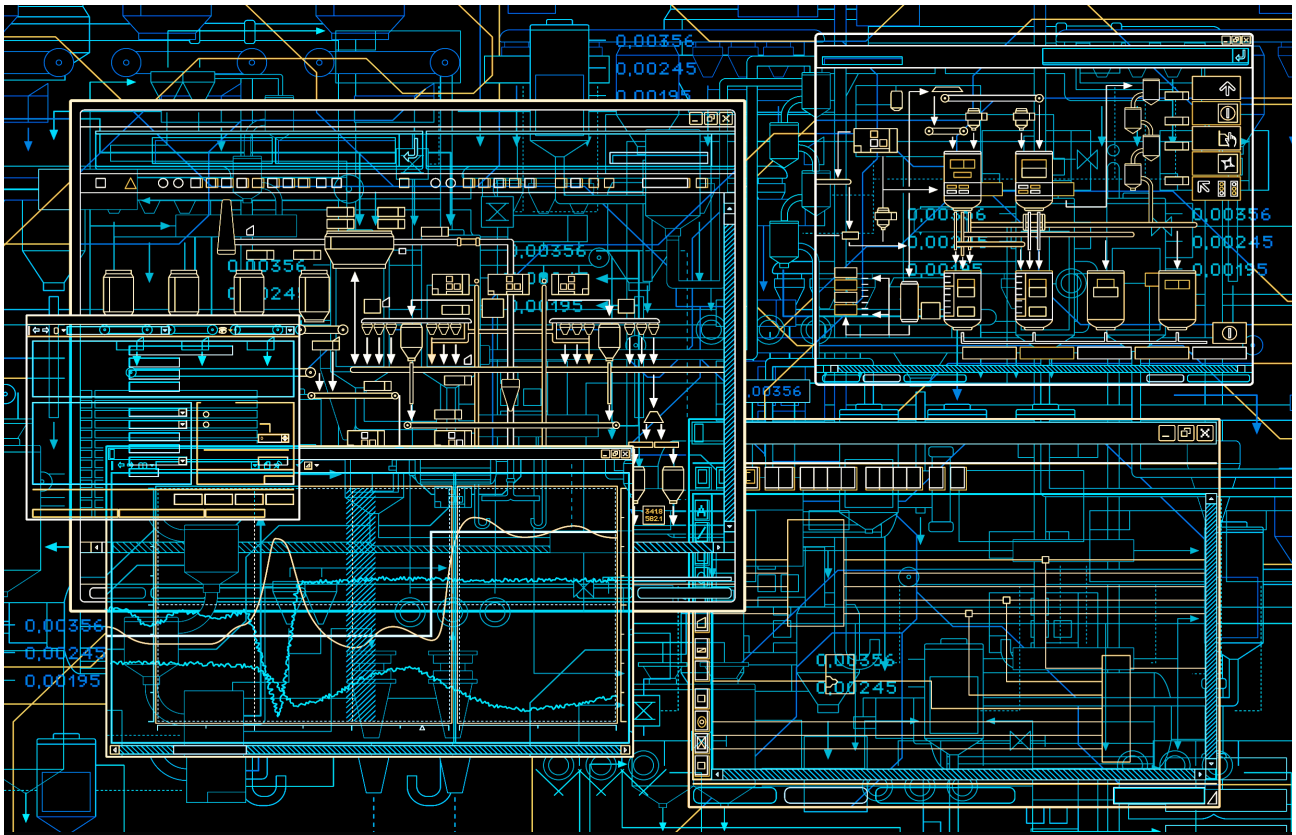

800xA for Advant Master

Graphic Library

System Version 6.0

Power and productivity
for a better world™

800xA for Advant Master

Graphic Library

System Version 6.0

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About This User Manual

General

Any security measures described in this User Manual, for example, for user access, password security, network security, firewalls, virus protection, etc., represent possible steps that a user of an 800xA System may want to consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user of the 800xA System.

This user manual describes 800xA for Advant Master, which enables data retrieval from the Advant Controller 400 Series to the 800xA Base System. 800xA for Advant Master contains built in graphic elements and faceplates for the below listed ABB standard object types:

- Analog Input **AI**
- Analog Output **AO**
- Data Base Parameters **DAT(x)**
- Digital Input **DI**
- Digital Output **DO**
- Engineered drive **DRICONE**
- Standard drive **DRICONS**
- Binary Object **GENBIN**
- PI Controller **GENCON**
- User Defined Object **GENUSD**

  - Group Alarm **GROUP**
  - Group Control **GROUP**
  - Manual Station **MANSTN**
  - Motor Control **MOTCON**
  - Motor Control **MOTCONI**
  - Adaptive PID Ctrl **PIDCONA**
  - PID Controller **PIDCON**
  - Ratio Station **RATSTN**
  - Sequence **SEQ**
  - Text data **TEXT**
  - Valve Control **VALVECON**
- The Control Connection Aspects (CCA) for each object type.
- Object Display.
- The graphic elements aspects of each type.
- A faceplate aspect for each type.

The Object types also include additional aspects such as an Icon aspect, an Alarm List aspect (for the instantiated object), and Trend aspect. This book is focused on describing the graphic elements and faceplates.

The faceplate images in this manual are not updated to the latest versions. For example, the pin button in a faceplate is not shown.

800xA for AdvantMaster graphic elements are designed and verified to work using the BackgroundColor selected in VBPG (BackColor = &H00666633&). We recommend that this BackgroundColor is used when creating new graphic displays, unless another BackgroundColor already has been verified to work properly with the graphic elements being used. The BackgroundColor can be changed by setting the BackColor property to the GeneralBackColor logical color or by (not recommended) specifying RGB(51,102,102). Graphic Displays being migrated to the new version of Process Graphics will retain the BackgroundColor.

VB based Process Graphics is not supported in System 800xA 6.0. The VB editor is not supported and VBPG graphics can no longer be edited in 800xA 6.0. It is mandatory to migrate all VB process graphics to PG2 graphics before upgrading to System 800xA 6.0.

User Manual Conventions

Microsoft Windows conventions are normally used for the standard presentation of material when entering text, key sequences, prompts, messages, menu items, screen elements, etc.

Feature Pack

The Feature Pack content (including text, tables, and figures) included in this User Manual is distinguished from the existing content using the following two separators:

Feature Pack Functionality _____

<Feature Pack Content>

_____

Feature Pack functionality included in an existing table is indicated using a table footnote (*) :

*Feature Pack Functionality

Feature Pack functionality in an existing figure is indicated using callouts.

Unless noted, all other information in this User Manual applies to 800xA Systems with or without a Feature Pack installed.

Warning, Caution, Information, and Tip Icons

This User Manual includes Warning, Caution, and Information where appropriate to point out safety related or other important information. It also includes Tip to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:

Electrical warning icon indicates the presence of a hazard which could result in *electrical shock.*

Warning icon indicates the presence of a hazard which could result in *personal injury.*

Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard which could result in *corruption of software or damage to equipment/property.*

Information icon alerts the reader to pertinent facts and conditions.

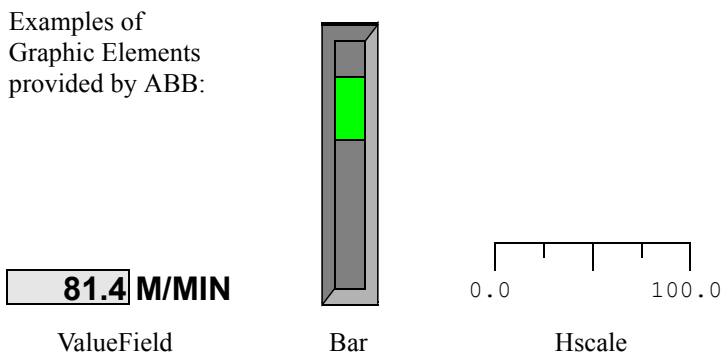
Tip icon indicates advice on, for example, how to design your project or how to use a certain function

Although Warning hazards are related to personal injury, and Caution hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result in degraded process performance leading to personal injury or death. Therefore, fully comply with all Warning and Caution notices.

Terminology

A complete and comprehensive list of terms is included in *System 800xA System Guide Functional Description (3BSE038018*)*. The listing includes terms and definitions that apply to the 800xA System where the usage is different from commonly accepted industry standard definitions and definitions given in standard dictionaries such as Webster's Dictionary of Computer Terms. Terms that uniquely apply to this User Manual are listed in the following table.

Term/Acronym	Description
Control connection aspect (CCA)	Contains the name, data type, access rights (read/write) and subscription update rate of each attribute and the name of the corresponding OPC item (object of the controller). CCA also contains a user interface to inspect the object type attribute information. It can also be used to subscribe for the current value of each attribute.
Faceplate	Faceplates are used to monitor and control process data. A faceplate has a configuration view where you insert faceplate elements, buttons, status indicators and aspect links. The faceplate can have up to three run-time views: reduced, normal and extended, depending on how much information the user wants.
Faceplate element	Faceplate elements are used both for presentation and modification of object properties. Faceplate elements are object aware.
Graphic display	Graphic displays are aspects directly selected and viewed by the process operator.
Graphic element	A graphic aspect that has a reference to an Aspect Object. Normally a part of a graphic display. A graphical object typically built up from several subelements and/or primitive elements. Some graphic elements are provided by ABB, while others may be built by the user.

Term/Acronym	Description
	
Graphic element browser	A tool used to select object aware (graphic) elements in Graphics Builder.
Graphic expression	Graphic expression is used to specify a data subscription and a relationship between process data and data to be displayed.
Graphic libraries	Libraries of primitive elements, and standard graphic elements, for example faceplate element, object display and graphic element.
Object display	A graphic aspect that has a reference to an Aspect Object.
PG	New Process Graphics
VBPG	Visual Basic Process graphics

Released User Manuals and Release Notes

A complete list of all User Manuals and Release Notes applicable to System 800xA is provided in *System 800xA Released User Manuals and Release Notes (3BUA000263*)*.

System 800xA Released User Manuals and Release Notes (3BUA000263)* is updated each time a document is updated or a new document is released. It is in pdf format and is provided in the following ways:

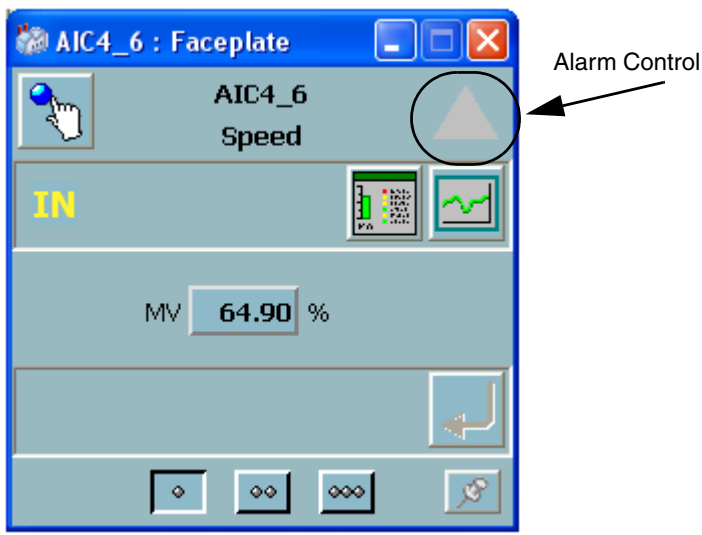
- Included on the documentation media provided with the system and published to ABB SolutionsBank when released as part of a major or minor release, Service Pack, Feature Pack, or System Revision.
- Published to ABB SolutionsBank when a User Manual or Release Note is updated in between any of the release cycles listed in the first bullet.

A product bulletin is published each time *System 800xA Released User Manuals and Release Notes (3BUA000263*)* is updated and published to ABB SolutionsBank.

Section 1 Faceplates and Graphic Elements

Common behaviour

Faceplates that has the alarm function will be displayed as in the figure below when no alarm is activated.
Note that this alarm control not is displayed in the faceplates throughout this document.



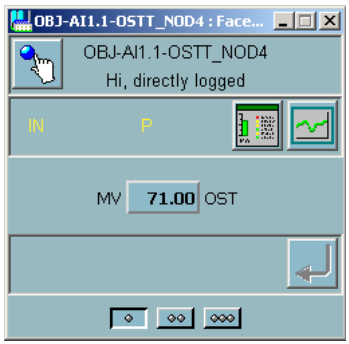
For more information regarding alarm icons see the *System 800xA, Operation (3BSE036904*)* instruction.

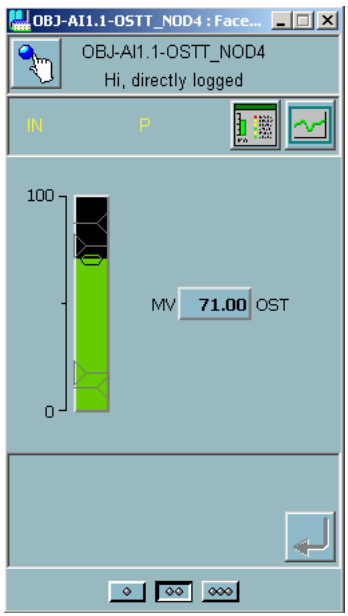
Two red lines crossing over a data element indicates that the status is bad and that there is no contact with the controller in PG.

AI, Analog Input

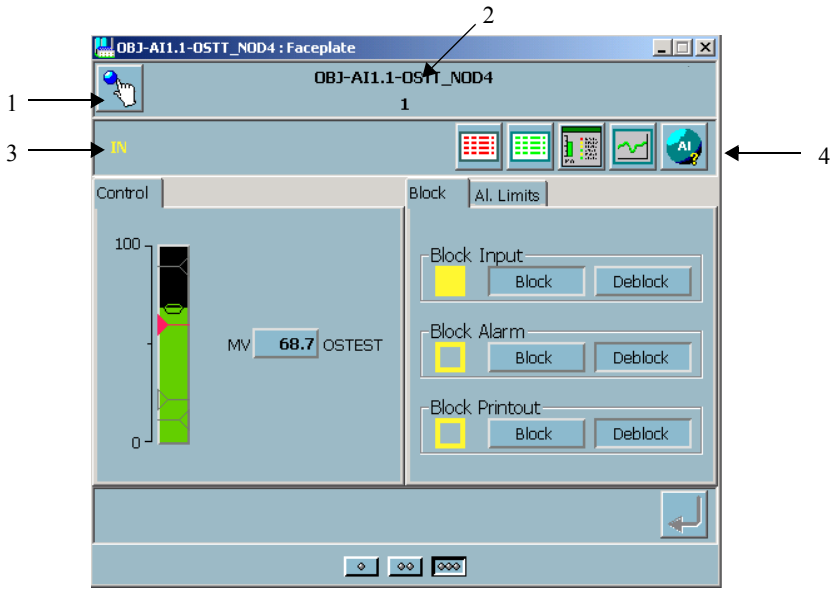
Faceplate

Presentation:





This symbol indicates that the status is uncertain.

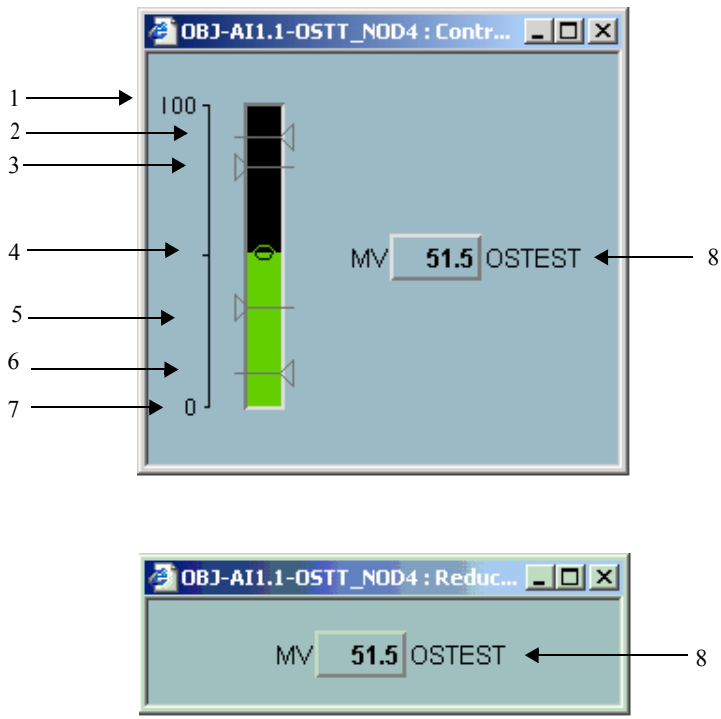


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Input Blk**	**IN** Yellow	BLOCKED = 1	*Input blocked*
3.2	**Print Blk**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	

Control and ReducedControl

Presentation:



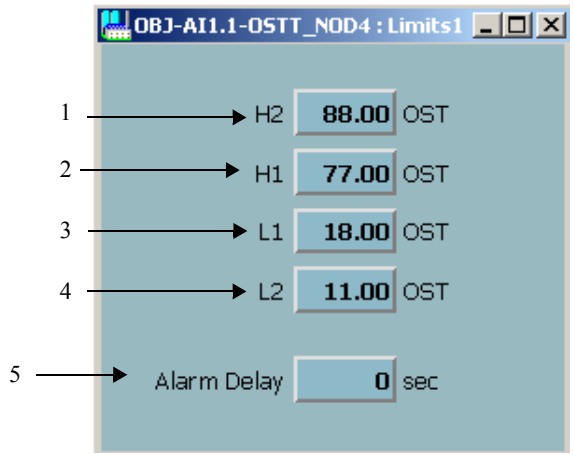
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Range Max**	Black	RANGEMAX	*Range Max of the MV value*
2	**High Limit 2** 		HI_LIM2	*Alarm High limit 2*
		-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE>H2 = 1	*Logical color* highAlarmSymbol
		Unfilled Grey	-	*Logical color* limit
3	**High Limit 1** 		HI_LIM1	*Warning High limit 1*
		-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	*Logical color* limit
4	**Measured Value Bargraph**		VALUE	*Object measured value*
		Green	-	

No	Description	Default Presentation	Condition	Remarks
5	**Low Limit 1** 		LO_LIM1	*Warning Low limit 1*
		-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	*Logical color* limit
6	**Low Limit 2** 		LO_LIM2	*Alarm Low limit 2*
		-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey	-	*Logical color* limit
7	**Range Min**	Black	RANGEMIN	*Range Min of the MV value*
8	**Measured Value**			*The MV object value*
8.1	**MV**	**MV** Black		*Text in front of the value* *Logical color* FaceplateFg
8.2	**MV Value**	**? ? ?** Red	ERR = 1	*I/O Error*
		Black	VALUE	*Measured value*
		Raised	BLOCKED = 1	*Input blocked*
		Flat	BLOCKED = 0	
8.3	**MV Unit**	Black	UNIT	*Measured unit*

Limits

Presentation:



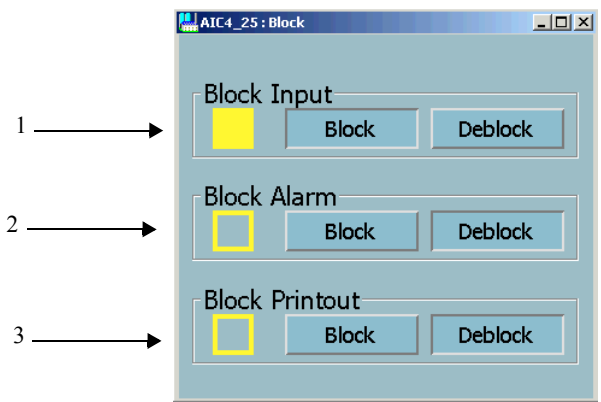
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**ALARM LIMITS for MV**			*Alarm limits for MV*
1.1	**H2 Text**	**H2** Black		*Text in front of the value*
1.2	**H2 Value**	Black	HI_LIM2	*High limit 2 value*
			EN_H2 = 0	*Invisible*
2.1	**H1 Text**	**H1** Black		*Text in front of the value*
2.2	**H1 Value**	Black	HI_LIM1	*Warning High limit 1 value*
		-	EN_H1 = 0	*Invisible*
3.1	**L1 Text**	**L1** Black		*Text in front of the value*
3.2	**L1 Value**	Black	LO_LIM1	*Warning Low limit 1 value*
		-	EN_L1 = 0	*Invisible*

No	Description	Default Presentation	Condition	Remarks
4.1	**L2 Text**	**L2** Black		*Text in front of the value*
4.2	**L2 Value**	Black	LO_LIM2	*Alarm Low limit2 value*
		-	EN_L2 = 0	*Invisible*
5.1	**Alarm Delay Text**	**Alarm Delay** Black		*Text in front of the value*
5.2	**Alarm Delay Value**	Black	ALARM_DELAY	*Alarm Delay value*

Block

Presentation:



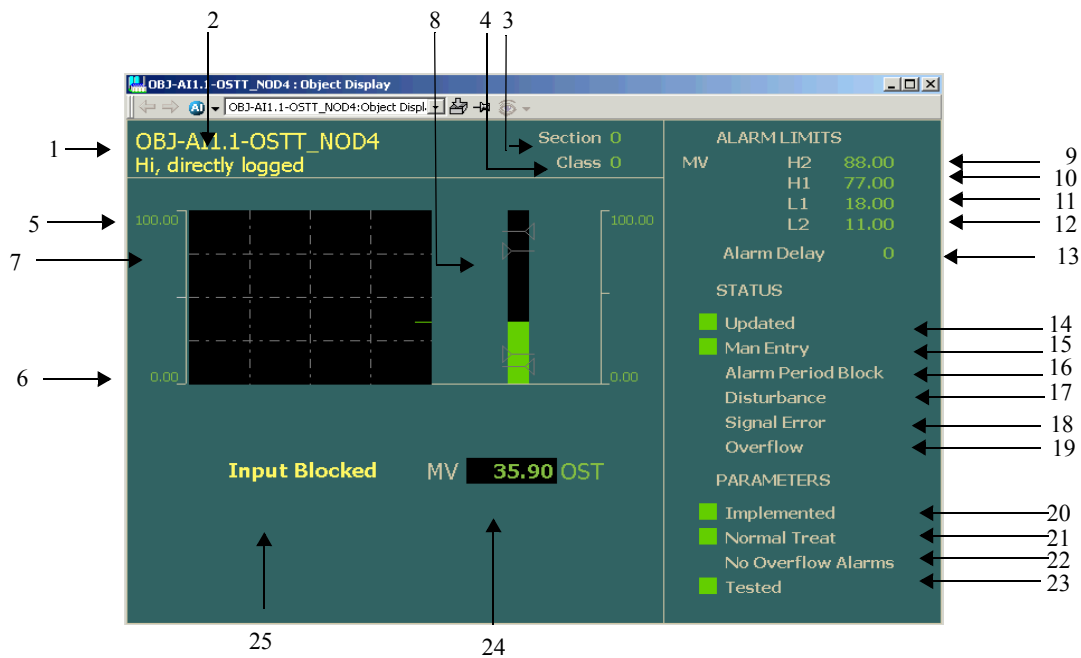
Behavior::

No	Description	Default Presentation	Condition	Remarks
1	**Block Input**	**Block Input** Black		
		! Yellow	Blocked	
		Block pressed	BLOCKED = 1	
		Deblock pressed	BLOCKED = 0	

No	Description	Default Presentation	Condition	Remarks
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK=1	
		Deblock pressed	AL_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PR_BLK = 1	
		Deblock pressed	PR_BLK=0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Logical color* selected
		Grey	SELECTED = 0	*Logical color* static
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Logical color* unackHighAlarm
		Yellow	BLOCKED = 1	*Logical color* blockedText
		Red	DISTURB = 1 or ERR = 1	*Logical color* highAlarmText
		Green		*Logical color* text2Normal
3.1	**Section Text**	**Section** Grey		*Logical color* static
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Range Max**	Green	RANGEMAX	*Range Max of the MV value*
6	**Range Min**	Green	RANGEMAX	*Range Min of the MV value*
7	**Measured Value Trim Curve**		VALUE	*Object value - Trim curve*
		Green		
8.1	**Measured Value Bargraph**		VALUE	*Object measured value*
		Green		

No	Description	Default Presentation	Condition	Remarks
8.2	**High Limit 2** 		HI_LIM2	*Alarm High limit 2*
		-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE>H2 = 1	
		Unfilled Grey		
8.3	**High Limit 1** 		HI_LIM1	*Warning High limit 1*
		-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blocked Symbol
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey		
8.4	**Low Limit 1** 		LO_LIM1	*Warning Low limit 1*
		-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blocked Symbol
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey		

No	Description	Default Presentation	Condition	Remarks
8.5	**Low Limit 2** 		LO_LIM2	*Alarm Low limit 2*
		-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blocked Symbol
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey		
9	**ALARM LIMITS for MV**			*Alarm limits for MV*
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Alarm Indication**	■ Red	VALUE>H2 = 1	*Alarm High limit 2*
9.4	**H2 Text**	**H2** Grey		*Text in front of the value*
9.5	**H2 Value**	Green	HI_LIM2	*High limit 2 value*
		-	EN_H2 = 0	*Invisible*
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Alarm Indication**	■ Red	VALUE>H1 = 1	*Warning High limit 1*
10.4	**H1 Text**	**H1** Grey		*Text in front of the value*
10.5	**H1 Value**	Green	HI_LIM1	*Warning High limit 1 value*
		-	EN_H1 = 0	*Invisible*
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*

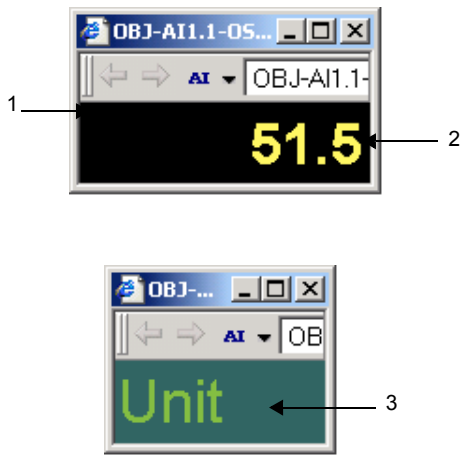
No	Description	Default Presentation	Condition	Remarks
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red	VALUE<L1 = 1	*Warning Low limit 1*
11.4	**L1 Text**	**L1** Grey		*Text in front of the value*
11.5	**L1 Value**	Green	LO_LIM1	*Warning Low limit 1 value*
		-	EN_L1 = 0	*Invisible*
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red	VALUE<L2 = 1	*Alarm Low limit 2*
12.4	**L2 Text**	**L2** Grey		*Text in front of the value*
12.5	**L2 Value**	Green	LO_LIM2	*Alarm Low limit2 value*
		-	EN_L2 = 0	*Invisible*
13.1	**Alarm Delay Text**	**Alarm Delay** Grey		*Text in front of the value*
13.2	**Alarm Delay Value**	Green	ALARM_DELAY	*Alarm Delay value*
14	**STATUS**			*Status*
14.1	**Updated Indication**	■ Green	UPDATED = 1	*Updated*
14.2	**Updated text**	**Updated** Grey		*Updated text*
15.1	**Manual entry Indication**	■ Green	MAN_ENTR = 1	*Manual entry flag*
15.2	**Manual entry text**	**Man Entry** Grey		
16.1	**Alarm period block Indication**	■ Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
16.2	**Alarm period block text**	**Alarm Period Blk**		*Text behind the indication*
		Yellow	AL_P_BLK = 1	
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
17.1	**Disturbance Indication**	■ Red	DISTURB = 1	*Fault*
17.2	**Disturbance text**	**Disturbance**		*Text behind the indication*
		Red	DISTURB = 1	
		Grey	-	
18.1	**Signal error Indication**	■ Red	ERR = 1	*I/O Error*
18.2	**Signal error text**	**Signal Error**		*Text behind the indication*
		Red	ERR = 1	
		Grey	-	
19.1	**Overflow Indication**	■ Red	OVERFLOW = 1	*Overflow*
19.2	**Overflow text**	**Overflow**		*Text behind the indication*
		Red	OVERFLOW = 1	
		Grey	-	
20	**PARAMETERS**			*Parameters*
20.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
20.2	**Implemented text**	**Implemented** Grey		*Implemented text*
21.1	**Normal treat Indication**	■ Green	NORM_TR = 1	*Normal object treat*
21.2	**Normal treat text**	**Normal Treated** Grey		*Normal object treat text*
22.1	**No overflow Indication**	■ Green	OVF_CTRL = 1	*No error at overflow*
22.2	**No overflow text**	**No Overflow** Grey		*No error at overflow text*
23.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
23.2	**Tested text**	**Tested** Grey		*Tested text*
24.1	**MV Text**	**MV** Grey		*Text in front of the value*
24.2	**MV Value**	**? ? ?** Red	ERR = 1	*I/O Error*
		Green	VALUE	*Measured value*
24.3	**MV Unit**	Green	UNIT	*Measured unit*
25	**Input Blocked**	**Input Blocked** Yellow	BLOCKED = 1	*Input blocked*
		-	BLOCKED = 0	*Invisible*

Graphic Element

NumericMV01 and UnitMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		VALUE	*Object value*
		? ? ? Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	ERR = 1	*I/O Error*
		Yellow	BLOCKED =1	*Input blocked*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red	DISTURB = 1	*Alarm*
		Green	-	
3	**Unit**			*Object unit*
		Green	UNIT	

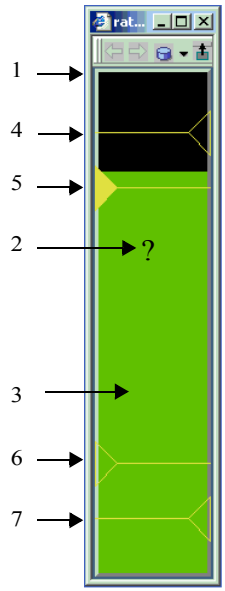
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor	2 Measured Value	**Black**, any other color **Transparent**, any other color	Valid for NumericMV01 Valid for UnitMV01

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*

No	Description	Default Presentation	Condition	Remarks
2	**AI Error**	**?** Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged*
		? Yellow	ERR = 1 and BLOCKED = 1	*Input blocked*
		? Red	ERR = 1	*I/O Error*
		-	ERR = 0	*Invisible*
3	**MV Value**		VALUE	*The object value*
		-	ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1	*Alarm*
		Green	-	
4	**High Limit 2** 		HI_LIM2	*Alarm High limit 2*
		-	HI_LIM2 >= RANGEMAX or EN_H2 = 0	*Invisible*
		Filled Yellow	VALUE>H2 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE>H2 = 1	
		Unfilled Grey	-	
5	**High Limit 1** 		HI_LIM1	*Warning High limit 1*
		-	HI_LIM1 >= RANGEMAX or EN_H1 = 0	*Invisible*
		Filled Yellow	VALUE>H1 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE>H1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
6	**Low Limit 1** 		LO_LIM1	*Warning Low limit 1*
		-	LO_LIM1 <= RANGEMIN or EN_L1 = 0	*Invisible*
		Filled Yellow	VALUE<L1 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
6 cont.		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE<L1 = 1	
		Unfilled Grey	-	
7	**Low Limit 2** 		LO_LIM2	*Alarm Low limit 2*
		-	LO_LIM2 <= RANGEMIN or EN_L2 = 0	*Invisible*
		Filled Yellow	VALUE<L2 = 1 and AL_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_BLK = 1	*Logical color* blockedSymbol
		Filled Red	VALUE<L2 = 1	
		Unfilled Grey	-	

The conditions are in priority order.

Configuration:

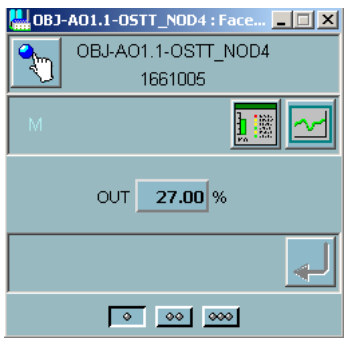
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		Vertical, Horizontal	

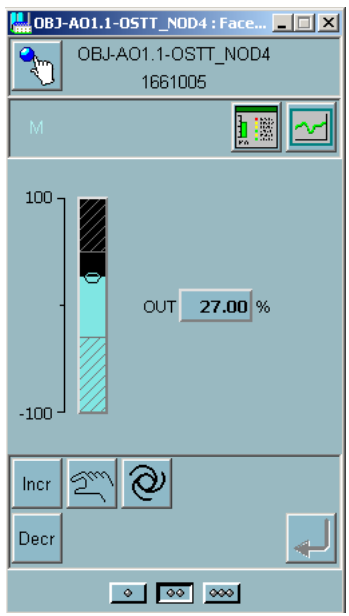
AO, Analog Output

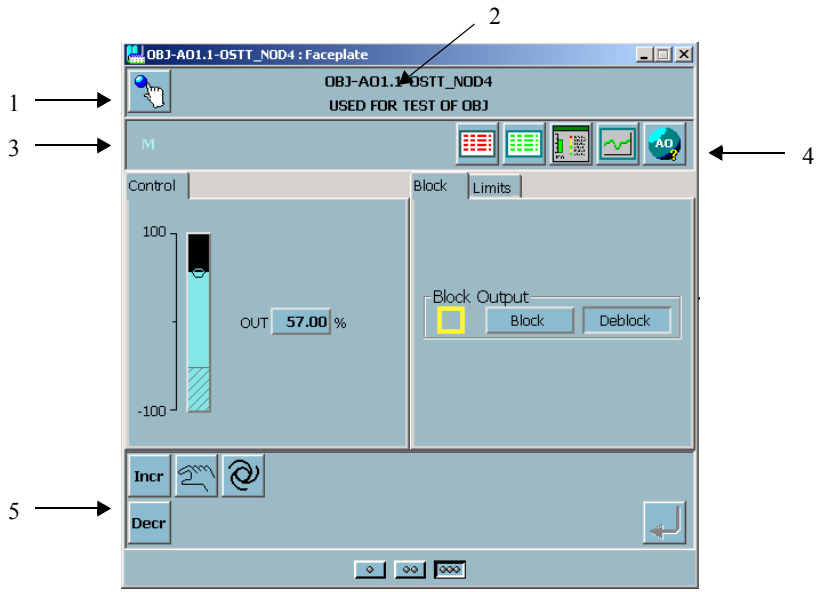
Faceplate

•

Presentation:







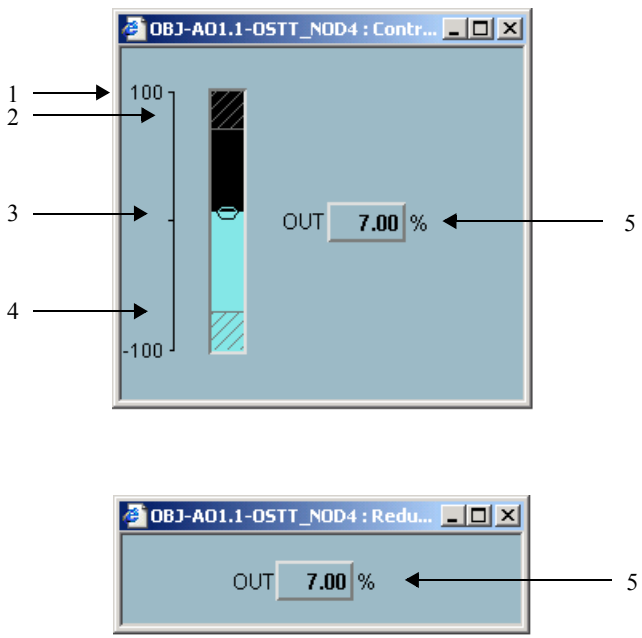
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Cyan	MAN_MODE = 1	*Manual Mode*
		A Magenta	MAN_MODE = 0	*Auto Mode*
3.2	**Output Blk**	**OUT** Yellow	OUTP_BLK = 1	*Output blocked*
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	

No	Description	Default Presentation	Condition	Remarks
4 cont.		Object Type Help	position 0, 0, 12	
5	**Decr**	Decrease value with 1%	MAN_MODE = 1	*Decrease*
	Incr	Increase value with 1%	MAN_MODE = 1	*Increase*
	Man	Set to Man Mode		Set MAN_MODE = 1
	Auto	Set to Auto Mode		Set MAN_MODE = 0

Control and ReducedControl

Presentation:

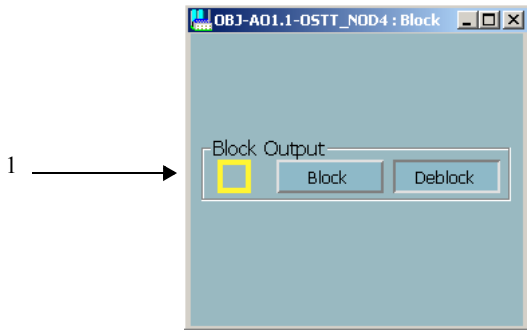


Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Range Max**	Black	RANGEMAX	
1.2	**Range Min**	Black	RANGEMIN	
2	**High Limitation**		HI_LIM	*High limitation*
		-	HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	
3	**Output Value Bargraph**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	MAN = 0	*Auto mode*
4	**Low Limitation**		LO_LIM	*Low limitation*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	
5	**Output Value**		VALUE	
5.1	**Text**	**OUT** Black		*Text in front of value*
5.2	**Value**	**XXX** Red	Value is Bad	
		Black, Raised	MAN = 1	*Manual mode*
		Black, Flat	MAN = 0	*Auto mode*
5.3	**Unit**	Black	UNIT	
6	**Input Field**		MAN = 1	*input blocked*
		-	MAN = 0	*Invisible*

Block

Presentation:

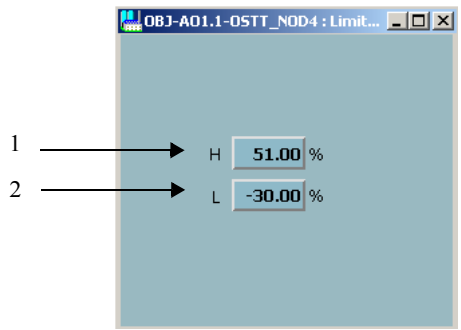


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Output**	**Block Output** Black		
		! Yellow	Blocked	
		Block pressed	BLOCKED = 1	
		Deblock pressed	BLOCKED = 0	

Limits

Presentation:

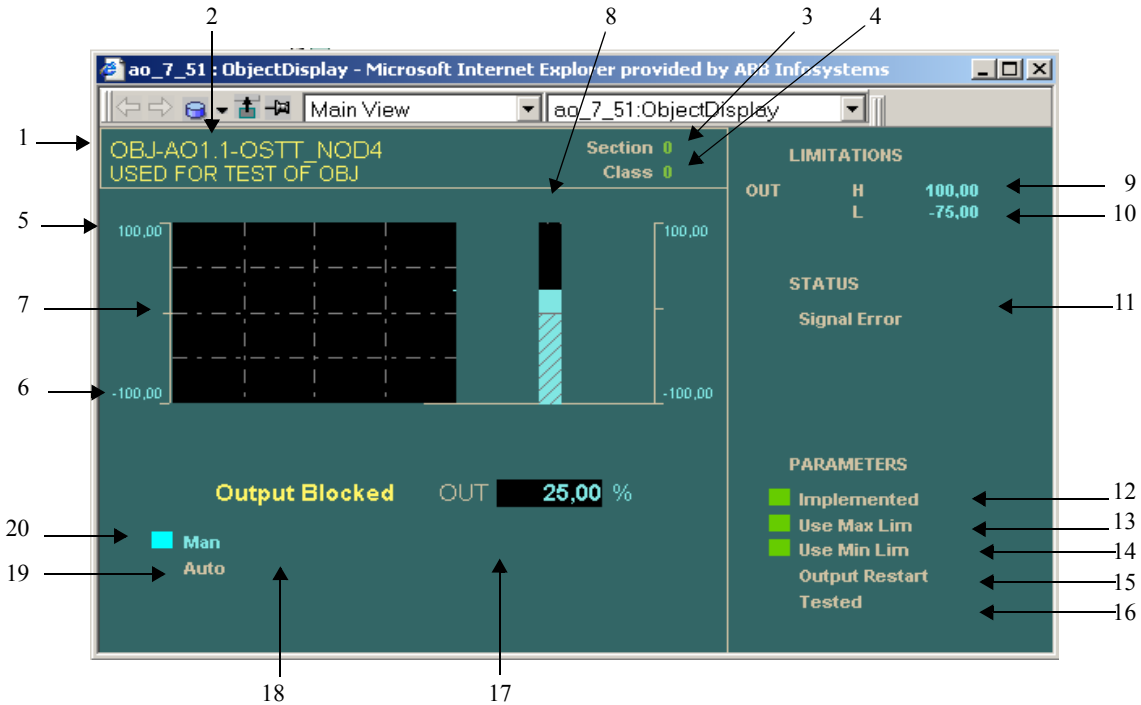


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**LIMITATIONS**			*Limitations for OUT*
1.1	**H Text**	**H** Black		*Text in front of the value*
1.2	**H Value**	Black	HI_LIM	*High limitation value*
		-	EN_HI = 1 and VALUE_HI = 1	*Invisible*
1.3		Raised	MAN = 1	*Manual mode*
		Flat	MAN = 0	*Auto mode*
1.4		Black	UNIT	
2.1	**L Text**	**L** Black		*Text in front of the value*
2.2	**L Value**	Black	LO_LIM	*Low limitation value*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
2.3		Raised	MAN = 1	*Manual mode*
		Flat	MAN = 0	*Auto mode*
2.4		Black	UNIT	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Logical color* select
		Grey	SELECTED = 0	*Logical color* static

No	Description	Default Presentation	Condition	Remarks
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Range Max**		RANGEMAX	*Range max of the Output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta		*Auto mode*
6	**Range Min**		RANGEMIN	*Range min of the Output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta		*Auto mode*
7	**Output Value Trim Curve**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
8.1	**Output Value Bargraph**		VALUE	*Object output value*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*

No	Description	Default Presentation	Condition	Remarks
8.2	**High Limitation**		HI_LIM	*High limitation*
		-	HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	
8.3	**Low Limitation**		LO_LIM	*Low limitation*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	
9	**LIMITATIONS**			*Limitations for OUT*
9.1	**High Limitation Indication**	■ Yellow	VALUE_HI = 1	*High limitation flag*
9.2	**H Text**	**H** Grey		*Text in front of the value*
9.3	**H Value**		HI_LIM	*High limitation value*
		-	EN_HI = 1 and VALUE_HI = 1	*Invisible*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
10.1	**Low Limitation Indication**	■ Yellow	VALUE_LO = 1	*Low limitation flag*
10.2	**L Text**	**L** Grey		*Text in front of the value*
10.3	**L Value**		LO_LIM	*Low limitation value*
		-	LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
11	**STATUS**			*Status*
11.1	**Signal Error Indication**	■ Red	ERR = 1	*Signal error*

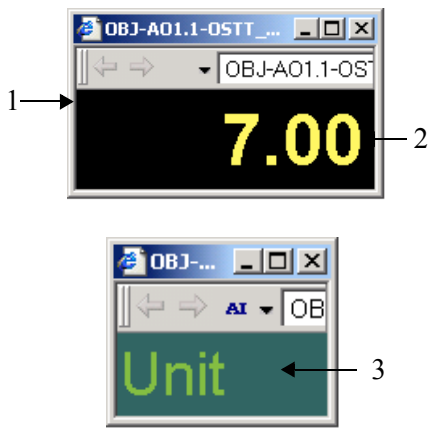
No	Description	Default Presentation	Condition	Remarks
11.2	**Signal Error Text**	**Signal Error**		*Signal error text*
		Red	ERR = 1	
		Grey	-	
12	**PARAMETERS**			*Parameters*
12.1	**Implemented Indication**	■ Green	IMPLEMENTED = 1	*Implemented*
12.2	**Implemented Text**	**Implemented** Grey		*Implemented text*
13.1	**Use Max Limitation Indication**	■ Green	EN_HI = 1	*Use max limitation*
13.2	**Use Max Lim Text**	**Use Max Lim** Grey		*Use max lim text*
14.1	**Use Min Limitation Indication**	■ Green	EN_LO = 1	*Use min limitation*
14.2	**Use Min Lim Text**	**Use Min Lim** Grey		*Use min lim text*
15.1	**Output Restart Indication**	■ Green	RESTART = 1	*Output restart*
15.2	**Output Restart Text**	**Output Restart** Grey		*Output restart text*
16.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
16.2	**Tested Text**	**Tested** Grey		*Tested text*
17.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
17.2	**OUT Value**		VALUE	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
17.3	**OUT Unit**		UNIT	
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Auto mode*
18	**Output Blocked**	**Output Blocked** Yellow	OUTP_BLK = 1	*Output blocked*
		-	OUTP_BLK = 0	*Invisible*
19.1	**Auto Indication**	■ Magenta	MAN = 0	*Auto mode*

No	Description	Default Presentation	Condition	Remarks
19.2	Auto Text	**Auto**		*Auto text*
		Magenta	MAN = 0	*Auto mode*
		Grey	MAN = 1	*Manual mode*
20.1	Man Indication	■ Cyan	MAN = 1	*Manual mode*
20.2	Man Text	**Man**		*Manual text*
		Cyan	MAN = 1	*Manual mode*
		Grey	MAN = 0	*Auto mode*

Graphic Element

NumericOUT01 and UnitOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Logical color select*
		Invisible	SELECTED = 0	
2	**Output Value**		VALUE	*Object value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	
		Magenta	MAN = 0	
3	**Unit**	Green	UNIT	*Object unit*

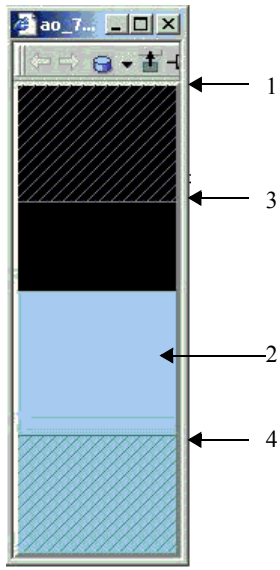
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor	2. Output Value	**Black**, any other color **Transparent,** any other color	Valid for NumericOUT01 Valid for UnitOUT01
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for Numeric01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for Numeric01

BargraphOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Output Value**		VALUE	*The object value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK =1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	

No	Description	Default Presentation	Condition	Remarks
2 cont.		Magenta	MAN = 0	
3	**High Limitation**		HI_LIM	*High limitation*
			HI_LIM > RANGEMAX or EN_HI = 0	*Invisible*
		Yellow	EN_HI = 1 and VALUE_HI = 1	
		Grey	EN_HI = 1	
4	**Low Limitation**		LO_LIM	*Low limitation*
			LO_LIM < RANGEMIN or EN_LO = 0	*Invisible*
		Yellow	EN_LO = 1 and VALUE_LO = 1	
		Grey	EN_LO = 1	

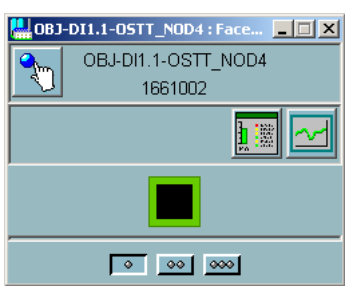
Configuration:

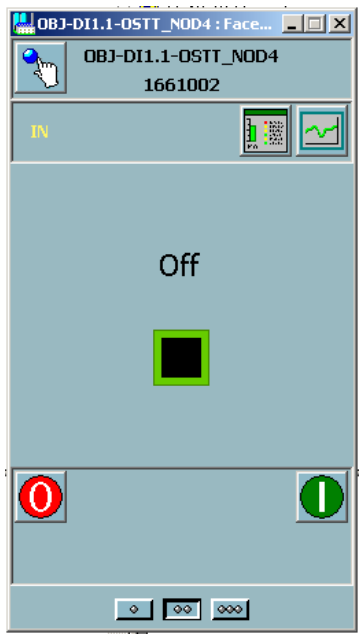
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (0..4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

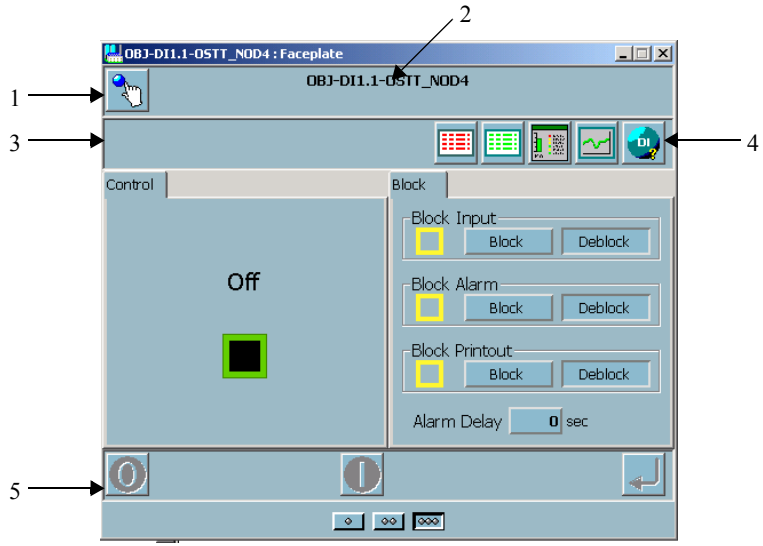
DI, Digital input

Faceplate

Presentation:





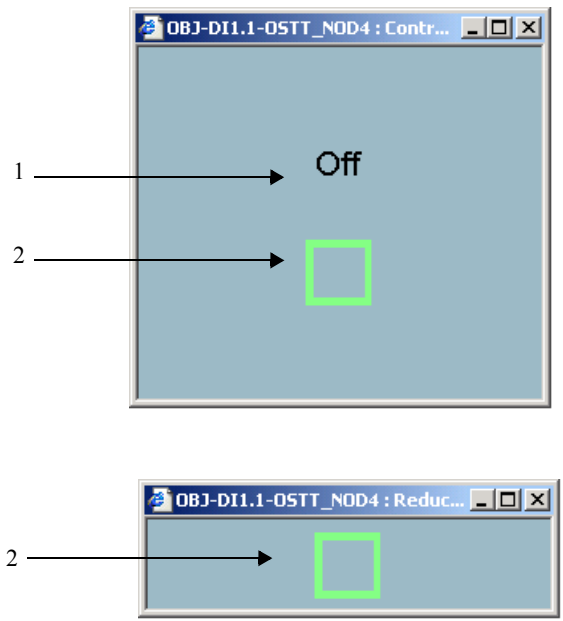


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Input Blk**	**IN** Yellow	BLOCKED = 1	*Input Blocked*
3.2	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**On**	Set VALUE to one	BLOCKED = 1	Set VALUE = 1
	Off	Set VALUE to zero	BLOCKED = 1	Set VALUE = 0

Control and ReducedControl

Presentation:

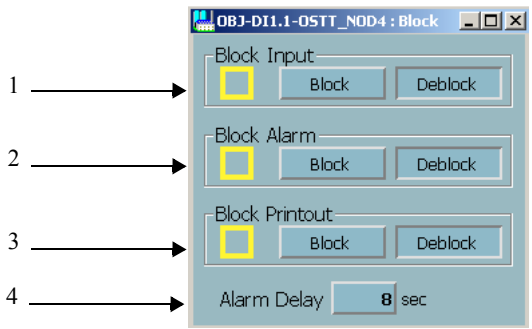


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value Text**			
		On Black	VALUE = 1	
		Off Black	VALUE = 0	
2	**Value**			
		■ Green	VALUE = 1	
		□ Green border	VALUE = 0	

Block

Presentation:

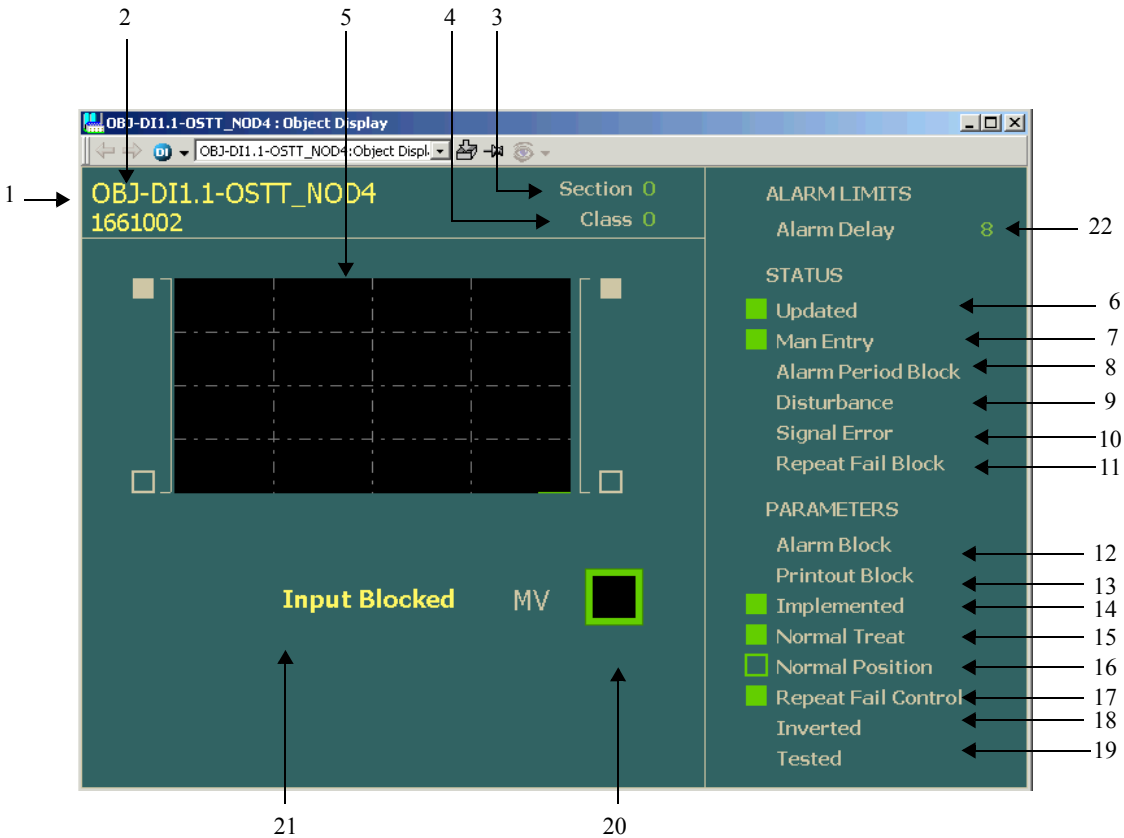


Behavior::

No	Description	Default Presentation	Condition	Remarks
1	**Block Input**	**Block Input** Black		
		! Yellow	Blocked	
		Block pressed	BLOCKED = 1	
		Deblock pressed	BLOCKED = 0	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK=1	
		Deblock pressed	AL_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PR_BLK = 1	
		Deblock pressed	PR_BLK=0	
4.1	**Alarm Delay Text**	**Alarm Delay** Black		*Text in front of the value*
4.2	**Alarm Delay Value**	Black	ALARM_DELAY	*Alarm Delay value*

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK = 1	*Unacknowledged*
		Yellow	BLOCKED = 1	*Input blocked*
		Red	DISTURB = 1 or ERR = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5.1	**Value Trim Curve**	Green	VALUE	
5.2	**Range Indicators**	Filled Grey		*Top indicator*
		Unfilled Grey		*Bottom indicator*
6	**STATUS**			*Status*
6.1	**Updated Indication**	■ Green	UPDATED = 1	*Updated*
6.2	**Updated text**	**Updated** Grey		
7.1	**Manual entry Indication**	■ Green	MAN_ENTR = 1	*Manual entry flag*
7.2	**Manual entry text**	**Man Entry** Grey		*Man Entry text*
8.1	**Alarm period block Indication**	■ Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.2	**Alarm period block text**	**Alarm Period Blk**		*Alarm Period Blk text*
		Yellow	AL_P_BLK = 1	
		Grey	-	

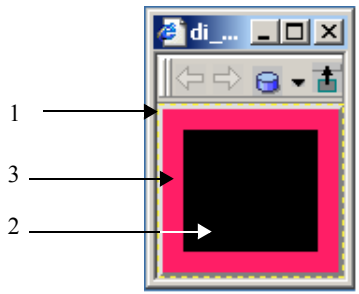
No	Description	Default Presentation	Condition	Remarks
9.1	**Disturbance Indication**	■ Red flashing	AL_UNACK = 1	*Unacknowledged*
		■ Red	DISTURB = 1	*Fault*
9.2	**Disturbance Text**	**Disturbance**		*Disturbance text*
		Red	AL_UNACK = 1 or DISTURB = 1	
		Grey	-	
10.1	**Signal error Indication**	■ Red	ERR = 1	*I/O Error*
10.2	**Signal error Text**	**Signal Error**		*Signal Error text*
		Red	ERR = 1	
		Grey	-	
11.1	**Repeat fail block Indication**	■ Yellow	RP_F_BLK = 1	*Repeat fail blocked*
11.2	**Repeat fail block text**	**Repeat Fail Block**		*Repeat fail blocked text*
		Yellow	RP_F_BLK = 1	
		Grey	-	
12	**PARAMETERS**			*Parameters*
12.1	**Alarm block Indication**	■ Yellow	**Alarm Block** = 1	*Alarm blocked by operator*
12.2	**Alarm block Text**	**Alarm Block**		*Alarm blocked text*
		Yellow	**Alarm Block** = 1	
		Grey	-	
13.1	**Printout Indication**	■ Yellow	PR_BLK = 1	*Printout blocked*
13.2	**Printout Text**	**Printout Block**		*Printout blocked text*
		Yellow	PR_BLK = 1	
		Grey	-	
14.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
14.2	**Implemented text**	**Implemented** Grey		*Implemented text*

No	Description	Default Presentation	Condition	Remarks
15.1	**Normal treat Indication**	■ Green	NORM_TR = 1	*Normal object treat*
15.2	**Normal treat text**	**Normal Treat** Grey		*Normal object treat text*
16.1	**Normal position Indication**	■ Green	NORM_POS = 1	*Normal position*
		□ Green	NORM_POS = 0	
16.2	**Normal position text**	**Normal Position** Grey		*Normal position text*
17.1	**Repeat Fail Control Indication**	■ Green	RP_F_CTL = 1	*Repeat fail control*
17.2	**Repeat Fail Control text**	**Repeat Fail Control** Grey		*Repeat fail control text*
18.1	**Inverted Indication**	■ Green	INV = 1	*Inverted*
18.2	**Inverted text**	**Inverted** Grey		*Inverted text*
19.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
19.2	**Tested text**	**Tested** Grey		*Tested text*
20.1	**MV Text**	**MV** Grey		*Text in front of the value*
20.2	**Value**			*3D Display object*
		■ Green	VALUE = 1	*Symbol released*
		□ Black/Green borders	VALUE = 0	*Symbol pressed in*
21	**Input Blocked**	**Input Blocked** Yellow	BLOCKED = 1	*Input blocked*
			BLOCKED = 0	*Invisible*
22.1	**Alarm Delay Text**	**Alarm Delay** Grey		*Text in front of the value*
22.2	**Alarm Delay Value**	Green	ALARM_DELAY	*Alarm Delay value*

Graphic Elements

IndicatorBox01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible	-	*Invisible*
2	**Symbol Center Color**		VALUE	*3D Display object*
		Black	ERR = 1	*I/O Error*
		Black	(Inverted = 1 and VALUE = 1) or VALUE = 0	*Inverted or Off*
		Flashing Red	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	BLOCKED = 1	*Updated blocked*
		Red	DISTURB = 1 and DisturbanceUsed = 1	*Alarm*
		Green	VALUE = 1	

No	Description	Default Presentation	Condition	Remarks
3	**Indicator**			
3.1	**Quality**	**Q** Flashing Red	AL_UNACK = 1 and ERR = 1	*Unacknowledged alarm*
		Q Yellow	BLOCKED = 1 and ERR = 1	*Updated blocked*
		Q Red	ERR = 1	*I/O Error*
3.2	**Label**	Label Grey	-	*User defined character*

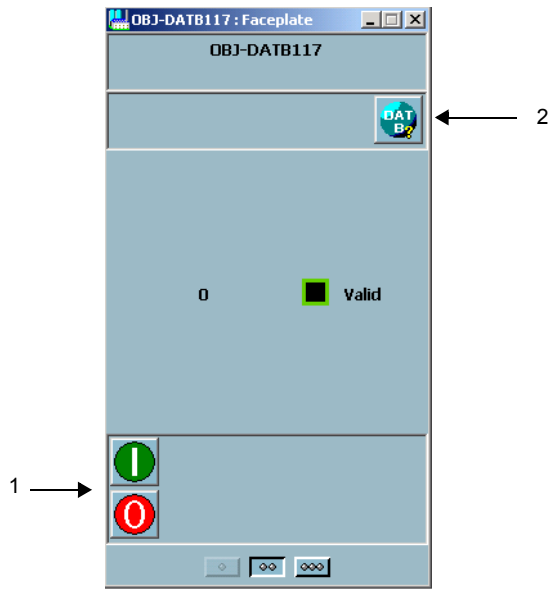
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Inverted	2. Symbol	**false**, true	
DisturbanceUsed	2. Symbol	**true**, false	
Label	3. Label	" ", any letter	
FrameWidth	1. Lock Frame	**3**, (0...5)	
FrameStyle	1. Lock Frame	**Raised,** Flat, Sunken	Raised and Sunken defines that 3-D presentation is used. The object state (on/off) defines the actual 3-D presentation.

DAT, Data Base Parameters

Faceplate

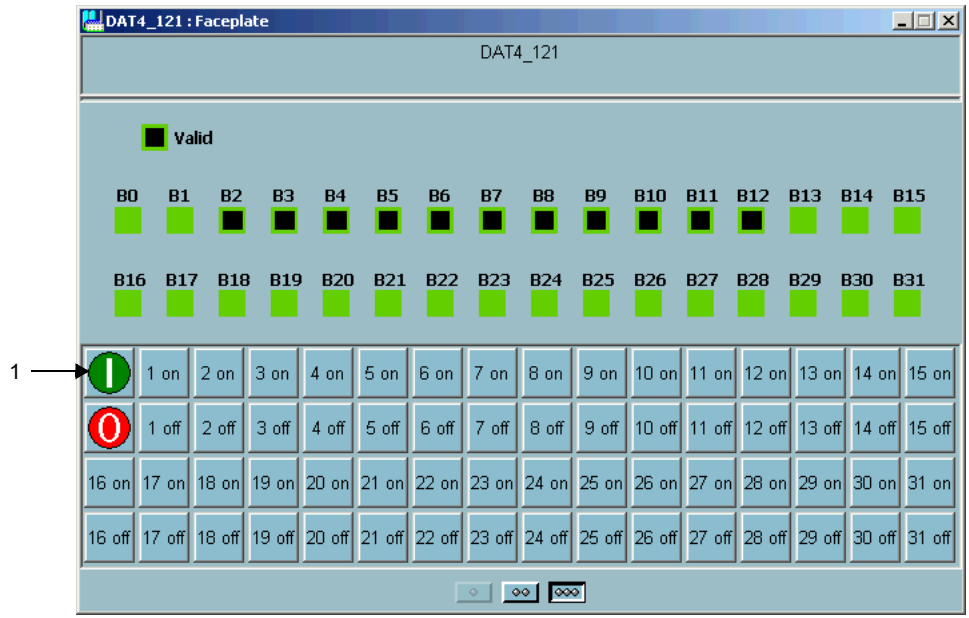
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Input On**	Set Boolean to one	Set B0_VAL = 1	VAL_TYPE = 1
	Input Off	Set Boolean to zero	Set B0_VAL = 0	VAL_TYPE = 1
2	**Aspect Links**	Object Type Help	position 0, 0, 12	
3	**Value**	Black		The objrct value

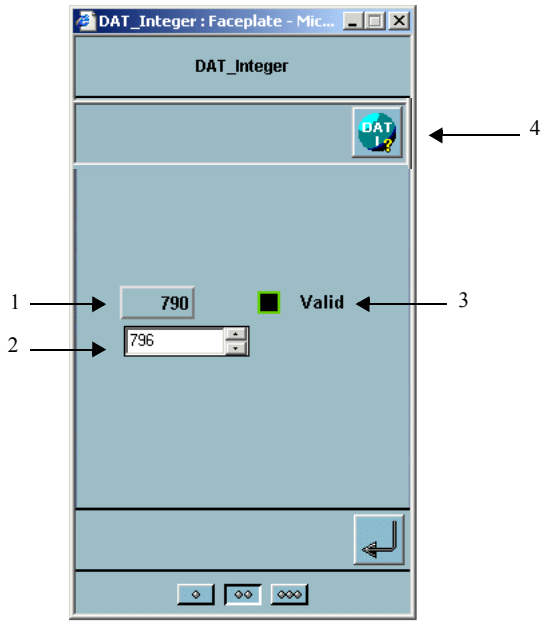
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1				
	On	Set Boolean to one	VAL_TYPE = 1	*B0_VAL = 1*
	Off	Set Boolean to zero	VAL_TYPE = 1	*B0_VAL = 0*
	1 - 15 On			*B1_VAL...B15_VAL = 1*
	1 - 15 Off			*B1_VAL...B15_VAL = 0*
	16 - 31 On			*B16_VAL...B31_VAL = 1*
	16 - 31 Off			*B16_VAL...B31_VAL = 0*

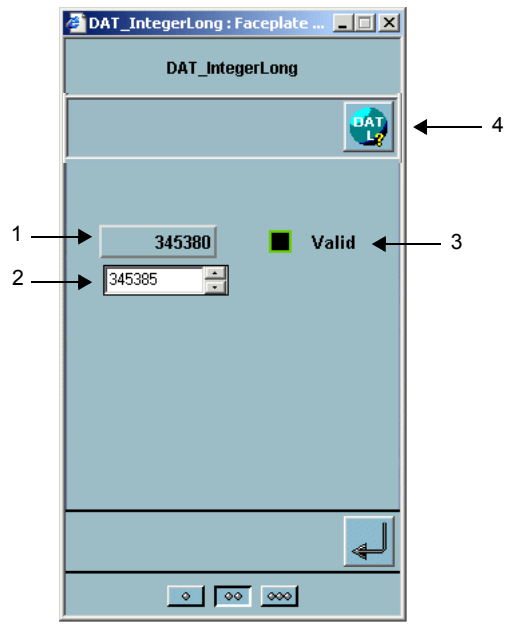
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value**	Black	VALUE	*The object value*
2	**Input Field**			
3	**Valid flag**	Green	VALID = 1	*Object validity*
		Green	VALID = 0	
4	**Aspect Links**	Object Type Help	position 0, 0, 12	

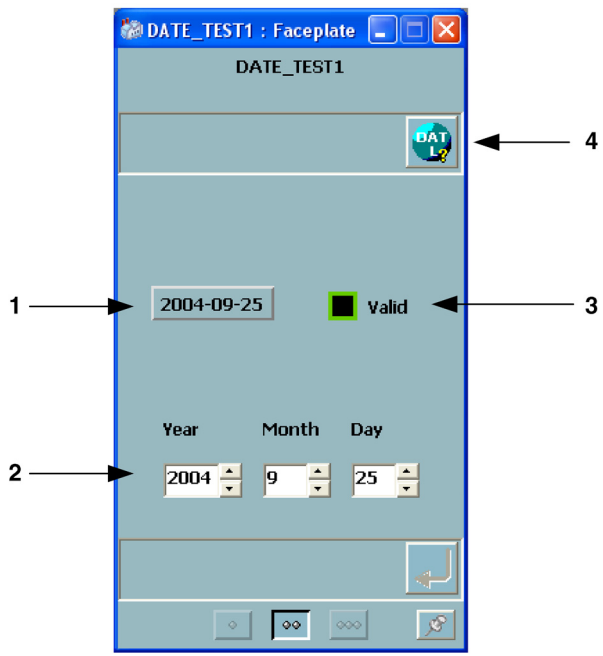
The integer long faceplate can be presented in three different ways. The presentation used is determined by PRESTYPE property. PRESTYPE=3 is the default value and is used to present an integer value.
The value of the TIME_RESOLUTION property is not used.
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value**	Black	VALUE	*The object value*
2	**Input Field**			
3	**Valid flag**	Green	VALID = 1	*Object validity*
		Green	VALID = 0	
4	**Aspect Links**	Object Type Help	position 0, 0, 12	

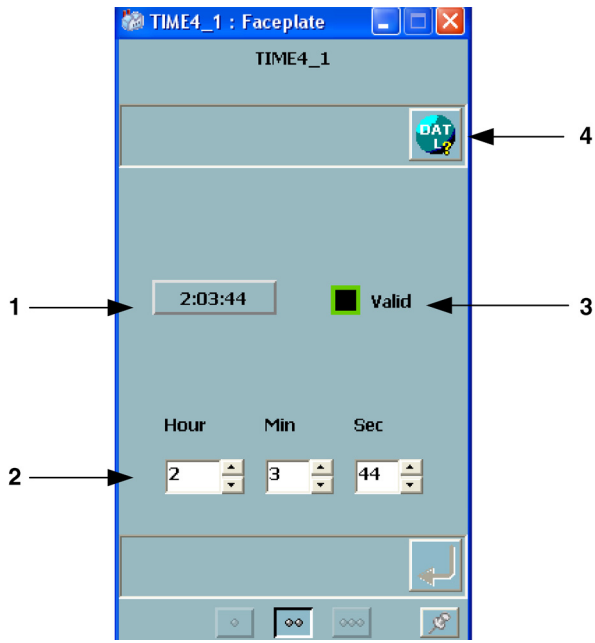
The integer long faceplate can be presented in three different ways. The presentation used is determined by PRESTYPE property. PRESTYPE=127 is used to present a date.
The value of the TIME_RESOLUTION property is not used.
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value**	Black	VALUE	*The object value*
2	**Input Field**	Year	100-9999	
		Month	1-12	
		Day	1-31	
3	**Valid flag**	■ Green	VALID = 1	*Object validity*
		□ Green	VALID = 0	
4	**Aspect Links**	Object Type Help	position 0, 0, 12	

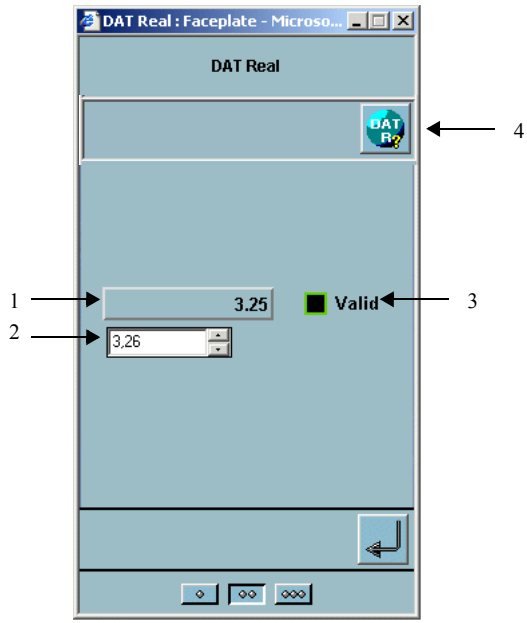
The integer long faceplate can be presented in three different ways. The presentation used is determined by PRESTYPE property. PRESTYPE=126 is used to present time.
The value of the TIME_RESOLUTION property is used to define time resolution.
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value**	Black	VALUE	*The object value*
2	**Input Field**	Hour	0-24	
		Min	0-59	
		Sec	0-59	
3	**Valid flag**	Green	VALID = 1	*Object validity*
		Green	VALID = 0	

Presentation:

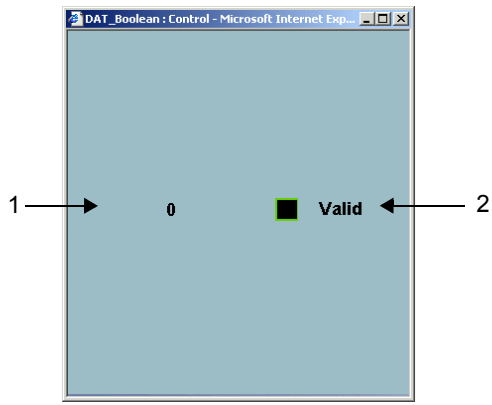


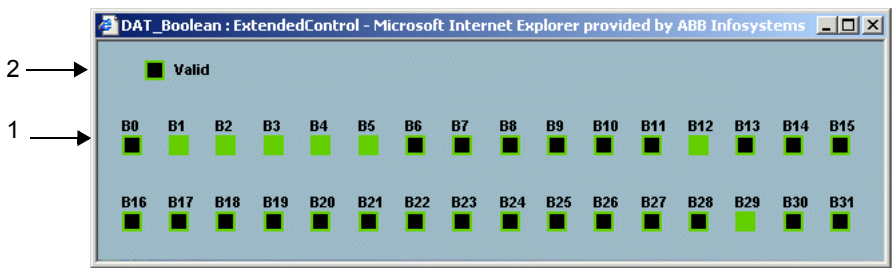
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value**	Black	VALUE	*The object value*
2	**Input Field**			
3	**Valid flag**	Green	VALID = 1	*Object validity*
		Green	VALID = 0	
4	**Aspect Links**	Object Type Help	position 0, 0, 12	

Control and ExtendedControl

Presentation:





Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value**	Black	VALUE	*The object value*
		DAT(?)	VAL_TYPE not 1	*Illegal datatype*
2	**Valid flag**	■ Green	VALID = 1	*Object validity*
		□ Green	VALID = 0	

Graphic Element

IndicatorText01

Presentation:

NOTE: Use this graphic element only for datatype Boolean!

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Background**			
		Black	-	
2	**String**			*The object value - String*
		On Green	VALUE = true	TrueString
		Off Green	VALUE = false	FalseString

The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
TrueString	2. String	**On**	
FalseString	2. String	**Off**	
NumberOfChar	2. String	**40**, (1..40)	
Alignment	2. String	**0**=Left, 1=Center, 2=Right	*Text position in field*
Bitno	2. String	**0**, (0...31)	
FrameWidth		**3**, (1...4)	

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle		**Flat**, Raised, Sunken	
BackgroundColor		Black, any color	

IndicatorBox01

Presentation:

NOTE: Use this graphic element only for datatype Boolean!

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Background**			
		Black	-	
2	**Indicator**			*The object value - Indication*
		Filled Green	VALUE = true	
		Unfilled Green	VALUE = false	

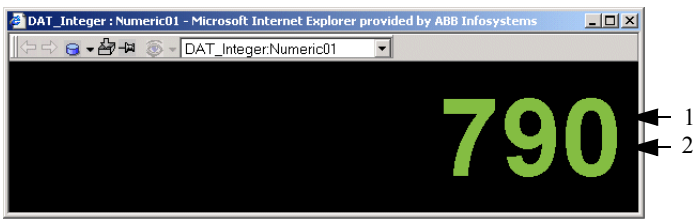
The conditions are in priority order. Underlined parameters are configurable.

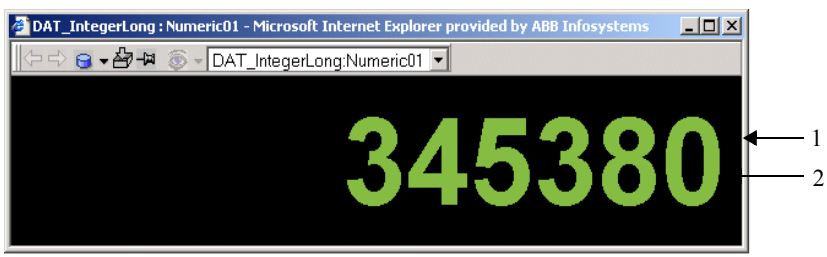
Configuration:

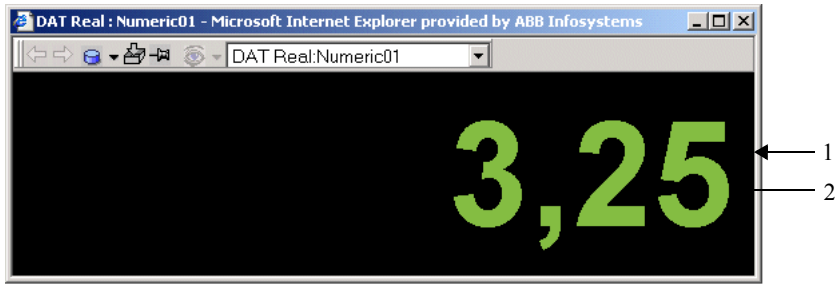
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth		**3**, (1..4)	
FrameStyle		**Flat**, Raised, Sunken	
Bitno	2. String	**0**, (0..31)	

Numeric01

Presentation:






DAT Real : Numeric01 - Microsoft Internet Explorer provided by ABB Infosystems
DAT Real:Numeric01
3,25
1
2

Behavior:

No	Description	Default Presentation	Condition	Remarks
1				
		Black	-	
2	**Value**		VALUE	*The object value*
		DAT(?) Green		*Illegal datatype*
		Green	VAL_TYPE in range 2...4	

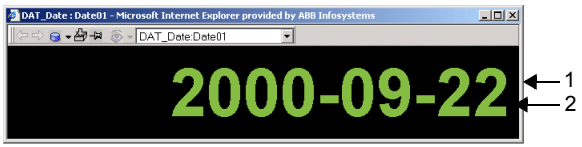
The conditions are in priority order. Underlined parameters are configurable.

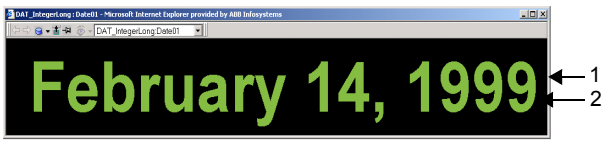
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		Black, any other color	
NumberOfDec	2. Value	**-1,** 0..6	*Number of decimals of the presented value if datatype is **Real**.* *-1 means presentation according to:* ***#Dec*** ***Value range*** *2* *-10 < Value < 10* *1* *-1000 < Value < 1000* *0* *otherwise*
FrameWidth		**0**, (0..4)	
FrameStyle		**Flat**, Raised, Sunken	

Date01

Presentation:





Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Background**			
		Black	-	
2	**Value**		VALUE	*The object value*
		*** Green	Internal overflow in calculations.	
		DAT(?) Green		*Illegal datatype*
		Green	VAL_TYPE = 3	

The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
DateFormat	2. Value	1, **2**	*1 Long Date or 2 Short Date presentation in accordance to Windows Regional Options settings*
FrameWidth	1. Frame	**3**, (1..4)	

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Frame	**Flat**, raised, Sunken	
BackgroundColor		**Black**, any other color	

Time01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1				
		Black	-	
2	**Value**		VALUE	*The object value*
		*** Green	Internal overflow in calculations.	
		DAT(?) Green		*Illegal datatype*
		Green	VAL_TYPE = 3	

The conditions are in priority order.

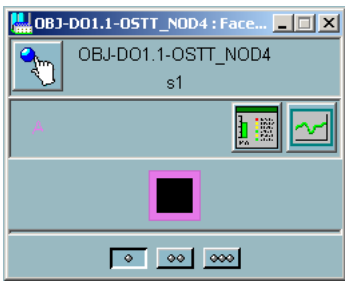
Configuration:

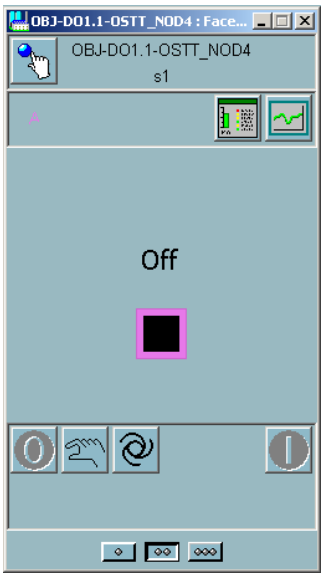
Parameters	Affects	Options (bold is default)	Remarks
TimeFormat	2. Value	**0**, 1, 2	*0 = Time format in accordance to Windows Regional Options settings* *1 = Hour:Min* *2 = Hour:Min:Sec:Millisec*
UnitsPerSecond	2. Value	**10000**	*One second represented by this value*
FrameWidth	1. Frame	**3**, (1..4)	
FrameStyle	1. Frame	**Flat**, Raised, Sunken	
BackgroundColor		**Black,** any other color	

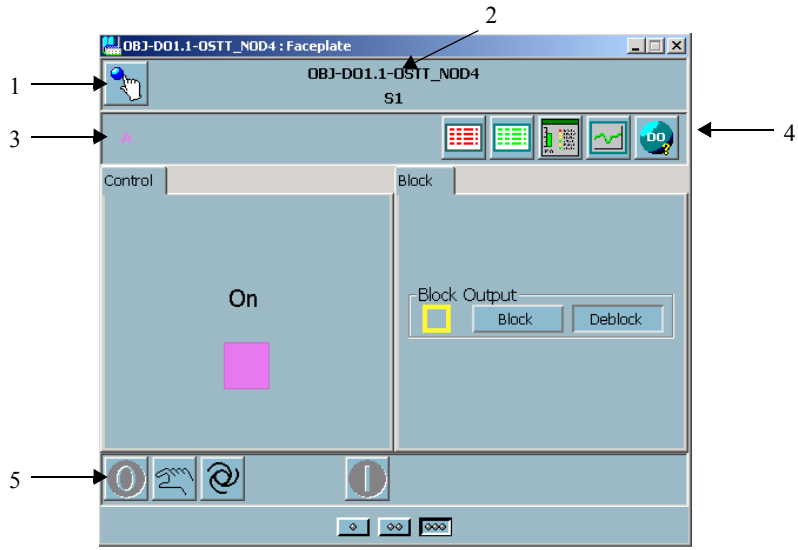
DO, Digital output

Faceplate

Presentation:







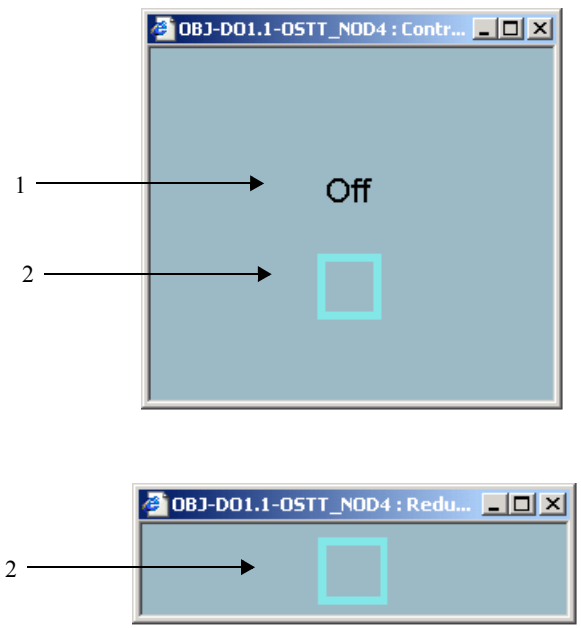
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Mode	**M** Cyan	MAN_MODE = 1	
		A Magenta	MAN_MODE = 0	
3.2	Output Blk	**OUT** Yellow	OUTP_BLK = 1	
4	Aspect links	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	

No	Description	Default Presentation	Condition	Remarks
5	**On**	Set VALUE to one	MAN_MODE = 1	Set VALUE = 1
	Off	Set VALUE to zero	MAN_MODE = 1	Set VALUE = 0
	Man	Set to Man Mode		Set MAN_MODE = 1
	Auto	Set to Auto Mode		Set MAN_MODE = 0

Control and ReducedControl

Presentation:

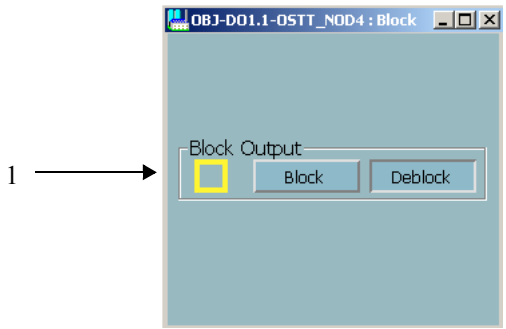


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Text Value**			*Status Line*
1.1	**On**	**On** Black	VALUE = 1	
1.2	**Off**	**Off** Black	VALUE = 0	
2	**Indication**			
		■	VALUE = 1	
		□	VALUE = 0	
	Color	Cyan	MAN = 1	*Manual Mode*
		Magenta	MAN = 0	*Auto Mode*

Block

Presentation:

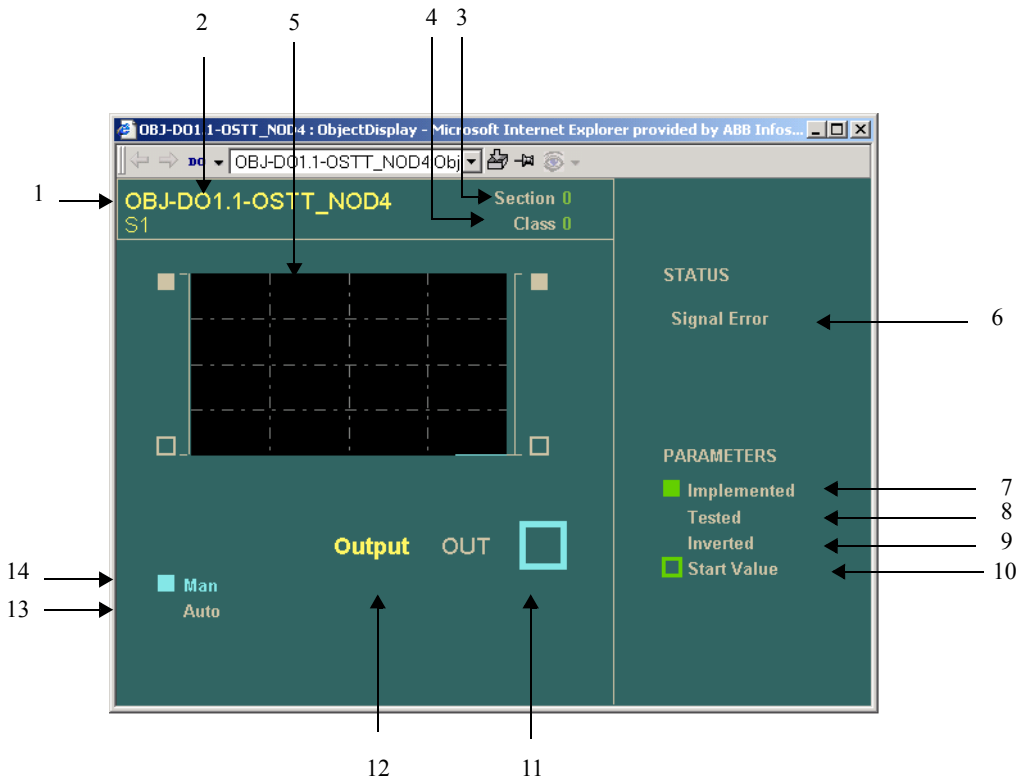


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Output**	**Block Output** Black		
		! Yellow	Blocked	
		Block pressed	OUTP_BLK = 1	
		Deblock pressed	OUTP_BLK = 0	

Object Display

Presentation:



Behavior:

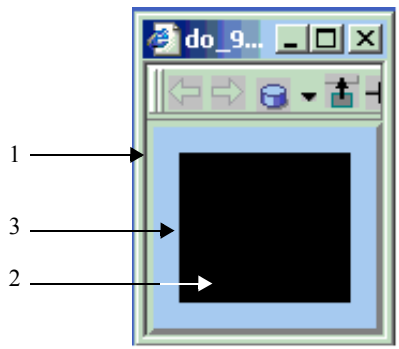
No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object Name and Description*
		Red flashing	AL_UNACK =1	*Unacknowledged*
		Yellow	OUTP_BLK = 1	*Output blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	*Manual mode*
		Magenta	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5.1	**Value Trim Curve**		VALUE	*Value*
		Cyan	MAN = 1	
		Magenta	-	
5.2	**Range Indicators**	Filled		*Top indicator*
		Unfilled		*Bottom indicator*
6	**STATUS**			*Status*
6.1	**Signal error Indication**	■ Red	ERR = 1	*I/O Error*
6.2	**Signal error Text**	**Signal Error**		*Signal Error text*
		Red	ERR = 1	
		Grey	-	
7	**Parameters**			*Parameters*
7.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
7.2	**Implemented Text**	**Implemented** Grey		*Implemented text*

No	Description	Default Presentation	Condition	Remarks
8.1	**Tested Indication**	■ Green	TESTED = 1	*Tested*
8.2	**Tested Text**	**Tested** Grey		*Tested text*
9.1	**Inverted Indication**	■ Green	INV = 1	*Inverted*
9.2	**Inverted Text**	**Inverted** Grey		*Inverted text*
10.1	**Start Value Indication**	**Last Val** Green	RESTART = 1	*Start value*
		■ Green	STVAL = 1 and RESTART = 0	
		□ Green	STVAL = 0 and RESTART = 0	
10.2	**Start Value Text**	**Start Value** Grey		*Start Value text*
11.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
11.2	**Value**			*3D Display object*
		■	VALUE = 1	*Symbol released*
		□	VALUE = 0	*Symbol pressed in*
	Color	Cyan	MAN = 1	
		Magenta	-	
12	**Output Blocked**	**Output Blocked** Yellow	OUTP_BLK = 1	*Output blocked*
		-	OUTP_BLK = 0	*Invisible*
13.1	**Auto Indication**	■ Magenta	MAN = 0	*Auto mode*
13.2	**Auto Text**	**Auto**		*Auto text*
		Magenta	MAN = 0	*Auto mode*
		Grey	MAN = 1	*Manual mode*
14.1	**Man Indication**	■ Cyan	MAN = 1	*Manual mode*
14.2	**Man Text**	**Man**		*Manual text*
		Cyan	MAN = 1	*Manual mode*
		Grey	MAN = 0	*Auto mode*

Graphic Element

IndicatorBox01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
			SELECTED = 0	*Invisible*
2	**Symbol Center Color**		VALUE	*3D Display object*
		Black	(Inverted = 1 and VALUE = 1) or VALUE = 0	*Inverted or Off*
		Flashing Red	AL_UNACK = 1	*Unacknowledged alarm*
		Yellow	OUTP_BLK = 1	*Updated blocked*
		Red	ERR = 1	*Alarm*
		Cyan	MAN = 1	
		Magenta	MAN = 0	
3	**Label**			*User defined character*
		Label Grey	-	

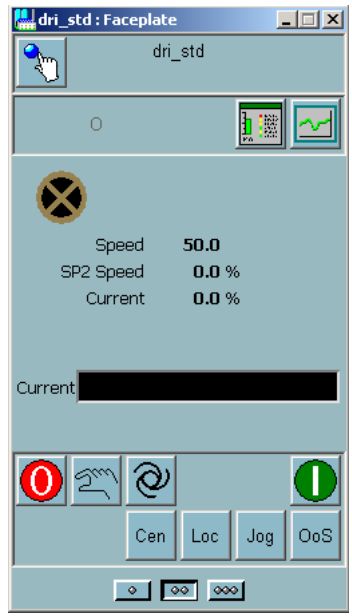
Configuration:

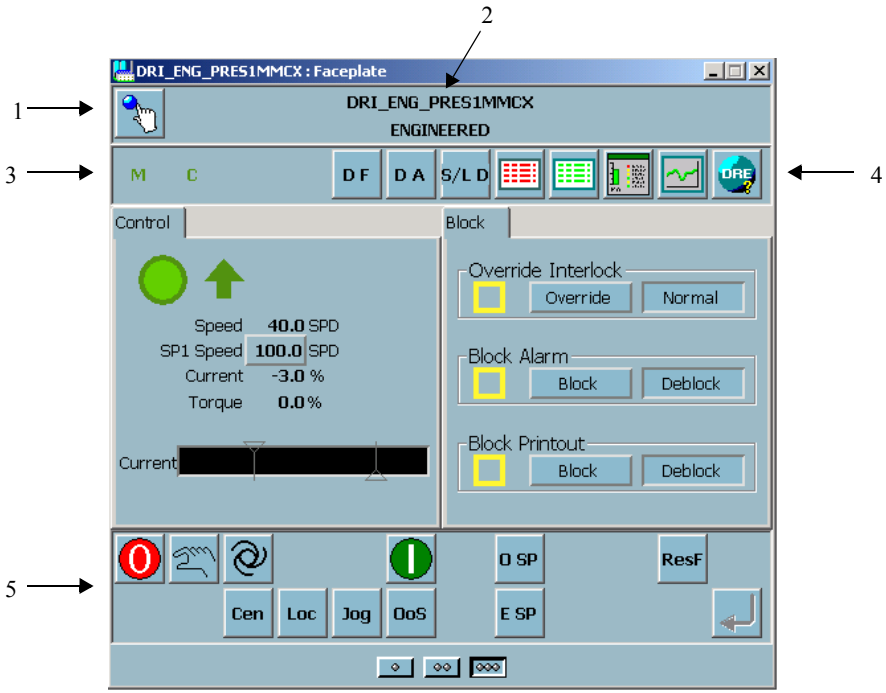
Parameters	Affects	Options (bold is default)	Remarks
Inverted	2. Symbol	**false**, true	
Label	3. Label	“ “, any letter	
FrameWidth	1. Lock Frame	**3**, (0...5)	
FrameStyle	1. Lock Frame	**Raised,** Flat, Sunken	Raised and Sunken defines that 3-D presentation is used. The object state (on/off) defines the actual 3-D presentation.

DRICONE, Engineered drive

Faceplate

Presentation:





Behavior:

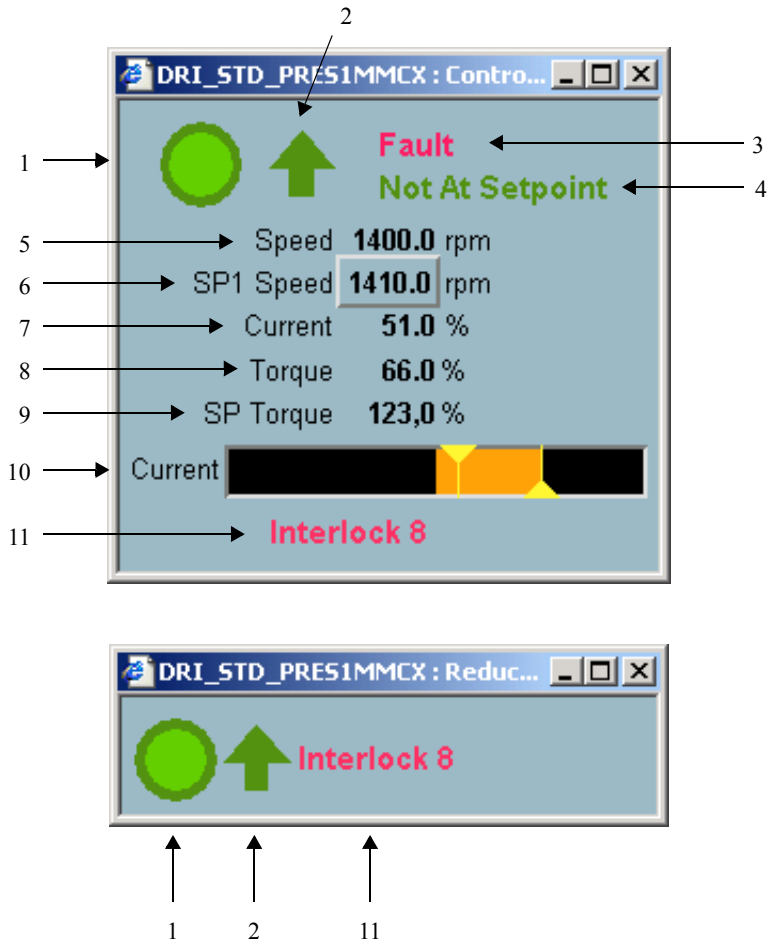
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	
		A Dark green	BOOL_A = 0 and BOOL_B = 1 and IND2_09 = 1	

No	Description	Default Presentation	Condition	Remarks
3.2	**Control point**	**O** Light brown	IND2_00 = 0	*Out of service.*
		D Yellow	IND2_09 = 0	*Drive local*
		J Yellow	IND2_09 = 1 and BOOL_C = 1	*Jog running from motor place*
		L Dark green	IND2_09 = 1 and BOOL_D = 1	*Local controlled from local panel*
		C Dark green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*Central controlled from operator's panel*
3.3	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
3.4	**Interlock indications**	**X** Yellow	(IND2_12 = 1 and IND2_02 = 1 and BOOL_F = 1 and IND2_15 = 0) or (IND2_13 = 1 and IND2_02 = 1 and BOOL_F = 1)	*B- Interlock 3* *B - Interlock 4*
		X Green	(IND2_08 = 1) or (IND2_10 = 1 and IND2_15 = 0) or IND2_11 = 1 or (IND2_12 = 1 and BOOL_F = 0 and IND2_15 = 0) or (IND2_12 = 1 and IND2_02 = 0 and BOOL_F = 1 and IND2_15 = 0) or (IND2_13 = 1 and BOOL_F = 0) or (IND2_13 = 1 and IND2_02 = 0 and BOOL_F = 1) or IND2_14 = 1	*C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4* *IA- Interlock*
		BX Red	IND1_15 = 1	*Override Interlock and Interlock active*
		BX Yellow	(BOOL_C = 1 or IND2_15 = 1) and IND1_15=0	*Override Interlock and Interlock active*

No	Description	Default Presentation	Condition	Remarks
4	**Aspect links**	Diagnostic Fault Display	position 0, 0, 5	
		Diagnostic Alarm Display	position 0, 0, 6	
		Status and Limit Display	position 0, 0, 7	
		Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0 , 12	
5	**Start**	Start motor		Set MORD_02 = 1
	Stop	Stop motor		Set MORD_03 = 1
	Man	Set to Man Mode		Set MORD_14 = 1
	Auto	Set to Auto Mode		Set MORD_15 = 1
	Cen	Set to Central Control		Set MORD_10 = 1
	Loc	Set to Local Control		Set MORD_11 = 1
	Jog	Set to Jog Control		Set MORD_12 = 1
	OoS	Set to Out of Service Control		Set MORD_13 = 1
	O SP	Set use of operator setpoint		Set MORD_06 = 1
	E SP	Set use of external setpoint		Set MORD_07 = 1
	ResF	Reset Drive fault		Set MORD_08 = 1

Control and Reduced Control

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Motor Status**	Light brown 	IND2_00 = 0	*Out of service*
		Green 	IND2_01 = 0 or IND2_08 = 1 or IND2_10 = 1 or IND2_11 = 1 or IND2_12 = 1 or IND2_13 = 1 or	*Not Ready for Start* *Not Ready Run* *C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4*
		Green 	IND2_14 = 1	*A - Interlock*
		Green 	IND2_02 = 1	*Drive running*
		Green 	IND2_01 = 1	*Drive ready to start* *Ready Run*
		Medium Green (Centre part)	IND2_02=1	*Running*
		Medium Green, Light green, Dark green, Black (Centre part background)	All others except out of service.	
2	**Running mode Indication**		IND2_02 = 1 and speed value positive	*Forward*

No	Description	Presentation	Condition	Remarks
2 cont.			IND2_02 = 1 and speed value negative	*Reverse*
			IND2_01 = 1	*Run permitted*
		Green		
3	**Warning text**	**Comm Err** Red Flash	AU_IND1_12 = 1	*NLS (Communication Error) unacknowledged fault*
		Comm Err Red	IND1_12 = 1	*NLS (Communication Error)*
		Fault Red Flash	AU_IND1_11 = 1	*NLS (Fault) unacknowledged fault*
		Fault Red	IND1_11 = 1	*NLS (Fault)*
		Alarm Red Flash	AU_IND1_07 = 1	*NLS (Alarm) unacknowledged alarm*
		Alarm Red	IND1_07 = 1	*NLS (Alarm)*
4	**Information text**	**At Limit** Red Flash	AU_IND1_09 = 1	*NLS (Limit) unacknowledged limit*
		At Limit Red	IND1_09 = 1	*NLS (Limit)*
		Check Status/Limit Green	BOOL_G = 1	*Indicate that the status word or limit word has changed.*
		Not At Setpoint Green	IND2_02 = 1 and IND2_07 = 0	*NLS (Actual value at not reference)*
		Ready Run Green	IND2_01 = 1 and ind2_02 = 0	*NLS (Ready Run)*
		Ready Green	IND2_00 = 1 and IND2_02 = 0	*NLS (Ready*
5.1	**Headline Speed**	**Speed** Black	INTWB_00 = 1	*NLS (Speed)*
5.2	**Speed value**	Black	REAL_C	*Numeric presentation of speed value 1*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*

No	Description	Presentation	Condition	Remarks
5.2 cont.		**? ? ?** Red	IND1_12 =1	*Communication error*
5.3	**Unit Speed**	String (5) Black	PRES_A(1-5)	*Unit of measured Speed*
6.1	**Headline Set Point Speed**	**E SP1 Spd** Black	INTWB11 = 1 and BOOL_E = 1	*NLS (E SP1 Spd)*
		E SP2 Spd Black	INTWB_12 = 1 and BOOL_E = 1	*NLS (E SP2 Spd)*
		SP1 Speed Black	INTWB_11 = 1 and BOOL_E = 0	*NLS (SP1 Speed)*
		SP2 Speed Black	INTWB_12 = 1 and BOOL_E = 0	*NLS (SP 2 Speed)*
6.2	**SetPoint speed value**	ESP1, Black	REAL_D (help drive object) and (BOOL_E = 1 and INTWB11= 1)	*External set point value for speed unit*
		ESP2, Black	REAL_D and (BOOL_E = 1 INTWB12=1)	*Set point value for speed %*
		SP1, Black	REAL_PARAM (help drive object) and (BOOL_E = 0 and INTWB11=1)	*Set point value for speed unit*
		SP2, Black	REAL_PARAM and (BOOL_E = 0 and INTWB12=1)	*Set Point value for speed %*
6.3	**Unit SetPoint Speed**	String (5) Black	(INTWB_11 = 1 and BOOL_E = 1) or (INTWB_11 = 1 and BOOL_E = 0) PRES_A(1-5)	*unit*
		% Black	(INTWB_12 = 1 and BOOL_E =1) or (INTWB12 = 1 and BOOL_E = 0) and	*%*

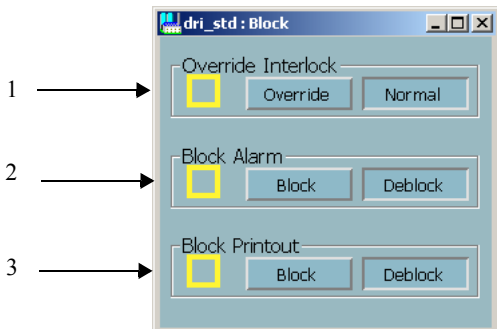
No	Description	Presentation	Condition	Remarks
7.1	**Headline Current**	Black	INTWB_01 = 1	*NLS (Current)*
7.2	**Current value**	Value string, Black	REAL_RES	*Numeric presentation of Current*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
7.3	**Current Unit**	**%** Black		*Unit of current*
8.1	**Headline Torque**	Black	INTWB_02 = 1	*NLS (Torque)*
8.2	**Torque value**	Black	REAL_A	*Numeric presentation of Torque*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
8.3	**Torque Unit**	**%** Black		*Unit of Torque*
9.1	**Headline External Set Point Torque/ Set Point Torque/ PID**	**E SP Torq** Black	INTWB_14 = 1 and BOOL_E = 1	*Head line of External Set Point Torque* *NLS (E SP Torque)*
		SP Torque Black	INTWB_14 = 1 and BOOL_E = 0	*Head line of External Set Point Torque* *NLS (SP Torque)*
		E SP PID Black	INTWB_13 = 1 and BOOL_E = 1	*Head line of External Set Point PID* *NLS (E SP PID)*
		SP PID Black	INTWB_13 = 1 and BOOL_E = 0	*Head line of External Set Point PID* *NLS (SP PID)*
9.2	**External Set Point Torque/ Set Point Torque/ PID**	E SP Torque Black	REAL_E and (BOOL_E = 1 and INTWB14= 1)	*External set point value for torque*
		SP Torque, Black	REAL_PARAM and (BOOL_E = 0 INTWB14=1)	*Set point value for torque*

No	Description	Presentation	Condition	Remarks
9.2 cont.		E SP PID, Black	REAL_E and (BOOL_E = 1 and INTWB13= 1)	*External set point value for PID*
		SP PID, Black	REAL_PARAM and (BOOL_E = 0 and INTWB13=1)	*Set Point value for PID*
9.3	**Unit External Set Point Torque/ Set Point Torque / PID**	String (5) Black	%	*Unit of External Set Point Torque or Set Point Torque or PID*
10.1	**Baragraph text**	**Current**, Black	INTWB_01 = 1	*NLS (Current) Current*
		Torque, Black	INTWB_02 = 1	*NLS (Torque) Torque*
10.2	**Motor Current**		INTWB_01 = 1 or INTWB_02 = 1	*Bar graph Visible*
10.3	**Motor Current**	Bar graph +, Magenta	INTWB_02 = 1 and REAL_A REAL_A_MIN to REAL_A_MAX	*Motor torque value*
		Bar graph +/-, Magenta	INTWB_02 = 1 and REAL_A_MIN<0 REAL_A -REAL_A_MAX to REAL_A_MAX	*Motor torque value*
		Bar graph +, Brown	INTWB_01 = 1 and REAL_RES REAL_RES_MIN to REAL_RES_MAX	*Motor current value*
		Bar graph +/-, Brown	INTWB_01 = 1 and REAL_RES_MIN<0 REAL_RES -REAL_RES_MAX to REAL_RES_MAX	*Motor current value*
10.4	**Hi Load Indication**	at 100%	INTWB_01 = 1 and REAL_RES_HILIM>0.02	*Limit Visible for current only*

No	Description	Presentation	Condition	Remarks
10.4 cont.		Filled Yellow	AL_BLK=1 and REAL_RES > REAL_RES_HILIM or AL_P_BLK=1 and REAL_RES > REAL_RES_HILIM	*Above high load, Alarm blocked*
		Unfilled Yellow	AL_P_BLK=1 or AL_BLK = 1	*Alarm blocked*
		Filled Red	REAL_RES > REAL_RES_HILIM	*The value of current has passed the high load limit.*
		Unfilled, Grey		*Not high load*
10.5	**Normal Load Limit Indication** **Normal Load Limit Indication**		REAL_RES_LOLIM>0.02	*Limit Visible*
		Arrow (polygon)	at REAL_RES_LOLIM REAL_RES_MIN to REAL_RES_MAX	*Upper limit of normal load*
		Filled Yellow	AL_BLK=1 and REAL_RES > REAL_RES_LOLIM or AL_P_BLK=1 and REAL_RES > REAL_RES_LOLIM	*Above normal load, Alarm blocked*
		Unfilled Yellow	AL_P_BLK=1 or AL_BLK = 1	*Alarm blocked*
		Filled Grey	REAL_RES > REAL_RES_LOLIM	*The value of current has passed the normal load limit.*
		Unfilled, Grey		*Normal*
11	**Blocking Interlock text**	**Interlock text** Red	ACT_PRES_TEXT	*Get the actual interlock text from the database. Valid for interlocks IC, IB1-IB4*
		Interlock text Yellow	ACT_PRES_TEXT	*Get the actual interlock text from the database. Valid for interlock IA*

Block

Presentation:



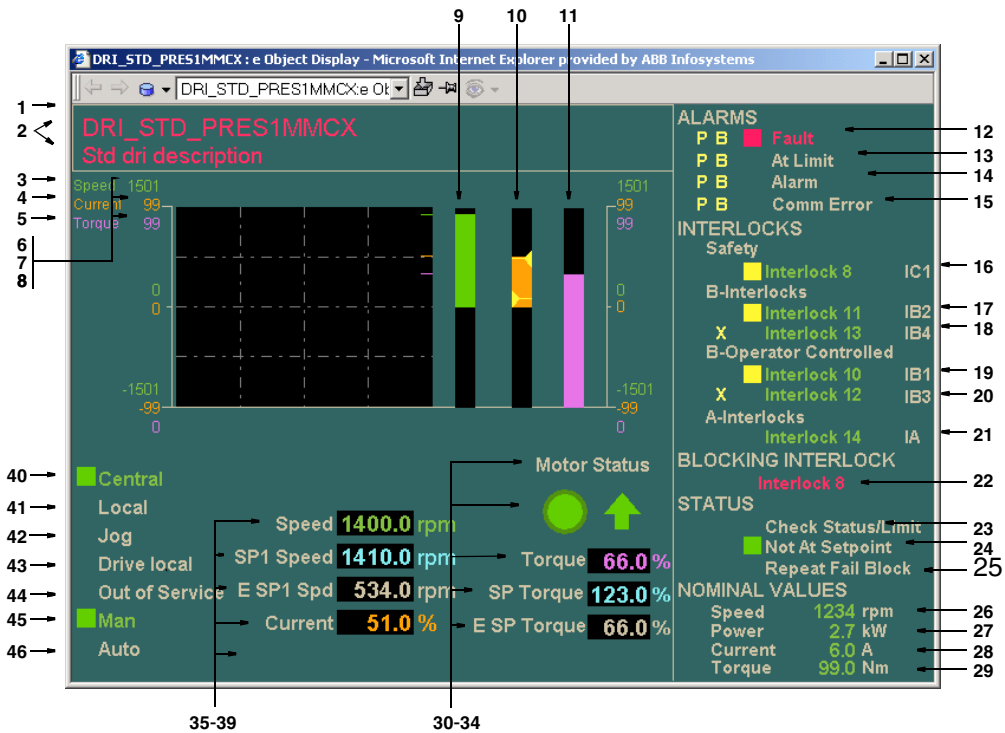
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Override Interlock**			*IND2_15 Indicates current status*
		! Yellow	Blocked	
		Override pressed	MORD_04 = 1	
		Normal pressed	MORD_05 = 1	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	ALARM_BLK = 1	
		Deblock pressed	ALARM_BLK = 0	
3	**Block Printout**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_BLK = 1	
		Deblock pressed	PRINT_BLK = 0	

Displays

Object Display

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Grey	-	

No	Description	Presentation	Condition	Remarks
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND1_11 = 1 or AU_IND1_07 = 1 or AU_IND1_09 = 1 or AU_IND1_12 = 1	*Unacknowledged alarm*
		Red	IND1_11 = 1 or IND1_07 = 1 or IND1_09 = 1 or IND1_12 = 1	*Fault* *Alarm* *Limit* *Communication error*
		Green		*Normal*
3.1	**Range Max Speed**	Green	REAL_C_MAX	
		-	INTWB_00 = 1	*Limit visible*
3.2	**Range Min Speed**	Green	REAL_C_MIN	
		-	INTWB_00 = 1	*Limit visible*
4.1	**Range Max Current**	Brown	REAL_RES_MAX	
		-	INTWB_01 = 1	*Limit visible*
4.2	**Range Min Current**	Brown	REAL_RES_MIN	
		-	INTWB_01 = 1	*Limit visible*
5.1	**Range Max Torque**	Magenta	REAL_A_MAX	
		-	INTWB_02 = 1	*Limit visible*
5.2	**Range Min Torque**	Magenta	REAL_A_MIN	
		-	INTWB_02 = 1	*Limit visible*
6	**Trim Curve Speed**	Green	REAL_C	*Trim curve for speed*
		-	INTWB_00 = 1	*Trim curve visible*
7	**Trim Curve Current**	Brown	REAL_RES	*Trim curve for current*
		-	INTWB_01 = 1	*Trim curve visible*
8	**Trim Curve Torque**	Magenta	REAL_A	*Trim curve for Torque*
		-	INTWB_02 = 1	*Trim curve visible*

No	Description	Presentation	Condition	Remarks
9.1	**Bar graph Speed**	Green	REAL_C	*Speed bar graph*
		Bar graph +	INTWB_00 = 1 and REAL_C REAL_C_MIN to REAL_C_MAX	*Bar graph when speed min value is positive.*
		Bar graph +/-	INTWB_00 = 1 and REAL_C_MIN<0 REAL_C -REAL_C_MAX to REAL_C_MAX	*Bar graph when speed min value is negative.*
10.1	**Bar graph Current**	Brown	REAL_RES	*Current bar graph*
		Bar graph +	INTWB_01 = 1 and REAL_RES REAL_RES_MIN to REAL_RES_MAX	*Bar graph when current min value is positive.*
		Bar graph +/-	INTWB_01 = 1 and REAL_RES_MIN<0 REAL_RES -REAL_RES_MAX to REAL_RES_MAX	*Bar graph when current min value is negative.*
10.2	**Hi Load Indication**	at 100%	INTWB_01 = 1	*Limit Indication*
		Filled Yellow	ALARM_BLK=1 and REAL_RES > REAL_RES_HILIM or ALARM_PERIOD_BLK=1 and REAL_RES > REAL_RES_HILIM	*High load, Alarm blocked*
		Unfilled Yellow	ALARM_PERIOD_BLK=1 or ALARM_BLK = 1	*Alarm blocked*
		Filled Red	REAL_RES > REAL_RES_HILIM	*The value of current has passed the high load limit.*
		Unfilled, Grey		*Not high load*

No	Description	Presentation	Condition	Remarks
10.3	**Normal Load Limit Indication**		INTWB_01 = 1	*Limit Visible for current only*
		Arrow (polygon)	at REAL_RES_LOLIM REAL_RES_MIN to REAL_RES_MAX	*Upper limit of normal load*
		Filled Yellow	AL_BLK=1 and REAL_RES > REAL_RES_LOLIM or AL_P_BLK=1 and REAL_RES > REAL_RES_LOLIM	*Above normal load, Alarm blocked*
		Unfilled Yellow	AL_P_BLK=1 or AL_BLK = 1	*Alarm blocked*
		Filled Grey	REAL_RES > REAL_RES_LOLIM	*The value of current has passed the normal load limit.*
		Unfilled, Grey		*Normal*
11.1	**Bar graph Torque**	Magenta	REAL_A	*Torque bar graph*
		Bar graph +	INTWB_02 = 1 and REAL_A REAL_A_MIN to REAL_A_MAX	*Bar graph when torque min value is positive.*
		Bar graph +/-	INTWB_02 = 1 and REAL_A_MIN<0 REAL_A -REAL_A_MAX to REAL_A_MAX	*Bar graph when torque min value is negative.*
12	**ALARMS**			*Alarms*
12.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	ALARM_PERIOD_BLK = 1	*Alarm blocked by PC-program*
12.3	**Warning Indication**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged alarm*
		■ Red	IND1_11 = 1	*Alarm*

No	Description	Presentation	Condition	Remarks
12.4	**Alarm 1 Text**	**Fault**		*NLS (Fault)*
		Red	IND1_11 = 1 or AU_IND1_11 = 1	
		Grey	-	
13.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
13.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	ALARM_PERIOD_BLK = 1	*Alarm blocked by PC-program*
13.3	**Warning Indication**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged alarm*
		■ Red	IND1_09 = 1	*Alarm*
13.4	**Alarm 2 Text**	**At Limit**		*NLS (At Limit)*
		Red	IND1_09 = 1 or AU_IND1_09 = 1	
		Grey	-	
14.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
14.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	ALARM_PERIOD_BLK = 1	*Alarm blocked by PC-program*
14.3	**Warning Indication**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged alarm*
		■ Red	IND1_07 = 1	*Alarm*
14.4	**Alarm 3 Text**	**Alarm**		*NLS (Alarm)*
		Red	IND1_07 = 1 or AU_IND1_07 = 1	
		Grey	-	
15.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
15.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_PERIOD_BLK = 1	*Alarm blocked by PC-program*
15.3	**Warning Indication**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged alarm*
		■ Red	IND1_12 = 1	*Alarm*

No	Description	Presentation	Condition	Remarks
15.4	**Alarm 4 Text**	**Comm. error**		*NLS (Comm. error)*
		Red	IND1_12 = 1 or AU_IND1_12 = 1	
		Grey	-	
16	**INTERLOCKS**			*Interlocks*
16	**STATUS**			*Status*
16.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
16.2	**IC1 Text**	Green	I2_08TXT	*Safety Interlock IC1 text from database*
17.1	**IB2 Blocked**	**BX** Yellow	BOOL_C = 1	*Jog mode. Interlock blocked*
17.2	**IB2 Active**	■ Yellow	IND2_11 = 1	*Interlock IB2 active*
17.3	**IB2 Text**	Green	I2_11TXT	*Interlock IB2 text from database*
18.1	**IB4 Block Indication**	**BX** Yellow	BOOL_C = 1	*Jog mode. Interlock blocked*
		X Yellow	IND2_13 = 1 and IND2_02 = 1 and BOOL_F = 1	*Pending interlock, will be set when not running.*
18.2	**IB4 Active**	■ Yellow	(IND2_13 = 1 and BOOL_F = 0) or (IND2_13 = 1 and IND2_02 = 0 and BOOL_F = 1)	*Interlock IB4 active*
18.3	**IB4 Text**	Green	I2_13TXT	*Interlock IB4 text from database*
19.1	**IB1 Blocked**	**BX** Red	IND1_15 = 1	*Override Interlock and Interlock IB1 active*
		BX Yellow	(BOOL_C = 1 or IND2_15=1) and IND1_15=0	*Jog mode. Interlock blocked*
19.2	**IB1 Active**	■ Yellow	IND2_10 = 1 and IND2_15 = 0	*Interlock IB1 active*

No	Description	Presentation	Condition	Remarks
19.3	**IB1 Text**	Green	I2_10TXT	*Interlock IB1 text from database*
20.1	**IB3 Blocked**	**BX** Red	IND1_15 = 1	*Override Interlock and Interlock IB3 active*
		BX Yellow	(BOOL_C = 1 or IND2_15=1) and IND1_15=0	*Jog mode. Interlock blocked*
		X Yellow	IND2_12 = 1 and IND2_02 = 1and BOOL_F = 1and IND2_15 = 0	*Pending interlock, will be set when not running.*
20.2	**IB3 Active**	■ Yellow	(IND2_12 = 1 and BOOL_F = 0 and IND2_15 = 0 and) or (IND2_12 = 1 and IND2_02 = 0 and BOOL_F = 1and IND2_15 = 0)	*Interlock IB3 active*
20.3	**IB3 Text**	Green	I2_12TXT	*Interlock IB3 text from database*
21.1	**IA Blocked**	**BX** Yellow	BOOL_C = 1	*Jog mode. Interlock blocked*
21.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
21.3	**IA Text**	Green	I2_14TXT	*Interlock IA text from database*
22	**Blocking Interlock**	Grey		*Blocking Interlock*
22.1	**Blocking Interlock Text**	Green	ACT_PRES_TEXT	*The Interlock that is active.*
23.1	**Ready Run Indication**	■ Green	IND2_01 = 1	
23.2	**Ready Run Text**	**Ready Run** Grey		*NLS (Ready Run)*
24.1	**Not at reference Indication**	■ Green	IND2_02 = 1 and IND2_07 = 0	
24.2	**Not at reference Text**	**Not at Setpoint** Grey		*NLS (Not at Setpoint)*
25.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	

No	Description	Presentation	Condition	Remarks
25.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*NLS (Repeat Fail Blk)*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
26	**Nominal Values**			*Nominal values*
26.1	**Nom. Speed Text**	**Nom. Speed** Grey		*NLS (Speed) Nominal Speed of drive*
26.2	**Nom. Speed Value**	Green	INTL_RES	
26.3	**Nom. Speed Unit**	**rpm** Grey		*Unit rpm*
27.1	**Nom. Power Text**	**Power** Grey	INTWA_00 = 1	*NLS (Power) Nominal Power of drive*
27.2	**Nom. Power Value**	Green	REAL_E from MMCX help object	
27.3	**Nom. Power Unit**	**kW** Grey		*Unit kW*
28.1	**Nom. Current Text**	**Current** Grey	INTWA_00 = 1	*NLS (Current) Nominal Current of motor*
28.2	**Nom. Current Value**	Green	REAL_E_MIN from MMCX help object	
28.3	**Nom. Current Unit**	**A** Grey		*Unit Ampere*
29.1	**Nom. Torque Text**	**Torque** Grey	INTWA_00 = 1	*NLS (Torque) Nominal Torque of motor*
29.2	**Nom. Torque Value**	Green	REAL_E_MAX from MMCX help object	
29.3	**Nom. Torque Unit**	**Nm** Grey		*Unit Nm*
30	**MotorStatus Text**	**Motor Status** Grey		*Run*

No	Description	Presentation	Condition	Remarks
31.1	**MotorStatus**	Light brown 	IND2_00 = 0	*Out of service*
		Green 	IND2_01 = 0 or IND2_08 = 1 or IND2_10 = 1 or IND2_11 = 1 or IND2_12 = 1 or IND2_13 = 1 or	*Not Ready for Start* *Not Ready Run* *C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4*
		Green 	IND2_14 = 1	*A - Interlock*
		Green 	IND2_02 = 1	*Drive running*
		Green 	IND2_01 = 1	*Drive ready to start* *Ready Run*
		Medium Green (K5) (Centre part)	IND2_02 =1	*Running*
		Medium Green (K5), Light green (L5), Dark green (M5), Black (K16) (Centre part background)		
31.2	**Direction Indication**		IND2_02 = 1 and speed value positive	*Forward*
			IND2_02 = 1 and speed value negative	*Reverse*
			IND2_01 = 1	*Run permitted*
		Green	-	

No	Description	Presentation	Condition	Remarks
32.1	**Torque Text**	**Torque** Grey	INTWB_02 = 1	*NLS (Torque)*
32.2	**Torque Value**	Magenta	REAL_A	*Torque value*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
32.3	**Torque Unit**	**%** Magenta	-	*%*
33.1	**SP Torque Text**	**SP Torque** Grey	INTWB_14 = 1 and BOOL_E = 0	*NLS (SP Torque)*
33.2	**SP Torque Value**	Cyan	REAL_PARAM and BOOL_E = 0	*Set point torque value*
		Grey	REAL_PARAM and BOOL_E = 1	*When the E SP Torque setpoint is selected*
33.3	**SP Torque Unit**	**%** Cyan	BOOL_E = 0	*%*
		% Grey	BOOL_E = 1	*When the E SP Torque setpoint is selected*
33.4	**SP PID Text**	**SP PID** Grey	INTWB_13 = 1 and BOOL_E = 0	*NLS (SP PID)*
	SP PID Value	Cyan	REAL_PARAM and BOOL_E = 0	*Set point PID value*
		Grey	REAL_PARAM and BOOL_E = 1	*When the E SP PID setpoint is selected*
33.5	**SP PID Unit**	**%** Cyan	BOOL_E = 0	*%*
		% Grey	BOOL_E = 1	*When the E SP PID setpoint is selected*
34.1	**E Sp Torque Text**	**E SP Torque** Grey	INTWB_14 = 1 and BOOL_E = 1	*NLS (E SP Torque)*
34.2	**E Sp Torque Value**	Cyan	REAL_E and BOOL_E = 1	*External Set point torque value, value from PC-program*
		Grey	REAL_E and BOOL_E = 0	*When the SP Torque setpoint is selected*

No	Description	Presentation	Condition	Remarks
34.3	**E Sp Torque Unit**	**%** Cyan	BOOL_E = 1	*%*
		% Grey	BOOL_E = 0	*When the SP Torque setpoint is selected*
34.4	**E Sp PID Text**	**E SP PID** Grey	INTWB_13 = 1 and BOOL_E = 1	*NLS (E SP PID)*
34.5	**E Sp PID Value**	Cyan	REAL_E and BOOL_E = 1	*External Set point PID value, value from PC-program*
		Grey	REAL_E and BOOL_E = 0	*When the SP PID setpoint is selected*
34.6	**E Sp PID Unit**	**%** Cyan	BOOL_E = 1	*%*
		% Grey	BOOL_E = 0	*When the SP PID setpoint is selected*
35.1	**Speed Text**	**Speed** Grey	INTWB_00 = 1	*NLS (Speed)*
35.2	**Speed Value**	Green	REAL_C	*Motor speed*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
35.3	**Speed Unit**	Green	PRES_A (1-5)	*Unit of speed from MMCX database.*
36.1	**SP1 Speed Text**	**SP1 Speed** Grey	INTWB_11 = 1 and BOOL_E = 0	*NLS (SP Speed)*
36.2	**SP1 Speed Value**	Cyan	REAL_PARAM and BOOL_E = 0 from drive help object	*Motor speed*
		Grey	REAL_PARAM and BOOL_E = 1 from drive help object	*When the E SP Spd setpoint is selected*
36.3	**SP1 Speed Unit**	**Unit** Cyan	PRES_A (1-5) and BOOL_E = 0	*Unit of SP Speed from MMCX database.*
		Unit Grey	PRES_A (1-5) and BOOL_E = 1	*When the E SP Spd setpoint is selected*
36.4	**SP2 Speed Text**	**SP2 Speed** Grey	INTWB_12 = 1 and BOOL_E = 0	*NLS (SP Speed)*

No	Description	Presentation	Condition	Remarks
36.5	**SP2 Speed Value**	Cyan	REAL_PARAM and BOOL_E = 0	*Motor speed*
		Grey	REAL_PARAM and BOOL_E = 1	*When the E SP Spd setpoint is selected*
36.6	**SP2 Speed Unit**	**%** Cyan	BOOL_E = 0	*%*
		% Grey	BOOL_E = 1	*When the E SP Spd setpoint is selected*
37.1	**E SP1 Spd Text**	**E SP1 Spd** Grey	INTWB_11 = 1 and BOOL_E = 1	*NLS (E SP Spd)*
37.2	**E SP1 Spd Value**	Cyan	REAL_D and BOOL_E = 1 from drive help object	*External Set point speed value, value from PC-program*
		Grey	REAL_D and BOOL_E = 0 from drive help object	*When the SP Speed setpoint is selected*
37.3	**E SP1 Spd Unit**	**Unit** Cyan	PRES_A (1-5) and BOOL_E = 1	*Unit of SP Speed from MMCX database.*
		Unit Grey	PRES_A (1-5) and BOOL_E = 0	*When the SP Speed setpoint is selected*
37.4	**E SP2 Spd Text**	**E SP2 Spd** Grey	INTWB_12 = 1 and BOOL_E = 1	*NLS (E SP Spd)*
37.5	**E SP2 Spd Value**	Cyan	REAL_D and BOOL_E = 1	*External Set point speed value, value from PC-program*
		Grey	REAL_D and BOOL_E = 0	*When the SP Speed setpoint is selected*
37.6	**E SP2 Spd Unit**	**%** Cyan	BOOL_E = 1	*%*
		% Grey	BOOL_E = 0	*When the SP Speed setpoint is selected*

No	Description	Presentation	Condition	Remarks
38.1	**Current Text**	**CURRENT** Grey	INTWB_01 = 1	*NLS (Current)*
38.2	**Current Value**	Brown	REAL_RES	*Current*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
38.3	**Current Unit**	**%** Brown	-	*% of nominal current*
39.1	**Value Text**	**"Value"** Grey	PRES_B and INTWB_03 = 1	*Free text from MMCX database element, max 10 characters*
39.2	**"Value" Value**	Light Yellow	REAL_B	
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
39.3	**"Value" Unit**	Light Yellow	PRES_A [6..10]	*Free text, max 5 characters.*
40.1	**Central Indication**	■ Green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*Central Controlled from operator's place or by group start or other PC-program*
40.2	**Central Text**	**Central**		
		Green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*NLS (Central)*
		Grey	-	
41.1	**Local Indication**	■ Green	BOOL_D = 1 and IND2_09 = 1	*Local Controlled from local panel*
41.2	**Local Text**	**Local**		
		Green	BOOL_D = 1 and IND2_09 = 1	
		Grey	-	
42.1	**Jog Indication**	■ Yellow	BOOL_C = 1 and IND2_09 = 1	*Jog Jog running from motor location*

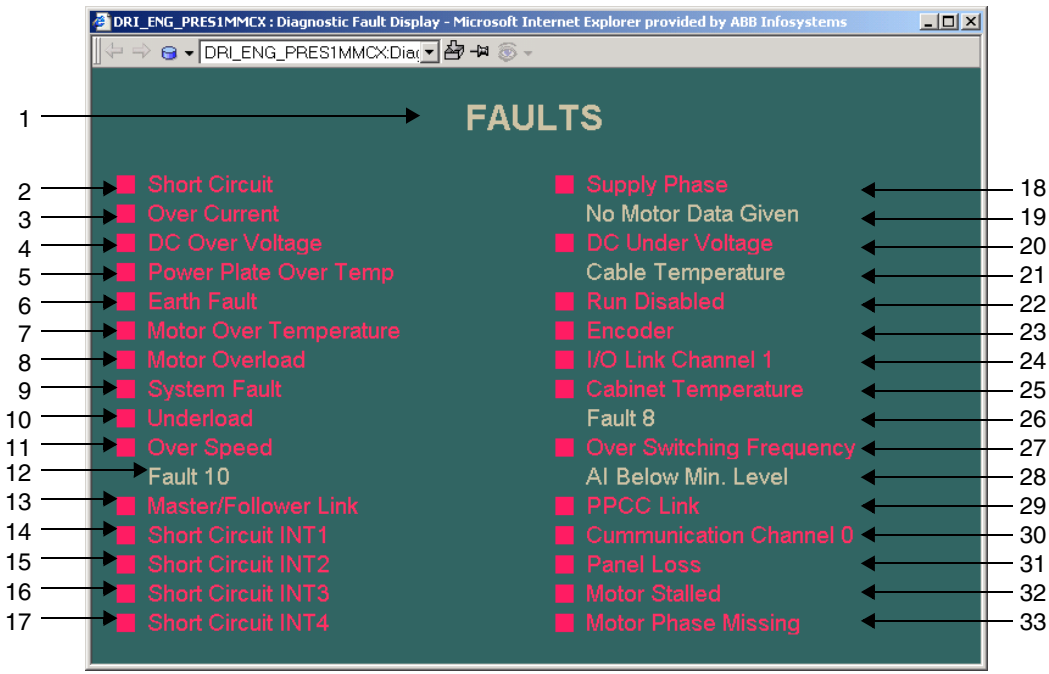
No	Description	Presentation	Condition	Remarks
42.2	**Test Text**	**Jog**		
		Yellow	BOOL_C = 1 and IND2_09 = 1	*NLS (Jog)*
		Grey	-	
43.1	**Drive local Indication**	■ Yellow	IND2_09 = 0	*Local* *Controlled from local drive panel*
43.2	**Drivel ocal Text**	**Drive local**		
		Yellow	IND2_09 = 0	*NLS (Drive local)*
		Grey	-	
44.1	**Out of Service Indication**	■ Light brown	IND2_00 = 0	*Out of service* *No control possible*
44.2	**Out of Service Text**	**Out of service**		
		Light brown	IND2_00 = 0	*NLS (Out of service)*
		Grey	-	
45.1	**Man Indication**	■ Green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	*Manual mode.* *Startorder affects the motor directly*
45.2	**Man Text**	**Man** Grey		
		Green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	
		Grey	-	
46.1	**Auto Indication**	■ Green	BOOL_B = 1 and BOOL_A = 0 and IND2_09 = 1	*Auto mode.* *Process conditions control start/stop of motor*
46.2	**Auto Text**	**Auto**		
		Green	BOOL_B = 1 and BOOL_A = 0 and IND2_09 = 1	
		Grey	-	

Diagnostic Fault Display

Data Base Element MMCX is to be named by the main Data Base Element + suffix **<.FL>**

Example: The main MMCX has the name **313-552A**. The MMCX for the fault overlap display must have the name **313-552A.FL**

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Header**	**FAULTS** Grey		*Faults title*
2.1	**Short Circuit Fault**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged Alarm Short Circuit Fault*
2.2	**Short Circuit Fault**	■ Red	IND1_00 = 1	*Short Circuit Fault*

No	Description	Presentation	Condition	Remarks
2.3	**Short Circuit Text Fault**	**Short Circuit** Red	AU_IND1_00 = 1 or IND1_00 = 1	*NLS (Short Circuit) fault*
2.4	**Short Circuit Text Normal**	**Short Circuit** Grey	IND1_00 = 0	*NLS (Short Circuit) normal*
3.1	**Over Current Fault**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged Alarm Over Current Fault*
3.2	**Over Current Fault**	■ Red	IND1_01 = 1	*Over Current Fault*
3.3	**Over Current Text Fault**	**Over Current** Red	AU_IND1_01 = 1 or IND1_01 = 1	*NLS (Over Current) fault.*
3.4	**Over Current Text Normal**	**Over Current** Grey	IND1_01 = 0	*NLS (Over Current) normal*
4.1	**DC Over Voltage Fault**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged Alarm DC Over Voltage Fault*
4.2	**DC Over Voltage Fault**	■ Red	IND1_02 = 1	*DC Over Voltage Fault*
4.3	**DC Over Voltage Text Fault**	**DC Over Voltage** Red	AU_IND1_02 = 1 or IND1_02 = 1	*NLS (DC Over Voltage) fault.*
4.4	**DC Over Voltage Text Normal**	**DC Over Voltage** Grey	IND1_02 = 0	*NLS (DC Over Voltage) normal*
5.1	**Power Plate Over Temp Fault**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged Alarm Power Plate Over Temp*
5.2	**Power Plate Over Temp Fault**	■ Red	IND1_03 = 1	*Power Plate Over Temp*
5.3	**Power Plate Over Temp Text Fault**	**Power Plate Over Temp** Red	AU_IND1_03 = 1 or IND1_03 = 1	*NLS (**Power Plate Over Temp**) fault.*
5.4	**Power Plate Over Temp Text Normal**	**Power Plate Over Temp** Grey	IND1_03 = 0	*NLS (**Power Plate Over Temp**) normal*

No	Description	Presentation	Condition	Remarks
6.1	**Earth Fault** **Fault**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged Alarm* *Earth Fault*
6.2	**Earth Fault** **Fault**	■ Red	IND1_04 = 1	*Earth Fault*
6.3	**Earth Fault Text** **Fault**	**Earth Fault** Red	AU_IND1_04 = 1 or IND1_04 = 1	*NLS (Earth Fault) fault.*
6.4	**Earth Fault Text** **Normal**	**Earth Fault** Grey	IND1_04 = 0	*NLS (Earth Fault) normal*
7.1	**Motor Over Temperature** **Fault**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged Alarm* *Motor Over Temperature Fault*
7.2	**Motor Over Temperature** **Fault**	■ Red	IND1_05 = 1	*Motor Over Temperature Fault*
7.3	**Motor Over Temperature** **Text** **Fault**	**Motor Over Temperature** Red	AU_IND1_05 = 1 or IND1_05 = 1	*NLS (Motor Over Temperature) fault.*
7.4	**Motor Over Temperature** **Text** **Normal**	**Motor Over Temperature** Grey	IND1_05 = 0	*NLS (Motor Over Temperature) normal*
8.1	**Motor Overload** **Fault**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged Alarm* *Motor Overload Fault*
8.2	**Motor Overload** **Fault**	■ Red	IND1_06 = 1	*Motor Overload Fault*
8.3	**Motor Overload Text** **Fault**	**Motor Overload** Red	AU_IND1_06 = 1 or IND1_06 = 1	*NLS (Motor Overload) fault.*
8.4	**Motor Overload Text** **Normal**	**Motor Overload** Grey	IND1_06 = 0	*NLS (Motor Overload) normal*
9.1	**System Fault** **Fault**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged Alarm* *System Fault*
9.2	**System Fault** **Fault**	■ Red	IND1_07 = 1	*System Fault*
9.3	**System Fault Text** **Fault**	**System Fault** Red	AU_IND1_07 = 1 or IND1_07 = 1	*NLS (System Fault) fault.*

No	Description	Presentation	Condition	Remarks
9.4	**System Fault Text Normal**	**System Fault** Grey	IND1_07 = 0	*NLS (System Fault) normal*
10.1	**Underload Fault**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged Alarm Underload Fault*
10.2	**Underload Fault**	■ Red	IND1_08 = 1	*Underload Fault*
10.3	**Underload Text Fault**	**Underload** Red	AU_IND1_08 = 1 or IND1_08 = 1	*NLS (Underload) fault.*
10.4	**Underload Text Normal**	**Underload** Grey	IND1_08 = 0	*NLS (Underload) normal*
11.1	**Over Speed Fault**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged Alarm Over Speed Fault*
11.2	**Over Speed Fault**	■ Red	IND1_09 = 1	*Over Speed Fault*
11.3	**Over Speed Text Fault**	**Over Speed** Red	AU_IND1_09 = 1 or IND1_09 = 1	*NLS (Over Speed) fault.*
11.4	**Over Speed Text Normal**	**Over Speed** Grey	IND1_09 = 0	*NLS (Over Speed) normal*
12.1	**Fault 10 Fault**	■ Red flashing	AU_IND1_10 = 1	*Unacknowledged Alarm Fault 10 Fault*
12.2	**Fault 10 Fault**	■ Red	IND1_10 = 1	*Fault 10 Fault*
12.3	**Fault 10 Text Fault**	**Fault 10** Red	AU_IND1_10 = 1 or IND1_10 = 1	*NLS (Fault 10) fault*
12.4	**Fault 10 Text Normal**	**Fault 10** Grey	IND1_10 = 0	*NLS (Fault 10) normal*
13.1	**Master/Follower Link Fault**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged Alarm Master/Follower Link Fault*
13.2	**Master/Follower Link Fault**	■ Red	IND1_11 = 1	*Master/Follower Link Fault*

No	Description	Presentation	Condition	Remarks
13.3	**Master/Follower Link Text Fault**	**Master/Follower Link** Red	AU_IND1_11 = 1 or IND1_11 = 1	*NLS (Master/Follower Link) fault.*
13.4	**Master/Follower Link Text Normal**	**Master/Follower Link** Grey	IND1_11 = 0	*NLS (Master/Follower Link) normal*
14.1	**Short Circuit INT1 Fault**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged Alarm* *Short Circuit INT1 Fault*
14.2	**Short Circuit INT1 Fault**	■ Red	IND1_12 = 1	*Short Circuit INT1 Fault*
14.3	**Short Circuit INT1 Text Fault**	**Short Circuit INT1** Red	AU_IND1_12 = 1 or IND1_12 = 1	*NLS (Short Circuit INT1) fault.*
14.4	**Short Circuit INT1 Text Normal**	**Short Circuit INT1** Grey	IND1_12= 0	*NLS (Short Circuit INT1) normal*
15.1	**Short Circuit INT2 Fault**	■ Red flashing	AU_IND1_13 = 1	*Unacknowledged Alarm* *Short Circuit INT2 Fault*
15.2	**Short Circuit INT2 Fault**	■ Red	IND1_13 = 1	*Short Circuit INT2 Fault*
15.3	**Short Circuit INT2 Text Fault**	**Short Circuit INT2** Red	AU_IND1_13 = 1 or IND1_13 = 1	*NLS (Short Circuit INT2) fault.*
15.4	**Short Circuit INT2 Text Normal**	**Short Circuit INT2** Grey	IND1_13 = 0	*NLS (Short Circuit INT2) normal*
16.1	**Short Circuit INT3 Fault**	■ Red flashing	AU_IND1_14 = 1	*Unacknowledged Alarm* *Short Circuit INT3 Fault*
16.2	**Short Circuit INT3 Fault**	■ Red	IND1_14 = 1	*Short Circuit INT3 Fault*
16.3	**Short Circuit INT3 Text Fault**	**Short Circuit INT3** Red	AU_IND1_14 = 1 or IND1_14 = 1	*NLS (Short Circuit INT3) fault*
16.4	**Short Circuit INT3 Text Normal**	**Short Circuit INT3** Grey	IND1_14 = 0	*NLS (Short Circuit INT3) normal*
17.1	**Short Circuit INT4 Fault**	■ Red flashing	AU_IND1_15 = 1	*Unacknowledged Alarm* *Short Circuit INT4 Fault*

No	Description	Presentation	Condition	Remarks
17.2	**Short Circuit INT4 Fault**	■ Red	IND1_15 = 1	*Short Circuit INT4 Fault*
17.3	**Short Circuit INT4 Text Fault**	**Short Circuit INT4** Red	AU_IND1_15 = 1 or IND1_15 = 1	*NLS (Short Circuit INT4) fault.*
17.4	**Short Circuit INT4 Text Normal**	**Short Circuit INT4** Grey	IND1_15 = 0	*NLS (Short Circuit INT4) normal*
18.1	**Supply Phase Fault**	■ Red flashing	AU_IND2_00 = 1	*Unacknowledged Alarm Supply Phase Fault*
18.2	**Supply Phase Fault**	■ Red	IND2_00 = 1	*Supply Phase Fault*
18.3	**Supply Phase Text Fault**	**Supply Phase** Red	AU_IND2_00 = 1 or IND2_00 = 1	*NLS (Supply Phase) Fault.*
18.4	**Supply Phase Text Normal**	**Supply Phase** Grey	IND2_00 = 0	*NLS (Supply Phase) normal*
19.1	**No Motor Data Given Fault**	■ Red flashing	AU_IND2_01 = 1	*Unacknowledged Alarm No Motor Data Given Fault*
19.2	**No Motor Data Given Fault**	■ Red	IND2_01 = 1	*No Motor Data Given Fault*
19.3	**No Motor Data Given Text Fault**	**No Motor Data Given** Red	AU_IND2_01 = 1 or IND2_01 = 1	*NLS (No Motor Data Given) Fault*
19.4	**No Motor Data Given Text Normal**	**No Motor Data Given** Grey	IND2_01 = 0	*NLS (No Motor Data Given) normal*
20.1	**DC Under Voltage Fault**	■ Red flashing	AU_IND2_02 = 1	*Unacknowledged Alarm DC Under Voltage Fault*
20.2	**DC Under Voltage Fault**	■ Red	IND2_02 = 1	*DC Under Voltage Fault*
20.3	**DC Under Voltage Text Fault**	**DC Under Voltage** Red	AU_IND2_02 = 1 or IND2_02 = 1	*NLS (DC Under Voltage) Fault.*
20.4	**DC Under Voltage Text Normal**	**DC Under Voltage** Grey	IND2_02 = 0	*NLS (DC Under Voltage) normal*

No	Description	Presentation	Condition	Remarks
21.1	**Cable Temperature Fault**	■ Red flashing	AU_IND2_03 = 1	*Unacknowledged Alarm Cable Temperature Fault*
21.2	**Cable Temperature Fault**	■ Red	IND2_03 = 1	*Cable Temperature Fault*
21.3	**Cable Temperature Text Fault**	**Cable Temperature** Red	AU_IND2_03 = 1 or IND2_03 = 1	*NLS (Cable Temperature) Fault.*
21.4	**Cable Temperature Text Normal**	**Cable Temperature** Grey	IND2_03 = 0	*NLS (Cable Temperature) normal*
22.1	**Run Disabled Fault**	■ Red flashing	AU_IND2_04 = 1	*Unacknowledged Alarm Run Disabled*
22.2	**Run Disabled Fault**	■ Red	IND2_04 = 1	*Run Disabled Fault*
22.3	**Run Disabled Text Fault**	**Run Disabled** Red	AU_IND2_04 = 1 or IND2_024= 1	*NLS (Run Disabled) Fault.*
22.4	**Run Disabled Text Normal**	**Run Disabled** Grey	IND2_04= 0	*NLS (Run Disabled) normal*
23.1	**Encoder Error Fault**	■ Red flashing	AU_IND2_05 = 1	*Unacknowledged Alarm Encoder Error Fault*
23.2	**Encoder Error Fault**	■ Red	IND2_05 = 1	*Encoder Error Fault*
23.3	**Encoder Error Text Fault**	**Encoder Error** Red	AU_IND2_05 = 1 or IND2_05 = 1	*NLS (Encoder Error) Fault.*
23.4	**Encoder Error Text Normal**	**Encoder Error** Grey	IND2_05 = 0	*NLS (Encoder Error) normal*
24.1	**I/O Link Channel 1 Fault**	■ Red flashing	AU_IND2_06 = 1	*Unacknowledged Alarm I/O Link Channel 1 Fault*
24.2	**I/O Link Channel 1 Fault**	■ Red	IND2_06 = 1	*I/O Link Channel 1 Fault*
24.3	**I/O Link Channel 1 Text Fault**	**I/O Link Channel 1** Red	AU_IND2_06 = 1 or IND2_06 = 1	*NLS (I/O Link Channel 1) Fault*

No	Description	Presentation	Condition	Remarks
24.4	**I/O Link Channel 1Text Normal**	**I/O Link Channel 1** Grey	IND2_06 = 0	*NLS (I/O Link Channel 1) normal*
25.1	**Cabinet Over Temperature Fault**	■ Red flashing	AU_IND2_07 = 1	*Unacknowledged Alarm* *Cabinet Over Temperature Fault*
25.2	**Cabinet Over Temperature Fault**	■ Red	IND2_07 = 1	*Cabinet Over Temperature Fault*
25.3	**Cabinet Over Temperature Text Fault**	**Cabinet Over Temperature** Red	AU_IND2_07 = 1 or IND2_07 = 1	*NLS (Cabinet Over Temperature) Fault*
25.4	**Cabinet Over Temperature Text Normal**	**Cabinet Over Temperature** Grey	IND2_07 = 0	*NLS (Cabinet Over Temperature) normal*
26.1	**Fault 18 Fault**	■ Red flashing	AU_IND2_08 = 1	*Unacknowledged Alarm* *Fault 18 Fault*
26.2	**Fault 18 Fault**	■ Red	IND2_08 = 1	*Fault 18 Fault*
26.3	**Fault 18 Text Fault**	**Fault 18** Red	AU_IND2_08 = 1 or IND2_08 = 1	*NLS (Fault 18) Fault*
26.4	**Fault 18 Text Normal**	**Fault 18** Grey	IND2_08 = 0	*NLS (Fault 18) normal*
27.1	**Over Switching Frequency Fault**	■ Red flashing	AU_IND2_09 = 1	*Over Switching Frequency Fault*
27.2	**Over Switching Frequency Fault**	■ Red	IND2_09 = 1	*Unacknowledged Alarm* *Over Switching Frequency Fault*
27.3	**Over Switching Frequency Text Fault**	**Over Switching Frequency** Red	AU_IND2_09 = 1 or IND2_09 = 1	*NLS (Over Switching Frequency) Fault.*
27.4	**Over Switching Frequency Text Normal**	**Over Switching Frequency** Grey	IND2_09 = 0	*NLS (Over Switching Frequency) normal*

No	Description	Presentation	Condition	Remarks
28.1	**AI Below Min. Level Fault**	■ Red flashing	AU_IND2_10 = 1	*Unacknowledged Alarm AI Below Min. Level Fault*
28.2	**AI Below Min. Level Fault**	■ Red	IND2_10 = 1	*AI Below Min. Level Fault*
28.3	**AI Below Min. Level Text Fault**	**AI Below Min. Level** Red	AU_IND2_10 = 1 or IND2_10 = 1	*NLS (AI Below Min. Level) Fault*
28.4	**AI Below Min. Level Text Normal**	**AI Below Min. Level** Grey	IND2_10 = 0	*NLS (AI Below Min. Level) normal*
29.1	**PPCC Link Fault**	■ Red flashing	AU_IND2_11 = 1	*Unacknowledged Alarm PPCC Link Fault*
29.2	**PPCC Link Fault**	■ Red	IND2_11 = 1	*PPCC Link Fault*
29.3	**PPCC Link Text Fault**	**PPCC Link** Red	AU_IND2_11 = 1 or IND2_11 = 1	*NLS (PPCC Link) Fault.*
29.4	**PPCC Link Text Normal**	**PPCC Link** Grey	IND2_11 = 0	*NLS (PPCC Link) normal*
30.1	**Communication Channel 0 Fault**	■ Red flashing	AU_IND2_12 = 1	*Unacknowledged Alarm Communication Channel 0 Fault*
30.2	**Communication Channel 0 Fault**	■ Red	IND2_12 = 1	*Communication Channel 0 Fault*
30.3	**Communication Channel 0 Text Fault**	**Communication Channel 0** Red	AU_IND2_12 = 1 or IND2_12 = 1	*NLS (Communication Channel 0) Fault.*
30.4	**Communication Channel 0 Text Normal**	**Communication Channel 0** Grey	IND2_12 = 0	*NLS (Communication Channel 0) normal*
31.1	**Panel Loss Fault**	■ Red flashing	AU_IND2_13 = 1	*Unacknowledged Alarm Panel Loss Fault*
31.2	**Panel Loss Fault**	■ Red	IND2_13 = 1	*Panel Loss Fault*

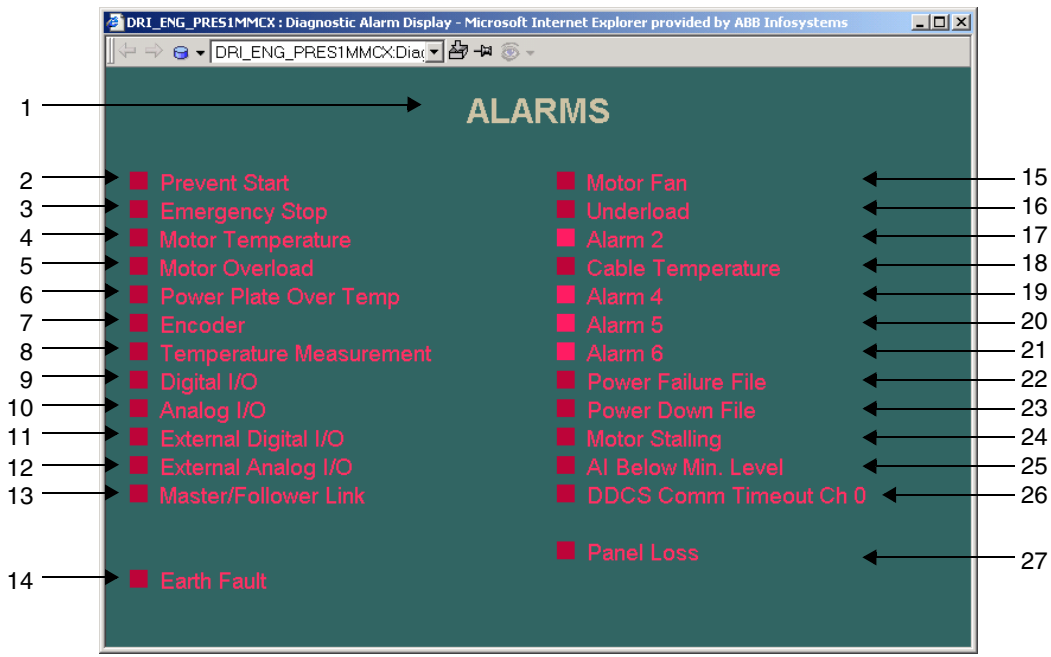
No	Description	Presentation	Condition	Remarks
31.3	**Panel Loss Text Fault**	**Panel Loss** Red	AU_IND2_13 = 1 or IND2_13 = 1	*NLS (Panel Loss) Fault.*
31.4	**Panel Loss Text Normal**	**Panel Loss** Grey	IND2_13 = 0	*NLS (Panel Loss) normal*
32.1	**Motor Stalled Fault**	■ Red flashing	AU_IND2_14 = 1	*Unacknowledged Alarm Motor Stalled Fault*
32.2	**Motor Stalled Fault**	■ Red	IND2_14 = 1	*Motor Stalled Fault*
32.3	**Motor Stalled Text Fault**	**Motor Stalled** Red	AU_IND2_14 = 1 or IND2_14 = 1	*NLS (Motor Stalled) Fault.*
32.4	**Motor Stalled Text Normal**	**Motor Stalled** Grey	IND2_14 = 0	*NLS (Motor Stalled) normal*
33.1	**Motor Phase Missing Fault**	■ Red flashing	AU_IND2_15 = 1	*Unacknowledged Alarm Motor Phase Missing Fault*
33.2	**Motor Phase Missing Fault**	■ Red	IND2_15 = 1	*Motor Phase Missing Fault*
33.3	**Motor Phase Missing Text Fault**	**Motor Phase Missing** Red	AU_IND2_15 = 1 or IND2_15 = 1	*NLS (Motor Phase Missing) Fault.*
33.4	**Motor Phase Missing Text Normal**	**Motor Phase Missing** Grey	IND2_15 = 0	*NLS (Motor Phase Missing) normal*

Diagnostic Alarm Display

Data Base Element MMCX is to be named by the main Data Base Element + suffix **<.AL>**

Example: The main MMCX has the name **313-552A**. The MMCX for the fault overlap display must have the name **313-552A.AL**

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Header**	**ALARMS** Grey		*Alarms title.*
2.1	**Prevent Start Alarm**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged Alarm Prevent Start Alarm*
2.2	**Prevent Start Alarm**	■ Red	IND1_00 = 1	*Prevent Start Alarm*

No	Description	Presentation	Condition	Remarks
2.3	**Prevent Start Text Alarm**	**Prevent Start** Red	AU_IND1_00 = 1 or IND1_00 = 1	*NLS (Prevent Start) alarm.*
2.4	**Prevent Start Text Normal**	**Prevent Start** Grey	IND1_00 = 0	*NLS (Prevent Start) normal*
3.1	**Emergency Stop Alarm**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged Alarm* *Emergency Stop Alarm*
3.2	**Emergency Stop Alarm**	■ Red	IND1_01 = 1	*Emergency Stop Alarm*
3.3	**Emergency Stop Text Alarm**	**Emergency Stop** Red	AU_IND1_01 = 1 or IND1_01 = 1	*NLS (Emergency Stop) alarm.*
3.4	**Emergency Stop Text Normal**	**Emergency Stop** Grey	IND1_01 = 0	*NLS (Emergency Stop) normal*
4.1	**Motor Temperature Alarm**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged Alarm* *Motor Temperature Alarm*
4.2	**Motor Temperature Alarm**	■ Red	IND1_02 = 1	*Motor Temperature Alarm*
4.3	**Motor Temperature Text Alarm**	**Motor Temperature** Red	AU_IND1_02 = 1 or IND1_02 = 1	*NLS (Motor Temperature) alarm.*
4.4	**Motor Temperature Text Normal**	**Motor Temperature** Grey	IND1_02 = 0	*NLS (Motor Temperature) normal*
5.1	**Motor Overload Alarm**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged Alarm* *Motor Overload Alarm*
5.2	**Motor Overload Alarm**	■ Red	IND1_03 = 1	*Motor Overload Alarm*
5.3	**Motor Overload Text Alarm**	**Motor Overload** Red	AU_IND1_03 = 1 or IND1_03 = 1	*NLS (Motor Overload) alarm.*
5.4	**Motor Overload Text Normal**	**Motor Overload** Grey	IND1_03 = 0	*NLS (Motor Overload) normal*
6.1	**Power Plate Over Temp Alarm**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged Alarm* *Power Plate Over Temp Alarm*

No	Description	Presentation	Condition	Remarks
6.2	**Power Plate Over Temp Alarm**	■ Red	IND1_04 = 1	*Power Plate Over Temp Alarm*
6.3	**Power Plate Over Temp Text Alarm**	**Power Plate Over Temp** Red	AU_IND1_04 = 1 or IND1_04 = 1	*NLS (Power Plate Over Temp) alarm.*
6.4	**Power Plate Over Temp Text Normal**	**Power Plate Over Temp** Grey	IND1_04 = 0	*NLS (Power Plate Over Temp) normal*
7.1	**Encoder Alarm**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged Alarm* *Encoder Alarm*
7.2	**Encoder Alarm**	■ Red	IND1_05 = 1	*Encoder Alarm*
7.3	**Encoder Text Alarm**	**Encoder** Red	AU_IND1_05 = 1 or IND1_05 = 1	*NLS (Encoder) alarm.*
7.4	**Encoder Text Normal**	**Encoder** Grey	IND1_05 = 0	*NLS (Encoder) normal*
8.1	**Temperature Measurement Alarm**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged Alarm* *Temperature Measurement Alarm*
8.2	**Temperature Measurement Alarm**	■ Red	IND1_06 = 1	*Temperature Measurement Alarm*
8.3	**Temperature Measurement Text Alarm**	**Temperature Measurement** Red	AU_IND1_06 = 1 or IND1_06 = 1	*NLS (Temperature Measurement) alarm.*
8.4	**Temperature Measurement Text Normal**	**Temperature Measurement** Grey	IND1_06 = 0	*NLS (Temperature Measurement) normal*
9.1	**Digital I/O Alarm**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged Alarm* *Digital I/O Alarm*
9.2	**Digital I/O Alarm**	■ Red	IND1_07 = 1	*Digital I/O Alarm*

No	Description	Presentation	Condition	Remarks
9.3	**Digital I/O Text Alarm**	**Digital I/O** Red	AU_IND1_07 = 1 or IND1_07 = 1	*NLS (Digital I/O) alarm.*
9.4	**Digital I/O Text Normal**	**Digital I/O** Grey	IND1_07 = 0	*NLS (Digital I/O) normal*
10.1	**Analog I/O Alarm**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged Alarm* *Analog I/O Alarm*
10.2	**Analog I/O Alarm**	■ Red	IND1_08 = 1	*Analog I/O Alarm*
10.3	**Analog I/O Text Alarm**	**Analog I/O** Red	AU_IND1_08 = 1 or IND1_08 = 1	*NLS (Analog I/O) alarm.*
10.4	**Analog I/O Text Normal**	**Analog I/O** Grey	IND1_08 = 0	*NLS (Analog I/O) normal*
11.1	**External Digital I/O Alarm**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged Alarm* *External Digital I/O Alarm*
11.2	**External Digital I/O Alarm**	■ Red	IND1_09 = 1	*External Digital I/O Alarm*
11.3	**External Digital I/O Text Alarm**	**External Digital I/O** Red	AU_IND1_09 = 1 or IND1_09 = 1	*NLS (External Digital I/O) alarm.*
11.4	**External Digital I/O Text Normal**	**External Digital I/O** Grey	IND1_09 = 0	*NLS (External Digital I/O) normal*
12.1	**External Analog I/O Alarm**	■ Red flashing	AU_IND1_10 = 1	*Unacknowledged Alarm* *External Analog I/O Alarm*
12.2	**External Analog I/O Alarm**	■ Red	IND1_10 = 1	*External Analog I/O Alarm*
12.3	**External Analog I/O Text Alarm**	**External Analog I/O** Red	AU_IND1_10 = 1 or IND1_10 = 1	*NLS (External Analog I/O) alarm.*
12.4	**External Analog I/O Text Normal**	**External Analog I/O** Grey	IND1_10 = 0	*NLS (External Analog I/O) normal*
13.1	**Master Follower Link Alarm**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged Alarm* *Master Follower Link Alarm*

No	Description	Presentation	Condition	Remarks
13.2	**Master Follower Link Alarm**	■ Red	IND1_11 = 1	*Master Follower Link Alarm*
13.3	**Master Follower Link Text Alarm**	**Master/Follower Link** Red	AU_IND1_11 = 1 or IND1_11 = 1	*NLS (Master Follower Link) alarm.*
13.4	**Master Follower Link Text Normal**	**Master/Follower Link** Grey	IND1_11 = 0	*NLS (Master Follower Link) normal*
14.1	**Earth Fault Fault**	■ Red flashing	AU_IND1_14 = 1	*Unacknowledged Alarm Earth Fault*
14.2	**Earth Fault Fault**	■ Red	IND1_14 = 1	*Earth Fault*
14.3	**Earth Fault Fault**	**Earth Fault** Red	AU_IND1_14 = 1 or IND1_14 = 1	*NLS (Earth Fault) fault.*
14.4	**Earth Fault Normal**	**Earth Fault** Grey	IND1_14 = 0	*NLS (Earth Fault) normal*
15.1	**Motor Fan Fault**	■ Red flashing	AU_IND2_00 = 1	*Unacknowledged Alarm Motor Fan*
15.2	**Motor Fan Fault**	■ Red	IND2_00 = 1	*Motor Fan*
15.3	**Motor Fan Text Fault**	**Motor Fan** Red	AU_IND2_00 = 1 or IND2_00 = 1	*NLS (Motor Fan) fault.*
15.4	**Motor Fan Text Normal**	**Motor Fan** Grey	IND2_00 = 0	*NLS (Motor Fan) normal*
16.1	**Underload Fault**	■ Red flashing	AU_IND2_01 = 1	*Unacknowledged Alarm Underload Fault*
16.2	**Underload Fault**	■ Red	IND2_01 = 1	*Underload Fault*
16.3	**Underload Text Fault**	**Underload** Red	AU_IND2_01 = 1 or IND2_01 = 1	*NLS (Underload) fault.*
16.4	**Underload Text Normal**	**Underload** Grey	IND2_01 = 0	*NLS (Underload) normal*

No	Description	Presentation	Condition	Remarks
17.1	**Alarm 2 Fault**	■ Red flashing	AU_IND2_02 = 1	*Unacknowledged Alarm Alarm 2 Fault*
17.2	**Alarm 2 Fault**	■ Red	IND2_02 = 1	*Alarm 2 Fault*
17.3	**Alarm 2 Text Fault**	**Alarm 2** Red	AU_IND2_02 = 1 or IND2_02 = 1	*NLS (Alarm 2) fault.*
17.4	**Alarm 2 Text Normal**	**Alarm 2** Grey	IND2_02 = 0	*NLS (Alarm 2) normal*
18.1	**Cable Temperature Fault**	■ Red flashing	AU_IND2_03 = 1	*Unacknowledged Alarm Cable Tempertaure Fault*
18.2	**Cable Temperature Fault**	■ Red	IND2_03 = 1	*Cable Tempertaure Fault*
18.3	**Cable Temperature Text Fault**	**Cable Temperature** Red	AU_IND2_03 = 1 or IND2_03 = 1	*NLS (Cable Tempertaure) fault.*
18.4	**Cable Temperature Text Normal**	**Cable Temperature** Grey	IND2_03 = 0	*NLS (Cable Tempertaure) normal*
19.1	**Alarm 4 Fault**	■ Red flashing	AU_IND2_04 = 1	*Unacknowledged Alarm Alarm 4 Fault*
19.2	**Alarm 4 Fault**	■ Red	IND2_04 = 1	*Alarm 4 Fault*
19.3	**Alarm 4 Text Fault**	**Alarm 4** Red	AU_IND2_04 = 1 or IND2_04 = 1	*NLS (Alarm 4) fault.*
19.4	**Alarm 4 Text Normal**	**Alarm 4** Grey	IND2_04 = 0	*NLS (Alarm 4) normal*
20.1	**Alarm 5 Fault**	■ Red flashing	AU_IND2_05 = 1	*Unacknowledged Alarm Alarm 5 Fault*
20.2	**Alarm 5 Fault**	■ Red	IND2_05 = 1	*Alarm 5 Fault*
20.3	**Alarm 5 Text Fault**	**Alarm 5** Red	AU_IND2_05 = 1 or IND2_05 = 1	*NLS (Alarm 5) fault.*

No	Description	Presentation	Condition	Remarks
20.4	**Alarm 5 Text Normal**	**Alarm 5** Grey	IND2_05 = 0	*NLS (Alarm 5) normal*
21.1	**Alarm 6 Fault**	■ Red flashing	AU_IND2_06 = 1	*Unacknowledged Alarm Alarm 6 Fault*
21.2	**Alarm 6 Fault**	■ Red	IND2_06 = 1	*Alarm 6 Fault*
21.3	**Alarm 6 Text Fault**	**Alarm 6** Red	AU_IND2_06 = 1 or IND2_06 = 1	*NLS (Alarm 6) fault.*
21.4	**Alarm 6 Text Normal**	**Alarm 6** Grey	IND2_06 = 0	*NLS (Alarm 6) normal*
22.1	**Power Failure File Fault**	■ Red flashing	AU_IND2_07 = 1	*Unacknowledged Alarm Power Failure File Fault*
22.2	**Power Failure File Fault**	■ Red	IND2_07 = 1	*Power Failure File Fault*
22.3	**Power Failure File Text Fault**	**Power Failure File** Red	AU_IND2_07 = 1 or IND2_07 = 1	*NLS (Power Failure File) fault.*
22.4	**Power Failure File Text Normal**	**Power Failure File** Grey	IND2_07 = 0	*NLS (Power Failure File) normal*
23.1	**Power Down File Fault**	■ Red flashing	AU_IND2_08 = 1	*Unacknowledged Alarm Power Down File Fault*
23.2	**Power Down File Fault**	■ Red	IND2_08 = 1	*Power Down File Fault*
23.3	**Power Down File Text Fault**	**Power Down File** Red	AU_IND2_08 = 1 or IND2_08 = 1	*NLS (Power Down File) fault.*
23.4	**Power Down File Text Normal**	**Power Down File** Grey	IND2_08 = 0	*NLS (Power Down File) normal*
24.1	**Motor Stalling Fault**	■ Red flashing	AU_IND2_09 = 1	*Unacknowledged Alarm Motor Stalling Fault*
24.2	**Motor Stalling Fault**	■ Red	IND2_09 = 1	*Motor Stalling Fault*

No	Description	Presentation	Condition	Remarks
24.3	**Motor Stalling Text Fault**	**Motor Stalling** Red	AU_IND2_09 = 1 or IND2_09 = 1	*NLS (Motor Stalling) fault.*
24.4	**Motor Stalling Text Normal**	**Motor Stalling** Grey	IND2_09 = 0	*NLS (Motor Stalling) normal*
25.1	**Al Below Min. Level Fault**	■ Red flashing	AU_IND2_10 = 1	*Unacknowledged Alarm* *Al Below Min. Level Fault*
25.2	**Al Below Min. Level Fault**	■ Red	IND2_10 = 1	*Al Below Min. Level Fault*
25.3	**Al Below Min. Level Text Fault**	**Al Below Min. Level** Red	AU_IND2_10 = 1 or IND2_10 = 1	*NLS (Al Below Min. Level) fault.*
25.4	**Al Below Min. Level Text Normal**	**Al Below Min. Level** Grey	IND2_10 = 0	*NLS (Al Below Min. Level) normal*
26.1	**DDCS Comm Timeout Ch 0 Fault**	■ Red flashing	AU_IND2_11 = 1	*Unacknowledged Alarm* *DDCS Comm Timeout Ch 0 Fault*
26.2	**DDCS Comm Timeout Ch 0 Fault**	■ Red	IND2_11 = 1	*DDCS Comm Timeout Ch 0 Fault*
26.3	**DDCS Comm Timeout Ch 0 Text Fault**	**DDCS Comm Timeout Ch 0** Red	AU_IND2_11 = 1 or IND2_11 = 1	*NLS (DDCS Comm Timeout Ch 0) fault.*
26.4	**DDCS Comm Timeout Ch 0 Text Normal**	**DDCS Comm Timeout Ch 0** Grey	IND2_11 = 0	*NLS (DDCS Comm Timeout Ch 0) normal*
27.1	**Panel Loss Alarm**	■ Red flashing	AU_IND2_13 = 1	*Unacknowledged Alarm* *Panel Loss Alarm*
27.2	**Panel Loss Alarm**	■ Red	IND2_13 = 1	*Panel Loss Alarm*
27.3	**Panel Loss Text Alarm**	**Panel Loss** Red	AU_IND2_13 = 1 or IND2_13 = 1	*NLS (Panel Loss) alarm.*
27.4	**Panel Loss Text Normal**	**Panel Loss** Grey	IND2_13 = 0	*NLS (Panel Loss) normal*

Status and Limit Display

The status information to this diagnostic display comes from the main Data Base Element.Limits information is found in the faults Data Base Element MMCX + suffix **<.FL>**

Example: The main MMCX has the name **313-552A**. The MMCX for the fault overlap display must have the name **313-552A.FL**

Presentation:

Behavior:

No	Description	Presentation	Condition	Remarks
1	**Header**	**STATUS and LIMITS** Grey		*STATUS and LIMITS title.*
2.1	**Out of Window Status**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm Out of Window Status*
2.2	**Out of Window Status**	■ Red	IND1_01 = 1	*Out of Window Status*
2.3	**Out of Window Status**	**Out of Window** Red	AU_IND1_01 = 1 or IND1_01 = 1	*NLS (Out of Window) Status.*
2.4	**Out of Window Normal**	**Out of Window** Grey	IND1_01 = 0	*NLS (Out of Window) normal*
3.1	**Emergency Stop Coast Status**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm Emergency Stop Coast Status*
3.2	**Emergency Stop Coast Status**	■ Red	IND1_02 = 1	*Emergency Stop Coast Status*
3.3	**Emergency Stop Coast Text Status**	**Emergency Stop Coast** Red	AU_IND1_02 = 1 or IND1_02 = 1	*NLS (Emergency Stop Coast) Status.*
3.4	**Emergency Stop Coast Text Normal**	**Emergency Stop Coast** Grey	IND1_02 = 0	*NLS (Emergency Stop Coast) normal*
4.1	**Run Disabled Status**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm Run Disabled Status*
4.2	**Run Disabled Status**	■ Red	IND1_04 = 1	*Run Disabled Status*
4.3	**Run Disabled Text Status**	**Run Disabled** Red	AU_IND1_04 = 1 or IND1_04 = 1	*NLS (Run Disabled) Status.*
4.4	**Run Disabled Text Normal**	**Run Disabled** Grey	IND1_04 = 0	*NLS (Run Disabled) normal*
5.1	**First Start Not Done Status**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged alarm First Start Not Done Status*

No	Description	Presentation	Condition	Remarks
5.2	**First Start Not Done Status**	■ Red	IND1_06 = 1	*First Start Not Done Status*
5.3	**First Start Not Done Text Status**	**First Start Not Done** Red	AU_IND1_06 = 1 or IND1_06 = 1	*NLS (First Start Not Done) Status.*
5.4	**First Start Not Done Text Normal**	**First Start Not Done** Grey	IND1_06 = 0	*NLS (First Start Not Done) normal*
6.1	**Start Inhibition Status**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged alarm Start Inhibition Status*
6.2	**Start Inhibition Status**	■ Red	IND1_08 = 1	*Start Inhibition Status*
6.3	**Start Inhibition Text Status**	**Start Inhibition** Red	AU_IND1_08 = 1 or IND1_08 = 1	*NLS (Start Inhibition) Status.*
6.4	**Start Inhibition Text Normal**	**Start Inhibition** Grey	IND1_08 = 0	*NLS (Start Inhibition) normal*
7.1	**Ready To Switch On Status**	■ Green	IND2_00 = 1	*Ready To Switch On Status*
7.2	**Ready To Switch On Text Status**	**Ready To Switch On** Green	IND2_00 = 1	*NLS (Ready To Switch On) Status.*
7.3	**Ready To Switch On Text Normal**	**Ready To Switch On** Grey	IND2_00 = 0	*NLS (Ready To Switch On) normal*
8.1	**Ready Run Status**	■ Green	IND2_01 = 1	*Ready Run Status*
8.2	**Ready Run Text Status**	**Ready Run** Green	IND2_01 = 1	*NLS (Ready Run) Status.*
8.3	**Ready Run Text Normal**	**Ready Run** Grey	IND2_01 = 0	*NLS (Ready Run) normal*
9.1	**Emergency Coast Stop Status**	■ Red	IND2_04 = 1	*Emergency Coast Stop Status*
9.2	**Emergency Coast Stop Text Status**	**Emergency Coast Stop** Red	IND2_04 = 1	*NLS (Emergency Coast Stop) Status.*

No	Description	Presentation	Condition	Remarks
9.3	**Emergency Coast Stop Text Normal**	**Emergency Coast Stop** Grey	IND2_04 = 0	*NLS (Emergency Coast Stop) normal*
10.1	**Fast Emergency Stop Status**	■ Red	IND2_05 = 1	*Fast Emergency Stop Status*
10.2	**Fast Emergency Stop Text Status**	**Fast Emergency Stop** Red	IND2_05 = 1	*NLS (Fast Emergency Stop) Status.*
10.3	**Fast Emergency Stop Text Normal**	**Fast Emergency Stop** Grey	IND2_05 = 0	*NLS (Fast Emergency Stop) normal*
11.1	**Switch On Inhibit Status**	■ Red	IND2_06 = 1	*Switch On Inhibit Status*
11.2	**Switch On Inhibit Text Status**	**Switch On Inhibit** Red	IND2_06 = 1	*NLS (Switch On Inhibit) Status.*
11.3	**Switch On Inhibit Text Normal**	**Switch On Inhibit** Grey	IND2_06 = 0	*NLS (Switch On Inhibit) normal*
12.1	**Logg Data Ready Status**	■ Green	INTWB_00 = 1	*Logg Data Ready Status*
12.2	**Logg Data Ready Text Status**	**Logg Data Ready** Green	INTWB_00 = 1	*NLS (Logg Data Ready) Status.*
12.3	**Logg Data Ready Text Normal**	**Logg Data Ready** Grey	INTWB_00 = 0	*NLS (Logg Data Ready) normal*
13.1	**Motor Magnetized Status**	■ Green	INTWB_03 = 1	*Motor Magnetized Status*
13.2	**Motor Magnetized Text Status**	**Motor Magnetized** Green	INTWB_03 = 1	*NLS (Motor Magnetized) Status.*
13.3	**Motor Magnetized Text Normal**	**Motor Magnetized** Grey	INTWB_03 = 0	*NLS (Motor Magnetized) normal*
14.1	**Synch Ready Status**	■ Green	INTWB_05 = 1	*Synch Ready Status*

No	Description	Presentation	Condition	Remarks
14.2	**Synch Ready Text Status**	**Synch Ready** Green	INTWB_05 = 1	*NLS (Synch Ready) Status.*
14.3	**Synch Ready Text Normal**	**Synch Ready** Grey	INTWB_05 = 0	*NLS (Synch Ready) normal*
15.1	**Identity Run Done Status**	■ Green	INTWB_07 = 1	*Identity Run Done Status*
15.2	**Identity Run Done Text Status**	**Identity Run Done** Green	INTWB_07 = 1	*NLS (Identity Run Done) Status.*
15.3	**Identity Run Done Text Normal**	**Identity Run Done** Grey	INTWB_07 = 0	*NLS (Identity Run Done) normal*
16.1	**Torque Control Status**	■ Green	INTWB_10 = 1	*Torque Control Status*
16.2	**Torque Control Text Status**	**Torque Control** Green	INTWB_10 = 1	*NLS (Torque Control) Status.*
16.3	**Torque Control Text Normal**	**Torque Control** Grey	INTWB_10 = 0	*NLS (Torque Control) normal*
17.1	**Zero Speed Status**	■ Green	INTWB_11 = 1	*Zero Speed Status*
17.2	**Zero Speed Text Status**	**Zero Speed** Green	INTWB_11 = 1	*NLS (Zero Speed) Status.*
17.3	**Zero Speed Text Normal**	**Zero Speed** Grey	INTWB_11 = 0	*NLS (Zero Speed) normal*
18.1	**Torque Motor Limit Limit**	■ Red	INTWA_00 = 1	*Torque Motor Limit* *From MMCX.FL.*
18.2	**Torque Motor Limit Text Limit**	**Torque Motor Limit** Red	INTWA_00 = 1	*NLS (Torque Motor Limit) Limit.*
18.3	**Torque Motor Limit Text Normal**	**Torque Motor Limit** Grey	INTWA_00 = 0	*NLS (Torque Motor Limit) normal*
19.1	**SPC Torque Min Limit Limit**	■ Red	INTWA_01 = 1	*SPC Torque Min Limit* *From MMCX.FL.*

No	Description	Presentation	Condition	Remarks
19.2	**SPC Torque Min Limit Limit**	**SPC Torque Min Limit** Red	INTWA_01 = 1	*NLS (SPC Torque Min Limit) Limit.*
19.3	**SPC Torque Min Limit Normal**	**SPC Torque Min Limit** Grey	INTWA_01 = 0	*NLS (SPC Torque Min Limit) normal*
20.1	**SPC Torque Max Limit Limit**	■ Red	INTWA_02 = 1	*SPC Torque Max Limit* *From MMCX.FL.*
20.2	**SPC Torque Max Limit Text Limit**	**SPC Torque Max Limit** Red	INTWA_02 = 1	*NLS (SPC Torque Max Limit) Limit.*
20.3	**SPC Torque Max Limit Text Normal**	**SPC Torque Max Limit** Grey	INTWA_02 = 0	*NLS (SPC Torque Max Limit) normal*
21.1	**Torque User Current Limit Limit**	■ Red	INTWA_03 = 1	*Torque User Current Limitation* *From MMCX.FL.*
21.2	**Torque User Current Limit Text Limit**	**Torque User Current Limit** Red	INTWA_03 = 1	*NLS (Torque User Current Limit) Limit.*
21.3	**Torque User Current Limit Text Normal**	**Torque User Current Limit** Grey	INTWA_03 = 0	*NLS (Torque User Current Limit) normal*
22.1	**Torque Inverter Current Limit Limit**	■ Red	INTWA_04 = 1	*Torque Inverter Current Limit* *From MMCX.FL.*
22.2	**Torque Inverter Current Limit Text Limit**	**Torque Inverter Current Limit** Red	INTWA_04 = 1	*NLS (Torque Inverter Current Limit) Limit.*
22.3	**Torque Inverter Current Limit Text Normal**	**Torque Inverter Current Limit** Grey	INTWA_04 = 0	*NLS (Torque Inverter Current Limit) normal*
23.1	**Torque Min Limit Limit**	■ Red	INTWA_05 = 1	*Torque Min Limit* *From MMCX.FL.*

No	Description	Presentation	Condition	Remarks
23.2	**Torque Min Limit Text Limit**	**Torque Min Limit** Red	INTWA_05 = 1	*NLS (Torque Min Limit) Limit.*
23.3	**Torque Min Limit Text Normal**	**Torque Min Limit** Grey	INTWA_05 = 0	*NLS (Torque Min Limit) normal*
24.1	**Torque Max Limit Limit**	■ Red	INTWA_06 = 1	*Torque Max Limit* *From MMCX.FL.*
24.2	**Torque Max Limit Text Limit**	**Torque Max Limit** Red	INTWA_06 = 1	*NLS (Torque Max Limit) Limit.*
24.3	**Torque Max Limit Text Normal**	**Torque Max Limit** Grey	INTWA_06 = 0	*NLS (Torque Max Limit) normal*
25.1	**Torque Reference Min Limit Limit**	■ Red	INTWA_07 = 1	*Torque Reference Min Limit* *From MMCX.FL.*
25.2	**Torque Reference Min Limit Text Limit**	**Torque Reference Min Limit** Red	INTWA_07 = 1	*NLS (Torque Reference Min Limit) Limit.*
25.3	**Torque Reference Min Limit Text Normal**	**Torque Reference Min Limit** Grey	INTWA_07 = 0	*NLS (Torque Reference Min Limit) normal*
26.1	**Torque Reference Max Limit Limit**	■ Red	INTWA_08 = 1	*Torque Reference Max Limit* *From MMCX.FL.*
26.2	**Torque Reference Max Limit Text Limit**	**Torque Reference Max Limit** Red	INTWA_08 = 1	*NLS (Torque Reference Max Limit) Limit.*
26.3	**Torque Reference Max Limit Text Normal**	**Torque Reference Max Limit** Grey	INTWA_08 = 0	*NLS (Torque Reference Max Limit) normal*
27.1	**Flux Min Limit Limit**	■ Red	INTWA_09 = 1	*Flux Min Limit* *From MMCX.FL.*
27.2	**Flux Min Limit Text Limit**	**Flux Min Limit** Red	INTWA_09 = 1	*NLS (Flux Min Limit) Limit.*

No	Description	Presentation	Condition	Remarks
27.3	**Flux Min Limit Text Normal**	**Flux Min Limit** Grey	INTWA_09 = 0	*NLS (Flux Min Limit) normal*
28.1	**Frequency Min Limit Limit**	■ Red	INTWA_10 = 1	*Frequency Min Limit From MMCX.FL.*
28.2	**Frequency Min Limit Text Limit**	**Frequency Min Limit** Red	INTWA_10 = 1	*NLS (Frequency Min Limit) Limit.*
28.3	**Frequency Min Limit Text Normal**	**Frequency Min Limit** Grey	INTWA_10 = 0	*NLS (Frequency Min Limit) normal*
29.1	**Frequency Max Limit Limit**	■ Red	INTWA_11 = 1	*Frequency Max Limit From MMCX.FL.*
29.2	**Frequency Max Limit Text Limit**	**Frequency Max Limit** Red	INTWA_11 = 1	*NLS (Frequency Max Limit) Limit.*
29.3	**Frequency Max Limit Text Normal**	**Frequency Max Limit** Grey	INTWA_11 = 0	*NLS (Frequency Max Limit) normal*
30.1	**DC Under Voltage Limit Limit**	■ Red	INTWA_12 = 1	*DC Under Voltage Limit From MMCX.FL.*
30.2	**DC Under Voltage Limit Text Limit**	**DC Under Voltage Limit** Red	INTWA_12 = 1	*NLS (DC Under Voltage Limit) Limit.*
30.3	**DC Under Voltage Limit Text Normal**	**DC Under Voltage Limit** Grey	INTWA_12 = 0	*NLS (DC Under Voltage Limit) normal*
31.1	**DC Over Voltage Limit Limit**	■ Red	INTWA_13 = 1	*DC Over Voltage Limit From MMCX.FL.*
31.2	**DC Over Voltage Limit Text Limit**	**DC Over Voltage Limit** Red	INTWA_13 = 1	*NLS (DC Over Voltage Limit) Limit.*
31.3	**DC Over Voltage Limit Text Normal**	**DC Over Voltage Limit** Grey	INTWA_13 = 0	*NLS (DC Over Voltage Limit) normal*

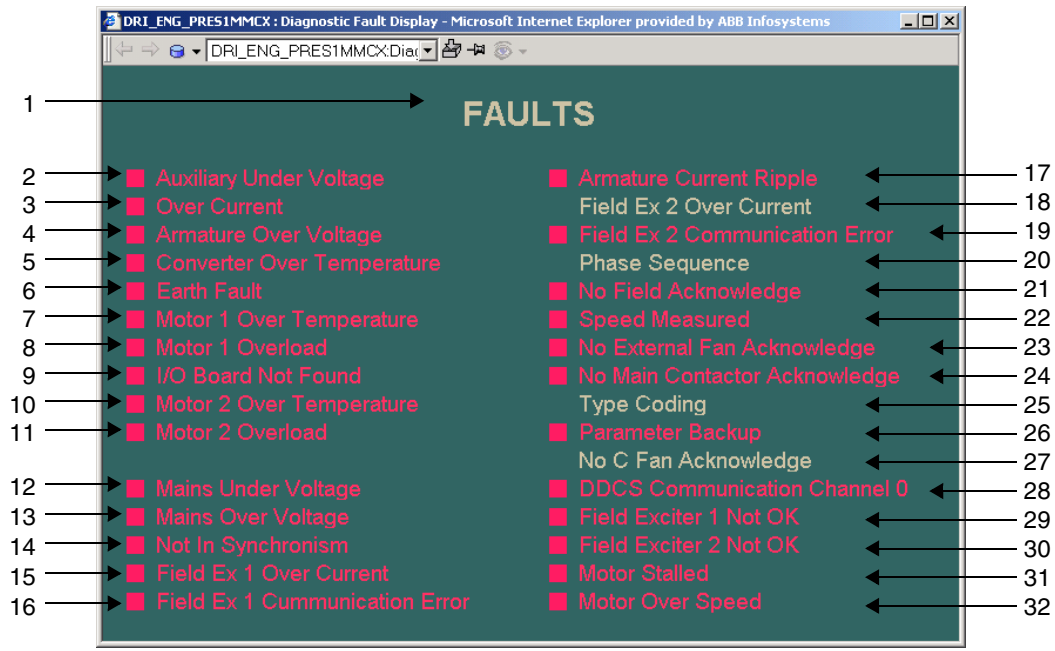
No	Description	Presentation	Condition	Remarks
32.1	**Torque Limit Limit**	■ Red	INTWA_14 = 1	*Torque Limit From MMCX.FL.*
32.2	**Torque Limit Text Limit**	**Torque Limit** Red	INTWA_14 = 1	*NLS (Torque Limit) Limit.*
32.3	**Torque Limit Text Normal**	**Torque Limit** Grey	INTWA_14 = 0	*NLS (Torque Limit) normal*
33.1	**Frequency Limit Limit**	■ Red	INTWA_15 = 1	*Frequency Limit From MMCX.FL.*
33.2	**Frequency Limit Text Limit**	**Frequency Limit** Red	INTWA_15 = 1	*NLS (Frequency Limit) Limit.*
33.3	**Frequency Limit Text Normal**	**Frequency Limit** Grey	INTWA_15 = 0	*NLS (Frequency Limit) normal*

Diagnostic Fault Display for DCS

Data Base Element MMCX is to be named by the main Data Base Element + suffix **<.FL>**. This display is used when there is a DCS 500 or DCS 600 drive.

Example: The main MMCX has the name **313-552A**. The MMCX for the fault overlap display must have the name **313-552A.FL**

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Header**	**FAULTS** Grey		*Faults title*
2.1	**Auxiliary Under Voltage Fault**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged Alarm Auxiliary Under Voltage Fault*
2.2	**Auxiliary Under Voltage Fault**	■ Red	IND1_00 = 1	*Auxiliary Under Voltage Fault*
2.3	**Auxiliary Under Voltage Text Fault**	**Auxiliary Under Voltage** Red	AU_IND1_00 = 1 or IND1_00 = 1	*NLS (Auxiliary Under Voltage) fault*
2.4	**Auxiliary Under Voltage Text Normal**	**Auxiliary Under Voltage** Grey	IND1_00 = 0	*NLS (Auxiliary Under Voltage) normal*

No	Description	Presentation	Condition	Remarks
3.1	**Over Current Fault**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged Alarm Over Current Fault*
3.2	**Over Current Fault**	■ Red	IND1_01 = 1	*Over Current Fault*
3.3	**Over Current Text Fault**	**Over Current** Red	AU_IND1_01 = 1 or IND1_01 = 1	*NLS (Over Current) fault*
3.4	**Over Current Text Normal**	**Over Current** Grey	IND1_01 = 0	*NLS (Over Current) normal*
4.1	**Armature Over Voltage Fault**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged Alarm Armature Over Voltage Fault*
4.2	**Armature Over Voltage Fault**	■ Red	IND1_02 = 1	*Armature Over Voltage Fault*
4.3	**Armature Over Voltage Text Fault**	**Armature Over Voltage** Red	AU_IND1_02 = 1 or IND1_02 = 1	*NLS (Armature Over Voltage) fault.*
4.4	**Armature Over Voltage Text Normal**	**Armature Over Voltage** Grey	IND1_02 = 0	*NLS (Armature Over Voltage) normal*
5.1	**Converter Over Temperature Fault**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged Alarm Converter Over Temperature*
5.2	**Converter Over Temperature Fault**	■ Red	IND1_03 = 1	*Converter Over Temperature*
5.3	**Converter Over Temperature Text Fault**	**Converter Over Temperature** Red	AU_IND1_03 = 1 or IND1_03 = 1	*NLS (**Converter Over Temperature**) fault.*
5.4	**Converter Over Temperature Text Normal**	**Converter Over Temperature** Grey	IND1_03 = 0	*NLS (**Converter Over Temperature**) normal*
6.1	**Earth Fault Fault**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged Alarm Earth Fault*

No	Description	Presentation	Condition	Remarks
6.2	**Earth Fault Fault**	■ Red	IND1_04 = 1	*Earth Fault*
6.3	**Earth Fault Text Fault**	**Earth Fault** Red	AU_IND1_04 = 1 or IND1_04 = 1	*NLS (Earth Fault) fault.*
6.4	**Earth Fault Text Normal**	**Earth Fault** Grey	IND1_04 = 0	*NLS (Earth Fault) normal*
7.1	**Motor 1 Over Temperature Fault**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged Alarm Motor 1 Over Temperature Fault*
7.2	**Motor 1 Over Temperature Fault**	■ Red	IND1_05 = 1	*Motor 1 Over Temperature Fault*
7.3	**Motor 1 Over Temperature Text Fault**	**Motor 1 Over Temperature** Red	AU_IND1_05 = 1 or IND1_05 = 1	*NLS (Motor 1 Over Temperature) fault.*
7.4	**Motor 1 Over Temperature Text Normal**	**Motor 1 Over Temperature** Grey	IND1_05 = 0	*NLS (Motor 1 Over Temperature) normal*
8.1	**Motor 1 OverLoad Fault**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged Alarm Motor 1 OverLoad Fault*
8.2	**Motor 1 OverLoad Fault**	■ Red	IND1_06 = 1	*Motor 1 OverLoad Fault*
8.3	**Motor 1 OverLoad Text Fault**	**Motor 1 Overload** Red	AU_IND1_06 = 1 or IND1_06 = 1	*NLS (Motor 1 OverLoad) fault.*
8.4	**Motor 1 OverLoad Text Normal**	**Motor 1 Overload** Grey	IND1_06 = 0	*NLS (Motor 1 OverLoad) normal*
9.1	**I/O Board Not Found Fault**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged Alarm I/O Board Not Found*
9.2	**I/O Board Not Found Fault**	■ Red	IND1_07 = 1	*I/O Board Not Found*

No	Description	Presentation	Condition	Remarks
9.3	**I/O Board Not Found Text Fault**	**I/O Board Not Found** Red	AU_IND1_07 = 1 or IND1_07 = 1	*NLS (I/O Board Not Found) fault.*
9.4	**I/O Board Not Found Text Normal**	**I/O Board Not Found** Grey	IND1_07 = 0	*NLS (I/O Board Not Found) normal*
10.1	**Motor 2 Over Temperature Fault**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged Alarm* *Motor 2 Over Temperature Fault*
10.2	**Motor 2 Over Temperature Fault**	■ Red	IND1_08 = 1	*Motor 2 Over Temperature Fault*
10.3	**Motor 2 Over Temperature Text Fault**	**Motor 2 Over Temperature** Red	AU_IND1_08 = 1 or IND1_08 = 1	*NLS (Motor 2 Over Temperature) fault.*
10.4	**Motor 2 Over Temperature Text Normal**	**Motor 2 Over Temperature** Grey	IND1_08 = 0	*NLS (Motor 2 Over Temperature) normal*
11.1	**Motor 2 OverLoad Fault**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged Alarm* *Motor 2 OverLoad Fault*
11.2	**Motor 2 OverLoad Fault**	■ Red	IND1_09 = 1	*Motor 2 OverLoad Fault*
11.3	**Motor 2 OverLoad Text Fault**	**Motor 2 Overload** Red	AU_IND1_09 = 1 or IND1_09 = 1	*NLS (Motor 2 OverLoad) fault.*
11.4	**Motor 2 OverLoad Text Normal**	**Motor 2 Overload** Grey	IND1_09 = 0	*NLS (Motor 2 OverLoad) normal*
12.1	**Mains Under Voltage Fault**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged Alarm* ***Mains Under Voltage*** *Fault*
12.2	**Mains Under Voltage Fault**	■ Red	IND1_11 = 1	***Mains Under Voltage*** *Fault*

No	Description	Presentation	Condition	Remarks
12.3	**Mains Under Voltage Text Fault**	**Mains Under Voltage** Red	AU_IND1_11 = 1 or IND1_11 = 1	*NLS (Mains Under Voltage) fault.*
12.4	**Mains Under Voltage Text Normal**	**Mains Under Voltage** Grey	IND1_11 = 0	*NLS (Mains Under Voltage) normal*
13.1	**Mains Over Voltage Fault**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged Alarm Mains Over Voltage Fault*
13.2	**Mains Over Voltage Fault**	■ Red	IND1_12 = 1	*Mains Over Voltage Fault*
13.3	**Mains Over Voltage Text Fault**	**Mains Over Voltage** Red	AU_IND1_12 = 1 or IND1_12 = 1	*NLS (Mains Over Voltage) fault.*
13.4	**Mains Over Voltage Text Normal**	**Mains Over Voltage** Grey	IND1_12= 0	*NLS (Mains Over Voltage) normal*
14.1	**Not In Synchronism Fault**	■ Red flashing	AU_IND1_13 = 1	*Unacknowledged Alarm Not In Synchronism Fault*
14.2	**Not In Synchronism Fault**	■ Red	IND1_13 = 1	*Not In Synchronism Fault*
14.3	**Not In Synchronism Text Fault**	**Not In Synchronism** Red	AU_IND1_13 = 1 or IND1_13 = 1	*NLS (Not In Synchronism) fault.*
14.4	**Not In Synchronism Text Normal**	**Not In Synchronism** Grey	IND1_13 = 0	*NLS (Not In Synchronism) normal*
15.1	**Field Ex 1 Over Current Fault**	■ Red flashing	AU_IND1_14 = 1	*Unacknowledged Alarm Field Ex 1 Over Current Fault*
15.2	**Field Ex 1 Over Current Fault**	■ Red	IND1_14 = 1	*Field Ex 1 Over Current Fault*
15.3	**Field Ex 1 Over Current Text Fault**	**Field Ex 1 Over Current** Red	AU_IND1_14 = 1 or IND1_14 = 1	*NLS (Field Ex 1 Over Current) fault.*

No	Description	Presentation	Condition	Remarks
15.4	**Field Ex 1 Over Current Text Normal**	**Field Ex 1 Over Current** Grey	IND1_14 = 0	*NLS (Field Ex 1 Over Current) normal*
16.1	**Field Ex 1 Communication Error Fault**	■ Red flashing	AU_IND1_15 = 1	*Unacknowledged Alarm Field Ex 1 Communication Error Fault*
16.2	**Field Ex 1 Communication Error Fault**	■ Red	IND1_15 = 1	*Field Ex 1 Communication Error Fault*
16.3	**Field Ex 1 Communication Error Text Fault**	**Field Ex 1 Communication Error** Red	AU_IND1_15 = 1 or IND1_15 = 1	*NLS (Field Ex 1 Communication Error) fault.*
16.4	**Field Ex 1 Communication Error Text Normal**	**Field Ex 1 Communication Error** Grey	IND1_15 = 0	*NLS (Field Ex 1 Communication Error) normal*
17.1	**Armature Current Ripple Fault**	■ Red flashing	AU_IND2_00 = 1	*Unacknowledged Alarm Armature Current Ripple Fault*
17.2	**Armature Current Ripple Fault**	■ Red	IND2_00 = 1	*Armature Current Ripple Fault*
17.3	**Armature Current Ripple Text Fault**	**Armature Current Ripple** Red	AU_IND2_00 = 1 or IND2_00 = 1	*NLS (Armature Current Ripple) Fault.*
17.4	**Armature Current Ripple Text Normal**	**Armature Current Ripple** Grey	IND2_00 = 0	*NLS (Armature Current Ripple) normal*
18.1	**Field Ex 2 Over Current Fault**	■ Red flashing	AU_IND2_01 = 1	*Unacknowledged Alarm Field Ex2 Over Current Fault*
18.2	**Field Ex 2 Over Current Fault**	■ Red	IND2_01 = 1	*Field Ex2 Over Current Fault*

No	Description	Presentation	Condition	Remarks
18.3	**Field Ex 2 Over Current Text Fault**	**Field Ex 2 Over Current** Red	AU_IND2_01 = 1 or IND2_01 = 1	*NLS (Field Ex2 Over Current) Fault.*
18.4	**Field Ex 2 Over Current Text Normal**	**Field Ex 2 Over Current** Grey	IND2_01 = 0	*NLS (Field Ex2 Over Current) normal*
19.1	**Field Ex 2 Communication Error Fault**	■ Red flashing	AU_IND2_02 = 1	*Unacknowledged Alarm Field Ex2 Communication Error*
19.2	**Field Ex 2 Communication Error Fault**	■ Red	IND2_02 = 1	*Field Ex2 Communication Error Fault*
19.3	**Field Ex 2 Communication Error Text Fault**	**Field Ex 2 Communication Error** Red	AU_IND2_02 = 1 or IND2_02 = 1	*NLS (Field Ex2 Communication Error) Fault.*
19.4	**Field Ex 2 Communication Error Text Normal**	**Field Ex 2 Communication Error** Grey	IND2_02 = 0	*NLS (Field Ex2 Communication Error) normal*
20.1	**Phase Sequence Fault**	■ Red flashing	AU_IND2_03 = 1	*Unacknowledged Alarm Phase Sequence Fault*
20.2	**Phase Sequence Fault**	■ Red	IND2_03 = 1	*Phase Sequence Fault*
20.3	**Phase Sequence Text Fault**	**Phase Sequence** Red	AU_IND2_03 = 1 or IND2_05 = 1	*NLS (Phase Sequence) Fault.*
20.4	**Phase Sequence Text Normal**	**Phase Sequence** Grey	IND2_03 = 0	*NLS (Phase Sequence) normal*
21.1	**No Field Acknowledge Fault**	■ Red flashing	AU_IND2_04 = 1	*Unacknowledged Alarm No Field Acknowledge Fault*
21.2	**No Field Acknowledge Fault**	■ Red	IND2_04 = 1	*No Field Acknowledge Fault*

No	Description	Presentation	Condition	Remarks
21.3	**No Field Acknowledge Text Fault**	**No Field Acknowledge** Red	AU_IND2_04 = 1 or IND2_04 = 1	*NLS (No Field Acknowledge) Fault.*
21.4	**No Field Acknowledge Text Normal**	**No Field Acknowledge** Grey	IND2_04 = 0	*NLS (No Field Acknowledge) normal*
22.1	**Speed Measured Fault**	■ Red flashing	AU_IND2_05 = 1	*Unacknowledged Alarm* *Speed Measured Fault*
22.2	**Speed Measured Fault**	■ Red	IND2_05 = 1	*Speed Measured Fault*
22.3	**Speed Measured Text Fault**	**Speed Measured** Red	AU_IND2_05 = 1 or IND2_05 = 1	*NLS (Speed Measured) Fault.*
22.4	**Speed Measured Text Normal**	**Speed Measured** Grey	IND2_05 = 0	*NLS (Speed Measured) normal*
23.1	**No External Fan Acknowledge Fault**	■ Red flashing	AU_IND2_06 = 1	*No External Fan Acknowledge Fault*
23.2	**No External Fan Acknowledge Fault**	■ Red	IND2_06 = 1	*Unacknowledged Alarm* *No External Fan Acknowledge Fault*
23.3	**No External Fan Acknowledge Text Fault**	**No External Fan Acknowledge** Red	AU_IND2_06 = 1 or IND2_09 = 1	*NLS (No External Fan Acknowledge) Fault.*
23.4	**No External Fan Acknowledge Text Normal**	**No External Fan Acknowledge** Grey	IND2_06 = 0	*NLS (No External Fan Acknowledge) normal*
24.1	**No Main Contactor Acknowledge Fault**	■ Red flashing	AU_IND2_7 = 1	*Unacknowledged Alarm* *No Main Contactor Acknowledge Fault*
24.2	**No Main Contactor Acknowledge Fault**	■ Red	IND2_7 = 1	*No Main Contactor Acknowledge Fault*

No	Description	Presentation	Condition	Remarks
24.3	**No Main Contactor Acknowledge Text Fault**	**No Main Contactor Acknowledge** Red	AU_IND2_7 = 1 or IND2_11 = 1	*NLS (No Main Contactor Acknowledge) Fault.*
24.4	**No Main Contactor Acknowledge Text Normal**	**No Main Contactor Acknowledge** Grey	IND2_7 = 0	*NLS (No Main Contactor Acknowledge) normal*
25.1	**Type Coding Fault**	■ Red flashing	AU_IND2_8 = 1	*Unacknowledged Alarm* *Type Coding Fault*
25.2	**Type Coding Fault**	■ Red	IND2_8 = 1	*Type Coding Fault*
25.3	**Type Coding Text Fault**	**Type Coding** Red	AU_IND2_8 = 1 or IND2_8 = 1	*NLS (Type Coding) Fault.*
25.4	**Type Coding Text Normal**	**Type Coding** Grey	IND2_8 = 0	*NLS (Type Coding) normal*
26.1	**Paramater Backup Fault**	■ Red flashing	AU_IND2_9 = 1	*Unacknowledged Alarm* *Paramater Backup Fault*
26.2	**Paramater Backup Fault**	■ Red	IND2_9 = 1	*Paramater Backup Fault*
26.3	**Paramater Backup Text Fault**	**Paramater Backup** Red	AU_IND2_9 = 1 or IND2_9 = 1	*NLS (Paramater Backup) Fault.*
26.4	**Paramater Backup Text Normal**	**Paramater Backup** Grey	IND2_9 = 0	*NLS (Paramater Backup) normal*
27.1	**No C Fan Acknowledge Fault**	■ Red flashing	AU_IND2_10 = 1	*Unacknowledged Alarm* *No C Fan Acknowledge Fault*
27.2	**No C Fan Acknowledge Fault**	■ Red	IND2_10 = 1	*No C Fan Acknowledge Fault*
27.3	**No C Fan Acknowledge Text Fault**	**No C Fan Acknowledge** Red	AU_IND2_10 = 1 or IND2_10 = 1	*NLS (No C Fan Acknowledge) Fault.*
27.4	**No C Fan Acknowledge Text Normal**	**No C Fan Acknowledge** Grey	IND2_10 = 0	*NLS (No C Fan Acknowledge) normal*

No	Description	Presentation	Condition	Remarks
28.1	**DDCS Communication Channel 0 Fault**	■ Red flashing	AU_IND2_11 = 1	*Unacknowledged Alarm DDCS Communication Channel 0 Fault*
28.2	**DDCS Communication Channel 0 Fault**	■ Red	IND2_11 = 1	*DDCS Communication Channel 0 Fault*
28.3	**DDCS Communication Channel 0 Text Fault**	**DDCS Communication Channel 0** Red	AU_IND2_11 = 1 or IND2_11 = 1	*NLS (DDCS Communication Channel 0) Fault.*
28.4	**DDCS Communication Channel 0 Text Normal**	**DDCS Communication Channel 0** Grey	IND2_11 = 0	*NLS (DDCS Communication Channel 0) normal*
29.1	**Field Exciter 1 Not OK Fault**	■ Red flashing	AU_IND2_12 = 1	*Unacknowledged Alarm Field Exciter 1 Not OK Fault*
29.2	**Field Exciter 1 Not OK Fault**	■ Red	IND2_12 = 1	*Field Exciter 1 Not OK Fault*
29.3	**Field Exciter 1 Not OK Text Fault**	**Field Exciter 1 Not OK** Red	AU_IND2_12 = 1 or IND2_13 = 1	*NLS (Field Exciter 1 Not OK) Fault.*
29.4	**Field Exciter 1 Not OK Text Normal**	**Field Exciter 1 Not OK** Grey	IND2_12 = 0	*NLS (Field Exciter 1 Not OK) normal*
30.1	**Field Exciter 2 Not OK Fault**	■ Red flashing	AU_IND2_13 = 1	*Unacknowledged Alarm Field Exciter 2 Not OK Fault*
30.2	**Field Exciter 2 Not OK Fault**	■ Red	IND2_13 = 1	*Field Exciter 2 Not OK Fault*
30.3	**Field Exciter 2 Not OK Text Fault**	**Field Exciter 2 Not OK** Red	AU_IND2_13 = 1 or IND2_13 = 1	*NLS (Field Exciter 2 Not OK) Fault.*

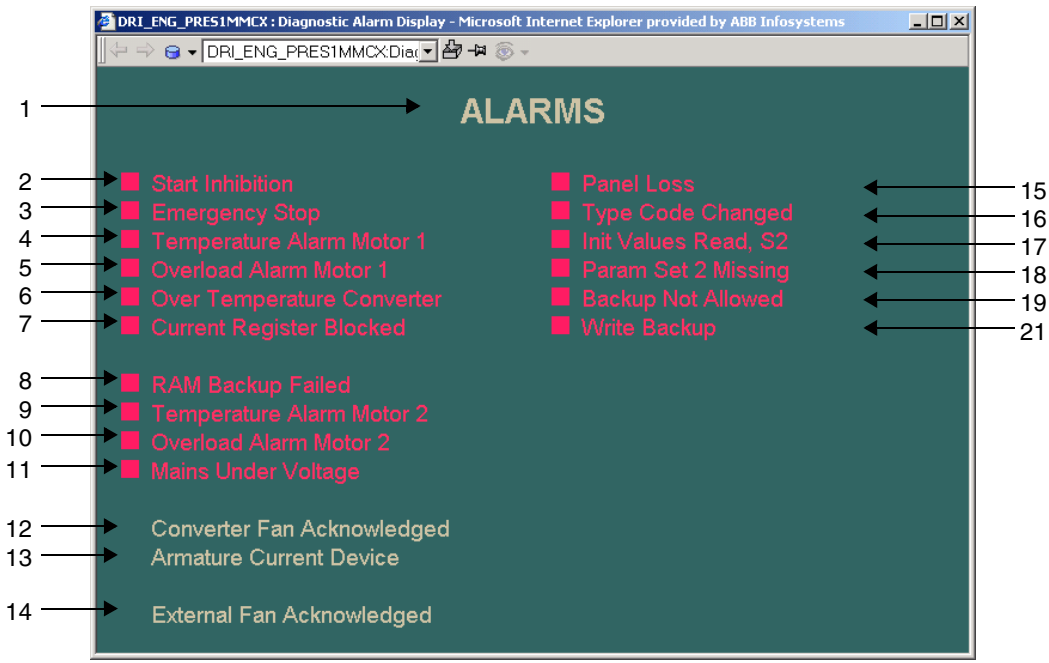
No	Description	Presentation	Condition	Remarks
30.4	**Field Exciter 2 Not OK Text Normal**	**Field Exciter 2 Not OK** Grey	IND2_13 = 0	*NLS (Field Exciter 2 Not OK) normal*
31.1	**Motor Stalled Fault**	■ Red flashing	AU_IND2_14 = 1	*Unacknowledged Alarm Motor Stalled Fault*
31.2	**Motor Stalled Fault**	■ Red	IND2_14 = 1	*Motor Stalled Fault*
31.3	**Motor Stalled Text Fault**	**Motor Stalled** Red	AU_IND2_14 = 1 or IND2_14 = 1	*NLS (Motor Stalled) Fault.*
31.4	**Motor Stalled Text Normal**	**Motor Stalled** Grey	IND2_14 = 0	*NLS (Motor Stalled) normal*
32.1	**Motor Over Speed Fault**	■ Red flashing	AU_IND2_15 = 1	*Unacknowledged Alarm Motor Over Speed Fault*
32.2	**Motor Over Speed Fault**	■ Red	IND2_15 = 1	*Motor Over Speed Fault*
32.3	**Motor Over Speed Text Fault**	**Motor Over Speed** Red	AU_IND2_15 = 1 or IND2_15 = 1	*NLS (Motor Over Speed) Fault.*
32.4	**Motor Over Speed Text Normal**	**Motor Over Speed** Grey	IND2_15 = 0	*NLS (Motor Over Speed) normal*

Diagnostic Alarm Display for DCS

Data Base Element MMCX is to be named by the main Data Base Element + suffix **<.AL>**. This display is used when there is a DCS 500 orDCS 600 drive.

Example: The main MMCX has the name **313-552A**. The MMCX for the fault overlap display must have the name **313-552A.AL**.

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Header**	**ALARMS** Grey		*Alarms title.*
2.1	**Start Inhibition Alarm**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged Alarm Start InhibitionAlarm*
2.2	**Start Inhibition Alarm**	■ Red	IND1_00 = 1	*Start InhibitionAlarm*
2.3	**Start InhibitionText Alarm**	**Start Inhibition** Red	AU_IND1_00 = 1 or IND1_00 = 1	*NLS (Start Inhibition) alarm.*
2.4	**Start InhibitionText Normal**	**Start Inhibition** Grey	IND1_00 = 0	*NLS (Start Inhibition) normal*
3.1	**Emergency Stop Alarm**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged Alarm Emergency Stop Alarm*

No	Description	Presentation	Condition	Remarks
3.2	**Emergency Stop Alarm**	■ Red	IND1_01 = 1	*Emergency Stop Alarm*
3.3	**Emergency Stop Text Alarm**	**Emergency Stop** Red	AU_IND1_01 = 1 or IND1_01 = 1	*NLS (Emergency Stop) alarm.*
3.4	**Emergency Stop Text Normal**	**Emergency Stop** Grey	IND1_01 = 0	*NLS (Emergency Stop) normal*
4.1	**Temperature Alarm Motor 1 Alarm**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged Alarm* *Temperature Alarm Motor 1 Alarm*
4.2	**Temperature Alarm Motor 1 Alarm**	■ Red	IND1_02 = 1	*Temperature Alarm Motor 1 Alarm*
4.3	**Temperature Alarm Motor 1 Text Alarm**	**Temperature Alarm Motor 1** Red	AU_IND1_02 = 1 or IND1_02 = 1	*NLS (Temperature Alarm Motor 1) alarm.*
4.4	**Temperature Alarm Motor 1 Text Normal**	**Temperature Alarm Motor 1** Grey	IND1_02 = 0	*NLS (Temperature Alarm Motor 1) normal*
5.1	**Overload Alarm Motor 1 Alarm**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged Alarm* *Overload Alarm Motor 1 Alarm*
5.2	**Overload Alarm Motor 1 Alarm**	■ Red	IND1_03 = 1	*Overload Alarm Motor 1 Alarm*
5.3	**Overload Alarm Motor 1 Text Alarm**	**Overload Alarm Motor 1** Red	AU_IND1_03 = 1 or IND1_03 = 1	*NLS (Overload Alarm Motor 1) alarm.*
5.4	**Overload Alarm Motor 1 Text Normal**	**Overload Alarm Motor 1** Grey	IND1_03 = 0	*NLS (Overload Alarm Motor 1) normal*
6.1	**Over Temperature Converter Alarm**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged Alarm* *Over Temperature Converter Alarm*

No	Description	Presentation	Condition	Remarks
6.2	**Over Temperature Converter Alarm**	■ Red	IND1_04 = 1	*Over Temperature Converter Alarm*
6.3	**Over Temperature Converter Text Alarm**	**Over Temperature Converter** Red	AU_IND1_04 = 1 or IND1_04 = 1	*NLS (Over Temperature Converter) alarm.*
6.4	**Over Temperature Converter Text Normal**	**Over Temperature Converter** Grey	IND1_04 = 0	*NLS (Over Temperature Converter) normal*
7.1	**Current Register Blocked Alarm**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged Alarm* *Current Register Blocked Alarm*
7.2	**Current Register Blocked Alarm**	■ Red	IND1_05 = 1	*Current Register Blocked Alarm*
7.3	**Current Register Blocked Text Alarm**	**Current Register Blocked** Red	AU_IND1_05 = 1 or IND1_05 = 1	*NLS (Current Register Blocked) alarm.*
7.4	**Current Register Blocked Text Normal**	**Current Register Blocked** Grey	IND1_05 = 0	*NLS (Current Register Blocked) normal*
8.1	**RAM Backup Failed Alarm**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged Alarm* *RAM Backup Failed Alarm*
8.2	**RAM Backup Failed Alarm**	■ Red	IND1_07 = 1	*RAM Backup Failed Alarm*
8.3	**RAM Backup Failed Text Alarm**	**RAM Backup Failed** Red	AU_IND1_07 = 1 or IND1_07 = 1	*NLS (RAM Backup Failed) alarm.*
8.4	**RAM Backup Failed Text Normal**	**RAM Backup Failed** Grey	IND1_07 = 0	*NLS (RAM Backup Failed) normal*
9.1	**Temperature Alarm Motor 2 Alarm**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged Alarm* *Temperature Alarm Motor 2 Alarm*

No	Description	Presentation	Condition	Remarks
9.2	**Temperature Alarm Motor 2 Alarm**	■ Red	IND1_08 = 1	*Temperature Alarm Motor 2 Alarm*
9.3	**Temperature Alarm Motor 2 Text Alarm**	**Temperature Alarm Motor 2** Red	AU_IND1_08 = 1 or IND1_08 = 1	*NLS (Temperature Alarm Motor 2) alarm.*
9.4	**Temperature Alarm Motor 2 Text Normal**	**Temperature Alarm Motor 2** Grey	IND1_08 = 0	*NLS (Temperature Alarm Motor 2) normal*
10.1	**Overload Alarm Motor 2 Alarm**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged Alarm* *Overload Alarm Motor 2 Alarm*
10.2	**Overload Alarm Motor 2 Alarm**	■ Red	IND1_09 = 1	*Overload Alarm Motor 2 Alarm*
10.3	**Overload Alarm Motor 2 Text Alarm**	**Overload Alarm Motor 2** Red	AU_IND1_09 = 1 or IND1_09 = 1	*NLS (Overload Alarm Motor 2) alarm.*
10.4	**Overload Alarm Motor 2 Text Normal**	**Overload Alarm Motor 2** Grey	IND1_09 = 0	*NLS (Overload Alarm Motor 2) normal*
11.1	**Mains Under Voltage Alarm**	■ Red flashing	AU_IND1_10 = 1	*Unacknowledged Alarm* *Mains Under Voltage Alarm*
11.2	**Mains Under Voltage Alarm**	■ Red	IND1_10 = 1	*Mains Under Voltage Alarm*
11.3	**Mains Under Voltage Text Alarm**	**Mains Under Voltage** Red	AU_IND1_10 = 1 or IND1_10 = 1	*NLS (Mains Under Voltage) alarm.*
11.4	**Mains Under Voltage Text Normal**	**Mains Under Voltage** Grey	IND1_10 = 0	*NLS (Mains Under Voltage) normal*
12.1	**Converter Fan Acknowledged Alarm**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged Alarm* *Converter Fan Acknowledged Alarm*

No	Description	Presentation	Condition	Remarks
12.2	**Converter Fan Acknowledged Alarm**	■ Red	IND1_12 = 1	*Converter Fan Acknowledged Alarm*
12.3	**Converter Fan Acknowledged Text Alarm**	**Converter Fan Acknowledged** Red	AU_IND1_12 = 1 or IND1_12 = 1	*NLS (Converter Fan Acknowledged) alarm.*
12.4	**Converter Fan Acknowledged Text Normal**	**Converter Fan Acknowledged** Grey	IND1_12 = 0	*NLS (Converter Fan Acknowledged) normal*
13.1	**Armature Current Device Alarm**	■ Red flashing	AU_IND1_13 = 1	*Unacknowledged Alarm* *Armature Current Device Alarm*
13.2	**Armature Current Device Alarm**	■ Red	IND1_13 = 1	*Armature Current Device Alarm*
13.3	**Armature Current Device Text Alarm**	**Armature Current Device** Red	AU_IND1_13 = 1 or IND1_13 = 1	*NLS (Armature Current Device) alarm.*
13.4	**Armature Current Device Text Normal**	**Armature Current Device** Grey	IND1_13 = 0	*NLS (Armature Current Device) normal*
14.1	**External Fan Acknowledged Fault**	■ Red flashing	AU_IND1_15 = 1	*Unacknowledged Alarm* *External Fan Acknowledged*
14.2	**External Fan Acknowledged Fault**	■ Red	IND1_15 = 1	*External Fan Acknowledged*
14.3	**External Fan Acknowledged Fault**	**External Fan Acknowledged** Red	AU_IND1_15 = 1 or IND1_15 = 1	*NLS (External Fan Acknowledged) fault.*
14.4	**External Fan Acknowledged Normal**	**External Fan Acknowledged** Grey	IND1_15 = 0	*NLS (External Fan Acknowledged) normal*

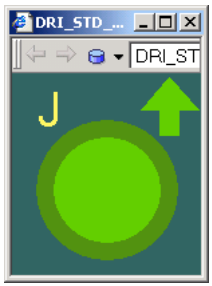
No	Description	Presentation	Condition	Remarks
15.1	**Panel Loss Fault**	■ Red flashing	AU_IND2_00 = 1	*Unacknowledged Alarm Panel Loss*
15.2	**Panel Loss Fault**	■ Red	IND2_00 = 1	*Panel Loss*
15.3	**Panel Loss Text Fault**	**Panel Loss** Red	AU_IND2_00 = 1 or IND2_00 = 1	*NLS (Panel Loss) fault.*
15.4	**Panel Loss Text Normal**	**Panel Loss** Grey	IND2_00 = 0	*NLS (Panel Loss) normal*
16.1	**Type Code Changed Fault**	■ Red flashing	AU_IND2_01 = 1	*Unacknowledged Alarm Type Code Changed Fault*
16.2	**Type Code Changed Fault**	■ Red	IND2_01 = 1	*Type Code Changed Fault*
16.3	**Type Code Changed Text Fault**	**Type Code Changed** Red	AU_IND2_01 = 1 or IND2_01 = 1	*NLS (Type Code Changed) fault.*
16.4	**Type Code Changed Text Normal**	**Type Code Changed** Grey	IND2_01 = 0	*NLS (Type Code Changed) normal*
17.1	**Init Values Read, S2 Fault**	■ Red flashing	AU_IND2_02 = 1	*Unacknowledged Alarm Init Values Read, S2 Fault*
17.2	**Init Values Read, S2 Fault**	■ Red	IND2_02 = 1	*Init Values Read, S2 Fault*
17.3	**Init Values Read, S2 Text Fault**	**Init Values Read, S2** Red	AU_IND2_02 = 1 or IND2_02 = 1	*NLS (Init Values Read, S2) fault.*
17.4	**Init Values Read, S2 Text Normal**	**Init Values Read, S2** Grey	IND2_02 = 0	*NLS (Init Values Read, S2) normal*
18.1	**Param Set 2 Missing Fault**	■ Red flashing	AU_IND2_03 = 1	*Unacknowledged Alarm Param Set 2 Missing Fault*
18.2	**Param Set 2 Missing Fault**	■ Red	IND2_03 = 1	*Param Set 2 Missing Fault*
18.3	**Param Set 2 Missing Text Fault**	**Param Set 2 Missing** Red	AU_IND2_03 = 1 or IND2_03 = 1	*NLS (Param Set 2 Missing) fault.*

No	Description	Presentation	Condition	Remarks
18.4	**Param Set 2 Missing Text Normal**	**Param Set 2 Missing** Grey	IND2_03 = 0	*NLS (Param Set 2 Missing) normal*
19.1	**Backup Not Allowed Fault**	■ Red flashing	AU_IND2_04 = 1	*Unacknowledged Alarm Backup Not Allowed Fault*
19.2	**Backup Not Allowed Fault**	■ Red	IND2_04 = 1	*Backup Not Allowed Fault*
19.3	**Backup Not Allowed Text Fault**	**Backup Not Allowed** Red	AU_IND2_04 = 1 or IND2_04 = 1	*NLS (Backup Not Allowed) fault.*
19.4	**Backup Not Allowed Text Normal**	**Backup Not Allowed** Grey	IND2_04 = 0	*NLS (Backup Not Allowed) normal*
20.1	**Write Backup Fault**	■ Red flashing	AU_IND2_05 = 1	*Unacknowledged Alarm Write Backup Fault*
20.2	**Write Backup Fault**	■ Red	IND2_05 = 1	*Write Backup Fault*
20.3	**Write Backup Text Fault**	**Write Backup** Red	AU_IND2_05 = 1 or IND2_05 = 1	*NLS (Write Backup) fault.*
20.4	**Write Backup Text Normal**	**Write Backup** Grey	IND2_05 = 0	*NLS (Write Backup) normal*

Graphic Element

Motor01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	

No	Description	Presentation	Condition	Remarks
2	**PointOfControl - Visible**	ModeVisible = true		
		O Yellow	IND2_00= 0	*Out of service*
		D Yellow	IND2_09= 0	*Drive Local Control*
		J Yellow	BOOL_C = 1 and IND2_09 = 1	*Jog Control*
		L Green	BOOL_D = 1 and IND2_09 = 1	*Local Control*
		A Green	BOOL_B = 1 and BOOL_A = 0 and IND2_09 = 1	*NLS (Auto)*
		ManModeVisible = true		
		M Green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	*NLS (Man)*
		ManModeVisible = false		
	Control point	**C** Green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*Central Control*
		-	Point OfControlVisible = false	*Control point not visible*
3	**Direction Indication**		DirectionVisible = true	
		Green 	IND2_02 = 1 and speed value positive	*Forward*
		Green 	IND2_02 = 1 and speed value negative	*Reverse*
		Green 	IND2_01 = 1	*Run permitted*
		-	DirectionVisible = false	*Direction is invisible*

No	Description	Presentation	Condition	Remarks
4	**DriveStatus** shape	Light brown 	IND2_00 = 0	*Out of service*
		Green 	IND2_01 = 0 or IND2_08 = 1 or IND2_10 = 1 or IND2_11 = 1 or IND2_12 = 1 or IND2_13 = 1 or	*Not Ready for Start* *Not Ready Run* *C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4*
		Green 	IND2_14 = 1	*A - Interlock*
		Green 	IND2_01 = 1	*Drive ready to start* *Ready Run*
		Green 	IND2_02 = 1	*Drive running*
		Red flashing	AU_IND1_09 = 1 or AU_IND1_10 = 1 or AU_IND1_11 = 1 or AU_IND1_12 = 1	*Unacknowledged alarm*
		Red	IND1_09 = 1 or IND1_10 = 1 or IND1_11 = 1 or IND1_12 = 1	*Fault* *Warning* *Limit* *Communication error*
		Green	-	

The conditions are in priority order. Underlined parameters are configurable.

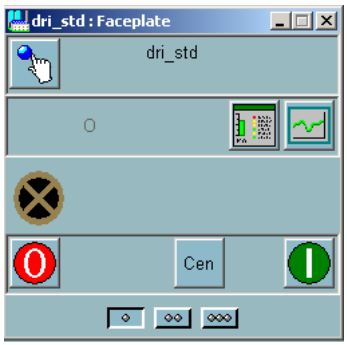
Configuration:

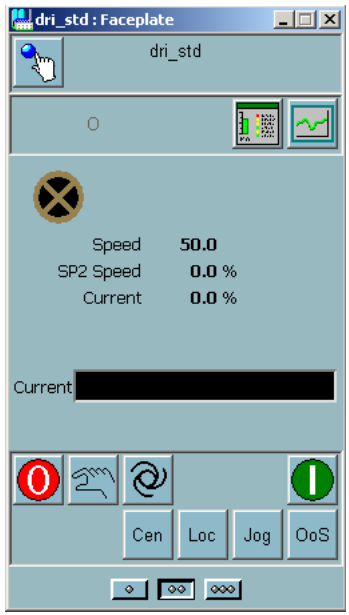
Parameters	Affects	Options (bold is default)	Remarks
ControlofPointVisible	2. Control Point	**true**, false	*Show point of control or not.*
ManModeVisible	2. Control Point	true, false	*True = show M when manual mode. False = show C when manual mode.*
DirectionVisible	3. Direction	true, false	*Show Direction or not.*

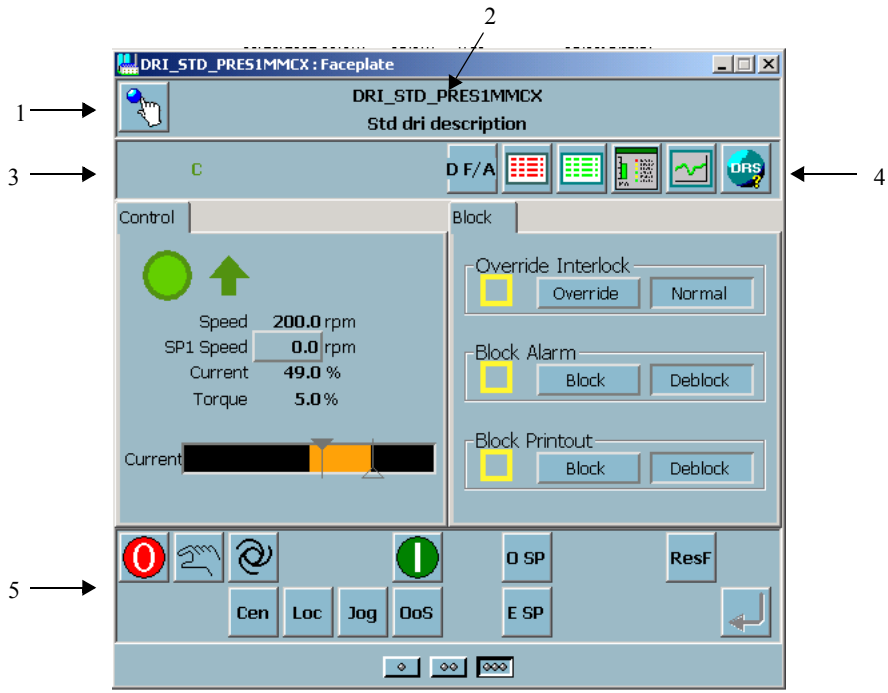
DRICONS, Standard drive

Faceplate

Presentation:







Behavior:

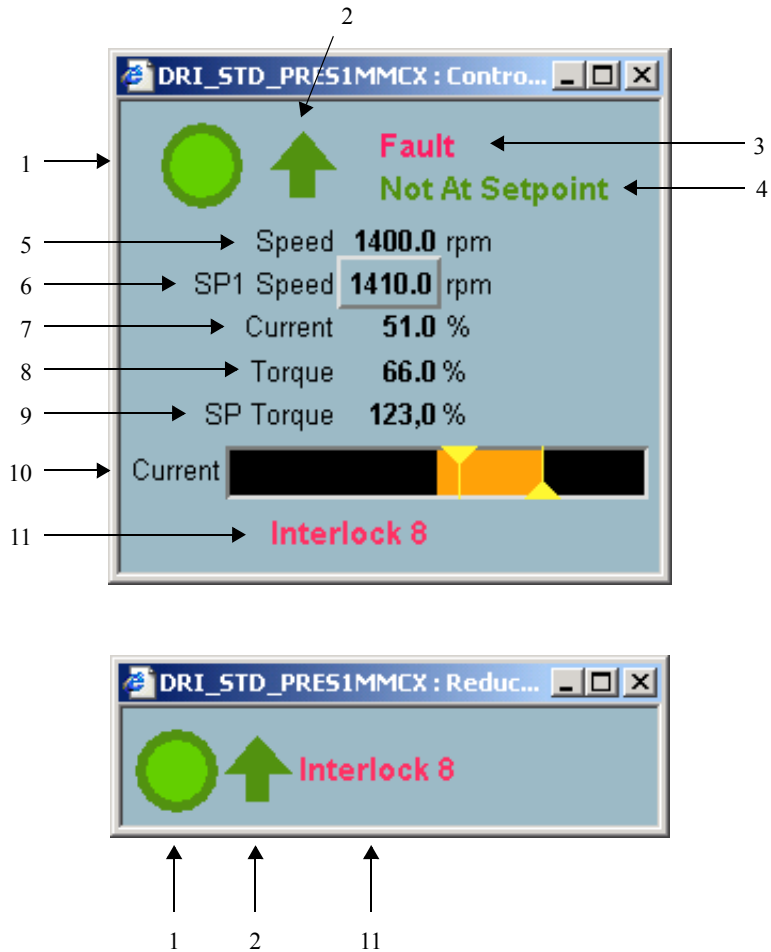
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	
		A Dark green	BOOL_A = 0 and BOOL_B = 1 and IND2_09 = 1	

No	Description	Default Presentation	Condition	Remarks
3.2	**Control point**	**O** Light brown	IND2_00 = 0	*Out of service.*
		D Yellow	IND2_09 = 0	*Drive local*
		J Yellow	IND2_09 = 1 and BOOL_C = 1	*Jog running from motor place*
		L Dark green	IND2_09 = 1 and BOOL_D = 1	*Local controlled from local panel*
		C Dark green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*Central controlled from operator's panel*
3.3	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
3.4	**Interlock indications**	**X** Yellow	(IND2_12 = 1 and IND2_02 = 1 and BOOL_F = 1 and IND2_15 = 0) or (IND2_13 = 1 and IND2_02 = 1 and BOOL_F = 1)	*B- Interlock 3* *B - Interlock 4*
		X Green	(IND2_08 = 1) or (IND2_10 = 1 and IND2_15 = 0) or IND2_11 = 1 or (IND2_12 = 1 and BOOL_F = 0 and IND2_15 = 0) or (IND2_12 = 1 and IND2_02 = 0 and BOOL_F = 1 and IND2_15 = 0) or (IND2_13 = 1 and BOOL_F = 0) or (IND2_13 = 1 and IND2_02 = 0 and BOOL_F = 1) or IND2_14 = 1	*C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4* *IA- Interlock*
		BX Red	IND1_15 = 1	*Override Interlock and Interlock active*
		BX Yellow	(BOOL_C = 1 or IND2_15 = 1) and IND1_15=0	*Override Interlock and Interlock active*

No	Description	Default Presentation	Condition	Remarks
4	**Aspect links**	Diagnostic Display	position 0, 0, 7	
		Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**Start**	Start motor		Set MORD_02 = 1
	Stop	Stop motor		Set MORD_03 = 1
	Man	Set to Man Mode		Set MORD_14 = 1
	Auto	Set to Auto Mode		Set MORD_15 = 1
	Cen	Set to Central Control		Set MORD_10 = 1
	Loc	Set to Local Control		Set MORD_11 = 1
	Jog	Set to Jog Control		Set MORD_12 = 1
	OoS	Set to Out of Service Control		Set MORD_13 = 1
	O SP	Set use of operator setpoint		Set MORD_06 = 1
	E SP	Set use of external setpoint		Set MORD_07 = 1
	ResF	Reset Drive fault		Set MORD_08 = 1

Control and Reduced Control

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Motor Status**	Light brown 	IND2_00 = 0	*Out of service*
		Green 	IND2_01 = 0 or IND2_08 = 1 or IND2_10 = 1 or IND2_11 = 1 or IND2_12 = 1 or IND2_13 = 1 or	*Not Ready for Start* *Not Ready Run* *C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4*
		Green 	IND2_14 = 1	*A - Interlock*
		Green 	IND2_02 = 1	*Drive running*
		Green 	IND2_01 = 1	*Drive ready to start* *Ready Run*
		Medium Green (Centre part)	IND2_02=1	*Running*
		Medium Green, Light green, Dark green, Black (Centre part background)	All others except out of service.	
2	**Running mode Indication**		IND2_02 = 1 and speed value positive	*Forward*
			IND2_02 = 1 and speed value negative	*Reverse*

No	Description	Presentation	Condition	Remarks
2 cont.			IND2_01 = 1	*Run permitted*
		Green		
3	**Warning text**	**Comm Err** Red Flash	AU_IND1_12 = 1	*NLS (Communication Error) unacknowledged fault*
		Comm Err Red	IND1_12 = 1	*NLS (Communication Error)*
		Fault Red Flash	AU_IND1_11 = 1	*NLS (Fault) unacknowledged fault*
		Fault Red	IND1_11 = 1	*NLS (Fault)*
		Warning Red Flash	AU_IND1_10 = 1	*NLS (Warning) unacknowledged warning*
		Warning Red	IND1_10 = 1	*NLS (Warning)*
4	**Information text**	**At Limit** Red Flash	AU_IND1_09 = 1	*NLS (Limit) unacknowledged limit*
		At Limit Red	IND1_09 = 1	*NLS (Limit)*
		Not At Setpoint Green	IND2_02 = 1 and IND2_07 = 0	*NLS (Actual value at not reference)*
		Ready Run Green	IND2_01 = 1 and ind2_02 = 0	*NLS (Ready Run)*
		Ready Green	IND2_00 = 1 and IND2_02 = 0	*NLS (Ready*
5.1	**Headline Speed**	**Speed** Black	INTWB_00 = 1	*NLS (Speed)*
5.2	**Speed value**	Black	REAL_C	*Numeric presentation of speed value 1*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
5.3	**Unit Speed**	String (5) Black	PRES_A(1-5)	*Unit of measured Speed*

No	Description	Presentation	Condition	Remarks
6.1	**Headline Set Point Speed**	**E SP1 Spd** Black	INTWB11 = 1 and BOOL_E = 1	*NLS (E SP1 Spd)*
		E SP2 Spd Black	INTWB_12 = 1 and BOOL_E = 1	*NLS (E SP2 Spd)*
		SP1 Speed Black	INTWB_11 = 1 and BOOL_E = 0	*NLS (SP1 Speed)*
		SP2 Speed Black	INTWB_12 = 1 and BOOL_E = 0	*NLS (SP 2 Speed)*
6.2	**SetPoint speed value**	ESP1, Black	REAL_D (help drive object) and (BOOL_E = 1 and INTWB11= 1)	*External set point value for speed unit*
		ESP2, Black	REAL_D and (BOOL_E = 1 INTWB12=1)	*Set point value for speed %*
		SP1, Black	REAL_PARAM (help drive object) and (BOOL_E = 0 and INTWB11=1)	*Set point value for speed unit*
		SP2, Black	REAL_PARAM and (BOOL_E = 0 and INTWB12=1)	*Set Point value for speed %*
6.3	**Unit SetPoint Speed**	String (5) Black	(INTWB_11 = 1 and BOOL_E = 1) or (INTWB_11 = 1 and BOOL_E = 0) PRES_A(1-5)	*unit*
		% Black	(INTWB_12 = 1 and BOOL_E =1) or (INTWB12 = 1 and BOOL_E = 0) and	*%*
7.1	**Headline Current**	Black	INTWB_01 = 1	*NLS (Current)*

No	Description	Presentation	Condition	Remarks
7.2	**Current value**	Value string, Black	REAL_RES	*Numeric presentation of Current*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
7.3	**Current Unit**	**%** Black		*Unit of current*
8.1	**Headline Torque**	Black	INTWB_02 = 1	*NLS (Torque)*
8.2	**Torque value**	Black	REAL_A	*Numeric presentation of Torque*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
8.3	**Torque Unit**	**%** Black		*Unit of Torque*
9.1	**Headline External Set Point Torque/ Set Point Torque/ PID**	**E SP Torq** Black	INTWB_14 = 1 and BOOL_E = 1	*Head line of External Set Point Torque* *NLS (E SP Torque)*
		SP Torque Black	INTWB_14 = 1 and BOOL_E = 0	*Head line of External Set Point Torque* *NLS (SP Torque)*
		E SP PID Black	INTWB_13 = 1 and BOOL_E = 1	*Head line of External Set Point PID* *NLS (E SP PID)*
		SP PID Black	INTWB_13 = 1 and BOOL_E = 0	*Head line of External Set Point PID* *NLS (SP PID)*

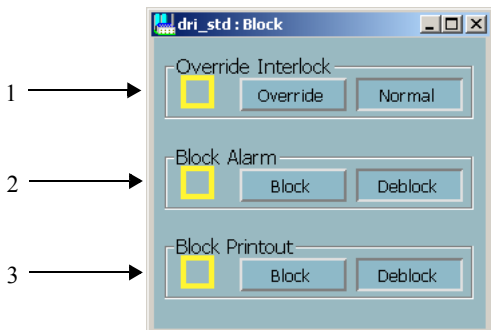
No	Description	Presentation	Condition	Remarks
9.2	**External Set Point Torque/ Set Point Torque / PID/**	E SP Torque Black	REAL_E and (BOOL_E = 1 and INTWB14= 1)	*External set point value for torque*
		SP Torque, Black	REAL_PARAM and (BOOL_E = 0 INTWB14=1)	*Set point value for torque*
		E SP PID, Black	REAL_E and (BOOL_E = 1 and INTWB13= 1)	*External set point value for PID*
		SP PID, Black	REAL_PARAM and (BOOL_E = 0 and INTWB13=1)	*Set Point value for PID*
9.3	**Unit External Set Point Torque/ Set Point Torque / PID**	String (5) Black	%	*Unit of External Set Point Torque or Set Point Torque or PID*
10.1	**Baragraph text**	**Current**, Black	INTWB_01 = 1	*NLS (Current) Current*
		Torque, Black	INTWB_02 = 1	*NLS (Torque) Torque*
10.2	**Motor Current**		INTWB_01 = 1 or INTWB_02 = 1	*Bar graph Visible*
10.3	**Motor Current**	Bar graph +, Magenta	INTWB_02 = 1 and REAL_A REAL_A_MIN to REAL_A_MAX	*Motor torque value*
		Bar graph +/-, Magenta	INTWB_02 = 1 and REAL_A_MIN<0 REAL_A -REAL_A_MAX to REAL_A_MAX	*Motor torque value*
		Bar graph +, Brown	INTWB_01 = 1 and REAL_RES REAL_RES_MIN to REAL_RES_MAX	*Motor current value*
		Bar graph +/-, Brown	INTWB_01 = 1 and REAL_RES_MIN<0 REAL_RES -REAL_RES_MAX to REAL_RES_MAX	*Motor current value*

No	Description	Presentation	Condition	Remarks
10.4	**Hi Load Indication**	at 100%	INTWB_01 = 1 and REAL_RES_HILIM>0.02	*Limit Visible for current only.*
		Filled Yellow	AL_BLK=1 and REAL_RES > REAL_RES_HILIM or AL_P_BLK=1 and REAL_RES > REAL_RES_HILIM	*Above high load, Alarm blocked*
		Unfilled Yellow	AL_P_BLK=1 or AL_BLK = 1	*Alarm blocked*
		Filled Red	REAL_RES > REAL_RES_HILIM	*The value of current has passed the high load limit.*
		Unfilled, Grey		*Not high load*
10.5	**Normal Load Limit Indication**		REAL_RES_LOLIM>0.02	*Limit Visible*
		Arrow (polygon)	at REAL_RES_LOLIM REAL_RES_MIN to REAL_RES_MAX	*Upper limit of normal load*
		Filled Yellow	AL_BLK=1 and REAL_RES > REAL_RES_LOLIM or AL_P_BLK=1 and REAL_RES > REAL_RES_LOLIM	*Above normal load, Alarm blocked*
		Unfilled Yellow	AL_P_BLK=1 or AL_BLK = 1	*Alarm blocked*
		Filled Grey	REAL_RES > REAL_RES_LOLIM	*The value of current has passed the normal load limit.*
		Unfilled, Grey		*Normal*

No	Description	Presentation	Condition	Remarks
11	**Blocking Interlock text**	**Interlock text** Red	ACT_PRES_TEXT	*Get the actual interlock text from the database. Valid for interlocks IC, IB1-IB4,*
		Interlock text Yellow	ACT_PRES_TEXT	*Get the actual interlock text from the database. Valid for interlock IA*

Block

Presentation:



Behavior:

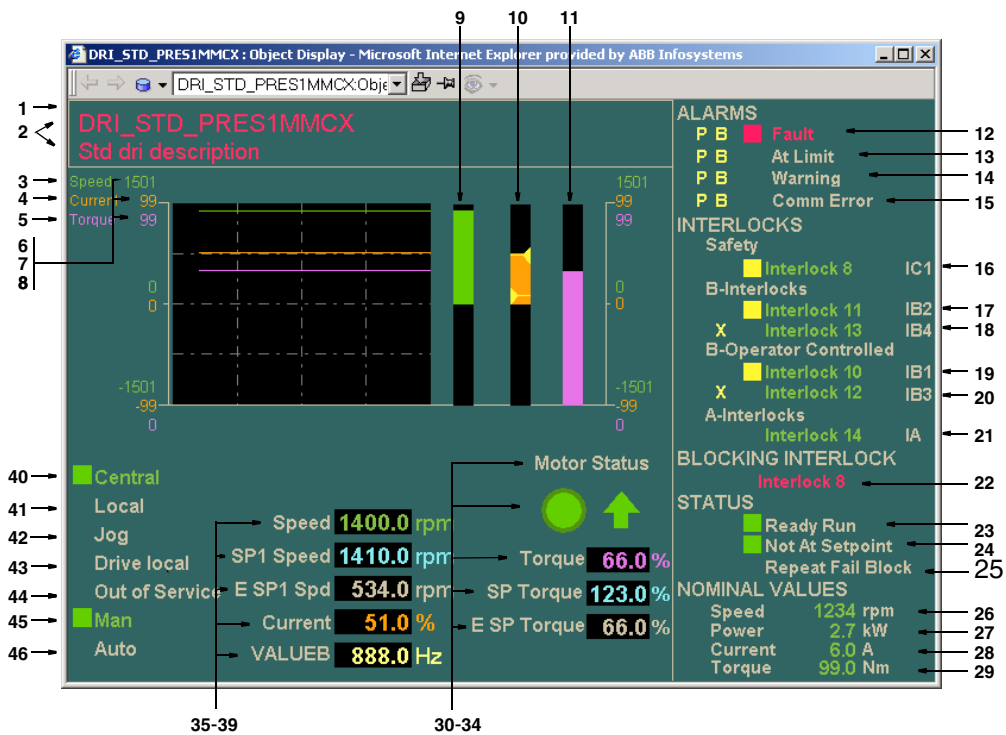
No	Description	Default Presentation	Condition	Remarks
1	**Override Interlock**			*IND2_15 Indicates current status*
		! Yellow	Blocked	
		Override pressed	MORD_04 = 1	
		Normal pressed	MORD_05 = 1	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	

No	Description	Default Presentation	Condition	Remarks
2 cont.		**Block** pressed	ALARM_BLK = 1	
		Deblock pressed	ALARM_BLK = 0	
3	**Block Printout**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_BLK = 1	
		Deblock pressed	PRINT_BLK = 0	

Displays

Object Display

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED = 1	*Object select frame*
		Grey	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND1_11 = 1 or AU_IND1_10 = 1 or AU_IND1_09 = 1 or AU_IND1_12 = 1	*Unacknowledged alarm*
		Red	IND1_11 = 1 or IND1_10 = 1 or IND1_09 = 1 or IND1_12 = 1	*Fault* *Warning* *Limit* *Communication error*
		Green		*Normal*
3.1	**Range Max Speed**	Green	REAL_C_MAX	
		-	INTWB_00 = 1	*Limit visible*
3.2	**Range Min Speed**	Green	REAL_C_MIN	
		-	INTWB_00 = 1	*Limit visible*
4.1	**Range Max Current**	Brown	REAL_RES_MAX	
		-	INTWB_01 = 1	*Limit visible*
4.2	**Range Min Current**	Brown	REAL_RES_MIN	
		-	INTWB_01 = 1	*Limit visible*
5.1	**Range Max Torque**	Magenta	REAL_A_MAX	
		-	INTWB_02 = 1	*Limit visible*
5.2	**Range Min Torque**	Magenta	REAL_A_MIN	
		-	INTWB_02 = 1	*Limit visible*
6	**Trim Curve Speed**	Green	REAL_C	*Trim curve for speed*
		-	INTWB_00 = 1	*Trim curve visible*

No	Description	Presentation	Condition	Remarks
7	**Trim Curve Current**	Brown	REAL_RES	*Trim curve for current*
		-	INTWB_01 = 1	*Trim curve visible*
8	**Trim Curve Torque**	Magenta	REAL_A	*Trim curve for Torque*
		-	INTWB_02 = 1	*Trim Curve visible*
9.1	**Bar graph Speed**	Green	REAL_C	*Speed bar graph*
		Bar graph +	INTWB_00 = 1 and REAL_C REAL_C_MIN to REAL_C_MAX	*Bar graph when speed min value is positive.*
		Bar graph +/-	INTWB_00 = 1 and REAL_C_MIN<0 REAL_C -REAL_C_MAX to REAL_C_MAX	*Bar graph when speed min value is negative.*
10.1	**Bar graph Current**	Brown	REAL_RES	*Current bar graph*
		Bar graph +	INTWB_01 = 1 and REAL_RES REAL_RES_MIN to REAL_RES_MAX	*Bar graph when current min value is positive.*
		Bar graph +/-	INTWB_01 = 1 and REAL_RES_MIN<0 REAL_RES -REAL_RES_MAX to REAL_RES_MAX	*Bar graph when current min value is negative.*

No	Description	Presentation	Condition	Remarks
10.2	**Hi Load Indication**	at 100%	INTWB_01 = 1	*Limit Indication*
		Filled Yellow	ALARM_BLK=1 and REAL_RES > REAL_RES_HILIM or ALARM_PERIOD_BLK=1 and REAL_RES > REAL_RES_HILIM	*High load, Alarm blocked*
		Unfilled Yellow	ALARM_PERIOD_BLK=1 or ALARM_BLK = 1	*Alarm blocked*
		Filled Red	REAL_RES > REAL_RES_HILIM	*The value of current has passed the high load limit.*
		Unfilled, Grey		*Not high load*
10.3	**Normal Load Limit Indication**		INTWB_01 = 1	*Limit Visible for current only*
		Arrow (polygon)	at REAL_RES_LOLIM REAL_RES_MIN to REAL_RES_MAX	*Upper limit of normal load*
		Filled Yellow	AL_BLK=1 and REAL_RES > REAL_RES_LOLIM or AL_P_BLK=1 and REAL_RES > REAL_RES_LOLIM	*Above normal load, Alarm blocked*
		Unfilled Yellow	AL_P_BLK=1 or AL_BLK = 1	*Alarm blocked*
		Filled Grey	REAL_RES > REAL_RES_LOLIM	*The value of current has passed the normal load limit.*
		Unfilled, Grey		*Normal*

No	Description	Presentation	Condition	Remarks
11.1	**Bar graph Torque**	Magenta	REAL_A	*Torque bar graph*
		Bar graph +	INTWB_02 = 1 and REAL_A REAL_A_MIN to REAL_A_MAX	*Bar graph when torque min value is positive.*
		Bar graph +/-	INTWB_02 = 1 and REAL_A_MIN<0 REAL_A -REAL_A_MAX to REAL_A_MAX	*Bar graph when torque min value is negative.*
12	**ALARMS**			*Alarms*
12.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	ALARM_PERIOD_BLK = 1	*Alarm blocked by PC-program*
12.3	**Warning Indication**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged alarm*
		■ Red	IND1_11 = 1	*Alarm*
12.4	**Alarm 1 Text**	**Fault**		*NLS (Fault)*
		Red	IND1_11 = 1 or AU_IND1_11 = 1	
		Grey	-	
13.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
13.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	ALARM_PERIOD_BLK = 1	*Alarm blocked by PC-program*
13.3	**Warning Indication**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged alarm*
		■ Red	IND1_09 = 1	*Alarm*
13.4	**Alarm 2 Text**	**At Limit**		*NLS (At Limit)*
		Red	IND1_09 = 1 or AU_IND1_09 = 1	
		Grey	-	

No	Description	Presentation	Condition	Remarks
14.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
14.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	ALARM_PERIOD_BLK = 1	*Alarm blocked by PC-program*
14.3	**Warning Indication**	■ Red flashing	AU_IND1_10 = 1	*Unacknowledged alarm*
		■ Red	IND1_10 = 1	*Alarm*
14.4	**Alarm 3 Text**	**Warning**		*NLS (Warning)*
		Red	IND1_10 = 1 or AU_IND1_10 = 1	
		Grey	-	
15.1	**Printout Blocked**	**P** Yellow	PRINT_BLK = 1	*Printout blocked*
15.2	**Alarm Blocked**	**B** Yellow	ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_PERIOD_BLK = 1	*Alarm blocked by PC-program*
15.3	**Warning Indication**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged alarm*
		■ Red	IND1_12 = 1	*Alarm*
15.4	**Alarm 4 Text**	**Comm. error**		*NLS (Comm. error)*
		Red	IND1_12 = 1 or AU_IND1_12 = 1	
		Grey	-	
16	**INTERLOCKS**			*Interlocks*
16	**STATUS**			*Status*
16.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
16.2	**IC1 Text**	Green	I2_08TXT	*Safety Interlock IC1 text from database*
17.1	**IB2 Blocked**	**BX** Yellow	BOOL_C = 1	*Jog mode. Interlock blocked*
17.2	**IB2 Active**	■ Yellow	IND2_11 = 1	*Interlock IB2 active*
17.3	**IB2 Text**	Green	I2_11TXT	*Interlock IB2 text from database*

No	Description	Presentation	Condition	Remarks
18.1	**IB4 Block Indication**	**BX** Yellow	BOOL_C = 1	*Jog mode. Interlock blocked*
		X Yellow	IND2_13 = 1 and IND2_02 = 1 and BOOL_F = 1	*Pending interlock, will be set when not running.*
18.2	**IB4 Active**	■ Yellow	(IND2_13 = 1 and BOOL_F = 0) or (IND2_13 = 1 and IND2_02 = 0 and BOOL_F = 1)	*Interlock IB4 active*
18.3	**IB4 Text**	Green	I2_13TXT	*Interlock IB4 text from database*
19.1	**IB1 Blocked**	**BX** Red	IND1_15 = 1	*Override Interlock and Interlock IB1 active*
		BX Yellow	(BOOL_C = 1 or IND2_15=1) and IND1_15=0	*Jog mode. Interlock blocked*
19.2	**IB1 Active**	■ Yellow	IND2_10 = 1 and IND2_15 = 0	*Interlock IB1 active*
19.3	**IB1 Text**	Green	I2_10TXT	*Interlock IB1 text from database*
20.1	**IB3 Blocked**	**BX** Red	IND1_15 = 1	*Override Interlock and Interlock IB3 active*
		BX Yellow	(BOOL_C = 1 or IND2_15=1) and IND1_15=0	*Jog mode. Interlock blocked*
		X Yellow	IND2_12 = 1 and IND2_02 = 1 and BOOL_F = 1 and IND2_15 = 0	*Pending interlock, will be set when not running.*

No	Description	Presentation	Condition	Remarks
20.2	**IB3 Active**	■ Yellow	(IND2_12 = 1 and BOOL_F = 0 and IND2_15 = 0 and) or (IND2_12 = 1 and IND2_02 = 0 and BOOL_F = 1 and IND2_15 = 0)	*Interlock IB3 active*
20.3	**IB3 Text**	Green	I2_12TXT	*Interlock IB3 text from database*
21.1	**IA Blocked**	**BX** Yellow	BOOL_C = 1	*Jog mode. Interlock blocked*
21.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
21.3	**IA Text**	Green	I2_14TXT	*Interlock IA text from database*
22	**Blocking Interlock**	Grey		*Blocking Interlock*
22.1	**Blocking Interlock Text**	Green	ACT_PRES_TEXT	*The Interlock that is active.*
23.1	**Ready Run Indication**	■ Green	IND2_01 = 1	
23.2	**Ready Run Text**	**Ready Run** Grey		*NLS (Ready Run)*
24.1	**Not at reference Indication**	■ Green	IND2_02 = 1 and IND2_07 = 0	
24.2	**Not at reference Text**	**Not at Setpoint** Grey		*NLS (Not at Setpoint)*
25.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	
25.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*NLS (Repeat Fail Blk)*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
26	**Nominal Values**			*Nominal values*
26.1	**Nom. Speed Text**	**Nom. Speed** Grey		*NLS (Speed) Nominal Speed of drive*
26.2	**Nom. Speed Value**	Green	INTL_RES	
26.3	**Nom. Speed Unit**	**rpm** Grey		*Unit rpm*
27.1	**Nom. Power Text**	**Power** Grey	INTWA_00 = 1	*NLS (Power) Nominal Power of drive*

No	Description	Presentation	Condition	Remarks
27.2	**Nom. Power Value**	Green	REAL_E from MMCX help object	
27.3	**Nom. Power Unit**	**kW** Grey		*Unit kW*
28.1	**Nom. Current Text**	**Current** Grey	INTWA_00 = 1	*NLS (Current) Nominal Current of motor*
28.2	**Nom. Current Value**	Green	REAL_E_MIN from MMCX help object	
28.3	**Nom. Current Unit**	**A** Grey		*Unit Ampere*
29.1	**Nom. Torque Text**	**Torque** Grey	INTWA_00 = 1	*NLS (Torque) Nominal Torque of motor*
29.2	**Nom. Torque Value**	Green	REAL_E_MAX from MMCX help object	
29.3	**Nom. Torque Unit**	**Nm** Grey		*Unit Nm*
30	**MotorStatus Text**	**Motor Status** Grey		*Run*
31.1	**MotorStatus**	Light brown 	IND2_00 = 0	*Out of service*
		Green 	IND2_01 = 0 or IND2_08 = 1 or IND2_10 = 1 or IND2_11 = 1 or IND2_12 = 1 or IND2_13 = 1 or	*Not Ready for Start* *Not Ready Run* *C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4*
		Green 	IND2_14 = 1	*A - Interlock*
		Green 	IND2_02 = 1	*Drive running*

No	Description	Presentation	Condition	Remarks
31.1 cont.		Green 	IND2_01 = 1	*Drive ready to start* *Ready Run*
		Medium Green (Centre part)	IND2_02 =1	*Running*
		Medium Green, Light green, Dark green, Black (Centre part background)		
31.2	**Direction Indication**		IND2_02 = 1 and speed value positive	*Forward*
			IND2_02 = 1 and speed value negative	*Reverse*
			IND2_01 = 1	*Run permitted*
		Green	-	
32.1	**Torque Text**	**Torque** Grey	INTWB_02 = 1	*NLS (Torque)*
32.2	**Torque Value**	Magenta	REAL_A	*Torque value*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
32.3	**Torque Unit**	**%** Magenta	-	*%*
33.1	**SP Torque Text**	**SP Torque** Grey	INTWB_14 = 1 and BOOL_E = 0	*NLS (SP Torque)*
33.2	**SP Torque Value**	Cyan	REAL_PARAM and BOOL_E = 0	*Set point torque value*
		Grey	REAL_PARAM and BOOL_E = 1	When the E SP Torque setpoint is selected
33.3	**SP Torque Unit**	**%** Cyan	BOOL_E = 0	*%*
		% Grey	BOOL_E = 1	When the E SP Torque setpoint is selected

No	Description	Presentation	Condition	Remarks
33.4	**SP PID Text**	**SP PID** Grey	INTWB_13 = 1 and BOOL_E = 0	*NLS (SP PID)*
33.4	**SP PID Value**	Cyan	REAL_PARAM and BOOL_E = 0	*Set point PID value*
		Grey	REAL_PARAM and BOOL_E = 1	When the E SP PID setpoint is selected
33.5	**SP PID Unit**	**%** Cyan	BOOL_E = 0	*%*
		% Grey	BOOL_E = 1	When the E SP PID setpoint is selected
34.1	**E Sp Torque Text**	**E SP Torque** Grey	INTWB_14 = 1 and BOOL_E = 1	*NLS (E SP Torque)*
34.2	**E Sp Torque Value**	Cyan	REAL_E and BOOL_E = 1	*External Set point torque value, value from PC-program*
		Grey	REAL_E and BOOL_E = 0	When the SP Torque setpoint is selected
34.3	**E Sp Torque Unit**	**%** Cyan	BOOL_E = 1	*%*
		% Grey	BOOL_E = 0	When the SP Torque setpoint is selected
34.4	**E Sp PID Text**	**E SP PID** Grey	INTWB_13 = 1 and BOOL_E = 1	*NLS (E SP PID)*
34.5	**E Sp PID Value**	Cyan	REAL_E and BOOL_E = 1	*External Set point PID value, value from PC-program*
		Grey	REAL_E and BOOL_E = 0	When the SP PID setpoint is selected
34.6	**E Sp PID Unit**	**%** Cyan	BOOL_E = 1	*%*
		% Grey	BOOL_E = 0	When the SP PID setpoint is selected
35.1	**Speed Text**	**Speed** Grey	INTWB_00 = 1	*NLS (Speed)*
35.2	**Speed Value**	Green	REAL_C	*Motor speed*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*

No	Description	Presentation	Condition	Remarks
35.3	**Speed Unit**	Green	PRES_A (1-5)	*Unit of speed from MMCX database.*
36.1	**SP1 Speed Text**	**SP1 Speed** Grey	INTWB_11 = 1 and BOOL_E = 0	*NLS (SP Speed)*
36.2	**SP1 Speed Value**	Cyan	REAL_PARAM and BOOL_E = 0 from drive help object	*Motor speed*
		Grey	REAL_PARAM and BOOL_E = 1 from drive help object	When the E SP Spd setpoint is selected
36.3	**SP1 Speed Unit**	**Unit** Cyan	PRES_A (1-5) and BOOL_E = 0	*Unit of SP Speed from MMCX database.*
		Unit Grey	PRES_A (1-5) and BOOL_E = 1	When the E SP Spd setpoint is selected
36.4	**SP2 Speed Text**	**SP2 Speed** Grey	INTWB_12 = 1 and BOOL_E = 0	*NLS (SP Speed)*
36.5	**SP2 Speed Value**	Cyan	REAL_PARAM and BOOL_E = 0	*Motor speed*
		Grey	REAL_PARAM and BOOL_E = 1	When the E SP Spd setpoint is selected
36.6	**SP2 Speed Unit**	**%** Cyan	BOOL_E = 0	*%*
		% Grey	BOOL_E = 1	When the E SP Spd setpoint is selected
37.1	**E SP1 Spd Text**	**E SP1 Spd** Grey	INTWB_11 = 1 and BOOL_E = 1	*NLS (E SP Spd)*
37.2	**E SP1 Spd Value**	Cyan	REAL_D and BOOL_E = 1 from drive help object	*External Set point speed value, value from PC-program*
		Grey	REAL_D and BOOL_E = 0 from drive help object	When the SP Speed setpoint is selected
37.3	**E SP1 Spd Unit**	**Unit** Cyan	PRES_A (1-5) and BOOL_E = 1	*Unit of SP Speed from MMCX database.*
		Unit Grey	PRES_A (1-5) and BOOL_E = 0	When the SP Speed setpoint is selected

No	Description	Presentation	Condition	Remarks
37.4	**E SP2 Spd Text**	**E SP2 Spd** Grey	INTWB_12 = 1 and BOOL_E = 1	*NLS (E SP Spd)*
37.5	**E SP2 Spd Value**	Cyan	REAL_D and BOOL_E = 1	*External Set point speed value, value from PC-program*
		Grey	REAL_D and BOOL_E = 0	When the SP Speed setpoint is selected
37.6	**E SP2 Spd Unit**	**%** Cyan	BOOL_E = 1	*%*
		% Grey	BOOL_E = 0	When the SP Speed setpoint is selected
38.1	**Current Text**	**CURRENT** Grey	INTWB_01 = 1	*NLS (Current)*
38.2	**Current Value**	Brown	REAL_RES	*Current*
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
38.3	**Current Unit**	**%** Brown	-	*% of nominal current*
39.1	**Value Text**	**"Value"** Grey	INTWB_03 = 1,Frequency INTWB_04 =1, Power INTWB_05 = 1, Outputv INTWB_06 = 1, PRES_B INTWB_07 = 1, Ref INTWB_08 = 1, Con dev INTWB_09 = 1, Act 1 INTWB_10 = 1, Act 2	NLS (Frequency) NLS (Power) NLS (Outputv) Free text from MMCX db element, max 10 characters NLS (Ref) NLS (Con dev) NLS (Act 1) NLS (Act 2)
39.2	**"Value" Value**	Light Yellow	REAL_B	
		Red Flash	AU_IND1_12 =1	*Communication error Unacknowledged*
		? ? ? Red	IND1_12 =1	*Communication error*
39.3	**"Value" Unit**	Light Yellow	PRES_A [6..10]	*Free text, max 5 characters.*
40.1	**Central Indication**	■ Green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*Central Controlled from operator's place or by group start or other PC-program*

No	Description	Presentation	Condition	Remarks
40.2	**Central Text**	**Central**		
		Green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*NLS (Central)*
		Grey	-	
41.1	**Local Indication**	■ Green	BOOL_D = 1 and IND2_09 = 1	*Local* *Controlled from local panel*
41.2	**Local Text**	**Local**		
		Green	BOOL_D = 1 and IND2_09 = 1	
		Grey	-	
42.1	**Jog Indication**	■ Yellow	BOOL_C = 1 and IND2_09 = 1	*Jog* *Jog running from motor location*
42.2	**Test Text**	**Jog**		
		Yellow	BOOL_C = 1 and IND2_09 = 1	*NLS (Jog)*
		Grey	-	
43.1	**Drive local Indication**	■ Yellow	IND2_09 = 0	*Local* *Controlled from local drive panel*
43.2	**Drivel ocal Text**	**Drive local**		
		Yellow	IND2_09 = 0	*NLS (Drive local)*
		Grey	-	
44.1	**Out of Service Indication**	■ Light brown	IND2_00 = 0	*Out of service* *No control possible*
44.2	**Out of Service Text**	**Out of service**		
		Light brown	IND2_00 = 0	*NLS (Out of service)*
		Grey	-	

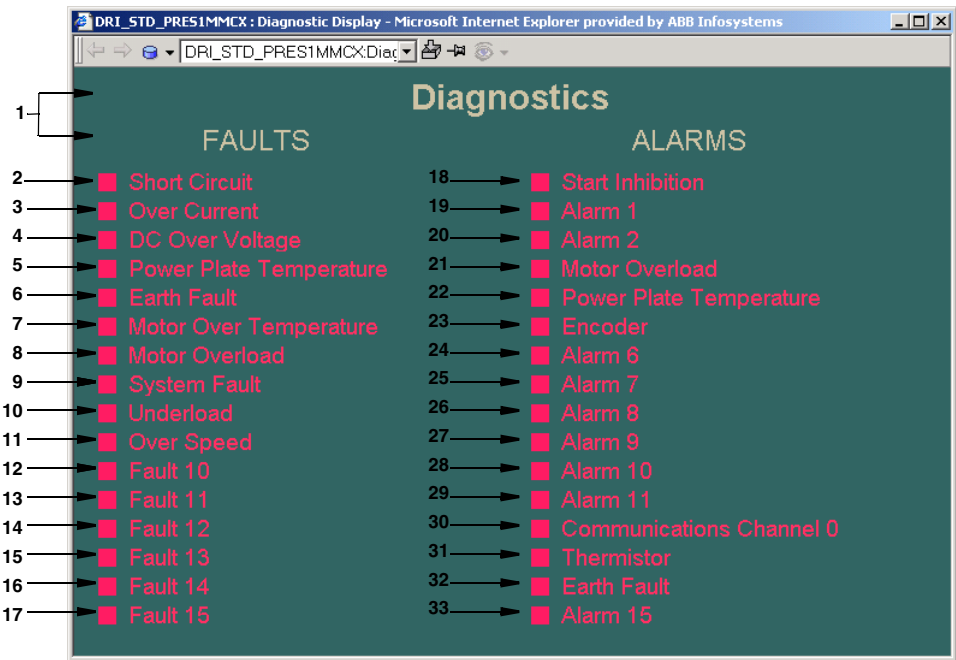
No	Description	Presentation	Condition	Remarks
45.1	**Man Indication**	■ Green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	*Manual mode. Startorder affects the motor directly*
45.2	**Man Text**	**Man** Grey		
		Green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	
		Grey	-	
46.1	**Auto Indication**	■ Green	BOOL_B = 1 and BOOL_A = 0 and IND2_09 = 1	*Auto mode. Process conditions control start/stop of motor*
46.2	**Auto Text**	**Auto**		
		Green	BOOL_B = 1 and BOOL_A = 0 and IND2_09 = 1	
		Grey	-	

Diagnostic Display

Data Base Element MMCX is to be named by the main Data Base Element + suffix **<.FL>**

Example: The main MMCX has the name **313-552A**. The MMCX for the fault overlap display must have the name **313-552A.FL**

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1.1	**Header**	**Diagnostic** Grey		*Diagnostic title.*
1.2	**Sub header**	**Fault** and **Alarm** Grey		*Fault and Alarm title.*
2.1	**Short Circuit Fault**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged Alarm Short Circuit Fault*

No	Description	Presentation	Condition	Remarks
2.2	**Short Circuit Fault**	■ Red	IND1_00 = 1	*Short Circuit Fault*
2.3	**Short Circuit Text Fault**	**Short Circuit** Red	AU_IND1_00 = 1 or IND1_00 = 1	*NLS (Short Circuit) fault.*
2.4	**Short Circuit Text Normal**	**Short Circuit** Grey	IND1_00 = 0	*NLS (Short Circuit) normal*
3.1	**Over Current Fault**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged Alarm Over Current Fault*
3.2	**Over Current Fault**	■ Red	IND1_01 = 1	*Over Current Fault*
3.3	**Over Current Text Fault**	**Over Current** Red	AU_IND1_01 = 1 or IND1_01 = 1	*NLS (Over Current) fault.*
3.4	**Over Current Text Normal**	**Over Current** Grey	IND1_01 = 0	*NLS (Over Current) normal*
4.1	**DC Over Voltage Fault**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged Alarm DC Over Voltage Fault*
4.2	**DC Over Voltage Fault**	■ Red	IND1_02 = 1	*DC Over Voltage Fault*
4.3	**DC Over Voltage Text Fault**	**DC Over Voltage** Red	AU_IND1_02 = 1 or IND1_02 = 1	*NLS (DC Over Voltage) fault.*
4.4	**DC Over Voltage Text Normal**	**DC Over Voltage** Grey	IND1_02 = 0	*NLS (DC Over Voltage) normal*
5.1	**Power Plate Over Temp Fault**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged Alarm Power Plate Over Temp*
5.2	**Power Plate Over Temp Fault**	■ Red	IND1_03 = 1	*Power Plate Over Temp*
5.3	**Power Plate Over Temp Text Fault**	**Power Plate Temperature** Red	AU_IND1_03 = 1 or IND1_03 = 1	*NLS (**Power Plate Over Temp**) fault.*
5.4	**Power Plate Over Temp Text Normal**	**Power Plate Temperature** Grey	IND1_03 = 0	*NLS (**Power Plate Over Temp**) normal*

No	Description	Presentation	Condition	Remarks
6.1	**Earth Fault Fault**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged Alarm Earth Fault Fault*
6.2	**Earth Fault Fault**	■ Red	IND1_04 = 1	*Earth Fault Fault*
6.3	**Earth Fault Text Fault**	**Earth Fault** Red	AU_IND1_04 = 1 or IND1_04 = 1	*NLS (Earth Fault) fault.*
6.4	**Earth Fault Text Normal**	**Earth Fault** Grey	IND1_04 = 0	*NLS (Earth Fault) normal*
7.1	**Motor Over Temperature Fault**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged Alarm Motor Over Temperature Fault*
7.2	**Motor Over Temperature Fault**	■ Red	IND1_05 = 1	*Motor Over Temperature Fault*
7.3	**Motor Over Temperature Text Fault**	**Motor Over Temperature** Red	AU_IND1_05 = 1 or IND1_05 = 1	*NLS (Motor Over Temperature) fault.*
7.4	**Motor Over Temperature Text Normal**	**Motor Over Temperature** Grey	IND1_05 = 0	*NLS (Motor Over Temperature) normal*
8.1	**Motor Overload Fault**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged Alarm Motor Overload Fault*
8.2	**Motor Overload Fault**	■ Red	IND1_06 = 1	*Motor Overload Fault*
8.3	**Motor Overload Text Fault**	**Motor Overload** Red	AU_IND1_06 = 1 or IND1_06 = 1	*NLS (Motor Overload) fault.*
8.4	**Motor Overload Text Normal**	**Motor Overload** Grey	IND1_06 = 0	*NLS (Motor Overload) normal*
9.1	**System Fault Fault**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged Alarm System Fault Fault*
9.2	**System Fault Fault**	■ Red	IND1_07 = 1	*System Fault Fault*
9.3	**System Fault Text Fault**	**System Fault** Red	AU_IND1_07 = 1 or IND1_07 = 1	*NLS (System Fault) fault.*

No	Description	Presentation	Condition	Remarks
9.4	**System Fault Text Normal**	**System Fault** Grey	IND1_07 = 0	*NLS (System Fault) normal*
10.1	**Underload Fault**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged Alarm Underload Fault*
10.2	**Underload Fault**	■ Red	IND1_08 = 1	*Underload Fault*
10.3	**Underload Text Fault**	**Underload** Red	AU_IND1_08 = 1 or IND1_08 = 1	*NLS (Underload) fault.*
10.4	**Underload Text Normal**	**Underload** Grey	IND1_08 = 0	*NLS (Underload) normal*
11.1	**Over Speed Fault**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged Alarm Over Speed Fault*
11.2	**Over Speed Fault**	■ Red	IND1_09 = 1	*Over Speed Fault*
11.3	**Over Speed Text Fault**	**Over Speed** Red	AU_IND1_09 = 1 or IND1_09 = 1	*NLS (Over Speed) fault.*
11.4	**Over Speed Text Normal**	**Over Speed** Grey	IND1_09 = 0	*NLS (Over Speed) normal*
12.1	**Fault 10 Fault**	■ Red flashing	AU_IND1_10 = 1	*Unacknowledged Alarm Fault10 Fault*
12.2	**Fault 10 Fault**	■ Red	IND1_10 = 1	*Fault10 Fault*
12.3	**Fault 10 Text Fault**	**Fault 10** Red	AU_IND1_10 = 1 or IND1_10 = 1	*NLS (Fault10) fault.*
12.4	**Fault 10 Text Normal**	**Fault 10** Grey	IND1_10 = 0	*NLS (Fault10) normal*
13.1	**Fault 11 Fault**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged Alarm Fault11 Fault*
13.2	**Fault 11 Fault**	■ Red	IND1_11 = 1	*Fault11 Fault*
13.3	**Fault 11 Text Fault**	**Fault 11** Red	AU_IND1_11 = 1 or IND1_11 = 1	*NLS (Fault11) fault.*

No	Description	Presentation	Condition	Remarks
13.4	**Fault 11 Text Normal**	**Fault 11** Grey	IND1_11 = 0	*NLS (Fault11) normal*
14.1	**Fault 12 Fault**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged Alarm Fault12 Fault*
14.2	**Fault 12 Fault**	■ Red	IND1_12 = 1	*Fault12 Fault*
14.3	**Fault 12 Text Fault**	**Fault 12** Red	AU_IND1_12 = 1 or IND1_12 = 1	*NLS (Fault12) fault.*
14.4	**Fault 12 Text Normal**	**Fault 12** Grey	IND1_12= 0	*NLS (Fault12) normal*
15.1	**Fault 13 Fault**	■ Red flashing	AU_IND1_13 = 1	*Unacknowledged Alarm Fault13 Fault*
15.2	**Fault 13 Fault**	■ Red	IND1_13 = 1	*Fault13 Fault*
15.3	**Fault 13 Text Fault**	**Fault 13** Red	AU_IND1_13 = 1 or IND1_13 = 1	*NLS (Fault13) fault.*
15.4	**Fault 13 Text Normal**	**Fault 13** Grey	IND1_13 = 0	*NLS (Fault13) normal*
16.1	**Fault 14 Fault**	■ Red flashing	AU_IND1_14 = 1	*Unacknowledged Alarm Fault14 Fault*
16.2	**Fault 14 Fault**	■ Red	IND1_14 = 1	*Fault14 Fault*
16.3	**Fault 14 Text Fault**	**Fault 14** Red	AU_IND1_14 = 1 or IND1_14 = 1	*NLS (Fault14) fault.*
16.4	**Fault 14 Text Normal**	**Fault 14** Grey	IND1_14 = 0	*NLS (Fault14) normal*
17.1	**Fault 15 Fault**	■ Red flashing	AU_IND1_15 = 1	*Unacknowledged Alarm Fault15 Fault*
17.2	**Fault 15 Fault**	■ Red	IND1_15 = 1	*Fault15 Fault*
17.3	**Fault 15 Text Fault**	**Fault 15** Red	AU_IND1_15 = 1 or IND1_15 = 1	*NLS (Fault15) fault.*
17.4	**Fault 15 Text Normal**	**Fault 15** Grey	IND1_15 = 0	*NLS (Fault15) normal*

No	Description	Presentation	Condition	Remarks
18.1	**Start Inhibition Alarm**	■ Red flashing	AU_IND2_00 = 1	*Unacknowledged Alarm Start Inhibition Alarm*
18.2	**Start Inhibition Alarm**	■ Red	IND2_00 = 1	*Start Inhibition Alarm*
18.3	**Start Inhibition Text Alarm**	**Start Inhibition** Red	AU_IND2_00 = 1 or IND2_00 = 1	*NLS (Start Inhibition) alarm.*
18.4	**Start Inhibition Text Normal**	**Start Inhibition** Grey	IND2_00 = 0	*NLS (Start Inhibition) normal*
19.1	**Alarm 1 Alarm**	■ Red flashing	AU_IND2_01 = 1	*Unacknowledged Alarm Alarm1 Alarm*
19.2	**Alarm 1 Alarm**	■ Red	IND2_01 = 1	*Alarm1 Alarm*
19.3	**Alarm 1 Text Alarm**	**Alarm 1** Red	AU_IND2_01 = 1 or IND2_01 = 1	*NLS (Alarm1) alarm.*
19.4	**Alarm 1 Text Normal**	**Alarm 1** Grey	IND2_01 = 0	*NLS (Alarm1) normal*
20.1	**Alarm 2 Alarm**	■ Red flashing	AU_IND2_02 = 1	*Unacknowledged Alarm Alarm2 Alarm*
20.2	**Alarm 2 Alarm**	■ Red	IND2_02 = 1	*Alarm2 Alarm*
20.3	**Alarm 2 Text Alarm**	**Alarm 2** Red	AU_IND2_02 = 1 or IND2_02 = 1	*NLS (Alarm2) alarm.*
20.4	**Alarm 2 Text Normal**	**Alarm 2** Grey	IND2_02 = 0	*NLS (Alarm2) normal*
21.1	**Motor Overload Alarm**	■ Red flashing	AU_IND2_03 = 1	*Unacknowledged Alarm Motor Overload Alarm*
21.2	**Motor Overload Alarm**	■ Red	IND2_03 = 1	*Motor Overload Alarm*
21.3	**Motor Overload Text Alarm**	**Motor Overload** Red	AU_IND2_03 = 1 or IND2_03 = 1	*NLS (Motor Overload) alarm.*

No	Description	Presentation	Condition	Remarks
21.4	**Motor Overload Text Normal**	**Motor Overload** Grey	IND2_03 = 0	*NLS (Motor Overload) normal*
22.1	**Power Plate Temperature Alarm**	■ Red flashing	AU_IND2_04 = 1	*Unacknowledged Alarm Power Plate Temperature Alarm*
22.2	**Power Plate Temperature Alarm**	■ Red	IND2_04 = 1	*Power Plate Temperature Alarm*
22.3	**Power Plate Temperature Text Alarm**	**Power Plate Temperature** Red	AU_IND2_04 = 1 or IND2_04 = 1	*NLS (Power Plate Temperature) alarm.*
22.4	**Power Plate Temperature Text Normal**	**Power Plate Temperature** Grey	IND2_04 = 0	*NLS (Power Plate Temperature) normal*
23.1	**Encoder Alarm**	■ Red flashing	AU_IND2_05 = 1	*Unacknowledged Alarm Encoder Alarm*
23.2	**Encoder Alarm**	■ Red	IND2_05 = 1	*Encoder Alarm*
23.3	**Encoder Text Alarm**	**Encoder** Red	AU_IND2_05 = 1 or IND2_05 = 1	*NLS (Encoder) alarm.*
23.4	**Encoder Text Normal**	**Encoder** Grey	IND2_05 = 0	*NLS (Encoder) normal*
24.1	**Alarm 6 Alarm**	■ Red flashing	AU_IND2_06 = 1	*Unacknowledged Alarm Alarm6 Alarm*
24.2	**Alarm 6 Alarm**	■ Red	IND2_06 = 1	*Alarm6 Alarm*
24.3	**Alarm 6 Text Alarm**	**Alarm 6** Red	AU_IND2_06 = 1 or IND2_06 = 1	*NLS (Alarm6) alarm.*
24.4	**Alarm 6 Text Normal**	**Alarm 6** Grey	IND2_06 = 0	*NLS (Alarm6) normal*
25.1	**Alarm 7 Alarm**	■ Red flashing	AU_IND2_07 = 1	*Unacknowledged Alarm Alarm7 Alarm*

No	Description	Presentation	Condition	Remarks
25.2	**Alarm 7 Alarm**	■ Red	IND2_07 = 1	*Alarm7 Alarm*
25.3	**Alarm 7 Text Alarm**	**Alarm 7** Red	AU_IND2_07 = 1 or IND2_07 = 1	*NLS (Alarm7) alarm.*
25.4	**Alarm 7 Text Normal**	**Alarm 7** Grey	IND2_07 = 0	*NLS (Alarm7) normal*
26.1	**Alarm 8 Alarm**	■ Red flashing	AU_IND2_08 = 1	*Unacknowledged Alarm Alarm8 Alarm*
26.2	**Alarm 8 Alarm**	■ Red	IND2_08 = 1	*Alarm8 Alarm*
26.3	**Alarm 8 Text Alarm**	**Alarm 8** Red	AU_IND2_08 = 1 or IND2_08 = 1	*NLS (Alarm8) alarm.*
26.4	**Alarm 8 Text Normal**	**Alarm 8** Grey	IND2_08 = 0	*NLS (Alarm8) normal*
27.1	**Alarm 9 Alarm**	■ Red flashing	AU_IND2_09 = 1	*Unacknowledged Alarm Alarm9 Alarm*
27.2	**Alarm 9 Alarm**	■ Red	IND2_09 = 1	*Alarm9 Alarm*
27.3	**Alarm 9 Text Alarm**	**Alarm 9** Red	AU_IND2_09 = 1 or IND2_09 = 1	*NLS (Alarm9) alarm.*
27.4	**Alarm 9 Text Normal**	**Alarm 9** Grey	IND2_09 = 0	*NLS (Alarm9) normal*
28.1	**Alarm 10 Alarm**	■ Red flashing	AU_IND2_10 = 1	*Unacknowledged Alarm Alarm10 Alarm*
28.2	**Alarm 10 Alarm**	■ Red	IND2_10 = 1	*Alarm10 Alarm*
28.3	**Alarm 10 Text Alarm**	**Alarm 10** Red	AU_IND2_10 = 1 or IND2_10 = 1	*NLS (Alarm10) alarm.*
28.4	**Alarm 10 Text Normal**	**Alarm 10** Grey	IND2_10 = 0	*NLS (Alarm10) normal*

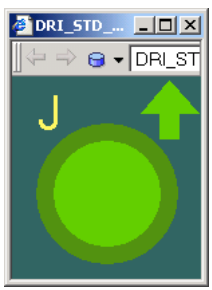
No	Description	Presentation	Condition	Remarks
29.1	**Alarm 11 Alarm**	■ Red flashing	AU_IND2_11 = 1	*Unacknowledged Alarm Alarm11 Alarm*
29.2	**Alarm 11 Alarm**	■ Red	IND2_11 = 1	*Alarm11 Alarm*
29.3	**Alarm 11 Text Alarm**	**Alarm 11** Red	AU_IND2_11 = 1 or IND2_11 = 1	*NLS (Alarm11) alarm.*
29.4	**Alarm 11 Text Normal**	**Alarm 11** Grey	IND2_11 = 0	*NLS (Alarm11) normal*
30.1	**Communications Channel 0 Alarm**	■ Red flashing	AU_IND2_12 = 1	*Unacknowledged Alarm Communications Channel 0 Alarm*
30.2	**Communications Channel 0 Alarm**	■ Red	IND2_12 = 1	*Communications Channel 0 Alarm*
30.3	**Communications Channel 0 Text Alarm**	**Communications Channel 0** Red	AU_IND2_12 = 1 or IND2_12 = 1	*NLS (Communications Channel 0) alarm.*
30.4	**Communications Channel 0 Text Normal**	**Communications Channel 0** Grey	IND2_12 = 0	*NLS (Communications Channel 0) normal*
31.1	**Thermistor Alarm**	■ Red flashing	AU_IND2_13 = 1	*Unacknowledged Alarm Thermistor Alarm*
31.2	**Thermistor Alarm**	■ Red	IND2_13 = 1	*Thermistor Alarm*
31.3	**Thermistor Text Alarm**	**Thermistor** Red	AU_IND2_13 = 1 or IND2_13 = 1	*NLS (Thermistor) alarm.*
31.4	**Thermistor Text Normal**	**Thermistor** Grey	IND2_13 = 0	*NLS (Thermistor) normal*
32.1	**Earth Fault Alarm**	■ Red flashing	AU_IND2_14 = 1	*Unacknowledged Alarm Earth Fault Alarm*
32.2	**Earth Fault Alarm**	■ Red	IND2_14 = 1	*Earth Fault Alarm*

No	Description	Presentation	Condition	Remarks
32.3	**Earth Fault Text Alarm**	**Earth Fault** Red	AU_IND2_14 = 1 or IND2_14 = 1	*NLS (Earth Fault) alarm.*
32.4	**Earth Fault Text Normal**	**Earth Fault** Grey	IND2_14 = 0	*NLS (Earth Fault) normal*
33.1	**Alarm 15 Alarm**	■ Red flashing	AU_IND2_15 = 1	*Unacknowledged Alarm Alarm15 Alarm*
33.2	**Alarm 15 Alarm**	■ Red	IND2_15 = 1	*Alarm15 Alarm*
33.3	**Alarm 15 Text Alarm**	**Alarm 15** Red	AU_IND2_15 = 1 or IND2_15 = 1	*NLS (Alarm15) alarm.*
33.4	**Alarm 15 Text Normal**	**Alarm 15** Grey	IND2_15 = 0	*NLS (Alarm15) normal*

Graphic Element

Motor01

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Black	-	
2	**PointOfControl - Visible**	ModeVisible = true		
		O Yellow	IND2_00= 0	*Out of service*
		D Yellow	IND2_09= 0	*Drive Local Control*
		J Yellow	BOOL_C = 1 and IND2_09 = 1	*Jog Control*
		L Green	BOOL_D = 1 and IND2_09 = 1	*Local Control*
		A Green	BOOL_B = 1 and BOOL_A = 0 and IND2_09 = 1	*NLS (Auto)*
		ManModeVisible = true		
		M Green	BOOL_A = 1 and BOOL_B = 0 and IND2_09 = 1	*NLS (Man)*
		ManModeVisible = false		
		C Green	IND2_09 = 1 and BOOL_C = 0 and BOOL_D = 0	*Central Control*
		-	Point OfControlVisible = false	*Control point not visible*

No	Description	Presentation	Condition	Remarks
3	**Direction Indication**		DirectionVisible = true	
		Green 	IND2_02 = 1 and speed value positive	*Forward*
		Green 	IND2_02 = 1 and speed value negative	*Reverse*
		Green 	IND2_01 = 1	*Run permitted*
		-	**DirectionVisible** = false	*Direction is invisible*
4	**DriveStatus** shape	Light brown 	IND2_00 = 0	*Out of service*
		Green 	IND2_01 = 0 or IND2_08 = 1 or IND2_10 = 1 or IND2_11 = 1 or IND2_12 = 1 or IND2_13 = 1 or	*Not Ready for Start* *Not Ready Run* *C - interlock* *B - Interlock 1* *B - Interlock 2* *B- Interlock 3* *B - Interlock 4*
		Green 	IND2_14 = 1	*A - Interlock*

No	Description	Presentation	Condition	Remarks
4 cont.	**DriveStatus**	Green 	IND2_01 = 1	*Drive ready to start* *Ready Run*
		Green 	IND2_02 = 1	*Drive running*
		Red flashing	AU_IND1_09 = 1 or AU_IND1_10 = 1 or AU_IND1_11 = 1 or AU_IND1_12 = 1	*Unacknowledged alarm*
		Red	IND1_09 = 1 or IND1_10 = 1 or IND1_11 = 1 or IND1_12 = 1	*Fault* *Warning* *Limit* *Communication error*
		Green	-	

The conditions are in priority order. Underlined parameters are configurable.

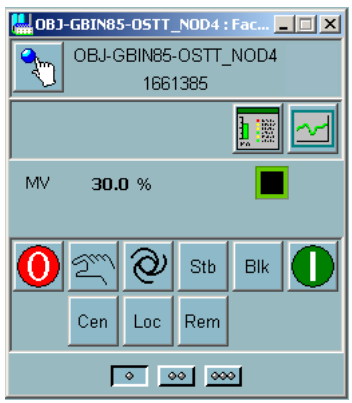
Configuration:

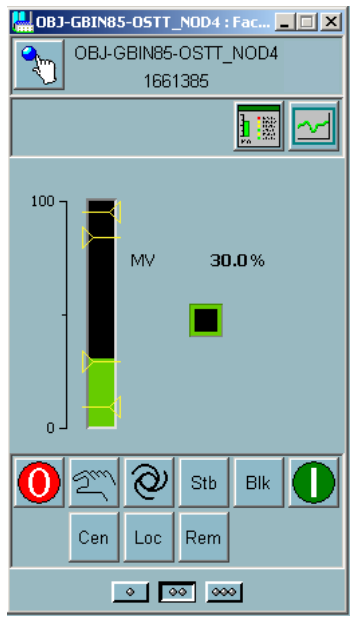
Parameters	Affects	Options (bold is default)	Remarks
ControlOfPointVisible	2. Control Point	**true**, false	*Show point of control or not.*
ManModeVisible	2. Control Point	**true**, false	*True = show M when manual mode. False = show C when manual mode.*
DirectionVisible	3. Direction	**true**, false	*Show Direction or not.*

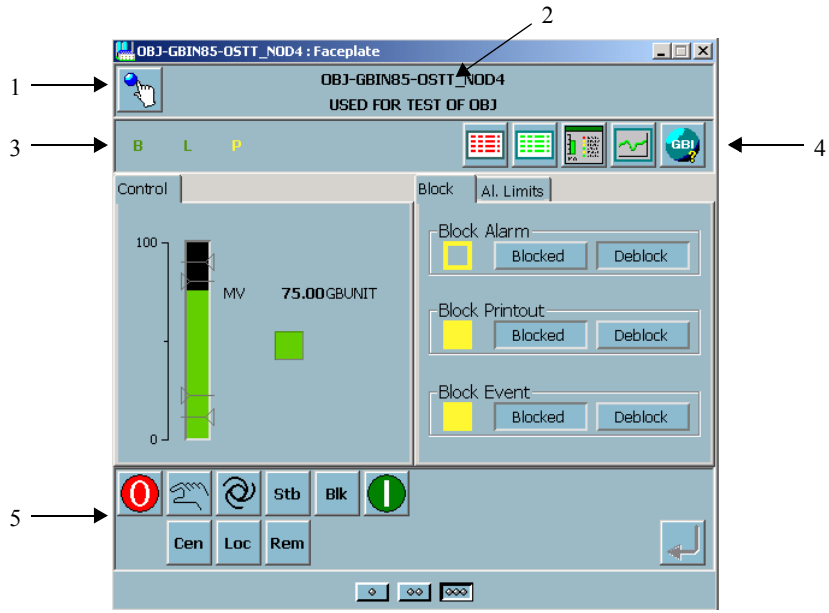
GENBIN, Binary Object

Faceplate

Presentation:







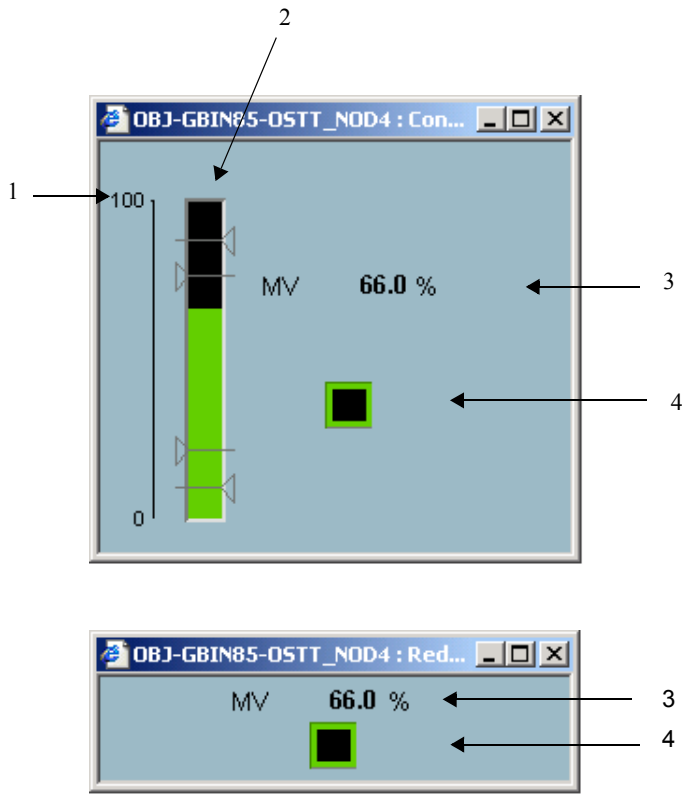
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	MAN = 1	
		A Dark green	AUTO = 1	
		B Dark green	BLK = 1	
		S Dark green	STBY = 1	
3.2	**Control point**	**C** Dark green	CEN = 1	
		L Dark green	LOC = 1	
		R Dark green	REM = 1	

No	Description	Default Presentation	Condition	Remarks
3.3	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
3.4	**Signal error**	**Q** Red	ALSIGNE = 1	
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**On**	set to open order		Set MORD_08 = 1
	Off	set to open order		Set MORD_09 = 1
	Man	Set to Man Mode		Set MORD_04 = 1
	Auto	Set to Auto Mode		Set MORD_05 = 1
	Stb	Set to Standby Mode		Set MORD_07 = 1
	Blk	Set to Blocked Mode		Set MORD_06 = 1
	Cen	Set to Central control		Set MORD_01 = 1
	Loc	Set to Local control		Set MORD_02 = 1
	Rem	Set to Remote control		Set MORD_03 = 1

Control and ReducedControl

Presentation:



Behavior:

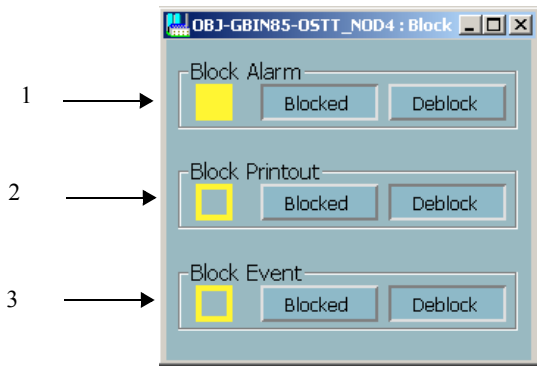
No	Description	Default Presentation	Condition	Remarks
1.1	**Range Max**		MAX	*Range Max of the MV value*
		Black	-	
1.2	**Range Min**		MIN	*Range Min of the MV value*
		Black	-	

No	Description	Default Presentation	Condition	Remarks
2.1	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	
2.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
2.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	
2.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	

No	Description	Default Presentation	Condition	Remarks
2.4 cont.		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
2.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
		Unfilled Red flashing	AU_ST_07 = 1	
3	**Measured Value**			*The MV object value*
3.1	**MV**	**MV** Black		*Text in front of the value*
3.2	**MV Value**	**? ? ?** Red	ALSIGNE = 1	*Signal error*
		Black	MV	*Measured value*
3.3	**MV Unit**		UNIT	*Measured unit*
		Black	-	
4	**Status Indication**			Status - Square indication
		Unfilled Green Flashing	INDONOP = 1 and INDCH = 1	*Off*
		Unfilled Green	INDONOP = 0 and INDCH = 0	*Off*
		Filled Green Flashing	INDONOP = 0 and INDCH = 1	*On*
		Filled Green	INDONOP = 1 and INDCH = 0	*On*

Block

Presentation:



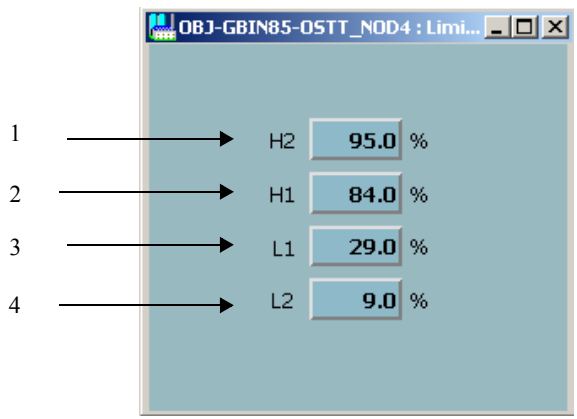
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK = 1	
		Deblock pressed	AL_BLK = 0	
2	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_BLK = 1	
		Deblock pressed	PRINT_BLK = 0	
3	**Block Event**	**Block Event** Black		
		! Yellow	Blocked	

No	Description	Default Presentation	Condition	Remarks
3 cont.		**Block** pressed	EVENT_BLK = 1	
		Deblock pressed	EVENT_BLK = 0	

Limits

Presentation:



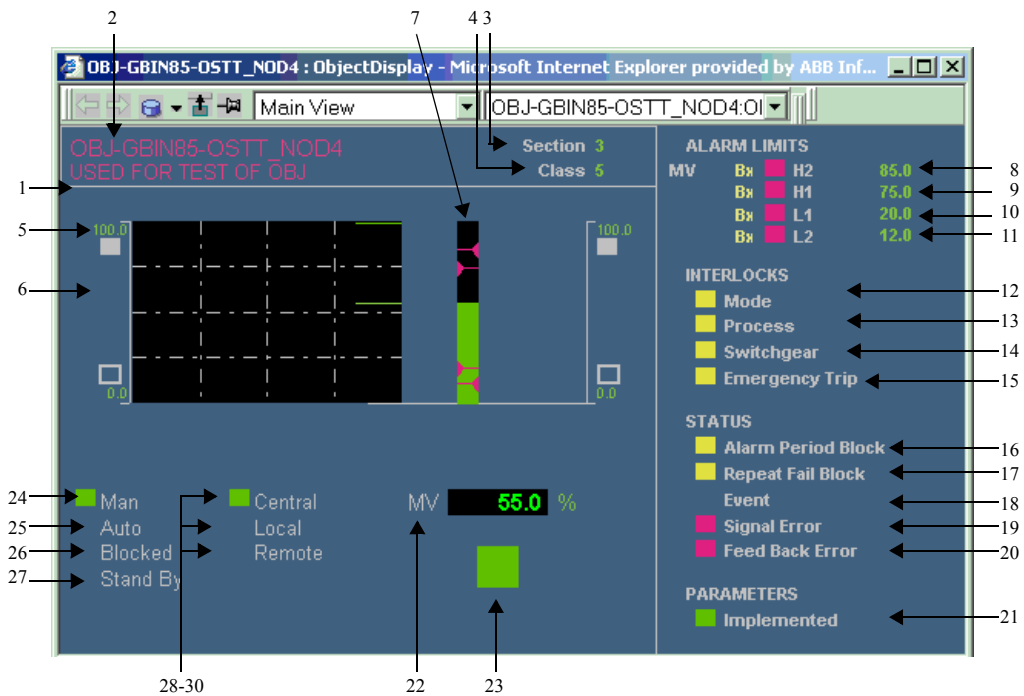
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**H2**	**H2** Black		
		Black	H2	
2	**H1**	**H1** Black		
		Black	H1	
3	**L1**	**L1** Black		
		Black	L1	

No	Description	Default Presentation	Condition	Remarks
4	L2	**L2** Black		
		Black	L2	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALSIGNE = 1 or ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
	Range Min		MIN	*Range Min of the MV value*
		Green	-	

No	Description	Default Presentation	Condition	Remarks
6	**Measure Value Trim Curve**		MV	*Object value - Trim curve*
		Green	-	
	Status Indication		INDONOP	*Status indication - On / Off*
		Green	-	
7.1	**Measured Value Bargraph**		MV	*Object value - Bargraph*
		Green	-	
7.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
7.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
7.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
8	**ALARM LIMITS for MV**			*Alarm limits for MV*
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
8.3	**Alarm Indication**	■ Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	*Alarm High limit 2*
		■ Red	ALLIMH2 = 1	
8.4	**H2 Text**	**H2** Grey		*Text in front of the value*

No	Description	Default Presentation	Condition	Remarks
8.5	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	*Warning High limit 1*
		■ Red	ALLIMH1 = 1	
9.4	**H1 Text**	**H1** Grey		*Text in front of the value*
9.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	*Warning Low limit 1*
		■ Red	ALLIML1 = 1	
10.4	**L1 Text**	**L1** Grey		*Text in front of the value*
10.5	**L1 Value**		MVL1	*Low limit1 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	*Alarm Low limit 2*
		■ Red	ALLIML2 = 1	
11.4	**L2 Text**	**L2** Grey		*Text in front of the value*

No	Description	Default Presentation	Condition	Remarks
11.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
12	**INTERLOCKS**			*Interlocks*
12.1	**Mode Interlock Indication**	■ Yellow	INTMODE = 1	*Mode interlock indication*
12.2	**Mode Interlock Text**	**Mode**		*Mode interlock text*
		Yellow	INTMODE = 1	
		Grey	-	
13.1	**Process Interlock Indication**	■ Yellow	INTPROC = 1	*Process interlock indication*
13.2	**Process Interlock Text**	**Process**		*Process interlock text*
		Yellow	INTPROC = 1	
		Grey	-	
14.1	**Switchgear Interlock Indication**	■ Yellow	INTSWGR = 1	*Switchgear interlock indication*
14.2	**Switchgear Interlock Text**	**Switchgear**		*Switchgear interlock text*
		Yellow	INTSWGR = 1	
		Grey	-	
15.1	**Emergency Trip Interlock Indication**	■ Yellow	INTEMTP = 1	*Emergency Trip interlock indication*
15.2	**Emergency Trip Interlock Text**	**Emergency Trip**		*Emergency Trip interlock text*
		Yellow	INTEMTP = 1	
		Grey	-	
16	**STATUS**			*Status*
16.1	**Alarm Period Block Indication**	■ Yellow	AUTO_BLK = 1	*Alarm block by PC-program*
16.2	**Alarm Period Block Text**	**Alarm Period Blk**		*Alarm period block text*
		Yellow	AUTO_BLK = 1	
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
17.1	**Repeat Fail Block Indication**	■ Yellow	RP_BLK = 1	*Repeat fail block indication*
17.2	**Repeat Fail Block Text**	**Repeat Fail Blk**		*Repeat fail block text*
		Yellow	RP_BLK = 1	
		Grey	-	
18.1	**Event Indication**	■ Yellow	EV_BLK = 1	*Event indication*
18.2	**Event Text**	**Event** Yellow		*Event text*
		Yellow	EV_BLK = 1	
		Grey	-	
19.1	**Signal Error Indication**	■ Red Flashing	AU_ST_00 = 1	*Signal error indication*
		■ Red	ALSIGNE = 1	
19.2	**Signal Error Text**	**Signal Error**		*Signal error text*
		Red	AU_ST_00 = 1 or ALSIGNE = 1	
		Grey	-	
20.1	**Feed Back Error Indication**	■ Red Flashing	AU_ST_01 = 1	*Feed back error indication*
		■ Red	ALFBE = 1	
20.2	**Feed Back Error Text**	**Feed Back Error**		*Feed back error text*
		Red	AU_ST_01 = 1 or ALFBE = 1	
		Grey	-	
21	**PARAMETER**			*Parameter*
21.1	**Implemented Indication**	■ Green	IMPLEMENTED = 1	*Implemented indication*
21.2	**Implemented Text**	**Implemented** Grey		*Implemented text*
22	**Measured Value**			*The MV object value*
22.1	**MV**	**MV** Grey		*Text in front of the value*
22.2	**MV Value**	**? ? ?** Red	ALSIGNE = 1	*Signal error*
			MV	*Measured value*

No	Description	Default Presentation	Condition	Remarks
		Green	-	
22.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
23	**Status Indication**			*Status - Square indication*
		Unfilled Green Flashing	INDONOP = 1 and INDCH = 1	*Off*
		Unfilled Green	INDONOP = 0 and INDCH = 0	*Off*
		Filled Green Flashing	INDONOP = 0 and INDCH = 1	*On*
		Filled Green	INDONOP = 1 and INDCH = 0	*On*
24.1	**Man Indication**	■ Green	MAN = 1	*Manual mode*
24.2	**Man Text**	**Man** Green	MAN = 1	*Man text*
		Grey	-	
25.1	**Auto Indication**	■ Green	AUTO = 1	*Auto mode*
25.2	**Auto Text**	**Auto** Green	AUTO = 1	*Auto text*
		Grey	-	
26.1	**Blocked Indication**	■ Green	BLK = 1	*Blocked mode*
26.2	**Blocked Text**	**Blocked** Green	BLK = 1	*Blocked text*
		Grey	-	
27.1	**Stand By Indication**	■ Green	STBY = 1	*Stand by mode*
27.2	**Stand By Text**	**Stand By** Green	STBY = 1	*Stand by text*
		Grey	-	
28.1	**Central Control Indication**	■ Green	CEN = 1	*Central control indication*
28.2	**Central Control Text**	**Central** Green	CEN = 1	*Central control text*
		Grey	-	
29.1	**Local Control Indication**	■ Green	LOC = 1	*Local control indication*

No	Description	Default Presentation	Condition	Remarks
29.2	**Local Control Text**	**Local** Green	LOC = 1	*Local control text*
		Grey	-	
30.1	**Remote Control Indication**	■ Green	REM = 1	*Remote control indication*
30.2	**Remote Control Text**	**Remote** Green	REM = 1	*Remote control text*
		Grey	-	

Graphic Element

NumericMV01, Mode01, UnitMV01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	ALSIGNE = 1 and AU_ST_00 =1	*Unacknowledged signal error*
		Red flashing	AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		? ? ? Red	ALSIGNE = 1	*Signal error*
		Red	ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	
3	**Mode**			*Object mode*
		M Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		B Green	BLK = 1	*Blocked mode*
		S Green	STBY = 1	*Standby mode*
4	**Operator Position**			*Object mode*
		C Green	CEN = 1	*Central position*
		L Green	LOC = 1	*Local position*
		R Green	REM = 1	*Remote position*
		-		*Operator position is invisible*

No	Description	Default Presentation	Condition	Remarks
5	**Interlocks**			*Object interlock*
		X Yellow	INTMODE = 1 or INTPROC = 1 or INTSWGR = 1 or INTEMTP = 1	*Interlock mode* *Interlock process* *Interlock switchgear* *Interlock emergency trip*
6	**Unit**	Green	UNIT	

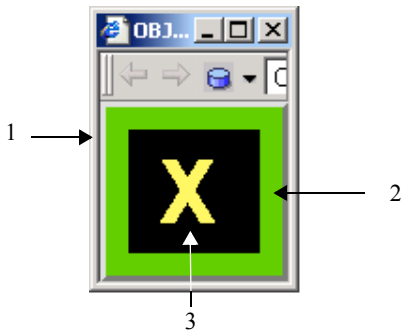
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV01, Valid for Mode01 & UnitMV01
FrameWidth	1. Lock Frame	**0**, (0..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01

IndicatorBoxI101

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Symbol Center Color**			
		Black	INDONOP = 1 and INDCH = 1 INDONOP = 0 and INDCH = 0	*Off*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm feedback error* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red	ALSIGNE = 1 or ALFBE = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm feedback error* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green flashing	INDCH = 1 and INDONOP = 0	
		Green	-	*On*
3	**Interlocks**			*Object interlock*
		X Yellow	INTMODE = 1 or INTPROC = 1 or INTSWGR = 1 or INTEMTP = 1	*Interlock mode* *Interlock process* *Interlock switchgear* *Interlock emergency trip*
		Label	-	*User defined Label*

The conditions are in priority order. Underlined parameters are configurable.

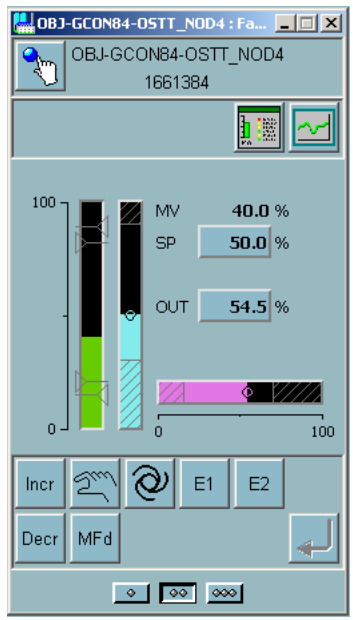
Configuration:

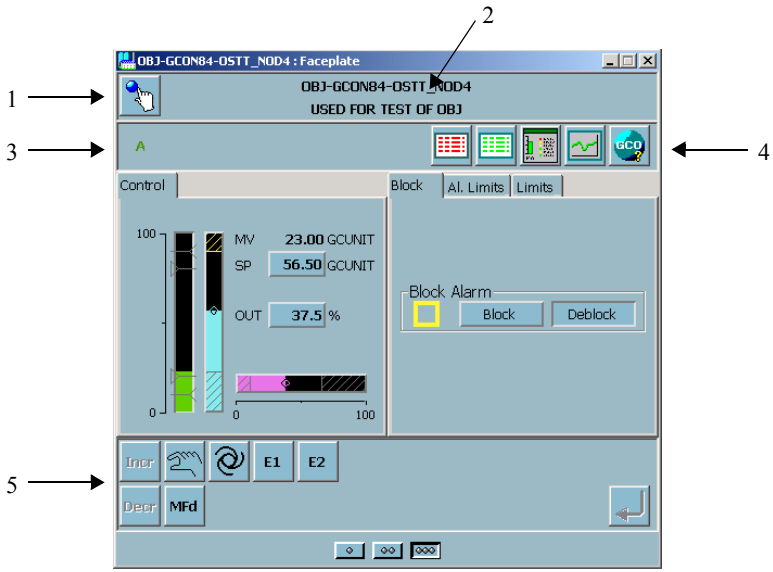
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (0...5)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	Raised and Sunken defines that 3-D presentation is used. The object state (on/off) defines the actual 3-D presentation.
Label	3. Interlock	" ", any character	

GENCON, PI Controller

Faceplate

Presentation:



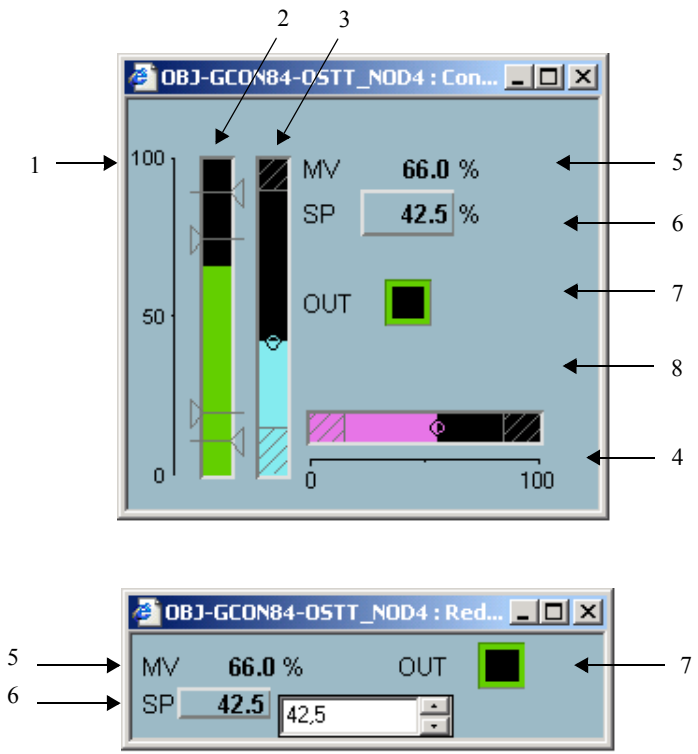

1
2
3
4
5
OBJ-GCON84-OSTT_NOD4 : Faceplate
OBJ-GCON84-OSTT_NOD4
USED FOR TEST OF OBJ
A
Control
Block
Al. Limits
Limits
100
0
MV
23.00 GCUNIT
SP
56.50 GCUNIT
OUT
37.5 %
0
100
Block Alarm
Block
Deblock
Incr
Decr
MFd
E1
E2

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark Green	MAN = 1	
		A Dark Green	AUTO = 1	
		MFd Dark Green	MANF = 1	
		E1 Dark Green	E1 = 1	
		E2 Dark Green	E2 = 1	
3.2	**Print Blk**	**P** Yellow		
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**Incr**	Increase output with 0,5 unit	MAN = 1	
		Increase setpoint with 0,5 unit	AUTO = 1	
	Decr	Decrease output with 0,5 unit	MAN = 1	
		Decrease setpoint with 0,5 unit	AUTO = 1	
	Man	Set to Man Mode		Set MORD_03 = 1
	Auto	Set to Auto Mode		Set MORD_04 = 1
	MFd	Set to Man Force Mode		Set MORD_02 = 1
	E1	Set to E1 Mode		Set MORD_05 = 1
	E2	Set to E2 Mode		Set MORD_06 = 1

Control and ReducedControl

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Range Max**	Black	MAX	*Range Max of the MV value*
1.2	**Range Min**	Black	MIN	*Range Min of the MV value*
2.1	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	

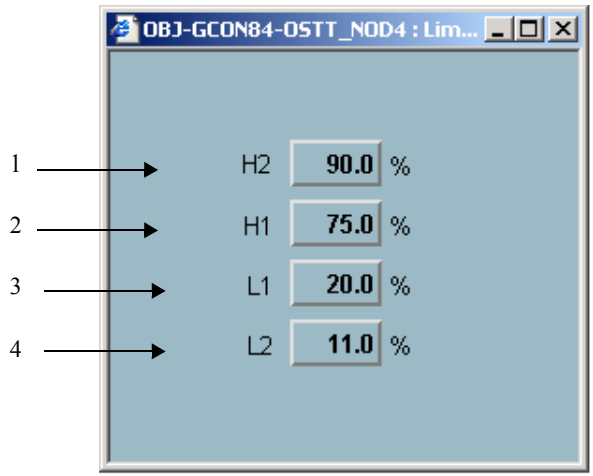
No	Description	Default Presentation	Condition	Remarks
2.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
2.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	
2.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
2.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
3.1	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
3.2	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	
3.3	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	
4.1	**OUT Value**		OUT	*Object output value*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		Magenta	-	
4.2	**High OUT Limit**		OUTPH	*Upper warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPH > 100%	*Invisible*
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
4.3	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPL < 0%	*Invisible*
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	
5	**Measured Value**			*The MV object value*
5.1	**MV Value**	**? ? ?** Red	ALAI = 1	*Signal error*
		Black	MV	*Measured value*
5.2	**MV Unit**		UNIT	*Measured unit*
		Black	-	
6	**Setpoint Value**			*The SP object value*
6.1	**SP Value**		SP	*Setpoint value*
		Black	-	
6.2	**SP Unit**		UNIT	*Setpoint unit*
		Black	-	
7	**Output Value**			*The OUT object value*
7.1	**OUT Value**		OUT	*Output value*
		Black	INDON = 0 and ONOFCTRL = 0	
7.2	**OUT Unit**	**%** Black	INDON = 0 and ONOFCTRL = 0	*Output unit*
7.3	**Status Indication**			*Status - Square indication*
		Filled Green	INDON = 1	*On*
		Unfilled Green	INDON = 0 and ONOFCTRL = 1	*Off*
8	**Warning Indication Deviation**			*Warning indication Deviation*
		DEV Red	ALDEV = 1	
		-	ALDEV = 0	*Invisible*

Limits

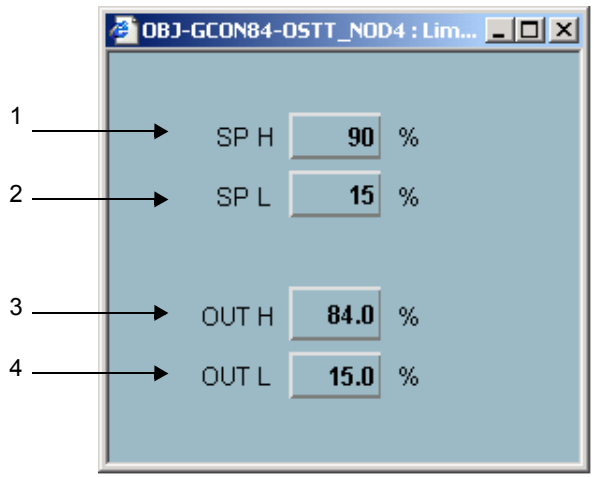
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	H2	**H2** Black		
		Black	MVH2	
2	H1	**H1** Black		
		Black	MVH1	
3	L1	**L1** Black		
		Black	MVL1	
4	L2	**L2** Black		
		Black	MVL2	

Presentation:

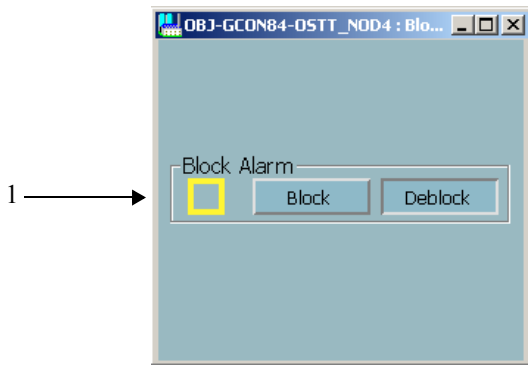


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**SP H**	**SPH** Black	SETPH	
2	**SP L**	**SPL** Black	SETPL	
3	**OUT H**	**OUT H** Black	OUTPH	
4	**OUT L**	**OUT L** Black	OUTPL	

Block

Presentation:

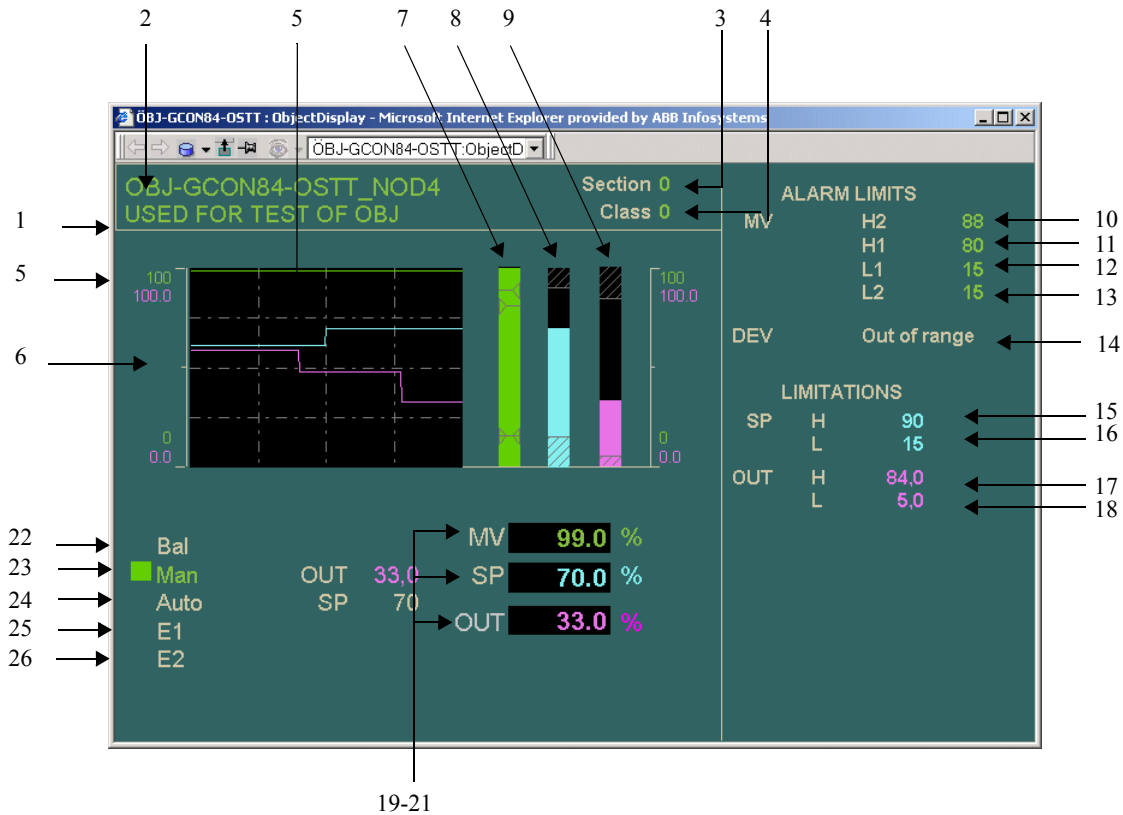


Behavior::

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK = 1	
		Deblock pressed	AL_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5.1	**Range MV Max**		MAX	*Range Max of the MV value*
		Green	-	
5.2	**Range OUT Max**	**100** Magenta		*Range Max of the OUT value*
5.3	**Range MV Min**		MIN	*Range Min of the MV value*
		Green	-	
5.4	**Range OUT Min**	**0** Magenta		*Range Min of the OUT value*
6	**Measure Value Trim Curve**		MV	*Object measure value*
		Green	-	
	Setpoint Value Trim Curve		SP	*Object setpoint value*
		Cyan	-	
	Output Value Trim Curve		OUT	*Object output value*
		Magenta	-	

No	Description	Default Presentation	Condition	Remarks
7.1	**Measured Value Bargraph**		MV	*Object value - Bargraph*
		Green	-	
7.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
7.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	
7.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	

No	Description	Default Presentation	Condition	Remarks
7.4 cont.		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	
8.1	**SP Value**		SP	*Object setpoint value*
		Cyan	-	
8.2	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	
8.3	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	
9.1	**OUT Value**		OUT	*Object output value*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		Magenta	-	
9.2	**High OUT Limit**		OUTPH	*Upper warning limit output*

No	Description	Default Presentation	Condition	Remarks
9.2 cont.		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPH > 100%	*Invisible*
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	
9.3	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	INDON = 1 or ONOFCTRL = 1	*Invisible*
		-	OUTPL < 0%	*Invisible*
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	
10	**ALARM LIMITS for MV**			*Alarm limits for MV*
10.1	**MV Text**	**MV** Grey		*Text in front of the line*
10.2	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.3	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
10.4	**Alarm Indication**	■ Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	*Alarm High limit 2*
		■ Red	ALLIMH2 = 1	
10.5	**H2 Text**	**H2** Grey		*Text in front of the value*
10.6	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*

No	Description	Default Presentation	Condition	Remarks
11.3	**Warning Indication**	■ Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	*Warning High limit 1*
		■ Red	ALLIMH1 = 1	
11.4	**H1 Text**	**H1** Grey		*Text in front of the value*
11.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
12.3	**Warning Indication**	■ Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	*Warning Low limit 1*
		■ Red	ALLIML1 = 1	
12.4	**L1 Text**	**L1** Grey		*Text in front of the value*
12.5	**L1 Value**		MVL1	*Low limit1 value*
		Green	-	
13.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
13.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
13.3	**Alarm Indication**	■ Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	*Alarm Low limit 2*
		■ Red	ALLIML2 = 1	
13.4	**L2 Text**	**L2** Grey		*Text in front of the value*
13.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
14.1	**DEV Text**	**DEV** Grey		*Text in front of the line*

No	Description	Default Presentation	Condition	Remarks
14.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
		Be Yellow	EV_BLK = 1	*Event blocked*
14.3	**Alarm Indication**	■ Red flashing	ALDEV = 1 and AU_ST_03 = 1	
		■ Red	ALDEV = 1	
14.4	**Out of range Text**	**Out of range** Grey		
15	**LIMITATIONS for SP**			*Limitations for SP*
15.1	**SP Text**	**SP** Grey		*Text in front of the line*
15.2	**Warning Indication**	■ Yellow	LIMSPH = 1	*Warning Setpoint High*
15.3	**H Text**	**H** Grey		*Text in front of the value*
15.4	**H Value**		SETPH	*Setpoint High value*
		Cyan	-	
16.1	**Warning Indication**	■ Yellow	LIMSPL = 1	*Warning Setpoint Low*
16.2	**L Text**	**L** Grey		*Text in front of the value*
16.3	**L Value**		SETPL	*Setpoint Low value*
		Cyan	-	
17	**LIMITATIONS for OUT**			*Limitations for OUT*
17.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
17.2	**Warning Indication**	■ Yellow	LIMOPH = 1	*Warning Output High*
17.3	**H Text**	**H** Grey		*Text in front of the value*
17.4	**H Value**		OUTPH	*Output High value*
		Magenta	-	
18.1	**Warning Indication**	■ Yellow	LIMOPL = 1	*Warning Output Low*
18.2	**L Text**	**L** Grey		*Text in front of the value*
18.3	**L Value**		OUTPL	*Output Low value*
		Magenta	-	

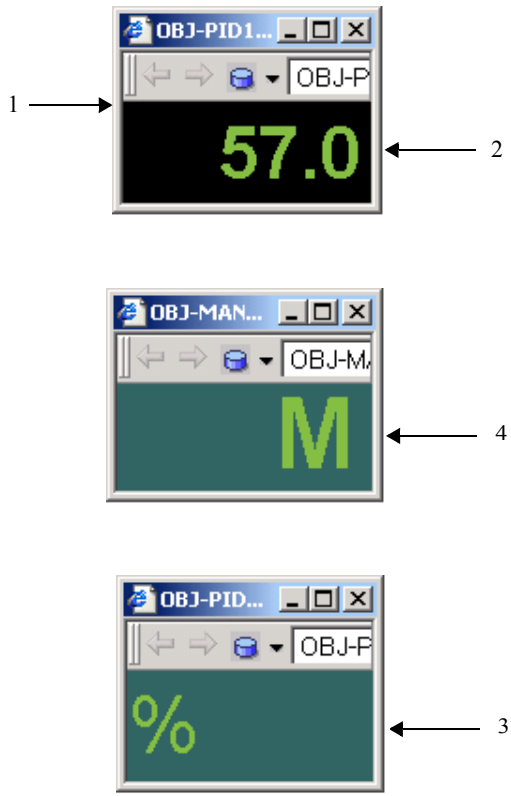
No	Description	Default Presentation	Condition	Remarks
19	**Measured Value**			*The MV object value*
19.1	**MV**	**MV** Grey		*Text in front of the value*
19.2	**MV Value**	**? ? ?** Red	ALAI = 1	*Signal error*
		Green	MV	*Measured value*
19.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
20	**Setpoint Value**			*The SP object value*
20.1	**SP**	**SP** Grey		*Text in front of the value*
20.2	**SP Value**		SP	*Setpoint value*
		Cyan	-	
20.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
21	**Output Value**			*The OUT object value*
21.1	**OUT**	**OUT** Grey		*Text in front of the value*
21.2	**OUT Value**		OUT	*Output value*
		Magenta	INDON = 0 and ONOFCTRL = 0	
21.3	**OUT Unit**	**%** Magenta	INDON = 0 and ONOFCTRL = 0	*Output unit*
21.4	**Status Indication**			*Status - Square indication*
		Filled Green	INDON = 1	*On*
		Unfilled Green	INDON = 0 and ONOFCTRL = 1	*Off*
22.1	**Balance indication**	■ Green filled	BAL = 1	*Balance mode*
22.2	**Balance Text**	**Bal**		*Text behind the indication*
		Green	BAL = 1	*Balance mode*
		Grey	-	
23.1	**Man indication**	■ Green filled	MANF = 1 or MAN = 1	*Manual mode*

No	Description	Default Presentation	Condition	Remarks
23.2	**Man Text**	**Man**		*Text behind the indication*
		Green	MANF = 1 or MAN = 1	*Manual mode*
		Grey	-	
23.3	**Forced Text**	**Forced** Green	MANF = 1	*Manual Forced mode*
		invisible	MANF = 0	
23.4	**Man Out Text**	**OUT** Grey		*Text in front of the value*
23.5	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MANF = 1 or MAN = 1	*Manual mode*
		Grey	-	
24.1	**Auto indication**	■ Green filled	AUTO = 1	*Auto mode*
24.2	**Auto Text**	**Auto**		*Text behind the indication*
		Green	AUTO = 1	*Auto mode*
		Grey	-	
24.3	**Auto Setpoint Text**	**SP** Grey		*Text in front of the value*
24.4	**Auto Setpoint Value**		SETP	*Auto Setpoint value*
		Cyan	AUTO = 1	*Auto mode*
		Grey	-	
25.1	**E1 indication**	■ Green filled	E1 = 1	*E1 mode*
25.2	**E1 Text**	**E1**		*Text behind the indication*
		Green	E1 = 1	*E1 mode*
		Grey	-	
26.1	**E2 indication**	■ Green filled	E2 = 1	*E2 mode*
26.2	**E2 Text**	**E2**		*Text behind the indication*
		Green	E2 = 1	*E2 mode*
		Grey	-	

Graphic Element

NumericMV01, Mode01, UnitMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	ALAI = 1 and AU_ST_00 = 1	*Unacknowledged signal error*
		Red flashing	AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		? ? ? Red	ALAI = 1	*Signal error*
		Red	ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	
3	**Unit**	Green	UNIT	
4	**Mode**			*Object mode*
		Bal Green	BAL = 1	*Balanced mode*
		M Fd Green	MANF = 1	*Manual Forced mode*
		M Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
		E2 Green	E2 = 1	*E2 mode*
		-		*Mode is invisible*

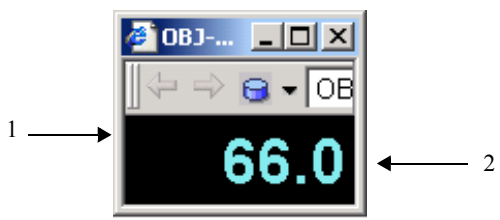
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV01, Valid for Mode01 & UnitMV01

NumericSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Setpoint Value**		SP	
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green	-	

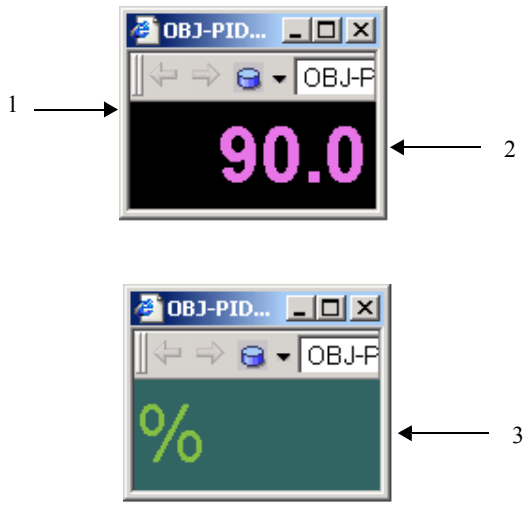
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	
BackgroundColor		**Black**, any other color	

NumericOUT01, UnitOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Output Value**		OP	*Object value*
		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Magenta	-	
3	**Unit**	**%** Green		*Object unit*

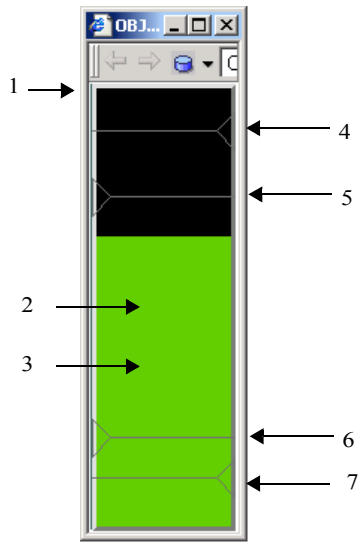
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericOUT01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericOUT01
BackgroundColor		**Black**, any other color **Transparent,** any color	Valid for NumericOUT01, Valid for UnitOUT01

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**AI Error**	**?** Red flashing	ALAI = 1 and AU_ST_00 = 1	*Unacknowledged signal error*
		? Red	ALAI = 1	*Signal error*
3	**Measured Value**		MV	*Object value*
		-	ALAI = 1	*Invisible - I/O Error*

No	Description	Default Presentation	Condition	Remarks
3 cont.		Red flashing	AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Green		
4	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	ALLIMH2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH2 = 1 and AU_ST_04 = 1	
		Unfilled Red flashing	AU_ST_04 = 1	
		Filled Red	ALLIMH2 = 1	
		Unfilled Grey	-	
5	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	ALLIMH1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIMH1 = 1 and AU_ST_05 = 1	
		Unfilled Red flashing	AU_ST_05 = 1	
		Filled Red	ALLIMH1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
6	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	ALLIML1 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML1 = 1 and AU_ST_06 = 1	
		Unfilled Red flashing	AU_ST_06 = 1	
		Filled Red	ALLIML1 = 1	
		Unfilled Grey	-	
7	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	ALLIML2 = 1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red flashing	ALLIML2 = 1 and AU_ST_07 = 1	
		Unfilled Red flashing	AU_ST_07 = 1	
		Filled Red	ALLIML2 = 1	
		Unfilled Grey	-	

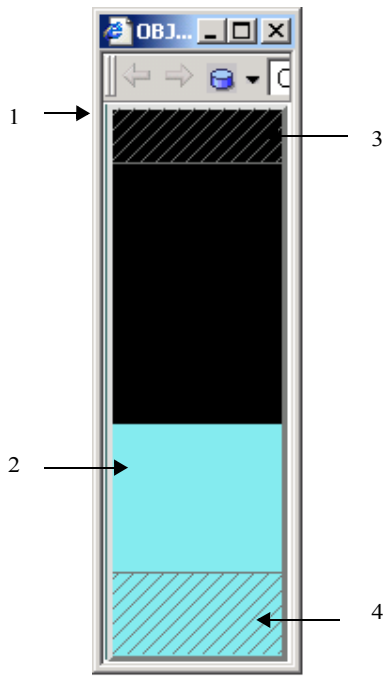
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical,** Horizontal	

BargraphSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Black	SELECTED = 0	
1.2	**Top Left Edge**	Light Grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark Grey		*Three Dimensions effect*
2	**Setpoint Value**		SP	*Object setpoint value*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Cyan		
3	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	LIMSPH = 1	*Limitation line and mesh*
		Grey	-	
4	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	LIMSPL = 1	*Limitation line and mesh*
		Grey	-	

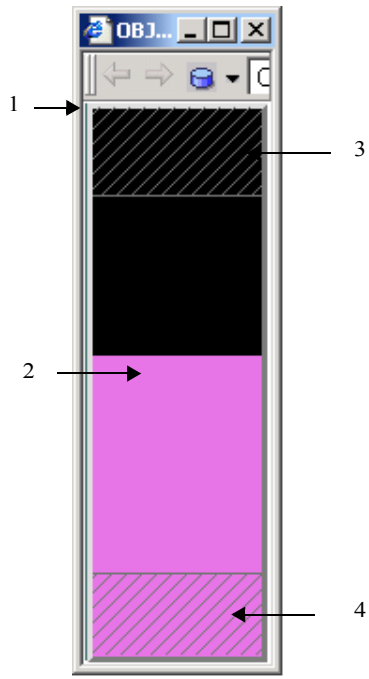
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

BargraphOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Output Value**		OUT	*Object output value*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red flashing	AU_ST_00 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged signal error* *UnAck alarm Deviation* *UnAck alarm high limit 2* *UnAck alarm high limit 1* *UnAck alarm low limit 1* *UnAck alarm low limit 2*
		Red	ALAI = 1 or ALDEV = 1 or ALLIMH2 = 1 or ALLIMH1 = 1 or ALLIML1 = 1 or ALLIML2 = 1	*Signal error* *Alarm Deviation* *Alarm high limit 2* *Alarm high limit 1* *Alarm low limit 1* *Alarm low limit 2*
		Magenta		
3	**High OUT Limit**		OUTPH	*Upper warning limit output*
		-	OUTPH > 100%	*Invisible if OUTPH >*
		Yellow	LIMOPH = 1	*Limitation line and mesh*
		Grey	-	
4	**Low OUT Limit**		OUTPL	*Lower warning limit output*
		-	OUTPL < 0%	*Invisible if OUTPL <*
		Yellow	LIMOPL = 1	*Limitation line and mesh*
		Grey	-	

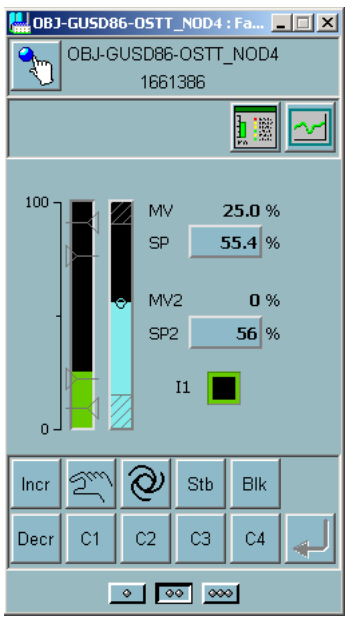
Configuration:

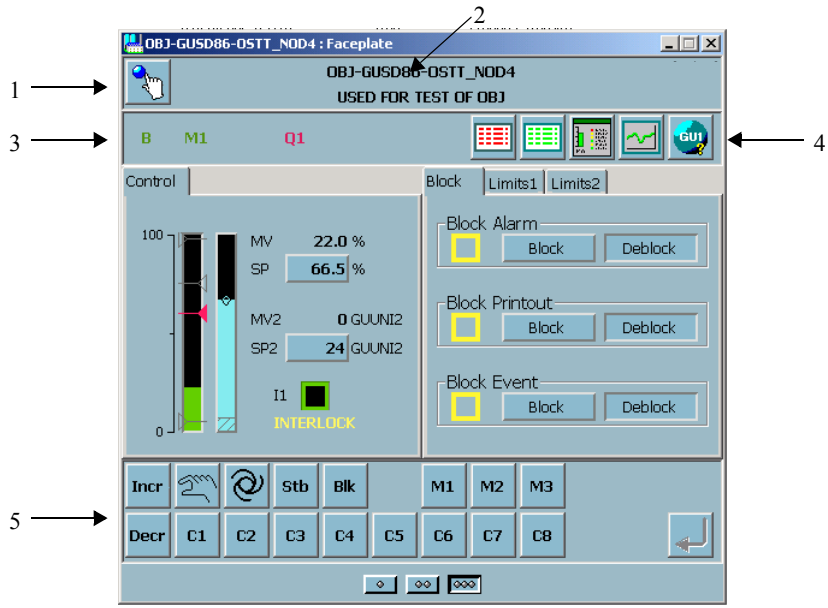
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

GENUSD, User Defined Object

Faceplate

Presentation:





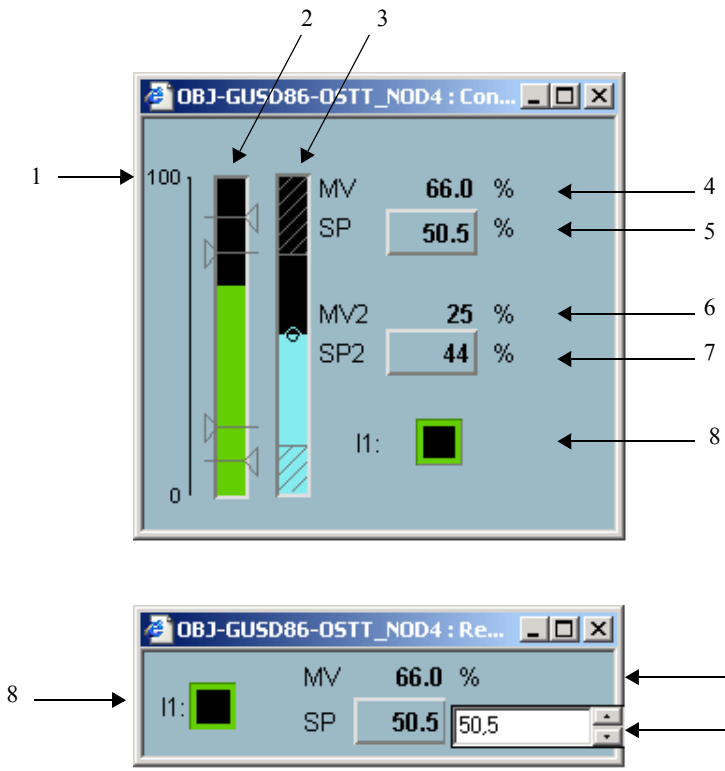
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Button			
2	Name and Description			
3	Status Field			
3.1	Mode	**M** Dark green	MAN = 1	
		A Dark green	AUTO = 1	
		B Dark green	BLK = 1	
		S Dark green	STBY = 1	
3.2	Control Point	**M1** Dark green	M1 = 1	
		M2 Dark green	M2 = 1	
		M3 Dark green	M3 = 1	
3.3	Signal Error	**Q1** Red	ALQ1 = 1	
		Q2 Red	ALQ2 = 1	

No	Description	Default Presentation	Condition	Remarks
3.4	**Print Blk**	**P** Yellow	PRINT_BLK	
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**Incr**	Increase setpoint2 with 1 unit		
		Increase setpoint with 0,5%		
	Decr	Decrease setoint2 with 1 unit		
		Decrease setpoint with 0,5%		
	Man	Set to Man Mode		Set MORD_04 = 1
	Auto	Set to Auto Mode		Set MORD_05 = 1
	Blk	Set to Blocked Mode		Set MORD_06 = 1
	Stb	Set to Standby Mode		Set MORD_07 = 1
	M1	Set to M1 Mode		Set MORD_01 = 1
	M2	Set to M2 Mode		Set MORD_02 = 1
	M3	Set to M3 Mode		Set MORD_03 = 1
	C1	Set to C1 Mode		Set MORD_09 = 1
	C2	Set to C2 Mode		Set MORD_10 = 1
	C3	Set to C3 Mode		Set MORD_11 = 1
	C4	Set to C4 Mode		Set MORD_12 = 1
	C5	Set to C5 Mode		Set MORD_13 = 1
	C6	Set to C6 Mode		Set MORD_14 = 1
	C7	Set to C7 Mode		Set MORD_15 = 1
	C8	Set to C8 Mode		Set MORD_16 = 1

Control and ReducedControl

Presentation:



Behavior:

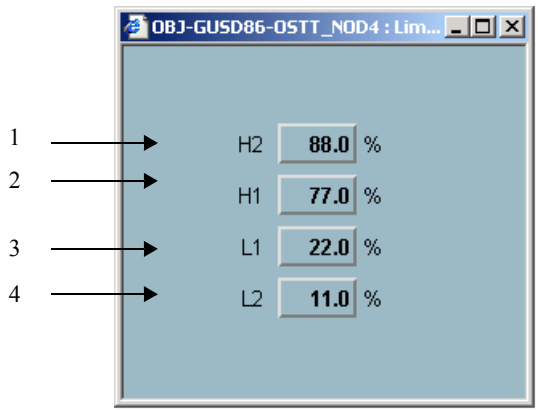
No	Description	Default Presentation	Condition	Remarks
1.1	**Range Max**	Green	MAX	*Range Max of the MV value*
1.2	**Range Min**	Green	MIN	*Range Min of the MV value*
2.1	**Measured Value Bargraph**		MV	*Object measured value*
		Green	-	

No	Description	Default Presentation	Condition	Remarks
2.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	
2.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	
2.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	
2.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	
3.1	**SP Value**		SP	*Object setpoint value*
		Cyan	-	

No	Description	Default Presentation	Condition	Remarks
3.2	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	
3.3	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	
4	**Measured Value**			*The MV object value*
4.1	**MV Value**		MV	*Measured value*
		Black	-	
4.2	**MV Unit**		UNIT	*Measured unit*
		Black	-	
5	**Setpoint Value**			*The SP object value*
5.1	**SP Value**		SP	*Setpoint value*
		Black	-	
5.2	**SP Unit**		UNIT	*Setpoint unit*
6	**Mesured2 Value**		-	*The MV2 object value*
6.1	**MV2 Value**	Black	MV2	*Measured2 Value*
6.2	**MV2 Unit**	% Black		*Measured2 Unit*
7	**Setpoint 2 Value**			
7.1	**SP2 Value**	Black	SP2	*The setpoint 2 value*
7.2	**SP2 Unit**	% Black		*The setpoint 2 Unit*
8	**Status Indication**			*Status - Square indication*
		Filled Green	IND1 = 1	*On*
		Unfilled Green	IND1 = 0 and IND2 =1	*Off*

Limits and Block

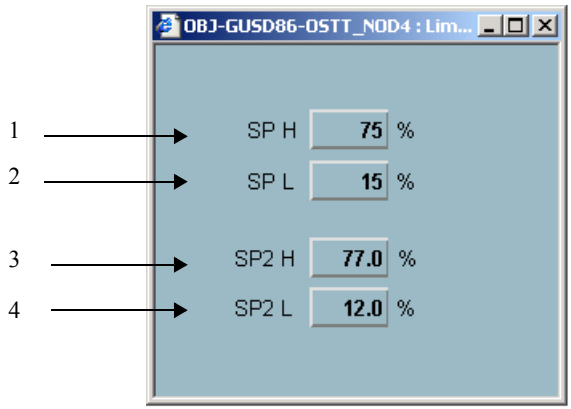
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	H2	**H2** Black		
		Black	MVH2	
2	H1	**H1** Black		
		Black	MVH1	
3	L1	**L1** Black		
		Black	MVL1	
4	L2	**L2** Black		
		Black	MVL2	

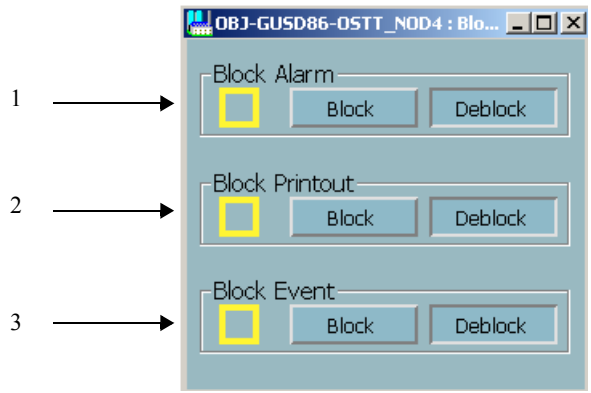
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	SP H	**SP H** Black		
		Black	SETPH	
2	SP L	**SP L** Black		
		Black	SETPL	
3	SP2 H	**SP2 H** Black		
		Black	SETP2H	
4	SP2 L	**SP2 L** Black		
		Black	SETP2L	

Presentation:

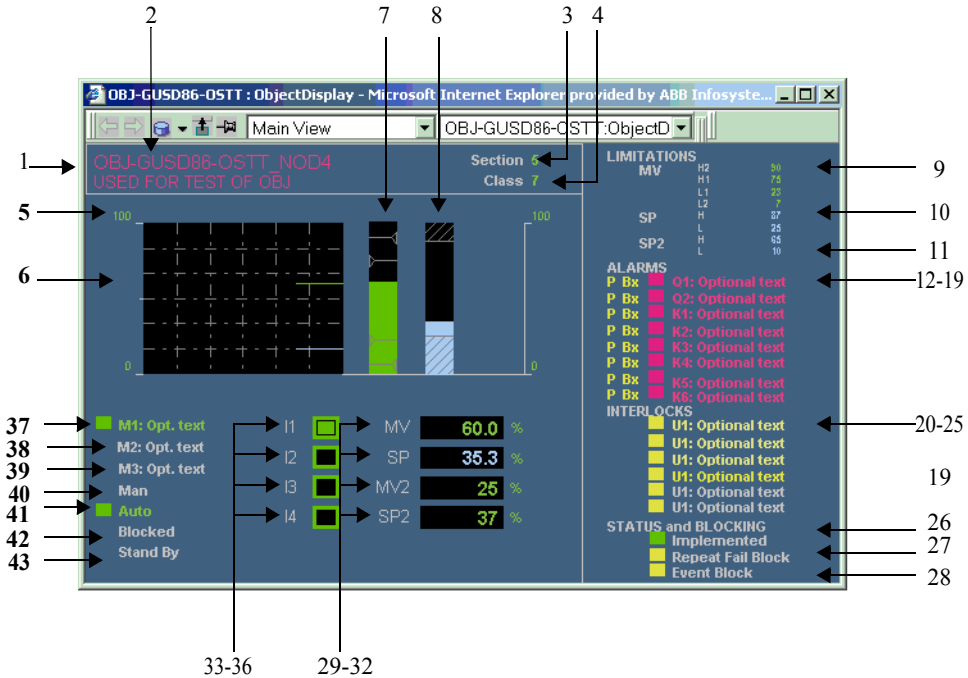


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK = 1	
		Deblock pressed	AL_BLK = 0	
2	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_BLK = 1	
		Deblock pressed	PRINT_BLK = 0	
3	**Block Event**	**Block Event** Black		
		! Yellow	Blocked	
		Block pressed	EVENT_BLK = 1	
		Deblock pressed	EVENT_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Black	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_ST_00 = 1 or AU_ST_01 = 1 or AU_ST_02 = 1 or AU_ST_03 = 1 or AU_ST_04 = 1 or AU_ST_05 = 1 or AU_ST_06 = 1 or AU_ST_07 = 1	*Unacknowledged sign. error 1* *Unacknowledged sign. error 2* *Unacknowledged alarm 1* *Unacknowledged alarm 2* *Unacknowledged alarm 3* *Unacknowledged alarm 4* *Unacknowledged alarm 5* *Unacknowledged alarm 6*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Signal error 1* *Signal error 2* *Alarm 1* *Alarm 2* *Alarm 3* *Alarm 4* *Alarm 5* *Alarm 6*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5.1	**Range MV Max**		MAX	*Range Max of the MV value*
		Green	-	
5.2	**Range MV Min**		MIN	*Range Min of the MV value*
		Green	-	
6	**Measure Value Trim Curve**	Green	MV	*Object measure value*
	Setpoint Value Trim Curve	Cyan	SP	*Object setpoint value*
7.1	**Measured Value Bargraph**		MV	*Object value*
		Green	-	

No	Description	Default Presentation	Condition	Remarks
7.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	
7.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	
7.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	
7.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	
8.1	**SP Value**		SP	*Object setpoint value*
		Cyan	-	

No	Description	Default Presentation	Condition	Remarks
8.2	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	
8.3	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	
9	**LIMITATIONS for MV**			*Alarm limits for MV*
9.1	**MV Text**	**MV** Grey		*Text in front of the line*
9.2	**H2 Text**	**H2** Grey		*Text in front of the value*
9.3	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
9.4	**H1 Text**	**H1** Grey		*Text in front of the value*
9.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
9.6	**L1 Text**	**L1** Grey		*Text in front of the value*
9.7	**L1 Value**		MVL1	*Low limit 1 value*
		Green	-	
9.8	**L2 Text**	**L2** Grey		*Text in front of the value*
9.9	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
10	**LIMITATIONS for SP**			*Limitations for SP*
10.1	**SP Text**	**SP** Grey		*Text in front of the line*
10.2	**H Text**	**H** Grey		*Text in front of the value*
10.3	**H Value**		SETPH	*Setpoint High value*
		Cyan	-	
10.4	**L Text**	**L** Grey		*Text in front of the value*

No	Description	Default Presentation	Condition	Remarks
10.5	**L Value**		SETPL	*Setpoint Low value*
		Cyan	-	
11	**LIMITATIONS for SP2**			*Limitations for SP2*
11.1	**SP2 Text**	**SP2** Grey		*Text in front of the line*
11.2	**H Text**	**H** Grey		*Text in front of the value*
11.3	**H Value**		SETP2H	*Setpoint High 2 value*
		Magenta	-	
11.4	**L Text**	**L** Grey		*Text in front of the value*
11.5	**L Value**		SETP2L	*Setpoint Low 2 value*
		Magenta	-	
12	**ALARMS**			*Alarms*
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red flashing	ALQ1 = 1 and AU_ST_00 =1	*Signal error 1*
		■ Red	ALQ1 = 1	
12.4	**User defined text**	**Q1: Optional text**		*User defined text*
		Red	ALQ1 = 1 or AU_ST_00 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
13.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
13.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
13.3	**Alarm Indication**	■ Red flashing	ALQ2 = 1 and AU_ST_01 =1	*Signal error 2*
		■ Red	ALQ2 = 1	

No	Description	Default Presentation	Condition	Remarks
13.4	**User defined text**	**Q2: Optional text**		*User defined text*
		Red	ALQ2 = 1 or AU_ST_01 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
14.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
14.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
14.3	**Alarm Indication**	■ Red flashing	ALF1 = 1 and AU_ST_02 =1	*Alarm 1*
		■ Red	ALF1 = 1	
14.4	**User defined text**	**K1: Optional text**		*User defined text*
		Red	ALF1 = 1 or AU_ST_02 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
15.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
15.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
15.3	**Alarm Indication**	■ Red flashing	ALF2 = 1 and AU_ST_03 =1	*Alarm 2*
		■ Red	ALF2 = 1	
15.4	**User defined text**	**K2: Optional text**		*User defined text*
		Red	ALF2 = 1 or AU_ST_03 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
16.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
16.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
16.3	**Alarm Indication**	■ Red flashing	ALF3 = 1 and AU_ST_04 =1	*Alarm 3*
		■ Red	ALF3 = 1	

No	Description	Default Presentation	Condition	Remarks
16.4	**User defined text**	**K3: Optional text**		*User defined text*
		Red	ALF3 = 1 or AU_ST_04 =1	*Alarm or Unacknowledged alarm*
		Grey	-	
17.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
17.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
17.3	**Alarm Indication**	■ Red flashing	ALF4 = 1 and AU_ST_05 =1	*Alarm 4*
		■ Red	ALF4 = 1	
17.4	**User defined text**	**K4: Optional text**		*User defined text*
		Red	ALF4 = 1 or AU_ST_05 = 1	*Alarm or Unacknowledged alarm*
		Grey	-	
18.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
18.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
18.3	**Alarm Indication**	■ Red flashing	ALF5 = 1 and AU_ST_06 =1	*Alarm 5*
		■ Red	ALF5 = 1	
18.4	**User defined text**	**K5: Optional text**		*User defined text*
		Red	ALF5 = 1 or AU_ST_06 = 1	*Alarm or Unacknowledged alarm*
		Grey	-	
19.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
19.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AUTO_BLK = 1	*Alarm blocked by PC-program*
19.3	**Alarm Indication**	■ Red flashing	ALF6 = 1 and AU_ST_07 =1	*Alarm 6*
		■ Red	ALF6 = 1	

No	Description	Default Presentation	Condition	Remarks
19.4	**User defined text**	**K6: Optional text**		*User defined text*
		Red	ALF6 = 1 or AU_ST_07 = 1	*Alarm or Unacknowledged alarm*
		Grey	-	
20	**INTERLOCKS**			*Interlocks*
20.1	**Interlock Indication**	■ Yellow	INTLU1 = 1	*Interlock 1*
20.2	**User defined text**	**U1: Optional text**		*User defined text*
		Yellow	INTLU1 = 1	*Interlocked*
		Grey	-	
21.1	**Interlock Indication**	■ Yellow	INTLU2 = 1	*Interlock 2*
21.2	**User defined text**	**U2: Optional text**		*User defined text*
		Yellow	INTLU2 = 1	*Interlocked*
		Grey	-	
22.1	**Interlock Indication**	■ Yellow	INTLU3 = 1	*Interlock 3*
22.2	**User defined text**	**U3: Optional text**		*User defined text*
		Yellow	INTLU3 = 1	*Interlocked*
		Grey	-	
23.1	**Interlock Indication**	■ Yellow	INTLU4 = 1	*Interlock 4*
23.2	**User defined text**	**U4: Optional text**		*User defined text*
		Yellow	INTLU4 = 1	*Interlocked*
		Grey	-	
24.1	**Interlock Indication**	■ Yellow	INTLU5 = 1	*Interlock 5*
24.2	**User defined text**	**U5: Optional text**		*User defined text*
		Yellow	INTLU5 = 1	*Interlocked*
		Grey	-	
25.1	**Interlock Indication**	■ Yellow	INTLU6 = 1	*Interlock 6*

No	Description	Default Presentation	Condition	Remarks
25.2	**User defined text**	**U6: Optional text**		*User defined text*
		Yellow	INTLU6 = 1	*Interlocked*
		Grey	-	
26	**STATUS & BLOCKING**			*Status and Blocking*
26.1	**Implemented Indication**	■ Green	ACT = 1	*Implemented*
26.2	**Implemented text**	**Implemented**		*Implemented text*
		Grey		
27.1	**Repeat Fail Block Indication**	■ Yellow	RP_BLK = 1	*Repeat Fail Block*
27.2	**Repeat Fail Block text**	**Repeat Fail Blk**		*Repeat Fail Block text*
		Yellow	RP_BLK = 1	
		Grey	-	
28.1	**Event Block Indication**	■ Yellow	EV_BLK = 1	*Event Block*
28.2	**Event Block text**	**Event Block**		*Event Block text*
		Yellow	EV_BLK = 1	
		Grey	-	
29	**Measured Value**			*The MV object value*
29.1	**MV**	**MV** Grey		*Text in front of the value*
29.2	**MV Value**		MV	*Measured value*
		Green	-	
29.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
30	**Setpoint Value**			*The SP object value*
30.1	**SP**	**SP** Grey		*Text in front of the value*
30.2	**SP Value**		SP	*Setpoint value*
		Cyan	-	
30.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
31	**Measured 2 Value**			*The MV2 object value*

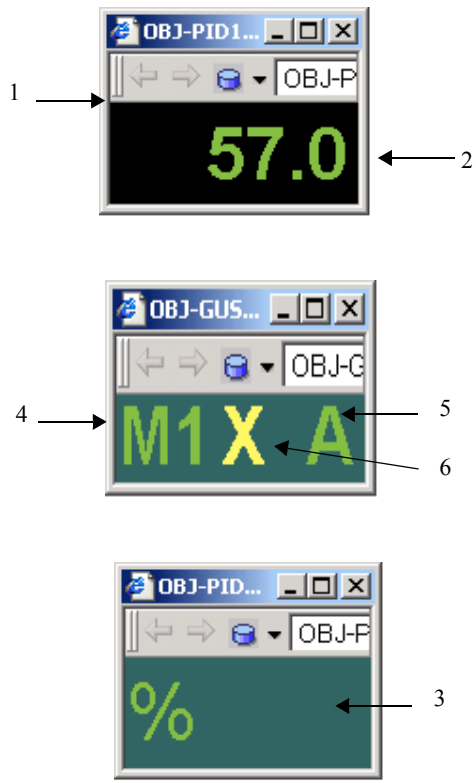
No	Description	Default Presentation	Condition	Remarks
31.1	**MV2 Text**	**MV2** Grey		*Text in front of the value*
31.2	**MV2 Value**		MV2	*Measured 2 value*
		Green	-	
31.3	**MV2 Unit**		UNIT2	*Measured 2 unit*
		Green	-	
32	**Setpoint 2 Value**			*The SP2 object value*
32.1	**SP2 Text**	**SP2** Grey		*Text in front of the value*
32.2	**SP2 Value**		SETP2	*Setpoint 2 value*
		Cyan	-	
32.3	**SP2 Unit**		UNIT2	*Setpoint 2 unit*
		Cyan	-	
33.1	**I1 Text**	**I1** Grey		*I1-text*
33.2	**I1 Indication**	Filled Green	IND1 = 1	*On - Square indication*
		Unfilled Green	IND1 = 0	*Off - Square indication*
34.1	**I2 Text**	**I2** Grey		*I2-text*
34.2	**I2 Indication**	Filled Green	IND2 = 1	*On - Square indication*
		Unfilled Green	IND2 = 0	*Off - Square indication*
35.1	**I3 Text**	**I3** Grey		*I3-text*
35.2	**I3 Indication**	Filled Green	IND3 = 1	*On - Square indication*
		Unfilled Green	IND3 = 0	*Off - Square indication*
36.1	**I4 Text**	**I4** Grey		*I4-text*
36.2	**I4 Indication**	Filled Green	IND4 = 1	*On - Square indication*
		Unfilled Green	IND4 = 0	*Off - Square indication*
37.1	**M1 Indication**	■ Green	M1 = 1	*Operator position indication*
37.2	**User defined text**	**M1: Opt. text**		*User defined text*
		Green	M1 = 1	
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
38.1	**M2 Indication**	■ Green	M2 = 1	*Operator position indication*
38.2	**User defined text**	**M2: Opt. text**		*User defined text*
		Green	M2 = 1	
		Grey	-	
39.1	**M3 Indication**	■ Green	M3 = 1	*Operator position indication*
39.2	**User defined text**	**M3: Opt. text**		*User defined text*
		Green	M3 = 1	
		Grey	-	
40.1	**Man Indication**	■ Green	MAN = 1	*Manual mode*
40.2	**Man text**	**Man**		*Man text*
		Green	MAN = 1	
		Grey	-	
41.1	**Auto Indication**	■ Green	AUTO = 1	*Auto mode*
41.2	**Auto text**	**Auto**		*Auto text*
		Green	AUTO = 1	
		Grey	-	
42.1	**Blocked Indication**	■ Green	BLK = 1	*Blocked mode*
42.2	**Blocked text**	**Blocked**		*Blocked text*
		Green	BLK = 1	
		Grey	-	
43.1	**Stand By indication**	■ Green filled	STBY = 1	*Stand By mode*
43.2	**Stand By text**	**Stand By**		*Stand By text*
		Green	STBY = 1	
		Grey	-	

Graphic Element

NumericMV01, Mode01, UnitMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	ALARM_BK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object setpoint value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Green	-	
3	**Unit**			*Object unit*
		Green	UNIT	
4	**Control Point**			*Object mode*
		M1 Magenta	M1 = 1	*Operator position M1*
		M2 Magenta	M2 = 1	*Operator position M2*
		M3 Magenta	M3 = 1	*Operator position M3*
		-		*Operator position is invisible*
5	**Mode**			*Object mode*
		M Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		B Green	BLK = 1	*Blocked mode*
		S Green	STBY = 1	*Standby mode*
		-		*Mode is invisible*

No	Description	Default Presentation	Condition	Remarks
6	**Interlocks**			*Object interlock*
		X Yellow	INTLU1 = 1 or INTLU2 = 1 or INTLU3 = 1 or INTLU4 = 1 or INTLU5 = 1 or INTLU6 = 1	*Interlock 1* *Interlock 2* *Interlock 3* *Interlock 4* *Interlock 5* *Interlock 6*
		-		*Interlock is invisible*

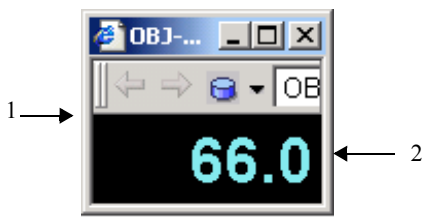
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV01, Valid for Mode01 & UnitMV01

NumericSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	ALARM_BK = 1	*Alarm blocked by operator*
		Invisible		
2	**Setpoint Value**		SP	*Object setpoint value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Cyan	-	

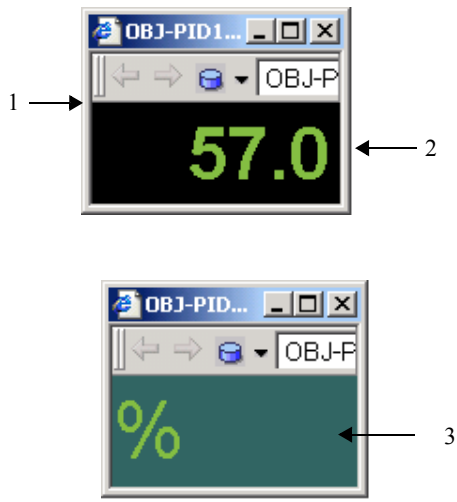
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	
BackgroundColor		**Black**, any other color	

NumericMV201, UnitMV201

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	ALARM_BK = 1	*Alarm blocked by operator*
		Invisible		

No	Description	Default Presentation	Condition	Remarks
2	**MV2 Value**		MV2	*Measured 2 value*
		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Cyan	-	
3	**Unit**			*Object unit*
		Green	UNIT2	*Measured 2 unit*

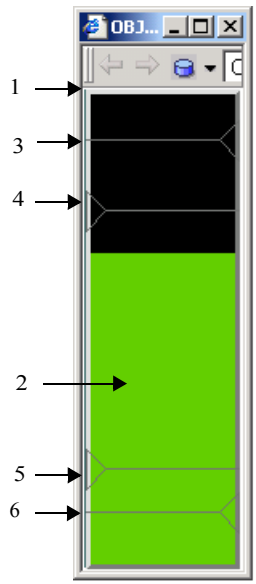
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV201
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV201
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV201 Valid for UnitMV201

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Measured Value**		MV	*Object value*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Green	-	
3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV > MVH2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH2	
		Unfilled Grey	-	
4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV > MVH1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV > MVH1	
		Unfilled Grey	-	
5	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV < MVL1 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
6	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV < MVL2 and AL_BLK = 1	
		Unfilled Yellow	AL_BLK = 1	
		Filled Red	MV < MVL2	
		Unfilled Grey	-	

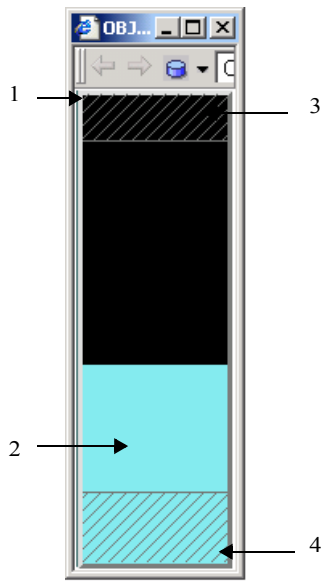
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (1..4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

BargraphSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Setpoint Value**		SP	*Object setpoint value*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red flashing	AU_ST_00 =1 or AU_ST_01 =1 or AU_ST_02 =1 or AU_ST_03 =1 or AU_ST_04 =1 or AU_ST_05 =1 or AU_ST_06 =1 or AU_ST_07 =1	*Unacknowledged alarm*
		Red	ALQ1 = 1 or ALQ2 = 1 or ALF1 = 1 or ALF2 = 1 or ALF3 = 1 or ALF4 = 1 or ALF5 = 1 or ALF6 = 1	*Alarm*
		Cyan		
3	**High SP Limit**		SETPH	*Upper warning limit setpoint*
		-	SETPH > MAX	*Invisible*
		Yellow	SP > SETPH	*Limitation line and mesh*
		Grey	-	
4	**Low SP Limit**		SETPL	*Lower warning limit setpoint*
		-	SETPL < MIN	*Invisible*
		Yellow	SP < SETPL	*Limitation line and mesh*
		Grey	-	

The conditions are in priority order.

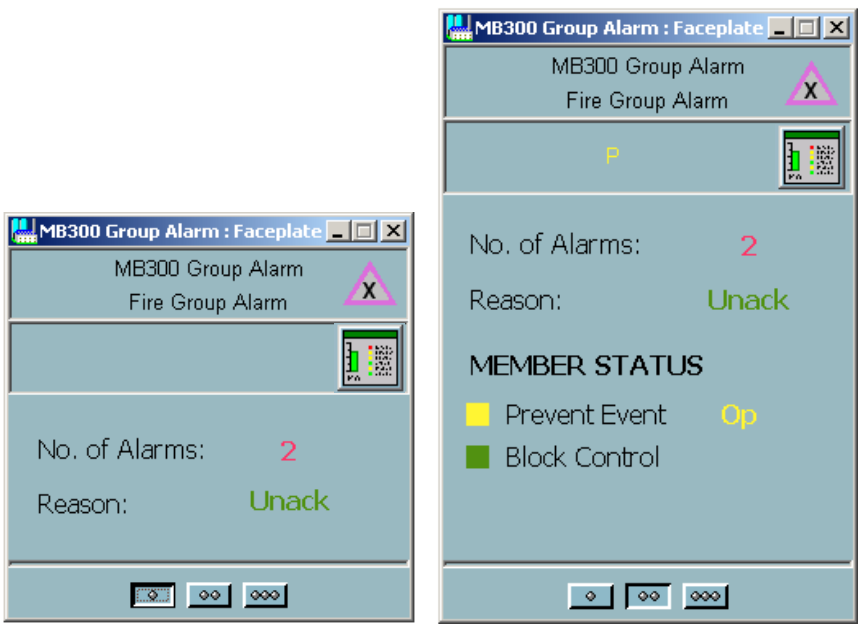
Configuration:

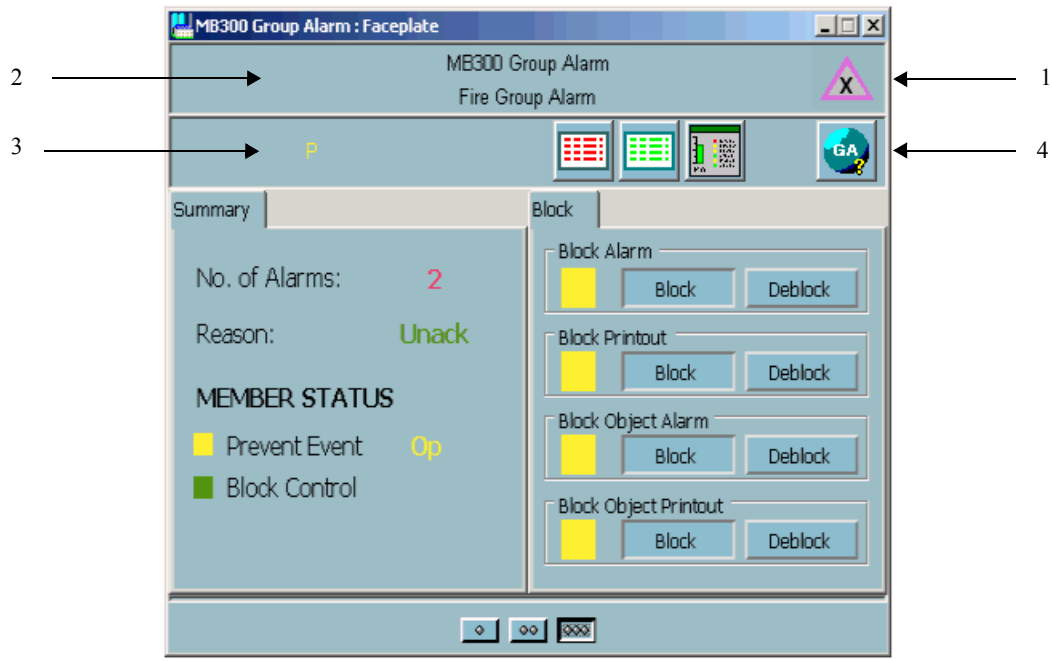
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3** (1..4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

GROUP ALARM, Group Alarm

Faceplate

Presentation:





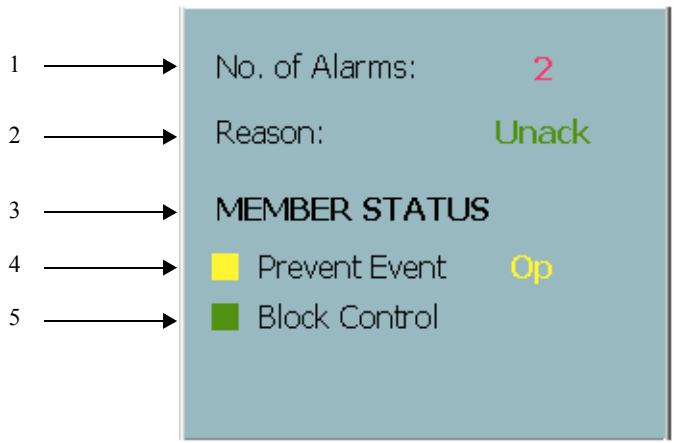
Behavior:

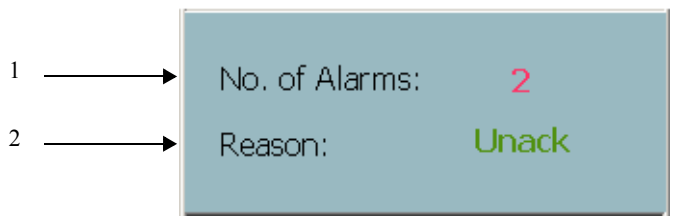
No	Description	Default Presentation	Condition	Remarks
1	**Alarm and Block Indicator**			
			DISTURB=1	*Alarm*
			AL_UNACK=1	*Unacknowledged alarm* ***Click icon to acknowledge***
			AL_BLK=1 or AL_P_BLK=1	*Alarm block* *Alarm Period Block*

No	Description	Default Presentation	Condition	Remarks
1 cont.			RP_F_BLK=1	*Repeat Fail Block*
2	**Name and Description**			
3	**Status Field**			
3.1	**Print Blk**	**P** Yellow	PRINT_BLK=1	*Printout blocked*
4	**Aspect Links**	Alarm List	position 0,0,8	*Alarm List*
		Event List	position 0,0,9	*Event List*
		Object Display	position 5,5,10	*Object Display*
		Object Type Help	position 0, 0, 12	

Control and Reduced Control

Presentation:





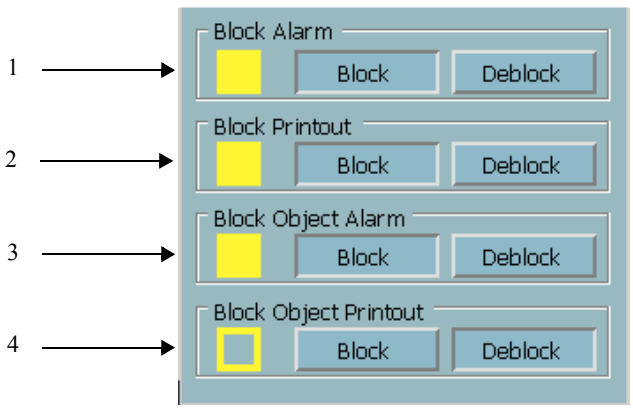
Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**No. of Alarms Text**	**No of Alarms:** Black		*Dist Counter*
1.2	**No. of Alarms Value**	Red Green	DST_CNT > 0 DST_CNT = 0	
2.1	**Reason Text**	**Reason:** Black		
2.2	**Reason Value**	**Alarm** Green **Unack** Green	REASON=0 REASON=1	
3	**Member Status**	**MEMBER STATUS** black		*status*

No	Description	Default Presentation	Condition	Remarks
4.1	**Prevent Event Indication**	**!** Yellow	PREV_OP=1 or PREV_PGM=1 or PREV_EXT=1	
4.2	**Prevent Event Text**	**Prevent Event:** Black		
4.3	**Prevent Event Handling**	**Op** Yellow **Pgm** Yellow **Ext** Yellow	PREV_OP=1 PREV_PGM=1 PREV_EXT=1	
5.1	**Block Control Indication**	**!** Green	BLK_CTRL=1	
5.2	**Block Control Text**	**Block Control** Black		

Block

Presentation:

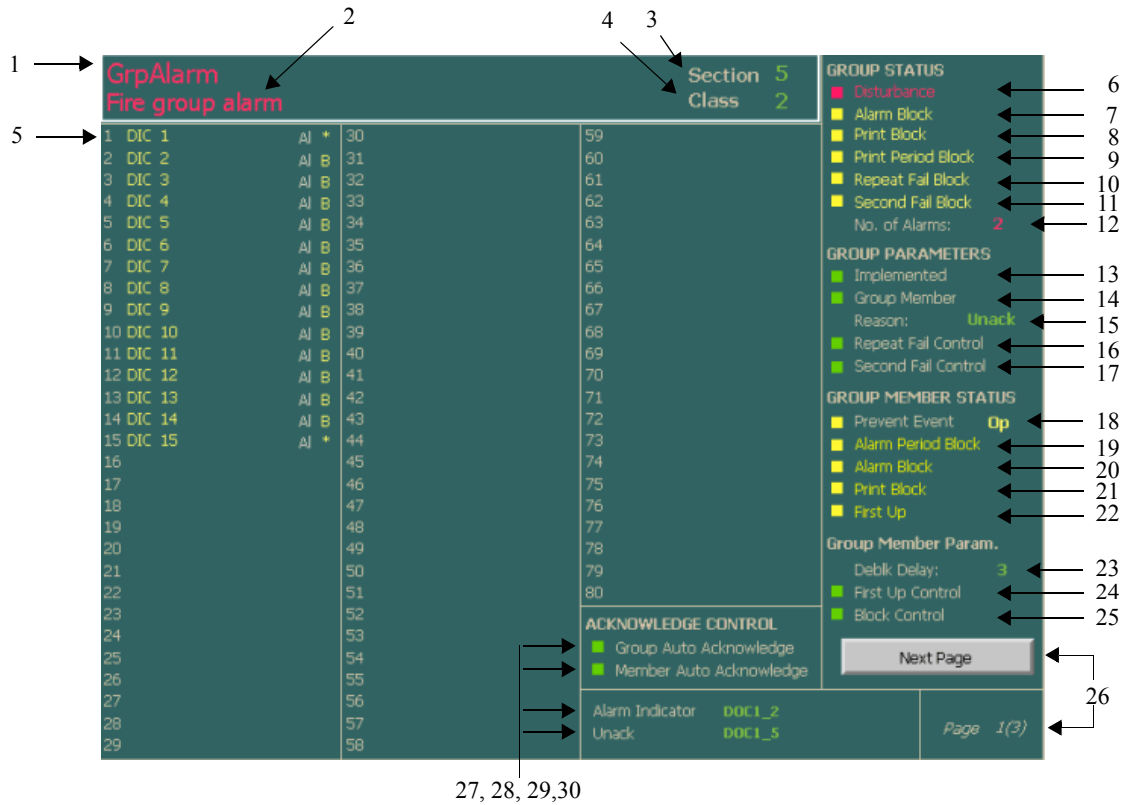


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK=1	
		Deblock pressed	AL_BLK=0	
2	**Block Printout**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	PR_BLK=1	
		Deblock pressed	PR_BLK=0	
3	**Block Obj Alarm**	**Block Alarm** Black		*Object alarm block*
		! Yellow	Blocked	
		Block pressed	M_AL_BLK=1	
		Deblock pressed	M_AL_BLK=0	
4	**Block ObjPrint**	**Block Alarm** Black		*Object printout block*
		! Yellow	Blocked	
		Block pressed	M_PR_BLK=1	
		Deblock pressed	M_PR_BLK=0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Select Frame**	White Invisible	SELECTED=1 -	*Object select frame*
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK=1	*Unacknowledged*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red	DISTURB=1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of value*
3.2	**Section Value**	**Green**	PROC_SEC	*Process Section*
4.1	**Class Text**	**Class** Grey		*Text in front of value*
4.2	**Class Value**	**Green**	CLASS	*Object class*
5.1	**Member Name**		GRPMEMB:OBJECT	
		Yellow	GRPMEMB:BLOCKED = 1	
		Red	GRPMEMB:DISTURB = 1	
		Green	-	
		Invisible		*Error*
5.2	**Action Status**	**AI** Grey	GRPMEMB:ACTION = 0	
		Bc Grey	GRPMEMB: ACTION = 1	
		Ac Grey	GRPMEMB: ACTION = 2	
		No Grey	GRPMEMB: ACTION = 3	
		-	Other values	*Invisible*
5.3	**Member Status**	***** Yellow	GRPMEMB: F_Upx =1	
		B Yellow	GRPMEMB: BLOCKED =1	
		F Red	GRPMEMB: DISTURB =1	
6	**GROUP STATUS**			*Group Status*
6.1	**Disturb Indication**	**!** Red flashing **!** Red	AL_UNACK=1 DISTURB=1	*Unacknowledged* *Alarm*
6.2	**Disturbance Text**	**Disturbance** Red Grey	 AL_UNACK=1 or DISTURB=1 -	*Text behind indication*
7.1	**Alarm block Indication**	**!** Yellow	AL_BLK=1	*Alarm blocked by operator*
7.2	**Alarm Block Text**	**Alarm Block** Yellow Grey	 AL_BLK=1 -	*Text behind indication*

No	Description	Default Presentation	Condition	Remarks
8.1	**Printout block Indication**	**!** Yellow	PR_BLK=1	*Print block*
8.2	**Printout Block Text**	**Print Block** Yellow Grey	 PR_BLK=1 -	*Text behind indication*
9.1	**Alarm period block Indication**	**!** Yellow	P_AL_BLK=1	*Alarm blocked by PC-program*
9.2	**Alarm Period Block Text**	**Alarm Period Block** Yellow Grey	 P_AL_BLK= -	*Text behind indication*
10.1	**Repeat Fail Block Indication**	**!** Yellow flashing	RP_F_BLK=1	*Repeat Fail Block*
10.2	**Repeat Fail Block Text**	**Alarm Block** Yellow Grey	 RP_F_BLK=1 -	*Text behind indication*
11.1	**Second Fail Block Indication**	**!** Yellow	SC_F_BLK=1	*Second Fail Block*
11.2	**Second Fail Block Text**	**Second Fail Block** Yellow Grey	 SC_F_BLK=1 -	*Text behind indication*
12.1	**No. of Alarms Text**	**No of Alarms:** Black		*Dist Counter*
12.2	**No. of Alarms Value**	Red Green	DST_CNT > 0 DST_CNT = 0	
13	**GROUP PARAMETERS**			*Group Parameters*
13.1	**Implemented Indication**	**!** Green	ACT=1	*Implemented*
13.2	**Implemented Text**	**Implemented** Grey		*Text behind indication*
14.1	**Group member Indication**	**!** Green	GRP_MEMB=1	*Group member*
14.2	**Group member Text**	**Group member** Grey		*Text behind indication*
15.1	**Reason Text**	**Reason:** Grey		
15.2	**Reason Value**	**Alarm** Green **Unack** Green	REASON=0 REASON=1	

No	Description	Default Presentation	Condition	Remarks
16.1	**Repeat Fail Control Indication**	**!** Green	RP_F_CTL=1	*Repeat Fail Control*
16.2	**Repeat Fail Control Text**	**Repeat Fail Control** Grey		*Text behind indication*
17.1	**Second Fail Control Indication**	**!** Green	SC_F_CTL=1	*Second Fail Control*
17.2	**Second Fail Control Text**	**Second Fail Control** Grey		*Text behind indication*
18	**GROUP MEMBER STATUS**			*Group Member Status*
18.1	**Prevent Event Indication**	**!** Yellow	PREV_OP=1 or PREV_PGM=1 or PREV_EXT=1	
18.2	**Prevent Event Text**	**Prevent Event:** Grey		
18.3	**Prevent Event Handling**	**Op** Yellow **Pgm** Yellow **Ext** Yellow	PREV_OP=1 PREV_PGM=1 PREV_EXT=1	
19.1	**Alarm Period Block Indication**	**!** Yellow	M_AL_P_B=1	
19.2	**Alarm Period Block Text**	**Alarm Period Block** Yellow Grey	M_AL_P_B=1	*Text behind indication*
20.1	**Alarm Block Indication**	**!** Yellow	M_AL_BLK=1	
20.2	**Alarm Block Text**	**Alarm Block** Yellow Grey	M_AL_BLK=1	*Text behind indication*
21.1	**Printout Block Indication**	**!** Yellow	M_PR_BLK=1	
21.2	**Printout Block Text**	**Print Block** Yellow Grey	M_PR_BLK=1	*Text behind indication*
22.1	**First Up Indication**	**!** Yellow	M_AL_P_B=1	

No	Description	Default Presentation	Condition	Remarks
22.2	**First Up Text**	**First Up** Yellow Grey	M_AL_P_B=1	*Text behind indication*
23	**GROUP MEMBER PARAMETERS**			*Group Member Parameters*
23.1	**Deblk Delay Text**	**Delblk Delay:** Grey		
23.2	**Deblk Delay Value**	Green	DBLK_D_T	*Value*
24.1	**First Up Control Indication**	**!** Green	F_UP_CTL=1	
24.2	**First Up Control Text**	**First Up Control** Grey		*Text behind indication*
25.1	**Block Control Indication**	**!** Green	BLK_CTL=1	
25.2	**Block Control Text**	**Block Control** Grey		*Text behind indication*
26.1	**Page Browser Button**	**Next Page** Black		*Click for cyclical page browsing: 1,2,3,1,2,3…*
26.2	**Page numbering**	**Page:** Grey		*Group members were displayed in 3 pages*
		1(3) Grey		*1(3), 2(3) or 3(3)*
27	**ACKNOWLEDGE CONTROL**			*Group Member Parameters*
27.1	**Group Auto Acknowledge ind.**	**!** Green	G_A_ACK=1	
27.2	**Group Auto Acknowledge Text**	**Group Auto Acknowledge** Grey		
28.1	**Member Auto Acknowledge ind.**	**!** Green	M_A_ACK=1	
28.2	**Member Auto Acknowledge Text**	**Member Auto Acknowledge** Grey		
29.1	**Alarm Indicator Text**	**Alarm Indicator** Grey		
29.2	**Alarm Indicator Name**	Green	DST_NAME	

No	Description	Default Presentation	Condition	Remarks
30.1	**Unack Indicator text**	**Unack indicator** Grey		
30.2	**Unack Indicator Name**	Green	UNACK_NAME	

Graphic Element

Presentation:

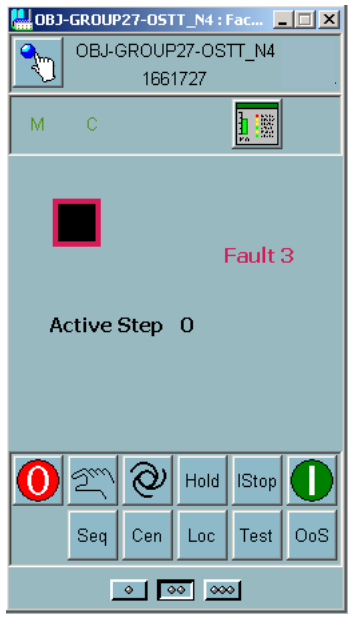
Behavior:

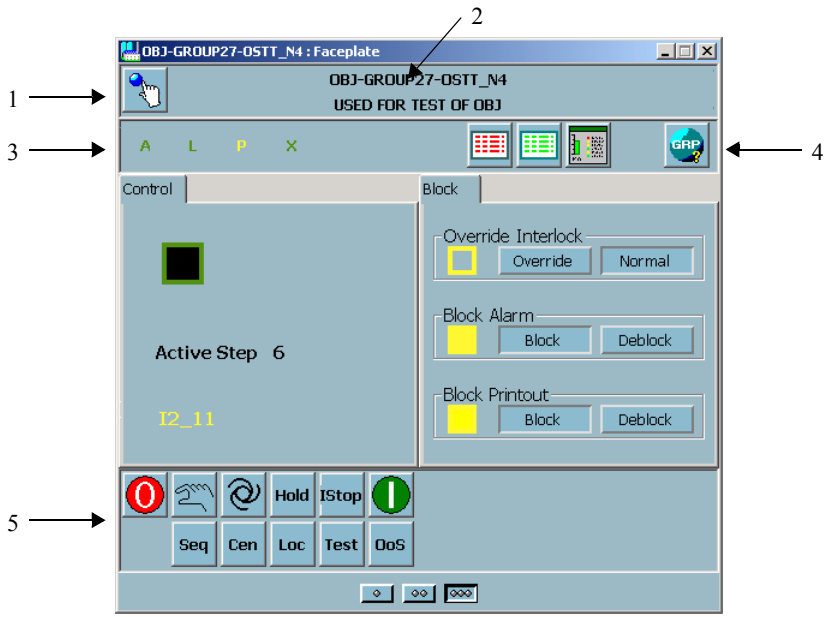
No	Description	Default Presentation	Condition	Remarks
1	**Select Frame**	White	SELECTED=1	*Object select frame*
		Dotted Yellow	AL_BLK=1	*Alarm Blocked by operator*
		Dotted Yellow	SC_F_BLK=1	*Second Fail Blocked*
		Invisible		
2	**Symbol Center Color**			*3D display object*
		Red flashing	AL_UNACK=1	*Unacknowledged alarm*
		Red	DISTURB=1	*Alarm*
		Green	-	
3	**No. of Alarms**			*No. of alarms*
3 cont.		Black	DST_CNT>0 and VisNoOfAlarms = true	
		-	VisNoOfAlarms = false	*invisible*

GROUP, Group Control

Faceplate

Presentation:





Behavior:

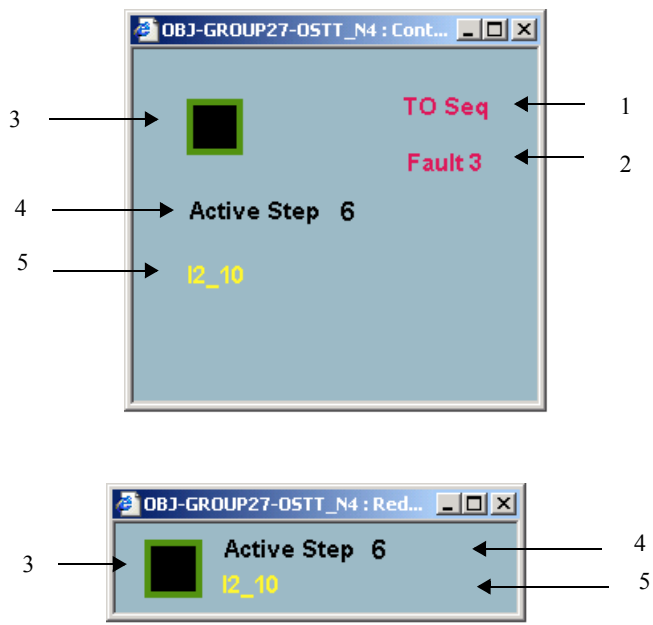
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		A Dark green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
3.2	**Control point**	**S** Dark green	IND2_04 = 1	*Sequence controller from groupstart*

No	Description	Default Presentation	Condition	Remarks
3.2 cont.		**C** Dark green	IND2_04 = 0 and IND2_03 = 0 and IND2_02 = 0 and IND2_01 = 0	*Control controlled from operator's panel*
		L Dark green	IND2_01 = 1	*Local controlled from local panel*
		T Yellow	IND2_2 = 1	*Test, jog running from motor place*
		O Kakhi	IND2_3 = 1	*Out of service. No control possible.*
3.3	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
3.4	**Interlock Indication**	**X** Dark green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Object Type Help	position 0, 0, 12	
5	**Start**	Start motor		*Set MORD_10 = 1*
	Stop	Stop motor		*Set MORD_11 = 1*
	Man	Set to Man Mode		*Set MORD_05 = 1*
	Auto	Set to Auto Mode		*Set MORD_04 = 1*
	Seq	Set to Sequence Control		*Set MORD_15 = 1*
	Cen	Set to Central Control		*Set MORD_03 = 1*

No	Description	Default Presentation	Condition	Remarks
5 cont.	**Loc**	Set to Local Control		*Set MORD_00 = 1*
	Test	Set to Test Control		*Set MORD_01 = 1*
	OoS	Set to Out of Service Control		*Set MORD_02 = 1*
	Hold	Stop the stepping		*Set MORD_09 = 1*
	IHold	Instant stop of the stepping		*Set MORD_12 = 1*

Control and ReducedControl

Presentation:



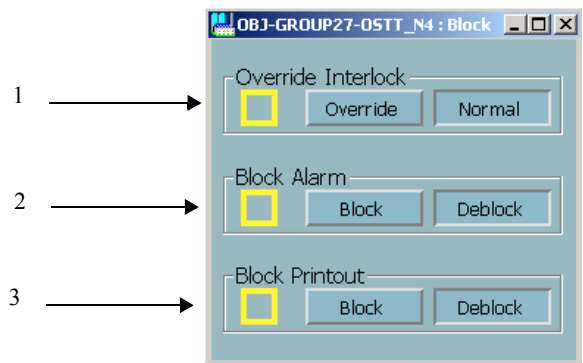
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Error 1**	**TO Seq** Red flashing	AU_IND1_00 = 1	*Time Out Seq. Unack alarm*
		TO Step Red flashing	AU_IND1_01 = 1	*Time Out Step Unack alarm*
		TO Seq Red	IND1_00 = 1	*Time Out Sequence alarm*
		TO Step Red	IND1_01 = 1	*Time Out Step alarm*
2	**Error 2**	**Fault 3** Red flashing	AU_IND1_02 = 1	*Unack alarm fault 3*
		Fault 4 Red flashing	AU_IND1_03 = 1	*Unack alarm fault 4*
		Fault 5 Red flashing	AU_IND1_04 = 1	*Unack alarm fault 5*
		Fault 3 Red	IND1_02 = 1	*Alarm fault 3*
		Fault 4 Red	IND1_03 = 1	*Alarm fault 4*
		Fault 5 Red	IND1_04 = 1	*Alarm fault 5*
3	**Status**		IND2_06 = 0	*Not Ready for Start*
			IND1_15 = 1	*Hold*
			IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
			IND2_06 = 1	*Ready to start*
			IND2_14 = 1 and IND2_06 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	
4.1	**Active Step Text**	**Active Step** Grey		*Active Step text*
4.2	**Active Step Value**	Green	INTL_RES	
5	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*

No	Description	Default Presentation	Condition	Remarks
5 cont.		Red	IND2_06 = 0	*Not ready for start*
		Yellow	IND2_06 = 1	*Ready for start*

Block

Presentation:



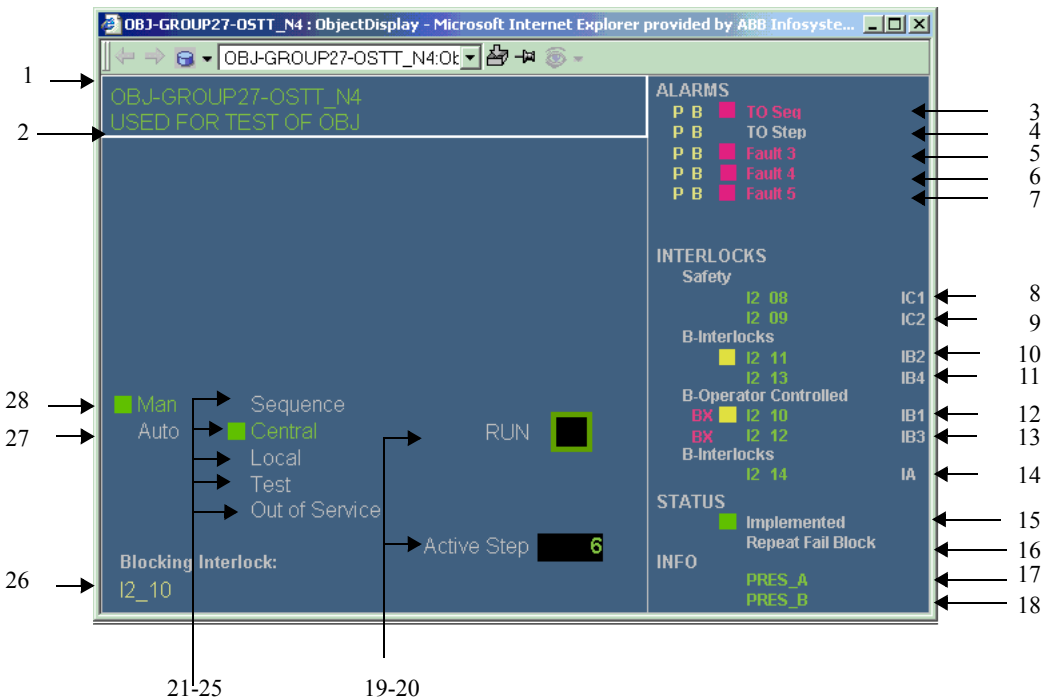
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Override Interlock**	**Override Interlock** Black		*IND2_00 Indicates current status*
		! Yellow	Blocked	
		Override pressed	MORD_06 = 1	
		Normal pressed	MORD_07 = 0	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK = 1	

No	Description	Default Presentation	Condition	Remarks
2 cont.		**Deblock** pressed	AL_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PR_BLK = 1	
		Deblock pressed	PR_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**ALARMS**			*Alarms*
3.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
3.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
3.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*
3.4	**Alarm 1 Text**	**TO Seq**	TXT_BLK_00 = 0	*Time Out Sequence*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	
4.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
4.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
4.3	**Warning Indication**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
		■ Red	IND1_01 = 1	*Alarm*
4.4	**Alarm 2 Text**	**TO Step**	TXT_BLK_01 = 0	*Time Out Step*
		Red	IND1_01 = 1 or AU_IND1_01 = 1	
		Grey	-	
5.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*

No	Description	Default Presentation	Condition	Remarks
5.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
5.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
5.4	**Alarm 3 Text**	**Fault 3**	TXT_BLK_02 = 0	*Error text for fault 3*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
		■ Red	IND1_03 = 1	*Alarm*
6.4	**Alarm 4 Text**	**Fault 4**	TXT_BLK_03 = 0	*Error text for fault 4*
		Red	IND1_03 = 1 or AU_IND1_03 = 1	
		Grey	-	
7.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
7.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
7.3	**Warning Indication**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm*
		■ Red	IND1_04 = 1	*Alarm*
7.4	**Alarm 5 Text**	**Fault 5**	TXT_BLK_04 = 0	*Error text for fault 5*
		Red	IND1_04 = 1 or AU_IND1_04 = 1	
		Grey	-	
8	**INTERLOCKS**			*Interlocks*
8.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*

No	Description	Default Presentation	Condition	Remarks
8.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*
9.1	**IC2 Active**	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
9.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
10.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
10.2	**IB2 Active**	■ Yellow	IND2_11 = 1	*Interlock IB2 active*
10.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
11.1	**IB4 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
11.2	**IB4 Active**	■ Yellow	IND2_13 = 1	*Interlock IB4 active*
11.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*
12.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
12.2	**IB1 Active**	■ Yellow	IND2_10 = 1	*Interlock IB1 active*
12.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
13.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
13.2	**IB3 Active**	■ Yellow	IND2_12 = 1	*Interlock IB3 active*
13.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
14.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
14.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
14.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
15	**STATUS**			*Status*
15.1	**Implemented Indication**	■ Green	ACT = 1	
15.2	**Implemented Text**	**Implemented** Grey		*Implemented*
16.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*

No	Description	Default Presentation	Condition	Remarks
16.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
17	**INFO**			*Info*
17.1	**X1 Indication**	■ Red flashing	AU_IND1_07 = 1	*Unack external alarm X1*
		■ Red	IND1_07 = 1	*External alarm*
17.2	**X1 Text**	Green	X1_TXT	
18.1	**X2 Indication**	■ Red flashing	AU_IND1_11 = 1	*Unack external alarm X2*
		■ Red	IND1_11 = 1	*External alarm*
18.2	**X2Text**	Green	X2_TXT	
19.1	**Run**	**Run** Grey		*Run*
19.2	**Status**		IND2_06 = 0	*Not Ready for Start*
			IND1_15 = 1	*Hold*
			IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
			IND2_06 = 1	*Ready to start*
			IND2_14 = 1 and IND2_06 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	
20.1	**Active Step**	**Active Step** Grey		
20.2	**Active Step Value**	Green	INTL_RES	*Value of current step*
21.1	**Sequence Indication**	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*

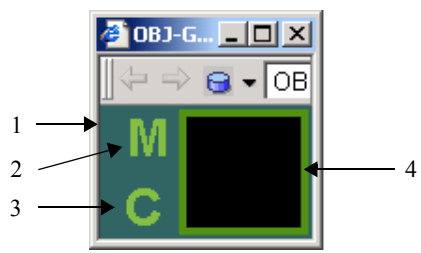
No	Description	Default Presentation	Condition	Remarks
21.2	**Sequence Text**	**Sequence**		
		Green	IND2_04 = 1	
		Grey	-	
22.1	**Central Indication**	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Controlled from operator's place*
22.2	**Central Text**	**Central**		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	
		Grey	-	
23.1	**Local Indication**	■ Green	IND2_01 = 1	*Local* *Controlled from local panel*
23.2	**Local Text**	**Local**		
		Green	IND2_01 = 1	
		Grey	-	
24.1	**Test Indication**	■ Yellow	IND2_02 = 1	*Test* *Jog running from motor place*
24.2	**Test Text**	**Test**		
		Yellow	IND2_02 = 1	
		Grey	-	
25.1	**Out of Service Indication**	■ Yellow	IND2_03 = 1	*Out of service* *No control possible*
25.2	**Out of Service Text**	**Out of Service**		
		Yellow	IND2_03 = 1	
		Grey	-	
26.1	**Blocking Interlock Text**	**Blocking Interlock:** Grey		*Blocking Interlock text*

No	Description	Default Presentation	Condition	Remarks
26.2	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_06 = 0	*Not ready for start*
		Yellow	IND2_06 = 1	*Ready for start*
27.1	**Auto Indication**	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
27.2	**Auto Text**	**Auto**		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
28.1	**Man Indication**	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Start order affects the motor directly*
28.2	**Man Text**	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

Graphic Element

Indicator01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Mode**		ModeVisible = true	
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*
		M Green	ManModeVisible = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
			ModeVisible = false	*Mode is invisible*
3	**Control point**		PointofControlVisible = true	
		S Green	IND2_04 = 1	*Sequence Control*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Control*
		L Green	IND2_01 = 1	*Local Control*
		T Green	IND2_02 = 1	*Test Control*
		O Green	IND2_03 = 1	*Out of Servive Control*
		-	PointofControlVisible = false	*Control point is invisible*
4	**Status** Shape		IND2_06 = 0	*Not Ready for Start*

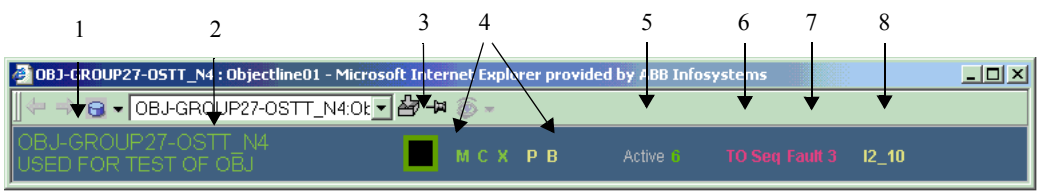
No	Description	Default Presentation	Condition	Remarks
4 cont.			IND1_15 = 1	*Hold*
			IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
			IND2_06 = 1	*Ready to start*
			IND2_14 = 1 and IND2_06 = 1 and IND2_02 = 0	*A-Interlock*
	color	Grey	IND2_03 = 1	*Out of Service*
		Red flashing	AU_IND = 1	*Alarm Unack*
		Red	IND1_DIST = 1	*Error*
		Green flashing	IND1_13 = 1	*Start/Stop in progress*
		Green	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	2. Mode	**true,** false	
PointofControlVisible	3. ControlPoint	**true,** false	

ObjectLine01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Status**		IND2_06 = 0	*Not Ready for Start*
			IND1_15 = 1	*Hold*
			IND1_12 = 1 or IND1_13 = 1	*Run or* *Sequence in progress*
			IND2_06 = 1	*Ready to start*
			IND2_14 = 1 and IND2_06 = 1 and IND2_02 = 0	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_13 = 1	*Sequence in Progress*
		Green	-	
4.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto start*
4.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*

No	Description	Default Presentation	Condition	Remarks
4.2 cont.		**C** Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*
4.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
4.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
4.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
4.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
5.1	**Active Step Text**	**Active Step** Grey		*Active Step text*
5.2	**Active Step value**	Green	INTL_RES	
6	**Error 1**	**TO Seq** Red flashing	AU_IND1_00 = 1	*Time Out Seq. Unack alarm*
		TO Step Red flashing	AU_IND1_01 = 1	*Time Out Step Unack alarm*
		TO Seq Red	IND1_00 = 1	*Time Out Sequence alarm*
		TO Step Red	IND1_01 = 1	*Time Out Step alarm*
7	**Error 2**	**Fault 3** Red flashing	AU_IND1_02 = 1	*Unack alarm fault 3*
		Fault 4 Red flashing	AU_IND1_03 = 1	*Unack alarm fault 4*
		Fault 5 Red flashing	AU_IND1_04 = 1	*Unack alarm fault 5*
		Fault 3 Red	IND1_02 = 1	*Alarm fault 3*

No	Description	Default Presentation	Condition	Remarks
7 cont.		**Fault 4** Red	IND1_03 = 1	*Alarm fault 4*
		Fault 5 Red	IND1_04 = 1	*Alarm fault 5*
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_06 = 0	*Not ready for start*
		Yellow	IND2_06 = 1	*Ready for start*

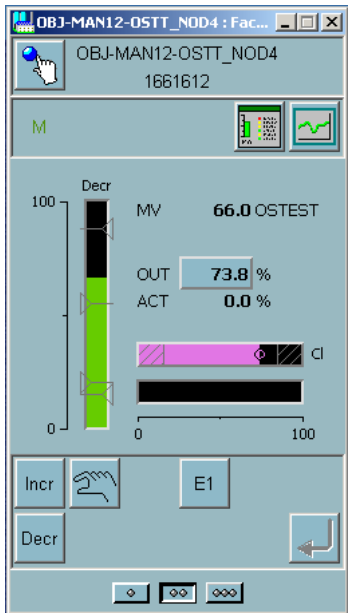
Configuration:

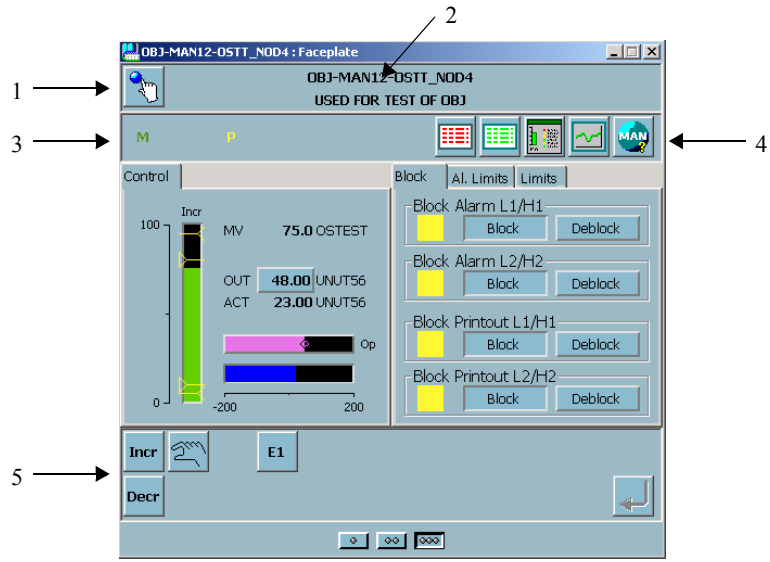
Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Transparent,** any color	

MANSTN, Manual Station

Faceplate

Presentation:





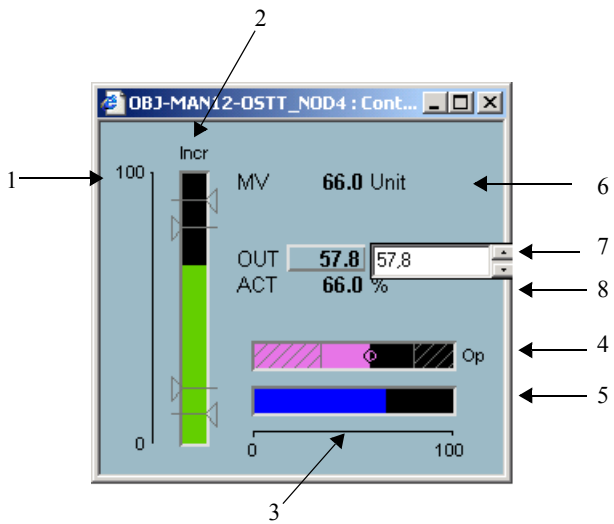
Behavior:

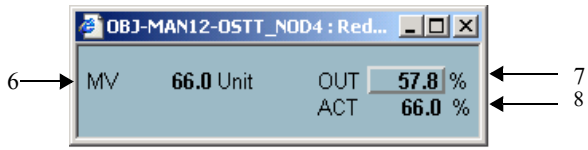
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	MAN = 1	
		E1 Dark green	E1 = 1	
3.2	**Print Blk**	**P** Yellow	PRINT_F1_BLK or PRINT_F2_BLK	

No	Description	Default Presentation	Condition	Remarks
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**Incr**	Increase output with 0,5 unit	MAN = 1	
	Decr	Decrease output with 0,5 unit	MAN = 1	
	Man	Set to Man Mode		Set MMI_MAN = 1
	E1	Set to E1 Mode		Set MMI_E1 = 1

Control and ReducedControl

Presentation:





Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Ranges**			
1.1	**MV Range Max**	Black	MAX	*Range Max of the MV value*
1.2	**MV Range Min**	Black	MIN	*Range Min of the MV value*
2.1	**Direction**	**Incr** Black	MV_DIR = INCREASING	*Increase*
		Decr Black	MV_DIR = DECREASING	*Decrease*
2.2	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
2.3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	

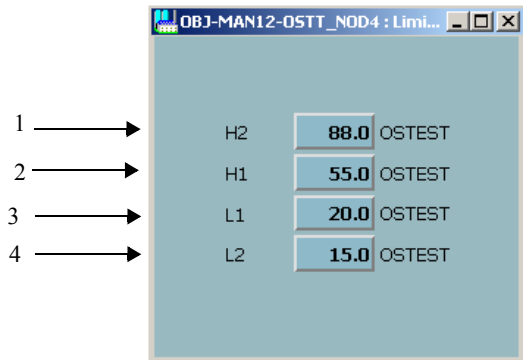
No	Description	Default Presentation	Condition	Remarks
2.4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
2.5	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
2.6	**Low Limit 2** 		MVL2	*Alarm Low limit*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
3.1	**OUT Range Max**	**100.0** Black		Range Max of OUT is 100.0%
3.2	**OUT Range Min**	**0** Black		Range Min of OUT is 0.0%
4	**Output Limitations**			*Mesh and limitations lines*
4.1	**OUT Value Bargraph**		POUT	*Object value*
		Magenta	-	
4.2	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	
		Grey	-	
4.3	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	
		Grey	-	
4.4	**Actuator position**	**Op** Black	ACT_DIR = OPENING	*Actuator open*
		Cl Black	ACT_DIR = CLOSING	*Actuator closed*

No	Description	Default Presentation	Condition	Remarks
5	**Actuator Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
6	**Measured Value**			*The MV object value*
6.1	**MV**	**MV** Black		*Text in front of the value*
6.2	**MV Value**	**XXX** Red	MV is Bad	*No connect with controller*
		? ? ? Red	ERR =1	*Signal error*
		Black	MV	*Measured value*
6.3	**MV Unit**	Black	UNIT	*Measured unit*
7	**Output Value**			*The OUT object value*
7.1	**OUT**	**OUT** Black		*Text in front of the value*
7.2	**OUT Value**	Black	POUT	*Output value*
7.3	**OUT Unit**	Black	PO_UNIT	*Output unit*
8	**Actuator Value**			*The ACT object value*
8.1	**ACT**	**ACT** Black	CTRL = ON-OFF	*Text in front of the value*
8.2	**ACT Value**		ACTPOS	*Actuator value*
		Black	CTRL = ON-OFF	
8.3	ACT Unit			*Actuator unit*
		% Black	CTRL = ON-OFF	

Limits

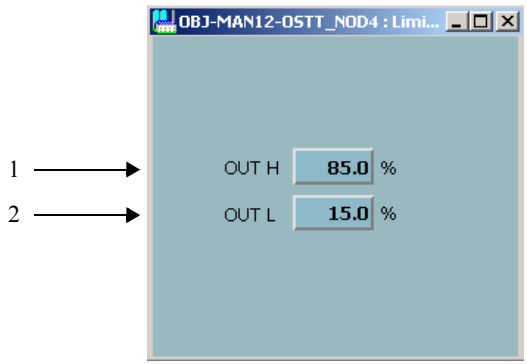
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	H2	**H2** Black		
		Black	MVH2	
2	H1	**H1** Black		
		Black	MVH1	
3	L1	**L1** Black		
		Black	MVL1	
4	L2	**L2** Black		
		Black	MVL2	

Presentation:

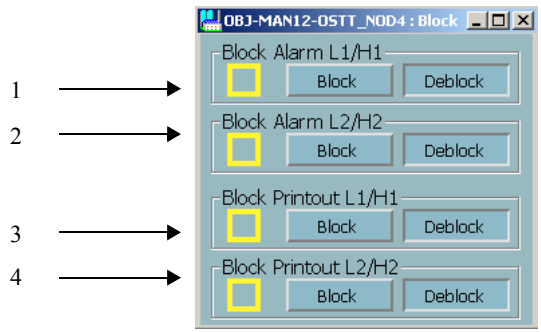


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	OUT H	**OUT H** Black		
		Black	OUTPH	
2	OUT L	**OUT L** Black		
		Black	OUTPL	

Block

Presentation:



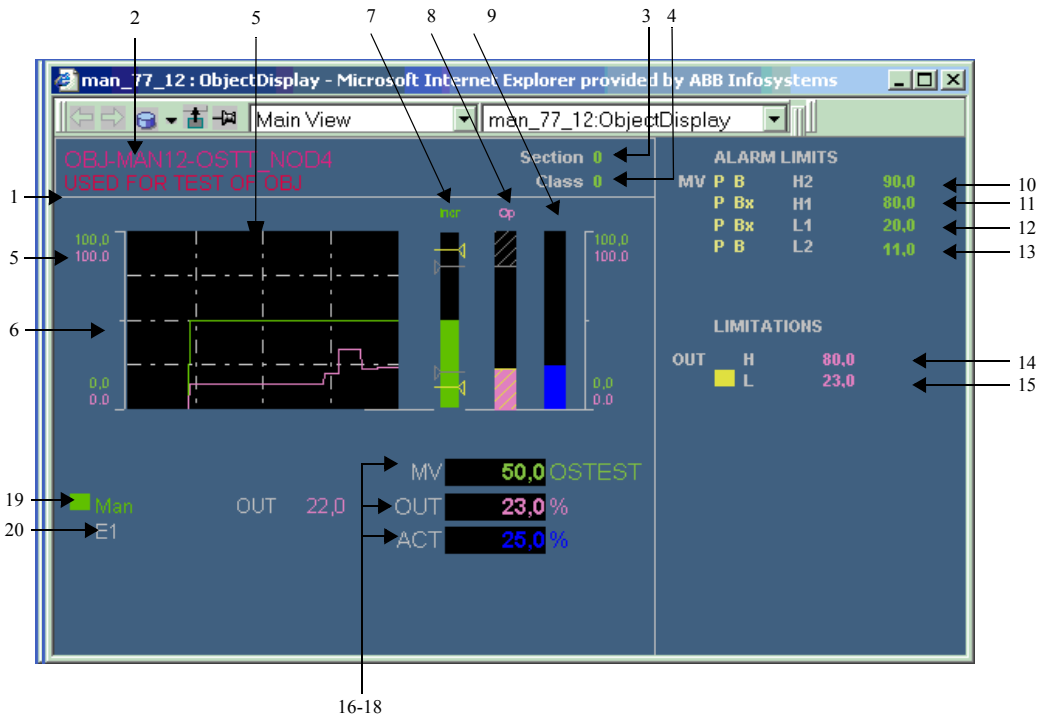
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm 1**	**Block Alarm L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	AL_F1_BLK = 1	
		Deblock pressed	AL_F1_BLK = 0	
2	**Block Alarm 2**	**Block Alarm L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	AL_F2_BLK = 1	
		Deblock pressed	AL_F2_BLK= 0	
3	**Block Printout 1**	**Block Printout L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F1_BLK = 1	
		Deblock pressed	PRINT_F1_BLK = 0	

No	Description	Default Presentation	Condition	Remarks
4	**Block Printout 2**	**Block Printout L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F2_BLK = 1	
		Deblock pressed	PRINT_F2_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	Selected
		Grey	SELECTED = 0	static
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	Unacknowledged High Alarm

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red	DISTURB = 1	High Alarm Text
		Green	-	
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Ranges**			*The actuator ranges are omitted since they always range from 0-100%.*
	MV Range Max	Green	MAX	
	MV Range Min	Green	MIN	
	OUT Range Max	Magenta	PO_MAX	
	OUT Range Min	Magenta	PO_MIN	
	ACT Range Max	**100** Blue		
	ACT Range Min	**0** Blue		
6	**Measure Value Trim Curve**		MV	*MV value - Trim curve*
		Green	-	
	Output Value Trim Curve		POUT	*AUT value - Trim curve*
		Magenta	-	
	Output Value Trim Curve		ACTPOS	*ACT value - Trim curve*
		Blue	CTRL = ON-OFF	
7.1	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase*
		Decr Green	MV_DIR = DECREASING	*Decrease*
7.2	**Measured Value Bargraph**		MV	*Object value*
		Green	-	Symbol 2 Normal
7.3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*

No	Description	Default Presentation	Condition	Remarks
7.3 cont.		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	High Alarm Symbol
		Unfilled Grey	-	Limit
7.4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
7.5 cont.		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
7.6	**Low Limit 2** 		MVL2	*Alarm Low limit*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
8.1	**Open or Closed**	**Op** Green	ACT_DIR = OPENING	*Open or close information*
		Cl Green	ACT_DIR = CLOSING	
8.2	**OUT Value Bargraph**		POUT	*Object output value*
		Magenta	-	
8.3	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	*High Limitation*
		Grey	-	
8.4	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	*Low Limitation*
		Grey	-	
9	**Actuator Value Bargraph**		ACTPOS	*Object actuator value*
		Blue	CTRL = ON-OFF	
10	**ALARM LIMITS for MV**			*Alarm limits for MV*
10.1	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout Blocked.*
10.2	**Alarm Blocked**	**B** Yellow	AL_F2_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK =1	*Alarm blocked by PC-program*

No	Description	Default Presentation	Condition	Remarks
10.3	**Alarm Indication**	■ Red flashing	AU_MV>H2 =1	*Alarm High limit 2*
		■ Red	MV>H2 = 1	
10.4	**H2 Text**	**H2** Grey		*Text in front of the value*
10.5	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout Blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK =1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red flashing	AU_MV>H1 =1	*Warning High limit 1*
		■ Red	MV>H1 = 1	
11.4	**H1 Text**	**H1** Grey		*Text in front of the value*
11.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
12.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout Blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK =1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red flashing	AU_MV<L1 =1	*Warning Low limit 1*
		■ Red	MV<L1 = 1	
12.4	**L1 Text**	**L1** Grey		*Text in front of the value*
12.5	**L1 Value**		MVL1	*Low limit1 value*
		Green	-	
13.1	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout Blocked*
13.2	**Alarm Blocked**	**B** Yellow	AL_F2_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK =1	*Alarm blocked by PC-program*
13.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 =1	*Alarm Low limit 2*
		■ Red	MV<L2 = 1	
13.4	**L2 Text**	**L2** Grey		*Text in front of the value*

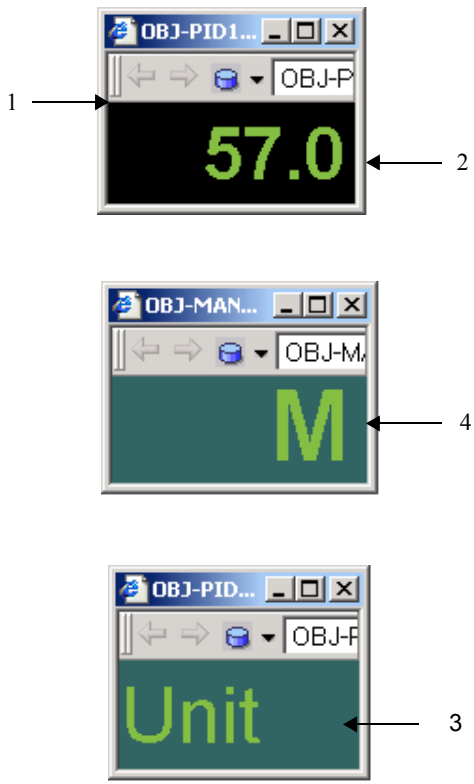
No	Description	Default Presentation	Condition	Remarks
13.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
14	**LIMITATIONS for OUT**			*Limitations for OUT*
14.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
14.2	**Warning Indication**	■ Yellow	OUT=HL = 1	*Warning Output High*
14.3	**H Text**	**H** Grey		*Text in front of the value*
14.4	**H Value**		OUTPH	*Output High value*
		Magenta	-	
15.1	**Warning Indication**	■ Yellow	OUT=LL = 1	*Warning Output Low*
15.2	**L Text**	**L** Grey		*Text in front of the value*
15.3	**L Value**		OUTPL	*Output Low value*
		Magenta	-	
16.1	**MV Text**	**MV** Grey		*Text in front of the value*
16.2	**MV Value**	**? ? ?** Red	ERR = 1	*Signal error*
			MV	*Measured value*
		Green	-	
16.3	**MV Unit**		UNIT	*Measured unit*
			-	
17.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
17.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
17.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
18	**Actuator Value**			*The ACT object value*
18.1	**ACT**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
18.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
18.3	**ACT Unit**			*Actuator unit*
		% Blue	CTRL = ON-OFF	

No	Description	Default Presentation	Condition	Remarks
19.1	**Man indication**	■ Green	MAN = 1	*Manual mode*
19.2	**Man Text**	**Man**		*Text behind the indication*
		Green	MAN = 1	
		Grey	-	
19.3	**Man Out Text**	**OUT** Grey		*Text in front of the value*
19.4	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
20.1	**E1 indication**	■ Green	E1 = 1	*E1 mode*
20.2	**E1 Text**	**E1** Grey		*Text behind the indication*
		Green	E1 = 1	
		Grey	-	
20.3	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	

Graphic Element

NumericMV01, Mode01 and UnitMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	ERR =1	*Signal error*
		Red	DISTURB =1	*Alarm*
		Green	-	
3	**Unit**			*Object unit*
		Green	UNIT	
4	**Mode**			*Object mode*
		M Green	MAN = 1	
		E1 Green	E1 = 1	*E1 mode*
		-		*Mode is invisible*

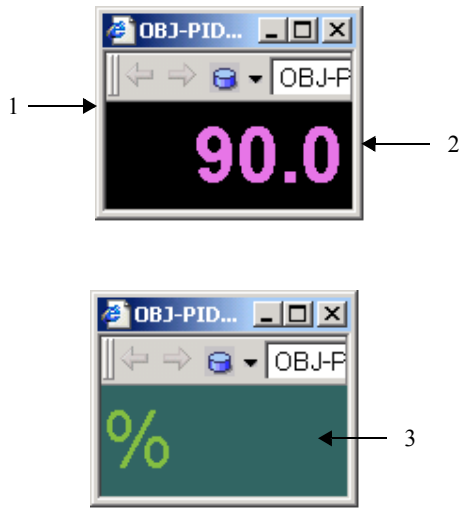
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV01, Valid for Mode01, UnitMV01

NumericOUT01, UnitOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Output Value**		POUT	*Object ratio value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Magenta	-	
3	**Unit**			*Object unit*
		% Green		

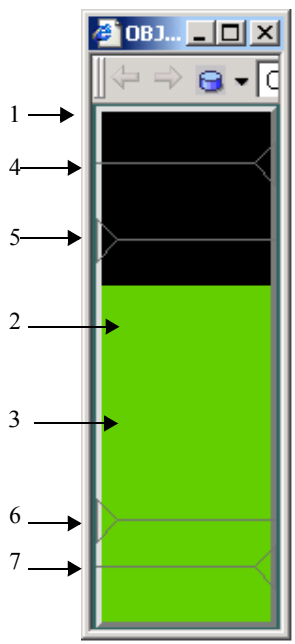
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericOut01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericOut01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericOUT01, Valid for UnitOUT01

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**AI Error**	**?** Red flashing	ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	ERR = 1	*Signal error*
3	**MV Value**		MV	*Object value*
		-	ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	
4	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
5	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	

No	Description	Default Presentation	Condition	Remarks
5 cont.		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
6	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7	**Low Limit 2** 		MVL2	*Alarm Low limit*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

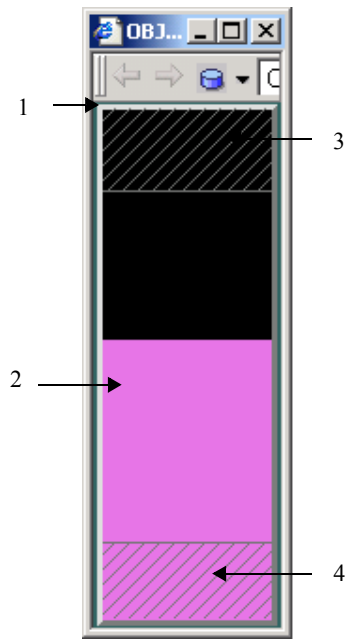
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

BargraphOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Out Value**		POUT	*Object output value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	ERR = 1 or DISTURB =1	*Alarm*
		Magenta	-	
3	**High Limitation**		OUTPH	*Upper warning limit output*
		-	OUTPH > PO_MAX	*Invisible*
		Yellow	OUT=HL = 1	
		Grey	-	
4	**Low Limitation**		OUTPL	*Lower warning limit output*
		-	OUTPL < PO_MIN	*Invisible*
		Yellow	OUT=LL = 1	
		Grey	-	

The conditions are in priority order.

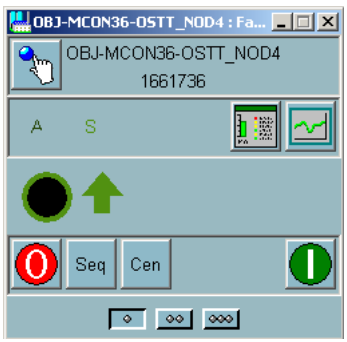
Configuration:

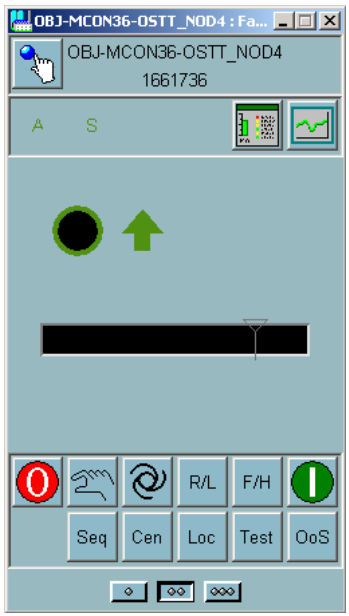
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

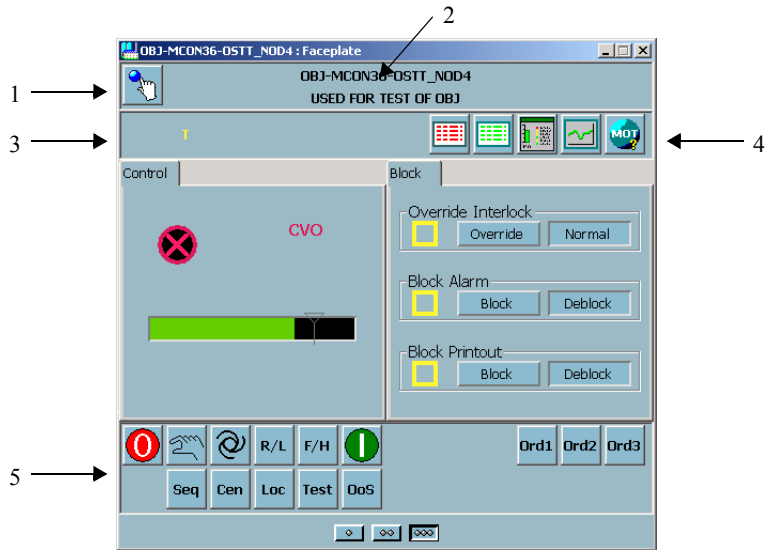
MOTCON, Motor Control

Faceplate

Presentation:







Behavior:

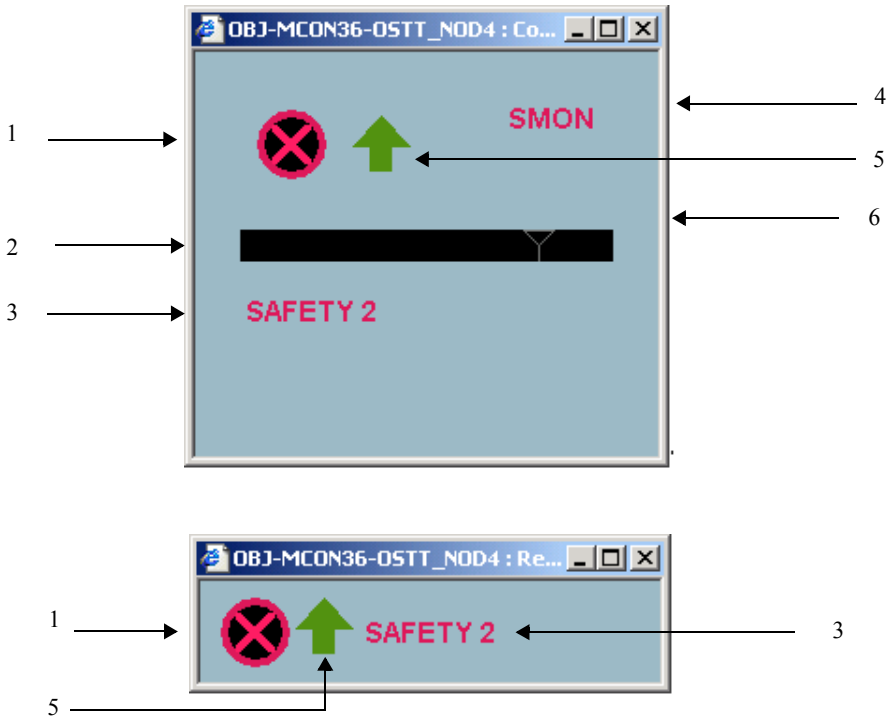
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		A Dark green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
3.2	**Control point**	**S** Dark green	IND2_04 = 1	*Sequence controller from groupstart*

No	Description	Default Presentation	Condition	Remarks
3.2 cont.		**C** Dark green	IND2_04 = 0 and IND2_03 = 0 and IND2_02 = 0 and IND2_01 = 0	*Control controlled from operator's panel*
		L Dark green	IND2_01 = 1	*Local controlled from local panel*
		T Yellow	IND2_2 = 1	*Test, jog controlled from motor place*
		O Kakhi	IND2_3 = 1	*Out of service. No control possible.*
3.3	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
3.4	**Interlock Indication**	**X** Dark green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**Start**	Start motor		Set MORD_10 = 1
	Stop	Stop motor		Set MORD_11 = 1
	Man	Set to Man Mode		Set MORD_05 = 1
	Auto	Set to Auto Mode		Set MORD_04 = 1
	Seq	Set to Sequence Control		Set MORD_15 = 1

No	Description	Default Presentation	Condition	Remarks
5 cont.	**Cen**	Set to Central Control		Set MORD_03 = 1
	Loc	Set to Local Control		Set MORD_00 = 1
	Test	Set to Test Control		Set MORD_01 = 1
	OoS	Set to Out of Service Control		Set MORD_02 = 1
	Ord1	Set Order 1		Set MORD_12 = 1
	Ord2	Set Order 2		Set MORD_13 = 1
	Ord3	Set Order 3		Set MORD_14 = 1
	R / L	Set direction to Reverse/ Low		Set MORD_09 = 1
	F / H	Set direction to Forward/ High		Set MORD_08 = 1

Control and ReducedControl

Presentation:



Behavior:

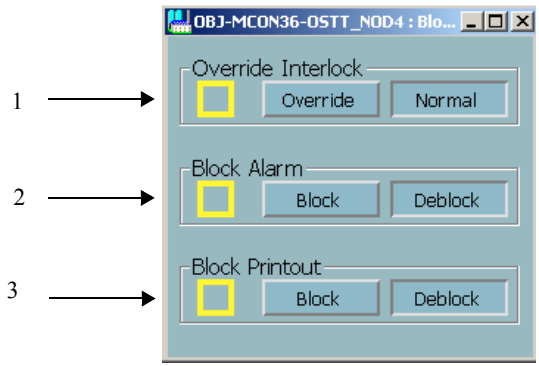
No	Description	Default Presentation	Condition	Remarks
1	**Motor Status**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*

No	Description	Default Presentation	Condition	Remarks
1 cont.			IND1_12 = 1 or IND1_15 = 1	*Run Direction Change*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
2.1	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
2.2	**Limit Indication** 	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*
3	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
4	**Error 1**	**CVO** Red flashing	AU_IND1_00 = 1	*Control voltage unack. error*
		BIM Red flashing	AU_IND1_01 = 1	*Bimetal Relay unack. error*
		LSTOP Red flashing	AU_IND1_02 = 1	*Local stop unack. error*
		SMON Red flashing	AU_IND1_03 = 1	*Safety monitor unack. error*
		CVO Red	IND1_00 = 1	*Control voltage error*

No	Description	Default Presentation	Condition	Remarks
4 cont.		**BIM** Red	IND1_01 = 1	*Bimetal Relay*
		LSTOP Red	IND1_02 = 1	*Local stop*
		SMON Red	IND1_03 = 1	*Safety monitor*
5	**Direction Indication**	Green ↑	IND1_13 = 1	*Forward/High*
		Green ↓	IND1_14 = 1	*Reverse/Low*
6	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*Motor Current unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*MotorCurrent error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*

Block

Presentation:

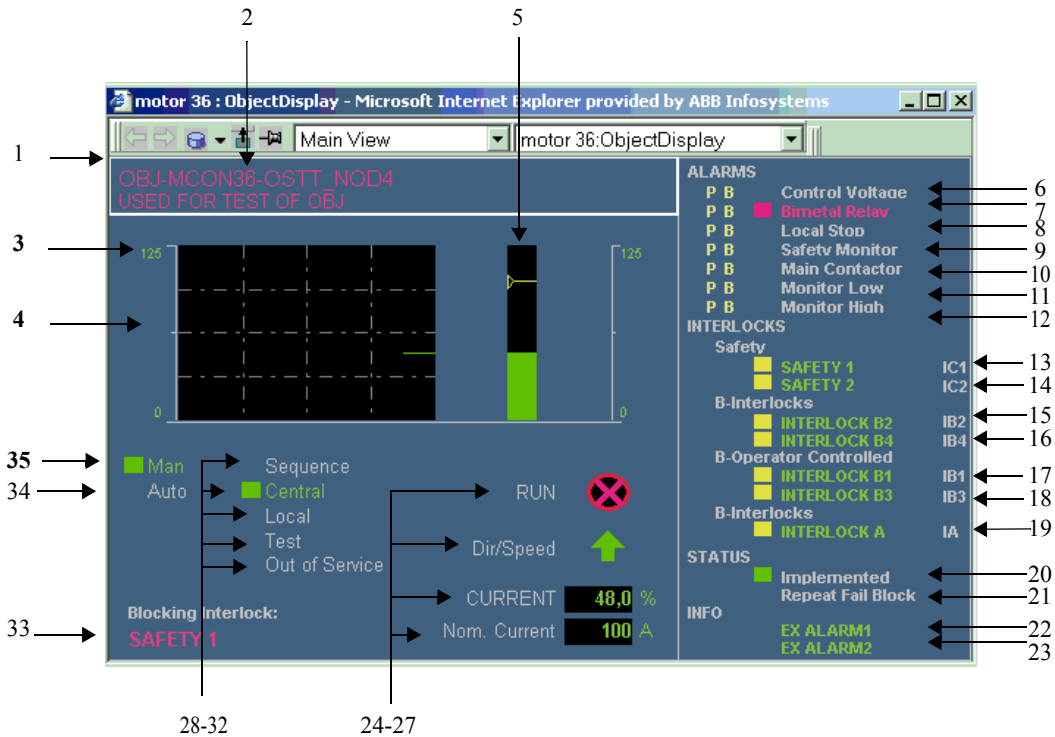


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Override Interlock**	**Override Interlock** Black		*IND2_00 Indicates current status*
		! Yellow	Blocked	
		Block pressed	MORD_06 = 1	
		Deblock pressed	MORD_07 = 1	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	ALARM_BLK = 1	
		Deblock pressed	ALARM_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_BLK = 1	
		Deblock pressed	PRINT_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green		*Normal*

No	Description	Default Presentation	Condition	Remarks
3.1	**Range Max**	Green	REAL_RES_MAX	
		-	REAL_RES_HILIM <= 0.1	*Limit invisible*
3.2	**Range Min**	Green	REAL_RES_MIN	
		-	REAL_RES_HILIM <= 0.1	*Limit invisible*
4	**Trim Curve**	Green	REAL_RES	*Motor current*
		-	REAL_RES_HILIM <= 0.1	*Trim Curve invisible*
5.1	**Bargraph**	Green	REAL_RES	*Motor current*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
5.2	**Limit Indication**	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey		
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*
6	**ALARMS**			*Alarms*
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*
6.4	**Alarm 1 Text**	**Control Voltage**	TXT_BLK_00 = 0	*Monitoring of Control Voltage*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
7.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
7.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
7.3	**Warning Indication**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
		■ Red	IND1_01 = 1	*Alarm*
7.4	**Alarm 2 Text**	**Bimetal Relay**	TXT_BLK_01 = 0	*Monitoring of Bimetal Relay*
		Red	IND1_01 = 1 or AU_IND1_01 = 1	
		Grey	-	
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
8.4	**Alarm 3 Text**	**Local Stop**	TXT_BLK_02 = 0	*Monitoring of Local Stop*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
		■ Red	IND1_03 = 1	*Alarm*
9.4	**Alarm 4 Text**	**Safety Monitor**	TXT_BLK_03 = 0	*Monitoring of Safety Monitor*
9.4 cont.		Red	IND1_03 = 1 or AU_IND1_03 = 1	
		Grey	-	
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*

No	Description	Default Presentation	Condition	Remarks
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm*
		■ Red	IND1_04 = 1	*Alarm*
10.4	**Alarm 5 Text**	**Main Contactor**	TXT_BLK_04 = 0	*Monitoring of Main Contactor*
		Red	IND1_04 = 1 or AU_IND1_04 = 1	
		Grey	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
11.3	**Warning Indication**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged alarm*
		■ Red	IND1_05 = 1	*Alarm*
11.4	**Alarm Text**	**Monitor Low**	TXT_BLK_05 = 0	*Monitoring of Monitor Low*
		Red	IND1_05 = 1 or AU_IND1_05 = 1	
		Grey	-	
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
12.3	**Warning Indication**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged alarm*
		■ Red	IND1_06 = 1	*Alarm*
12.4	**Alarm Text**	**Monitor High**	TXT_BLK_06 = 0	*Monitoring of Monitor High*
		Red	IND1_06 = 1 or AU_IND1_06 = 1	
		Grey	-	
13	**INTERLOCKS**			*Interlocks*

No	Description	Default Presentation	Condition	Remarks
13.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
13.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*
14.1	**IC2 Active**	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
14.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
15.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
15.2	**IB2 Active**	■ Yellow	IND2_13 = 1	*Interlock IB2 active*
15.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
16.1	**IB4 Block Indication**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
16.2	**IB4 Active**	■ Yellow	IND2_11 = 1	*Interlock IB4 active*
16.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*
17.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
17.2	**IB1 Active**	■ Yellow	IND2_12 = 1	*Interlock IB1 active*
17.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
18.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
18.2	**IB3 Active**	■ Yellow	IND2_10 = 1	*Interlock IB3 active*
18.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
19.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
19.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
19.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
20	**STATUS**			*Status*
20.1	**Implemented Indication**	■ Green	ACT = 1	
20.2	**Implemented Text**	**Implemented** Grey		*Implemented*
21.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*

No	Description	Default Presentation	Condition	Remarks
21.2	**Repeat Fail Blocked Text**	**Repeat Fail Block**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
22	**INFO**			*Info*
22.1	**X1 Indication**	■ Red flashing	AU_IND1_07 = 1	*Unack external alarm X1*
		■ Red	IND1_07 = 1	*External alarm*
22.2	**X1 Text**	Green	X1_TXT	
23.1	**X2 Indication**	■ Red flashing	AU_IND1_11 = 1	*Unack external alarm X2*
		■ Red	IND1_11 = 1	*External alarm*
23.2	**X2Text**	Green	X2_TXT	
24.1	**Motor Status Text**	**Run** Grey		*Run*
24.2	**Motor Status**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *Direction Change*
24.2 cont.			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
25.1	**Dir/Speed Text**	**Dir/Speed** Grey		*Direction and speed*

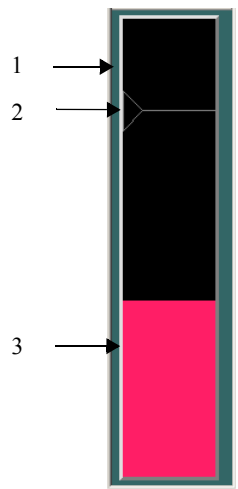
No	Description	Default Presentation	Condition	Remarks
25.2	**Direction Indication**	↑	IND1_13 = 1	*Forwards/High*
		↓	IND1_14 = 1	*Reverse/Low*
		Green	-	
26.1	**Current Text**	**CURRENT** Grey		*Current*
26.2	**Current Value**	Green	REAL_RES	*Motor current*
26.3	**Current Unit**	**%** Green	-	*% of nominal current*
27.1	**Nominal Current Text**	**Nom. Current** Grey		*Nominal Current of motor*
27.2	**Nom. Current Value**	Green	REAL_RES_HILIM	
27.3	**Nom. Current Unit**	**A** Green		*Unit Ampere*
28.1	**Sequence Indication**	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*
28.2	**Sequence Text**	**Sequence**		
		Green	IND2_04 = 1	
		Grey	-	
29.1	**Central Indication**	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Controlled from operator's place*
29.2	**Central Text**	**Central**		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	
		Grey	-	
30.1	**Local Indication**	■ Green	IND2_01 = 1	*Local* *Controlled from local panel*
30.2	**Local Text**	**Local**		
		Green	IND2_01 = 1	
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
31.1	**Test Indication**	■ Yellow	IND2_02 = 1	*Test* *Jog running from motor place*
31.2	**Test Text**	**Test**		
		Yellow	IND2_02 = 1	
		Grey	-	
32.1	**Out of Service Indication**	■ Yellow	IND2_03 = 1	*Out of service* *No control possible*
32.2	**Out of Service Text**	**Out of Service**		
		Yellow	IND2_03 = 1	
		Grey	-	
33.1	**Blocking Interlock Text**	**Blocking Service:** Grey		*Blocking Interlock text*
33.2	**Actual Interlock Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
34.1	**Auto Indication**	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
34.2	**Auto Text**	**Auto**		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
35.1	**Man Indication**	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Start order affects the motor directly*
35.2	**Man Text**	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

Graphic Element

BargraphMC01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Limit Indication** ▷	at 100%		
		Filled Yellow	AL_BLK = 1 and IND1_10 =1	*Alarm blocked*
		Unfilled Yellow	AL_BLK = 1	*Alarm blocked*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Filled Red flashing	AU_IND = 1 and IND1_10 = 1	*Unacknowledged alarm*
		Unfilled Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Filled Light Red	IND1_10 = 1	*High motor current*
		Grey	-	*Limit*
3	**Bargraph**		REAL_RES	
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Error*
		Green	-	

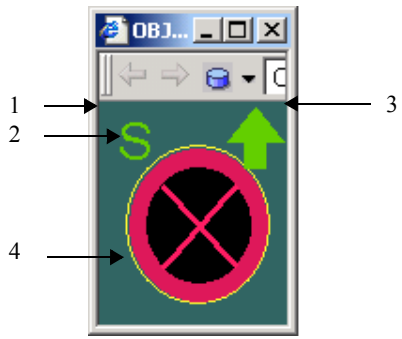
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (1..4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

Motor01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible	-	
2	**Mode or Control point**		ModeIndVis = true	*You can configure your own text instead of using the figures*
		* Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*

No	Description	Default Presentation	Condition	Remarks
2 cont.		**A** Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0 and IND2_14 = 0 and IND2_07 = 1	*Indicates Auto Start Init Not Performed*
		M Green	ManModeIndVis = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
			ManModeIndVis = false	
		S Green	IND2_04 = 1	*Sequence Control*
		L Green	IND2_01 = 1	*Local Control*
		C Green	IND2_01 = 0 and IND2_04 = 0 and IND2_02 = 0 and IND2_03 = 0	*Central Control*
		-	ModeIndVis = false	*Mode or Control point is invisible*
3	**Direction Indication**		DirectionVisible = true	
		Green ↑	IND1_13 = 1	*Forward/High*
		Green ↓	IND1_14 = 1	*Reverse/Low*
		-	DirectionVisible = false	*Direction is invisible*

No	Description	Default Presentation	Condition	Remarks
4	**Motor Status** Shape		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *Direction Change*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
	Color	Grey	IND2_03 = 1	*Out of service*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Error*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	

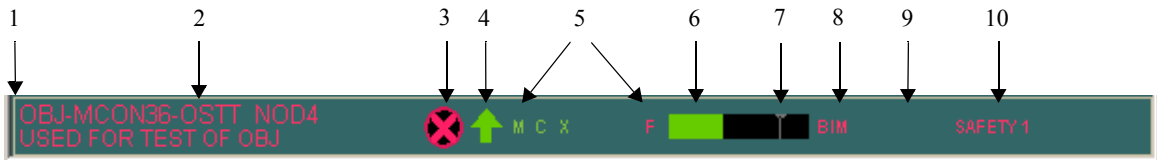
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeIndVis	2. Mode or Control point	**True,** False	
ManModeIndVis	2. Mode or Control point	**True,** False	
DirectionVisible	3. Direction Indication	**True,** False	

ObjectLine01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Motor Status**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *Direction Change*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*

No	Description	Default Presentation	Condition	Remarks
3 cont.			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
4	**Direction Indication**	Green 	IND1_13 = 1	*Forward/High*
		Green 	IND1_14 = 1	*Reverse/Low*
5	**Status Indication**			*Status Indication*
5.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		A Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0	*Indicates Auto Start Init Not Performed*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*
5.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*

No	Description	Default Presentation	Condition	Remarks
5.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks.* *Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
5.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
5.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
5.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
6	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
7	**Limit Indication** 	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*
8	**Error 1**	**CVO** Red flashing	AU_IND1_00 = 1	*Control voltage unack. error*
		BIM Red flashing	AU_IND1_01 = 1	*Bimetal Relay unack. error*
		LSTOP Red flashing	AU_IND1_02 = 1	*Local stop unack. error*
		SMON Red flashing	AU_IND1_03 = 1	*Safety monitor unack. error*
		CVO Red	IND1_00 = 1	*Control voltage error*
		BIM Red	IND1_01 = 1	*Bimetal Relay*
		LSTOP Red	IND1_02 = 1	*Local stop*
8 cont.		**SMON** Red	IND1_03 = 1	*Safety monitor*

No	Description	Default Presentation	Condition	Remarks
9	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*Motor Current unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*Motor Current error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*
10	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*

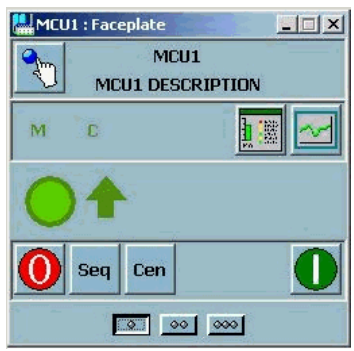
Configuration:

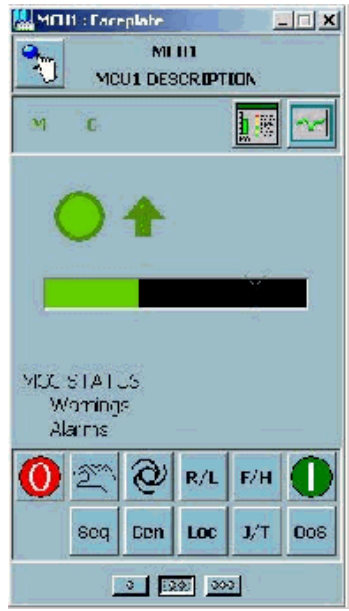
Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Transparent**, any color	

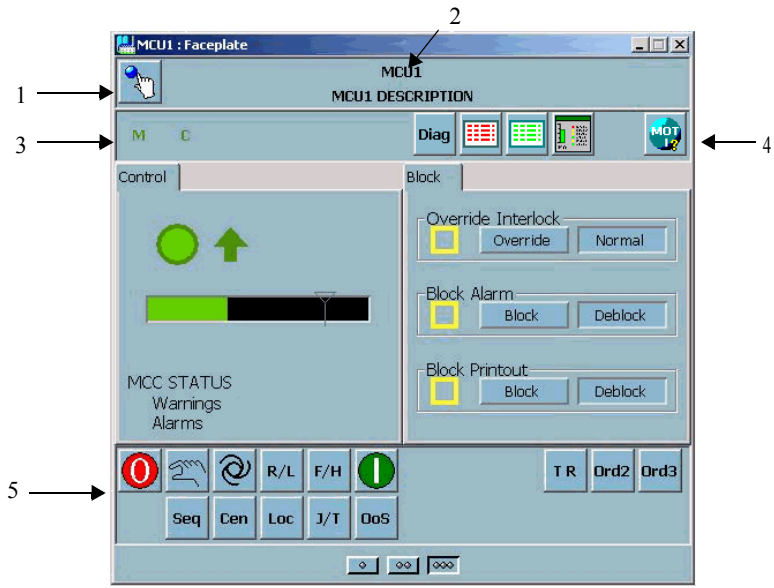
MOTCONI, Motor Control

Faceplate

Presentation:







Behavior:

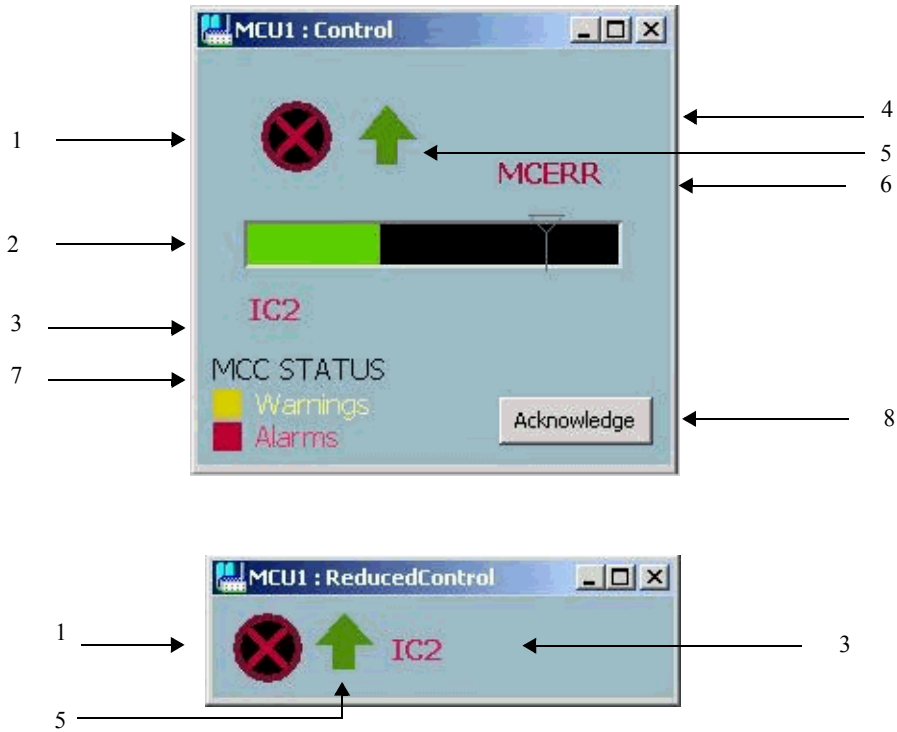
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		A Dark green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
3.2	**Control point**	**S** Dark green	IND2_04 = 1	*Sequence controller from groupstart*

No	Description	Default Presentation	Condition	Remarks
3.2 cont.		**C** Dark green	IND2_04 = 0 and IND2_03 = 0 and IND2_02 = 0 and IND2_01 = 0	*Control controlled from operator's panel*
		L Dark green	IND2_01 = 1	*Local controlled from local panel*
		LM Yellow	BOOLH = 1	*Local - MCC*
		T Yellow	IND2_2 = 1	*Test, jog controlled from motor place*
		O Kakhi	IND2_3 = 1	*Out of service. No control possible.*
3.3	**Print Blk**	**P** Yellow	PRINT_BLK = 1	
3.4	**Interlock Indication**	**X** Dark green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
3.5	**Warnings or Alarms**	**W** Yellow	IND1_07 or BOOLD	*Collective Warning Indication*
		F Red	IND1_11 or BOOLE or IND1_08	*Collective Fault Indication*
4	**Aspect links**	Diagnostic Display	position 0, 0, 7	
		Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Object Type Help	position 0, 0, 12	

No	Description	Default Presentation	Condition	Remarks
5	**Start**	Start motor		Set MORD_10 = 1
	Stop	Stop motor		Set MORD_11 = 1
	Man	Set to Man Mode		Set MORD_05 = 1
	Auto	Set to Auto Mode		Set MORD_04 = 1
	Seq	Set to Sequence Control		Set MORD_15 = 1
	Cen	Set to Central Control		Set MORD_03 = 1
	Loc	Set to Local Control		Set MORD_00 = 1
	J/T	Set to Jog/Test Control		Set MORD_01 = 1
	OoS	Set to Out of Service Control		Set MORD_02 = 1
	Ord1	Set Order 1		Set MORD_12 = 1
	Ord2	Set Order 2		Set MORD_13 = 1
	Ord3	Set Order 3		Set MORD_14 = 1
	R / L	Set direction to Reverse/ Low		Set MORD_09 = 1
	F / H	Set direction to Forward/ High		Set MORD_08 = 1

Control and ReducedControl

Presentation:



Behavior:

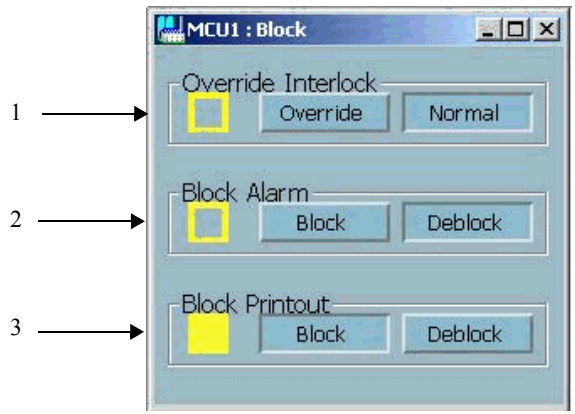
No	Description	Default Presentation	Condition	Remarks
1	**Motor Status**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*

No	Description	Default Presentation	Condition	Remarks
1 cont.			IND1_12 = 1 or IND1_15 = 1	*Run Direction Change*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
2.1	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
2.2	**Limit Indication** 	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*
3	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
4	**Error 1**	**COERR** Red flashing	AU_IND1_00 = 1	*Communication unack. error*
		TRIP Red flashing	AU_IND1_02 = 1	*Tripped unack. error*
		ESTOP Red flashing	AU_IND1_03 = 1	*Emergency stop unack. error*
		COERR Red	IND1_00 = 1	*Communication error*
		TRIP Red	IND1_02 = 1	*Tripped error*
		ESTOP Red	IND1_03 = 1	*Emergency stop error*

No	Description	Default Presentation	Condition	Remarks
5	**Direction Indication**	Green 	IND1_13 = 1	*Forward/High*
		Green 	IND1_14 = 1	*Reverse/Low*
6	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*Main Contactor unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*Main Contactor error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*
7	**MCC Status**		BOOLG = 1	*MCC Status*
7.1	**Warnings**	**!** Yellow flashing	BOOLD = 1	
		! Yellow	IND1_07 = 1	
	Warnings Text	**Warnings** Grey	BOOLG = 1	
		Yellow	BOOLD = 1 or IND1_07 = 1	
7.2	**Alarms**	**!** Red flashing	BOOLE = 1	
		! Red	IND1_11 = 1	
	Alarms Text	**Alarms** Grey	BOOLG = 1	
		Red	BOOLE = 1 or IND1_11 = 1	
8	**Acknowledge Warnings and Alarms**	**Acknowledge**	BOOLD = 1 or BOOLE = 1 or IND1_07 = 1 or IND1_11 = 1	*Acknowledge main object and the Alarm and Warning objects*

Block

Presentation:



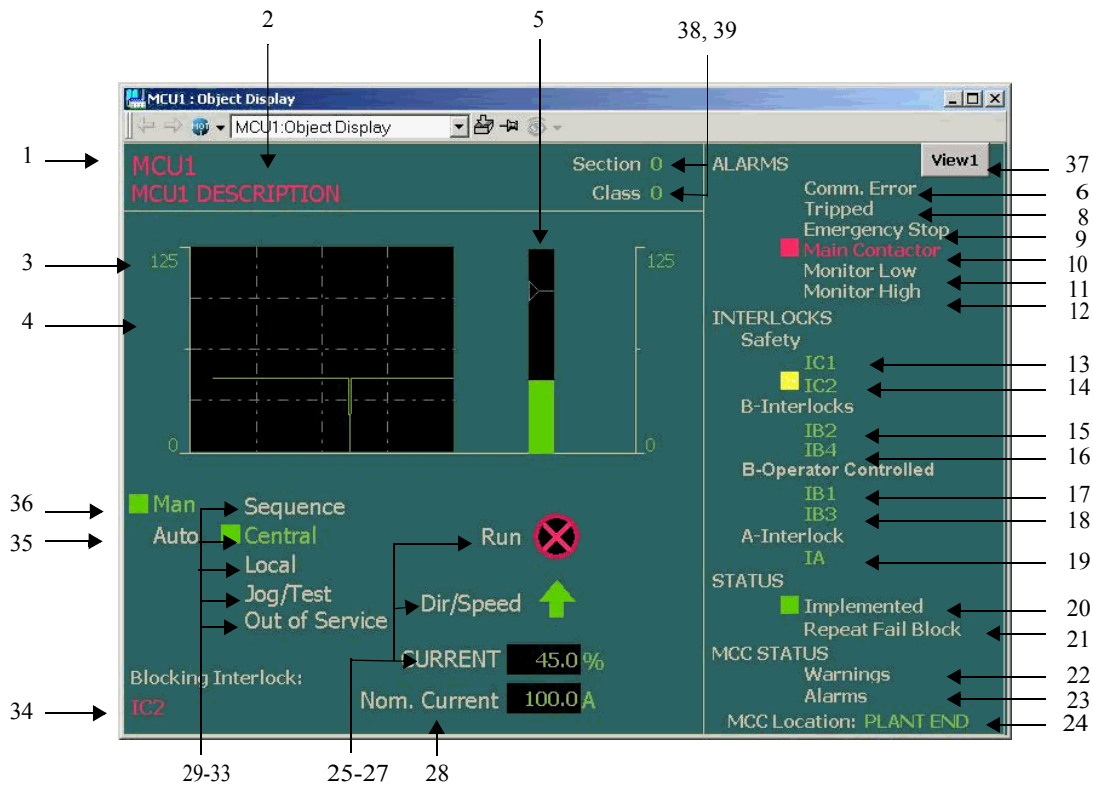
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Override Interlock**	**Override Interlock** Black		*IND2_00 Indicates current status*
		! Yellow	Blocked	
		Block pressed	MORD_06 = 1	
		Deblock pressed	MORD_07 = 1	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	ALARM_BLK = 1	
		Deblock pressed	ALARM_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_BLK = 1	
		Deblock pressed	PRINT_BLK = 0	

Displays

Object Display View 1

Presentation:



Behavior

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Black	-	

No	Description	Presentation	Condition	Remarks
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1 OR BOOLE = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1 OR IND1_11 = 1	*Alarm*
		Yellow flashing	BOOLD = 1	*Unacknowledged warning*
		Yellow	IND1_07 = 1	*Warning*
		Green		*Normal*
3.1	**Range Max**	Green	REALRES_MAX	
		-	REALRES_HILIM <= 0.1	*Limit invisible*
3.2	**Range Min**	Green	REALRES_MIN	
		-	REALRES_HILIM <= 0.1	*Limit invisible*
4	**Trim Curve**	Green	REALRES	*Motor current*
		-	REALRES_HILIM <= 0.1	*Trim Curve invisible*
5.1	**Bargraph**	Green	REALRES	*Motor current*
		-	REALRES_HILIM <= 0.1	*Bargraph invisible*
5.2	**Limit Indication**	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey		
		-	REALRES_HILIM <= 0.1	*Limit Indication invisible*
6	**ALARMS**			*Alarms*
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*

No	Description	Presentation	Condition	Remarks
6.4	**Alarm 1 Text**	Comm. Error	TXT_BLK_00 = 0	*Monitoring of Communication Error*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
8.4	**Alarm 3 Text**	Local Stop	TXT_BLK_02 = 0	*Monitoring of Local Stop*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	
10.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm*
		■ Red	IND1_04 = 1	*Alarm*
10.4	**Alarm 5 Text**	Main Contactor	TXT_BLK_04 = 0	*Monitoring of Main Contactor*
		Red	IND1_04 = 1 or AU_IND1_04 = 1	
		Grey	-	
11.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*

No	Description	Presentation	Condition	Remarks
11.3	**Warning Indication**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged alarm*
		■ Red	IND1_05 = 1	*Alarm*
11.4	**Alarm Text**	Monitor Low	TXT_BLK_05 = 0	*Monitoring of Monitor Low*
		Red	IND1_05 = 1 or AU_IND1_05 = 1	
		Grey	-	
12.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
12.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
12.3	**Warning Indication**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged alarm*
		■ Red	IND1_06 = 1	*Alarm*
12.4	**Alarm Text**	Monitor High	TXT_BLK_06 = 0	*Monitoring of Monitor High*
		Red	IND1_06 = 1 or AU_IND1_06 = 1	
		Grey	-	
13	**INTERLOCKS**			*Interlocks*
13.1	**IC1** Active	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
13.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*
14.1	**IC**2 Active	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
14.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
15.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
15.2	**IB2** Active	■ Yellow	IND2_13 = 1	*Interlock IB2 active*
15.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
16.1	**IB4 Block Indication**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
16.2	**IB4** Active	■ Yellow	IND2_11 = 1	*Interlock IB4 active*
16.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*

No	Description	Presentation	Condition	Remarks
17.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
17.2	**IB1** Active	■ Yellow	IND2_12 = 1	*Interlock IB1 active*
17.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
18.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
18.2	**IB3** Active	■ Yellow	IND2_10 = 1	*Interlock IB3 active*
18.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
19.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
19.2	**IA** Active	■ Yellow	IND2_14 = 1	*Interlock IA active*
19.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
20	**STATUS**			*Status*
20.1	**Implemented Indication**	■ Green	ACT = 1	
20.2	**Implemented Text**	**Implemented** Grey		*Implemented*
21.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*
21.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
22	**MCC STATUS**		BOOLG = 1	*MCC status*
22.1	**Warnings**	■ Yellow flashing	BOOLD = 1	*Unack MCU warning*
		■ Yellow	IND1_07 = 1	*MCU warning*
	Warnings text	**Warnings** Green	BOOLG = 1	*Displaying warnings*
		Yellow	BOOLD = 1 or IND1_07 = 1	*Warnings*
		Grey	BOOLG = 0	*Whole Field Greyed*
23.1	**Alarms**	■ Red flashing	BOOLE = 1	*Unack MCU alarm*
		■ Red	IND1_11 = 1	*MCU alarm*

No	Description	Presentation	Condition	Remarks
23.2	**Alarms text**	**Alarms** Green	BOOLG = 1	*Displaying alarms*
		Red	BOOLE = 1 or IND1_11 = 1	*Alarms*
		Grey	BOOLG = 0	*Whole Field Greyed*
24.1	Location text	**MCC Location:** Grey		*MCC Location*
		Green	X1-TEXT	
25.1	**MotorStatus Text**	**Run** Grey		*Run*
25.2	**MotorStatus**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *DirectionChange*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	

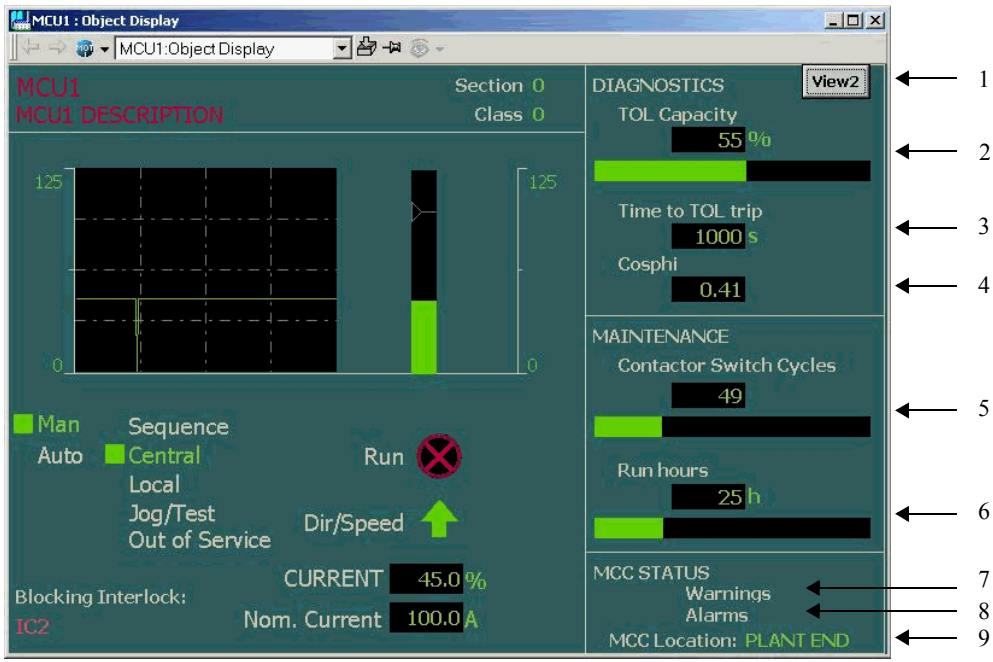
No	Description	Presentation	Condition	Remarks
26.1	**Dir/Speed Text**	**Dir/Speed** Grey		*Direction and speed*
26.2	**Direction Indication**		IND1_13 = 1	*Forwards/High*
			IND1_14 = 1	*Reverse/Low*
		Green	-	
27.1	**Current Text**	Current Grey	BOOLA = 1	*Motor current*
		Power Grey	BOOLA = 0 and BOOLC = 1	*Motor power (If MCU2)*
27.2	**Current Value**	Green	REALRES	*Motor current*
27.3	**Current Unit**	**%** Green	-	*% of normal current*
28.1	**Nom. Current Text**	Nom.Current Grey	BOOLA = 1	*Nominal current of motor*
		Nom.Power Grey	BOOLA = 0 and BOOLC = 1	*nominal power of motor (if MCU2)*
28.2	**Nom. Current Value**	Green	REALRES_HILIM	
28.3	**Nom. Current Unit**	Green	X2-TEXT	*Unit for current or power*
29.1	**Sequence** Indication	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*
29.2	**Sequence** Text	Sequence		
		Green	IND2_04 = 1	
		Grey	-	
30.1	**Central** Indication	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0 and BOOLH = 0	*Central Controlled from operator's place*
30.2	**Central** Text	Central		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0 and BOOLH = 0	
		Grey	-	
31.1	Local Indication	■ Green	IND2_01 = 1	*Local* *Controlled from local panel*

No	Description	Presentation	Condition	Remarks
31.2	Local Text	Local		
		Green	IND2_01 = 1	
		Grey	-	
31.3	Local Text	Local - MCC		*MCU controlled by an other LON station. (No Control Access)*
		Yellow	BOOLH = 1	
		Grey	-	
32.1	Test Indication	■ Yellow	IND2_02 = 1	*Test* *Jog running from motor place*
32.2	Test Text	Jog/Test		
		Yellow	IND2_02 = 1	
		Grey	-	
33.1	**Out of Servic**e Indication	■ Kakhi	IND2_03 = 1	*Out of service* *No control possible*
33.2	**Out of Servic**e Text	Out of Service		
		Kakhi	IND2_03 = 1	
		Grey	-	
34.1	**Blocking Interlock Text**	**Blocking Interlock:** Grey		*Blocking Interlock text*
34.2	**Actual Interlock Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
35.1	**Auto** Indication	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
35.2	**Auto** Text	Auto		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

No	Description	Presentation	Condition	Remarks
36.1	**Ma**n Indication	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Startorder affects the motor directly*
36.2	**Ma**n Text	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
37	**TOGGLE**	White/black		*Toggle between Object Display View 1 and View 2*
38	**SECTION**			*If available from AC 400 series*
38.1	**Section Text**	**Section** Grey		*Text in front of the value*
38.2	**Section Value**	Green	PROC_SEC	*Process section*
39	**CLASS**			*If available from AC 400 series*
39.1	**Class Text**	**Class** Grey		*Text in front of the value*
39.2	**Class Value**	Green	CLASS	*Object class*

Object Display View 2

Presentation:



Behavior:

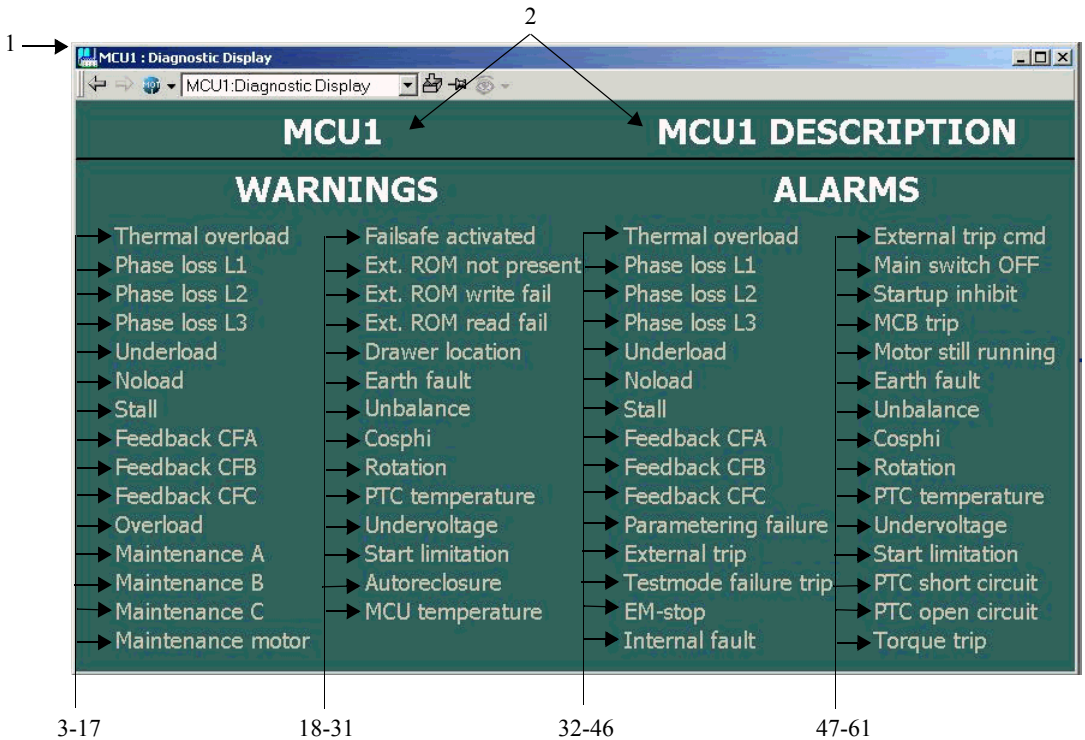
No	Description	Presentation	Condition	Remarks
1	**TOGGLE**	White/black		*Toggle between MOTIOB01 and MOTIOB02*
2	**DIAGNOSTICS**		BOOLF = 1 BOOLF = 0	*Diagnostics* *Diagnostics field invisible*
2.1	**TOL Capacity text**	**TOL Capacity** Grey		*Thermal overload capacity*
	TOL Capacity value	Green	REALE	*Thermal overload capacity*

No	Description	Presentation	Condition	Remarks
2.2	**TOL Capacity bargraph**	Green	REALE	*Thermal overload capacity*
		-	REALE <= 0.1	*Bargraph invisible*
3.1	**Time to TOL trip text**	**Time TOL trip** Grey	BOOLB = 1	*Time to thermal overload trip*
	Time to TOL reset text	**Time TOL reset** Grey	BOOLB = 0	*Time to thermal overload reset*
	Time to TOL trip/reset value in Seconds	Green	REALA	*Time to thermal overload trip/reset*
4.1	**Cosphi text**	Cosphi	BOOLC = 1	*Cosphi*
	Cosphi value	Green	REALC	*Cosphi*
5	**MAINTENANCE**		BOOLF = 1 BOOLF = 0	*Maintenance* *Maintenance field invisible*
5.1	**Contactor switch cycles text**	**Contactor switch cycles** Grey		*Contactor switch cycles*
	Contactor switch cycles value	Green	REALD	*Contactor switch cycles*
5.2	**Contactor switch cycles bargraph**	Green	REALD	*Thermal overload capacity*
		-	REALD <= 0.1	*Bargraph invisible*
6.1	**Run hours text**	**Run hours** Grey		*Cumulated run hours*
	Run hours value	Green	REALB	*Cumulated run hours*
6.2	**Run hours bargraph**	Green	REALB	*Cumulated run hours*
		-	REALB <= 0.1	*Bargraph invisible*
7	**MCC STATUS**			*Info*
7.1	**Warnings**	■ Yellow flashing	BOOLD = 1	*Unack MCU warning*
		■ Yellow	IND1_07 = 1	*MCU warning*
	Warnings text	**Warnings** Green	BOOLG = 1	*Displaying warnings*
		Yellow	BOOLD = 1 or IND1_07 = 1	*Warnings*
7.2		Grey	BOOLG = 0	*Whole Field Greyed*

No	Description	Presentation	Condition	Remarks
8.1	**Alarms**	■ Red flashing	BOOLE = 1	*Unack MCU alarm*
		■ Red	IND1_11 = 1	*MCU alarm*
	Alarms text	**Alarms** Green	BOOLG = 1	*Displaying alarms*
		Red	BOOLE = 1 or IND1_11 = 1	*Alarms*
8.2		Grey	BOOLG = 0	*Whole Field Greyed*
9	**Location text**	**MCC Location:** Grey		*MCC Location*
		Green	X1-TEXT	

Diagnostic Display

Presentation:



Remark: 12, 16, 23-31, 41, 52-61 not available for MCU1(BOOLC = 0)

Behavior:

No	Description	Presentation	Condition	Remarks
1	**Frame**	Black	-	*No selection of frame Remains on the main dialog.*
2	**Header**		NAME and DESCR	*Object name and description*

No	Description	Presentation	Condition	Remarks
WARNINGS				
3.1	**Thermal overload warning**	■ Yellow flashing	AU_IND1_00 = 1	*Unacknowledged warning*
3.2	**Thermal overload warning**	■ Yellow	IND1_00 = 1	*warning*
3.3	**Thermal overload text**	**Thermal overload** Yellow	AU_IND1_00 = 1 or IND1_00 = 1	*Thermal overload*
3.4	**Thermal overload text**	**Thermal overload** Grey	IND1_00 = 0	*Thermal overload*
4.1	**Phase loss L1 warning**	■ Yellow flashing	AU_IND1_01 = 1	*Unacknowledged warning*
4.2	**Phase loss L1 warning**	■ Yellow	IND1_01 = 1	*warning*
4.3	**Phase loss L1 text**	**Phase loss L1** Yellow	AU_IND1_01 = 1 or IND1_01 = 1	*Phase loss L1*
4.4	**Phase loss L1 text**	**Phase loss L1** Grey	IND1_01 = 0	*Phase loss L1*
5.1	**Phase loss L2 warning**	■ Yellow flashing	AU_IND1_02 = 1	*Unacknowledged warning*
5.2	**Phase loss L2 warning**	■ Yellow	IND1_02 = 1	*warning*
5.3	**Phase loss L2 text**	**Phase loss L2** Yellow	AU_IND1_02 = 1 or IND1_02 = 1	*Phase loss L2*
5.4	**Phase loss L2 text**	**Phase loss L2** Grey	IND1_02 = 0	*Phase loss L2*
6.1	**Phase loss L3 warning**	■ Yellow flashing	AU_IND1_03 = 1	*Unacknowledged warning*
6.2	**Phase loss L3 warning**	■ Yellow	IND1_03 = 1	*warning*
6.3	**Phase loss L3 text**	**Phase loss L3** Yellow	AU_IND1_03 = 1 or IND1_03 = 1	*Phase loss L3*
6.4	**Phase loss L3 text**	**Phase loss L3** Grey	IND1_03 = 0	*Phase loss L3*
7.1	**Underload warning**	■ Yellow flashing	AU_IND1_04 = 1	*Unacknowledged warning*
7.2	**Underload warning**	■ Yellow	IND1_04 = 1	*warning*
7.3	**Underload text**	**Underload** Yellow	AU_IND1_04 = 1 or IND1_04 = 1	*Underload*
7.4	**Underload text**	**Underload** Grey	IND1_04 = 0	*Underload*

No	Description	Presentation	Condition	Remarks
8.1	Noload warning	■ Yellow flashing	AU_IND1_05 = 1	*Unacknowledged warning*
8.2	Noload warning	■ Yellow	IND1_05 = 1	*warning*
8.3	Noload text	**Noload** Yellow	AU_IND1_05 = 1 or IND1_05 = 1	*Noload*
8.4	Noload text	**Noload** Grey	IND1_05 = 0	*Noload*
9.1	Stall warning	■ Yellow flashing	AU_IND1_06 = 1	*Unacknowledged warning*
9.2	Stall warning	■ Yellow	IND1_06 = 1	*warning*
9.3	Stall text	**Stall** Yellow	AU_IND1_06 = 1 or IND1_06 = 1	*Stall*
9.4	Stall text	**Stall** Grey	IND1_06 = 0	*Stall*
10.1	Feedback CFA warning	■ Yellow flashing	AU_IND1_07 = 1	*Unacknowledged warning*
10.2	Feedback CFA warning	■ Yellow	IND1_07 = 1	*warning*
10.3	Feedback CFA text	**Feedback CFA** Yellow	AU_IND1_07 = 1 or IND1_07 = 1	*Feedback CFA*
10.4	Feedback CFA text	**Feedback CFA** Grey	IND1_07 = 0	*Feedback CFA*
11.1	Feedback CFB warning	■ Yellow flashing	AU_IND1_08 = 1	*Unacknowledged warning*
11.2	Feedback CFB warning	■ Yellow	IND1_08 = 1	*warning*
11.3	Feedback CFB text	**Feedback CFB** Yellow	AU_IND1_08 = 1 or IND1_08 = 1	*Feedback CFB*
11.4	Feedback CFB text	**Feedback CFB** Grey	IND1_08 = 0	*Feedback CFB*
12.1	Feedback CFC warning	■ Yellow flashing	AU_IND1_09 = 1	*Unacknowledged warning*
12.2	Feedback CFC warning	■ Yellow	IND1_09 = 1	*warning*
12.3	Feedback CFC text	**Feedback CFC** Yellow	AU_IND1_09 = 1 or IND1_09 = 1	*Feedback CFC*
12.4	Feedback CFC text	**Feedback CFC** Grey	IND1_09 = 0	*Feedback CFC*

No	Description	Presentation	Condition	Remarks
13.1	**Overload warning**	■ Yellow flashing	AU_IND2_03 = 1	*Unacknowledged warning*
13.2	**Overload warning**	■ Yellow	IND2_03 = 1	*warning*
13.3	**Overload text**	**Overload** Yellow	AU_IND2_03 = 1 or IND2_03 = 1	*Overload*
13.4	**Overload text**	**Overload** Grey	IND2_03 = 0	*Overload*
14.1	**Maintenance A warning**	■ Yellow flashing	AU_IND2_04 = 1	*Unacknowledged warning*
14.2	**Maintenance A warning**	■ Yellow	IND2_04 = 1	*warning*
14.3	**Maintenance A text**	**Maintenance A** Yellow	AU_IND2_04 = 1 or IND2_04 = 1	*Maintenance A*
14.4	**Maintenance A text**	**Maintenance A** Grey	IND2_04 = 0	*Maintenance A*
15.1	**Maintenance B warning**	■ Yellow flashing	AU_IND2_05 = 1	*Unacknowledged warning*
15.2	**Maintenance B warning**	■ Yellow	IND2_05 = 1	*warning*
15.3	**Maintenance B text**	**Maintenance B** Yellow	AU_IND2_05 = 1 or IND2_05 = 1	*Maintenance B*
15.4	**Maintenance B text**	**Maintenance B** Grey	IND2_05 = 0	*Maintenance B*
16.1	**Maintenance C warning**	■ Yellow flashing	AU_IND2_06 = 1	*Unacknowledged warning*
16.2	**Maintenance C warning**	■ Yellow	IND2_06 = 1	*warning*
16.3	**Maintenance C text**	**Maintenance C** Yellow	AU_IND2_06 = 1 or IND2_06 = 1	*Maintenance C*
16.4	**Maintenance C text**	**Maintenance C** Grey	IND2_06 = 0	*Maintenance C*
17.1	**Maintenance motor warning**	■ Yellow flashing	AU_IND2_07 = 1	*Unacknowledged warning*
17.2	**Maintenance motor warning**	■ Yellow	IND2_07 = 1	*warning*
17.3	**Maintenance motor text**	**Maintenance motor** Yellow	AU_IND2_07 = 1 or IND2_07 = 1	*Maintenance motor*
17.4	**Maintenance motor text**	**Maintenance motor** Grey	IND2_07 = 0	*Maintenance motor*
18.1	**Fail-safe activated warning**	■ Yellow flashing	AU_IND2_08 = 1	*Unacknowledged warning*

No	Description	Presentation	Condition	Remarks
18.2	**Fail-safe activated warning**	■ Yellow	IND2_08 = 1	*warning*
18.3	**Fail-safe activated text**	**Failsafe activated** Yellow	AU_IND2_08 = 1 or IND2_08 = 1	*Fail-safe activated*
18.4	**Fail-safe activated text**	**Failsafe activated** Grey	IND2_08 = 0	*Fail-safe activated*
19.1	**Ext. ROM not present warning**	■ Yellow flashing	AU_IND2_09 = 1	*Unacknowledged warning*
19.2	**Ext. ROM not present warning**	■ Yellow	IND2_09 = 1	*warning*
19.3	**Ext. ROM not present text**	**Ext. ROM not present** Yellow	AU_IND2_09 = 1 or IND2_09 = 1	*External Memory not present*
19.4	**Ext. ROM not present text**	**Ext. ROM not present** Gray	IND2_09 = 0	*External Memory not present*
20.1	**Ext. ROM write fail warning**	■ Yellow flashing	AU_IND2_10 = 1	*Unacknowledged warning*
20.2	**Ext. ROM write fail warning**	■ Yellow	IND2_10 = 1	*warning*
20.3	**Ext. ROM write fail text**	**Ext. ROM write fail** Yellow	AU_IND2_10 = 1 or IND2_10 = 1	*External Memory write fail*
20.4	**Ext. ROM write fail text**	**Ext. ROM write fail** Gray	IND2_10 = 0	*External Memory write fail*
21.1	**Ext. ROM read fail warning**	■ Yellow flashing	AU_IND2_11 = 1	*Unacknowledged warning*
21.2	**Ext. ROM read fail warning**	■ Yellow	IND2_11 = 1	*warning*
21.3	**Ext. ROM read fail text**	**Ext. ROM read fail** Yellow	AU_IND2_11 = 1 or IND2_11 = 1	*External Memory read fail*
21.4	**Ext. ROM read fail text**	**Ext. ROM read fail** Gray	IND2_11 = 0	*External Memory read fail*
22.1	**Drawer location warning**	■ Yellow flashing	AU_IND2_12 = 1	*Unacknowledged warning*
22.2	**Drawer location warning**	■ Yellow	IND2_12 = 1	*warning*
22.3	**Drawer location text**	**Drawer location** Yellow	AU_IND2_12 = 1 or IND2_12 = 1	*Drawer location*

No	Description	Presentation	Condition	Remarks
22.4	**Drawer location text**	**Drawer location** Grey	IND2_12 = 0	*Drawer location*
23.1	**Earth fault warning**	■ Yellow flashing	AU_IND1_10 = 1	*Unacknowledged warning*
23.2	**Earth fault warning**	■ Yellow	IND1_10 = 1	*warning*
23.3	**Earth fault text**	**Earth fault** Yellow	AU_IND1_10 = 1 or IND1_10 = 1	*Earth fault*
23.4	**Earth fault text**	**Earth fault** Grey	IND1_10 = 0	*Earth fault*
24.1	**Unbalance warning**	■ Yellow flashing	AU_IND1_11 = 1	*Unacknowledged warning*
24.2	**Unbalance warning**	■ Yellow	IND1_11 = 1	*warning*
24.3	**Unbalance text**	**Unbalance** Yellow	AU_IND1_11 = 1 or IND1_11 = 1	*Unbalance*
24.4	**Unbalance text**	**Unbalance** Grey	IND1_11 = 0	*Unbalance*
25.1	**Cosphi warning**	■ Yellow flashing	AU_IND1_12 = 1	*Unacknowledged warning*
25.2	**Cosphi warning**	■ Yellow	IND1_12 = 1	*warning*
25.3	**Cosphi text**	**Cosphi** Yellow	AU_IND1_12 = 1 or IND1_12 = 1	*Cosphi*
25.4	**Cosphi text**	**Cosphi** Grey	IND1_12 = 0	*Cosphi*
26.1	**Rotation warning**	■ Yellow flashing	AU_IND1_13 = 1	*Unacknowledged warning*
26.2	**Rotation warning**	■ Yellow	IND1_13 = 1	*warning*
26.3	**Rotation text**	**Rotation** Yellow	AU_IND1_13 = 1 or IND1_13 = 1	*Rotation*
26.4	**Rotation text**	**Rotation** Grey	IND1_13 = 0	*Rotation*
27.1	**PTC temperature warning**	■ Yellow flashing	AU_IND1_14 = 1	*Unacknowledged warning*
27.2	**PTC temperature warning**	■ Yellow	IND1_14 = 1	*warning*
27.3	**PTC temperature text**	**PTC temperature** Yellow	AU_IND1_14 = 1 or IND1_14 = 1	*PTC temperature*
27.4	**PTC temperature text**	**PTC temperature** Grey	IND1_14 = 0	*PTC temperature*

No	Description	Presentation	Condition	Remarks
28.1	**Undervoltage warning**	■ Yellow flashing	AU_IND1_15 = 1	*Unacknowledged warning*
28.2	**Undervoltage warning**	■ Yellow	IND1_15 = 1	*warning*
28.3	**Undervoltage text**	**Undervoltage** Yellow	AU_IND1_15 = 1 or IND1_15 = 1	*Undervoltage*
28.4	**Undervoltage text**	**Undervoltage** Grey	IND1_15 = 0	*Undervoltage*
29.1	**Start limitation warning**	■ Yellow flashing	AU_IND2_00 = 1	*Unacknowledged warning*
29.2	**Start limitation warning**	■ Yellow	IND2_00 = 1	*warning*
29.3	**Start limitation text**	**Start limitation** Yellow	AU_IND2_00 = 1 or IND2_00 = 1	*Start limitation*
29.4	**Start limitation text**	**Start limitation** Grey	IND2_00 = 0	*Start limitation*
30.1	**Auto reclosure warning**	■ Yellow flashing	AU_IND2_01 = 1	*Unacknowledged warning*
30.2	**Auto reclosure warning**	■ Yellow	IND2_01 = 1	*warning*
30.3	**Auto reclosure text**	**Auto reclosure** Yellow	AU_IND2_01 = 1 or IND2_01 = 1	*Auto reclosure*
30.4	**Auto reclosure text**	**Auto reclosure** Grey	IND2_01 = 0	*Auto reclosure*
31.1	**MCU temperature warning**	■ Yellow flashing	AU_IND2_02 = 1	*Unacknowledged warning*
31.2	**MCU temperature warning**	■ Yellow	IND2_02 = 1	*warning*
31.3	**MCU temperature text**	**MCU temperature** Yellow	AU_IND2_02 = 1 or IND2_02 = 1	*MCU temperature*
31.4	**MCU temperature text**	**MCU temperature** Grey	IND2_02 = 0	*MCU temperature*
ALARMS				
32.1	**Thermal overload alarm**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
32.2	**Thermal overload alarm**	■ Red	IND1_00 = 1	*alarm*
32.3	**Thermal overload text**	**Thermal overload** Red	AU_IND1_00 = 1 or IND1_00 = 1	*Thermal overload*
32.4	**Thermal overload text**	**Thermal overload** Grey	IND1_00 = 0	*Thermal overload*

No	Description	Presentation	Condition	Remarks
33.1	**Phase loss L1 alarm**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
33.2	**Phase loss L1 alarm**	■ Red	IND1_01 = 1	*alarm*
33.3	**Phase loss L1 text**	**Phase loss L1** Red	AU_IND1_01 = 1 or IND1_01 = 1	*Phase loss L1*
33.4	**Phase loss L1 text**	**Phase loss L1** Grey	IND1_01 = 0	*Phase loss L1*
34.1	**Phase loss L2 alarm**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
34.2	**Phase loss L2 alarm**	■ Red	IND1_02 = 1	*alarm*
34.3	**Phase loss L2 text**	**Phase loss L2** Red	AU_IND1_02 = 1 or IND1_02 = 1	*Phase loss L2*
34.4	**Phase loss L2 text**	**Phase loss L2** Grey	IND1_02 = 0	*Phase loss L2*
35.1	**Phase loss L3 alarm**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
35.2	**Phase loss L3 alarm**	■ Red	IND1_03 = 1	*alarm*
35.3	**Phase loss L3 text**	**Phase loss L3** Red	AU_IND1_03 = 1 or IND1_03 = 1	*Phase loss L3*
35.4	**Phase loss L3 text**	**Phase loss L3** Grey	IND1_03 = 0	*Phase loss L3*
36.1	**Underload alarm**	■ Red flashing	AU_IND1_04 = 1	*Unacknowledged alarm*
36.2	**Underload alarm**	■ Red	IND1_04 = 1	*alarm*
36.3	**Underload text**	**Underload** Red	AU_IND1_04 = 1 or IND1_04 = 1	*Underload*
36.4	**Underload text**	**Underload** Grey	IND1_04 = 0	*Underload*
37.1	**Noload alarm**	■ Red flashing	AU_IND1_05 = 1	*Unacknowledged alarm*
37.2	**Noload alarm**	■ Red	IND1_05 = 1	*alarm*
37.3	**Noload text**	**Noload** Red	AU_IND1_05 = 1 or IND1_05 = 1	*Noload*
37.4	**Noload text**	**Noload** Grey	IND1_05 = 0	*Noload*
38.1	**Stall alarm**	■ Red flashing	AU_IND1_06 = 1	*Unacknowledged alarm*
38.2	**Stall alarm**	■ Red	IND1_06 = 1	*alarm*

No	Description	Presentation	Condition	Remarks
38.3	**Stall text**	**Stall** Red	AU_IND1_06 = 1 or IND1_06 = 1	*Stall*
38.4	**Stall text**	**Stall** Grey	IND1_06 = 0	*Stall*
39.1	**Feedback CFA alarm**	■ Red flashing	AU_IND1_07 = 1	*Unacknowledged alarm*
39.2	**Feedback CFA alarm**	■ Red	IND1_07 = 1	*alarm*
39.3	**Feedback CFA text**	**Feedback CFA** Red	AU_IND1_07 = 1 or IND1_07 = 1	*Feedback CFA*
39.4	**Feedback CFA text**	**Feedback CFA** Grey	IND1_07 = 0	*Feedback CFA*
40.1	**Feedback CFB alarm**	■ Red flashing	AU_IND1_08 = 1	*Unacknowledged alarm*
40.2	**Feedback CFB alarm**	■ Red	IND1_08 = 1	*alarm*
40.3	**Feedback CFB text**	**Feedback CFB** Red	AU_IND1_08 = 1 or IND1_08 = 1	*Feedback CFB*
40.4	**Feedback CFB text**	**Feedback CFB** Grey	IND1_08 = 0	*Feedback CFB*
41.1	**Feedback CFC alarm**	■ Red flashing	AU_IND1_09 = 1	*Unacknowledged alarm*
41.2	**Feedback CFC alarm**	■ Red	IND1_09 = 1	*alarm*
41.3	**Feedback CFC text**	**Feedback CFC** Red	AU_IND1_09 = 1 or IND1_09 = 1	*Feedback CFC*
41.4	**Feedback CFC text**	**Feedback CFC** Grey	IND1_09 = 0	*Feedback CFC*
42.1	**Parameter failure alarm**	■ Red flashing	AU_IND2_04 = 1	*Unacknowledged alarm*
42.2	**Parameter failure alarm**	■ Red	IND2_04 = 1	*alarm*
42.3	**Parameter failure text**	**Parametering failure** Red	AU_IND2_04 = 1 or IND2_04 = 1	*Parametering failure*
42.4	**Parameter failure text**	**Parametering failure** Grey	IND2_04 = 0	*Parametering failure*
43.1	**External trip alarm**	■ Red flashing	AU_IND3_05 = 1	*Unacknowledged alarm*
43.2	**External trip alarm**	■ Red	IND3_05 = 1	*alarm*
43.3	**External trip text**	**External trip** Red	AU_IND2_05 = 1 or IND2_05 = 1	*External trip*

No	Description	Presentation	Condition	Remarks
43.4	**External trip text**	**External trip** Grey	IND2_05 = 0	*External trip*
44.1	**Testmode failure trip alarm**	■ Red flashing	AU_IND2_06 = 1	*Unacknowledged alarm*
44.2	**Testmode failure trip alarm**	■ Red	IND2_06 = 1	*alarm*
44.3	**Testmode failure trip text**	**Testmode failure trip** Red	AU_IND2_06 = 1 or IND2_06 = 1	*Testmode failure trip*
44.4	**Testmode failure trip text**	**Testmode failure trip** Grey	IND2_06 = 0	*Testmode failure trip*
45.1	**EM-stop alarm**	■ Red flashing	AU_IND2_07 = 1	*Unacknowledged alarm*
45.2	**EM-stop alarm**	■ Red	IND2_07 = 1	*alarm*
45.3	**EM-stop text**	**EM-stop** Red	AU_IND2_07 = 1 or IND2_07 = 1	*EM-stop*
45.4	**EM-stop text**	**EM-stop** Grey	IND2_07 = 0	*EM-stop*
46.1	**Internal fault alarm**	■ Red flashing	AU_IND2_08 = 1	*Unacknowledged alarm*
46.2	**Internal fault alarm**	■ Red	IND2_08 = 1	*alarm*
46.3	**Internal fault text**	**Internal fault** Red	AU_IND2_08 = 1 or IND2_08 = 1	*Internal fault*
46.4	**Internal fault text**	**Internal fault** Grey	IND2_08 = 0	*Internal fault*
47.1	**External fault alarm**	■ Red flashing	AU_IND2_09 = 1	*Unacknowledged alarm*
47.2	**External fault alarm**	■ Red	IND2_09 = 1	*alarm*
47.3	**External fault text**	**External trip cmd** Red	AU_IND2_09 = 1 or IND2_09 = 1	*External fault*
47.4	**External fault text**	**External trip cmd** Grey	IND2_09 = 0	*External fault*
48.1	**Main switch OFF alarm**	■ Red flashing	AU_IND2_10 = 1	*Unacknowledged alarm*
48.2	**Main switch OFF alarm**	■ Red	IND2_10 = 1	*alarm*
48.3	**Main switch OFF text**	**Main Switch OFF** Red	AU_IND2_10 = 1 or IND2_10 = 1	*Main switch OFF*

No	Description	Presentation	Condition	Remarks
48.4	**Main switch OFF text**	**Main Switch OFF** Grey	IND2_10 = 0	*Main switch OFF*
49.1	**Startup inhibit alarm**	■ Red flashing	AU_IND2_11 = 1	*Unacknowledged alarm*
49.2	**Startup inhibit alarm**	■ Red	IND2_11 = 1	*alarm*
49.3	**Startup inhibit text**	**Startup inhibit** Red	AU_IND2_11 = 1 or IND2_11 = 1	*Startup inhibit*
49.4	**Startup inhibit text**	**Startup inhibit** Grey	IND2_11 = 0	*Startup inhibit*
50.1	**MCB trip alarm**	■ Red flashing	AU_IND2_12 = 1	*Unacknowledged alarm*
50.2	**MCB trip alarm**	■ Red	IND2_12 = 1	*alarm*
50.3	**MCB trip text**	**MCB trip** Red	AU_IND2_12 = 1 or IND2_12 = 1	*MCB trip*
50.4	**MCB trip text**	**MCB trip** Grey	IND2_12 = 0	*MCB trip*
51.1	**Motor still running alarm**	■ Red flashing	AU_IND2_13 = 1	*Unacknowledged alarm*
51.2	**Motor still running alarm**	■ Red	IND2_13 = 1	*alarm*
51.3	**Motor still running text**	**Motor still running** Red	AU_IND2_13 = 1 or IND2_13 = 1	*Motor still running*
51.4	**Motor still running text**	**Motor still running** Grey	IND2_13 = 0	*Motor still running*
52.1	**Earth fault alarm**	■ Red flashing	AU_IND1_10 = 1	*Unacknowledged alarm*
52.2	**Earth fault alarm**	■ Red	IND1_10 = 1	*alarm*
52.3	**Earth fault text**	**Earth fault** Red	AU_IND1_10 = 1 or IND1_10 = 1	*Earth fault*
52.4	**Earth fault text**	**Earth fault** Grey	IND1_10 = 0	*Earth fault*
53.1	**Unbalance alarm**	■ Red flashing	AU_IND1_11 = 1	*Unacknowledged alarm*
53.2	**Unbalance alarm**	■ Red	IND1_11 = 1	*alarm*
53.3	**Unbalance text**	**Unbalance** Red	AU_IND1_11 = 1 or IND1_11 = 1	*Unbalance*
53.4	**Unbalance text**	**Unbalance** Grey	IND1_11 = 0	*Unbalance*
54.1	**Cosphi alarm**	■ Red flashing	AU_IND1_12 = 1	*Unacknowledged alarm*

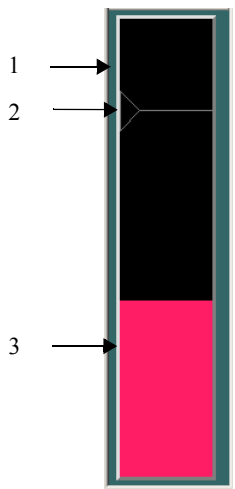
No	Description	Presentation	Condition	Remarks
54.2	**Cosphi alarm**	■ Red	IND1_12 = 1	*alarm*
54.3	**Cosphi text**	**Cosphi** Red	AU_IND1_12 = 1 or IND1_12 = 1	*Cosphi*
54.4	**Cosphi text**	**Cosphi** Grey	IND1_12 = 0	*Cosphi*
55.1	**Rotation alarm**	■ Red flashing	AU_IND1_13 = 1	*Unacknowledged alarm*
55.2	**Rotation alarm**	■ Red	IND1_13 = 1	*alarm*
55.3	**Rotation text**	**Rotation** Red	AU_IND1_13 = 1 or IND1_13 = 1	*Rotation*
55.4	**Rotation text**	**Rotation** Grey	IND1_13 = 0	*Rotation*
56.1	**PTC temperature alarm**	■ Red flashing	AU_IND1_14 = 1	*Unacknowledged alarm*
56.2	**PTC temperature alarm**	■ Red	IND1_14 = 1	*alarm*
56.3	**PTC temperature text**	**PTC temperature** Red	AU_IND1_14 = 1 or IND1_14 = 1	*PTC temperature*
56.4	**PTC temperature text**	**PTC temperature** Grey	IND1_14 = 0	*PTC temperature*
57.1	**Undervoltage alarm**	■ Red flashing	AU_IND1_15 = 1	*Unacknowledged alarm*
57.2	**Undervoltage alarm**	■ Red	IND1_15 = 1	*alarm*
57.3	**Undervoltage text**	**Undervoltage** Red	AU_IND1_15 = 1 or IND1_15 = 1	*Undervoltage*
57.4	**Undervoltage text**	**Undervoltage** Grey	IND1_15 = 0	*Undervoltage*
58.1	**Start limitation alarm**	■ Red flashing	AU_IND2_00 = 1	*Unacknowledged alarm*
58.2	**Start limitation alarm**	■ Red	IND2_00 = 1	*alarm*
58.3	**Start limitation text**	**Start limitation** Red	AU_IND2_00 = 1 or IND2_00 = 1	*Start limitation*
58.4	**Start limitation text**	**Start limitation** Grey	IND2_00 = 0	*Start limitation*
59.1	**PTC short circuit alarm**	■ Red flashing	AU_IND2_01 = 1	*Unacknowledged alarm*
59.2	**PTC short circuit alarm**	■ Red	IND2_01 = 1	*alarm*
59.3	**PTC short circuit text**	**PTC short circuit** Red	AU_IND2_01 = 1 or IND2_01 = 1	*PTC short circuit*

No	Description	Presentation	Condition	Remarks
59.4	**PTC short circuit text**	**PTC short circuit** Grey	IND2_01 = 0	*PTC short circuit*
60.1	**PTC open circuit alarm**	■ Red flashing	AU_IND2_02 = 1	*Unacknowledged alarm*
60.2	**PTC open circuit alarm**	■ Red	IND2_02 = 1	*alarm*
60.3	**PTC open circuit text**	**PTC open circuit** Red	AU_IND2_02 = 1 or IND2_02 = 1	*PTC open circuit*
60.4	**PTC open circuit text**	**PTC open circuit** Grey	IND2_02 = 0	*PTC open circuit*
61.1	**Torque trip alarm**	■ Red flashing	AU_IND2_03 = 1	*Unacknowledged alarm*
61.2	**Torque trip alarm**	■ Red	IND2_03 = 1	*alarm*
61.3	**Torque trip text**	**Torque trip** Red	AU_IND2_03 = 1 or IND2_03 = 1	*Torque trip*
61.4	**Torque trip text**	**Torque trip** Grey	IND2_03 = 0	*Torque trip*

Graphic Element

BargraphMC01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Limit Indication** ▷	at 100%		
		Filled Yellow	AL_BLK = 1 and IND1_10 =1	*Alarm blocked*
		Unfilled Yellow	AL_BLK = 1	*Alarm blocked*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Filled Red flashing	AU_IND = 1 and IND1_10 = 1	*Unacknowledged alarm*
		Unfilled Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Filled Light Red	IND1_10 = 1	*High motor current*
		Grey	-	*Limit*
3	**Bargraph**		REALRES	
		Red flashing	AU_IND = 1 or BOOLE = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1 or IND1_11 = 1	*Error*
		Yellow flashing	BOOLD = 1	*Unacknowledge warning*
		Yellow	IND1_07 = 1	*Warning*
		Green	-	*NormalColor*

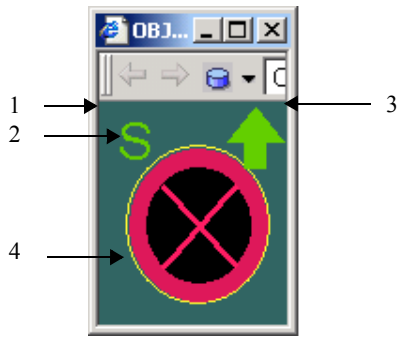
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (1..4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

Motor01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible	-	
2	**Mode or Control point**		ModeIndVis = true	*You can configure your own text instead of using the figures*
		* Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*

No	Description	Default Presentation	Condition	Remarks
2 cont.		**A** Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0 and IND2_14 = 0 and IND2_07 = 1	*Indicates Auto Start Init Not Performed*
		M Green	ManModeIndVis = true and IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
			ManModeIndVis = false	
		S Green	IND2_04 = 1	*Sequence Control*
		L Green	IND2_01 = 1	*Local Control*
		LM Yellow	BOOLH = 1	*Local - MCC*
		C Green	IND2_01 = 0 and IND2_04 = 0 and IND2_02 = 0 and IND2_03 = 0	*Central Control*
		-	ModeIndVis = false	*Mode or Control point is invisible*
3	**Direction Indication**		DirectionVisible = true	
		Green ↑	IND1_13 = 1	*Forward/High*
		Green ↓	IND1_14 = 1	*Reverse/Low*
		-	DirectionVisible = false	*Direction is invisible*

No	Description	Default Presentation	Condition	Remarks
4	**Motor Status** Shape		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent the start*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *Direction Change*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
	Color	Grey	IND2_03 = 1	*Out of service*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Error*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	

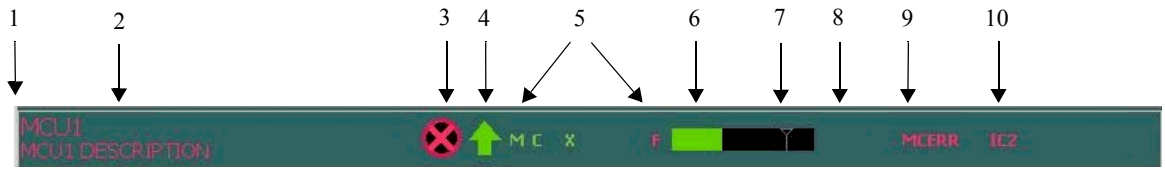
The conditions are in priority order. Underlined parameters are configurable.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeIndVis	2. Mode or Control point	**True,** False	
ManModeIndVis	2. Mode or Control point	**True,** False	
DirectionVisible	3. Direction Indication	**True,** False	

ObjectLine01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1 or BOOLE = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1 or IND1_11 = 1	*Alarm*
		Yellow flashing	BOOLD = 1	*Acknowledge warning*
		Yellow	IND1_07 = 1	*Warning*
		Green	-	*Normal*

No	Description	Default Presentation	Condition	Remarks
3	**Motor Status**		IND2_07 = 0	*Not Ready for Start* *Error or interlocks prevent*
			IND2_14 = 1 and IND2_07 = 1	*A-Interlock*
			IND1_12 = 1 or IND1_15 = 1	*Run* *Direction Change*
			IND2_06 = 1	*Start Ready Auto. The motor starts when the process conditions are satisfied*
			IND1_12 = 0	*Motor ready to start*
		Grey	IND2_03 = 1	*Out of service*
		Green flashing	IND1_15 = 1	*Change of Direction in progress*
		Green	-	
4	**Direction Indication**	Green 	IND1_13 = 1	*Forward/High*
		Green 	IND1_14 = 1	*Reverse/Low*
5	**Status Indication**			*Status Indication*
5.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		A Green flashing	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0 and IND2_06 = 0 and IND1_12 = 0	*Indicates Auto Start Init Not Performed*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*

No	Description	Default Presentation	Condition	Remarks
5.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		LM Yellow	BOOLH = 1	*Local - MCC*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*
5.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_13 = 1 or (IND2_11 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_12 = 1 or (IND2_10 = 1 and IND1_12 = 0)))	*Safety interlock or Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks. Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
5.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
5.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
5.6	**Warnings or Alarms**	**W** Yellow	IND1_07 or BOOLD	*Collective Warning indication*
		F Red	IND1_11 or BOOLE or IND1_08	*Collective Fault Indication*

No	Description	Default Presentation	Condition	Remarks
6	**Bargraph**	Green	REAL_RES	*Motor current value*
		-	REAL_RES_HILIM <= 0.1	*Bargraph invisible*
7	**Limit Indication** 	at 100%		*Limit Indication*
		Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Red	IND1_10 = 1	*High motor current*
		Grey	-	
		-	REAL_RES_HILIM <= 0.1	*Limit Indication invisible*
8	**Error 1**	**COERR** Red flashing	AU_IND1_00 = 1	*Communication unack. error*
		TRIP Red flashing	AU_IND1_02 = 1	*Tripped unack. error*
		ESTOP Red flashing	AU_IND1_03 = 1	*Emergency stop unack. error*
		COERR Red	IND1_00 = 1	*Communication error*
		TRIP Red	IND1_02 = 1	*Tripped error*
		ESTOP Red	IND1_03 = 1	*Emergency stop error*
9	**Error 2**	**MCERR** Red flashing	AU_IND1_04 = 1	*Main Contactor unack error*
		MONL Red flashing	AU_IND1_05 = 1	*Monitor low unack error*
		MONH Red flashing	AU_IND1_06 = 1	*Monitor high unack error*
		MCERR Red	IND1_04 = 1	*Main Contactor error*
		MONL Red	IND1_05 = 1	*Monitor low error*
		MONH Red	IND1_06 = 1	*Monitor high error*

No	Description	Default Presentation	Condition	Remarks
10	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*

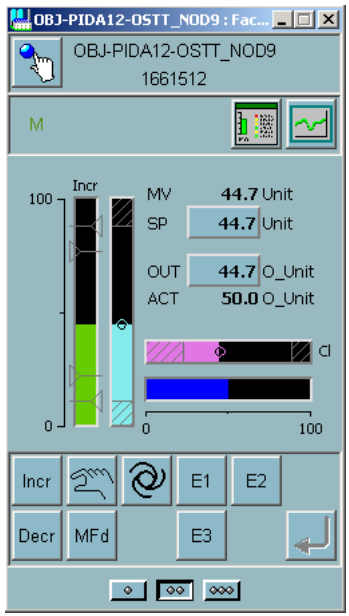
Configuration:

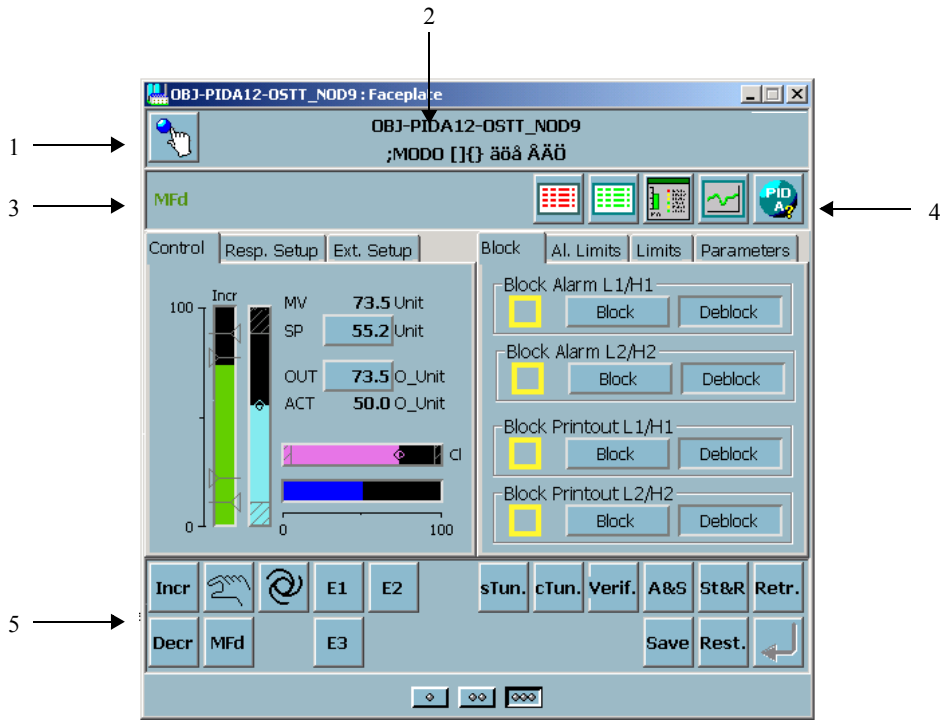
Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Transparent**, any color	

PIDCONA, Adaptive PID Ctrl

Faceplate

Presentation:





Behavior:

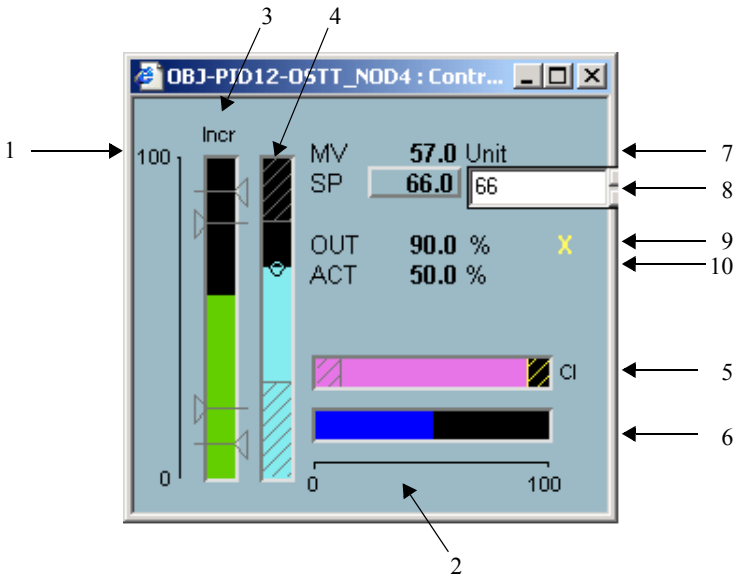
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**BaLo** Dark green	LOCAL = 1	*Bal Local mode*
		Bal Dark green	BAL = 1	*Bal mode*
		MCp Dark green	CLAMP = 1	*Man Clamped mode*

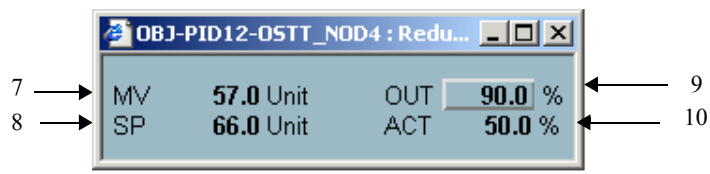
No	Description	Default Presentation	Condition	Remarks
3.1 cont.	**Mode**	**MFd** Dark green	MANFD = 1	*Man Forced mode*
		M AT Dark green	MAN = 1 and ATENBL = 1	*Man mode and Autotuning*
		M Dark green	MAN = 1	*Man mode*
		A AT Dark green	AUTO = 1 and ATENBL = 1	*Auto mode and Autotuning*
		A Ad Dark green	AUTO = 1 and ADAPON = 1	*Auto mode and Adaptation*
		A Dark green	AUTO = 1	*Auto mode*
		E1 AT Dark green	E1 = 1 and ATENBL = 1	*E1 mode and Autotuning*
		E1 Ad Dark green	E1 = 1 and ADAPON = 1	*E1 mode and Adaptation*
		E1 Dark green	E1 = 1	*E1 mode*
		E2 AT Dark green	E2 = 1 and ATENBL = 1	*E2 mode and Autotuning*
		E2 Ad Dark green	E2 = 1 and ADAPON = 1	*E2 mode and Adaptation*
		E2 Dark green	E2 = 1	*E2 mode*
		E3 AT Dark green	E3 = 1 and ATENBL = 1	*E3 mode and Autotuning*
		E3 Dark green	E3 = 1	*E3 mode*
3.2	**Print Blk**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	

No	Description	Default Presentation	Condition	Remarks
5	**Incr**	Increase output with 0,5 unit	MAN = 1	
		Increase setpoint with 0,5 unit	AUTO = 1	
	Decr	Decrease output with 0,5 unit	MAN = 1	
		Decrease setpoint with 0,5 unit	AUTO = 1	
	Man	Set to Man Mode		Set MMI_MAN = 1
	Auto	Set to Auto Mode		Set MMI_AUTO = 1
	MFd	Set to Man Force Mode		Set MANFD = 1
	E1	Set to E1 Mode		Set MMI_E1 = 1
	E2	Set to E2 Mode		Set MMI_E2 = 1
	E3	Set to E3 Mode		Set MMI_E3 = 1
	sTun.	Start Autotuning		Set START_TUNE = 1
	cTun.	Continue Autotuning		Set CONT-TUNE = 1
	Verif.	Try to Verify Setting		Set VERIFY_REQUEST = 1
	A&S	Accept Autotuning and Save present parameters		Set SAVE_REQUEST = 1
	S&R	Store Autotuning and Restore present		Set RESTORE_REQUEST = 1
	Retr.	Retrieve Aborted Setting		Set RETRIEVE = 1
	Save	Save present parameters		Set SAVE_REQUEST = 1
	Rest.	Restore present parameters		Set RESTORE_REQUEST = 1

Control and ReducedControl

Presentation:





Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**MV Range Max**	Black	MAX	*Range Max of the MV and SP value*
1.2	**MV Range Min**	Black	MIN	*Range Min of the MV and SP value*
2.1	**OUT Range Max**	Black	OUTMAX	*Range Max of OUT and ACT value*
2.2	**OUT Range Min**	Black	OUTMIN	*Range Min of OUT and ACT value*
3.1	**Direction**	**Incr** Black	REVACT = 1	*Increase of measured value*
		Decr Black	REVACT = 0	*Decrease of measured value*
3.2	**Measured Value Bargraph**		MV	*Measured Value*
		Green	-	
3.3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
3.4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	

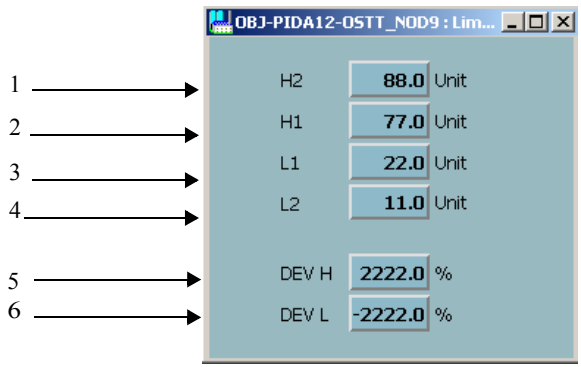
No	Description	Default Presentation	Condition	Remarks
3.4 cont.		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
3.5	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
3.6	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
4.1	**SP Value Bargraph**	Cyan	SETP	*Setpoint value*
4.2	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Default Presentation	Condition	Remarks
4.3	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
5.1	**Opening or Closing**	**Op** Black	ACT_DIR = OPENING	*Actuator position opening*
		Cl Black	ACT_DIR = CLOSING	*Actuator position closing*
5.2	**OUT Value Bargraph**		OUT	*Output value*
		Magenta	-	
5.3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > OUTMAX or (EOHL > OUTMAX and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
5.4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < OUTMIN or (EOLL < OUTMIN and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
6	**ACT Value Bargraph**		ACTPOS	*Actuator value*
		Blue	SHOW_ACT = 1	
7.1	**MV Text**	**MV** Black		*Text in front of the value*
7.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*Signal error*
			MV	*Measured value*
		Black	-	
7.3	**MV Unit**		UNIT	*Measured unit*
		Black	-	

No	Description	Default Presentation	Condition	Remarks
8.1	**SP Text**	**SP** Black		*Text in front of the value*
8.2	**SP Value**		SETP	*Setpoint value*
		Black	-	
8.3	**SP Unit**		UNIT	*Setpoint unit*
		Black	-	
9.1	**OUT Text**	**OUT** Black		*Text in front of the value*
9.2	**OUT Value**		OUT	*Output value*
		Black	-	
9.3	**OUT Unit**	Black	OUTUNIT	*Output unit*
9.4	**External OUT Limitation Indication**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
10.1	**ACT Text**	**ACT** Black	SHOW_ACT = 1	*Text in front of the value*
10.2	**ACT Value**		ACTPOS	*Actuator value*
		Black	SHOW_ACT = 1	
10.3	**ACT Unit**	Black	OUTUNIT SHOW_ACT = 1	*Actuator unit*

Limits

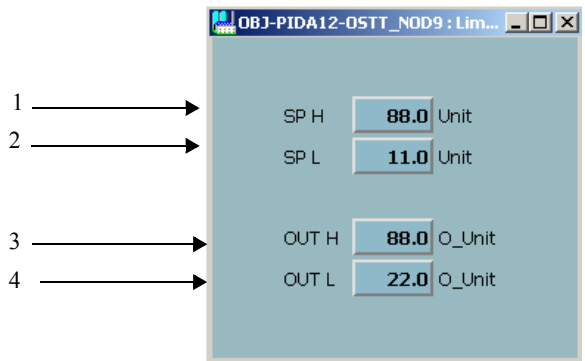
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	H2	**H2** Black		
		Black	MVH2	
2	H1	**H1** Black		
		Black	MVH1	
3	L1	**L1** Black		
		Black	MVL1	
4	L2	**L2** Black		
		Black	MVL2	
5	DEV H	**DEV H** Black		
		Black	DEVH	
6	DEV L	**DEV L** Black		
		Black	DEVL	

Presentation:

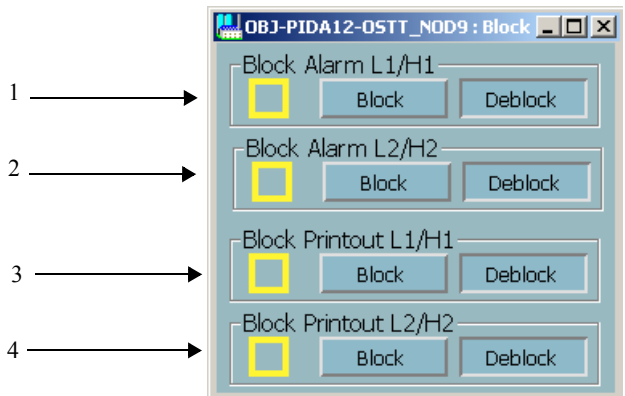


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	SP H	**SP H** Black		
		Black	SPH	
2	SP L	**SP L** Black		
		Black	SPL	
3	OUT H	**OUT H** Black		
		Black	OUTPH	
4	OUT L	**OUT L** Black		
		Black	OUTPL	

Block

Presentation:



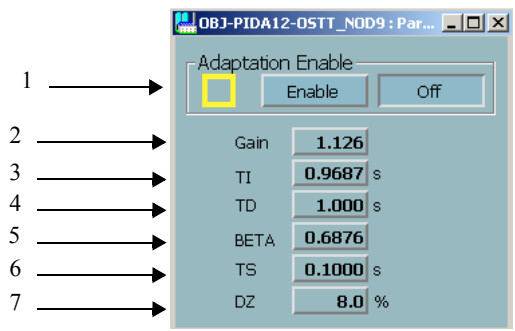
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm 1**	**Block Alarm L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	AL_F1_BLK = 1	
		Deblock pressed	AL_F1_BLK = 0	
2	**Block Alarm 2**	**Block Alarm L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	AL_F2_BLK = 1	
		Deblock pressed	AL_F2_BLK= 0	
3	**Block Printout 1**	**Block Printout L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F1_BLK = 1	

No	Description	Default Presentation	Condition	Remarks
3 cont.		**Deblock** pressed	PRINT_F1_BLK = 0	
4	**Block Printout 2**	**Block Printout L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F2_BLK = 1	
		Deblock pressed	PRINT_F2_BLK = 0	

Parameters

Presentation:



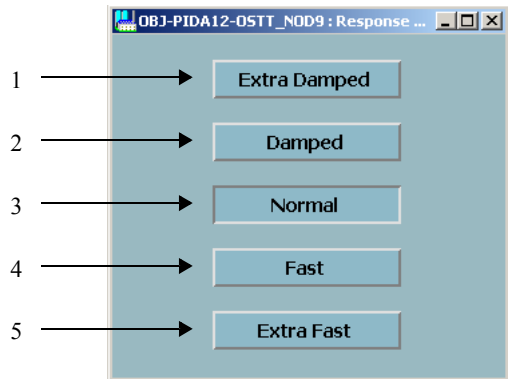
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Adaptation Enable**	**Adaptation Enable** Black		
		! Yellow	Blocked	
		Enable pressed	ADAPENBL = 1	
		Off pressed	ADAPENBL = 0	
2.1	**Gain**	**Gain** Black		*Gain*

No	Description	Default Presentation	Condition	Remarks
2.2	**Value**	Black	GAIN	
3.1	**TI**	**TI** Black		*Integration time*
3.2	**Value**	Black	TI	
3.3	**Unit**	**s** Black		
4.1	**TD**	**TD** Black		*Derivation time*
4.2	**Value**	Black	TD	
4.3	**Unit**	**s** Black		
5.1	**BETA**	**BETA** Black		*Setpoint factor BETA*
5.2	**Value**	Black	BETA	
6.1	**TS**	**TS** Black		*Sampling time*
6.2	**Value**	Black	TS	
6.3	**Unit**	**s** Black		
7.1	**DZ**	**DZ** Black		*Dead zone*
7.2	**Value**	Black	DZ, CTRL = ON - OFF	
7.3	**Unit**	**%** Black	DZ, CTRL = ON - OFF	

Response Setup

Presentation:

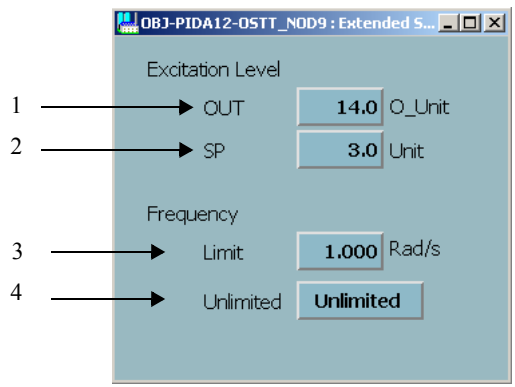


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Extra Damped**	**Extra Damped** pressed	RESPTYPE = 1	
		Extra Damped unpressed		
2	**Damped**	**Damped** pressed	RESPTYPE = 2	
		Damped unpressed		
3	**Normal**	**Normal** pressed	RESPTYPE = 3	
		Normal unpressed		
4	**Fast**	**Fast** pressed	RESPTYPE = 4	
		Fast unpressed		
5	**Extra Fast**	**Extra Fast** pressed	RESPTYPE = 5	
		Extra Fast unpressed		

Extended Setup

Presentation:



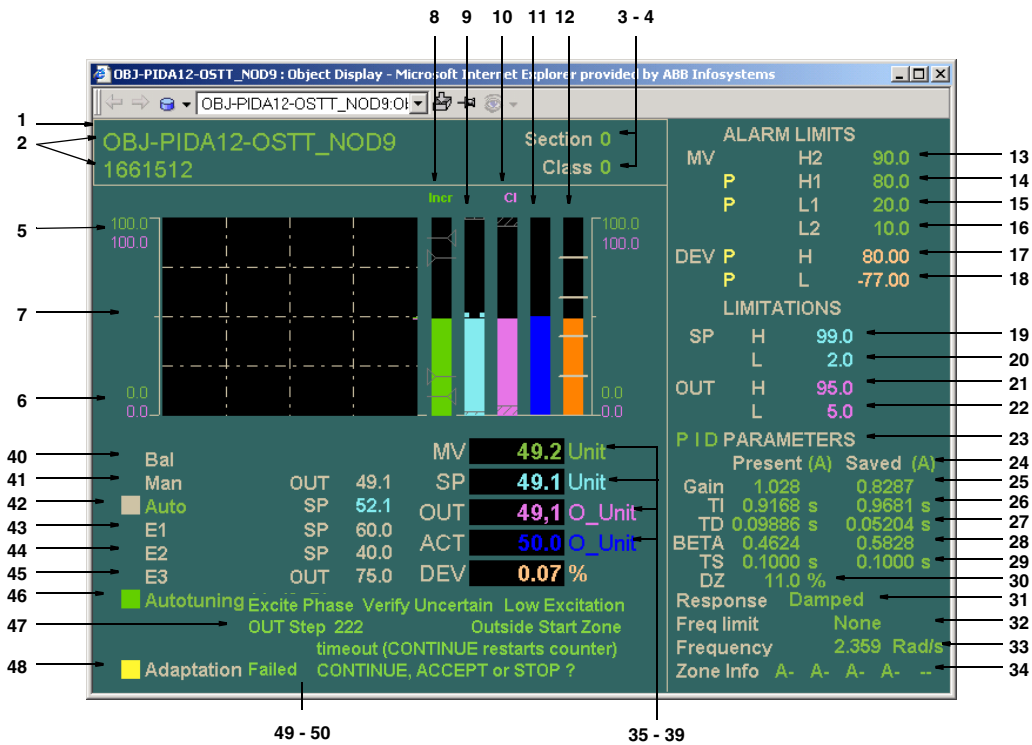
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Excitation Level Output Value**			*The Excitation level OUT object value*
1.1	**OUT**	**OUT** Black		*Text in front of the value*
1.2	**OUT Value**	Black	EXCLOUT	*Output value*
1.3	**OUT Unit**	Black	OUTUNIT	*Output unit*
2	**Excitation Level Setpoint Value**			*The Excitation level SP object value*
2.1	**SP**	**SP** Black		*Text in front of the value*
2.2	**SP Value**	Black	EXCLSP	*Setpoint value*
2.3	**SP Unit**	Black	UNIT	*Setpoint unit*
3.1	**Frequency Text**	**Frequency** Black		*Design frequency limit*
3.2	**Value**	Black	FREQLIM	*Text in front of the value*
		None Black		*Infinite frequency limit*
3.3	**Unit**	**Rad/s** Black		*Unit*

No	Description	Default Presentation	Condition	Remarks
4.1	**Unlimited**	**Unlimited** pressed	FREQ_UNLIMITED = 1	
4.2		**Unlimited** unpressed	FREQ_UNLIMITED = 0	

Object Display

Presentation:



Behavior:

No	Description	Presentation	Condition	Remarks
1	**SelectFrame**	White	SELECTED = 1	*Object select frame*
		Grey	-	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3	**Section**	**Section** Grey		*Text in front of the value*
		Green	PROC_SEC	*Process section*
4	**Class**	**Class** Grey		*Text in front of the value*
		Green	CLASS	*Object class*
5	**MV Range Max**		MAX	*Range Max of MV and SP values*
		Green	-	
	OUT Range Max		OUTMAX	*Range Max of OUT and ACT values*
		Magenta	-	
6	**MV Range Min**		MIN	*Range Min of MV and SP values*
		Green	-	
	OUT Range Min		OUTMIN	*Range Min of OUT and ACT values*
		Magenta	-	

No	Description	Presentation	Condition	Remarks
7	**Measured Value Trim Curve**		MV	
		Green	-	
	Setpoint Value Trim Curve		SETP	
		Cyan	-	
	Output Value Trim Curve		OUT	
		Magenta	-	
8.1	**Direction**	**Incr** Green	REVACT = 1	*Increase. When measured value is increasing, it is counteracted with decreasing output.*
		Decr Green	REVACT = 0	*Decrease. When measured value is decreasing, output also decreasing.*
8.2	**Measured Value Bargraph**		MV	*Measured Value*
		Green		
8.3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
8.4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
8.5	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
8.6	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

No	Description	Presentation	Condition	Remarks
9.1	**Working SP Value Bargraph**		If AUTO = 1 or E1 = 1 or E2 = 1 or ATENBL =1	*Current Setpoint value*
		Cyan	Then WSP	*Working Setpoint value*
		Cyan	else SETP	*Auto Setpoint value*
9.2	**AUTOSP Value**		SETP	*Auto Setpoint value*
		Cyan	If SETP > WSP	
		Black	If SETP < WSP	
9.3	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
9.4	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
10.1	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Opening. When output is increasing the valve is opening.*
		Cl Magenta	ACT_DIR = CLOSING	*Closing. When output is increasing the valve is closing.*
10.2	**OUT Value Bargraph**		OUT	*Output value*
		Magenta	-	
10.3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > OUTMAX or (EOHL > OUTMAX and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	

No	Description	Presentation	Condition	Remarks
10.4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < OUTMIN or (EOLL < OUTMIN and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
11	**ACT Value Bargraph**		ACTPOS	*Actuator position.*
		Blue	SHOW_ACT = 1	
12.1	**Gain Scheduling Bargraph**		SCHEDIN	*Gain scheduling value in.*
		Brown		*Gain scheduling enabled.*
12.2	**Zone limit between zone 4 and 5**		ZLIM45	
		Grey		*Gain scheduling enabled.*
12.3	**Zone limit between zone 3 and 4**		ZLIM34	
		Grey		*Gain scheduling enabled.*
12.4	**Zone limit between zone 2 and 3**		ZLIM23	
		Grey		*Gain scheduling enabled.*
12.5	**Zone limit between zone 1 and 2**		ZLIM12	
		Grey		*Gain scheduling enabled.*
13	**ALARM LIMITS**			*Alarm limits*
13.1	**MV Text**	**MV** Grey		*Text in front of the line*
13.2	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked.*
13.3	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
13.4	**Alarm Indication**	■ Red flashing	AU_MV>H2 = 1	*Unacknowledged alarm.*
		■ Red	MV>H2 = 1	*Alarm.*
13.5	**H2 Text**	**H2** Grey		*Text in front of the value*
13.6	**H2 Value**	Green	MVH2	*High limit 2 value*
14.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*

No	Description	Presentation	Condition	Remarks
14.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
14.3	**Alarm Indication**	■ Red flashing	AU_MV>H1 = 1	*Unacknowledged alarm.*
		■ Red	MV>H1 = 1	*Alarm.*
14.4	**H1 Text**	**H1** Grey		*Text in front of the value*
14.5	**H1 Value**	Green	MVH1	*High limit 1 value*
15.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked.*
15.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
15.3	**Alarm Indication**	■ Red flashing	AU_MV<L1 = 1	*Unacknowledged alarm.*
		■ Red	MV<L1 = 1	*Alarm.*
15.4	**L1 Text**	**L1** Grey		*Text in front of the value*
15.5	**L1 Value**	Green	MVL1	*Low limit 1 value*
16.1	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked.*
16.2	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator.*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
16.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 = 1	*Unacknowledged alarm.*
		■ Red	MV<L2 = 1	*Alarm.*
16.4	**L2 Text**	**L2** Grey		*Text in front of the value*
16.5	**L2 Value**	Green	MVL2	*Low limit 2 value*
17.1	**DEV**	**DEV** Grey		
17.2	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked.*
17.3	**Alarm blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm block by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
17.4	**Alarm Indication**	■ Red flashing	AU_DEV>H1 = 1	*Unacknowledged alarm.*
		■ Red	DEV>H1 = 1	*Alarm.*
17.5	**H Text**	**H1** Grey		*Text in front of the value*

No	Description	Presentation	Condition	Remarks
17.6	**Value**	Cream	DEVH1	
18.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked.*
18.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
18.3	**Alarm Indication**	■ Red flashing	AU_DEV<L1 = 1	*Unacknowledged alarm.*
		■ Red	DEV<L1 = 1	*Alarm.*
18.4	**L Text**	**L1** Grey		*Text in front of the value*
18.5	**L Value**	Cream	DEVL1	
19	**LIMITATIONS**			*Limitations*
19.1	**SP Text**	**SP** Grey		*Setpoint*
19.2	**Warning Indication**	■ Yellow	SP=HL = 1	*Setpoint is equal to high setpoint limit*
19.3	**H Text**	**H** Grey		*High limit setpoint*
19.4	**H Value**	Cyan	SETPH	
20.1	**Warning Indication**	■ Yellow	SP=LL = 1	*Setpoint is equal to low setpoint limit*
20.2	**L Text**	**L** Grey		*Low limit setpoint*
20.3	**L Value**	Cyan	SETPL	
21.1	**OUT Text**	**OUT** Grey		*Output*
21.2	**Warning Indication**	■ Yellow	OUT=HL = 1	*Output is equal to output high limit*
21.3	**H Text**	**H** Grey		*Output high limit.*
21.4	**H Value**	Grey	OUTPH, EOLIM = 1	*Output high limit value.*
		Magenta	OUTPH, EOLIM = 0	
21.5	**External H value**	Magenta	EOLIM = 1	*External output high limit value*
		Grey	-	
22.1	**Warning Indication**	■ Yellow	OUT=LL = 1	*Output is equal to low output limit*

No	Description	Presentation	Condition	Remarks
22.2	**L Text**	**L** Grey		*Output low limit.*
22.3	**L Value**	Grey	OUTPL, EOLIM = 1	*Output low limit value.*
		Magenta	OUTPL, EOLIM = 0	
22.4	**External L Value**	Magenta	EOLIM = 1	*External output low limit value.*
		Grey	-	
23	**PARAMETERS**			
23.1	**P**	**P** Green	GAIN > 0	*Gain active*
23.2	**I**	**I** Green	GAIN > 0 and TI > 0	*Integration active*
23.3	**D**	**D** Green	GAIN > 0 and TD > 0	*Derivation active*
23.4	**Zone Text**	**Zone** Green	GSENBL = 1	*Gain scheduling active*
23.5	**Zone Value**	Green	GSENBL = 1	*Gain scheduling zone*
24.1	**Present Text**	**Present** Grey		*Present parameters*
24.2	**Text**		PRESENT_OBT = 0	*Default setting. Invisible.*
		(M) Green	PRESENT_OBT = 1	*Manual setting*
		(A) Green	PRESENT_OBT = 2	*Autotuned setting*
24.3	**Saved Text**	**Saved** Grey		*Saved parameters*
24.4	**Text**		SAVED_OBT = 0	*Default setting. Invisible.*
		(M) Green	SAVED_OBT = 1	*Manual setting*
		(A) Green	SAVED_OBT = 2	*Autotuned setting*
25.1	**Gain Text**	**Gain** Grey		*Gain*
25.2	**Present Gain Value**	Green		
25.3	**Saved Gain Value**	Green		
26.1	**TI Text**	**TI** Grey		*Integration time*
26.2	**Present TI Value**	Green	TI	
26.4	**Unit**	**s** Green		
26.5	**Saved TI Value**	Green		

No	Description	Presentation	Condition	Remarks
26.5	**Unit**	**s** Green		
27.1	**TD Text**	**TD** Grey		*Derivation time*
27.2	**Present TD Value**	Green	TD	
27.3	**Unit**	**s** Green		
27.4	**Saved TD Value**	Green		
27.5	**Unit**	**s** Green		
28.1	**BETA Text**	**BETA** Grey		*Setpoint factor BETA*
28.2	**Present BETA Value**	Green	BETA	
28.3	**Saved BETA Value**	Green		
29.1	**Alarm Indication**	■ Red flashing	INV_TSAMP = 1	*Unacknowledged TS alarm.*
		■ Red	INV_TSAMP = 1	*TS Alarm. There is one or more invalid sample rates.*
29.2	**TS Text**	**TS** Grey		*Sampling time*
29.3	**Present TS Value**	Green	TS	
29.4	**Unit**	**s** Green		
29.5	**Saved TS Value**	Green		
29.6	**Unit**	**s** Green		
30.1	**DZ Text**	**DZ** Grey		*Deadzone*
30.2	**Value**	Green	DZ	
30.3	**Unit**	**%** Green		
31.1	**Response Text**	**Response** Grey		*Response type*
31.2	**Response Type Text**	**Extra Damped** Green	RESPTYPE = EXTRA DAMPED	
		Damped Green	RESPTYPE = DAMPED	
		Normal Green	RESPTYPE = NORMAL	
		Fast Green	RESPTYPE = FAST	
		Extra Fast Green	RESPTYPE = EXTRA FAST	

No	Description	Presentation	Condition	Remarks
32.1	**Freq Limit Text**	**Freq Limit** Grey		*Design frequency limit*
32.2	**Value**	Green	FREQLIM	
		None Green		*Infinite frequency limit.*
32.3	**Unit**	**Rad/s** Green		
33.1	**Frequency Text**	**Frequency** Grey		*Design frequency. Shown only when an autotuned setting exist.*
33.2	**Value**	Green		
33.3	**Unit**	**Rad/s** Green		*Design frequency unit.*
34.1	**Zone Info Text**	**Zone Info** Grey		*Gain scheduling zone information*
34.2	**Text**	**- -** Green	ZONE1_OBT = 0	*Default*
		M - Green	ZONE1_OBT = 1	*Manual setting*
		A - Green	ZONE1_OBT = 2	*Autotuned setting*
		- V Green	ZONE1_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE1_OBT = 5	*Manual setting and the zone has been visited during autotuning*
		AV Green	ZONE1_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*

No	Description	Presentation	Condition	Remarks
34.3	**Text**	**- -** Green	ZONE2_OBT = 0	*Default*
		M - Green	ZONE2_OBT = 1	*Manual setting*
		A - Green	ZONE2_OBT = 2	*Autotuned setting*
		- V Green	ZONE2_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE2_OBT = 5	*Manual setting and the zone has been visited during autotuning*
		AV Green	ZONE2_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
34.4	**Text**	**- -** Green	ZONE3_OBT = 0	*Default*
		M - Green	ZONE3_OBT = 1	*Manual setting*
		A - Green	ZONE3_OBT = 2	*Autotuned setting*
		- V Green	ZONE3_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE3_OBT = 5	*Manual setting and the zone has been visited during autotuning*
		AV Green	ZONE3_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
34.5	**Text**	**- -** Green	ZONE4_OBT = 0	*Default*
		M - Green	ZONE4_OBT = 1	*Manual setting*
		A - Green	ZONE4_OBT = 2	*Autotuned setting*
		- V Green	ZONE4_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE4_OBT = 5	*Manual setting and the zone has been visited during visit autotuning*
		AV Green	ZONE4_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*

No	Description	Presentation	Condition	Remarks
34.6	**Text**	**- -** Green	ZONE5_OBT = 0	*Default*
		M - Green	ZONE5_OBT = 1	*Manual setting*
		A - Green	ZONE5_OBT = 2	*Autotuned setting*
		- V Green	ZONE5_OBT = 4	*The zone has been visited during autotuning*
		MV Green	ZONE5_OBT = 5	*Manual setting and the zone has been visited during visit autotuning*
		AV Green	ZONE5_OBT = 6	*Autotuned setting and the zone has been visited during autotuning*
35.1	**MV Text**	**MV** Grey		*Text in front of the value*
35.2	**MV Value**	**? ? ?** Red	AI_ERR	*Signal error*
			MV	*Measured value*
		Green	-	
35.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
36.1	**SP Text**	**SP** Grey		*Text in front of the value*
36.2	**Current SP Value**		If AUTO = 1 or E1 = 1 or E2 = 1 or ATENBL =1	*Current Setpoint value*
		Cyan	Then WSP	*Working Setpoint value*
		Cyan	else SETP	*Auto Setpoint value*
36.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
37.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
37.2	**OUT Value**		OUT	*Output value*
		Magenta	-	

No	Description	Presentation	Condition	Remarks
37.3	**OUT Unit**		OUTUNIT	*Output unit*
		Magenta	-	
37.4	**External OUT Limitation Indication**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
38.1	**ACT Text**	**ACT** Grey	SHOW_ACT = 1	*Actuator position*
38.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	SHOW_ACT = 1	
38.2	**ACT Unit**		OUTUNIT	*Actuator unit*
		Blue	SHOW_ACT = 1	
39.1	**DEV Text**	**DEV** Grey		*Text in front of the value*
39.2	**DEV Value**		DEV	*Deviation value. DEV = MV - SP*
		Cream		
39.3	**DEV Unit**	**%** Cream		*Deviation unit*
40.1	**Bal Indicator**	■ Green filled	BAL = 1	*Balance control mode*
40.2	**Bal Mode**	**Bal** Green	BAL = 1	
		Bal Grey	-	
40.3		**Local** Green	LOCAL = 1	*Balance Local control mode*
41.1	**Man Indicator**	■ Grey	MAN = 1 and ATENBL = 1	*When autotuning is finished manual control mode is resumed*
		■ Green	MAN = 1	*Manual control mode*
41.2	**Man Mode**	**Man** Green	MAN = 1	
		Man Grey	-	
41.3		**Clamped** Green	CLAMP = 1	*Man Clamped control mode*
		Forced Green	MANFD = 1	*Man Forced control mode*
41.4	**Out Text**	**OUT** Grey		*Text in front of the value*

No	Description	Presentation	Condition	Remarks
41.5	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
42.1	**Auto Indicator**	■ Grey	AUTO = 1 and ATENBL = 1	*When autotuning is finished control mode auto is resumed*
		■ Green	AUTO = 1	
42.2	**Auto Mode**	**Auto** Green	AUTO = 1	*Auto control mode*
		Auto Grey	-	
42.3	**SP Text**	**SP** Grey		*Text in front of the value*
42.4	**Auto Setpoint Value**		SETP	*Auto Setpoint value*
		Cyan	AUTO = 1	*Auto mode*
		Grey	-	
43.1	**E1 Indicator**	■ Grey	E1 = 1 and ATENBL = 1	*When autotuning is finished control mode E1 is resumed*
		■ Green	E1 =1	
43.2	**E1 Mode**	**E1** Green	E1 =1	*Text behind the indication*
		E1 Grey	-	
43.3	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	
43.4	**SP Text**	**SP** Grey		*Text in front of the value*
43.5	**E1 Setpoint Value**		EXTREF1	*E1 control mode setpoint*
		Green	E1 = 1	*E1 mode*
		Grey	-	
44.1	**E1 Mode Indicator**	■ Grey	E2 = 1 and ATENBL = 1	*When autotuning is finished control mode E2 is resumed*
		■ Green	E2 = 1	

No	Description	Presentation	Condition	Remarks
44.2	**E2 Mode**	**E2** Green	E2 = 1	*E2 control mode*
		E2 Grey	-	
44.3	**E2 Name**		E2NAME	
		Green	E2 = 1	
		Grey	-	
44.4	**SP Text**	**SP** Grey		*Text in front of the value*
44.5	**E2 Setpoint Value**		EXTREF2	*E2 control mode setpoint*
		Green	E2 = 1	*E2 mode*
		Grey	-	
45.1	**E3 Mode Indicator**	■ Grey	E3 = 1 and ATENBL = 1	*When autotuning is finished control mode E3 is resumed*
		■ Green	E3 = 1	
45.2	**E3 Mode**	**E3** Green	E3 = 1	*External 3 control mode*
		E3 Grey	-	
45.3	**E3 Name**		E3NAME	
		Green	E2 = 1	
		Grey	-	
45.4	**OUT Text**	**OUT** Grey		*Text in front of the value*
45.5	**E3 Output Value**		EXTREF3	*E3 control mode output*
		Green	E3 = 1	*E3 mode*
		Grey	-	
46.1	**Autotuning Alarm Indicator**	■ Red flashing	AL_F5_UNACK = 1	*Unacknowledged alarm*
		■ Red		*Alarm*
46.2	**Autotuning Indicator**	■ Green	ATENBL = 1	*Autotuning active*
46.3	**Autotuning**	**Autotuning** Green	ATENBL = 1	*Autotuning active.*
		Autotuning Grey		

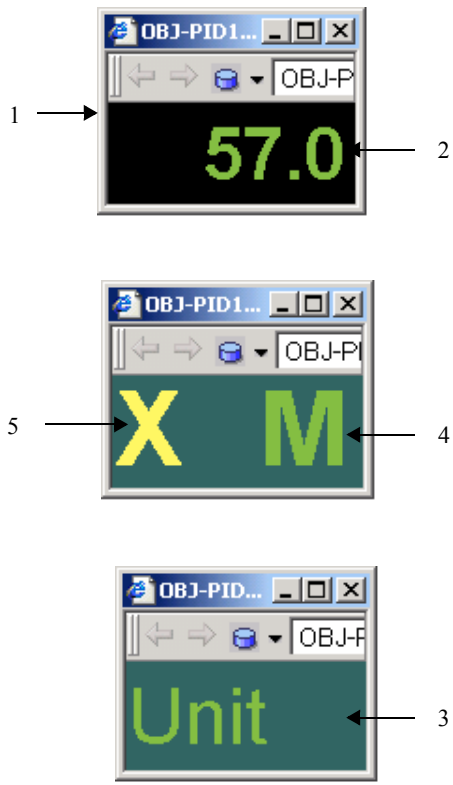
No	Description	Presentation	Condition	Remarks
46.4	**Text**	**Off** Grey		*Autotuning failed or stopped.*
		Done Grey		*Autotuning was successful.*
		Listen Phase Green	ATENBL = 1	*Check process value variation.*
		Relay Phase Green	ATENBL = 1	*Relay feedback with sample rate selection and design calculations.*
		Excite Phase Green	ATENBL = 1	*Adaptive control with setpoint excitation.*
		Verify Phase Green	ATENBL = 1	*Verify setting with a setpoint step.*
46.5	**Text**	**Aborted by PC** Green		*Autotuning aborted by PC-input LOCALFL, LOCAL, BALIN, CLAMP, ATENBL or command Man Forced or AI error.*
		Failed Green		*Autotuning failed.*
		Verify Uncertain Green		*The response of the step outside bounds but not rejected and the design is considered uncertain.*
		Verify OK Green		*The response of the step within bound of the design.*
46.6	**Text**	**Low Excitation** Green		*Excitation level too low.*
47.1	**Text**	**Step** Green		*Number of listen steps.*
		OUT Step Green		*Number of output steps from the beginning of relay phase.*
		SP Step Green		*Number of setpoint steps from the beginning of excitation phase.*
47.2	**Counter**	Green		*Counter value.*
47.3	**Text**	**Outside Start Zone** Green		*Zone has changed during autotuning with gain scheduling. Text only visible during autotuning.*

No	Description	Presentation	Condition	Remarks
48.1	**Adaptation Alarm Indicator**	■ Red flashing	AL_F5_UNACK = 1	*Unacknowledged alarm.*
		■ Red		*Alarm.*
48.2	**Adaptation Indicator**	■ Green	ADAPON = 1	*Adaptation active.*
		■ Yellow		*1. Adaptation blocked by PC program or* *2. Not mode Auto, E1 or E2 or* *3. No autotuned setting exist.*
48.3	**Adaptation**	**Adaptation** Green	ADAPON = 1	*Adaptation active.*
		Adaptation Grey		
48.4	**Text**	**Failed** Green		*Alarm text.*
49	**Text**	**timeout (CONTINUE restarts counter)** Green		*The setpoint step counter has reach max number of steps - 2.*
		timeout (ABORTS if Verify fails) Green		*The setpoint step counter has reach max number of steps - 2.*
50	**Text**	**CONTINUE, ACCEPT or STOP ?** Green	AT_ALERT = 1	*Question to the operator. Continue tune, accept and save setting or stop autotuning and restore setting.*

Graphic Element

NumericMV01, Mode01 and UnitMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	AI_ERR = 1	*Signal error*
		Red	DISTURB = 1	*Alarm*
		Green	-	
3	**Unit**			*Object unit*
		Green	UNIT	
4	**Mode**			*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode*
		Bal Green	BAL = 1	*Bal mode*
		MCp Green	CLAMP = 1	*Man Clamped mode*
		MFd Green	MANFD = 1	*Man Forced mode*
		M AT Green	MAN = 1 and ATENBL = 1	*Man mode and Autotuning*
		M Green	MAN = 1	*Man mode*
		A AT Green	AUTO = 1 and ATENBL = 1	*Auto mode and Autotuning*
		A Ad Green	AUTO = 1 and ADAPON = 1	*Auto mode and Adaptation*
		A Green	AUTO = 1	*Auto mode*
		E1 AT Green	E1 = 1 and ATENBL = 1	*E1 mode and Autotuning*

No	Description	Default Presentation	Condition	Remarks
4 cont.		**E1 Ad** Green	E1 = 1 and ADAPON = 1	*E1 mode and Adaptation*
		E1 Green	E1 = 1	*E1 mode*
		E2 AT Green	E2 = 1 and ATENBL = 1	*E2 mode and Autotuning*
		E2 Ad Green	E2 = 1 and ADAPON = 1	*E2 mode and Adaptation*
		E2 Green	E2 = 1	*E2 mode*
		E3 AT Green	E3 = 1 and ATENBL = 1	*E3 mode and Autotuning*
		E3 Green	E3 = 1	*E3 mode*
5	**External OUT Limitation**			*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation*

The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV01, Valid for Mode01, UnitMV01

NumericSP01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Setpoint Value**		SETP	*Setpoint value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Cyan	-	

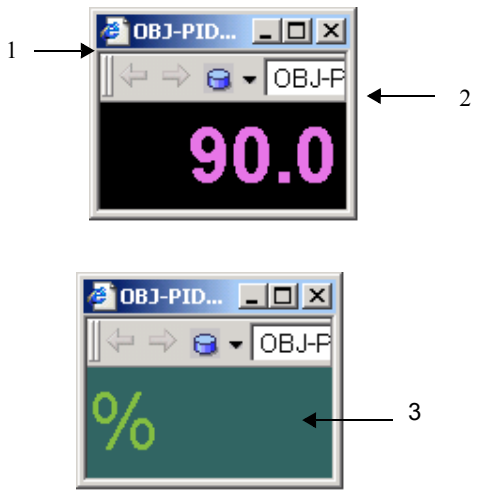
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	
BackgroundColor		**Black**, any other color	

NumericOUT01, UnitOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Output Value**		OUT	*Output value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Magenta	-	

No	Description	Default Presentation	Condition	Remarks
3	**Unit**		OUTUNIT	*Object unit*
		Green	-	

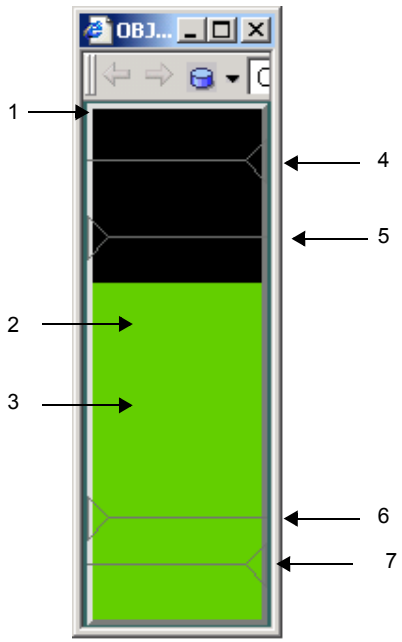
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	
BackgroundColor		**Black,** any other color	

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**AI Error**	**?** Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	AI_ERR = 1	*AI error alarm*

No	Description	Default Presentation	Condition	Remarks
3	**MV Value**		MV	*Object value*
		-	AI_ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB =1	*Alarm*
		Green	-	
4	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 > MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
5	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 > MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
6	**Low Limit 1**		MVL1	*Warning Low limit 1*

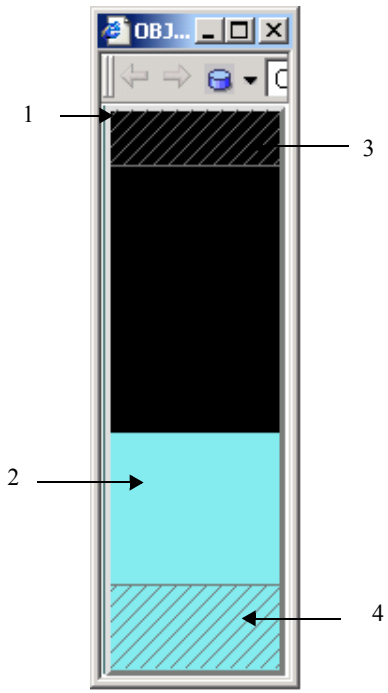
No	Description	Default Presentation	Condition	Remarks
6 cont.		-	MVL1 < MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 < MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

BargraphSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*

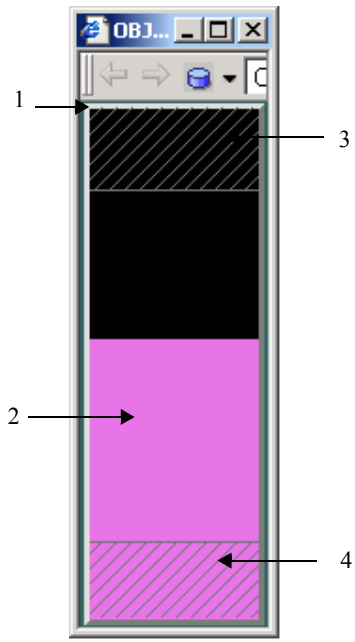
No	Description	Default Presentation	Condition	Remarks
2	**Setpoint Value**		SETP	*Object setpoint value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Cyan	-	
3	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
4	**Low SP Limit**		SETPL	*Lower limit setpoint*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical,** Horizontal	

Bargraphout01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*

No	Description	Default Presentation	Condition	Remarks
2	**Setpoint Value**		OUT	*Object setpoint value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Cyan	-	
3	**High OUT Limit**		OUTPH	*Upper limit setpoint*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
4	**Low OUT Limit**		OUTPL	*Lower limit setpoint*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	

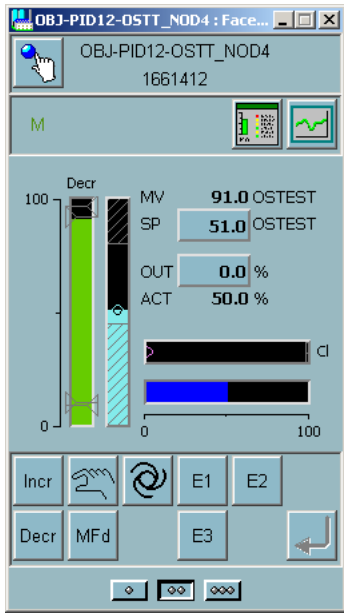
Configuration:

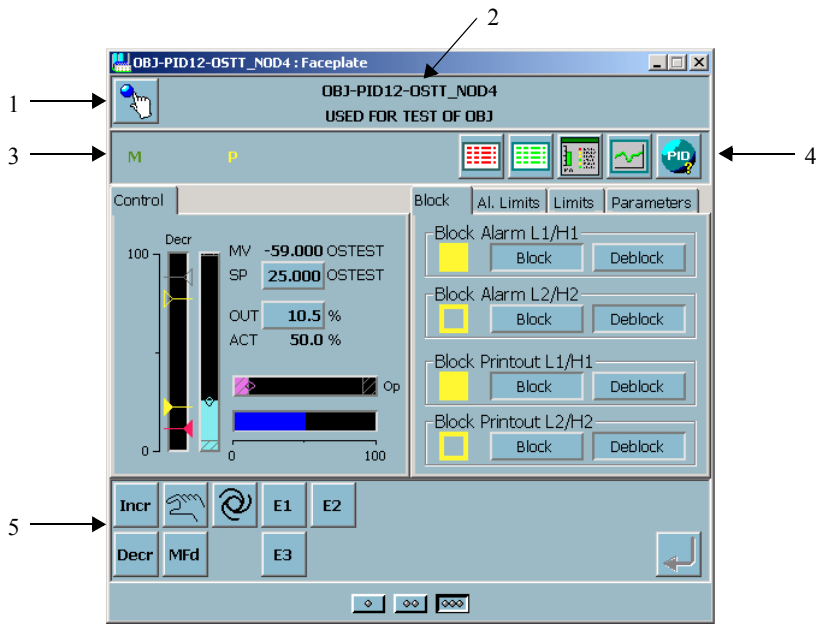
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	
Orientation		**Vertical**, Horizontal	

PIDCON, PID Controller

Faceplate

Presentation:





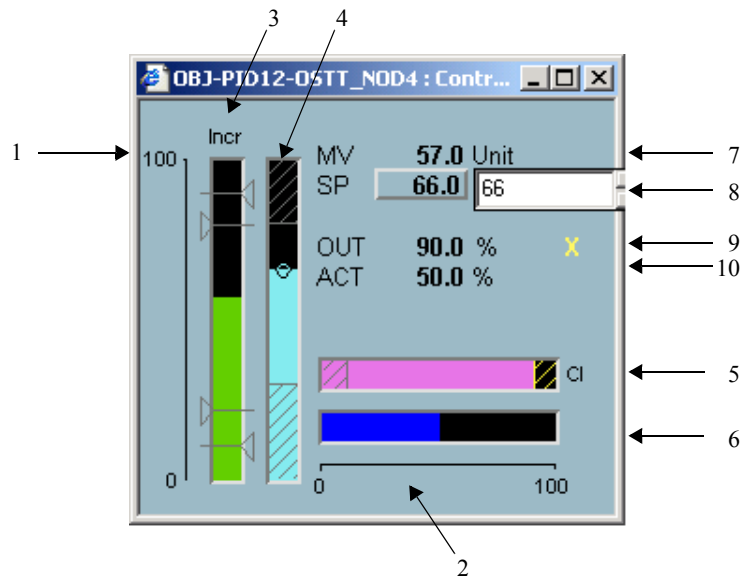
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**BaLo** Dark green	LOCAL = 1	
		Bal Dark green	BAL = 1	
		MCp Dark green	CLAMPED = 1	
		MFd Dark green	MANFD = 1	
		M Dark green	MAN = 1	
		A Dark green	AUTO = 1	
		E1 Dark green	E1 = 1	

No	Description	Default Presentation	Condition	Remarks
3.1 cont.		**E2** Dark green	E2 = 1	
		E3 Dark green	E3 = 1	
3.2	**Print Blk**	**P** Yellow	PRINT_F1_BLK = 1 or PRINT_F2_BLK = 1	
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0 , 12	
5	**Incr**	Increase output with 0,5 unit	MAN = 1	
		Increase setpoint with 0,5 unit	AUTO = 1	
	Decr	Decrease output with 0,5 unit	MAN = 1	
		Decrease setpoint with 0,5 unit	AUTO = 1	
	Man	Set to Man Mode		Set MMI_MAN = 1
	Auto	Set to Auto Mode		Set MMI_AUTO = 1
	MFd	Set to Man Force Mode		Set MANFD = 1
	E1	Set to E1 Mode		Set MMI_E1 = 1
	E2	Set to E2 Mode		Set MMI_E2 = 1
	E3	Set to E3 Mode		Set MMI_E3 = 1

Control and ReducedControl

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**MV Range Max**	Black	MAX	*Range Max of the MV and SP value*
1.2	**MV Range Min**	Black	MIN	*Range Min of the MV and SP value*

No	Description	Default Presentation	Condition	Remarks
2.1	**OUT Range Max**	**100.0** Black		*Range Max of OUT is 100.0%*
2.2	**OUT Range Min**	**0.0** Black		*Range Min of OUT is 0.0%*
3.1	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase of measured value*
		Decr Green	MV_DIR = DECREASING	*Decrease of measured value*
3.2	**Measured Value Bargraph**		MV	*Measured Value*
		Green	-	
3.3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
3.4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
3.5	**Low Limit 1**		MVL1	*Warning Low limit 1*

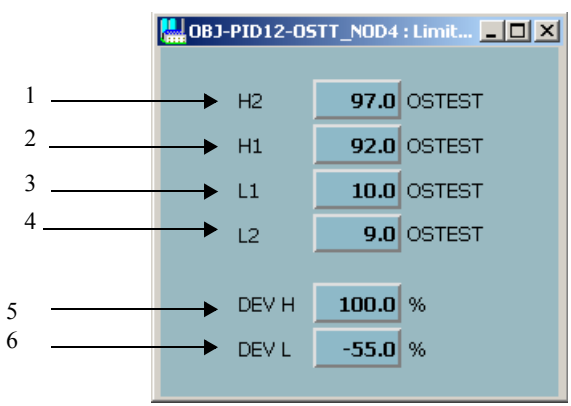
No	Description	Default Presentation	Condition	Remarks
3.5 cont.		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
3.6	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
4.1	**SP Value Bargraph**	Cyan	SETP	*Setpoint value*
4.2	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
4.3	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
5.1	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Actuator position opening*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator position closing*
5.2	**OUT Value Bargraph**		POUT	*Output value*

No	Description	Default Presentation	Condition	Remarks
5.2 cont.		Magenta	-	
5.3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > 100 or (EOHL > 100 and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
5.4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < 0 or (EOLL < 0 and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
6	**ACT Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
7.1	**MV Text**	**MV** Black		*Text in front of the value*
7.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*Signal error*
			MV	*Measured value*
		Black	-	
7.3	**MV Unit**		UNIT	*Measured unit*
		Black	-	
8.1	**SP Text**	**SP** Black		*Text in front of the value*
8.2	**SP Value**		SETP	*Setpoint value*
		Black	-	
8.3	**SP Unit**		UNIT	*Setpoint unit*
		Black	-	
9.1	**OUT Text**	**OUT** Black		*Text in front of the value*
9.2	**OUT Value**		POUT	*Output value*

No	Description	Default Presentation	Condition	Remarks
9.2 cont.		Black	-	
9.3	**OUT Unit**	**%** Black		*Output unit*
9.4	**External OUT Limitation Indication**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
10.1	**ACT Text**	**ACT** Black	CTRL = ON-OFF	*Text in front of the value*
10.2	**ACT Value**		ACTPOS	*Actuator value*
		Black	CTRL = ON-OFF	
10.3	**ACT Unit**	**%** Black	CTRL = ON-OFF	*Actuator unit*

Limits

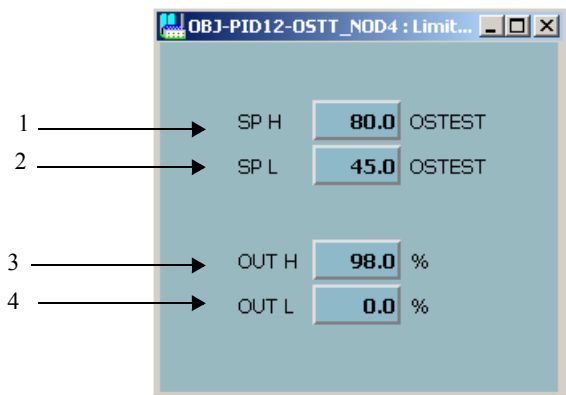
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	H2	**H2** Black		
		Black	MVH2	
2	H1	**H1** Black		
		Black	MVH1	
3	L1	**L1** Black		
		Black	MVL1	
4	L2	**L2** Black		
		Black	MVL2	
5	DEV H	**DEV H** Black		
		Black	DEVH	
6	DEV L	**DEV L** Black		
		Black	DEVL	

Presentation:

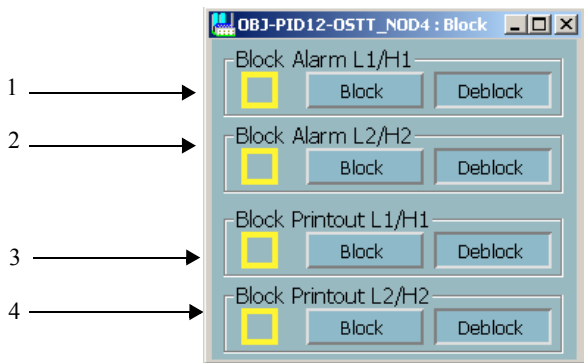


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	SP H	**SP H** Black		
		Black	SPH	
2	SP L	**SP L** Black		
		Black	SPL	
3	OUT H	**OUT H** Black		
		Black	OUTH	
4	OUT L	**OUT L** Black		
		Black	OUTL	

Block

Presentation:

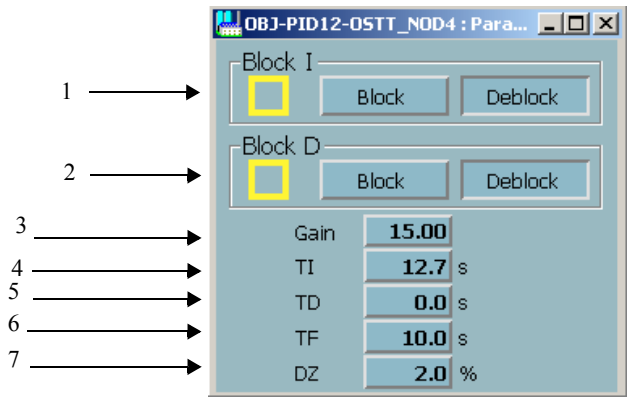


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm 1**	**Block Alarm L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	AL_F1_BLK = 1	
		Deblock pressed	AL_F1_BLK = 0	
2	**Block Alarm 2**	**Block Alarm L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	AL_F2_BLK = 1	
		Deblock pressed	AL_F2_BLK= 0	
3	**Block Printout 1**	**Block Printout L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F1_BLK = 1	
		Deblock pressed	PRINT_F1_BLK = 0	
4	**Block Printout 2**	**Block Printout L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F2_BLK = 1	
		Deblock pressed	PRINT_F2_BLK = 0	

Parameters

Presentation:



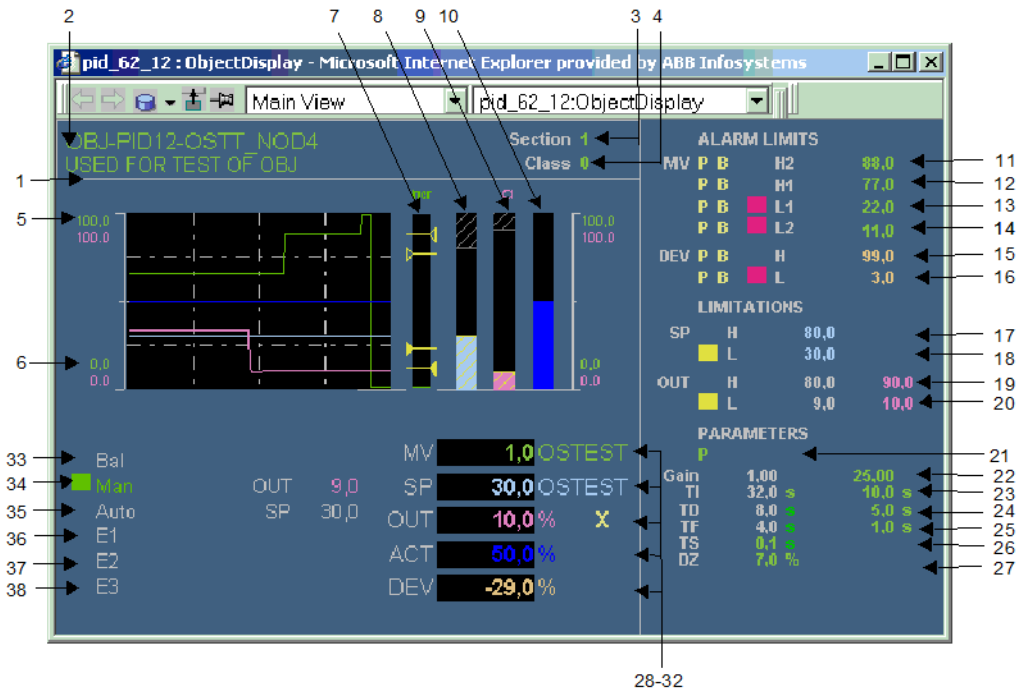
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Integration**	**Block I** Black		
		! Yellow	Blocked	
		Block pressed	BLK_I = 1	
		Deblock pressed	BLK_I = 0	
2	**Block Deviation**	**Block D** Black		
		! Yellow	Blocked	
		Block pressed	BLK_D = 1	
		Deblocked pressed	BLK_D = 0	
3.1	**Gain**	**Gain** Black		*Gain*
3.2	**Value**	Black	GAIN	

No	Description	Default Presentation	Condition	Remarks
4.1	**TI**	**TI** Black		*Integration time*
4.2	**Value**	Black	TI	
4.3	**Unit**	**s** Black		
5.1	**TD**	**TD** Black		*Derivation time*
5.2	**Value**	Black	TD	
5.3	**Unit**	**s** Black		
6.1	**TF**	**TF** Black		*Filter Time*
6.2	**Value**	Black	TF	
6.3	**Unit**	**s** Black		
7.1	**DZ**	**DZ** Black		*Dead zone*
7.2	**Value**	Black	DZ, CTRL = ON - OFF	
7.3	**Unit**	**%** Black	DZ, CTRL = ON - OFF	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
2 cont.		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*

No	Description	Default Presentation	Condition	Remarks
3	**Section**	**Section** Grey		*Text in front of the value*
		Green	PROC_SEC	*Process section*
4	**Class**	**Class** Grey		*Text in front of the value*
		Green	CLASS	*Object class*
5	**MV Range Max**		MAX	*Range Max of the MV and SP value*
		Green	-	
	OUT Range Max			*Range Max of OUT is 100.0%*
		100.0 Magenta	-	
6	**MV Range Min**		MIN	*Range Min of the MV and SP value*
		Green	-	
	OUT Range Min			*Range Min of OUT is 0.0%*
		0.0 Magenta	-	
7.1	**Direction**	**Incr** Green	MV_DIR = INCREASING	*Increase of measured value*
		Decr Green	MV_DIR = DECREASING	*Decrease of measured value*
7.2	**Measured Value Bargraph**		MV	*Measured Value*
		Green	-	
7.3	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	

No	Description	Default Presentation	Condition	Remarks
7.3 cont.		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
7.4	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7.6	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	

No	Description	Default Presentation	Condition	Remarks
7.6 cont.		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
8.1	**SP Value Bargraph**	Cyan	SETP	*Setpoint value*
8.2	**High SP Limit**		SETPH	*Upper limit setpoint*
		Yellow	SP=HL = 1	*Limitation line and mesh*
		Grey	-	
8.3	**Low SP Limit**		SETPL	*Lower setpoint limit*
		Yellow	SP=LL = 1	*Limitation line and mesh*
		Grey	-	
9.1	**Opening or Closing**	**Op** Magenta	ACT_DIR = OPENING	*Actuator position opening*
		Cl Magenta	ACT_DIR = CLOSING	*Actuator position closing*
9.2	**OUT Value Bargraph**		POUT	*Output value*
		Magenta	-	
9.3	**HIgh OUT Limit**		OUTPH	*Upper limit output*
		-	OUTPH > 100 or (EOHL > 100 and EOLIM = 1)	*Invisible*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
9.4	**Low OUT Limit**		OUTPL	*Lower limit output*
		-	OUTPL < 0 or (EOLL < 0 and EOLIM = 1)	*Invisible*
		Yellow	OUT=LL = 1	*Limitation line and mesh*
		Grey	-	
10	**ACT Value Bargraph**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
11	**ALARM LIMITS**			*Alarm limits*

No	Description	Default Presentation	Condition	Remarks
11.1	**MV Text**	**MV** Grey		*Text in front of the line*
11.2	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
11.3	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
11.4	**Alarm Indication**	■ Red flashing	AU_MV>H2 = 1	*Unacknowledged alarm*
		■ Red	MV>H2 = 1	*Alarm*
11.5	**H2 Text**	**H2** Grey		*Text in front of the value*
11.6	**H2 Value**	Green	MVH2	*High limit 2 value*
12.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
12.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
12.3	**Alarm Indication**	■ Red flashing	AU_MV>H1 = 1	*Unacknowledged alarm*
		■ Red	MV>H1 = 1	*Alarm*
12.4	**H1 Text**	**H1** Grey		*Text in front of the value*
12.5	**H1 Value**	Green	MVH1	*High limit 1 value*
13.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
13.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
13.3	**Alarm Indication**	■ Red flashing	AU_MV<L1 = 1	*Unacknowledged alarm*
		■ Red	MV<L1 = 1	*Alarm*
13.4	**L1 Text**	**L1** Grey		*Text in front of the value*
13.5	**L1 Value**	Green	MVL1	*Low limit 1 value*
14.1	**Printout blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
14.2	**Alarm blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*

No	Description	Default Presentation	Condition	Remarks
14.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 = 1	*Unacknowledged alarm*
		■ Red	MV<L2 = 1	*Alarm*
14.4	**L2 Text**	**L2** Grey		*Text in front of the value*
14.5	**L2 Value**	Green	MVL2	*Low limit 2 value*
15.1	**DEV**	**DEV** Grey		
15.2	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
15.3	**Alarm blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm block by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
15.4	**Alarm Indication**	■ Red flashing	AU_DEV>H1 = 1	*Unacknowledged alarm*
		■ Red	DEV>H1 = 1	*Alarm*
15.5	**H Text**	**H** Grey		*Text in front of the value*
15.6	**H Value**	Cream	DEVH1	
16.1	**Printout blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
16.2	**Alarm blocked**	**B** Yellow	AL_F1_BLK =1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
16.3	**Alarm Indication**	■ Red flashing	AU_DEV<L1 = 1	*Unacknowledged alarm*
		■ Red	DEV<L1 = 1	*Alarm*
16.4	**L Text**	**L** Grey		*Text in front of the value*
16.5	**L Value**	Cream	DEVL1	
17	**LIMITATIONS**			*Limitations*
17.1	**SP Text**	**SP** Grey		*Setpoint*
17.2	**Warning Indication**	■ Yellow	SP=HL = 1	
17.3	**H Text**	**H** Grey		*High limit setpoint*
17.4	**H Value**	Cyan	SETPH	
18.1	**Warning Indication**	■ Yellow	SP=LL = 1	
18.2	**L Text**	**L** Grey		*Low limit setpoint*

No	Description	Default Presentation	Condition	Remarks
18.3	**L Value**	Cyan	SETPL	
19.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
19.2	**Warning Indication**	■ Yellow	OUT_HL = 1	
19.3	**H Text**	**H** Grey		*High limit output*
19.4	**H Value**	Grey	OUTPH, EOLIM = 1	*Output High value*
		Magenta	OUTPH, EOLIM = 0	
19.5	**External H value**	Magenta	EOLIM = 1	*External Output High value*
		Grey		
20.1	**Warning**	■ Yellow	OUT_EQ_LL = 1	
20.2	**L Text**	**L** Grey		*Low limit output*
20.3	**L Value**	Grey	OUTPL, EOLIM = 1	*Output Low value*
		Magenta	OUTPL, EOLIM = 0	
20.4	**External L Value**	Magenta	EOLIM = 1	*External Output Low value*
		Grey	-	
21	**PARAMETERS**	Grey		
21.1	**P**	**P** Green		*Gain active*
21.2	**I**	**I** Green	BLK_I = 0 and EINTBE = 0	*Integration active*
21.3	**D**	**D** Green	BLK_D = 0 and EDERBE = 0	*Derivation active*
22.1	**Gain**	**Gain** Grey		*Gain*
22.2	**Value**	Grey	EGAINE = 1	*Value changed by operator*
		Green	GAIN	
22.3	**External Value**	Green	EGAINE = 1	
23.1	**TI**	**TI** Grey		*Integration time*
23.2	**Value**	Grey	ETIE = 1	*Value changed by operator*
		Green	TI	
23.3	**Unit**	**s** Green		

No	Description	Default Presentation	Condition	Remarks
23.4	**External Value**	Green	ETIE = 1	
23.5	**External Unit**	**s** Green	ETIE = 1	
24.1	**TD**	**TD** Grey		*Derivation time*
24.2	**Value**	Grey	ETDE = 1	*Value changed by operator*
		Green	TD	
24.3	**Unit**	**s** Green		
24.4	**External Value**	Green	ETDE = 1	
24.5	**External Unit**	**s** Green	ETDE = 1	
25.1	**TF**	**TF** Grey		*Filter Time*
25.2	**Value**	Grey	ETFE = 1	*Value changed by operator*
		Green	TF	
25.3	**Unit**	**s** Green		
25.4	**External Value**	Green	ETFE = 1	
25.5	**External Unit**	**s** Green	ETFE = 1	
26.1	**TS**	**TS** Grey		*Sampling time*
26.2	**Value**	Green	TS	
26.3	**Unit**	**s** Green		
27.1	**DZ**	**DZ** Grey		*Dead zone*
27.2	**Value**	Green	DZ, CTRL = ON-OFF	
27.3	**Unit**	**%** Green	DZ, CTRL = ON-OFF	
28.1	**MV Text**	**MV** Grey		*Text in front of the value*
28.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*Signal error*
			MV	*Measured value*
		Green	-	
28.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
29.1	**SP Text**	**SP** Grey		*Text in front of the value*

No	Description	Default Presentation	Condition	Remarks
29.2	**SP Value**		SETP	*Setpoint value*
		Cyan	-	
29.3	**SP Unit**		UNIT	*Setpoint unit*
		Cyan	-	
30.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
30.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
30.3	**OUT Unit**	**%** Magenta		*Output unit*
30.4	**External OUT Limitation Indication**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
31.1	**ACT Text**	**ACT** Grey	CTRL = ON-OFF	*Text in front of the value*
31.2	**ACT Value**		ACTPOS	*Actuator value*
		Blue	CTRL = ON-OFF	
31.3	**ACT Unit**	**%** Blue	CTRL = ON-OFF	*Actuator unit*
32.1	**DEV Text**	**DEV** Grey		*Text in front of the value*
32.2	**DEV Value**		DEV	*Deviation value*
		Cream	-	
32.3	**DEV Unit**	**%** Cream		*Deviation unit*
33.1	**Bal indication**	■ Green filled	BAL = 1	*Bal control mode*
33.2	**Bal Mode**	**Bal** Green	BAL = 1	*Text behind the indication*
		Bal Grey	-	
33.3		**Local** Green	LOCAL = 1	*Bal Local control mode*
34.1	**Man indication**	■ Green filled	MAN = 1	*Man control mode*
34.2	**Man Mode**	**Man** Green	MAN = 1	*Text behind the indication*
		Man Grey	-	
34.3		**Clamped** Green	CLAMP = 1	*Man Clamp control mode*
		Forced Green	MANFD = 1	*Man Forced control mode*

No	Description	Default Presentation	Condition	Remarks
34.4	**Man Out Text**	**OUT** Grey		*Text in front of the value*
34.5	**Man Out Value**		MAN_OUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
35.1	**Auto indication**	■ Green filled	AUTO = 1	*Auto control mode*
35.2	**Auto Mode**	**Auto** Green	AUTO = 1	*Text behind the indication*
		Auto Grey	-	
35.3	**Auto Setpoint Text**	**SP** Grey		*Text in front of the value*
35.4	**Auto Setpoint Value**		AUTOSP	*Auto Setpoint value*
		Cyan	AUTO =1	*Auto mode*
		Grey	-	
36.1	**E1 indication**	■ Green filled	E1 = 1	*E1 control mode*
36.2	**E1 Mode**	**E1** Green	E1 = 1	*Text behind the indication*
		E1 Grey	-	
36.2	**E1 Name**		E1NAME	*User text behind the text E1*
		Green	E1 = 1	
		Grey	-	
37.1	**E2 indication**	■ Green filled	E2 = 1	*E2 control mode*
37.2	**E2 Mode**	**E2** Green	E2 = 1	*Text behind the indication*
		E2 Grey	-	
37.2	**E2 Name**		E2NAME	*User text behind the text E2*
		Green	E2 = 1	
		Grey	-	
38.1	**E3 indication**	■ Green filled	E3 = 1	*E3 control mode*
38.2	**E3 Mode**	**E3** Green	E3 = 1	*Text behind the indication*
		E3 Grey	-	

No	Description	Default Presentation	Condition	Remarks
38.3	**E3 Name**		E3NAME	*User text behind the text E3*
		Green	E3 = 1	
		Grey	-	

Graphic Element

NumericMV01, Mode01 and UnitMV01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	AI_ERR = 1	*Signal error*
		Red	DISTURB = 1	*Alarm*
		Green	-	
3	**Unit**			*Object unit*
		Green	UNIT	

No	Description	Default Presentation	Condition	Remarks
4	**Mode**			*Object mode*
		BaLo Green	LOCAL = 1	*Bal Local mode*
		Bal Green	BAL = 1	*Bal mode*
		MCp Green	CLAMPED = 1	*Man Clamped mode*
		MFd Green	MANFD = 1	*Man Forced mode*
		M Green	MAN = 1	*Man mode*
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
		E2 Green	E2 = 1	*E2 mode*
		E3 Green	E3 = 1	*E3 mode*
		-		*Mode is invisible*
5	**External OUT Limitation**			*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation*

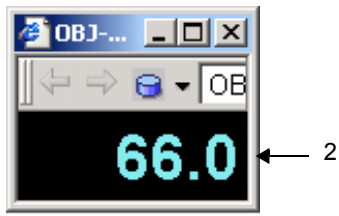
The conditions are in priority order.

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericMV01, Valid for Mode01, UnitMV01

NumericSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Setpoint Value**		SETP	*Setpoint value*
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Cyan	-	

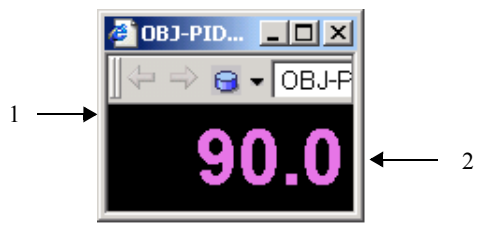
The conditions are in priority order.

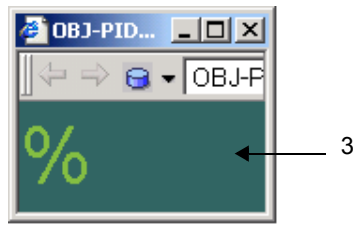
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	
BackgroundColor		**Black**, any other color	

NumericOUT01, UnitOUT01

Presentation:





Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	Selected
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	Alarm blocked by operator
		Invisible		
2	**Output Value**		OUT	Output value
		Red flashing	AL_UNACK = 1	
		Red	DISTURB = 1	
		Magenta	-	
3	**Unit**			Object unit
		% Green	-	

The conditions are in priority order.

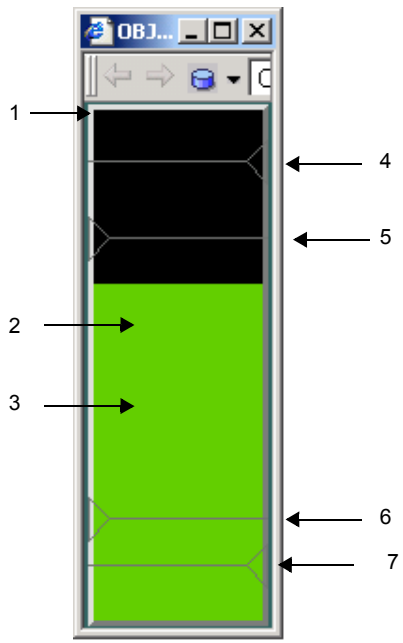
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericOut01

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericOut01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericOUT01, Valid for UnitOUT01

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*

No	Description	Default Presentation	Condition	Remarks
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**AI Error**	**?** Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	AI_ERR = 1	*AI error alarm*
3	**MV Value**		MV	*Object value*
		-	AI_ERR = 1	*Invisible - I/O Error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB =1	*Alarm*
		Green	-	
4	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 > MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
5	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 > MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

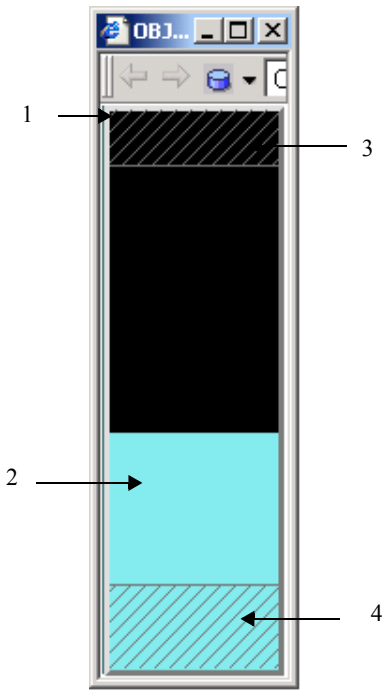
No	Description	Default Presentation	Condition	Remarks
6	**Low Limit 1**		MVL1	*Warning Low limit 1*
6 cont.		-	MVL1 < MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	
		Unfilled Yellow	AL_F1_BLK = 1	
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 < MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	
		Unfilled Yellow	AL_F2_BLK = 1	
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	**1 Lock Frame**	**3**, (0...4)	
FrameStyle	**1. Lock Frame**	**Raised,** Flat**,** Sunken	
Orientation		**Vertical,** Horizontal	

BargraphSP01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*

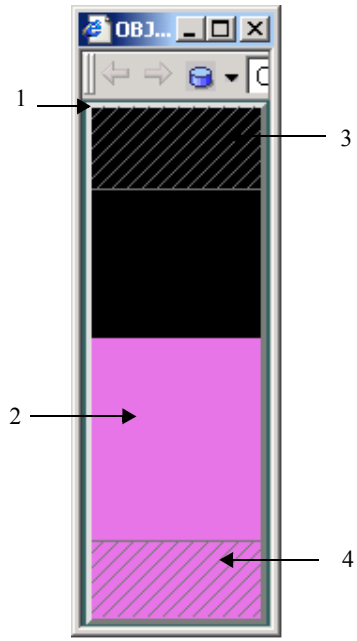
No	Description	Default Presentation	Condition	Remarks
2	**Setpoint Value**		SETP	*Object setpoint value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Cyan	-	
3	**High SP Limit**		SETPH	Upper limit setpoint
		Yellow	SP=HL = 1	Limitation line and mesh
		Grey	-	
4	**Low SP Limit**		SETPH	Lower limit setpoint
		Yellow	SP=HL = 1	Limitation line and mesh
		Grey	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical,** Horizontal	

BargraphOUT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**Output Value**		POUT	*Object Output value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Magenta	-	

No	Description	Default Presentation	Condition	Remarks
3	**High OUT Limit**		OUTPH	*Upper limit setpoint*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	
4	**Low OUT Limit**		OUTPH	*Lower limit setpoint*
		Yellow	OUT=HL = 1	*Limitation line and mesh*
		Grey	-	

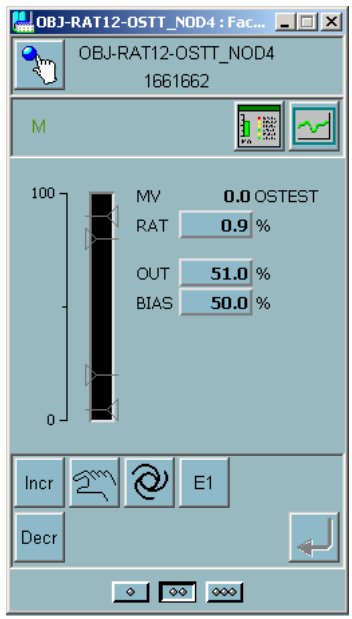
Configuration:

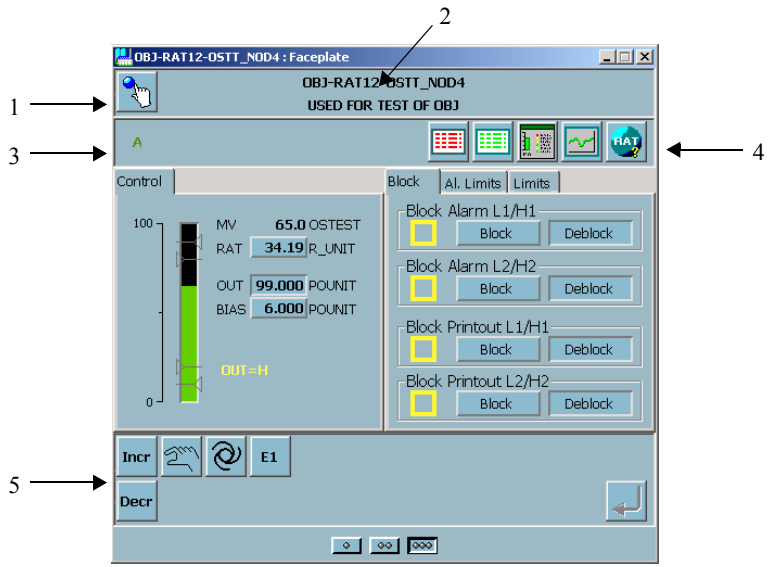
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (1..4)	
FrameStyle	1. Lock Frame	**Raised**, Flat, Sunken	
Orientation		**Vertical**, Horizontal	

RATSTN, Ratio Station

Faceplate

Presentation:





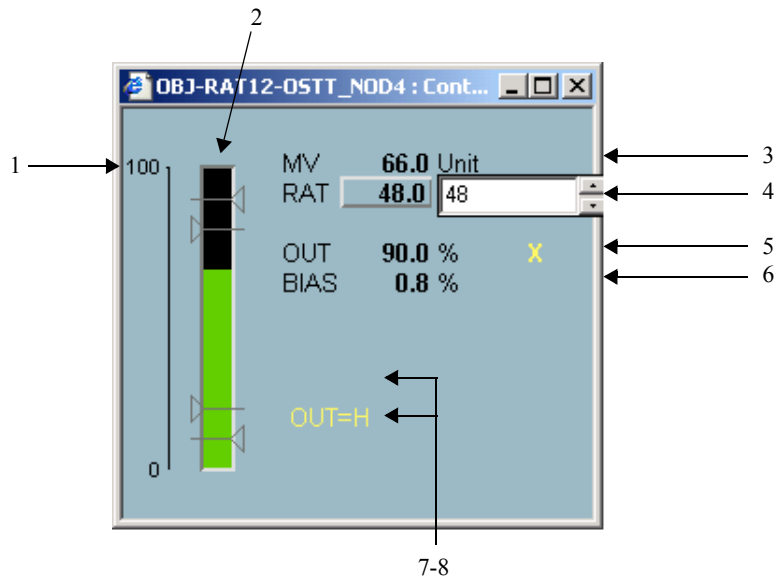
Behavior:

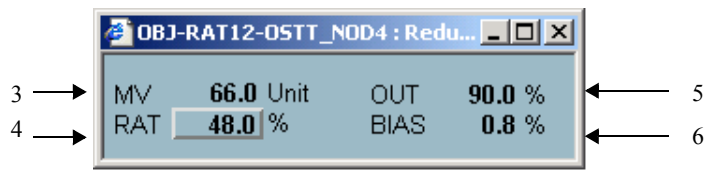
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	MAN = 1	
		A Dark green	AUTO = 1	
		E1 Dark green	E1 = 1	
3.2	**Print Blk**	**P** Yellow	PRINT_F1_BLK or PRINT_F2_BLK	
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	

No	Description	Default Presentation	Condition	Remarks
4 cont.		Object Type Help	position 0, 0, 12	
5	**Incr**	Increase output with 0,5 unit	MAN = 1	
		Increase ratio with 0,5 unit	AUTO = 1	
	Decr	Decrease output with 0,5 unit	MAN = 1	
		Decrease ratio with 0,5 unit	AUTO = 1	
	Man	Set to Man Mode		Set MMI_MAN = 1
	Auto	Set to Auto Mode		Set MMI_AUTO = 1
	E1	Set to E1 Mode		Set MMI_E1 = 1

Control and ReducedControl

Presentation:





Behavior:

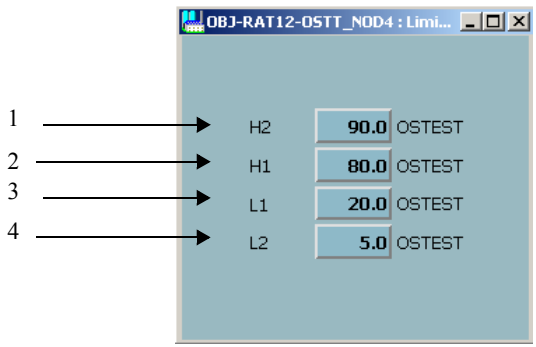
No	Description	Default Presentation	Condition	Remarks
1.1	**Range Max**	Black	MAX	*Range Max of the MV value*
1.2	**Range Min**	Black	MIN	*Range Min of the MV value*
2.1	**Measured Value Bargraph**		MV	*Object value*
		Green	-	
2.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
2.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
2.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
2.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	*Logical color* blocked Symbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blocked Symbol
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
3	**Measured Value**			*The MV object value*
3.1	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Black	-	
3.2	**MV Unit**		UNIT	*Measured unit*
		Black	-	
4	**Ratio Value**			*The RAT object value*

No	Description	Default Presentation	Condition	Remarks
4.1	**RAT Value**		RATIO	*Ratio value*
		Black	-	
4.2	**RAT Unit**		R_UNIT	*Ratio unit*
		Black	-	
5	**Output Value**			*The OUT object value*
5.1	**OUT Value**		POUT	*Output value*
		Black	-	
5.2	**OUT Unit**		PO_UNIT	*Output unit*
		Black	-	
6	**BIAS Value**			*The BIAS object value*
6.1	**BIAS Value**	Black	PARAM9 EBIAS = 1	*External Bias value*
		Black	BIAS EBIAS = 0	*Bias value*
6.2	**BIAS Unit**	**Ext** Black	EBIAS = 1	*External Bias*
		Black	PO_UNIT EBIAS = 0	*Bias unit*
7	**Warning Indication Ratio**	**RAT=H** Yellow	RATIO=HL = 1	*Warning for Ratio*
		RAT=L Yellow	RATIO=LL = 1	
8	**Warning Indication Output**	**OUT=H** Yellow	OUT=HL = 1	*Warning for Output*
		OUT=L Yellow	OUT=LL =1	

Limits

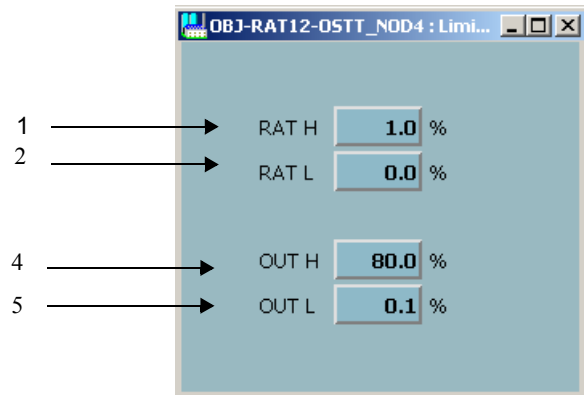
Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	H2	**H2** Black		
		Black	MVH2	
2	H1	**H1** Black		
		Black	MVH1	
3	L1	**L1** Black		
		Black	MVL1	
4	L2	**L2** Black		
		Black	MVL2	

Presentation:

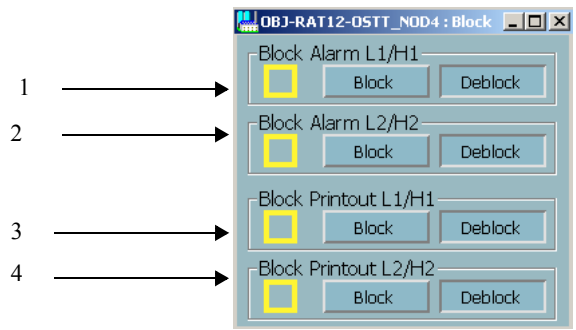


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**RAT H**	**RAT H** Black		
		Black	RATIOH	
2	**RAT L**	**RAT L** Black		
		Black	RATIOL	
3	**OUT H**	**OUT H** Black		
		Black	OUTPH	
4	**OUT L**	**OUT L** Black		
		Black	OUTPL	

Block

Presentation:



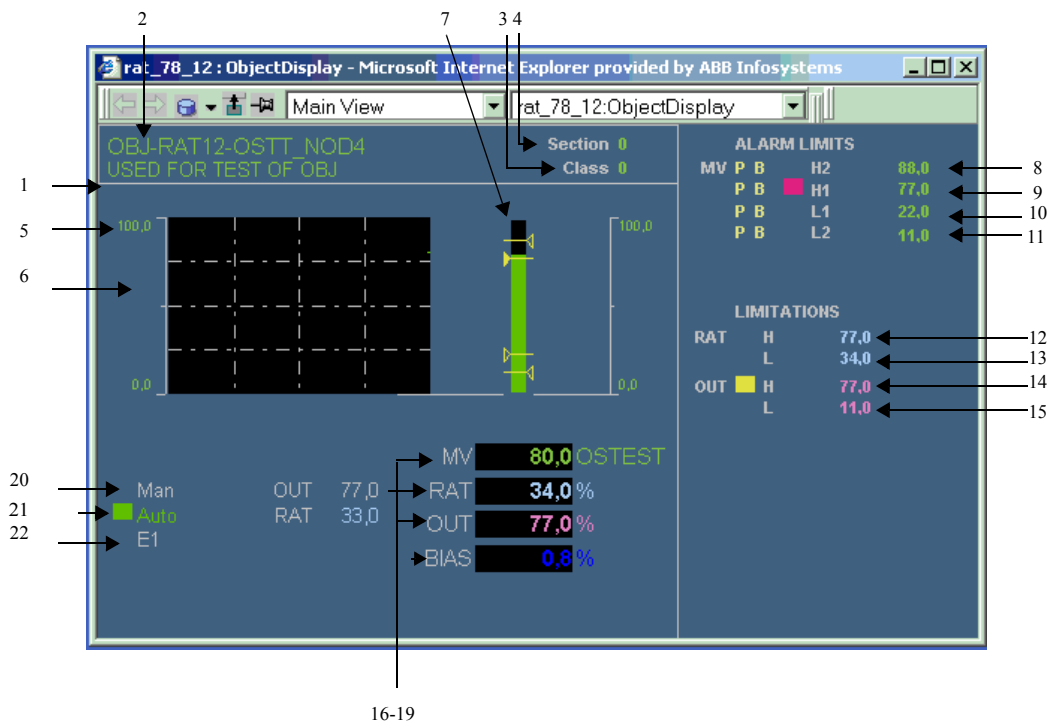
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Block Alarm 1**	**Block Alarm L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	AL_F1_BLK = 1	
		Deblock pressed	AL_F1_BLK = 0	
2	**Block Alarm 2**	**Block Alarm L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	AL_F2_BLK = 1	
		Deblock pressed	AL_F2_BLK= 0	
3	**Block Printout 1**	**Block Printout L1/H1** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F1_BLK = 1	
		Deblock pressed	PRINT_F1_BLK = 0	

No	Description	Default Presentation	Condition	Remarks
4	**Block Printout 2**	**Block Printout L2/H2** Black		
		! Yellow	Blocked	
		Block pressed	PRINT_F2_BLK = 1	
		Deblock pressed	PRINT_F2_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Grey		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Grey		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Range Max**		MAX	*Range Max of the MV value*
		Green	-	
	Range Min		MIN	*Range Min of the MV value*
		Green	-	
6	**Measure Value Trim Curve**		MV	*Object value - Trim curve*
		Green	-	
7.1	**Measured Value Bargraph**		MV	*Object value - Bargraph*
		Green	-	

No	Description	Default Presentation	Condition	Remarks
7.2	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow”	AL_F2_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
7.3	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	

No	Description	Default Presentation	Condition	Remarks
7.4	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7.5	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	
8	**ALARM LIMITS for MV**			*Alarm limits for MV*
8.1	**MV Text**	**MV** Grey		*Text in front of the line*
8.2	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
8.3	**Alarm Blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
8.4	**Alarm Indication**	■ Red flashing	AU_MV>H2 = 1	*Alarm High limit 2*
		■ Red	MV> H2 = 1	

No	Description	Default Presentation	Condition	Remarks
8.5	**H2 Text**	**H2** Grey		*Text in front of the value*
8.6	**H2 Value**		MVH2	*High limit 2 value*
		Green	-	
9.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	AU_MV>H1 = 1	*Warning High limit 1*
		■ Red	MV> H1 = 1	
9.4	**H1 Text**	**H1** Grey		*Text in front of the value*
9.5	**H1 Value**		MVH1	*High limit 1 value*
		Green	-	
10.1	**Printout Blocked**	**P** Yellow	PRINT_F1_BLK = 1	*Printout blocked*
10.2	**Alarm Blocked**	**B** Yellow	AL_F1_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F1_P_BLK = 1	*Alarm blocked by PC-program*
10.3	**Warning Indication**	■ Red flashing	AU_MV<L1 = 1	*Warning Low limit 1*
		■ Red	MV<L1 = 1	
10.4	**L1 Text**	**L1** Grey		*Text in front of the value*
10.5	**L1 Value**		MVL1	*Low limit 1 value*
		Green	-	
11.1	**Printout Blocked**	**P** Yellow	PRINT_F2_BLK = 1	*Printout blocked*
11.2	**Alarm Blocked**	**B** Yellow	AL_F2_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_F2_P_BLK = 1	*Alarm blocked by PC-program*
11.3	**Alarm Indication**	■ Red flashing	AU_MV<L2 = 1	*Alarm Low limit 2*
		■ Red	MV<L2 = 1	
11.4	**L2 Text**	**L2** Grey		*Text in front of the value*

No	Description	Default Presentation	Condition	Remarks
11.5	**L2 Value**		MVL2	*Low limit 2 value*
		Green	-	
12	**LIMITATIONS for RAT**			*Limitations for RAT*
12.1	**RAT Text**	**RAT** Grey		*Text in front of the line*
12.2	**Warning Indication**	■ Yellow	RATIO=HL = 1	*Warning Ratio High*
12.3	**H Text**	**H** Grey		*Text in front of the value*
12.4	**H Value**		RATIOH	*Ratio High value*
		Cyan	-	
13.1	**Warning Indication**	■ Yellow	RATIO=LL = 1	*Warning Ratio Low*
13.2	**L Text**	**L** Grey		*Text in front of the value*
13.3	**L Value**		RATIOL	*Ratio Low value*
		Cyan	-	
14	**LIMITATIONS for OUT**			*Limitations for OUT*
14.1	**OUT Text**	**OUT** Grey		*Text in front of the line*
14.2	**Warning Indication**	■ Yellow	OUT=HL = 1	*Warning Output High*
14.3	**H Text**	**H** Grey		*Text in front of the value*
14.4	**H Value**		OUTPH	*Output High value*
		Grey	EOLIM = 1	
		Magenta	-	
14.5	**External H value**		EOHL	*External Output High value*
		Magenta	EOLIM = 1	
		Grey	-	
15.1	**Warning Indication**	■ Yellow	OUT=LL = 1	*Warning Output Low*
15.2	**L Text**	**L** Grey		*Text in front of the value*
15.3	**L Value**		OUTPL	*Output Low value*
		Grey	EOLIM = 1	
		Magenta	-	

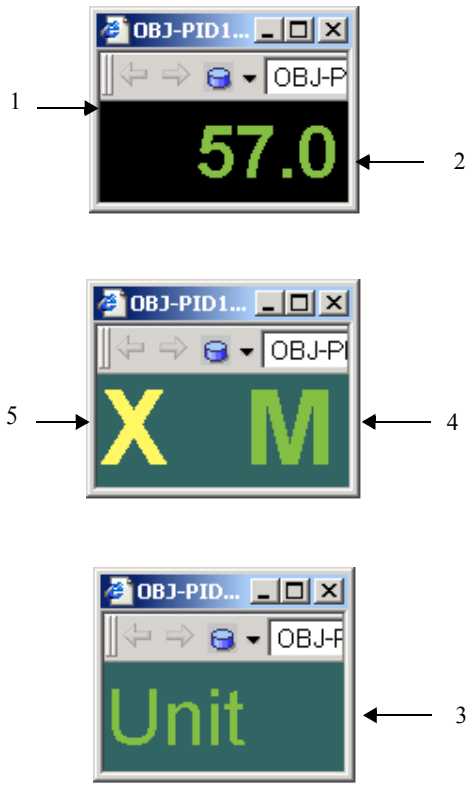
No	Description	Default Presentation	Condition	Remarks
15.4	**External L Value**		EOLL	*External Output Low value*
		Magenta	EOLIM = 1	
		Grey	-	
16.1	**MV Text**	**MV** Grey		*Text in front of the value*
16.2	**MV Value**	**? ? ?** Red	AI_ERR = 1	*AI Error*
			MV	*Measured value*
		Green	-	
16.3	**MV Unit**		UNIT	*Measured unit*
		Green	-	
17.1	**RAT Text**	**RAT** Grey		*Text in front of the value*
17.2	**RAT Value**		RATIO	*Ratio value*
		Cyan	-	
17.3	**RAT Unit**		R_UNIT	*Ratio unit*
		Cyan	-	
18.1	**OUT Text**	**OUT** Grey		*Text in front of the value*
18.2	**OUT Value**		POUT	*Output value*
		Magenta	-	
18.3	**OUT Unit**		PO_UNIT	*Output unit*
		Magenta	-	
18.4	**External OUT Limitation**	**X** Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*OUT limited by external limitation*
19.1	**BIAS Text**	**BIAS** Grey		*Text in front of the value*
19.2	**BIAS Value**	Blue	PARAM9 EBIAS = 1	*External Bias value*
		Blue	BIAS EBIAS = 0	*Bias value*

No	Description	Default Presentation	Condition	Remarks
19.3	**BIAS Unit**	**Ext** Blue	EBIAS = 1	*External Bias*
		Blue	PO_UNIT EBIAS = 0	*Bias unit*
20.1	**Man indication**	■ Green filled	MAN = 1	*Manual mode*
20.2	**Man Text**	**Man** Green	MAN = 1	*Text behind the indication*
		Man Grey	-	
20.3	**Man Out Text**	**OUT** Grey		*Text in front of the value*
20.4	**Man Out Value**		MANOUT	*Man Out value*
		Magenta	MAN = 1	*Manual mode*
		Grey	-	
21.1	**Auto indication**	■ Green filled	AUTO = 1	*Auto mode*
21.2	**Auto Text**	**Auto** Green	AUTO = 1	*Text behind the indication*
		Auto Grey	-	
21.3	**Auto Ratio Text**	**RAT** Grey		*Text in front of the value*
21.4	**Auto Ratio Value**		RATIOREF	*Auto Ratio value*
		Cyan	AUTO = 1	*Auto mode*
		Grey	-	
22.1	**E1 indication**	■ Green filled	E1 = 1	E1 mode
22.2	**E1 Text**	**E1** Green	E1 = 1	Text behind the indication
		E1 Grey	-	
22.3	**E1 Name**		E1NAME	User text behind the text E1
		Green	E1 = 1	
		Grey	-	

Graphic Element

NumericMV01, Mode01 and UnitMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Measured Value**		MV	*Object value*
		? ? ? Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		? ? ? Red	AI_ERR = 1	*Signal error*
		Red	DISTURBANCE = 1	*Alarm*
		Green	-	
3	**Unit**			*Object unit*
		Green	UNIT	
4	**Mode**			*Object mode*
		M Green	MAN = 1	*Manual mode*
		A Green	AUTO = 1	*Auto mode*
		E1 Green	E1 = 1	*E1 mode*
5	**External OUT Limitation**			*External output limitation*
		X Yellow	(OUT=HL = 1 or OUT=LL= 1) and EOLIM = 1	*External output limitation*

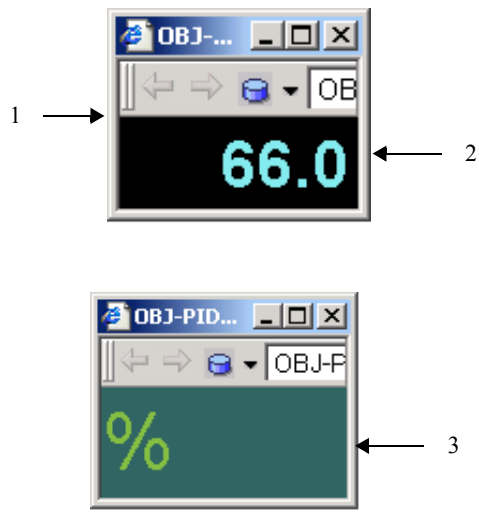
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericMV01

Parameters	Affects	Options (bold is default)	Remarks
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericMV01
BackgroundColor		**Black**, any other color **Transparent,** any color	Valid for NumericMV01, Valid for Mode01, UnitMV01

NumericRAT01, UnitRAT01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	Selected
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	Alarm blocked by operator
		Invisible		

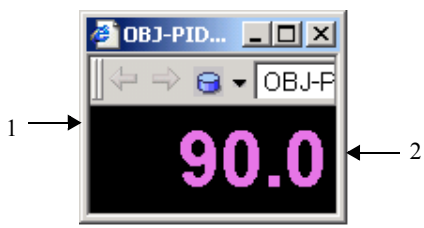
No	Description	Default Presentation	Condition	Remarks
2	**Ratio Value**		WRATIO	Object ratio value
		Red flashing	AL_UNACK = 1	Unacknowledged alarm
		Red	DISTURB = 1	Alarm
		Cyan	-	
3	**Unit**			Object unit
		Green	R_UNIT	

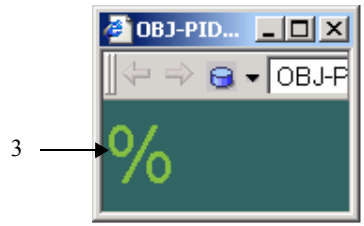
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericRAT01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericRAT01
BackgroundColor		**Black,** any other color **Transparen**t, any color	Valid for NumericRAT01, Valid for UnitRAT01

NumericOUT01, UnitOUT01

Presentation:





Behavior:

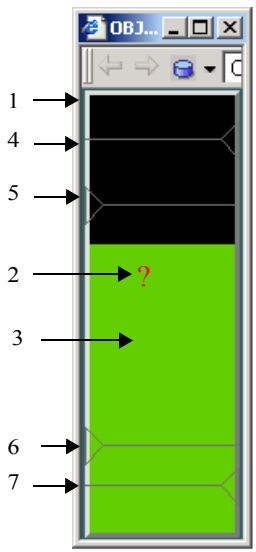
No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	AL_F1_BLK = 1 or AL_F2_BLK = 1	*Alarm blocked by operator*
		Invisible		
		Black	-	*Logical color FaceplateFg*
2	**Output Value**		POUT	*Object ratio value*
		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB = 1	*Alarm*
		Magenta	-	
3	**Unit**			*Object unit*
		Green	PO_UNIT	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**0**, (1..4)	Valid for NumericOUT01
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	Valid for NumericOUT01
BackgroundColor		**Black**, any other color **Transparent**, any color	Valid for NumericOUT01, Valid for UnitOUT01

BargraphMV01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1.1	**Lock Frame**	White	SELECTED = 1	*Object frame*
		Invisible	SELECTED = 0	
1.2	**Top Left Edge**	Light grey		*Three Dimensions effect*
1.3	**Bottom Right Edge**	Dark grey		*Three Dimensions effect*
2	**AI Error**	**?** Red flashing	AI_ERR = 1 and AL_UNACK = 1	*Unacknowledged signal error*
		? Red	AI_ERR = 1	*Signal error*
3	**Measured Value**		MV	*Object value*
		-	AI_ERR = 1	*Invisible - I/O Error*

No	Description	Default Presentation	Condition	Remarks
3 cont.		Red flashing	AL_UNACK = 1	*Unacknowledged alarm*
		Red	DISTURB =1	*Alarm*
		Green	-	
4	**High Limit 2** 		MVH2	*Alarm High limit 2*
		-	MVH2 >= MAX	*Invisible*
		Filled Yellow	MV>H2 = 1 and AL_F2_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow”	AL_F2_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV>H2 = 1 and AU_MV>H2 = 1	
		Unfilled Red flashing	AU_MV>H2 = 1	
		Filled Red	MV>H2 = 1	
		Unfilled Grey	-	
5	**High Limit 1** 		MVH1	*Warning High limit 1*
		-	MVH1 >= MAX	*Invisible*
		Filled Yellow	MV>H1 = 1 and AL_F1_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV>H1 = 1 and AU_MV>H1 = 1	
		Unfilled Red flashing	AU_MV>H1 = 1	
		Filled Red	MV>H1 = 1	
		Unfilled Grey	-	
6	**Low Limit 1** 		MVL1	*Warning Low limit 1*
		-	MVL1 <= MIN	*Invisible*
		Filled Yellow	MV<L1 = 1 and AL_F1_BLK = 1	*Logical color* blockedSymbol

No	Description	Default Presentation	Condition	Remarks
6 cont.		Unfilled Yellow	AL_F1_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV<L1 = 1 and AU_MV<L1 = 1	
		Unfilled Red flashing	AU_MV<L1 = 1	
		Filled Red	MV<L1 = 1	
		Unfilled Grey	-	
7	**Low Limit 2** 		MVL2	*Alarm Low limit 2*
		-	MVL2 <= MIN	*Invisible*
		Filled Yellow	MV<L2 = 1 and AL_F2_BLK = 1	*Logical color* blockedSymbol
		Unfilled Yellow	AL_F2_BLK = 1	*Logical color* blockedSymbol
		Filled Red flashing	MV<L2 = 1 and AU_MV<L2 = 1	
		Unfilled Red flashing	AU_MV<L2 = 1	
		Filled Red	MV<L2 = 1	
		Unfilled Grey	-	

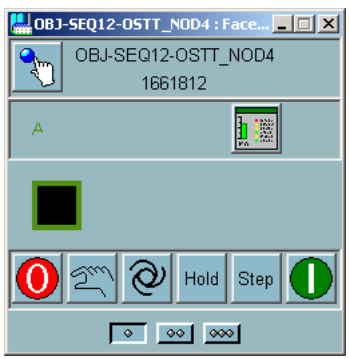
Configuration:

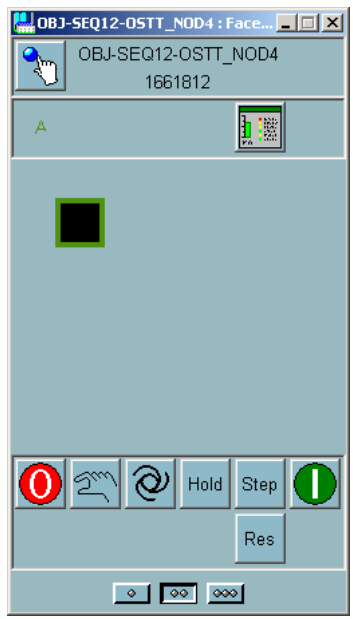
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1 Lock Frame	**3**, (0...5)	
FrameStyle	1 Lock Frame	**Raised**, Flat, Sunken	*Sunken*
Orientation		**Vertical**, Horizontal	

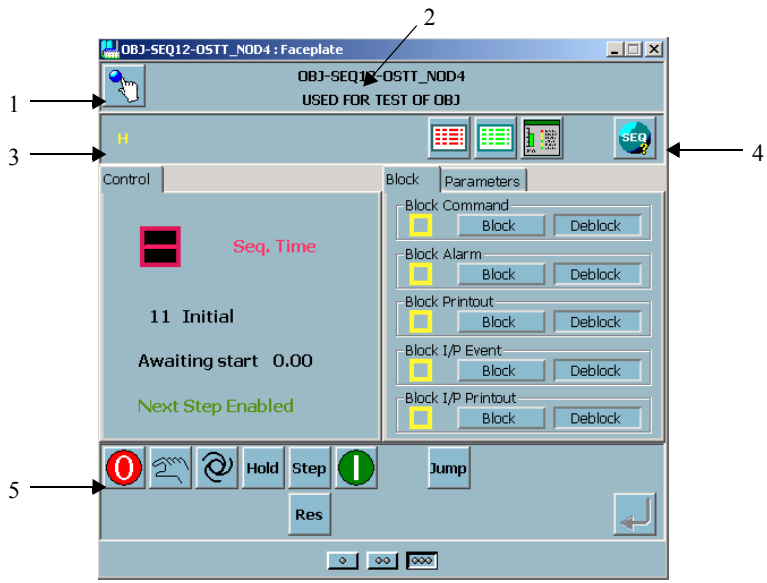
SEQ, Sequence

Faceplate

Presentation:







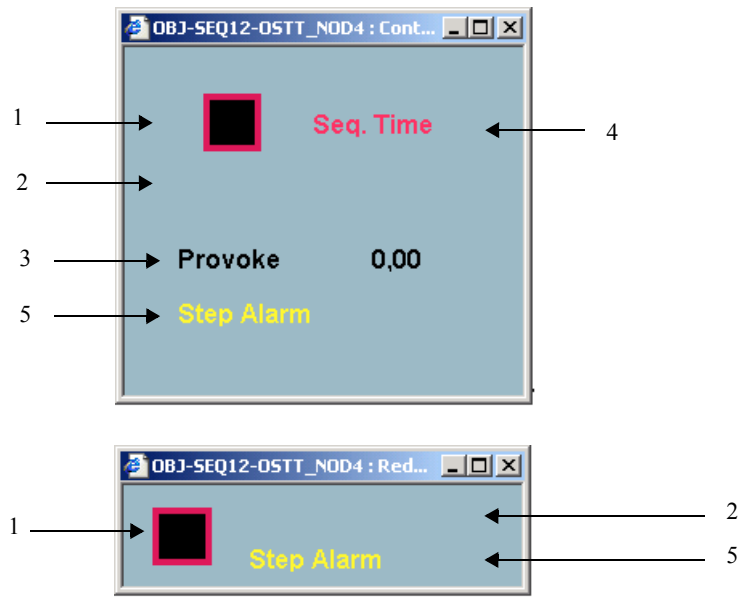
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**		Lock	
2	**Name and Description**		Name: Name Name: Description	
3	**Status Field**			
3.1	**Mode**	**M** Un Dark green	MANM= 1 and UNCOND M= 1	*Manual mode*
		M Dark green	MANM= 1	*Manual mode*
		A Dark green	AUTOM= 1	*Auto mode*
		HOLD Yellow	HOLDM= 1	*Hold mode*
3.2	**Print Blk**	**P** Yellow	TF_PRINT_BLK	
4	**Aspect links**	Alarm List	position 0, 0, 8	

No	Description	Default Presentation	Condition	Remarks
4 cont.		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Object Type Help	position 0, 0, 12	
5	**Start**	Start the Sequence		Set START = 1
	Stop	Stop the Sequence		Set START = 0
	Man	Set to manual mode		Set MAN = 1
	Auto	Set to automatic mode		Set MAN = 0
	Hold	Set to hold mode		Set HOLD = 1
	Step	Step the Sequence one step		Set STEP = 1
	Res	Reset the Sequence to initial values		Set RESET = 1
	Jump	Jump to step JPOSN_OUT		Set JUMP = 1

Control and ReducedControl

Presentation:



Behavior:

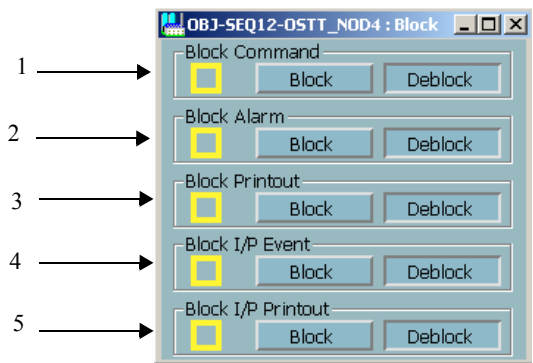
No	Description	Default Presentation	Condition	Remarks
1	**Run Status Indication**	Green	INTERLOCK (SEQ_RFS) = 1 and RUN = 0	*Not Ready for Start*
		Green	HOLDM= 1	
		Green flashing	RUN = 1 and BUSY (SEQ_COMPLETE)= 1	*Not-Completed*

No	Description	Default Presentation	Condition	Remarks
1 cont.		 Green	RUN = 1	
		 Green	RUN = 0	
		M Un Green	MANM = 1 and UNCOND M= 1	*Manual mode*
		M Green	MANM = 1	*Manual mode*
		A Green	AUTOM = 1	*Auto mode*
		HOLD Yellow	HOLDM = 1	*Hold mode*
2	**Current Step Number and Name**		POSN : STEPNAME	*Current step number and name*
		Black	POSN <> 0	
3	**Information Text**		INFTXT	*Information text*
		Black	BLANKINF = 0	
	Information Value		INFVAL	*Information value*
		Black	BLANKINF = 0 and INFTXT <> ““	
4	**Alarm Text:**	**? ? ?** Yellow flashing	DI2_RP_F_BLK = 1	*Repeat fail block*
		-	DI1_AL_BLK = 1 or DI1_AL_P_BLK = 1	*Alarm blocked by operator or Alarm blocked by PC-program*
		Jump Error Red	TS_POSN_F = 1	
		Seq. Time Red	TS_SEQAL = 1	
		Step Time Red	TS_STEPAL = 1	
5	**Interlock Info Text**	**Next Step Enabled** Green	NXTCOND = 1	
		CONDTXT1 Yellow	CONDTXT1 <> ‘’ and CONDSTA1 = 0	*Condition 1 exists but is not satisfied*
		CONDTXT2 Yellow	CONDTXT2 <> ‘’ and CONDSTA2 = 0	*Condition 2 exists but is not satisfied*

No	Description	Default Presentation	Condition	Remarks
5 cont.		CONDTXT3 Yellow	CONDTXT3 <> ‘’ and CONDSTA3 = 0	*Condition 3 exists but is not satisfied*
		CONDTXT4 Yellow	CONDTXT4 <> ‘’ and CONDSTA4 = 0	*Condition 4 exists but is not satisfied*
		CONDTXT5 Yellow	CONDTXT5 <> ‘’ and CONDSTA5 = 0	*Condition 5 exists but is not satisfied*
		CONDTXT6 Yellow	CONDTXT6 <> ‘’ and CONDSTA6 = 0	*Condition 6 exists but is not satisfied*
		CONDTXT7 Yellow	CONDTXT7 <> ‘’ and CONDSTA7 = 0	*Condition 7 exists but is not satisfied*
		CONDTXT8 Yellow	CONDTXT8 <> ‘’ and CONDSTA8 = 0	*Condition 8 exists but is not satisfied*

Block

Presentation:

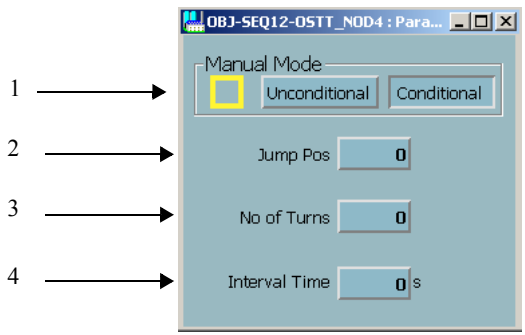


Behavoir:

No	Description	Default Presentation	Condition	Remarks
1	**Block Command**	**Block Command** Black		
		! Yellow	Blocked	
		Block pressed	BLOCKED = 1	
		Deblock pressed	BLOCKED = 0	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	DI1_AL_BLK = 1 and TF_AL_BLK = 1	
		Deblock pressed	DI1_AL_BLK = 0 and TF_AL_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	
		Block pressed	DI1_PR_BLK = 1 and TF_PR_BLK = 1	
		Deblock pressed	DI1_PR_BLK = 0 and TF_PR_BLK = 0	
4	**Block I/P Event**	**Block I/P Event** Black		
		! Yellow	Blocked	
		Block pressed	PT_AL_BLK = 1 and SI_AL_BLK = 1	
		Deblock pressed	PT_AL_BLK = 0 and SI_AL_BLK = 0	
5	**Block I/P Printout**	**Block I/P Printout** Black		
		! Yellow	Blocked	
		Block pressed	PT_PR_BLK = 1 and SI_PR_BLK = 1	
		Deblock pressed	PT_PR_BLK = 0 and SI_PR_BLK = 0	

Parameters

Presentation:

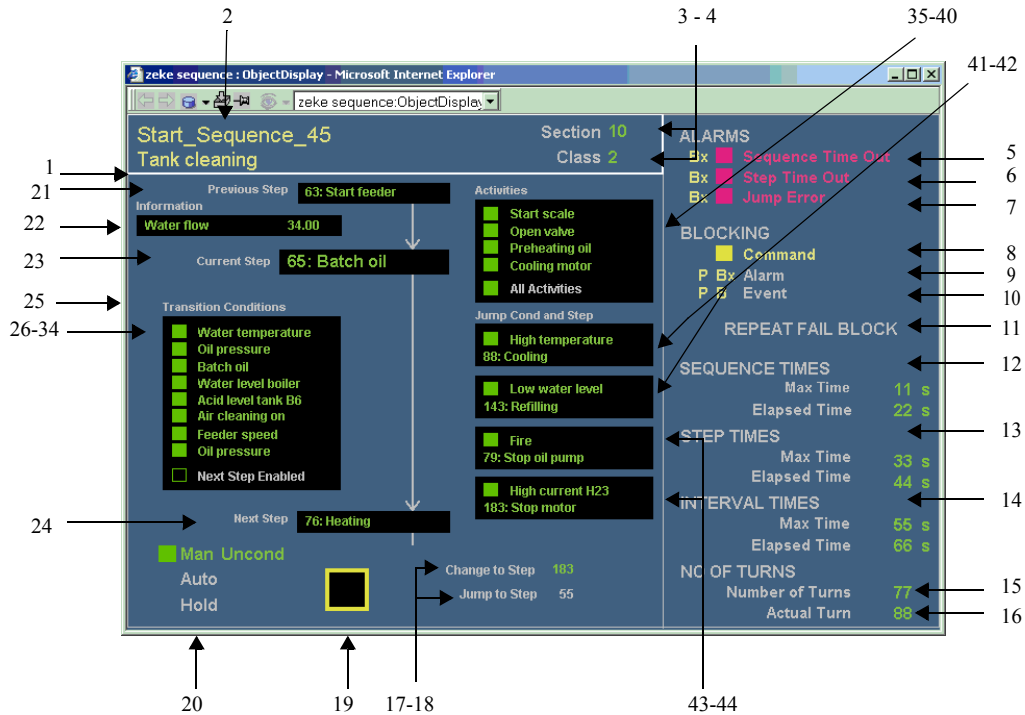


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Manual Mode**	**Manual Mode** Black		
		! Yellow	Blocked	
		Unconditional pressed	UNCONDM / UNCOND= 1	
		Conditional pressed	UNCONDM / UNCOND= 0	
2	**Jump pos**	Dialog for changing JPOSN_OUTP, value black	JPOSN_OUTP/JPOSN	
3	**No of Turns**	Dialog for changing NO_OF_TURNS_OUTP/ NO_OF_TURNS, value black	NO_OF_TURNS_OUTP/ NO_OF_TURNS	
4	**Interval Time**	Dialog for changing INTERV_TIME_DEL/ INTERV_TIME, value black	INTERV_TIME_DEL/ INTERV_TIME	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Khaki	SELECTED = 0	*Logical color (static)*
2	**Header**		NAME and DESCR	*Object name and description*

No	Description	Default Presentation	Condition	Remarks
2 cont.		Red flashing	DI2_ALARM_UNACK = 1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	*Unacknowledged alarm*
		Yellow	BLOCKED =1	*Command blocked*
		Red	DI2_DIST = 1	*Alarm*
		Green	-	*Normal*
3.1	**Section Text**	**Section** Khaki		*Text in front of the value*
3.2	**Section Value**	Green	PROC_SEC	*Process section*
4.1	**Class Text**	**Class** Khaki		*Text in front of the value*
4.2	**Class Value**	Green	CLASS	*Object class*
5	**Sequence Time Out**			*Sequence Time Out*
5.1	**Alarm Blocked**	**B** Yellow	TF_ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_ALARM_P_BLK = 1	*Alarm blocked by PC-program*
5.2	**Alarm Indication**	■ Red flashing	AU_SEQAL = 1	*Unacknowledged alarm*
		■ Red	TS_SEQAL = 1	*Alarm*
5.3	**Sequence Time Out Text**	**Sequence Time Out**		*Text for Sequence Time Out*
		Red	AU_SEQAL = 1 or TS_SEQAL = 1	
		Khaki	-	
6	**Step Time Out**			*Step Time Out*
6.1	**Alarm Blocked**	**B** Yellow	TF_ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_ALARM_P_BLK = 1	*Alarm blocked by PC-program*
6.2	**Alarm Indication**	■ Red flashing	AU_STEPAL = 1	*Unacknowledged alarm*
		■ Red	TS_STEPAL = 1	*Alarm*
6.3	**Step Time Out Text**	**Step Time Out**		*Text for Step Time Out*

No	Description	Default Presentation	Condition	Remarks
6.3 cont.		Red	AU_STEPAL = 1 or TS_STEPAL = 1	
		Khaki	-	
7	**Jump Error**			*Jump Error*
7.1	**Alarm Blocked**	**B** Yellow	TF_ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_ALARM_P_BLK = 1	*Alarm blocked by PC-program*
7.2	**Alarm Indication**	■ Red flashing	AU_POSN_F = 1	*Unacknowledged alarm*
		■ Red	TS_POSN_F = 1	*Alarm*
7.3	**Jump Error Text**	**Jump Error** Red		*Text for Jump Error*
		Red	AU_POSN_F = 1 or TS_POSN_F = 1	
		Khaki	-	
8	**Command Blocking**			*Command blocking*
8.1	**Command Block Indication**	■ Yellow	BLOCKED = 1	*Command blocked*
8.2	**Command Text**	**Command**		*Text for Command*
		Yellow	BLOCKED = 1	
		Khaki	-	
9	**Alarm Blocking**			*Alarm blocking*
9.1	**Printout Blocked**	**P** Yellow	DI1_PRINT_BLK = 1 and TF_PRINT_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	TF_ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	TF_ALARM_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Alarm Text**	**Alarm** Grey		*Text for Alarm*
10	**Event Blocking**			*Event blocking*
10.1	**Printout Blocked**	**P** Yellow	PT_PRINT_BLK = 1 and SI_PRINT_BLK = 1	*Printout blocked*

No	Description	Default Presentation	Condition	Remarks
10.2	**Event Blocked**	**B** Yellow	PT_ALARM_BLK = 1 and SI_ALARM_BLK = 1	*Alarm blocked*
10.3	**Event Text**	**Event** Grey		*Text for Event*
11.1	**Repeat Fail Block Indication**	■ Yellow flashing	DI2_REPEAT_FAIL_BLK = 1	*Repeat fail blocked*
11.2	**Repeat Fail Block Text**	**REPEAT FAIL BLOCK**		*Text for REPEAT FAIL BLOCK*
		Yellow	DI2_REPEAT_FAIL_BLK = 1	
		Khaki	-	
12	**SEQUENS TIMES**			*SEQUENS TIMES*
12.1	**Max Sequence Time Text**	**Max Time** Khaki		*Max Time Text*
12.2	**Max Sequence Time**	Green	SEQTD	*Max Sequence Time*
12.3	**Elapsed Sequence Time Text**	**Elapsed Time** Khaki		*Elapsed Time Text*
12.4	**Elapsed Sequence Time**	Green	SEQTE	*Elapsed Sequence Time*
13	**STEP TIMES**			*STEP TIMES*
13.1	**Max Step Time Text**	**Max Time** Khaki		*Max Time Text*
13.2	**Max Step Time**	Green	STEPTD	*Max Step Time*
13.3	**Elapsed Step Time Text**	**Elapsed Time** Khaki		*Elapsed Time Text*
13.4	**Elapsed Step Time**	Green	STEPTE	*Elapsed Step Time*
14	**INTERVAL TIMES**			*INTERVAL TIMES*
14.1	**Max Interval Time Text**	**Max Time** Khaki		*Max Time Text*
14.2	**Max Interval Time**	Green	INTV_TDO	*Max Interval Time*
14.3	**Elapsed Interval Time Text**	**Elapsed Time** Khaki		*Elapsed Time Text*
14.4	**Elapsed Interval Time**	Green	INTERV_TIME_EL	*Elapsed Interval Time*
	NO OF TURNS			*NO OF TURNS*
15.1	**Number of Turns Text**	**Number of Turns** Khaki		*Number of Turns Text*

No	Description	Default Presentation	Condition	Remarks
15.2	**Number of Turns**	Green	NO_OF_TURNS_OUTP	*Number of Turns*
16.1	**Actual Turn Text**	**Actual Turn** Khaki		*Actual Turn Text*
16.2	**Actual Turn**	Green	ACT_TURN	*Actual Turn*
17.1	**Jump to Step Text**	**Jump to Step** Khaki		*Jump to Step Text*
17.2	**Jump to Step Value**		JPOSN_OUTP	*Jump to Step Value*
		Khaki	MAN = 1	
		-	MAN = 0	*Invisible*
18.1	**Change to Step Text**	**Change to Step** Khaki		*Change to Step Text*
18.2	**Change to Step Value**	Green	NEXTSTEP	*Change to Step Value*
19	**Run Status Indication**	 Green	INTERLOCK = 1 and RUN = 0	*Not Ready for Start*
		 Green	HOLD = 1	
		 Green flashing	RUN = 1 and BUSY = 1	*Not-Completed*
		 Green	RUN = 1	
		 Green	RUN = 0	
		M Un Green	MANM= 1 and UNCONDM= 1	*Manual mode*
		M Green	MANM= 1	*Manual mode*
		A Green	AUTOM= 1	*Auto mode*
		HOLD Yellow	HOLDM= 1	*Hold mode*
20.1	**Manual Mode Indication**	 Green filled	MANM= 1	*Manual mode*
		Man Green	MANM= 1	*Man text behind the indication*
		Man Khaki	MANM= 0	
		Uncond Green	UNCONDM= 1	*Manual unconditional mode*

No	Description	Default Presentation	Condition	Remarks
20.2	**Auto mode**	■ Green filled	AUTOM= 1	*Auto mode*
		Auto Green	AUTOM = 1	*Auto text behind the indication*
		Auto Khaki	AUTOM= 0	
20.3	**Hold mode**	■ Yellow filled	HOLDM= 1	*Hold mode*
		Hold Yellow	HOLDM = 1	*Hold text behind the indication*
		Hold Khaki	HOLDM = 0	
21	**Previous Step Text**	**Previous Step** Khaki	PREPOS <> 0	*Previous Step Text*
	Previous Step Box	Filled background Black	PREPOS <> 0	*Invisible when PREPOS = 0*
	Previous Step Number and Name		PREPOS **:** PRENAME	*Previous step number and name*
		Green	PREPOS <> 0	
22.1	**Information Text**	**Information** Khaki		*Information Text*
22.2	**Information Box**	Filled background Black	BLANKINF = 0 and INFTXT <> ““	*Invisible when BLANKINF = 1*
22.3	**Information Text**		INFTXT	*Information text*
		Green	BLANKINF = 0 and INFTXT <> ““	
22.4	**Information Value**		INFVAL	*Information value*
		Green	BLANKINF = 0 and INFTXT <> ““	
23.1	**Current Step Text**	**Current Step** Khaki		*Current Step Text*
23.2	**Current Step Box**	Filled background Black	POSN <> 0	*Invisible when POSN = 0*
23.3	**Current Step Number and Name**		POSN **:** STEPNAME	*Current step number and name*
		Green	POSN <> 0	
24.1	**Next Step Text**	**Next Step** Khaki		*Next Step Text*
24.2	**Next Step Box**	Filled background Black	NXTPOS <> 0	*Invisible when NXTPOS = 0*

No	Description	Default Presentation	Condition	Remarks
24.3	**Next Step Number and Name**		NXTPOS : NXTNAME	*Next step number and name*
		Green	NXTPOS <> 0	
25.1	**Transitions Condition Text**	**Transitions Condition** Khaki	any CONDTXT# <> “”	*Transitions Condition Text*
25.2	**Transition Condition Box**	Filled background Black	any CONDTXT# <> “”	*Invisible when no CONDTXT#*
26.1	**Transition Condition 1 Ind.**	☐ Green	CONDSTA1 = 0	
		■ Green	CONDSTA1 = 1	
26.2	**Transition Condition 1 Text**	CONDTXT1 Green	CONDTXT1 <> “”	*Invisible when no CONDTXT1*
27.1	**Transition Condition 2 Ind.**	☐ Green	CONDSTA2 = 0	
		■ Green	CONDSTA2 = 1	
27.2	**Transition Condition 2 Text**	CONDTXT2 Green	CONDTXT2 <> “”	*Invisible when no CONDTXT2*
28.1	**Transition Condition 3 Ind.**	☐ Green	CONDSTA3 = 0	
		■ Green	CONDSTA3 = 1	
28.2	**Transition Condition 3 Text**	CONDTXT3 Green	CONDTXT3 <> “”	*Invisible when no CONDTXT3*
29.1	**Transition Condition 4 Ind.**	☐ Green	CONDSTA4 = 0	
		■ Green	CONDSTA4 = 1	
29.2	**Transition Condition 4 Text**	CONDTXT4 Green	CONDTXT4 <> “”	*Invisible when no CONDTXT4*
30.1	**Transition Condition 5 Ind.**	☐ Green	CONDSTA5 = 0	
		■ Green	CONDSTA5 = 1	
30.2	**Transition Condition 5 Text**	CONDTXT5 Green	CONDTXT5 <> “”	*Invisible when no CONDTXT5*
31.1	**Transition Condition 6 Ind.**	☐ Green	CONDSTA6 = 0	
		■ Green	CONDSTA6 = 1	
31.2	**Transition Condition 6 Text**	CONDTXT6 Green	CONDTXT6 <> “”	*Invisible when no CONDTXT6*

No	Description	Default Presentation	Condition	Remarks
32.1	**Transition Condition 7 Ind.**	☐ Green	CONDSTA7 = 0	
		■ Green	CONDSTA7 = 1	
32.2	**Transition Condition 7 Text**	CONDTXT7 Green	CONDTXT7 <> “”	*Invisible when no CONDTXT7*
33.1	**Transition Condition 8 Ind.**	☐ Green	CONDSTA8 = 0	
		■ Green	CONDSTA8 = 1	
33.2	**Transition Condition 8 Text**	CONDTXT8 Green	CONDTXT8 <> “”	*Invisible when no CONDTXT8*
34.1	**Next Step Enabled Indication**	☐ Green	NXTCOND = 0	
		■ Green	NXTCOND = 1	
34.2	**Next Step Enabled Text**	**Next Step Enabled** Green		*Next Step Enabled Text*
34.3	**Next Step Enabled Box**	**Filled background** Black		*Next Step Enabled Box*
35.1	**Activities Text**	**Activities** Khaki		*Activities Text*
35.2	**Activities Box**	Filled background Black	any ACTTXT# <> “”	*Invisible when no ACTTXT#*
36.1	**Activity 1 Indication**	☐ Green	ACTSTA1 = 0	
		■ Green	ACTSTA1 = 1	
36.2	**Activity 1 Text**	ACTTXT1 Green	ACTTXT1 <> “”	*Invisible when no ACTTXT1*
37.1	**Activity 2 Indication**	☐ Green	ACTSTA2 = 0	
		■ Green	ACTSTA2 = 1	
37.2	**Activity 2 Text**	ACTTXT2 Green	ACTTXT2 <> “”	*Invisible when no ACTTXT2*
38.1	**Activity 3 Indication**	☐ Green	ACTSTA3 = 0	
		■ Green	ACTSTA3 = 1	
38.2	**Activity 3 Text**	ACTTXT3 Green	ACTTXT3 <> “”	*Invisible when no ACTTXT3*
39.1	**Activity 4 Indication**	☐ Green	ACTSTA4 = 0	
		■ Green	ACTSTA4 = 1	
39.2	**Activity 4 Text**	ACTTXT4 Green	ACTTXT4 <> “”	*Invisible when no ACTTXT4*

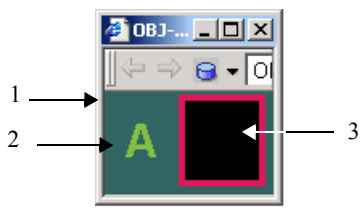
No	Description	Default Presentation	Condition	Remarks
40.1	**All Activities Indication**	□ Green	ALLACT = 0	
		■ Green	ALLACT = 1	
40.2	**All Activities Text**	**All Activities** Grey		*All Activities Text*
40.3	**All Activities Box**	**Filled Background** Black		*All Activities Box*
41	**Jump Cond and Step Text**	**Jump Cond and Step** Khaki		*Jump Cond and Step Text*
41.1	**Jump Condition 1 Box**	**Filled background** Black	JCTXT1 <> “”	*Hollow when no JCTXT1*
41.2	**Jump Condition 1 Indication**	□ Green	JCSTA1 = 0	
		■ Green	JCSTA1 = 1	
41.3	**Jump Condition 1 Text**	JCTXT1 Green	JCTXT1 <> “”	*Invisible when no JCTXT1*
41.4	**Jump Step 1 Number and Name**		JPOS1 : JNAME1	*Jump step number and name*
		Green	JCTXT1 <> 0	*Invisible when no JCTXT1*
42.1	**Jump Condition 2 Box**	**Filled background** Black	JCTXT2 <> “”	*Hollow when no JCTXT2*
42.2	**Jump Condition 2 Indication**	□ Green	JCSTA2 = 0	
		■ Green	JCSTA2 = 1	
42.3	**Jump Condition 2 Text**	JCTXT2 Green	JCTXT2 <> “”	*Invisible when no JCTXT2*
42.4	**Jump Step 2 Number and Name**		JPOS2 : JNAME2	*Jump step number and name*
		Green	JCTXT2 <> 0	*Invisible when no JCTXT2*
43.1	**Jump Condition 3 Box**	**Filled background** Black	JCTXT3 <> “”	*Hollow when no JCTXT3*
43.2	**Jump Condition 3 Indication**	□ Green	JCSTA3 = 0	
		■ Green	JCSTA3 = 1	
43.3	**Jump Condition 3 Text**	JCTXT3 Green	JCTXT3 <> “”	*Invisible when no JCTXT3*

No	Description	Default Presentation	Condition	Remarks
43.4	**Jump Step 3 Number and Name**		JPOS23 : JNAME3	*Jump step number and name*
		Green	JCTXT3 <> 0	*Invisible when no JCTXT3*
44.1	**Jump Condition 4 Box**	**Filled background** Black	JCTXT4 <> ""	*Hollow when no JCTXT4*
44.2	**Jump Condition 4 Indication**	□ Green	JCSTA4 = 0	
		■ Green	JCSTA4 = 1	
44.3	**Jump Condition 4 Text**	JCTXT4 Green	JCTXT4 <> ""	*Invisible when no JCTXT4*
44.4	**Jump Step 4 Number and Name**		JPOS4 : JNAME4	*Jump step number and name*
		Green	JCTXT24 <> 0	*Invisible when no JCTXT4*

Graphic Element

Indicator01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Dotted Yellow	DI1_ALARM_BLK = 1	*Alarm blocked by operator*
		Invisible		
2	**Mode**		ModeVisible = true	*Object mode*
		M Green	MANM= 1	*Manual mode*
		A Green	AUTOM =1	*Auto mode*
		H Yellow	HOLDM =1	*Hold mode*
		-	ModeVisible = false	*Mode is invisible*
3	**Run Status Indication**	 Green	INTERLOCK (SEQ_RFS) = 1 and RUN = 0	*Not Ready for Start*
		 Green	HOLDM= 1	
		 Green flashing	RUN = 1 and BUSY (SEQ_COMPLETE)= 1	*Not-Completed*
		 Green	RUN = 1	
		 Green	RUN = 0	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
ModeVisible	2. Mode	**true,** false	*Mode string is visible*

CurrStepNumberName01

Presentation:

Behavior:

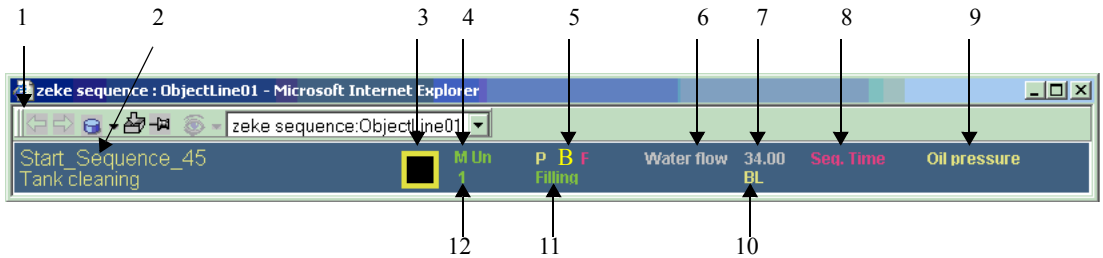
No	Description	Default Presentation	Condition	Remarks
1	**Current Step Number**			*Current Step Number*
			POSN	*Invisible when POSN = 0*
		Green	POSN <> 0	
		-		
2	**Current Step Name**			*Current Step Name*
		Green	STEPNAME	
		-		

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Transparent**, any color	

ObjectLine01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Invisible	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	DI2_ALARM_UNACK = 1 or AU_POSN_F = 1 or AU_SERVUC = 1 or AU_SEQAL = 1 or AU_STEPAL = 1	*Unacknowledged alarm*
		Yellow	BLOCKED =1	*Command blocked*
		Red	DI2_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Run Status Indication**	 Green	INTERLOCK (SEQ_RFS) = 1 and RUN = 0	*Not Ready for Start*
		 Green	HOLDM= 1	

No	Description	Default Presentation	Condition	Remarks
3 cont.		 Green flashing	RUN = 1 and BUSY (SEQ_COMPLETE)= 1	*Not-Completed*
		 Green	RUN = 1	
		 Green	RUN = 0	
4	**Mode**	**M Un** Green	MAN M= 1 and UNCONDM= 1	*Manual mode*
		M Green	MANM= 1	*Manual mode*
		A Green	AUTOM= 1	*Auto mode*
		HOLD Yellow	HOLDM= 1	*Hold mode*
5	**Printout Blocked**	**P** Yellow	TF_PRINT_BLK = 1	*Printout blocked*
	Alarm Blocked	**B** Yellow	DI1_ALARM_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	DI1_ALARM_P_BLK = 1	*Alarm blocked by PC-program*
	Fault Indication	**F** Red	DI2_DIST = 1	*Alarm*
6	**Information Text**		INFTXT	*Information text*
		Khaki	BLANKINF = 0	*Invisible when BLANKINF = 1*
7	**Information Value**		INFVAL	*Information value*
		Khaki	BLANKINF = 0 and INFTXT <> “”	*Invisible when BLANKINF = 1*
8	**Alarm Text**	**? ? ?** Yellow flashing	DI2_REPEAT_FAIL_BLK = 1	*Repeat fail block*
		-	DI1_ALARM_BLK = 1 or DI1_ALARM_PERIOD_BLK = 1	*Alarm blocked by operator or Alarm blocked by PC-program*
		Jump Error Red	TS_POSN_F = 1	
		Seq. Time Red	TS_SEQAL = 1	
		Step Time Red	TS_STEPAL = 1	

No	Description	Default Presentation	Condition	Remarks
9	**Interlock Info Text**	**Next Step Enabled** Green	NXTCOND = 1	
		CONDTXT1 Yellow	CONDTXT1 <> '' and CONDSTA1 = 0	*Condition 1 exists but is not satisfied.*
		CONDTXT2 Yellow	CONDTXT2 <> '' and CONDSTA2 = 0	*Condition 2 exists but is not satisfied.*
		CONDTXT3 Yellow	CONDTXT3 <> '' and CONDSTA3 = 0	*Condition 3 exists but is not satisfied*
		CONDTXT4 Yellow	CONDTXT4 <> '' and CONDSTA4 = 0	*Condition 4 exists but is not satisfied*
		CONDTXT5 Yellow	CONDTXT5 <> '' and CONDSTA5 = 0	*Condition 5 exists but is not satisfied*
		CONDTXT6 Yellow	CONDTXT6 <> '' and CONDSTA6 = 0	*Condition 6 exists but is not satisfied*
		CONDTXT7 Yellow	CONDTXT7 <> '' and CONDSTA7 = 0	*Condition 7 exists but is not satisfied*
		CONDTXT8 Yellow	CONDTXT8 <> '' and CONDSTA8 = 0	*Condition 8 exists but is not satisfied*
10	**Command Blocked**	**BL** Yellow	BLOCKED = 1	*Command blocked*
11	**Current Step Name**		STEPNAME	*Invisible when POSN = 0*
		Green	POSN <> 0	
12	**Current Step Number**		POSN	*Invisible when POSN = 0*
		Green	POSN <> 0	

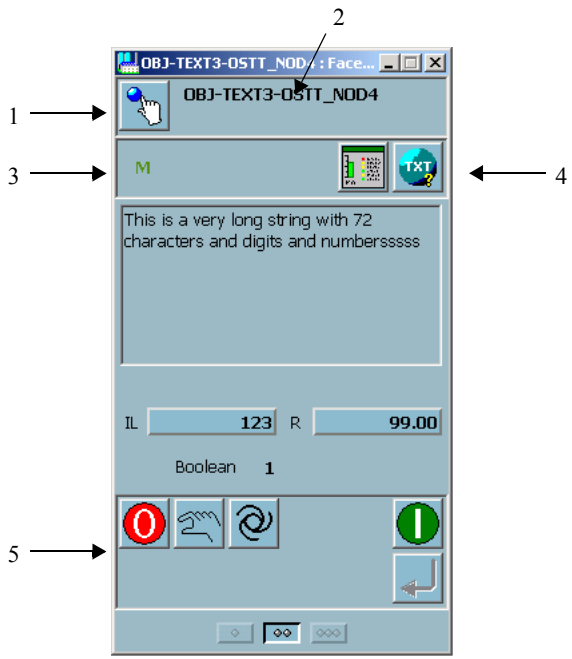
Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Transparent**, any color	

TEXT, Text data

Faceplate

Presentation:



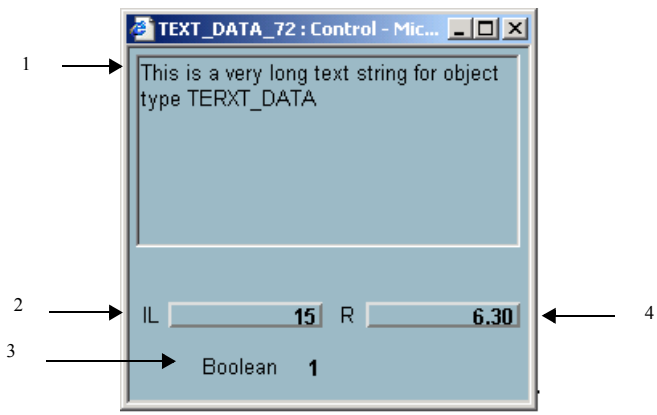
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Object lock button			
2	Name and Description			
3	Status Field			
3.1	Mode	**M** Dark green	MAN = 1	
		A Dark green	MAN = 0	

No	Description	Default Presentation	Condition	Remarks
4	**Aspect Links**	Object Display		
		Object Type Help		
5	**Man**	Set to Manual Mode		Set MAN = 1
	Auto	Set to Automatic Mode		Set MAN = 0
	On	Set VALUE to one	MAN = 1 and ORD_BLK = 0	Set BOOLEAN = 1
	Off	Set VALUE to zero	MAN = 1 and ORD_BLK = 0	Set BOOLEAN = 1

Control

Presentation:

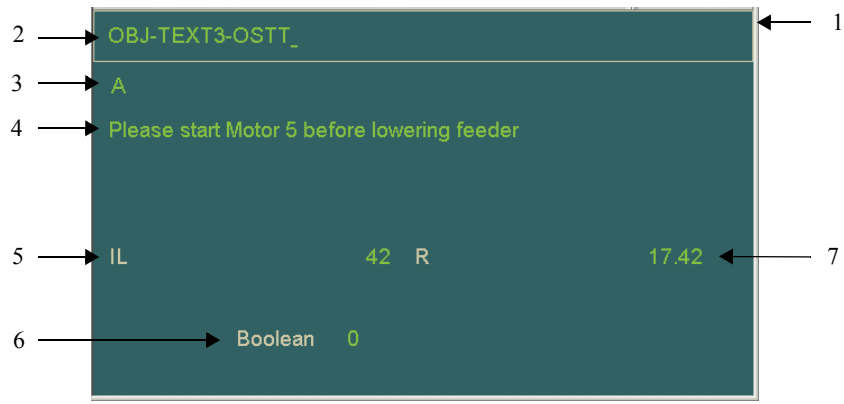


Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Value Text**		TEXT	*The object Text value*
		-	BLANKT = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Black	-	
2	**Value Integer Long**		INT_LONG	*The object IL value*
		-	BLANKIL = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Black	-	
3	**Value Boolean**		BOOLEAN	*The object Boolean value*
		-	BLANKB = 1	*Invisible*
		1	BOOLEAN =1	
		0	-	
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Black	-	
4	**Value real**		REAL	*The object Real value*
		-	BLANKR = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Black	-	

ObjectDisplay

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**			*Object select frame*
		White	SELECTED = 1	*Only for overlap*
		Grey	SELECTED = 0	static
2	**Header**	Green	NAME	*The object name*
3	**Mode**			*The object mode*
		M Green	MAN = 1	*Manual mode*
		A Green	MAN = 0	*Auto mode*
4	**Value Text**		TEXT	*The object Text value*
		-	BLANKT = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	

No	Description	Default Presentation	Condition	Remarks
5	**Value Integer Long**		INT_LONG	*The object IL value*
		-	BLANKIL = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	
6	**Value Boolean**		BOOLEAN	*The object Boolean value*
		-	BLANKB = 1	*Invisible*
		1	BOOLEAN =1	
		0	BOOLEAN =0	
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	
7	**Value real**		REAL	*The object Real value*
		-	BLANKR = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	

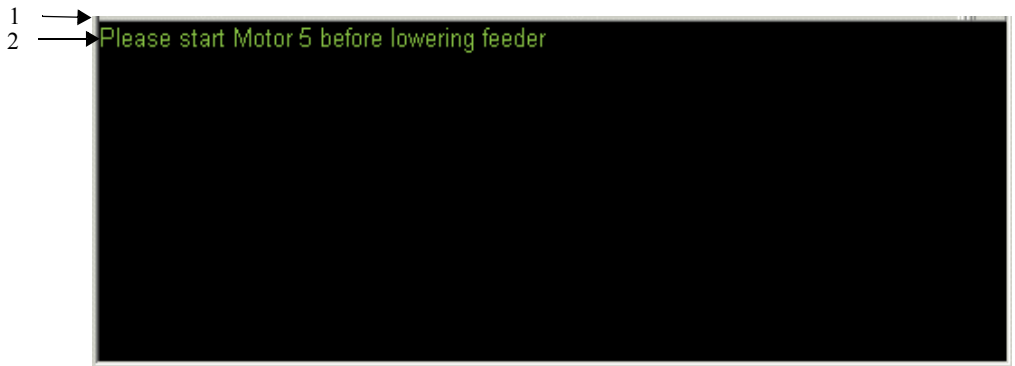
Graphic Element

SingleLineText01

Presentation:

MultiLineText01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	Lock Frame	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	

No	Description	Default Presentation	Condition	Remarks
2	**Value**		TEXT	*The object Text value*
		-	BLANKT = 1	*Invisible*
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	

Configuration:.

Parameters	Affects	Options (bold is default)	Remarks
Alignment	2. Value	Near, Far, Center	*Alignment of text in field* *Note that MultiLineText01only will wrap the text if it include spaces.*
NumberOfChar	2. Value	**72**, (1..72)	*Number of total character that the field could contain.*
Font Size	2. Value	**10** point	*Valid for MultiLineText01*
FrameWidth		3,0,,4	*Valid for SingleLineText01*
FrameStyle		Flat, Raised, Sunken	*Valid for SingleLineText01*
BackgroundColor		**Black**, any other color	

NumericString01

Presentation:

Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
2	**Values**			*The object values*
			REAL	DataType = 0
			INT_LONG	DataType = 1
			BOOLEAN	DataType = 2
		No Datatype Green	-	
		-	BLANKx = 1	*Invisible, x = IL,R, or T **
		Red flashing	COLOR2 = 1	
		Red	COLOR1 = 1	
		Green	-	

Configuration:.

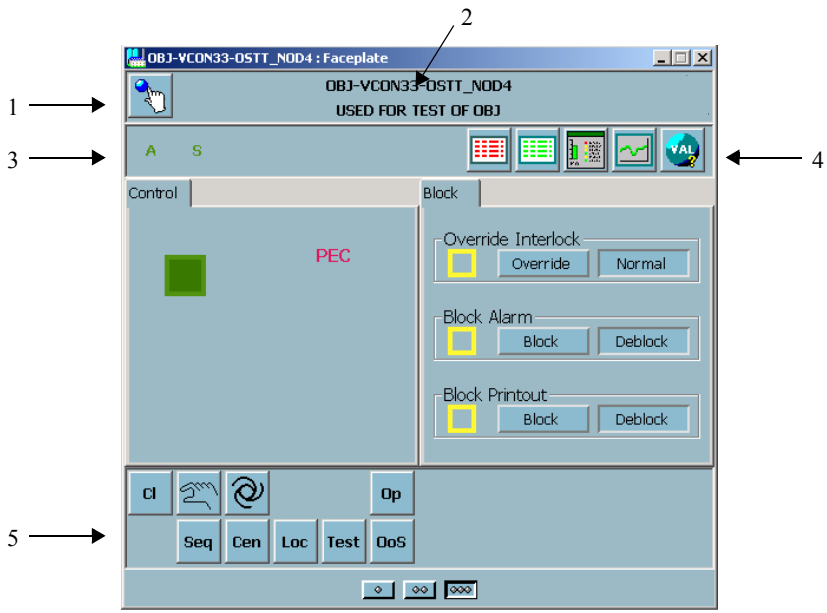
Parameters	Affects	Options (bold is default)	Remarks
FrameWidth	1. Lock Frame	**3**, (0...5)	
FrameStyle	1. Lock Frame	**Flat**, Raised, Sunken	

Parameters	Affects	Options (bold is default)	Remarks
DataType	2. Value	0 = Real, 1 = Int Long, 2 = Boolean	
BackgroundColor		**Black**, any other color	

VALVECON, Valve Control

Faceplate

Presentation:



Behavior:

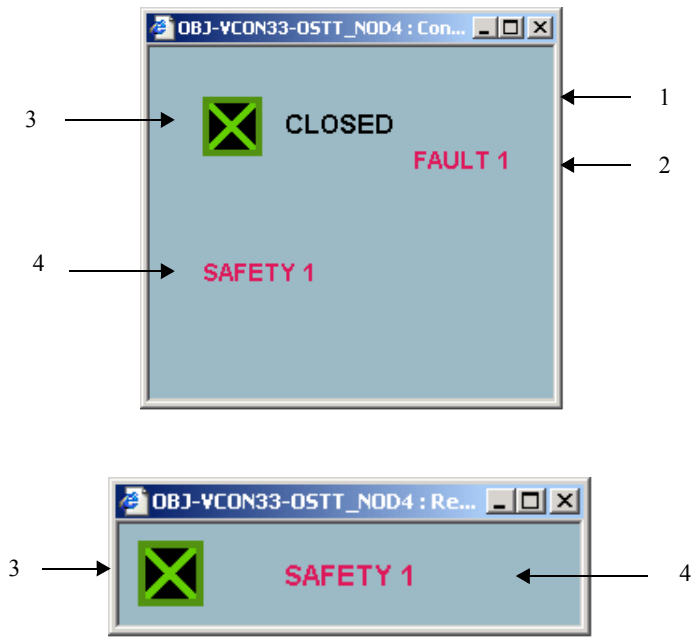
No	Description	Default Presentation	Condition	Remarks
1	**Lock Button**			
2	**Name and Description**			
3	**Status Field**			
3.1	**Mode**	**M** Dark green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		A Dark green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
3.2	**Control point**	**S** Dark green	IND2_04 = 1	*Sequence controller from groupstart*

No	Description	Default Presentation	Condition	Remarks
3.2 cont.		**C** Dark green	IND2_04 = 0 and IND2_03 = 0 and IND2_02 = 0 and IND2_01 = 0	*Control controlled from operator's panel*
		L Dark green	IND2_01 = 1	*Local controlled from local panel*
		T Yellow	IND2_2 = 1	*Test, jog running from motor place*
		O Kakhi	IND2_3 = 1	*Out of service. No control possible.*
3.3	**Print Blk**	**P** Black	PRINT_BLK	
3.4	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11= 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_12 = 0)))	*Safety interlock or Operator interlock*
		BX Green	IND2_15 = 1	*Override interlocks*
		BX Yellow	IND2_00 = 1	*Override interlock*
4	**Aspect links**	Alarm List	position 0, 0, 8	
		Event List	position 0, 0, 9	
		Object Display	position 5, 5, 10	
		Trend Display	position 6, 6, 11	
		Object Type Help	position 0, 0, 12	
5	**Op**	Open Value		Set MORD_08 = 1
	Cl	Close Value		Set MORD_09 = 1
	Man	Set to Man Mode		Set MORD_05 = 1
	Auto	Set to Auto Mode		Set MORD_04 = 1
	Seq	Set to Sequence Control		Set MORD_10 = 1
	Cen	Set to Central Control		Set MORD_03 = 1

No	Description	Default Presentation	Condition	Remarks
5 cont.	**Lock**	Set to Local Control		Set MORD_00 = 1
	Test	Set to Test Control		Set MORD_01 = 1
	OoS	Set to Out of Service Control		Set MORD_02 = 1

Control and ReducedControl

Presentation:



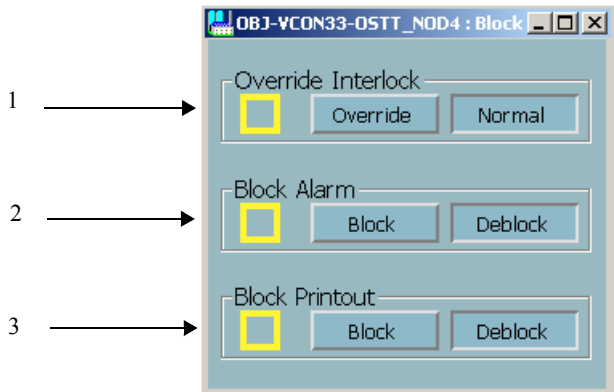
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Error 1**	**PEO** Red flashing	AU_IND1_02=1	*Unack Position Error Open*
		PEC Red flashing	AU_IND1_03=1	*Unack Position Error Close*

No	Description	Default Presentation	Condition	Remarks
1 cont.		**PEO** Red	IND1_02=1	*Position Error Open*
		PEC Red	IND1_03=1	*Position Error Close*
2	**Error 2**	**Fault 1** Red flashing	AU_IND1_00=1	*Unacknowledged Fault 1*
		Fault 2 Red flashing	AU_IND1_01=1	*Unacknowledged Fault 2*
		Fault 1 Red	IND1_00=1	*Fault 1*
		Fault 2 Red	IND1_01=1	*Fault 2*
3.1	**Valve Status**	 Green	IND2_07 = 0	*Not ready for start*
		 Green flashing	(IND1_13 = 1 or IND1_12 = 1) and IND1_15 = 1	*No limit position*
		 Green	IND1_07 = 1	*Limit position*
		 Green	IND1_07 = 0 and IND1_15 = 0	*No limit position*
		 Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
3.2	**Valve Text**	Green	INDI_07 = 1 / PRES_A INDI_11 = 1 / PRES_B	*User defined text*
4	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*

Block

Presentation:



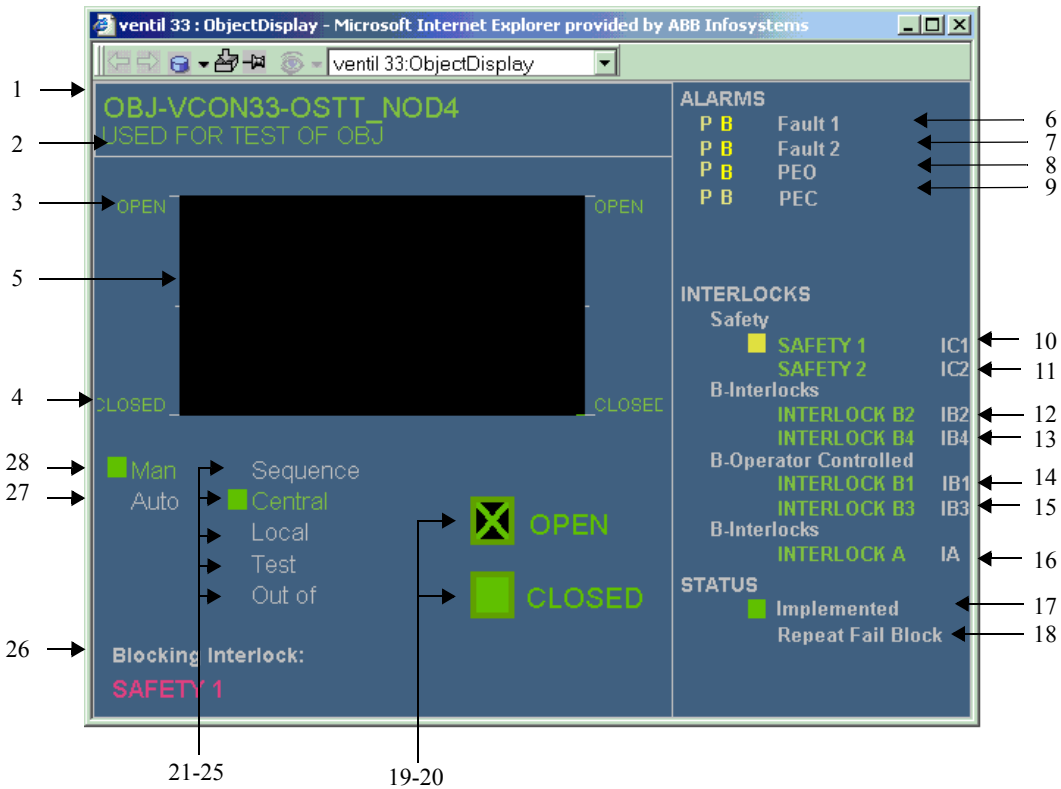
Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Override Interlock**	**Override Interlock** Black		*IND2_00 Indicates current status*
		! Yellow	Blocked	
		Overide pressed	MORD_06 = 1	
		Normal pressed	MORD_07 = 0	
2	**Block Alarm**	**Block Alarm** Black		
		! Yellow	Blocked	
		Block pressed	AL_BLK = 1	
		Deblock pressed	AL_BLK = 0	
3	**Block Printout**	**Block Printout** Black		
		! Yellow	Blocked	

No	Description	Default Presentation	Condition	Remarks
3 cont.		**Block** pressed	PR_BLK = 1	
		Deblock pressed	PR_BLK = 0	

Object Display

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Object select frame*
		Grey	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*
3	**Range Max**	Green		*User defined text for open position*
4	**Range Min**	Green		*User defined text for close position*
5	**Trim Curve** **ALARMS**	Green		*Curve shows the valve position*
				Alarms
6.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
6.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
6.3	**Warning Indication**	■ Red flashing	AU_IND1_00 = 1	*Unacknowledged alarm*
		■ Red	IND1_00 = 1	*Alarm*
6.4	**Alarm 1 Text**	**Fault 1**	TXT_BLK_00 = 0	*User defined Fault 1*
		Red	IND1_00 = 1 or AU_IND1_00 = 1	
		Grey	-	
7.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
7.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*

No	Description	Default Presentation	Condition	Remarks
7.3	**Warning Indication**	■ Red flashing	AU_IND1_01 = 1	*Unacknowledged alarm*
		■ Red	IND1_01 = 1	*Alarm*
7.4	**Alarm 2 Text**	**Fault 2**	TXT_BLK_01 = 0	*User defined Fault 2*
		Red	IND1_01 = 1 or AU_IND1_01 = 1	
		Grey	-	
8.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
8.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
8.3	**Warning Indication**	■ Red flashing	AU_IND1_02 = 1	*Unacknowledged alarm*
		■ Red	IND1_02 = 1	*Alarm*
8.4	**Alarm 3 Text**	**PEO**	TXT_BLK_02 = 0	*PEO Position Error Open*
		Red	IND1_02 = 1 or AU_IND1_02 = 1	
		Grey	-	
9.1	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
9.2	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
9.3	**Warning Indication**	■ Red flashing	AU_IND1_03 = 1	*Unacknowledged alarm*
		■ Red	IND1_03 = 1	*Alarm*
9.4	**Alarm 4 Text**	**PEC**	TXT_BLK_03 = 0	*PEC Position Error closed*
		Red	IND1_03 = 1 or AU_IND1_03 = 1	
		Grey	-	
	INTERLOCKS			*Interlocks*
10.1	**IC1 Active**	■ Yellow	IND2_08 = 1	*Safety Interlock IC1 active*
10.2	**IC1 Text**	**C-Interlock 1** Grey		*Safety Interlock IC1*

No	Description	Default Presentation	Condition	Remarks
11.1	**IC2 Active**	■ Yellow	IND2_09 = 1	*Safety Interlock IC2 active*
11.2	**IC2 Text**	**C-Interlock 2** Grey		*Safety Interlock IC2*
12.1	**IB2 Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
12.2	**IB2 Active**	■ Yellow	IND2_11 = 1	*Interlock IB2 active*
12.3	**IB2 Text**	Green	IB2_TXT	*Interlock text IB2*
13.1	**IB4 Block Indication**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
13.2	**IB4 Active**	■ Yellow	IND2_13 = 1	*Interlock IB4 active*
13.3	**IB4 Text**	Green	IB4_TXT	*Interlock IB4 text*
14.1	**IB1 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB1 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
14.2	**IB1 Active**	■ Yellow	IND2_10 = 1	*Interlock IB1 active*
14.3	**IB1 Text**	Green	IB1_TXT	*Interlock IB1 text*
15.1	**IB3 Blocked**	**BX** Red	IND2_15 = 1 and (IND2_00 = 1 or IND2_02 = 1)	*Override Interlock and Interlock IB3 active*
		BX Yellow	IND2_00 = 1 or IND2_02 = 1	*Test mode. Interlock blocked*
15.2	**IB3 Active**	■ Yellow	IND2_12 = 1	*Interlock IB3 active*
15.3	**IB3 Text**	Green	IB3_TXT	*Interlock IB3*
16.1	**IA Blocked**	**BX** Yellow	IND2_02 = 1	*Test mode. Interlock blocked*
16.2	**IA Active**	■ Yellow	IND2_14 = 1	*Interlock IA active*
16.3	**IA Text**	Green	IA_TXT	*Interlock IA text*
	STATUS			*Status*
17.1	**Implemented Indication**	■ Green	ACT = 1	
17.2	**Implemented Text**	**Implemented** Grey		*Implemented*

No	Description	Default Presentation	Condition	Remarks
18.1	**Repeat Fail Blocked Indication**	■ Yellow	REPEAT_BLK = 1	*The motor can be controlled*
18.2	**Repeat Fail Blocked Text**	**Repeat Fail Blk**		*Repeat Fail Blocked*
		Yellow	REPEAT_BLK = 1	
		Grey	-	
19.1	**Valve Open Status**	 Green	IND2_07 = 0	*Not ready for start*
		 Green flashing	IND1_12 = 1 and IND1_15 = 1	*Open* *No limit position open*
		 Green	IND1_07 = 1	*Limit position open*
		 Green	IND1_07 = 0 and IND1_15 = 0	*No limit position open*
		 Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
19.2	**Valve Open Text**	Green	PRES_A	*User defined text*

No	Description	Default Presentation	Condition	Remarks
20.1	**Valve Close Status**	 Green	IND2_07 = 0	*Not ready for start*
		 Green flashing	IND1_13 = 1 and IND1_15 = 1	*Close* *No limit position close*
		 Green	IND1_11 = 1	*Limit position close*
		 Green	IND1_11 = 0 and IND1_15 = 0	*No limit position close*
		 Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
20.2	**Valve Close Text**	Green	PRES_B	*User defined text*
21.1	**Sequence Indication**	■ Green	IND2_04 = 1	*Sequence Controlled from groupstart*
21.2	**Sequence Text**	**Sequence**		
		Green	IND2_04 = 1	
		Grey	-	
22.1	**Central Indication**	■ Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Controlled from operator's place*
22.2	**Central Text**	**Central**		
		Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	
		Grey	-	
23.1	**Local Indication**	■ Green	IND2_01 = 1	*Local* *Controlled from local panel*

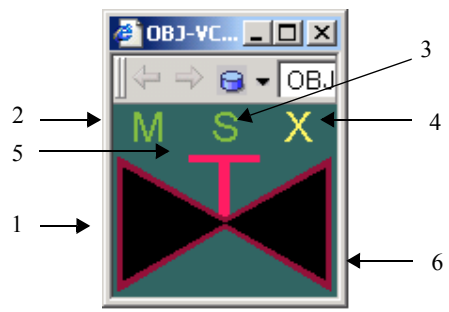
No	Description	Default Presentation	Condition	Remarks
23.2	**Local Text**	**Local**		
		Green	IND2_01 = 1	
		Grey	-	
24.1	**Test Indication**	■ Yellow	IND2_02 = 1	*Test* *Jog running from motor place*
24.2	**Test Text**	**Test**		
		Yellow	IND2_02 = 1	
		Grey	-	
25.1	**Out of Service Indication**	■ Yellow	IND2_03 = 1	*Out of service* *No control possible*
25.2	**Out of Service Text**	**Out of Service**		
		Yellow	IND2_03 = 1	
		Grey	-	
26.1	**Blocking Interlock Text**	**Blocking Interlock:** Grey		*Blocking Interlock text*
26.2	**Actual Interlock Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07 = 0	*Not ready for start*
		Yellow	IND2_07 = 1	*Ready for start*
27.1	**Auto Indication**	■ Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode. Process conditions control start/stop of motor*
27.2	**Auto Text**	**Auto**		
		Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	
28.1	**Man Indication**	■ Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode. Startorder affects the motor directly*

No	Description	Default Presentation	Condition	Remarks
28.2	**Man Text**	**Man** Grey		
		Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	
		Grey	-	

Graphic Element

Valve01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Yellow	IND2_00 = 1	*Interlock override by operator*
		Dotted Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Invisible		

No	Description	Default Presentation	Condition	Remarks
2	**Mode**		ModeVisible = true	
		* Yellow	IND2_02 = 1 and IND2_03 = 0	*Test*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*
		M Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		-	ModeVisible = false	*Mode is invisible*
3	**Control Point**		PointofControlVisible= true	
		S Green	IND2_04 = 1	*Sequence Control*
		L Green	IND2_01 = 1	*Local Control*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central Control*
		-	PointofControlVisible = false	*Control point is invisible*
4.	**Interlock Indication**		InterlockVisible = true	
		-	IND2_03 = 1	*Out Of Service - No indication*
		XA Yellow	IND2_14 = 1	*IA1*
		-	IND2_07 = 1	*Ready for start*
		X Yellow	IND2_08 = 1 or IND2_09 = 1 or IND2_11= 1 or (IND2_13 = 1 and IND1_11 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_11 = 0)))	*IC1 or* *IC2 or* *IB2 or* *(IB4 & OPN=0) or* *(BlkIntl=0 &* *(IB1 or* *(IB3 & OPN=0)))*
		-	InterlockVisible = false	*Interlock is invisible*

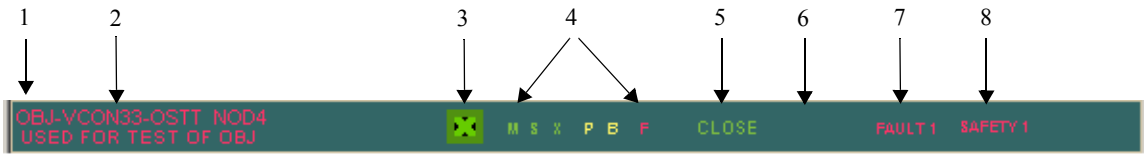
No	Description	Default Presentation	Condition	Remarks
5	**Actuator Indication**		ActuatorVisible = true	
		Grey	IND2_03 = 1	*Out Of Service*
		Red flashing	IND1_09 = 1	*Alarm Unack*
		Red	IND1_08 = 1	*Collective fault*
		Green	-	
		-	ActuatorVisible = false	*Actuator is invisible*
6	**Valve Status**	 Black	IND1_15 = 0 and IND1_11 = 1	*No intermediate position* *No limit position for open*
		 Green flashing	IND1_15 = 1 and IND1_12 = 0	*Intermediate position* *Not open*
		 Green flashing	IND1_15 = 1 and IND1_12 = 1	*Intermediate position* *Open*
		 Green	IND1_15 = 0 and IND1_07 = 1	*No intermediate position* *Limit position for open*
		Grey	IND2_03 = 1	*Out Of Service*
		Red flashing	AU_IND = 1	*Unacknowledged Alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
Orientation		**Horizontal**, Vertical	
ActuatorIndVis		**true,** false	
ModeIndVis		**true,** false	
Point OfControlIndVis		**true,** false	
InterlockIndVis		**true,** false	

ObjectLine01

Presentation:



Behavior:

No	Description	Default Presentation	Condition	Remarks
1	**Lock Frame**	White	SELECTED = 1	*Selected*
		Invisible	SELECTED = 0	
2	**Header**		NAME and DESCR	*Object name and description*
		Red flashing	AU_IND = 1	*Unacknowledged alarm*
		Red	IND1_DIST = 1	*Alarm*
		Green	-	*Normal*

No	Description	Default Presentation	Condition	Remarks
3	**Valve Open Status**	 Green	IND2_07 = 0	*Not ready for start*
		 Green flashing	IND1_12 = 1 and IND1_15 = 1	*Open* *No limit position open*
		 Green	IND1_07 = 1	*Limit position for open*
		 Green flashing	IND1_13 = 1 and IND1_15 = 1	*Close* *No limit for close*
		 Green	IND1_11 = 0 and IND1_15 = 0	*Limit position for close*
		 Green	IND2_07 = 1 and IND2_14 = 1	*A-Interlock*
		Grey	IND2_03 = 1	*Out of service*
4	**Status Indication**			*Status Indication*
4.1	**Mode**	**M** Green	IND2_05 = 0 and IND2_02 = 0 and IND2_03 = 0	*Manual mode*
		A Green	IND2_05 = 1 and IND2_02 = 0 and IND2_03 = 0	*Auto mode*
4.2	**Point Of Control**	**O** Yellow	IND2_03 = 1	*Out of Service*
		T Yellow	IND2_02 = 1	*Test*
		L Green	IND2_01 = 1	*Local*
		S Green	IND2_04 = 1	*Sequence*
		C Green	IND2_01 = 0 and IND2_02 = 0 and IND2_03 = 0 and IND2_04 = 0	*Central*

No	Description	Default Presentation	Condition	Remarks
4.3	**Interlock Indication**	**X** Green	IND2_08 = 1 or IND2_09 = 1 or IND2_11 = 1 or (IND2_13 = 1 and IND1_12 = 0) or (IND2_00 = 0 and (IND2_10 = 1 or (IND2_12 = 1 and IND1_12 = 0)))	*Safety interlock or* *Operator interlock*
		BX Red	IND2_15 = 1	*Override Interlocks.* *Interlock IB1 or IB3 active*
		BX Yellow	IND2_00 = 1	*Override Interlock*
4.4	**Printout Blocked**	**P** Yellow	PR_BLK = 1	*Printout blocked*
4.5	**Alarm Blocked**	**B** Yellow	AL_BLK = 1	*Alarm blocked by operator*
		Bx Yellow	AL_P_BLK = 1	*Alarm blocked by PC-program*
4.6	**Fault Indication**	**F** Red	IND1_08 = 1	*Collective fault indication*
5	**Valve Open Text**	**OPEN** Green	PRES_B IND1_07 = 1	*User defined text*
	Valve Closed Text	**CLOSED** Green	PRES_A IND1_11 = 1	*User defined text*
6	**Error 1**	**PEO** Red flashing	AU_IND1_02 = 1	*Unack Position Error Open*
		PEC Red flashing	AU_IND1_03 = 1	*Unack Position Error Close*
		PEO Red	IND1_02 = 1	*Position Error Open*
		PEC Red	IND1_03 = 1	*Position Error Close*
7	**Error 2**	**Fault 1** Red flashing	AU_IND1_00 = 1	*Unacknowledged Fault 1*
		Fault 2 Red flashing	AU_IND1_01 = 1	*Unacknowledged Fault 2*
		Fault 1 Red	IND1_00 = 1	*Fault 1*
		Fault 2 Red	IND1_01 = 1	*Fault 2*
8	**Act Pres Text**		ACT_PRES_TEXT	*Actual interlock text*
		Red	IND2_07=0	*Not ready for start*
		Yellow	IND2_07=1	*Ready for start*

Configuration:

Parameters	Affects	Options (bold is default)	Remarks
BackgroundColor		**Transparent,** any color	

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