



PRODUCT-DETAILS

# OTDC800F22-PV2

## OTDC800F22-PV2 DC Switch-disconnector




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### General Information

|                       |   |
|-----------------------|---|
| Extended Product Type | OTDC800F22-PV2  |
| Product ID            | 1SCA161684R1001   |
| EAN                   | 6417019918327   |
| Catalog Description   | OTDC800F22-PV2 DC Switch-disconnector   |
| Long Description      | <p>A fully optimized four-pole DC switch-disconnector for 1000V utility-scale photovoltaic power plants covering 315-800A current range. The new design offers both a size reduction and an increase in efficiency and performance to help manufacturers adapt to the industry's rapid adoption of 1500V DC solutions.</p> <p>The four-pole 1000V DC concept helps manufacturers improve system efficiency, reducing switch losses. The compact size of the new OTDC range makes it possible for manufacturers to reduce the size of combiner boxes and inverters.</p> <p>Main characteristics of this particular OTDC type:<br/>                 Disconnect single PV circuit. Approved according to IEC 60947-1, -3, DC-PV2 ratings</p> |

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### ABB EcoSolutions

|                  |     |
|------------------|-----|
| ABB EcoSolutions | Yes |
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### Circular Value

|  |  |
|--|--|
| Circular Design Principles<br>Recyclability Rate | Design for Closing Resource Loops - Standard EN45555 - 59,09 %   |
| End of Life Instructions                         | 1SCC301112M0201  |
| Group Waste to Landfill<br>Target                | UL 2799 Zero Waste To Landfill Validation available  |
| Improved Resource<br>Efficiency for Customers    | Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line |

**Eco Transparency**

|  |                 |
|--|-----------------|
| Environmental Product<br>Declaration - EPD | 1SCC301247D0201 |
|--|-----------------|

**Material Compliance**

|   |  |
|---|--|
| Conflict Minerals<br>Reporting Template<br>(CMRT) | 9AKK108467A5658  |
| REACH Declaration                                 | 1SCC301240D0201  |
| RoHS Information                                  | 1SCC301239D0201  |
| RoHS Status                                       | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances Control<br>Act - TSCA            | 1SCC301321D0201  |

**Ordering**

|                        |              |
|------------------------|--------------|
| Minimum Order Quantity | 1 piece      |
| Customs Tariff Number  | 85363090     |
| Country of Origin      | Finland (FI) |

**Popular Downloads**

|  |                 |
|--|-----------------|
| Data Sheet, Technical<br>Information       | 1SCC301022C0201 |
| Instructions and Manuals                   | 1SCC301102M0201 |
| Environmental Product<br>Declaration - EPD | 1SCC301247D0201 |
| End of Life Instructions                   | 1SCC301112M0201 |

**Dimensions**

|                               |                     |
|-------------------------------|---------------------|
| Product Frame Size            | M                   |
| Product Net Width             | 255.5 mm<br>10.1 in |
| Product Net Height            | 211 mm<br>8.3 in    |
| Product Net Depth /<br>Length | 135 mm<br>5.3 in    |
| Product Net Weight            | 10 kg<br>22 lb      |

**Technical**

|   |                       |
|---|-----------------------|
| Connection Configuration                              | Single circuit 6c, 6g |
| Rated Operational Current<br>DC-21B (I <sub>g</sub> ) | (1000 V) 800 A        |
| Rated Operational Current<br>DC-PV1                   | (1000 V) 800 A        |

|   |  |
|---|--|
| Rated Operational Current<br>DC-PV2                               | (1000 V) 800 A   |
| Conventional Free-air<br>Thermal Current ( $I_{th}$ )             | $\Theta = 40\text{ °C}$ 800 A  |
| Conventional Thermal<br>Current ( $I_{the}$ )                     | Fully Enclosed 800 A   |
| Rated Impulse Withstand<br>Voltage ( $U_{imp}$ )                  | 12 kV  |
| Rated Insulation Voltage<br>( $U_i$ )                             | 1500 V   |
| Rated Operational Voltage   | 1000 V   |
| Rated Short-Circuit<br>Making Capacity ( $I_{cm}$ )               | (1000 V DC) 10 kA  |
| Rated Short-time<br>Withstand Current Low<br>Voltage ( $I_{cw}$ ) | (1000 V DC) 10 kA<br>for 1 s 10 kA   |
| Power Loss  | at Rated Operating Conditions per Pole 30 ... 32 W   |
| Pollution Degree  | 3  |
| Handle Type   | Handle and shaft not included  |
| Positive Opening<br>Operation Torque (Direct<br>Opening Action)   | 18 ... 30 N·m  |
| Shaft Diameter  | 12 mm<br>0.47 in   |
| Switches Operating<br>Mechanism                                   | Mechanism Between the Poles<br>22 (Between the Poles)  |
| Position of Line Terminals  | Top In - Bottom Out<br>Bottom In - Top Out   |
| Operating Mode  | Front Operated   |
| Standards   | IEC 60947-1, -3  |
| Special Functions   | No   |
| Mounting Type   | Base mounting  |
| Number of Circuits  | 1  |
| Number of Poles   | 4  |
| Degree of Protection  | Front IP20   |
| Terminal Type   | Lug terminals  |
| Terminal Width  | 30 mm<br>1.2 in  |
| Mechanical Durability   | 10000 cycle  |
| Utilization   | Photovoltaic   |
| Utilization Category  | Switching of single PV string(s) without reverse and overcurrents (DC-PV1)<br>Switching of several PV string(s) with reverse and overcurrents (DC-PV2) |

## Certificates and Declarations

|                                     |                     |
|-------------------------------------|---------------------|
| CCC Certificate                     | CQC2019010302206498 |
| Declaration of Conformity<br>- CE   | 1SCC301227D2701     |
| Declaration of Conformity<br>- UKCA | 1SCC301313D0201     |
| DNV GL Certificate                  | 1SCC301231D0201     |

## Container Information

|                                   |                   |
|-----------------------------------|-------------------|
| Package Level 1 Units             | box 1 piece       |
| Package Level 1 Width             | 270 mm<br>10.6 in |
| Package Level 1 Depth /<br>Length | 310 mm<br>12.2 in |
| Package Level 1 Height            | 200 mm<br>7.9 in  |
| Package Level 1 Gross             | 10 kg             |

Weight

22 lb

Package Level 1 EAN

6417019918327

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## Classifications

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Object Classification Code

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ETIM 8

EC000216 - Switch disconnecter

ETIM 9

EC000216 - Switch disconnecter (low voltage)

eClass

V11.1 : 27371403

WEEE Category

5. Small Equipment (No External Dimension More Than 50 cm)

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## Categories

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Low Voltage Products and Systems → Switches → DC Switch-Disconnectors

