



PRODUCT-DETAILS

OTDC500FV11

OTDC500FV11 DC Switch-disconnector



General Information	
Extended Product Type	OTDC500FV11
Product ID	1SCA158226R1001
EAN	6417019873312
Catalog Description	OTDC500FV11 DC Switch-disconnector
Long Description	<p>A fully optimized two-pole DC switch-disconnector for 1500V utility-scale photovoltaic power plants covering 315-630A 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 two-pole 1500V DC concept helps manufacturers improve system efficiency, reducing switch losses by up to 35 percent. Measuring just 150mm wide and 122mm high, the OTDC range of 1500V DC switches is also up to 30 percent smaller than conventional solutions. 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 for this particular OTDC type: Disconnect single PV circuit, Approved according to IEC 60947-1, -3</p>

Circular Value	
ABB EcoSolutions	Yes
Circular Design	Design for Closing Resource Loops - Standard EN45555 - 59,09 %

Principles Recyclability Rate		
Conflict Minerals Reporting Template (CMRT)		9AKK108467A5658
End of Life Instructions		1SCC301112M0201
Environmental Product Declaration - EPD		1SCC301247D0201
Group Waste to Landfill Target	UL 2799 Zero Waste To Landfill Validation available	
Improved Resource Efficiency for Customers	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line	
REACH Declaration		1SCC301240D0201
RoHS Information		1SCC301239D0201
Toxic Substances Control Act - TSCA		1SCC301321D0201

Eco Transparency

Environmental Product Declaration - EPD	1SCC301247D0201
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Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85353010
Country of Origin	Finland (FI) India (IN)

Popular Downloads

Data Sheet, Technical Information	1SCC301022C0201
Instructions and Manuals	1SCC301099M0201 9AKK107492A6191
Mechanical Drawings	OTDC315-630FV11_stp OTDC315-630FV11_igs 1SCC307658F0001 1SCC307659F0001
Wiring Diagram	1SCC301030K0201
Environmental Product Declaration - EPD	1SCC301247D0201
End of Life Instructions	1SCC301112M0201

Dimensions

Product Frame Size	M
Product Net Width	157.5 mm 6.2 in
Product Net Height	211 mm 8.3 in
Product Net Depth / Length	135 mm 5.3 in
Product Net Weight	3.5 kg 7.7 lb

Technical

Connection Configuration	Single circuit 2a, 2b
Rated Operational Current DC-21B (I_e)	(1500 V) 500 A
Rated Operational Current DC-22B	(1500 V) 400 A
Rated Operational Current DC-PV1	(1500 V) 500 A
Rated Operational Current DC-PV2	(1500 V) 500 A
Conventional Free-air Thermal Current (I_{th})	$\Theta = 40\text{ }^{\circ}\text{C}$ 500 A
Conventional Thermal Current (I_{the})	Fully Enclosed 500 A
Rated Impulse Withstand Voltage (U_{imp})	12 kV
Rated Insulation Voltage (U_i)	1500 V
Rated Operational Voltage	1500 V
Rated Short-Circuit Making Capacity (I_{cm})	(1500 V DC) 10 kA
Rated Short-time Withstand Current Low Voltage (I_{cw})	(1500 V DC) 10 kA for 1 s 10 kA
Power Loss	at Rated Operating Conditions per Pole 18...20 W
Pollution Degree	3
Handle Type	Handle and shaft not included
Positive Opening Operation Torque (Direct Opening Action)	11 ... 19 N·m
Shaft Diameter	12 mm 0.47 in
Switches Operating Mechanism	Mechanism Between the Poles 11 (Between the Poles)
Position of Line Terminals	Top In - Bottom Out 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	2
Degree of Protection	Front IP20
Terminal Type	Lug terminals
Terminal Width	30 mm 1.2 in
Mechanical Durability	10000 cycle
Utilization	Photovoltaic
Utilization Category	Switching of resistive loads, including moderate overloads - occasional actuation (DC-21B) Switching of mixed resistive and inductive loads, including moderate overloads (i.e. shunt motors) - occasional actuation (DC-22B) Switching of single PV string(s) without reverse and overcurrents (DC-PV1) Switching of several PV string(s) with reverse and overcurrents (DC-PV2)

Environmental	
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	1SCC301321D0201

Certificates and Declarations	
CCC Certificate	CQC2019010302206498
Declaration of Conformity - CE	1SCC301227D2701
Declaration of Conformity - UKCA	1SCC301313D0201
DNV GL Certificate	1SCC301231D0201
REACH Declaration	1SCC301240D0201

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	220 mm 8.7 in
Package Level 1 Depth / Length	250 mm 9.8 in
Package Level 1 Height	210 mm 8.3 in
Package Level 1 Gross Weight	3.8 kg 8.3 lb
Package Level 1 EAN	6417019873312

Classifications	
Object Classification Code	Q
ETIM 7	EC000216 - Switch disconnecter
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)

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

