

PRODUCT-DETAILS

OTDC400FV22

OTDC400FV22 DC Switch-disconnector



General Information

Extended Product Type	OTDC400FV22
Product ID	1SCA158299R1001
EAN	6417019874043
Catalog Description	OTDC400FV22 DC Switch-disconnector
Long Description	<p>A fully optimized four-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 four-pole 1500V 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: Disconnect double PV circuit, Approved according to IEC 60947-1, -3</p>

Circular Value

ABB EcoSolutions	Yes
Circular Design Principles Recyclability Rate	Design for Closing Resource Loops - Standard EN45555 - 59,09 %
Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
End of Life Instructions	1SCC301112M0201
Environmental Product Declaration - EPD	1SCC301247D0201

Group Waste to Landfill Target	Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility
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	OTDC315-630FV22_stp OTDC315-630FV22_igs 1SCC307664F0001 1SCC307665F0001
Wiring Diagram	1SCC301035K0201
Environmental Product Declaration - EPD	1SCC301247D0201
End of Life Instructions	1SCC301112M0201

Dimensions

Product Frame Size	M
Product Net Width	255.5 mm 10.1 in
Product Net Height	211 mm 8.3 in
Product Net Depth / Length	135 mm 5.3 in
Product Net Weight	7.7 kg 16.9 lb

Technical

Connection Configuration	Double circuit 4a, 4c
Rated Operational Current DC-21B (I_g)	(1500 V) 400 A
Rated Operational Current DC-22B	(1500 V) 400 A
Rated Operational Current	(1500 V) 400 A

DC-PV1

Rated Operational Current DC-PV2	(1500 V) 400 A
Conventional Free-air Thermal Current (I_{th})	$\Theta = 40\text{ }^{\circ}\text{C}$ 400 A
Conventional Thermal Current (I_{the})	Fully Enclosed 400 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 12...13 W
Pollution Degree	3
Handle Type	Handle and shaft not included
Positive Opening Operation Torque (Direct Opening Action)	18 ... 30 N·m
Shaft Diameter	12 mm 0.47 in
Switches Operating Mechanism	Mechanism Between the Poles 22 (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	2
Number of Poles	4
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	1SCC301227D2701

- CE

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	270 mm 10.6 in
Package Level 1 Depth / Length	310 mm 12.2 in
Package Level 1 Height	200 mm 7.9 in
Package Level 1 Gross Weight	8 kg 17.5 lb
Package Level 1 EAN	6417019874043

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

