

PRODUCT-DETAILS

OTDC400UFSV02

OTDC400UFSV02 PV Disconnect Switch



General Information

Extended Product Type	OTDC400UFSV02
Product ID	1SCA158358R1001
EAN	6417019874593
Catalog Description	OTDC400UFSV02 PV Disconnect Switch
Long Description	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. The two-pole 1500V DC concept helps manufacturers improve system efficiency, reducing switch losses by up to 35 percent. 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. Main characteristics for this particular OTDC type: Disconnect single PV circuit, Approved according to UL98B and IEC 60947-1,-3, Factory fitted connection bar kits

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85353010
Last Ordering Date	2021-05-31 All Countries
Country of Origin	Finland (FI)

Popular Downloads

Data Sheet, Technical Information	1SCC301022C0201
Instructions and Manuals	1SCC301099M0201 9AKK107492A6191
Mechanical Drawings	OTDC250-400UFSV02_stp OTDC250-400UFSV02_igs 1SCC307672F0001 1SCC307673F0001
Wiring Diagram	1SCC301026K0201

Dimensions

Product Frame Size	M
Product Net Width	180 mm 7.1 in
Product Net Height	220.5 mm 8.7 in
Product Net Depth / Length	135 mm 5.3 in
Product Net Weight	3.8 kg 8.4 lb

Technical

Connection Configuration	Single circuit 1a
Rated Operational Current DC-21B (I_g)	(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) 400 A
Conventional Free-air Thermal Current (I_{th})	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 (I_{cw})	(1500 V DC) 10 kA for 1 s 10 kA
Protection Type	Circuit breaker
Power Loss	at Rated Operating Conditions per Pole 20 W
Pollution Degree	3
Handle Type	Handle and shaft not included
Shaft Diameter	12 mm

0.47 in

Switches Operating Mechanism	Mechanism at the End of the Switch 02 (Left Side)
Position of Line Terminals	Bottom In - Bottom Out
Operating Mode	Front Operated
Standards	UL98B and IEC 60947-1, -3
Special Functions	US single-wire break
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
Tightening Torque	Cable Lug 30...40 N·m
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)

Technical UL/CSA

Maximum Operating Voltage UL/CSA	1500 V DC
Ampere Rating UL/CSA	1500VDC 400 A
Tightening Torque UL/CSA	Cable Lug 30...44 N·m Cable Lug 266...390 lbf·in

Environmental

RoHS Status	Following EU Directive 2011/65/EU
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Certificates and Declarations (Document Number)

CCC Certificate	CQC2019010302206498
Declaration of Conformity - CE	1SCC301227D2701
DNV GL Certificate	1SCC301231D0201
Instructions and Manuals	1SCC301099M0201 9AKK107492A6191
RoHS Information	1SCC301227D2701
UL Certificate	UL certificate OTDC250-1000UF

Container Information

Package Level 1 Units	box 1 piece
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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	4.1 kg 9 lb
Package Level 1 EAN	6417019874593

Classifications

Object Classification Code	Q
ETIM 5	EC000216 - Switch disconnecter
ETIM 6	EC000216 - Switch disconnecter
ETIM 7	EC000216 - Switch disconnecter
UNSPSC	39122233
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Categories

Low Voltage Products and Systems → Industries → Solar power → 1500V DC
Low Voltage Products and Systems → Switches → DC Switch-Disconnectors

