

PRODUCT-DETAILS

## OTDC320UFS11P OTDC320UFS11P PV Disconnect Switch



General Information	
Extended Product Type	OTDC320UFS11P
Product ID	1SCA158466R1001
EAN	6417019875644
Catalog Description	OTDC320UFS11P PV Disconnect Switch
Long Description	A fully optimized two-pole DC switch-disconnector for 1000V 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.  The two-pole 1000V DC Switch helps manufacturers improve system efficiency. 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

## OrderingMinimum Order Quantity1 pieceCustoms Tariff Number85363090Last Ordering Date2021-05-31 All CountriesCountry of OriginFinland (FI)

Data Sheet, Technical Information	1SCC301022C0201
Instructions and Manuals	1SCC301099M0201
	9AKK107492A6191
Mechanical Drawings	OTDC250-400UFSV11_stp
	OTDC250-400UFSV11_igs
	1SCC307668F0001
	1SCC307669F0001
Wiring Diagram	1SCC301026K0201
Dimensions	

Dimensions	
Product Frame Size	М
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	4.1 kg 9 lb

Technical	
Connection Configuration	Single circuit 1a
Rated Operational Current DC-21B ( $I_e$ )	(1000 V) 400 A
Rated Operational Current DC-22B	(1000 V) 400 A
Rated Operational Current DC-PV1	(1000 V) 400 A
Rated Operational Current DC-PV2	(1000 V) 400 A
Conventional Free-air Thermal Current $(I_{th})$	400 A
Conventional Thermal Current (I <sub>the</sub> )	Fully Enclosed 400 A
Rated Impulse Withstand Voltage $(U_{imp})$	12 kV
Rated Insulation Voltage (U <sub>i</sub> )	1500 V
Rated Operational Voltage	1000 V
Rated Short-Circuit Making Capacity (I <sub>cm</sub> )	(1000 V DC) 10 kA
Rated Short-time Withstand Current (I <sub>cw</sub> )	(1500 V DC) 10 kA for 1 s 10 kA
Protection Type	Circuit breaker
Power Loss	at Rated Operating Conditions per Pole 13 W
Pollution Degree	3
Handle Color	Black
Handle Length	95 mm 3.7 in

Handle Type	Pistol handle
Shaft Diameter	12 mm 0.47 in
Shaft Length	185 mm 7.3 in
Switches Operating Mechanism	Mechanism Between the Poles 11 (Between the Poles)
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 3040 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	1000 V DC
Ampere Rating UL/CSA	1000VDC 320 A
Tightening Torque UL/CSA	Cable Lug 3044 N·m Cable Lug 266390 lbf·in

## Environmental RoHS Status Following EU Directive 2011/65/EU

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
Package Level 1 Width	220 mm
	8.7 in
Package Level 1 Depth /	250 mm
Length	9.8 in
Package Level 1 Height	210 mm
	8.3 in
Package Level 1 Gross	4.4 kg
Weight	9.6 lb
Package Level 1 EAN	6417019875644

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

## Categories

Low Voltage Products and Systems  $\rightarrow$  Switches  $\rightarrow$  DC Switch-Disconnectors

