

PRODUCT-DETAILS

OTDC320UFV22K

OTDC320UFV22K PV Disconnect Switch



General Information

Extended Product Type	OTDC320UFV22K
Product ID	1SCA158313R1001
EAN	6417019874180
Catalog Description	OTDC320UFV22K PV Disconnect Switch
Long Description	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. 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. Main characteristics of this particular OTDC type: Disconnect double PV circuit, Approved according to UL98B and IEC 60947-1,-3

Ordering

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

Popular Downloads

Data Sheet, Technical Information	1SCC301022C0201
Instructions and Manuals	1SCC301099M0201 9AKK107492A6191
Mechanical Drawings	OTDC250-600UFV22K_stp OTDC250-600UFV22K_igs
Wiring Diagram	1SCC301035K0201

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	169.5 mm 6.7 in
Product Net Weight	8 kg 17.7 lb

Technical

Connection Configuration	Double circuit 4a, 4c
Rated Operational Current DC-21B (I_e)	(1500 V) 400 A
Rated Operational Current DC-22B	(1500 V) 400 A
Rated Operational Current DC-PV1	(1500 V) 400 A
Rated Operational Current DC-PV2	(1500 V) 400 A
Conventional Free-air Thermal Current (I_{th})	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 (I_{cw})	(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	145 mm 5.7 in
Handle Type	Direct mounted handle
Shaft Diameter	12 mm

	0.47 in
Shaft Length	160 mm 6.3 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	UL98B and 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
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 320 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
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	8.3 kg 18.3 lb
Package Level 1 EAN	6417019874180

Classifications	
Object Classification Code	Q
ETIM 5	EC000216 - Switch disconnect
ETIM 6	EC000216 - Switch disconnect
ETIM 7	EC000216 - Switch disconnect
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

