

PRODUCT-DETAILS

# OTDC500F22P

## OTDC500F22P DC Switch-disconnector



### General Information

Extended Product Type	OTDC500F22P
Product ID	1SCA158434R1001
EAN	6417019875323
Catalog Description	OTDC500F22P DC Switch-disconnector
Long Description	<p>A fully optimized four-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.</p> <p>The four-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.</p> <p>Main characteristics of this particular OTDC type: Disconnect double PV circuit, Approved according to IEC 60947-1, -3</p>

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85363090
Country of Origin	Finland (FI)

### 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

## 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	7.9 kg 17.3 lb

## Technical

Connection Configuration	Double circuit 4a, 4c
Rated Operational Current DC-21B ( $I_e$ )	(1000 V) 500 A
Rated Operational Current DC-22B	(1000 V) 400 A
Rated Operational Current DC-PV1	(1000 V) 500 A
Rated Operational Current DC-PV2	(1000 V) 500 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	1000 V
Rated Short-Circuit Making Capacity ( $I_{cm}$ )	(1000 V DC) 10 kA
Rated Short-time Withstand Current ( $I_{cw}$ )	(1500 V DC) 10 kA for 1 s 10 kA
Power Loss	at Rated Operating Conditions per Pole 20 W
Pollution Degree	3
Handle Color	Black
Handle Length	145 mm 5.7 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 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
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)

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## 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

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## 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	8.2 kg 18 lb
Package Level 1 EAN	6417019875323

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## Classifications

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

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Categories

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

