

PRODUCT-DETAILS

OTDC400UFV11K-ESS

OTDC400UFV11K-ESS PV Disconnect Switch



General Information

Extended Product Type	OTDC400UFV11K-ESS
Product ID	1SCA158273R1001
EAN	6417019873787
Catalog Description	OTDC400UFV11K-ESS PV Disconnect Switch
Long Description	ABB offers new OTDC Switch-disconnectors specially designed for reliable switching for ESS applications where higher performance is needed. They are durable and virtually maintenance-free, and offer easy installation for all imaginable situations. Depending on the ESS layout and the customer's wishes, the OTDC switch-disconnectors may be used in one or more sections of the overall setup, for the battery protection. Main characteristics of this particular OTDC type: Rated conditional short circuit current with fuses is 30kA, 2-Pole, 1500Vdc, 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

OTDC250-600UFV11K_stp
OTDC250-600UFV11K_igs

Wiring Diagram

1SCC301030K0201

Dimensions

Product Frame Size	M
Product Net Width	177.5 mm 7 in
Product Net Height	211 mm 8.3 in
Product Net Depth / Length	169.5 mm 6.7 in
Product Net Weight	3.8 kg 8.4 lb

Technical

Connection Configuration	Single circuit 2a, 2b
Rated Operational Current DC-21B (I_e)	(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) 20 kA
Rated Short-time Withstand Current (I_{cw})	(1500 V DC) 10 kA for 1 s 10 kA for 0.1 s 20 kA
Rated Conditional Short- Circuit Current (I_{nc})	(1500 V DC) 30 kA
Protection Type	Fuselink max. 400A, ETI, Cat.no 004110 followed by 632, 637 or 642.
Power Loss	at Rated Operating Conditions per Pole 20 W
Pollution Degree	3
Handle Color	Black
Handle Length	95 mm 3.7 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 11 (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	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	Energy Storage System (ESS)
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
-------------	-----------------------------------

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 / 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	6417019873787

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

