

Switch-disconnectors characteristics

Compact NSX100 NA DC PV to NSX500 NA DC PV

PE110838.eps



Compact NSX200 NA DC PV.

PE110847.eps



Compact NSX200 NA DC PV.

PV Switch

Number of poles

Electrical characteristics as per IEC 60947-3

Rated current (A) (free air + no venting)	I_n	40 °C
Altitude	m	2000
Rated insulation voltage (V)	U_i	
Rated impulse withstand voltage (kV)	U_{imp}	
Rated operational voltage (V)	U_e	DC
Type of circuit breaker		
Rated short circuit withstand current (kA rms),	I_{cw}/I_{cm}	$t = 1\text{ s}$
Rated conditional short-circuit current	I_q	kA
	with back-up fuse	A gPV
Rated conditional short-circuit current	I_q with circuit breaker	kA with MCCB

Utilization category

Suitability for isolation

Pollution degree

Durability

Endurance (C-O cycles)	mechanical		
	electrical	1000 V	I_n

Installation and connections

Control	manual	toggle
		direct or extended rotary handle
Connections	fixed	front connection
		long rear connection
	plug-in (on base)	front connection
		rear connection
	withdrawable (on chassis)	front connection
		rear connection

Additional measurement, indication and control auxiliaries

Indication contacts	OF	auxiliary contact
	SD, SDE	trip, fault-trip
Voltage releases	MX, MN	shunt trip/undervoltage release

Installation

Accessories	crimp lugs / bare cable connector
	terminal extensions and spreaders
	escutcheons
	terminal shields and interphase barriers
	Din rail adapter

Dimensions and weight

Dimensions (mm) W x H x D (w/o series connection)	4P
Weight (kg) (w/o series connection)	4P

□ On request, not available on the standard catalogue.

(1) Switches used in PV systems are designed to break the rated current of all poles at $U_{OC\text{ MAX}}$. To break the current when $U_{OC\text{ MAX}}$ is equal to 1000 V, for instance, four poles in series (two poles in series for each polarity) are required. In double ground fault situations, the circuit breaker or switch must break the current at full voltage with only two poles in series. Such switchgear is not designed for that purpose and could sustain irremediable damage if used to break the current in a double ground fault situation. For this reason double ground faults must be avoided at all costs. Insulation monitoring devices or overcurrent protection in grounded system detect the first fault. Staff shall locate it and clear it without delay.

	NSX100 NA DC PV	NSX160 NA DC PV	NSX200 NA DC PV	NSX400 NA DC PV	NSX500 NA DC PV
	4	4	4	4	4
	100 heatsink - IP4X	160 heatsink - IP4X	220 heatsink - IP4X	400 heatsink - IP2X	500 heatsink - IP2X
	■	■	■	■	■
	1000 ⁽¹⁾	1000 ⁽¹⁾	1000 ⁽¹⁾	1000 ⁽¹⁾	1000 ⁽¹⁾
	8	8	8	8	8
	1000	1000	1000	1000	1000
	2,5	2,5	2,5	6	6
	10	10	10	10	10
	100	160	200	320	400
	10	10	10	-	-
	NSX125 TM DC PV	NSX160-200 TM DC PV	NSX200 TM DC PV		
	DC22-A	DC22-A	DC22-A	DC22-A	DC22-A
	■	■	■	■	■
	3	3	3	3	3
	10000	10000	10000	5000	5000
	1500	1000	1000	1000	1000
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	□	□	□	□	□
	□	□	□	□	□
	□	□	□	□	□
	□	□	□	□	□
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	140 x 161 x 186	140 x 161 x 186	140 x 161 x 186	185 x 255 x 110	185 x 255 x 110
	2,8	2,8	2,8	8,1	8,1

Compact NSX80 TM DC PV to NSX500 NA DC PV

Compact NSX		Connection and insulation accessories mandatory					
Circuit breaker							
		Upstream connection (x2)		Upstream terminal shields		Downstream terminal shields	
NSX 80 TM DC PV 4P	LV438081	connection plate with heath sink	LV438328	LV438327		LV429518	
NSX 125 TM DC PV 4P	LV438126		LV438328	LV438327		LV429518	
NSX 160 TM DC PV 4P	LV438161		LV438328	LV438327		LV429518	
NSX 200 TM DC PV 4P	LV438201		LV438328	LV438327		LV429518	
Switch disconnecter							
		Upstream connection (x2)		Upstream terminal shields	or interphase barrier	Downstream terminal shields	or interphase barrier
NSX100 NA DC PV 4P	LV438100	connection plate with heath sink	LV438328	LV438327	LV429329	LV429518	LV429329
NSX160 NA DC PV 4P	LV438160		LV438328	LV438327	LV429329	LV429518	LV429329
NSX200 NA DC PV 4P (160A)	LV438250		LV438328	LV438327	LV429329	LV429518	LV429329
NSX200 NA DC PV 4P (200A)	LV438250	connection plate with heath sink (longer)	LV438339	not available	LV429329	LV429518	LV429329
NSX400 NA DC PV 4P	LV438300	connection plate	LV438338	LV438337	LV432570	LV432594	LV432570
NSX500 NA DC PV 4P	LV438500	connection plate with heath sink	LV438338	LV438337	LV432570	LV432594	LV432570