



- DESIGN: MODULAR
- DEGREE OF PROTECTION: IP66
- YEARS OF WARRANTY: 5
- UV RESISTANCE: YES
- READY TO CONNECT: YES
- WEIGHT: 9.630 KG



The connection panel from the Polish manufacturer KENO provides protection against the effects of both indirect and direct discharges and functions as a disconnect switch on the direct current side. It is designed for use in grounded and isolated photovoltaic installations. Due to the high degree of IP protection, outdoor installation is possible. The design of the switchgear is intended for surface mounting. Depending on the equipment, switchboards can perform various functions.

BASIC PARAMETERS DC SIDE

Number of inputs PV string outputs	4 4
Quantity Type of DC surge arrester Type	4 Phoenix T1/T2
DC disconnect	(1)16A
Shunt trip	Ponadnapięciowy
Connection type	Array MC4 Stäubli

ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

Model	BF-IP66 48
The number of modules	48
Dimensions of housing without chokes and MC4 (Length Width Height)	210.00 400.00 500.00
Design in accordance with	EN/IEC 62208, EN/IEC 61439-1-4, Dyrektywa RoHS 2011/65/EU Dyrektywa Niskonapięciowa 2006/95/EC (do 1500 VDC)
Level of security	IP66
Protection class	II
Rated insulation voltage U_i	1000 V AC, 1500 V DC
The incandescent rod test	960°C
Impact resistance	IK10 +35°C / IK08 -25°C

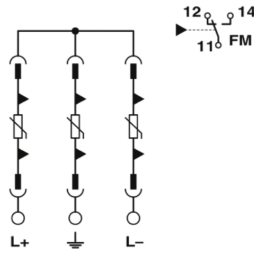
UV resistance	UL 508
Flammability class	UL 94-5VA / UL 94-V0
NEMA standard	NEMA 4, 4X, 12, 13
Temperature °C (short-term)	-40 ... 120°C
Temperature °C (continuous work)	-40 ... 80°C
Temperature °F (short-term)	-40 ... 250°F
Temperature °F (continuous work)	-40 ... 175°F

DC surge arrester used (SPD)

Manufacturer / Model	PHOENIX/VAL-MS-T1/T21000DC-PV/2+V
Surge protection	T1 / T2
Idle voltage U_{OCSTC}	≤ 975 V DC
Maximum discharge current I_{max} (8/20) μs	40 kA
Response time t_A	≤ 25 ns
Testing lightning current (10/350) μs , ładunek	2,5 As
Testing lightning current (10/350) μs , energia specyficzna	6,25 kJ/ Ω
Test lightning current (10/350) μs , wartość szczytowa I_{imp}	5 kA
Total current discharged I_{total} (8/20) μs	40 kA
Total current discharged I_{total} (10/350) μs	5 kA
Insulation resistance R_{iso}	> 5 G Ω (by 500 V DC)
Nominal discharge current I_n (8/20) μs	15 kA
Rated load current I_L	80 A
Long-term operating current I_{CPV}	< 20 μA
Maximum permanent voltage U_{CPV}	1170 V DC
Short circuit resistant I_{SCPV}	2000 A
Residual voltage U_{res}	$\leq 3,5$ kV (by I_n)
-	$\leq 2,9$ kV (by 5 kA)
-	$\leq 3,2$ kV (by 10 kA)
-	$\leq 3,7$ kV (by 20 kA)
-	$\leq 4,1$ kV (by 30 kA)
-	$\leq 4,6$ kV (by 40 kA)
Current of the protective conductor I_{PE}	≤ 20 μA DC
-	≤ 350 μA AC
Protection level U_p	$\leq 3,5$ kV
Power consumption in standby mode P_C	≤ 25 mVA

Connection configuration

Configuration Y



Zastosowany DC disconnector (1)

Model	Ex9IP 16A
Made in accordance with	IEC/EN 60947-3
Rated voltage	500 (2P), 750 (3P), 1000 (4P)
Rated current	16
Category of use	DC-22B
Rated voltage of the insulation U_i	1000V
Rated impulse withstand voltage U_{imp}	6 kV
Rated short-time withstand current I_{cw} 1s	12x I_e
Rated current short-circuit switched I_{cm} (wartość szczytowa)	20x I_e
Mechanical durability	20 000 connections
Electrical durability	2 000 connections

