



- DESIGN: MODULAR
- DEGREE OF PROTECTION: IP65
- YEARS OF WARRANTY: 5
- UV RESISTANCE: YES
- READY TO CONNECT: YES
- WEIGHT: 3.010 KG



The connection panel from the Polish manufacturer KENO provides protection against the effects of both indirect and direct discharges 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
Connection type	Array MC4 Stäubli

ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

Model	PHS 12 T
Number of fields	12
Dimensions of housing without chokes and MC4 (Length Width Height)	107.00 191.00 240.00
Design in accordance with	EN 60670-1, EN 62208
Level of security	IP65
Protection class	II
Rated insulation voltage U_i	400 V AC, 1500 V DC
The incandescent rod test	650°C
Impact resistance	IK08
UV resistance	YES
Recyclable plastic	bezhalogenowy
Working temperature	-25°C - +60°C

Model	TPC 12 T
The number of modules	12
Dimensions of housing without chokes and MC4 (Length Width Height)	107.00 191.00 240.00
Design in accordance with	EN 62208
Level of security	IP65
Protection class	II
Rated insulation voltage U_i	1000 V AC, 1500 V DC
The incandescent rod test	960°C
Impact resistance	IK07 / IK08
UV resistance	in accordance with UL 746C
Flammability class	UL 94-5VA / UL 94-V0
NEMA standard	NEMA 1, 4, 4X, 12
Recyclable plastic	bezhalogenowy
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-MB-T1/T2 1000DC-PV/2+V
Surge protection	T1 / T2
Idle voltage U_{OCSTC}	≤ 833 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	3,125 As
Testing lightning current (10/350) μs , energia specyficzna	9,77 kJ/ Ω
Test lightning current (10/350) μs , wartość szczytowa I_{imp}	6,25 kA
Total current discharged I_{total} (8/20) μs	40 kA
Total current discharged I_{total} (10/350) μs	12,5 kA
Insulation resistance R_{iso}	> 5 G Ω (by 500 V DC)
Nominal discharge current I_n (8/20) μs	20 kA
Rated load current I_L	50 A
Long-term operating current I_{CPV}	< 70 μA
Maximum permanent voltage U_{CPV}	1000 V DC

Short circuit resistant I_{SCPV} 2000 A

Residual voltage U_{res} $\leq 3,3$ kV (by I_n)

- $\leq 2,5$ kV (by 3 kA)

- $\leq 2,7$ kV (by 6,25 kA)

- $\leq 2,9$ kV (by 10 kA)

- $\leq 3,1$ kV (by 15 kA)

- ≤ 4 kV (by 40 kA)

Current of the protective conductor I_{PE} ≤ 70 μ A DC

- ≤ 500 μ A AC

Protection level U_p $\leq 3,3$ kV

Power consumption in standby mode P_C ≤ 70 mVA

Connection configuration Configuration Y

