



- DESIGN: MODULAR
- DEGREE OF PROTECTION: IP65
- YEARS OF WARRANTY: 5
- UV RESISTANCE: YES
- READY TO CONNECT: YES
- WEIGHT: 2.600 KG



The connection panel from the Polish manufacturer KENO provides protection against the effects of indirect 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	2   2
Quantity   Type of DC surge arrester   Type	2   Phoenix   T2
Overcurrent protection	4 x 20A gPV
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)	144.00   319.00   259.00
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

#### DC surge arrester used (SPD)

Manufacturer / Model

Phoenix / VAL-MS 1000DC-PV/2+V

Surge protection

T2

Idle voltage  $U_{OCSTC}$

$\leq 975$  V DC

Maximum discharge current  $I_{max}$  (8/20)  $\mu s$

40 kA

Response time  $t_A$

$\leq 25$  ns

Total current discharged  $I_{total}$  (8/20)  $\mu s$

40 kA

Insulation resistance  $R_{iso}$

$> 5$  G $\Omega$  (by 500 V DC)

Nominal discharge current  $I_n$  (8/20)  $\mu s$

15 kA

Rated load current  $I_L$

80 A

Long-term operating current  $I_{CPV}$

$< 20$   $\mu A$

Maximum permanent voltage  $U_{CPV}$

1170 V DC

Short circuit resistant  $I_{SCPV}$

2000 A

Residual voltage  $U_{res}$

$\leq 3,7$  kV (by  $I_n$ )

-

$\leq 3,1$  kV (by 5 kA)

-

$\leq 3,5$  kV (by 10 kA)

-

$\leq 4$  kV (by 20 kA)

-

$\leq 4,6$  kV (by 30 kA)

-

$\leq 5$  kV (by 40 kA)

Current of the protective conductor  $I_{PE}$

$\leq 20$   $\mu A$  DC

-

$\leq 250$   $\mu A$  AC

Protection level  $U_p$

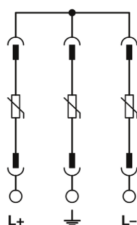
$\leq 3,7$  kV

Power consumption in standby mode  $P_C$

$\leq 25$  mVA

Connection configuration

Configuration Y



#### Overcurrent protection applied gPV DC

Model

10X38 1000V gPV 20A



Characteristic	gPV
Rated current	20A
Rated voltage	1000V DC
fuse	10,3 x 38 mm