



- DESIGN: MODULAR
- DEGREE OF PROTECTION: IP66
- YEARS OF WARRANTY: 2
- UV RESISTANCE: YES
- READY TO CONNECT: YES
- WEIGHT: 11.600 KG



The connection switchgear from Polish producer KENO is designed to power photovoltaic inverters in grounded and isolated photovoltaic installations. It realizes protection against the effects of short circuits and overloads, as well as protection against the effects of direct and indirect discharges on the AC side. 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 AC SIDE

AC Surge Protector Type	Dehn T1/T2
Overcurrent circuit breaker (1)	Noark B50A 3F
Overcurrent circuit breaker (2)	Noark B40A 3F

ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

Model	GW-IP66
The number of modules	54
Dimensions of housing without chokes and MC4 (Length Width Height)	200.00 406.00 499.00
Design in accordance with	EN 61439-1, EN 61439-2, EN62208, EN 60670-1, IEC 60670-24
Level of security	IP66
Protection class	II
Rated insulation voltage U_i	1000 V in accordance with the standard EN 62208 both for alternating current (AC), as well as direct (DC)
The incandescent rod test	960°C
Impact resistance	IK10
UV resistance	UV resistance (EN 62208)

Operating Temperature °C

-25 +60 °C

Material

Glass fibre reinforced polyester

Overcurrent circuit breaker used (MCB) (1)

Manufacturer / Model Noark / Ex9BN 3P B50

Rated current 50A; 3-F

Rated operational voltage U_e 230/415 V AC

- 72 V DC to the pole (1P, 2P)

- 48 V DC to the pole (3P, 4P)

Minimum voltage 12 V AC/DC

Rated impulse withstand voltage U_{imp} in accordance with IEC 60898-1 6 kV

Rated impulse withstand voltage U_{imp} in accordance with IEC 60947-2 6 kV

Rated short-circuit breaking capacity I_{cn} in accordance with IEC 60898-1 6 kA

Rated short-circuit breaking capacity I_{cn} in accordance with IEC 60947-2 10 kA

Rated voltage of the insulation U_i 690 V AC

Number of poles 3

Frequency 50/60 Hz

Characteristic B

Design in accordance with IEC/EN 60898-1, IEC/EN 60947-2

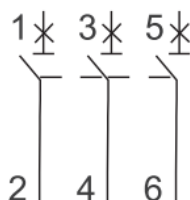
Mechanical durability 20 000 connections

Electrical durability 10 000 connections

Energy limitation class 3

Category of use A

Feed direction Any (top or bottom)

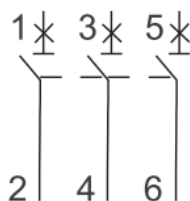


Overcurrent circuit breaker used (MCB) (2)

Manufacturer / Model Noark / Ex9BN 3P B40

Rated current 40A; 3-F

Rated operational voltage U_e	230/415 V AC
-	72 V DC to the pole (1P, 2P)
-	48 V DC to the pole (3P, 4P)
Minimum voltage	12 V AC/DC
Rated impulse withstand voltage U_{imp} in accordance with IEC 60898-1	6 kV
Rated impulse withstand voltage U_{imp} in accordance with IEC 60947-2	6 kV
Rated short-circuit breaking capacity I_{cn} in accordance with IEC 60898-1	6 kA
Rated short-circuit breaking capacity I_{cn} in accordance with IEC 60947-2	10 kA
Rated voltage of the insulation U_i	690 V AC
Number of poles	3
Frequency	50/60 Hz
Characteristic	B
Design in accordance with	IEC/EN 60898-1, IEC/EN 60947-2
Mechanical durability	20 000 connections
Electrical durability	10 000 connections
Energy limitation class	3
Category of use	A
Feed direction	Any (top or bottom)



Overvoltage limiter used AC (SPD)

Manufacturer / Model	Dehn DSH TNS 255
Made in accordance with	EN 61643-11 / IEC 61643-11
Surge protection	T1 / T2
Number of fields	2
Rated voltage AC (U_n)	230 V (50 / 60 Hz)
The greatest voltage of permanent work AC (U_c)	255 V (50 / 60 Hz)
Surge current (10/350 μ s) [L1+L2+L3+N-PE] (I_{total})	25 kA
Specific energy [L1+L2+L3+N-PE] (W/R)	156.25 kJ/ Ω
Surge current (10/350 μ s) [L, N-PE] (I_{imp})	12,5 kA

Specific energy [L,N-PE] (W/R)	39,06 kJ/ Ω
Nominal discharge current (8/20 μ s) [L/N-PE] / [L1+L2+L3+NPE] (I_n)	12,5 / 25 kA
Voltage protection level [L-PE]/[N-PE] (U_p)	$\leq 1,5$ / $\leq 1,5$ kV
Follow current extinguishing capability AC (I_{fi})	25 kArms
Response time (t_A)	≤ 100 ns
Maximum fuse protection	160 A gG
Occasional surges (TOV) [L-N] (U_t) - characteristic	440 V / 120 min - durable
Working temperature range (TU)	-40°C ...
Operation / failure indicator	green / red

