



- DESIGN: MODULAR
- DEGREE OF PROTECTION: IP65
- YEARS OF WARRANTY: 5
- UV RESISTANCE: YES
- READY TO CONNECT: YES
- WEIGHT: 1.080 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 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   T2     |
| Overcurrent circuit breaker | Noark B16A 1F |

#### ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

|                                                                       |                          |
|-----------------------------------------------------------------------|--------------------------|
| Model                                                                 | PHS 8 T                  |
| Number of fields                                                      | 8                        |
| Dimensions of housing without chokes and MC4<br>(Length Width Height) | 120.00   201.00   202.00 |
| 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            |

#### Overcurrent circuit breaker used (MCB) (1)

|                                                                               |                                |
|-------------------------------------------------------------------------------|--------------------------------|
| Manufacturer / Model                                                          | Noark / Ex9BN 1P B16           |
| Rated current                                                                 | 16A; 1-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                                                               | 1                              |
| 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 DG M TN 275   |
| Surge arrester according to PN-EN 61643-11                  | Type 2 / klasa II  |
| Energy coordination with the terminal device ( $\leq 10$ m) | Type 2 + Type 3    |
| Rated voltage AC ( $U_n$ )                                  | 230 V (50 / 60 Hz) |
| The greatest voltage of permanent work AC ( $U_c$ )         | 275 V (50 / 60 Hz) |

|                                                            |                               |
|------------------------------------------------------------|-------------------------------|
| Nominal discharge current (8/20 $\mu$ s) ( $I_n$ )         | 20 kA                         |
| Maximum discharge current (8/20 $\mu$ s) ( $I_{max}$ )     | 40 kA                         |
| Voltage protection level [L-PE]/[N-PE] ( $U_p$ )           | $\leq 1,5 / \leq 1,5$ kV      |
| Voltage protection level [L-PE] / [N-PE] by 5 kA ( $U_p$ ) | $\leq 1 / \leq 1$ kV          |
| Response time ( $t_A$ )                                    | $\leq 25$ ns                  |
| Maximum fuse protection                                    | 125 A gG                      |
| Short-circuit withstand at maximum fuse ( $I_{SCCR}$ )     | 50 kArms                      |
| Occasional surges (TOV) ( $U_t$ ) - characteristic         | 335 V / 5 s - durable         |
| Occasional surges (TOV) ( $U_t$ ) - characteristic         | 440 V / 120 min - safe damage |

