

EM-50N AC

STANDARD SERIES



DESIGN: MODULAR

DEGREE OF PROTECTION: IP65

YEARS OF WARRANTY: 5

UV RESISTANCE: YES

READY TO CONNECT: YES

WEIGHT: 2.92 KG











The connection switchgear from Polish producer EMITER 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 Noark | T1/T2

Overcurrent circuit breaker Noark B40A 3F

ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

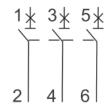
| Model | PHS 12 T |
|--|--------------------------|
| Number of fields | 12 |
| Dimensions of housing without chokes and MC4 (Length Width Height) | 144.00 259.00 325.00 |
| Design in accordance with | EN 60670-1, EN 62208 |
| Level of security | IP65 |
| Protection class | II |
| Rated insulation voltage 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 | -25ºC - +60ºC |



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| Overcurrent circuit breaker used (MC | B) (1) |
|---|--------------------------------|
| Manufacturer / Model | Noark / Ex9BN 3P B40 |
| Rated current | 40A; 3-F |
| Rated operational voltage $U_{\rm e}$ | 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 with stand voltage $\ensuremath{\text{U}_{\text{imp}}}$ 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 $\rm I_{cn}$ 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 $U_{\rm i}$ | 690 V AC |
| Number of poles | 3 |
| Frequency | 50/60 Hz |
| Characteristic | В |
| 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 | А |
| Feed direction | Any (top or bottom) |



| Overvoltage limiter used AC (SPD) | | | | |
|-----------------------------------|------------------------------------|------------------------------------|--|--|
| Manufacturer / Model | Noark Ex9UE1+2 12.5 3PN 275 | Noark Ex9UE1+2 12.5 3PN 275 | | |
| Connection | L-N/PE N-PE | | | |
| Made in accordance with | EN 61643-11 | EN 61643-11 | | |
| Type of delimiter | Typee 1+2 (klasa I+II, B+C, T1+T2) | Typee 1+2 (klasa I+II, B+C, T1+T2) | | |
| Making the insert | MOV (Warystor)GDT (Iskiernik) | MOV (Warystor)GDT (Iskiernik) | | |



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| Rated voltage U _n | 230 \ | 230 V AC | |
|---|---------------------|-------------------|--|
| Reference test voltage U _{REF} | 255 \ | 255 V AC | |
| Continuous working voltage U_{c} | 275 V AC | 255 V AC | |
| Frequency f | 25 kA to the pole | 50 kA to the pole | |
| Specific energy W/R | 156.25 | 156.25 kJ/Ω | |
| Maximum impulse current I_{imp} (10/350 μ s) | 12.5 kA to the pole | 50 kA to the pole | |
| Maximum discharge current I_{max} (8/20 μ s) | 50 kA to | 50 kA to the pole | |
| Voltage protection level U_p for electricity I_n | 1.5 kV | 1.5 kV | |
| Voltage protection level U_p for electricity I_{max} | 1.8 kV | 1.5 kV | |
| Voltage protection level U_p dla 5 kA (8/20 μ s) | 1 kV | - | |
| N-PE Follow current extinguishing capability \mathbf{I}_{fi} | - | 100 A | |
| 5 s | 335 V | 335 V | |
| 200 ms | 335 V | 1200 V | |
| Residual current I _{PE} by U _{REF} | ≤ 1 mA | - | |
| Limiter voltage for current 1mA | 387 - 4 | 387 - 473 V | |
| Response time | ≤ 25 ns | ≤ 100 ns | |
| Maximum fuse protection | 160 A gG | - | |
| Ability to withstand short-circuit current | 50kA | - | |
| Short-circuit withstand I _{SCCR} | 10kA | - | |
| Current factor k | 1kA | - | |
| Type of system LV | TN-S, T | Г (3+1) | |
| | | | |

