

EM-111N AC

STANDARD SERIES



DESIGN: MODULAR

DEGREE OF PROTECTION: IP65

YEARS OF WARRANTY: 5

UV RESISTANCE: YES

READY TO CONNECT: YES

WEIGHT: 2.64 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 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 | T2

Overcurrent circuit breaker

Noark B32A 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)	144.00 259.00 319.00
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 (MCB) (1)					
Manufacturer / Model	Noark / Ex9BN 3P B32				
Rated current	32A; 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 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 Ex9UE2 20	Noark Ex9UE2 20 3PN 275	
	Connection	L-N/PE	N-PE	
	Made in accordance with	EN 61643-	EN 61643-11	
	Type of delimiter	Typee 2 (klasa I	Typee 2 (klasa II, C, T2)	
	Making the insert	MOV (Warystor)	GDT (Iskiernik)	
	Rated voltage U _n	230 / 400 V	230 / 400 V AC	
	Reference test voltage U_{REF}	255 V AC	255 V AC	
	Continuous working voltage U_{c}	275 V AC	255 V AC	
	Frequency f	50/60 Hz	50/60 Hz	
	Nominal discharge current I_n (8/20 μ s)	20 kA to the pole	40 kA to the pole	



Type of system LV

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Maximum impulse current I_{imp} (10/350 μ s)	-	12 kA to the pole
Maximum discharge current I_{max} (8/20 μ s)	40 kA to the pole	
Voltage protection level U_p for electricity I_n	1.4 kV	1.5 kV
Voltage protection level U_p for electricity I_{max}	2 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
Occasional surges U_t (paused)	335 V	1200 V
Residual current I_{PE} by U_{REF}	≤ 1 mA	-
Limiter voltage for current 1mA	387 - 473 V	-
Response time	≤ 25 ns	≤ 100 ns
Maximum fuse protection	125 A gG	-
Ability to withstand short-circuit current	50kA	-
Short-circuit withstand I _{SCCR}	10kA	-
Current factor k	1	kA

