

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

Overcurrent circuit breaker

ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

Model	PHS 8 T
Number of fields	8
Dimensions of housing without chokes and MC4 (Length Width Height)	120.00 201.00 205.00
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

Noark | T1/T2

Noark B20A 1F



STANDARD SERIES

Overcurrent circuit breaker used (MCB) (1)

Manufacturer / Model	Noark / Ex9BN 1P B20
Rated current	20A; 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 ${\rm I}_{\rm cn}$ 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	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 1PN 275			
Connection	L-N/PE			
Made in accordance with	EN 61643-11			
Type of delimiter	Typee 1+2 (klasa I+II, B+C, T1+T2)			
Making the insert	MOV (Warystor)GDT (Iskiernik)			
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	156.2	156.25 kJ/Ω		



STANDARD SERIES

Maximum impulse current I _{imp} (10/350 μs)	12.5 kA to the pole	50 kA to the pole
Maximum discharge current I _{max} (8/20 μs)	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 $\mu s)$	1 kV	-
N-PE Follow current extinguishing capability 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 - 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, TT	(1+1)

