emiternet	EM-897N AC
	SECURE SERIES
	DESIGN: MODULAR
	DEGREE OF PROTECTION: IP66
	YEARS OF WARRANTY: 5
	UV RESISTANCE: YES
	READY TO CONNECT: YES
	WEIGHT: 12.52 KG
	$\mathbf{5^{y}} 66 \mathbf{AC} \mathbf{DC} \mathbf{CE}$

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 B80A 3F
FR switch disconnector	100A
Phase signaling	YES

ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

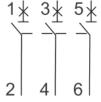
Model	GW-IP66
The number of modules	54
Dimensions of housing without chokes and MC4 (Length Width Height)	210.00 495.00 500.00
Design in accordance with	EN 61439-1, EN 61439-2, EN62208, EN 60670-1, IEC 60670-24
Level of security	IP66
Protection class	Ш
Rated insulation voltage U _i	1000 V in accordance with the standard EN 62208 both for alternating current (AC), as well as direct (DC)
The incandescent rod test	960°C
Impact resistance	IK10



SECURE SERIES

UV resistance	UV resistance (EN 62208)
Operating Temperature °C	-25 +60 °C
Material	Glass fibre reinforced polyester

Overcurrent circuit breaker used	а (МСВ) (I)
Manufacturer / Model	Noark / Ex9BN 3P B80
Rated current	80A; 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 $\mathrm{U}_{\mathrm{imp}}$ 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 $\rm I_{cn}$ 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	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	A
Feed direction	Any (top or bottom)



Overvoltage limiter used AC (SPD)

Manufacturer / Model

Noark Ex9UE1+2 12.5 3PN 275

(1) emiternet

EM-897N AC

SECURE SERIES

Connection	L-N/PE	N-PE	
Made in accordance with	EN 61643	EN 61643-11	
Type of delimiter	Typee 1+2 (klasa I+	Typee 1+2 (klasa I+II, B+C, T1+T2)	
Making the insert	MOV (Warystor)GI	MOV (Warystor)GDT (Iskiernik)	
Rated voltage U _n	230 V A	٩C	
Reference test voltage U _{REF}	255 V A	٩C	
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 k	sJ/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 the	e pole	
Voltage protection level ${\rm U}_{\rm p}$ for electricity ${\rm I}_{\rm n}$	1.5 kV	1.5 kV	
Voltage protection level ${\rm U}_{\rm p}$ for electricity ${\rm I}_{\rm max}$	1.8 kV	1.5 kV	
Voltage protection level $U_{\rm p}$ 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 - 47	3 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 (3+1)	

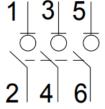
Switch disconnector used

Model	Ex9I125 3P 100A
Design in accordance with	IEC/EN 60947-3
Rated operational voltage U_{e}	230/400 V AC



SECURE SERIES

Frequency	50/60 Hz
Rated current le AC-22A 230/400 V AC	100
Number of poles	3
Category of use	AC-22A
Rated voltage of the insulation U _i	500 V
Rated impulse withstand voltage U _{imp}	6 kV
Rated short-time withstand current I _{cw} , 1s	12 x le
Rated short-circuit making current l _{cm} (wartość szczytowa)	2500 A
Maximum fuse protection	160 A gG
Mechanical durability	20 000 connections
Electrical durability	4 000 connections
1 3 5	



Phase indicator used	
Model	Ex9PDe
Made in accordance with	EN 60947-5-1
Rated operational voltage U_e	24/48 DC 240 V AC
Rated current le	≤20mA / LED
Conventional thermal current in open space ${\sf I}_{\sf n}$	20 mA
Frequency f	50 Hz
Rated voltage of the insulation U _i	500V
Rated voltage impact resistance U _{imp}	4kV
Electrical durability	≥30 000 work hours
Diode luminance	≥ 40 cd/m2

