SHP-232 AC

STANDARD SERIES

- DESIGN: MODULAR
- DEGREE OF PROTECTION: IP65
- YEARS OF WARRANTY: 5
- UV RESISTANCE: YES
- READY TO CONNECT: YES
- WEIGHT: 1.740 KG

BASIC PARAMETERS AC SIDE	
AC Surge Protector | Type	Phoenix | T1/T2
Overcurrent circuit breaker	Noark B16A 3F

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 | 202.00 | 201.00
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

Overcurrent circuit breaker used (MCB) (1)	
Manufacturer / Model	Noark / Ex9BN 3P B16
Rated current	16A; 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 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	3
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	Phoenix / VAL-MS-T1/T2 335/12.5/3+1
Made in accordance with	EN 61643-11 / IEC 61643-11
Test class IEC	I / II, T1 / T2
Type EN	T1 / T2
Power system IEC	TT, TN-S
Number of poles	4
Protective tracks	L-N, L-PE, N-PE
Direction of action	3L-N & N-PE
Rated voltage U_n	240/415 V AC (TN-S)
	240/415 V AC (TT)

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Rated frequency fN	50 Hz (60 Hz)
The highest working voltage U_c (L-N)	335 V AC
Maximum permanent voltage U_c (L-PE)	335 V AC
The highest working voltage U_c (N-PE)	264 V AC
Rated load current I_L	80 A
Current of the protective conductor I_{PE}	≤ 5 µA
Power consumption in standby mode P_C	≤ 810 mVA
Nominal discharge current I_n (8/20) µs (L-N)	12,5 kA
Nominal discharge current I_n (8/20) µs (L-PE)	12,5 kA
Nominal discharge current I_n (8/20) µs (N-PE)	50 kA
Maximum discharge current I_{max} (8/20) µs	50 kA
Testing lightning current (10/350) µs (L-N), ładunek	6,25 As
Testing lightning current (10/350) µs (L-N), Specific energy	39 kJ/Ω
Testing lightning current (10/350) µs, (L-N) wartość szczytowa prądu I_{imp}	12,5 kA
Testing lightning current (10/350) µs (L-PE), ładunek	6,25 As
Testing lightning current (10/350) µs (L-PE), Specific energy	39 kJ/Ω
Testing lightning current (10/350) µs, (L-PE) wartość szczytowa prądu I_{imp}	12,5 kA
Testing lightning current (10/350) µs (N-PE), ładunek	25 As
Testing lightning current (10/350) µs (N-PE), Specific energy	625 kJ/Ω
Testing lightning current (10/350) µs, (N-PE) wartość szczytowa prądu I_{imp}	50 kA
Total current discharged I_{total} (8/20) µs	50 kA
Total current discharged I_{total} (10/350) µs	50 kA
Follow current extinguishing capability I_{fi} (N-PE)	100 A
Short circuit resistant I_{SCCR}	25 kA
Protection level U_p (L-N)	≤ 1,2 kV
	≤ 1,6 kV (30 kA - 8/20 µs)
Protection level U_p (L-PE)	≤ 2 kV
Protection level U_p (N-PE)	≤ 1,7 kV
Residual voltage U_{res} (L-N)	≤ 1,2 kV (by I_n)
	≤ 1,1 kV (by 10 kA)
	≤ 1 kV (by 5 kA)
	≤ 0,9 kV (by 3 kA)
Residual voltage U_{res} (L-PE)	≤ 2 kV (by I_n)
	≤ 1,5 kV (by 10 kA)

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	≤ 1,2 kV (by 5 kA)
	≤ 1,1 kV (by 3 kA)
Residual voltage U_{res} (N-PE)	≤ 0,6 kV (by I_n)
	≤ 0,5 kV (by 10 kA)
	≤ 0,5 kV (by 5 kA)
	≤ 0,4 kV (by 3 kA)
TOV behavior for U_t (L-N)	415 V AC (5 s / withstand mode)
	457 V AC (120 min / safe failure mode)
TOV behavior for U_t (N-PE)	1200 V AC (200 ms / withstand mode)
Response time t_A (L-N)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Maximum pre-fuse in through-flow installations V	80 A (gG - 16 mm²)
Maximum fuse value for radial installations	160 A (gG)
Maximum discharge current I_{max} (8/20) µs	65 kA