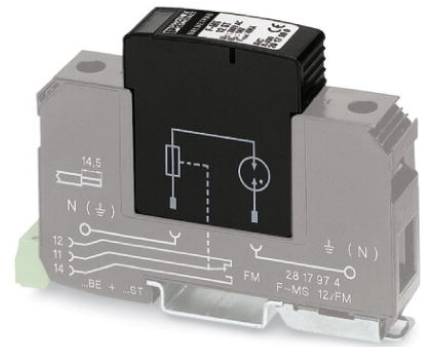


# F-MS 12 ST


Order No.: 2817990



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2817990>

Surge protection plug type 2, with N-PE total current spark gap for base element.



Commercial data	
GTIN (EAN)	4 017918 163648 
sales group	J022
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 36 (TT-2011)

### Product notes

WEEE/RoHS-compliant since:  
12/01/2005



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

Standards	
Housing material	PA
Inflammability class acc. to UL 94	V0
Color	black

Standards for air and creepage distances	EN 60664-1
	EN 61643-11
Surge voltage category	III
Pollution degree	2
Degree of protection	IP20
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Number of positions	1
Ambient temperature (operation)	-40 °C ... 80 °C
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10
Message: Surge protection fault	Optical
Direction of action	N-PE
Width	17.70 mm
Height	54.50 mm
Length	52.40 mm
Pitch unit	1 Div.

**Protective circuit**

IEC category	II
	T2
EN type	T2
Nominal voltage $U_N$	230 V AC
Nominal DC sparkover voltage $U_{agn}$	500 V $\pm$ 20 %
Arrester rated voltage $U_C$	260 V AC
Arrester rated voltage $U_C$ (N-PE)	260 V AC
$U_T$ (TOV-proof)	1200 V AC (200 ms / N-PE)
Nominal frequency $f_N$	50 Hz
	60 Hz
Ground conductor current $I_{PE}$	$\leq 1 \mu A$
Standby power consumption $P_C$	0.3 mVA
Max. discharge surge current $I_{max}$ (8/20) $\mu s$	40 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu s$ maximum (N-PE)	40 kA
Nominal discharge surge current $I_n$ (8/20) $\mu s$	20 kA
Nominal discharge surge current $I_n$ (8/20) $\mu s$ (N-PE)	20 kA

Lightning test current (10/350) $\mu$ s, charge	6 As
Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$	12 kA
Impulse operate voltage at 6 kV (1.2/50) $\mu$ s (N-PE)	$\leq 1.5$ kV
Insulation resistance $R_{iso}$ :	$> 1$ G $\Omega$
Protection level $U_p$	$\leq 1.5$ kV
Protection level UP (N-PE)	$\leq 1.5$ kV
Residual voltage	$\leq 150$ V (at 5 kA)
Residual voltage (N-PE)	$\leq 150$ V (at 5 kA)
	$\leq 400$ V
	$\leq 250$ V (at 10 kA)
	$\leq 100$ V (at 3 kA)
Response time	$\leq 100$ ns
Response time (N-PE)	$\leq 100$ ns
Follow current quenching capacity $I_f$ (N-PE)	100 A (260 V)

**Connection, protective circuit**

Connection type IN	FLASHTRAB/VALVETRAB plug-in system
Connection type OUT	FLASHTRAB/VALVETRAB plug-in system

**Standards**

Standards/regulations	IEC 61643-1 2005
	EN 61643-11/A11 2007

**Certificates / Approvals**

Certification

CB, CCA, CUL, GL, GOST, KEMA, OEVE, UL

**Accessories**

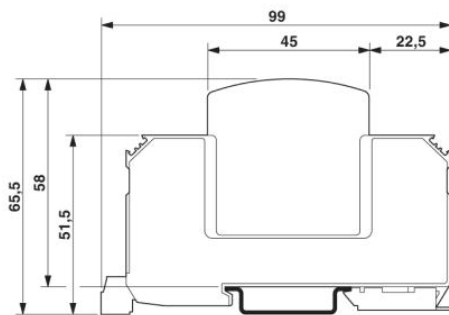
Item	Designation	Description
1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

**Marking**

2749589	ZBN 18,LGS:ERDE	Marking labels, printed horizontally, strips with 5 labels, GND (grounding symbol), color: White
2749576	ZBN 18,LGS:L1-N,ERDE	Marker labels, printed horizontally, strips with 5 labels, L1, L2, L3, N, GND, color: white
0800763	ZBN 18:SO/CMS	Marker labels, 5-section, special printing, labeled according to customer requirements (Please specify the required marking with order), for terminal width: 17.5 mm, color: White
2809128	ZBN 18:UNBEDRUCKT	Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White

### Diagrams/Drawings

Dimensioned drawing



Circuit diagram

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