

## Type 2 surge protection plug - F-MS 12 ST - 2817990

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	37.7 g
Custom tariff number	85363010
Country of origin	Germany

### Technical data

#### Dimensions

Height	52.4 mm
Width	17.5 mm
Depth	55.3 mm
Horizontal pitch	1 Div.

#### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g (half sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

#### General

## Type 2 surge protection plug - F-MS 12 ST - 2817990

### Technical data

#### General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN
	TT
SPD design	Voltage-switching type
Mode of protection	N-PE
Mounting type	On base element
Color	jet black RAL 9005
Housing material	PA 6.6
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	1
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10
Surge protection fault message	optical

#### Protective circuit

Nominal voltage $U_N$	240/415 V AC (TN - only N-PE)
	240/415 V AC (TT - only N-PE)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	260 V AC
Residual current $I_{PE}$	$\leq 5 \mu A$
Standby power consumption $P_C$	$\leq 1.5 \text{ mVA}$
Nominal discharge current $I_n$ (8/20) $\mu s$	20 kA
Maximum discharge current $I_{max}$ (8/20) $\mu s$	40 kA
Follow current interrupt rating $I_{fi}$	100 A (260 V)
Voltage protection level $U_p$	$\leq 1.5 \text{ kV}$
Residual voltage $U_{res}$	$\leq 0.4 \text{ kV}$ (at $I_n$ )
	$\leq 0.25 \text{ kV}$ (at 10 kA)
	$\leq 0.15 \text{ kV}$ (at 5 kA)
	$\leq 0.1 \text{ kV}$ (at 3 kA)
Front of wave sparkover voltage at 6 kV (1.2/50) $\mu s$	$\leq 1.5 \text{ kV}$
TOV behavior at $U_T$	1200 V AC (200 ms / withstand mode)
Response time $t_A$	$\leq 100 \text{ ns}$

# Type 2 surge protection plug - F-MS 12 ST - 2817990

## Technical data

### Connection data

Connection method	VALVETRAB plug-in system
-------------------	--------------------------

### UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (N-G)	260 V AC
Mode of protection	N-G
Power distribution system	1
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (N-G)	1490 V
Nominal discharge current $I_n$ (N-G)	20 kA

## Classifications

### eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130805
eCl@ss 7.0	27130805
eCl@ss 8.0	27130805
eCl@ss 9.0	27130805

### ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 5.0	EC000941

### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

## Approvals

### Approvals

# Type 2 surge protection plug - F-MS 12 ST - 2817990

## Approvals

---

### Approvals

ÖVE / IECCEB Scheme / UL Recognized / KEMA-KEUR / cUL Recognized / GL / CCA / CSA / EAC / EAC / cULus Recognized

---

### Ex Approvals


---

### Approvals submitted

---


### Approval details

ÖVE 

IECEE CB Scheme 

UL Recognized 

KEMA-KEUR 

cUL Recognized 

GL

CCA


CSA

# Type 2 surge protection plug - F-MS 12 ST - 2817990

## Approvals

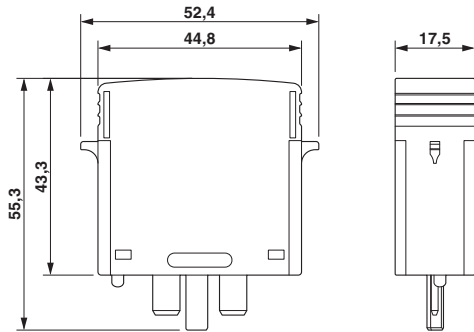
EAC

EAC

cULus Recognized 

## Drawings

Dimensional drawing



Circuit diagram

