



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Type 2 surge protection device - F-MS 12 - 2817987

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://download.phoenixcontact.com>)



Surge arrester type 2, consisting of base element and protective plug with N-PE total current spark gap for mounting on NS 35/7.5, housing width: 17.5 mm (1 Div.)

### Why buy this product

- Single-channel, DIN-rail mountable protective devices
- Consists of base element and plug
- Base element with/without floating remote indication contact
- Disconnect device on each individual plug
- Optical, mechanical status indication for the individual arresters
- Mechanical keying of all slots



### Key commercial data

Packing unit	1
Minimum order quantity	1
Catalog page	Page 38 (TT-2011)
GTIN	 4 017918 163662
Custom tariff number	85363030
Country of origin	GERMANY

### Technical data

#### Standards

Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	EN 60664-1
Standards for air and creepage distances	EN 61643-11
Degree of protection	IP20
Mounting type	DIN rail: 35 mm
Design	DIN rail module, two-section, divisible
Number of positions	1
Ambient temperature (operation)	-40 °C ... 80 °C

## Type 2 surge protection device - F-MS 12 - 2817987

### Technical data

#### Standards

Message: Surge protection fault	Optical
Direction of action	N-PE
Width	17.7 mm
Height	90 mm
Depth	65.5 mm
Pitch unit	1 Div.

#### Protective circuit

IEC category	II
IEC category	T2
EN type	T2
Nominal voltage UN	230 V AC
Nominal DC sparkover voltage Uagn	500 V $\pm$ 20 %
Arrester rated voltage UC	260 V AC
Arrester rated voltage UC (N-PE)	260 V AC
UT (TOV-proof)	1200 V AC (200 ms / N-PE)
Nominal frequency fN	50 Hz
Nominal frequency fN	60 Hz
Ground conductor current IPE	$\leq$ 1 $\mu$ A
Standby power consumption PC	0.3 mVA
Max. discharge surge current I <sub>max</sub> (8/20) $\mu$ s	40 kA
Max. discharge surge current I <sub>max</sub> (8/20) $\mu$ s maximum (N-PE)	40 kA
Nominal discharge surge current I <sub>n</sub> (8/20) $\mu$ s	20 kA
Nominal discharge surge current I <sub>n</sub> (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 limp	12 kA
Impulse operate voltage at 6 kV (1.2/50) $\mu$ s (N-PE)	$\leq$ 1.5 kV
Insulation resistance Riso:	$>$ 1 G $\Omega$
Protection level Up	$\leq$ 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)
Residual voltage (N-PE)	$\leq$ 400 V
Residual voltage (N-PE)	$\leq$ 250 V (at 10 kA)
Residual voltage (N-PE)	$\leq$ 100 V (at 3 kA)
Response time	$\leq$ 100 ns
Response time (N-PE)	$\leq$ 100 ns
Follow current quenching capacity I <sub>f</sub> (N-PE)	100 A (260 V)

#### Standards

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

# Type 2 surge protection device - F-MS 12 - 2817987

## Classifications

### eclass

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

### etim

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000941

### unspsc

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

## Approvals

### Approvals

---

#### Approvals

IECEE CB Scheme / UL Recognized / KEMA-KEUR / ÖVE / cUL Recognized / GOST / GL / CCA / cULus Recognized

---

#### Ex Approvals

---

#### Approvals submitted

---

### Approval details

IECEE CB Scheme
-----------------

UL Recognized
---------------



## Type 2 surge protection device - F-MS 12 - 2817987

### Approvals

KEMA-KEUR

ÖVE

cUL Recognized

GOST

GL

CCA

cULus Recognized

### Accessories

Accessories

Assembly

Wiring bridge end cover - MPB 18/4-D - 2809335



End cover for lateral connection of wiring bridges, 4-phase

Wiring bridge end cover - MPB 18/3- D - 2809322

End cover for lateral connection of wiring bridges, 3-phase

### Bridges

## Type 2 surge protection device - F-MS 12 - 2817987

### Accessories

Wiring bridge - MPB F600X16/ 1GS - 2818355



Wiring bridge flexible, diameter: 16 mm<sup>2</sup>, with a fork-type cable lug on one side, length: 600 mm

---

Wiring bridge - MPB F400X16/ 1GS - 2818342



Wiring bridge flexible, diameter 16 mm<sup>2</sup>, with a fork-type cable lug on one side, length: 400 mm

---

Wiring bridge - MPB F200X16/ 1GS - 2818339



Wiring bridge flexible, diameter 16 mm<sup>2</sup>, with a fork-type cable lug on one side, length: 200 mm

---

Wiring bridge - MPB 18/1-20/1.2.5 - 2830168



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 20 pitches with contact sequence 1-2-0-0-5

---

Wiring bridge - MPB 18/4-12 - 2809296



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.

---

Wiring bridge - MPB 18/4- 8 - 2809283



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.

## Type 2 surge protection device - F-MS 12 - 2817987

### Accessories

---

Wiring bridge - MPB 18/3- 6 - 2809241



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos.

---

Wiring bridge - MPB 18/1-57 - 2809238



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 57-pos.

---

Wiring bridge - MPB 18/1-12 - 2748593



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 12-pos.

---

Wiring bridge - MPB 18/1- 9 - 2748580



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.

---

Wiring bridge - MPB 18/1- 8 - 2748577



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

---

## Type 2 surge protection device - F-MS 12 - 2817987

### Accessories

Wiring bridge - MPB 18/1- 6 - 2748564



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.

---

Wiring bridge - MPB 18/1- 4 - 2809225



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.

---

Wiring bridge - MPB 18/1- 3 - 2809212



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.

---

Wiring bridge - MPB 18/1- 2 - 2809209



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 2-pos.

---

### Marking

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---



## Type 2 surge protection device - F-MS 12 - 2817987

### Accessories

Zack marker strip - ZBN 18,LGS:ERDE - 2749589



Zack marker strip, Strip, white, Labeled, Horizontal: Grounding symbol, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

---

Zack marker strip - ZBN 18,LGS:L1-N,ERDE - 2749576



Zack marker strip, Strip, white, Labeled, Horizontal: L1, L2, L3, N, GND, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

---

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

---

Feed-through terminal block - DK-BIC-35 - 2749880



Feed-through terminal block for VAL and FLT applications

---

Wiring bridge - MPB 18/1-10/1.0.0 - 2830443



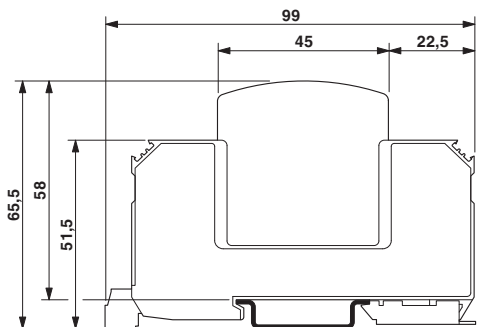
Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 10 pitches with contact sequence 1-0-0

---

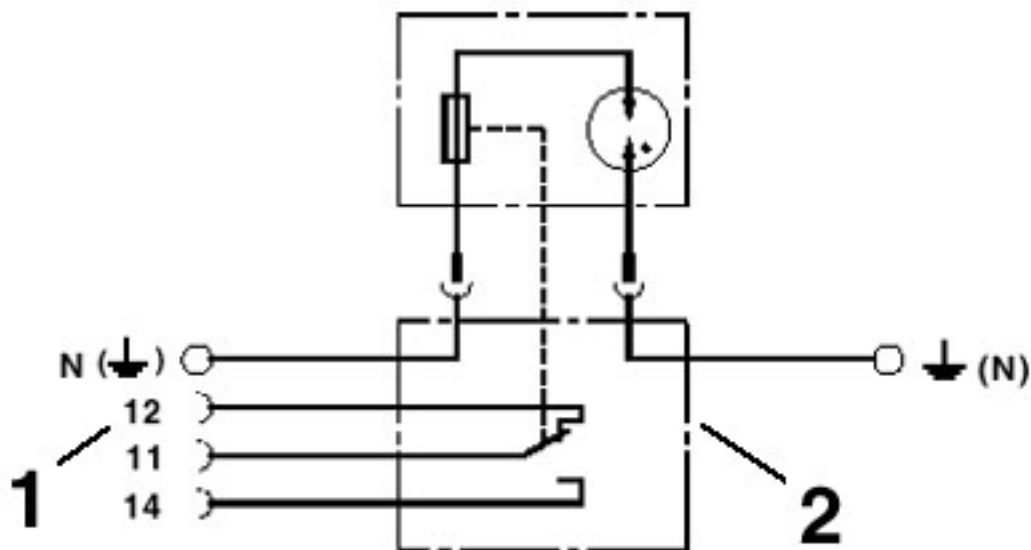
### Drawings

# Type 2 surge protection device - F-MS 12 - 2817987

Dimensioned drawing



Circuit diagram



1 = Remote indicator contact  
2 = base element