

# Type 2 surge protection connector - VAL-MS 320-ST - 2838843

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 protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 320 V AC

## Why buy this product

- Single-channel, DIN-rail mountable protective devices
- Base element with/without floating remote indication contact
- Consists of base element and plug
- 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	10
Catalog page	Page 39 (TT-2011)
GTIN	 4 017918 170813
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	DIN VDE 0110-1
Standards for air and creepage distances	IEC 60664-1
Standards for air and creepage distances	IEC 61643-1
Surge voltage category	III
Pollution degree	2
Degree of protection	IP20
Mounting type	On base element

# Type 2 surge protection connector - VAL-MS 320-ST - 2838843

## Technical data

### Standards

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	1L-N/PE
Width	17.7 mm
Height	52.4 mm
Depth	54.5 mm
Pitch unit	1 Div.

### Protective circuit

IEC category	II
IEC category	T2
EN type	T2
Nominal voltage UN	230 V AC
Nominal voltage UN	277 V AC
Arrester rated voltage UC	335 V AC
UT (TOV-proof)	415 V AC (5 s)
Nominal frequency fN	50 Hz (60 Hz)
Ground conductor current IPE	≤ 0.32 mA
Standby power consumption PC	≤ 110 mW
Max. discharge surge current I <sub>max</sub> (8/20) μs	40 kA
Nominal discharge surge current I <sub>n</sub> (8/20) μs	20 kA
Lightning test current (10/350) μs, peak value I <sub>imp</sub>	3 kA
Max. energy absorption (2 ms)	640 J
Protection level U <sub>p</sub>	≤ 1.5 kV
Residual voltage	≤ 1.2 kV (at 5 kA)
Residual voltage	≤ 1.4 kV (at 15 kA)
Residual voltage	≤ 1.3 kV (at 10 kA)
Residual voltage	≤ 1.5 kV (at I <sub>n</sub> )
Residual voltage	≤ 1.1 kV (at 3 kA)
Response time	≤ 25 ns
Max. required backup fuse with branch wiring	125 A (gL)
Short-circuit resistance IP with max. backup fuse (effective)	25 kA
Capacity	2.3 nF (typical)

### Standards

Standards/regulations	IEC 61643-1 1998
Standards/regulations	DIN EN 61643-11 2002
Standards/regulations	UL 1449 ed. 2
Standards/regulations	IEEE C62.1 / C62.34 / C62.45

# Type 2 surge protection connector - VAL-MS 320-ST - 2838843

## 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
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

---

#### Approvals

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

---

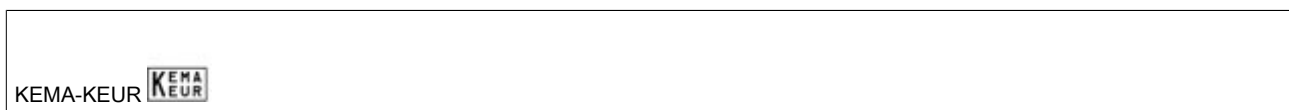
#### Ex Approvals

---

#### Approvals submitted

---

### Approval details



# Type 2 surge protection connector - VAL-MS 320-ST - 2838843

## Approvals

CCA

IECEE CB Scheme

UL Recognized

cUL Recognized

GOST

GL

KEMA-KEUR

ÖVE

CCA

IECEE CB Scheme

cULus Recognized

## Accessories

Accessories

Bridges

## Type 2 surge protection connector - VAL-MS 320-ST - 2838843

### 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 connector - VAL-MS 320-ST - 2838843

### 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 connector - VAL-MS 320-ST - 2838843

### 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

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

---

## Type 2 surge protection connector - VAL-MS 320-ST - 2838843

### Accessories

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

Marker pen - B-STIFT - 1051993



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

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

### Additional products

Type 2 surge protection base element - VAL-MS BE - 2817741



Base element for type 2 arresters of the VALVETRAB MS series of products. Design: 1-channel



# Type 2 surge protection connector - VAL-MS 320-ST - 2838843

## Accessories

Type 2 surge protection base element - VAL-MS BE/FM - 2817738



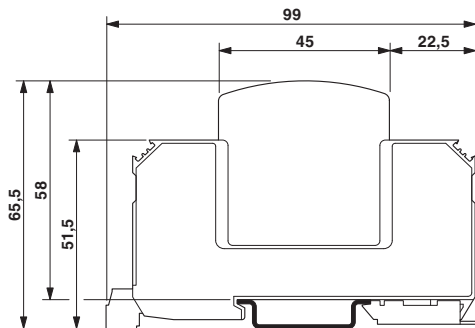
Base element for type 2 arresters of the VALVETRAB MS series of products, with remote indication contact.  
Design: 1-channel

---

## Drawings

Dimensioned drawing

Circuit diagram



---

© Phoenix Contact 2012 - all rights reserved  
<http://www.phoenixcontact.com>

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А