

F-MS-T1/T2 50 ST - Type 1/2 surge protection plug



2800191

<https://www.phoenixcontact.com/pc/products/2800191>

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N-PE replacement plug for VAL-MS-T1/T2 335/12.5 plug-in lighting/surge arrester.



Your advantages

- Quality proven millions of times over in the widest range of applications
- Rapid installation with bridges, thanks to industry-standard overall width of 1 HP
- Easy testing and insulation measurement, thanks to pluggable protection modules

Commercial Data

Item number	2800191
Packing unit	10 pc
Minimum order quantity	1 pc
Product Key	CL1151
Catalog Page	Page 46 (C-4-2019)
GTIN	4046356518628
Weight per Piece (including packing)	77.9 g
Weight per Piece (excluding packing)	77.9 g
Customs tariff number	85363030
Country of origin	DE

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Technical Data

Product properties

IEC test classification	I / II
	T1 / T2
	T1
EN type	T1 / T2
	T1
IEC power supply system	TN-S
	TT
Type	DIN rail module, two-section, divisible
Product type	Replacement plug
Product family	VALVETRAB MS
Number of positions	1
Surge protection fault message	optical

Insulation characteristics

Overvoltage category	III
Pollution degree	2

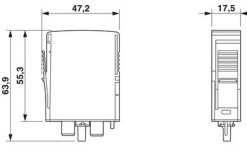
Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
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Connection data

Connection method	pluggable
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Dimensions

Dimensional drawing	
Width	17.7 mm
Height	47 mm
Depth	67.3 mm
Horizontal pitch	1 Div.

Material specifications

Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6/PBT
Material group	I
Housing material	PA 6.6
	PBT

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Protective circuit

Mode of protection	N-PE
Direction of action	N-PE
Nominal voltage U_N	240/415 V AC (TN-S) 240/415 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	264 V AC
Residual current I_{PE}	$\leq 5 \mu A$
Standby power consumption P_C	$\leq 1.3 \text{ mVA}$
Nominal discharge current I_n (8/20) μs	50 kA
Maximum discharge current I_{max} (8/20) μs	50 kA
Impulse discharge current (10/350) μs , charge	25 As
Impulse discharge current (10/350) μs , specific energy	625 kJ/ Ω
Impulse discharge current (10/350) μs , peak value I_{imp}	50 kA
Follow current interrupt rating I_{fi}	100 A (264 V AC)
Voltage protection level U_p	$\leq 1.7 \text{ kV}$
Residual voltage U_{res}	$\leq 0.6 \text{ kV}$ (at I_n) $\leq 0.5 \text{ kV}$ (at 10 kA) $\leq 0.5 \text{ kV}$ (at 5 kA) $\leq 0.4 \text{ kV}$ (at 3 kA)
Front of wave sparkover voltage at 6 kV (1.2/50) μs	$\leq 1.7 \text{ kV}$
TOV behavior at U_T	1200 V AC (200 ms / withstand mode)
Response time t_A	$\leq 100 \text{ ns}$

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	$\leq 2000 \text{ m}$ (amsl)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x $\pm X$, $\pm Y$, $\pm Z$)
Vibration (operation)	7.5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

Approvals

UL specifications

Maximum continuous operating voltage MCOV (N-G)	264 V AC
Nominal discharge current I_n (N-G)	20 kA
Mode of protection	N-G
Power distribution system	Single phase
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (N-G)	2600 V

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SPD Type	4CA
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Standards and regulations

Standards/specifications	IEC 61643-11
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EN 61643-11

Standards/specifications	EN 61643-11
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Mounting

Mounting type	on base element
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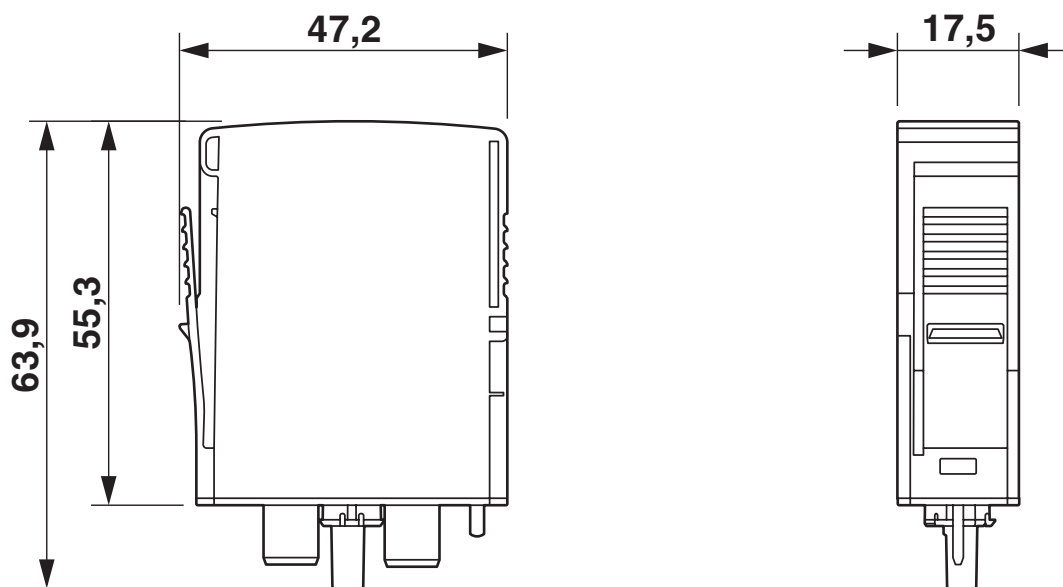


Drawings

Circuit diagram



Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/2800191>



cUL Recognized
Approval ID: FILE E 330181



UL Recognized
Approval ID: FILE E 330181



IECEE CB Scheme
Approval ID: AT 2584



EAC
Approval ID: RU C-DE.*09.B.00169



KEMA-KEUR
Approval ID: 2162496-01



DNV GL
Approval ID: TAE00001N9



ÖVE
Approval ID: 18583-009-08

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Classifications

ECLASS

ECLASS-11.0	27130890
ECLASS-13.0	27171292

ETIM

ETIM 8.0	EC002496
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UNSPSC

UNSPSC 21.0	39121600
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

MPB 18/3- D - Wiring bridge end cover

2809322

<https://www.phoenixcontact.com/pc/products/2809322>



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

B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/pc/products/1051993>



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

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CUTFOX 50 - Cable-cutting tool

1206641

<https://www.phoenixcontact.com/pc/products/1206641>



One-hand cable cutter to cut MPB wiring bridges to length

ZBN 18,LGS:ERDE - Marker for terminal blocks

2749589

<https://www.phoenixcontact.com/pc/products/2749589>



Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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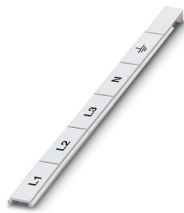
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ZBN 18,LGS:L1-N,ERDE - Marker for terminal blocks

2749576

<https://www.phoenixcontact.com/pc/products/2749576>



Marker for terminal blocks, Strip, white, labeled, horizontal: L1, L2, L3, N, GND, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

<https://www.phoenixcontact.com/pc/products/2809128>



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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