

# F-MS 12 ST GY1 - Type 2 surge protection plug

2801282

<https://www.phoenixcontact.com/sg/products/2801282>

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



## Commercial data

Item number	2801282
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	*****
Product key	CL1327
GTIN	4046356750325
Weight per piece (including packing)	45.3 g
Weight per piece (excluding packing)	43.5 g
Customs tariff number	85363010
Country of origin	DE

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## Technical data

### Product properties

IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN
	TT
Number of positions	1
Surge protection fault message	optical
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10

### Insulation characteristics

Overvoltage category	III
Pollution degree	2

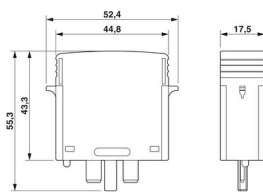
### Electrical properties

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	17.5 mm
Height	52.4 mm
Depth	55.3 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
Material group	I
Housing material	PA 6.6

### Mechanical properties

#### Mechanical data

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Open side panel	No
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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 - 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 $I_{PE}$	$\leq 5 \mu\text{A}$
Standby power consumption $P_C$	$\leq 1.5 \text{ mVA}$
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$	20 kA
Maximum discharge current $I_{max}$ (8/20) $\mu\text{s}$	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) $\mu\text{s}$	$\leq 1.5 \text{ kV}$
TOV behavior at $U_T$	1200 V AC (200 ms / withstand mode)
Response time $t_A$	$\leq 100 \text{ ns}$

## 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)	25g
Vibration (operation)	5g

## Standards and regulations

### Air clearances and creepage distances

Standards/regulations	EN 60664-1 / EN 61643-11
Standards/specifications	IEC 61643-11
Note	2011
Standards/specifications	EN 61643-11
Note	2012

## Mounting

Mounting type	on base element
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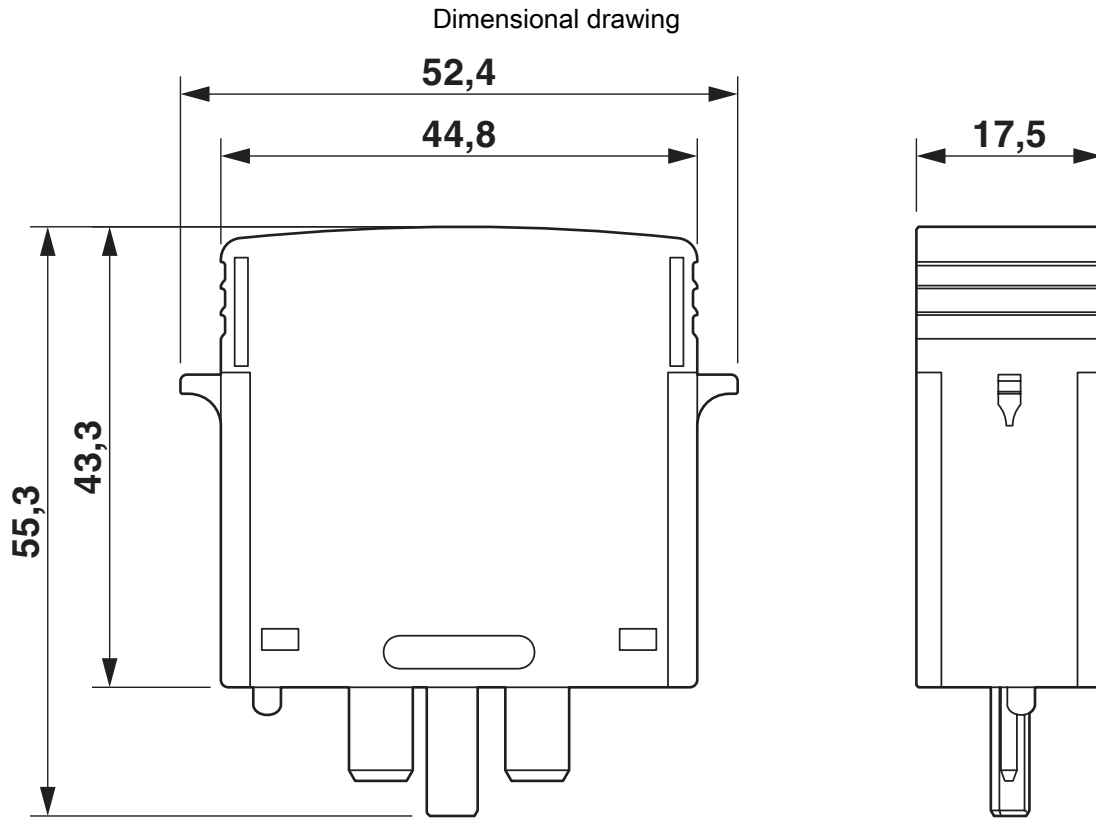
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## Drawings



Circuit diagram



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## Classifications

### ECLASS

ECLASS-11.0	27130802
ECLASS-13.0	27171201

### ETIM

ETIM 8.0	EC000381
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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

### ZBN 18,LGS:ERDE - Marker for terminal blocks

2749589

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



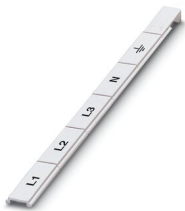
Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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

2749576

<https://www.phoenixcontact.com/sg/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

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## ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

<https://www.phoenixcontact.com/sg/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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## B-STIFT - Marker pen

1051993

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



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

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