

# CLT-10P/2-2-24V-I-P - Surge protection plug



1088570

<https://www.phoenixcontact.com/us/products/1088570>

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Surge protection plug, directly pluggable on 2 terminal blocks, with integrated status indicator on the module for a 2-wire floating signal circuit. Nominal voltage: 24 V DC

## Your advantages

- Easy installation due to Push-in terminal blocks with pluggable surge protection
- Superior system availability thanks to high-performance protective circuit with integrated overload protection
- Quick and easy diagnostics with optional remote signaling for integration into digital infrastructures
- Three become two - use just two terminal blocks to protect two signal paths in an overall width of 10.3 mm
- Future-proof - satisfies international standards and directives, such as the DB RIL 819.0808 railway directive

## Commercial data

Item number	1088570
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	NULL
Product key	CL2171
GTIN	4055626890326
Weight per piece (including packing)	46.7 g
Weight per piece (excluding packing)	27.6 g
Customs tariff number	85363010
Country of origin	DE

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## Technical data

### Product properties

IEC test classification	C1
	C2
	C3
	D1
Type	DIN rail module, two-section, divisible
Product type	Surge protection for MCR technology
Product family	CLIXTRAB

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

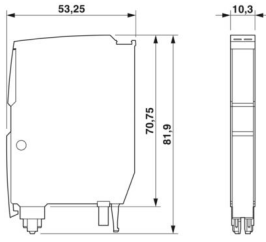
### Electrical properties

Nominal voltage $U_N$	24 V DC
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### Connection data

Connection method	pluggable
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### Dimensions

Dimensional drawing	
Width	10.3 mm
Height	53.25 mm
Depth	81.9 mm

### Material specifications

Color	light grey (RAL 7035)
Flammability rating according to UL 94	V-0
Insulating material	PA 6.6+GV 20 %
Housing material	PA 6.6+GV 20 %

### Mechanical properties

#### Mechanical data

Open side panel	No
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## Protective circuit

Direction of action	Line-Line & Line-Earth Ground
Maximum continuous voltage $U_C$	30 V DC
	21 V AC
Rated current	200 mA (80 °C)
Operating effective current $I_C$ at $U_C$	$\leq 5 \mu\text{A}$
Residual current $I_{PE}$	$\leq 1 \mu\text{A}$
Total discharge current $I_{total}$ (8/20) $\mu\text{s}$	10 kA
Voltage protection level $U_p$ (line-line)	$\leq 60 \text{ V}$ (C1 - 700 V/350 A)
	$\leq 95 \text{ V}$ (C3 - 100 A)
Voltage protection level $U_p$ (line-earth)	$\leq 900 \text{ V}$ (C1 - 2 kV / 1 kA)
	$\leq 900 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 1050 \text{ V}$ (C3 - 100 A)
Response time $t_A$ (line-line)	$\leq 1 \text{ ns}$
Response time $t_A$ (line-earth)	$\leq 100 \text{ ns}$
Input attenuation aE, sym.	typ. 0.3 dB ( $\leq 8,5 \text{ MHz} / 150 \Omega$ )
Input attenuation aE, asym.	typ. 0.3 dB ( $\leq 14,5 \text{ MHz} / 150 \Omega$ )
Cut-off frequency $f_g$ (3 dB), sym. in 150 $\Omega$ system	typ. 60 MHz
Cut-off frequency $f_g$ (3 dB), asym. (signal ground) in 150 $\Omega$ system	typ. 60 MHz
Capacity (Core-Core)	typ. 45 pF
Capacity (line-signalground)	typ. 30 pF
Surge protection fault message	optical
Max. required back-up fuse	200 mA (T)
Impulse durability (line-line)	C1 - 700 V / 350 A
	C3 - 100 A
Impulse durability (line-earth)	C1 - 2 kV / 1 kA
	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 1,25 kA
Pulse reset time (line-earth)	$\leq 200 \text{ ms}$

## 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)	5g (Half-sine / 11 ms / 3x $\pm X$ , $\pm Y$ , $\pm Z$ )
	10g (Half-sine / 8 ms / 3x $\pm X$ , $\pm Y$ , $\pm Z$ )
	5g (Half-sine / 30 ms / 3x $\pm X$ , $\pm Y$ , $\pm Z$ )
Vibration (operation)	0,58g (5 ... 150 Hz / 5 h / X, Y, Z)

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	1g (5 ... 2000 Hz / 5 h / X, Y, Z)
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## Standards and regulations

Standards/specifications	IEC 61643-21
Note	2000 + corrigendum 2001 + A1:2008, modified + A2:2012
Standards/specifications	EN 61643-21
Note	2001 + A1:2009 + A2:2013

## Mounting

Mounting type	on base element
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## Classifications

### ECLASS

ECLASS-11.0	27130807
ECLASS-13.0	27171501

### ETIM

ETIM 9.0	EC001625
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### UNSPSC

UNSPSC 21.0	39121600
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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