

Surge protection plug - CTM 1X2- 12DC - 2838597

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://phoenixcontact.com/download>)



LSA-PLUS plug with protection for conductor pairs in floating signal circuits. Nominal voltage: 12 V DC

The illustration shows version CTM
1x2- 24 DC

Product Features

- ✓ The CTM 10-MAG surge protection magazine can be freely fitted with various protective plugs
- ✓ Can be used in LSA-PLUS disconnect and control strips or CT-TERMIBLOCK
- ✓ Space-saving LSA-PLUS connection technology
- ✓ Typical installation locations include marshalling distributors
- ✓ Modular compact protection for high-density networks



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	10.03 GRM
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	21 mm
Width	9.5 mm
Depth	53.5 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 75 °C
Degree of protection	IP20

Surge protection plug - CTM 1X2- 12DC - 2838597

Technical data

General

Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	DIN VDE 0110-1
	IEC 60664-1
Surge voltage category	II
Pollution degree	2
Mounting type	On CT-TERMIBLOCK and LSA-PLUS disconnect strip
Type	LSA-PLUS module
Number of positions	2
Direction of action	Line-Line & Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10

Protective circuit

IEC test classification	B2
	C1
	C2
	C3
	D1
VDE requirement class	B2
	C1
	C2
	C3
	D1
Nominal voltage U_N	12 V DC
Maximum continuous operating voltage U_C	± 15 V DC
	10 V AC
Maximum continuous voltage U_C (wire-wire)	± 15 V DC
	10 V AC
Maximum continuous voltage U_C (wire-ground)	72 V DC
Nominal current I_N	380 mA (25 °C)
Operating effective current I_C at U_C	≤ 5 μ A
Residual current I_{PE}	≤ 2 μ A
Nominal discharge current I_n (8/20) μ s (Core-Core)	5 kA
Nominal discharge current I_n (8/20) μ s (Core-Earth)	5 kA
Total surge current (8/20) μ s	10 kA
Total surge current (10/350) μ s	2.5 kA

Surge protection plug - CTM 1X2- 12DC - 2838597

Technical data

Protective circuit

Max. discharge current I_{max} (8/20) μ s maximum (Core-Earth)	10 kA (in total)
Nominal pulse current I_{an} (10/1000) μ s (Core-Core)	100 A
Nominal pulse current I_{an} (10/1000) μ s (Core-Earth)	100 A
Impulse discharge current (10/350) μ s, peak value I_{imp}	1 kA
Output voltage limitation at 1 kV/ μ s (Core-Core) spike	≤ 45 V
Output voltage limitation at 1 kV/ μ s (Core-Earth) spike	≤ 700 V
Output voltage limitation at 1 kV/ μ s (Core-Core) static	≤ 25 V
Output voltage limitation at 1 kV/ μ s (Core-Earth) static	≤ 700 V
Residual voltage at I_n , (conductor-conductor)	≤ 22 V
Residual voltage at I_n , (conductor-ground)	≤ 45 V
Residual voltage with I_{an} (10/1000) μ s (conductor-conductor)	≤ 25 V
Residual voltage with I_{an} (10/1000) μ s (conductor-ground)	≤ 25 V
Voltage protection level U_p (Core-Core)	≤ 40 V (C2, 10 kV/5 kA, spike)
	≤ 25 V (C2, 10 kV/5 kA, static)
	≤ 25 V (C3, 7.5 kV/100 A)
Voltage protection level U_p (Core-Earth)	≤ 700 V (C2, 10 kV/5 kA, spike)
	≤ 45 V (C2, 10 kV/5 kA, static)
	≤ 700 V (C3, 7.5 kV/100 A, spike)
	≤ 20 V (C3, 7.5 kV/100 A, static)
Response time t_A (Core-Core)	≤ 1 ns
Response time t_A (Core-Earth)	≤ 100 ns
Input attenuation a_E , sym.	0.3 dB (≤ 400 kHz)
Cut-off frequency f_g (3 dB), sym. in 100 Ohm system	1.2 MHz
Capacity (Core-Core)	1.5 nF ($f=1$ MHz / $V_R=0$ V)
Resistance in series	3.3 Ω 10 %
	3.3 Ω
Surge protection fault message	None
Surge current resistance (conductor-conductor)	C2 (4 kV/2 kA)
	C3 - 100 A
	B2 - 4 kV/100 A
Surge current resistance (conductor-ground)	C2 (4 kV / 2 kA)
	C3 - 100 A
	B2 - 4 kV/100 A
	D1 - 1 kA
Alternating current carrying capacity (conductor-ground)	5 A - 1 s

Connection data

Surge protection plug - CTM 1X2- 12DC - 2838597

Technical data

Connection data

Connection method	can be plugged into COMTRAB-TERMIBLOCK and LSA-PLUS disconnect and switching strips
Connection type IN	COMTRAB plug-in system
Connection type OUT	COMTRAB plug-in system
Connection method	LSA-PLUS

Connection, equipotential bonding

Connection method	Spring contact
-------------------	----------------

Standards and Regulations

Standards/regulations	IEC 61643-21
-----------------------	--------------

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

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

Approvals

Approvals

Surge protection plug - CTM 1X2- 12DC - 2838597

Approvals

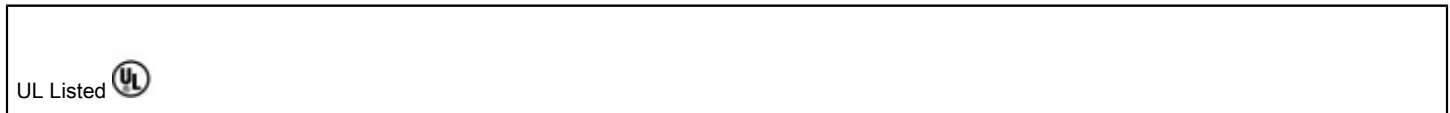
Approvals

GOST / UL Listed

Ex Approvals

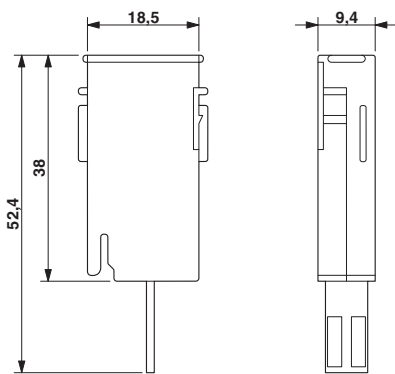
Approvals submitted

Approval details



Drawings

Dimensioned drawing



Circuit diagram

