

CTM 2X1- 12DC - Surge protection plug



2838584

<https://www.phoenixcontact.com/us/products/2838584>

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LSA-PLUS plug (COMTRAB CTM) with protective circuit for 2-conductor signal circuits grounded on one side. Nominal voltage: 12 V DC

Your advantages

- Space-saving due to compact design
- Flexible fields of application with modular protective plug
- Can be used in LSA-PLUS disconnect and control strips or CT-TERMIBLOCK via adapted connection technology

Commercial data

Item number	2838584
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CL03
Product key	CL3211
Catalog page	Page 142 (C-4-2019)
GTIN	4017918819606
Weight per piece (including packing)	10.56 g
Weight per piece (excluding packing)	10.56 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Product properties

IEC test classification	B2
	C1
	C2
	C3
	D1
VDE requirement class	B2
	C1
	C2
	C3
	D1
Type	LSA-PLUS module
Product type	Surge protection for MCR technology
Product family	COMTRAB
Number of positions	2
Surge protection fault message	none
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10

Insulation characteristics

Overvoltage category	II
Pollution degree	2

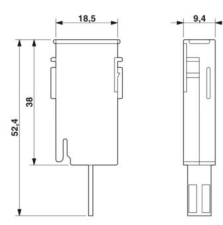
Electrical properties

Nominal voltage U_N	12 V DC
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Connection data

Connection method	can be plugged into COMTRAB-TERMIBLOCK and LSA-PLUS disconnect and switching strips
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Dimensions

Dimensional drawing	
Width	9.5 mm
Height	21 mm
Depth	53.5 mm

Material specifications

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Color	black (RAL 9005)
	Copper
Flammability rating according to UL 94	V-0
Housing material	PA

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	± 15 V DC
	10 V AC
Rated current	380 mA AC (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 (line-ground)	5 kA
Pulse discharge current I_{imp} (10/350) μ s (line-earth)	1 kA
Total discharge current I_{total} (8/20) μ s	10 kA
Total discharge current I_{total} (10/350) μ s	2.5 kA
Max. discharge current I_{max} (8/20) μ s maximum (line-earth)	10 kA (in total)
Nominal pulse current I_{an} (10/1000) μ s (line-earth)	100 A
Output voltage limitation at 1 kV/ μ s (line-earth) spike	≤ 28 V
Output voltage limitation at 1 kV/ μ s (line-earth) static	≤ 22 V
Residual voltage at I_n (conductor-ground)	≤ 32 V
Residual voltage with I_{an} (10/1000) μ s (line-earth)	≤ 18 V
Voltage protection level U_p (line-earth)	≤ 60 V (C2 - 10 kV/5 kA, spike)
	≤ 30 V (C3 - 7.5 kV / 100 A, spike)
Response time t_A (line-earth)	≤ 1 ns
Input attenuation aE , asym.	0.3 dB (≤ 400 kHz)
Cut-off frequency f_g (3 dB), asym. (PE) in 100 Ω system	1.5 MHz
Capacity (Core-Earth)	1.5 nF ($f=1$ MHz / $V_R=0$ V)
Resistance per path	3.3 Ω 10 %
Surge protection fault message	none
Impulse durability (line-earth)	C2 - 4 kV / 2 kA
	C3 - 100 A
	B2 - 4 kV / 100 A
	D1 - 1 kA
Alternating current carrying capacity (line-earth)	5 A - 1 s

Environmental and real-life conditions

Ambient conditions

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

VDE requirement class	B2
	C1
	C2
	C3
	D1

Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1
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Standards Information technology specification

Standards/regulations	IEC 61643-21
	IEC 61643-21
Standards/specifications	IEC 61643-21
Note	2000

Mounting

Mounting type	On CT-TERMIBLOCK and LSA-PLUS disconnect strip
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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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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com