

CTM 2X1- 5DC - Surge protection plug



2838571

<https://www.phoenixcontact.com/us/products/2838571>

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 documentation. Our general terms of use for downloads are valid.



LSA-PLUS plug (COMTRAB CTM) for 2-conductor signal circuits grounded on one side. Nominal voltage: 5 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	2838571
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CL03
Product key	CL3211
Catalog page	Page 102 (C-6-2013)
GTIN	4017918819590
Weight per piece (including packing)	10.372 g
Weight per piece (excluding packing)	10.372 g
Customs tariff number	85363010
Country of origin	DE

CTM 2X1- 5DC - Surge protection plug



2838571

<https://www.phoenixcontact.com/us/products/2838571>

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
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	5 V DC
-----------------------	--------

Connection data

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

Dimensions

Dimensional drawing	
Width	9.5 mm
Height	21 mm
Depth	53.5 mm

Material specifications

Color	black (RAL 9005)
-------	------------------

CTM 2X1- 5DC - Surge protection plug



2838571

<https://www.phoenixcontact.com/us/products/2838571>

	Copper
Flammability rating according to UL 94	V0
Housing material	PA

Mechanical properties

Mechanical data

Open side panel	No
-----------------	----

Protective circuit

Direction of action	Line-Line & Line-Earth Ground
Maximum continuous voltage U_C	± 6 V DC
	5 V AC
Rated current	380 mA (25 °C)
Operating effective current I_C at U_C	≤ 200 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	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	≤ 18 V
Output voltage limitation at 1 kV/ μ s (line-earth) static	≤ 12 V
Residual voltage at I_n (conductor-ground)	≤ 20 V
Residual voltage with I_{an} (10/1000) μ s (line-earth)	≤ 15 V
Voltage protection level U_p (line-earth)	≤ 50 V (C2 - 10 kV/5 kA, spike)
	≤ 20 V (C3 - 7.5 kV / 100 A, spike)
Response time t_A (line-earth)	≤ 1 ns
Input attenuation aE, asym.	0.3 dB (≤ 300 kHz)
Cut-off frequency f_g (3 dB), asym. (PE) in 100 Ω system	700 kHz
Capacity (Core-Earth)	3.5 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
Ambient temperature (operation)	-25 °C ... 75 °C

CTM 2X1- 5DC - Surge protection plug



2838571

<https://www.phoenixcontact.com/us/products/2838571>

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
-----------------------	------------------------------

Standards Information technology specification

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

Mounting

Mounting type	On CT-TERMBLOCK and LSA-PLUS disconnect strip
---------------	---

CTM 2X1- 5DC - Surge protection plug



2838571

<https://www.phoenixcontact.com/us/products/2838571>

Classifications

ECLASS

ECLASS-11.0	27130807
ECLASS-13.0	27171501

ETIM

ETIM 9.0	EC001625
----------	----------

UNSPSC

UNSPSC 21.0	39121600
-------------	----------

CTM 2X1- 5DC - Surge protection plug



2838571

<https://www.phoenixcontact.com/us/products/2838571>

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"

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com