

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 (COMTRAB CTM) with protection for conductor pairs in floating signal circuits. Nominal voltage: 60 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

- Modular compact protection for high-density networks





# Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	9.82 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



# 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
Туре	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 <sub>N</sub>	60 V DC
Maximum continuous operating voltage U <sub>C</sub>	± 65 V DC
	50 V AC
Maximum continuous voltage UC (wire-wire)	± 65 V DC
	50 V AC
Maximum continuous voltage U <sub>C</sub> (wire-ground)	72 V DC
Nominal current I <sub>N</sub>	380 mA (25 °C)
Operating effective current I <sub>C</sub> at U <sub>C</sub>	≤ 70 μA
Residual current I <sub>PE</sub>	≤ 2 µA
Nominal discharge current I <sub>n</sub> (8/20) µs (Core-Core)	5 kA
Nominal discharge current I <sub>n</sub> (8/20) µs (Core-Earth)	5 kA
Total surge current (8/20) μs	10 kA
Total surge current (10/350) μs	2.5 kA



# Technical data

## Protective circuit

Max. discharge current I <sub>max</sub> (8/20) µs maximum (Core-Earth)	10 kA (in total)
Nominal pulse current lan (10/1000) µs (Core-Core)	100 A
Nominal pulse current lan (10/1000) µs (Core-Earth)	100 A
Impulse discharge current (10/350)#µs, peak value I <sub>imp</sub>	1 kA
Output voltage limitation at 1 kV/µs (Core-Core) spike	≤ 160 V
Output voltage limitation at 1 kV/µs (Core-Earth) spike	≤ 700 V
Output voltage limitation at 1 kV/µs (Core-Core) static	≤ 160 V
Output voltage limitation at 1 kV/µs (Core-Earth) static	≤ 700 V
Residual voltage at I <sub>n</sub> , (conductor-conductor)	≤ 95 V
Residual voltage at I <sub>n</sub> , (conductor-ground)	≤ 60 V
Residual voltage with Ian (10/1000)µs (conductor-conductor)	≤ 35 V
Residual voltage with Ian (10/1000)µs (conductor-ground)	≤ 12 V
Voltage protection level U <sub>P</sub> (Core-Core)	≤ 200 V (C2, 10 kV/5 kA, spike)
	≤ 95 V (C2, 10 kV/5 kA, static)
	≤ 160 V (C3, 7.5 kV/100 A, spike)
	≤ 35 V (C3, 7.5 kV/100 A, static)
Voltage protection level U <sub>P</sub> (Core-Earth)	≤ 700 V (C2, 10 kV/5 kA, spike)
	≤ 90 V (C2, 10 kV/5 kA, static)
	≤ 700 V (C3, 7.5 kV/100 A, spike)
	≤ 12 V (C3, 7.5 kV/100 A, static)
Response time tA (Core-Core)	≤ 1 ns
Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, sym.	0.3 dB (≤ 500 kHz)
Cut-off frequency fg (3 dB), sym. in 100 Ohm system	2 MHz
Capacity (Core-Core)	1.2 nF (f=1 MHz / V <sub>R</sub> = 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



# 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

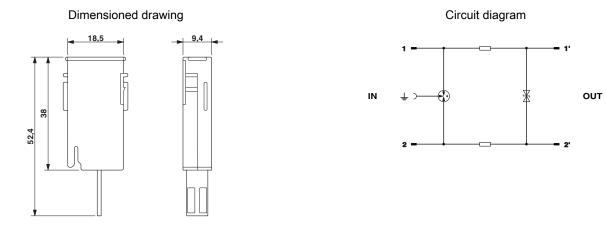
# Approvals



# Approvals Approvals GOST / UL Listed Ex Approvals Approvals submitted Approval details GOST ©

# Drawings

UL Listed 🕦



Phoenix Contact 2014 © - all rights reserved http://www.phoenixcontact.com