

Surge protection plug - CTM 2X1-180DC-GS-P - 2838623

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LSA-PLUS protective plug (COMTRAB CTM) with power cross and coarse surge protection for 2 signal lines.
Nominal voltage: 180 V DC

Your advantages

- ✓ 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
- ✓ Typical installation locations include marshalling distributors
- ✓ Space-saving LSA-PLUS connection technology
- ✓ Modular compact protection for high-density networks



Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 948375
GTIN	4017918948375

Technical data

Dimensions

Height	21 mm
Width	9.5 mm
Depth	53.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Degree of protection	IP20

General

Housing material	PA
Flammability rating according to UL 94	V-0
Color	black

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Technical data

General

Standards for clearances and creepage distances	DIN VDE 0110-1
	IEC 60664-1
Overvoltage category	II
Degree of pollution	2
Mounting type	On CT-TERMIBLOCK and LSA-PLUS disconnect strip
Type	LSA-PLUS module
Direction of action	Line-Line & Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 2.20
Near-end crosstalk attenuation aN between adjacent articles	70 dB (up to 1 MHz 100 Ω system)
	50 dB (up to 10 MHz 100 Ω system)
	30 dB (up to 100 MHz, 100 Ω system)

Protective circuit

IEC test classification	A2
	B1
	B2
	B3
	C1
	C2
	C3
	D1
	D2
VDE requirement class	A2
	B1
	B2
	B3
	C1
	C2
	C3
	D1
	D2
Nominal voltage U_N	180 V DC
Maximum continuous voltage U_C	± 180 V DC
Rated current	120 mA (25 °C)
Operating effective current I_C at U_C	≤ 2 μA
Residual current I_{PE}	≤ 2 μA
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs	1 kA
Total discharge current I_{total} (8/20) μs	10 kA
Total discharge current I_{total} (10/350) μs	2.5 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	10 kA (in total)

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Protective circuit

Nominal pulse current I_{an} (10/1000) μ s (line-earth)	200 A
Output voltage limitation at 1 kV/ μ s (line-earth) spike	≤ 800 V
Output voltage limitation at 1 kV/ μ s (line-earth) static	≤ 800 V
Residual voltage at I_n (line-earth)	≤ 70 V
Residual voltage with I_{an} (10/1000) μ s (line-earth)	≤ 28 V
Voltage protection level U_p (line-earth)	≤ 900 V (C2 - 10 kV/5 kA, spike)
	≤ 70 V (C2 - 10 kV/5 kA, static)
	≤ 1 kV (C3 - 7.5 kV / 100 A, spike)
	≤ 30 V (C3 - 7.5 kV / 100 A, static)
Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, asym.	0.5 dB (≤ 10 MHz)
	0.6 dB (up to 60 MHz in 100 Ω system)
	1 dB (up to 100 MHz, 100 Ω)
Cut-off frequency f_g (3 dB), asym. (PE) in 100 Ohm system	> 100 MHz
Capacity (line-earth)	5 pF ($f=1$ MHz / $V_R=0$ V)
Resistance in series	5.5 $\Omega \pm 1.5 \Omega$ (symmetry: +/- 0.5 Ω)
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

Connection data

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

Connection, equipotential bonding

Connection method	Spring contact
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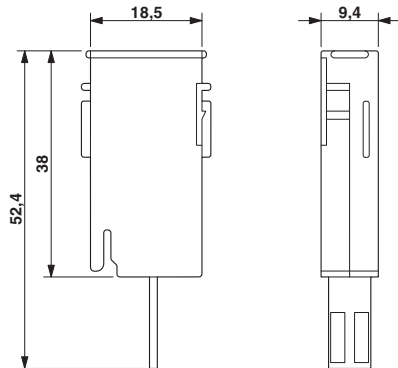
Standards and Regulations

Standards/regulations	IEC 61643-21
Standards/specifications	IEC 61643-21 2002

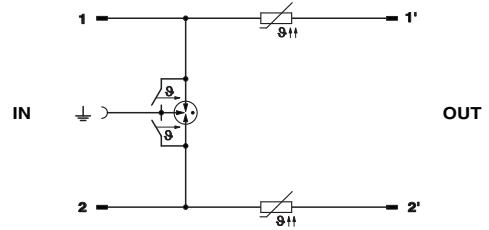
Drawings

Surge protection plug - CTM 2X1-180DC-GS-P - 2838623

Dimensional drawing



Circuit diagram



Approvals

Approvals

Approvals

UL Listed / EAC

Ex Approvals

Approval details

UL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

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