

D-LAN-CAT.5E - Surge protection device



2858991

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Fine surge protection in accordance with Class D (CAT.5e), for token ring and Ethernet. RJ45 attachment plug with separate grounding cable, incl. RJ45 cable

Commercial data

Item number	2858991
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL24
Product key	CL3111
Catalog page	Page 97 (TT-2005)
GTIN	4017918920463
Weight per piece (including packing)	135.8 g
Weight per piece (excluding packing)	135 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Product properties

Product type	Surge protection for information technology
Product family	DATATRAB
IEC test classification	C1
	C2
	C3
	B2
	B3
VDE requirement class	C1
	C2
	C3
	B2
	B3
Type	Attachment plug
Surge protection fault message	none
Insulation characteristics	
Overvoltage category	II
Pollution degree	2

Connection data

Connection method	RJ45
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Dimensions

Dimensional drawing	
Width	25.4 mm
Height	94 mm
Depth	25.4 mm

Material specifications

Color	black (RAL 9005)
Housing material	Aluminum, anodized

Mechanical properties

Mechanical data	
Open side panel	No

Protective circuit

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Direction of action	Line-Line & Line-Shield & Shield-Earth Ground
Maximum continuous voltage U_C	$\pm 7 \text{ V DC}$
Rated current	1.5 A (25 °C)
Operating effective current I_C at U_C	$\leq 100 \mu\text{A}$
Residual current I_{PE}	$\leq 100 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (line-line)	350 A
Nominal discharge current I_n (8/20) μs (line-ground)	2.5 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	2.5 kA (in total)
Nominal pulse current I_{an} (10/700) μs (line-line)	160 A
Nominal pulse current I_{an} (10/700) μs (line-earth)	160 A
Output voltage limitation at 1 kV/ μs (line-line) spike	$\leq 22 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 80 \text{ V}$ (equipotential bonding lead: 1 m)
Output voltage limitation at 1 kV/ μs (shield-ground) spike	$\leq 700 \text{ V}$ (equipotential bonding lead: 1 m)
Residual voltage at I_n (conductor-conductor)	$\leq 45 \text{ V}$
Residual voltage at I_n (conductor-ground)	$\leq 45 \text{ V}$
Residual voltage at I_n (shield-ground)	$\leq 700 \text{ V}$
Voltage protection level U_p (line-line)	$\leq 50 \text{ V}$ (C1 - 500 V / 250 A)
	$\leq 20 \text{ V}$ (B3 - 2 kV / 25 A)
	$\leq 65 \text{ V}$ (C1, 500 V/250 A - PA-Ltg: 1 m)
Voltage protection level U_p (line-earth)	$\leq 25 \text{ V}$ (B3 - 2 kV / 25 A - PA-Ltg: 1 m)
	$\leq 60 \text{ V}$ (C3, 7 kV/90 A - PA-Ltg: 1 m)
	$\leq 850 \text{ V}$ (C2 - 4 kV/2 kA - PA-Ltg: 1 m)
Voltage protection level U_p (shield-ground)	$\leq 850 \text{ V}$ (C2 - 4 kV/2 kA - PA-Ltg: 1 m)
Response time t_A (line-line)	$\leq 500 \text{ ns}$
Response time t_A (line-earth)	$\leq 100 \text{ ns}$
Input attenuation aE, sym.	1 dB (up to 100 MHz, 100 Ω system)
Near-end crosstalk attenuation	36 dB (pair 3-6 against pair 4-5 in 100 Ω system / 100 MHz)
	40 dB (all other pair combinations in 100 Ω system/100 MHz)
Cut-off frequency f_g (3 dB), sym. in 100 Ω system	$\leq 100 \text{ MHz}$
Capacity (Core-Core)	20 pF (typical)
Capacity (Core-Earth)	1 pF (typical)
Surge protection fault message	none
Impulse durability (line-line)	B2 - 4 kV / 100 A
	B3 - 2 kV / 25 A
	C1 - 500 V / 250 A
Impulse durability (line-earth)	B2 - 4 kV / 100 A
	C1 - 500 V / 250 A
	C2 - 4 kV / 2 kA
	B3 - 2 kV / 25 A

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C

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Standards and regulations

VDE requirement class	C1
	C2
	C3
	B2
	B3

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
	E VDE 0845-3-1
	DIN EN 50173-1
	IEC 61643-21
	E VDE 0845-3-1
	DIN EN 50173-1

Mounting

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