

# Surge protection device - D-LAN-CAT.5E - 2858991

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RJ-45 attachment plug with surge protection for LAN interfaces for inserting in the data line, incl. RJ45 cable

## Key commercial data

<b>package_quantity</b>	1
<b>GTIN</b>	4017918920463

## Technical data

### Dimensions

<b>Height</b>	94 mm
<b>Width</b>	25.4 mm
<b>Depth</b>	25.4 mm

### Ambient conditions

<b>Ambient temperature (operation)</b>	-40 °C ... 80 °C
<b>Degree of protection</b>	IP20

### General

<b>Housing material</b>	Aluminum, anodized
<b>Color</b>	black
<b>Standards for air and creepage distances</b>	DIN VDE 0110-1
<b>Standards for air and creepage distances</b>	IEC 60664-1
<b>Surge voltage category</b>	II
<b>Pollution degree</b>	2
<b>Mounting type</b>	Connection-specific intermediate plugging
<b>Design</b>	Attachment plug
<b>Direction of action</b>	Line-Line & Line-Shield & Shield-Earth Ground

### Protective circuit

<b>IEC test classification</b>	C1
<b>IEC test classification</b>	C2
<b>IEC test classification</b>	C3
<b>IEC test classification</b>	B2
<b>IEC test classification</b>	B3
<b>VDE requirement class</b>	C1

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## Technical data

### Protective circuit

VDE requirement class	C2
VDE requirement class	C3
VDE requirement class	B2
VDE requirement class	B3
Maximum continuous voltage $U_C$ (wire-wire)	$\pm 7$ V DC
Maximum continuous voltage $U_C$ (wire-ground)	$\pm 7$ V DC
Nominal current $I_N$	1.5 A (25 °C)
Operating effective current $I_C$ at $U_C$	$\leq 100$ $\mu$ A
Residual current $I_{PE}$	$\leq 100$ $\mu$ A
Nominal discharge current $I_n$ (8/20) $\mu$ s (Core-Core)	350 A
Nominal discharge current $I_n$ (8/20) $\mu$ s (Core-Earth)	2.5 kA
Max. discharge current $I_{max}$ (8/20) $\mu$ s maximum (Core-Earth)	2.5 kA (in total)
Nominal pulse current $I_{an}$ (10/700) $\mu$ s (Core-Core)	160 A
Nominal pulse current $I_{an}$ (10/700) $\mu$ s (Core-Earth)	160 A
Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) spike	$\leq 22$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) spike	$\leq 80$ V (equipotential bonding lead: 1 m)
Output voltage limitation at 1 kV/ $\mu$ s (Shield-Earth) spike	$\leq 700$ V (equipotential bonding lead: 1 m)
Residual voltage at $I_n$ , (conductor-conductor)	$\leq 45$ V
Residual voltage at $I_n$ , (conductor-ground)	$\leq 45$ V
Residual voltage at $I_n$ , (shield-ground)	$\leq 700$ V
Voltage protection level $U_P$ (Core-Core)	$\leq 50$ V (C1, 500 V/250 A)
Voltage protection level $U_P$ (Core-Core)	$\leq 20$ V (B3, 2 kV/25 A)
Voltage protection level $U_P$ (Core-Earth)	$\leq 65$ V (C1, 500 V/250 A - PA-Ltg: 1 m)
Voltage protection level $U_P$ (Core-Earth)	$\leq 25$ V (B3, 2 kV/25 A - PA-Ltg: 1 m)
Voltage protection level $U_P$ (Core-Earth)	$\leq 60$ V (C3, 7 kV/90 A - PA-Ltg: 1 m)
Voltage protection level $U_P$ (Shield-Earth)	$\leq 850$ V (C2, 4 kV/2 kA - PA-Ltg: 1 m)
Response time $t_A$ (Core-Core)	$\leq 500$ ns
Response time $t_A$ (Core-Earth)	$\leq 100$ ns
Input attenuation $a_E$ , sym.	1 dB (up to 100 MHz, 100 $\Omega$ system)
Near-end crosstalk attenuation	36 dB (pair 3-6 against pair 4-5 in 100 $\Omega$ system / 100 MHz)
Near-end crosstalk attenuation	40 dB (all other pair combinations in 100 $\Omega$ system/100 MHz)
Cut-off frequency $f_g$ (3 dB), sym. in 100 Ohm system	$\leq 100$ MHz
Capacity (Core-Core)	20 pF (typical)
Capacity (Core-Earth)	1 pF (typical)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	B2 (4 kV / 100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	B3 (2 kV/25 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C1 (500 V / 250 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	B2 (4 kV / 100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (500 V/250 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (4 kV / 2 kA)

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## Technical data

### Protective circuit

<b>Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)</b>	B3 (2 kV/25 A)
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### Connection data

<b>Connection method</b>	RJ45
<b>Connection type IN</b>	RJ45 socket
<b>Connection type OUT</b>	RJ45 socket
<b>Connection method</b>	Network interfaces (e.g. Ethernet, Token Ring and CDDI/FDDI)

### Connection, equipotential bonding

<b>Connection method</b>	Cable connection
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### Standards and Regulations

<b>Standards/regulations</b>	IEC 61643-21
<b>Standards/regulations</b>	E VDE 0845-3-1
<b>Standards/regulations</b>	DIN EN 50173-1

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27140201
<b>eCl@ss 4.1</b>	27130801
<b>eCl@ss 5.0</b>	27130801
<b>eCl@ss 5.1</b>	27130801
<b>eCl@ss 6.0</b>	27130807
<b>eCl@ss 7.0</b>	27130807
<b>eCl@ss 8.0</b>	27130807

### ETIM

<b>ETIM 2.0</b>	EC000943
<b>ETIM 3.0</b>	EC000943
<b>ETIM 4.0</b>	EC000943
<b>ETIM 5.0</b>	EC000943

### UNSPSC

<b>UNSPSC 6.01</b>	30212010
<b>UNSPSC 7.0901</b>	39121610
<b>UNSPSC 11</b>	39121610
<b>UNSPSC 12.01</b>	39121610
<b>UNSPSC 13.2</b>	39121620

## approvals

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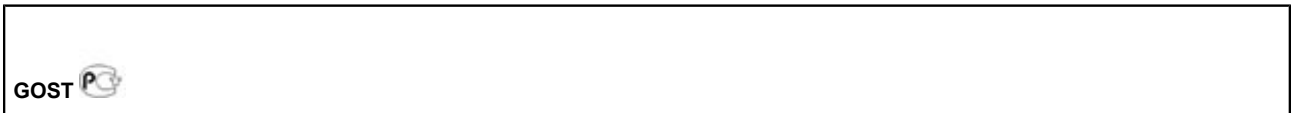
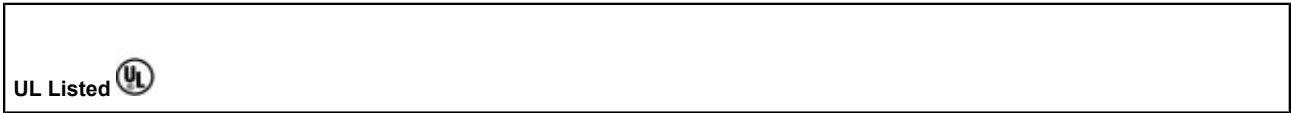
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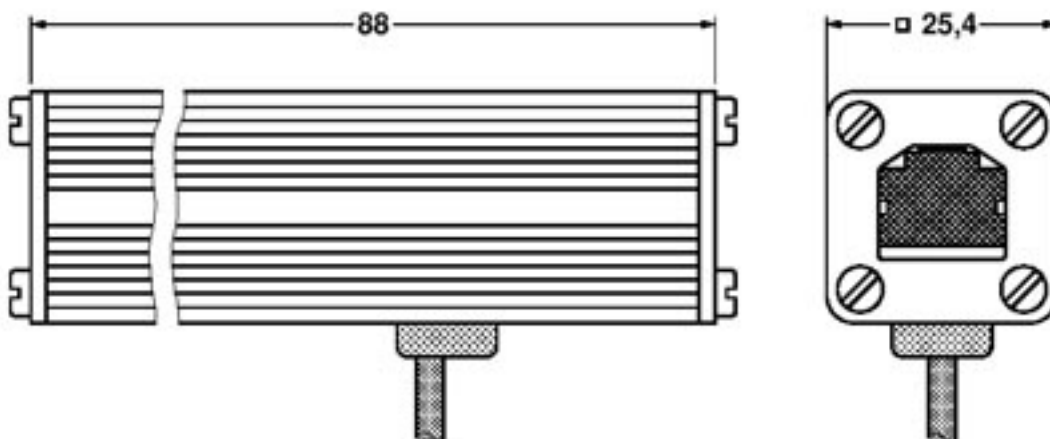
approvals

Approval details



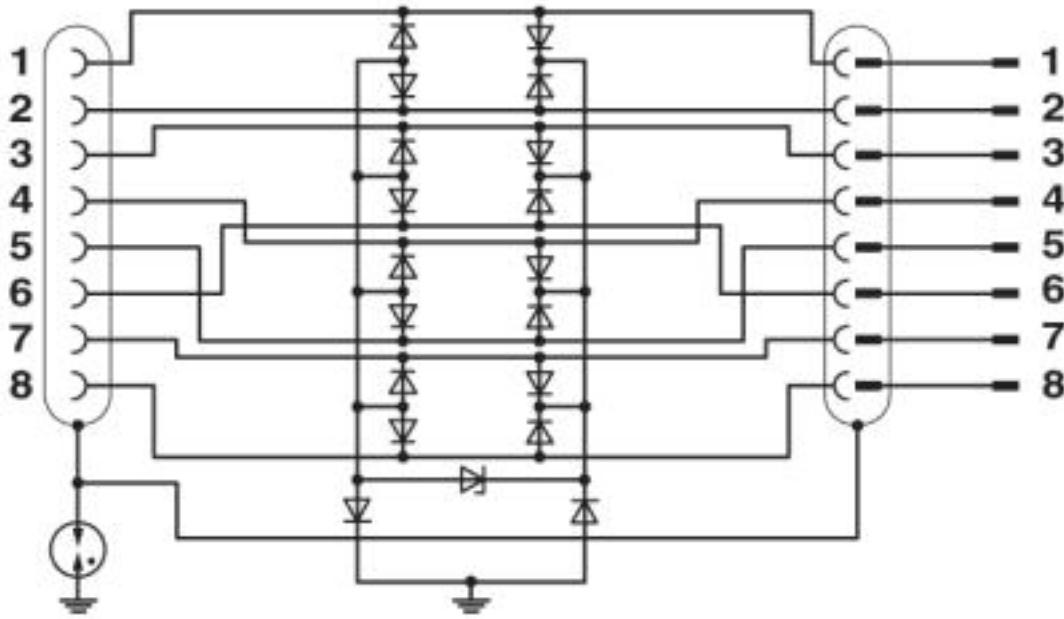
Drawings

Dimensioned drawing



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Circuit diagram



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