#### SPDs FOR RJ CONNECTION

## Surge arrester



Surge arrester for telecommunications terminal devices and telephone systems with RJ plug-in connection for surface mounting.

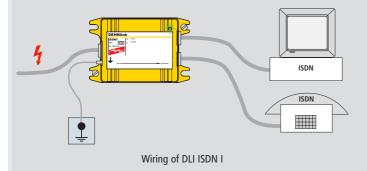
- Surface-mountable surge protective device for telecommunication systems
- Quick installation due to plug-in terminals
- · Different types specified for interfaces

Surge arrester for surface mounting in modern design. It protects especially modems and telephone systems with RJ plug-in connections. The plug-in connections allow for easy installation.

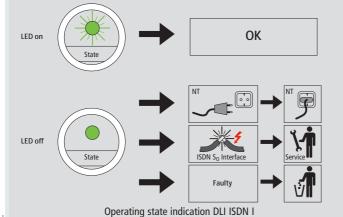


Devices with and without operating state indication

Compared to conventional devices ( ... ECO), the different SPD units with ...I type designation have an additional LED indication of the supply voltage. This helps to immediately recognise interferences on the installation. Furthermore, they provide a wide range of accessories like connecting cables or fixing material.



DLI ISDN I can protect two terminal devices at the same time due to the integrated distribution function. The operating state indication is only illuminated, if the NTBA is also connected to the power supply and not in case of emergency operation (remote supply of telecommunication network operators).



The operating state indication informs about the operating condition of the device. In case of faults, the connections and cables have to be checked. If no installation fault can be detected, the SPD has been overloaded and has to be replaced.

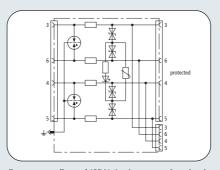


### **DLI ISDN I**

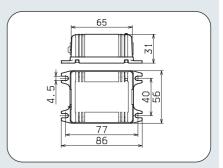
### SPDs FOR RJ CONNECTION



- · 2 protected outputs
- Surge protection and LED indication for the remote supply included
- For use according to the lightning protection zones concept at boundaries 0<sub>B</sub> – 2 and higher



Energy-coordinated ISDN 4-wire protective circuit with additional protection and indication of the remote power supply.



Dimension drawing DLI ISDN I

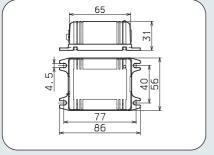
SPD with two protected ISDN  $S_0$  outputs (distribution function) and operating state indication (LED) of the remote supply voltage. No indication during emergency operation (supply from telephone system only). Connecting cable and mounting material included.

	DLI ISDN I	
SPD class	TYPE 2 P1	
Nominal voltage U <sub>N</sub>	5 V	
Nominal voltage pa-pa U <sub>N</sub>	40 V	
Max. continuous operating d.c. voltage U <sub>c</sub>	7.5 V	
Max. continuous a.c. voltage $U_{\text{c}}$	5.2 V	
Max. continuous d.c. voltage pa-pa U <sub>C</sub>	45 V	
Nominal current I <sub>L</sub>	200 mA	
C2 Total nominal discharge current (8/20 µs) I <sub>n</sub>	10 kA	
C2 Nominal discharge current (8/20 µs) per line I <sub>n</sub>	2.5 kA	
Voltage protection level line-line for I <sub>n</sub> C2 U <sub>p</sub>	≤ 30 V	
Voltage protection level line-PG for I <sub>n</sub> C2 U <sub>p</sub>	≤ 600 V	
Voltage protection level pa-pa for I <sub>n</sub> C2 U <sub>p</sub>	≤ 180 V	
Voltage protection level line-line for 1 kV/µs C3 Up	≤ 17 V	
Voltage protection level line-PG for 1 kV/µs C3 Up	≤ 600 V	
Voltage protection level pa-pa for I <sub>n</sub> C2 U <sub>p</sub>	≤ 100 V	
Series impedance per line	1 ohm	
Bandwidth line-line	2 MHz	
Capacitance line-line C	≤ 3 nF	
Capacitance line-PG C	≤ 15 pF	
Operating temperature range	-40°C+80°C	
Degree of protection	IP 20	
Connection input/output	RJ45 / 2 x RJ45	
Pinning	3/6, 4/5	
Earthing by	flat connector 6.3 mm	
Enclosure material	polyamide PA 6.6	
Colour	yellow	
Test standards	IEC 61643-21	
Accessories	connecting cable, mounting material	
Ordering information		
Туре	DLI ISDN I	
Part No.	929 024	
Packing unit	1 pc(s).	

Protective device for analogue telephony or system telephony with operating state indication (LED). Protects even against a.c. current interferences. Compatible with pins of RJ11/12 plugs.

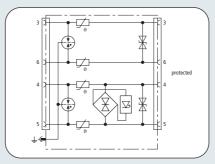
#### SPDs FOR RJ CONNECTION

#### DLI TC I



Dimension drawing DLI TC I

Connecting cable and mounting material included.



2-stage protective circuit with overcurrent protection and system voltage indication of DLI TC 2 I.



- · LED indicates supply voltage
- Protection against power crossing integrated
- For use according to the lightning protection zones concept at boundaries 0<sub>B</sub> – 2 and higher

DLITC 2 I SPD class TYPE 2 P2 Nominal voltage U<sub>N</sub> 110 V Max. continuous operating d.c. voltage U<sub>c</sub> 170 V 120 V Max. continuous operating a.c. voltage U<sub>c</sub> Nominal current I<sub>I</sub> 150 mA C2 Total nominal discharge current (8/20 µs) I<sub>n</sub> 10 kA C2 Nominal discharge current (8/20 µs) per line I<sub>n</sub> 2.5 kA Voltage protection level line-line for In C2 Up ≤ 250 V Voltage protection level line-PG for In C2 Up ≤ 600 V Voltage protection level line-line for 1 kV/µs C3 Un ≤ 230 V ≤ 600 V Voltage protection level line-PG for 1 kV/µs C3 Up Series impedance per line 10 ohms Bandwidth line-line 10 MHz Capacitance line-line C ≤ 0.3 nF Capacitance line-PG C ≤ 15 pF Operating temperature range -40°C...+80°C Degree of protection IP 20 Connection input/output RJ45 / RJ 45 (compatible with RJ12) **Pinning** 3/6, 4/5 (3/4, 2/5 for RJ12) Earthing by flat connector 6.3 mm **Enclosure material** polyamide PA 6.6 Colour yellow Test standards IEC 61643-21 Accessories connecting cable, mounting material Ordering information DLI TC 2 I Type Part No. 929 028

1 pc(s)



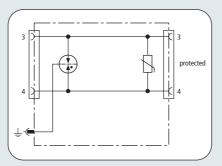
Packing unit

# **DLI TC**

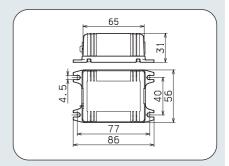
# SPDs FOR RJ CONNECTION



- Economical protection for 1 pair
- Modern design
- For use according to the lightning protection zones concept at boundaries 0<sub>B</sub> – 2 and higher



Using a high-capacity varistor makes decoupling to the gas discharge tube unnecessary.



Dimension drawing DLI TC

Protective device for analogue telephony or system telephony, RJ12 unit.

	DLI TC ECO RJ12
SPD class	TYPE 2 P2
Nominal voltage U <sub>N</sub>	130 V
Max. continuous operating d.c. voltage $U_{\text{\tiny C}}$	170 V
Max. continuous operating a.c. voltage $U_{\text{\tiny C}}$	120 V
Nominal current I <sub>L</sub>	200 mA
C2 Total nominal discharge current (8/20 µs) I <sub>n</sub>	5 kA
C2 Nominal discharge current (8/20 $\mu$ s) per line $I_n$	2.5 kA
Voltage protection level line-line for I <sub>n</sub> C2 U <sub>p</sub>	≤ 480 V
Voltage protection level line-PG for $I_n$ C2 $U_p$	≤ 600 V
Voltage protection level line-line for 1 kV/ $\mu s$ C3 U $_p$	≤ 280 V
Voltage protection level line-PG for 1 kV/ $\mu$ s C3 $U_p$	≤ 600 V
Bandwidth line-line	10 MHz
Capacitance line-line C	≤ 0.7 nF
Capacitance line-PG C	≤ 15 pF
Operating temperature range	-40°C+80°C
Degree of protection	IP 20
Connection input/output	RJ12 / RJ12
Pinning	3/4
Earthing by	flat connector 6.3 mm
Enclosure material	polyamide PA 6.6
Colour	yellow
Test standards	IEC 61643-21
Accessories	mounting material
Ordering information	
Туре	DLI TC ECO RJ12
Part No.	929 081
Packing unit	1 pc(s).



#### SPDs FOR BT JACK CONNECTION

Surge arrester



Surge arrester for telecommunications terminal equipment and telephone systems with BT plug-in connection for surface mounting.

- Surface-mountable protective device for telecommunication systems
- Quick installation due to plug-in terminals
- Device according to British Telecom requirements

Surge arrester for telecommunications terminal equipment and telephone systems with BT plug-in connection for surface mounting. The device corresponds to requirements by Oftel NS/G/23/L/100005 on connections

between a terminal point of a public telephone installation and any telecommunications terminal equipment. Fulfils BS6651:1992, Appendix C, Category C-High and CCITT K17.



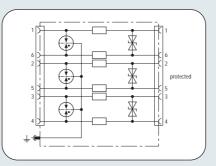
# **INFORMATION TECHNOLOGY SYSTEMS**

# **DLI TC BT**

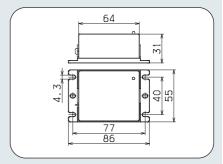
# SPDs FOR BT JACK CONNECTION



- Device according to British Telecom requirements
- · Protection for all lines
- For use according to the lightning protection zones concept at boundaries 0<sub>B</sub> – 2 and higher



Energy-coordinated protective circuit for all pairs, free of leakage currents to earth.



Dimension drawing DLI TC BT

Protective device for analogue telephony or system telephony in accordance with British Telecom requirements. Pluggable terminals for easy installation.

	DLI TC BT	
SPD class	TYPE 2 P2	
Nominal voltage U <sub>N</sub>	130 V	
Max. continuous operating d.c. voltage U <sub>C</sub>	145 V	
Nominal current I <sub>L</sub>	125 mA	
C2 Total nominal discharge current (8/20 µs) I <sub>n</sub>	10 kA	
C2 Nominal discharge current (8/20 µs) per line I <sub>n</sub>	5 kA	
Voltage protection level line-line for I <sub>n</sub> C2 U <sub>p</sub>	≤ 210 V	
Voltage protection line-PG for I <sub>n</sub> C2 U <sub>p</sub>	≤ 550 V	
Voltage protection level line-line for 1 kV/µs C3 U <sub>P</sub>	≤ 185 V	
Voltage protection level line-PG for 1 kV/µs C3 U <sub>P</sub>	≤ 450 V	
Series impedance per line	4.7 ohms	
Bandwidth f <sub>G</sub>	13 MHz	
Capacitance line-line C	≤ 400 pF	
Capacitance line-PG C	≤ 10 pF	
Operating temperature range	-40°C+80°C	
Degree of protection	IP 20	
Connection input/output	BT jack / BT jack	
Pinning	1/6, 2/5, 3/4	
Earthing by	flat connector 6.3 mm	
Enclosure	thermoplastic	
Colour	black	
Test standards	IEC 61643-21	
Accessories	connecting cable, mounting material	
Ordering information		
Туре	DLI TC BT	
Part No.	929 026	

.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Part No. Packing unit	929 026
Packing unit	1 pc(s).