



# DIN rail Surge Protector for dataline/telecom

## DLU, DLU2



DLU and DLU2 Din rail mount surge protectors are resettable surge protectors and are designed to protect your sensitive datacom, telephone and instrumentation equipment against harmful lightning surges and electrical transients.

These surge protectors must be installed on a symmetrical DIN rail and are available for transmission lines ranging from 6-170Vdc and can handle transmission speeds up to 10 Mbps.

These surge protectors utilize a hybrid technology consisting of GDT's and fast clamping diodes that combines an ultra-fast response time (<1 ns) and a higher power handling capability of 20kA.

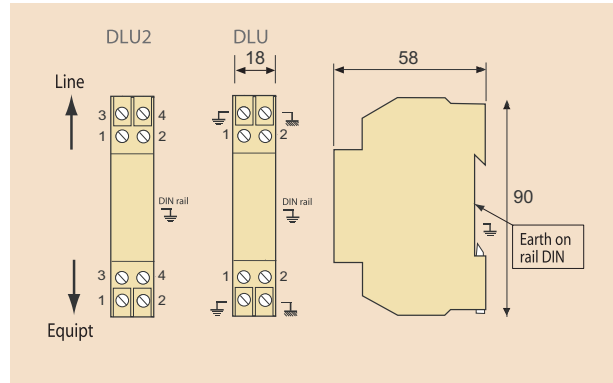
The DLU protects 1 pair (2 wires) and the DLU2 protects 2 pairs (4 wires).

These surge protectors protect the shield to ground via gas tube and offer direct earth grounding via the din rail clip.



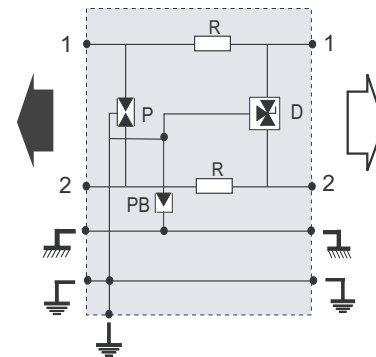
- For «DIN» rail mounting
- All types of Telephone and Data lines
- Monobloc housing
- 2-pair version (DLU2)
- Transmission and protection of shield wire (DLU)
- IEC 61643-21 compliance

### Dimensions (in mm)

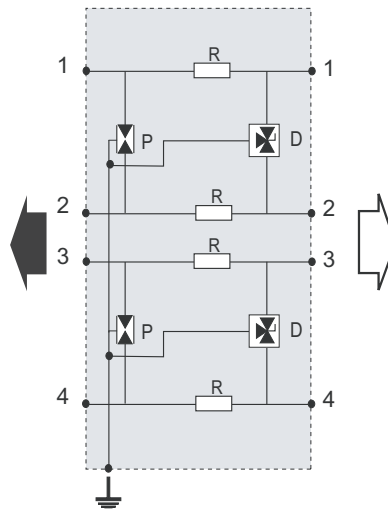


### Electrical diagrams

DLU 1-pair version



DLU2 2-pair version



P : 3-electrode gas tube  
 Pb : 2-electrode gas tube  
 R : Resistor  
 D : Clamping diode



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## DLU, DLU2

### Characteristics

#### 1-pair version : DLU

CITEL part number	DLU-170	DLU-48D3	DLU-48DBC	DLU-24D3	DLU-12D3	DLU-12DBC	DLU-06D3	DLU-06DBC
Typical Application	Telephone line ADSL	48 V line	Fipway WorldFIP Fieldbus-H2	4-20 mA 24 V line	Profibus-FMS Interbus Fieldbus-H1 Batibus, RS485	Profibus-DP LONwork RS485	RS422, 10 Base T	6 V line high bitrate
Configuration	1 pair + shield	1 pair + shield	1 pair + shield	1 pair + shield	1 pair + shield	1 pair + shield	1 pair + shield	1 pair + shield
Nominal line voltage (Un)	150 V	48 V	48 V	24 V	12 V	12 V	6 V	6 V
Max. line voltage (Uc)	170 V	53 V	53 V	28 V	15 V	15 V	10 V	10 V
Max. line current	300 mA	300 mA	300 mA	300 mA	300 mA	300 mA	300 mA	300 mA
Protection level (Up) <i>8/20µs impulse - 5 kA</i>	220 V	70 V	75 V	40 V	30 V	35 V	20 V	25 V
Nominal discharge current (In) <i>8/20µs impulse - 10 times</i>	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Max. discharge current (Imax) <i>8/20µs impulse - 1 time</i>	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Impulse current (Iimp) <i>10/350µs impulse - 2 times</i>	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Type of diagram	D	D	D	D	D	D	C	C
End of life	Short-circuit	Short-circuit	Short-circuit	Short-circuit	Short-circuit	Short-circuit	Short-circuit	Short-circuit
Mechanical characteristics	Monobloc Symmetrical DIN rail mounting Dimensions : see drawing Screw terminal connection - min/max: 22/16 AWG Housing material : Thermoplastic UL94-V0 Ground connection via DIN rail (DLU, DLU2) and screw terminal (DLU).							

#### 2-pair version : DLU2

CITEL part number	DLU2-170	DLU2-48D3	DLU2-24D3	DLU2-12D3	DLU2-06D3	DLU2-06DBC
Typical Application	Telephone line ADSL	48 V line	4-20 mA 24 V line	RS232 RS485	RS422, 10 Base T	T2 - T1 10BaseT
Configuration	2 pairs	2 pairs	2 pairs	4 wires	2 pairs	2 pairs
Nominal line voltage (Un)	150 V	48 V	24 V	12 V	6 V	6 V
Max. line voltage (Uc)	170 V	53 V	28 V	15 V	10 V	10 V
Max. line current	300 mA	300 mA	300 mA	300 mA	300 mA	300 mA
Protection level (Up) <i>8/20µs impulse - 5 kA</i>	220 V	70 V	70 V	30 V	20 V	25 V
Nominal discharge current (In) <i>8/20µs impulse - 10 times</i>	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Max. discharge current (Imax) <i>8/20µs impulse - 1 time</i>	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Impulse current (Iimp) <i>10/350µs impulse - 2 times</i>	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Type of diagram	D	C	C	C	C	C
End of life	Short-circuit	Short-circuit	Short-circuit	Short-circuit	Short-circuit	Short-circuit
Mechanical characteristics	Monobloc Symmetrical DIN rail mounting Dimensions : see drawing Screw terminal connection - min/max: 22/16 AWG Housing material : Thermoplastic UL94-V0 Ground connection via DIN rail (DLU, DLU2) and screw terminal (DLU).					

