Surge protection for data and information signal transmission

hakel®

Hz in Hearts

HDT1/6B

- Designed for the protection of data and communication lines against longitudinal and transverse surge effects.
- Pluggable version.
- No interruption of communication bus when the module is removed.
- One pair or two pairs lines.

- Contains both 1st and 2nd stage of protection.
- The HDT*/*C range, in addition, contains a gas discharge tube between the PE and SH (shield) terminals for their galvanic isolation.
- Suitable for use in industrial applications, especially in low-voltage ESS, FDAS systems and also in measurement and control systems.

Type		HDT1/6B
Testing category according to IEC 61643-21:2000 and EN 61643-21:2001		C1, C2, C3, D1
Number of pairs		1
Connector type		Screw terminals
Rated operating DC voltage	U_N	$0 \div 6$ V
Maximum continuous operating voltage DC	U_C	7.2 V
Rated load current	I_L	0.5 A
C1 Voltage protection level at I_n (line/PE)	U_p	< 180 V
C1 Voltage protection level at I_n (line/line)	U_p	< 30 V
C1 Nominal discharge current (8/20)	I_n	1 kA
C2 Voltage protection level at I_n (line/PE)	U_p	< 350 V
C2 Voltage protection level at I_n (line/line)	U_p	< 40 V
C2 Nominal discharge current (8/20)	I_n	15 kA
C3 Voltage protection level at 1 kV/µs (line/PE)	U_p	< 15 V
C3 Voltage protection level at 1 kV/µs (line/line)	U_p	< 10 V
D1 Impulse discharge current (10/350) line/PE	I_{imp}	2.5 kA
D1 Total impulse discharge current (10/350)	I_{Total}	5 kA
Response time	t_A	< 30 ns
Data rate		1 Mbit/s
Bandwidth	B	$0 \div 1$ MHz
Series impedance per line		1.8 Ω
Parasitic capacitance	C	< 1.5 nF
Lightning protection zone		LPZ 1-2, LPZ 2-3
Housing material		Polyamid PA6, UL94 V-0
Degree of protection		IP20
Operating temperature	ϑ	$-40 \div 55$ °C
Clamp fastening range (solid conductor)		$0.2 \div 1.5$ mm^2
Tightening moment		0,5 Nm
Installation		On DIN rail 35 mm
Modular width		1 TE
Operating position		Any

Type		HDT1/6B
Remote signalling		No
Modular design		Yes
Article number of spare module		56 002/M
Lifetime		> 100 000 h
Designed according to standards		
Requirements and test methods for SPDs connected to telecommunications and signalling networks		IEC 61643-21:2000
Safety of Flammability of Plastic Materials		UL 94
Application standards		
Protection against lightning		IEC 62305:2010
Ordering, packaging and additional data		
Mass	m	69 g
Mass (including the packaging)	m	80 g
Packaging dimensions (H x W x D)		26 x 98 x 73 mm
Packaging value	V	0.19 dm^3
ETIM group		EG000021
ETIM class		EC000943
Customs tariff no.		85363010
EAN code		8590681166574
Art. number		**56 002**

The link in the QR code leads to the online presentation of the **HDT1/6B**.
There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials.
For more information, visit **www.hakel.com**

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Internal diagram