



HDT1/12D

- 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.
  - High transmission speed up to 100 Mbit/s.
  - Suitable for use in industrial applications, especially in low-voltage ESS, FDAS systems and also in measurement and control systems.

Type		HDT1/12D
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 ÷ 12 V
Maximum continuous operating voltage DC	$U_C$	14.4 V
Rated load current	$I_L$	0.5 A
C1 Voltage protection level at $I_n$ (line/PE)	$U_p$	< 250 V
C1 Voltage protection level at $I_n$ (line/line)	$U_p$	< 80 V
C1 Nominal discharge current (8/20)	$I_n$	1 kA
C2 Voltage protection level at $I_n$ (line/PE)	$U_p$	< 130 V
C2 Voltage protection level at $I_n$ (line/line)	$U_p$	< 100 V
C2 Nominal discharge current (8/20)	$I_n$	15 kA
C3 Voltage protection level at 1 kV/μs	$U_p$	< 50 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		100 Mbit/s
Bandwidth	B	0 ÷ 100 MHz
Series impedance per line		0.8 Ω
Parasitic capacitance	C	< 0.04 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 ÷ 55 °C
Clamp fastening range (solid conductor)		0.2 ÷ 1.5 mm <sup>2</sup>
Tightening moment		0,5 Nm
Installation		On DIN rail 35 mm
Modular width		1 TE
Operating position		Any
Remote signalling		No

Type		HDT1/12D
Pluggable version		Yes
Article number of spare module		56 035/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 <sup>3</sup>
ETIM group		EG000021
ETIM class		EC000943
Customs tariff no.		85363010
EAN code		8590681167724
Art. number		56 035



The link in the QR code leads to the online presentation of the HDT1/12D. 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.hakil.com](http://www.hakil.com)



Internal diagram

