



HT-D 4/12 Xseries

- Designed for the protection of data and communication lines against longitudinal and transverse surge effects.
  - Contains both 1st and 2nd stage of protection.
- Suitable for use in industrial applications, especially in low-voltage ESS, FDAS systems and also in measurement and control systems.

Type		HT-D 4/12 Xseries
Testing category according to IEC 61643-21:2000 and EN 61643-21:2001		C1, C2, C3, D1
Number of pairs		4
Connector type		Eight-pole screw plug-in terminal block
Rated operating DC voltage	$U_N$	0 ÷ 12 V
Maximum continuous operating voltage DC	$U_C$	14.4 V
Rated load current	$I_L$	0.1 A
Maximum discharge current (8/20)	$I_{max}$	10 kA
C2 Nominal discharge current (8/20)	$I_n$	1 kA
C2 Voltage protection level at $I_n$	$U_p$	< 28 V
C3 Voltage protection level at 1 kV/μs	$U_p$	< 18 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 ÷ 1 MHz
Series impedance per line		2.2 Ω
Parasitic capacitance	C	< 1.5 nF
Lightning protection zone		LPZ 0-1, LPZ 1-2, LPZ 2-3
Housing material		AlMgSi (EN AW 6060)
Degree of protection		IP20
Operating temperature	θ	-40 ÷ 70 °C
Clamp fastening range (solid conductor)		0.2 ÷ 1.5 mm <sup>2</sup>
Tightening moment		0,2 Nm
Installation		On DIN rail 35 mm
Operating position		Any
Remote signalling		No
Pluggable version		No
Designed according to standards		
Requirements and test methods for SPDs connected to telecommunications and signalling networks		IEC 61643-21:2000
Application standards		
Protection against lightning		IEC 62305:2010

Ordering, packaging and additional data

Mass	m	95 g
Mass (including the packaging)	m	110 g
Packaging dimensions (H x W x D)		34 x 126 x 88 mm
Packaging value	V	0.38 dm <sup>3</sup>
Customs tariff no.		85363010
EAN code		8590681350041
Art. number		35 004



The link in the QR code leads to the online presentation of the HT-D 4/12 Xseries.  
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](http://www.hakel.com)



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Internal diagram

