## HDSP CANP/12/24

- Two-stage surge protection of connected CAN bus device with power lines.
- They are installed prior to the protected equipment and at the interface of LPZs 1 2 and higher.
- They increase the EMC level of the connected equipment against switching and atmospheric transients.

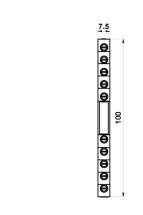
## The connection of the module allows to use the operating range of CAN bus drivers in the range of +/- 12 V (common-mode voltage range).

- Connecting the module allows the full CAN bus speed of 1 Mb/s to be used.
- Maximum current load of the power line 5 A.

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Туре		HDSP CANP/12/24
Testing category according to IEC 61643-21:2000 and EN 61643-21:2001		C2, C3, B3
Number of pairs		1
Connector type		Screw terminals
Rated operating voltage DC of data line X1-7, X3-7	U <sub>N</sub>	0 ÷ 12 V
Maximum continuous operating voltage DC of data line X1-7, X3-7	U <sub>c</sub>	15 V
Rated operating voltage DC of power line X5-7	U <sub>N</sub>	0 ÷ 24 V
Maximum continuous operating voltage DC of power line X5-7	U <sub>c</sub>	30 V
Maximum continuous operating voltage DC X7-9	U <sub>c</sub>	70 V
Rated load current of power line X5-6	۱ <sub>L</sub>	5 A
Rated load current of data line X1-2, X3-4	Ι <sub>L</sub>	0.5 A
C2 Nominal discharge current (8/20)	I <sub>n</sub>	5 kA
C2 Voltage protection level X2-8, X4-8 at In	Up	< 32 V
C2 Voltage protection level X2-4 at In	Up	< 56 V
C2 Voltage protection level X6-8 at +In	Up	< 43 V
C2 Voltage protection level X6-8 at -In	U <sub>p</sub>	> -10 V
C3 Voltage protection level X2-8, X4-8 at 1 kV/µs	Up	< 20 V
C3 Voltage protection level X2-4 at 1 kV/µs	U <sub>p</sub>	< 40 V
C3 Voltage protection level X6-8 at +1 kV/µs	Up	< 40 V
C3 Voltage protection level X6-8 at -1 kV/µs	Up	> -1 V
B3 Voltage protection level X8-10 at 100 V/µs	Up	< 550 V
C3 Voltage protection level X8-10 at 1 kV/µs	Up	< 700 V
Serial inductance of X5-6 power line	L	2.2 µH
Serial resistance of data line X1-2, X3-4	R	1.6 Ω
Capacitance X2-4 at 0 V	С	150 pF
Limiting transmission frequency of data link S21 for $Z_0{=}120\Omega$	f <sub>C</sub>	16 MHz
Lightning protection zone		LPZ 1-2, LPZ 2-3
Housing material		Polyamid PA6, UL94 V-0
Degree of protection		IP20
Operating temperature	9	-40 ÷ 70 °C
Clamp fastening range (solid conductor)		$0.2 \div 4 \text{ mm}^2$





100.5







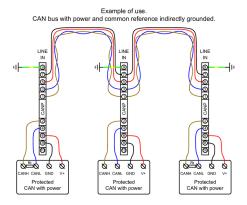
Туре		HDSP CANP/12/24
Tightening moment		0,5 Nm
Installation		On DIN rail 35 mm
Operating position		Any
Remote signalling		No
Modular design		No
Designed according to standards		
Requirements and test methods for SPDs connected to telecommunications and signalling networks		IEC 61643-21:2000
Safety of 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	86 g
Packaging dimensions (H x W x D)		52 x 108 x 83 mm
Packaging value	V	0.47 dm <sup>3</sup>
ETIM group		EG000021
ETIM class		EC000943
Customs tariff no.		85363010
EAN code		8590681185773
Art. number		56 053



The link in the QR code leads to the online presentation of the HDSP CANP/12/24 . 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** 



## Application wiring diagram (installation)



## Internal diagram

