

## 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.

Type		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	$U_N$	0 ÷ 12 V
Maximum continuous operating voltage DC of data line X1-7, X3-7	$U_C$	15 V
Rated operating voltage DC of power line X5-7	$U_N$	0 ÷ 24 V
Maximum continuous operating voltage DC of power line X5-7	$U_C$	30 V
Maximum continuous operating voltage DC X7-9	$U_C$	70 V
Rated load current of power line X5-6	$I_L$	5 A
Rated load current of data line X1-2, X3-4	$I_L$	0.5 A
C2 Nominal discharge current (8/20)	$I_n$	5 kA
C2 Voltage protection level X2-8, X4-8 at $I_n$	$U_p$	< 32 V
C2 Voltage protection level X2-4 at $I_n$	$U_p$	< 56 V
C2 Voltage protection level X6-8 at $+I_n$	$U_p$	< 43 V
C2 Voltage protection level X6-8 at $-I_n$	$U_p$	> -10 V
C3 Voltage protection level X2-8, X4-8 at 1 kV/ $\mu$ s	$U_p$	< 20 V
C3 Voltage protection level X2-4 at 1 kV/ $\mu$ s	$U_p$	< 40 V
C3 Voltage protection level X6-8 at +1 kV/ $\mu$ s	$U_p$	< 40 V
C3 Voltage protection level X6-8 at -1 kV/ $\mu$ s	$U_p$	> -1 V
B3 Voltage protection level X8-10 at 100 V/ $\mu$ s	$U_p$	< 550 V
C3 Voltage protection level X8-10 at 1 kV/ $\mu$ s	$U_p$	< 700 V
Serial inductance of X5-6 power line	$L$	2.2 $\mu$ H
Serial resistance of data line X1-2, X3-4	$R$	1.6 $\Omega$
Capacitance X2-4 at 0 V	$C$	150 pF
Limiting transmission frequency of data link S21 for $Z_0=120 \Omega$	$f_c$	16 MHz
Lightning protection zone		LPZ 1-2, LPZ 2-3
Housing material		Polyamid PA6, UL94 V-0
Degree of protection		IP20
Operating temperature	$\theta$	-40 ÷ 70 °C
Clamp fastening range (solid conductor)		0.2 ÷ 4 mm <sup>2</sup>

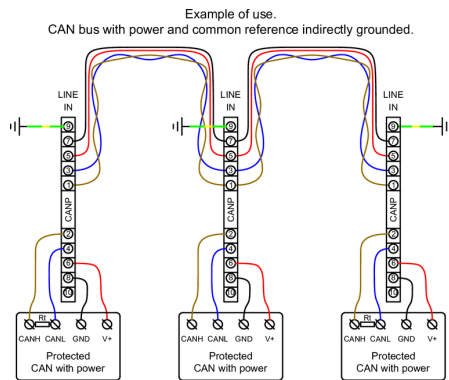
Type		HDSP CANP/12/24
Tightening moment		0,5 Nm
Installation		On DIN rail 35 mm
Operating position		Any
Remote signalling		No
Modular design		No
<b>Designed according to standards</b>		
Requirements and test methods for SPDs connected to telecommunications and signalling networks		IEC 61643-21:2000
Safety of Flammability of Plastic Materials		UL 94
<b>Application standards</b>		
Protection against lightning		IEC 62305:2010
<b>Ordering, packaging and additional data</b>		
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
<b>Art. number</b>		<b>56 053</b>



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](http://www.hakel.com)



## Application wiring diagram (installation)



## Internal diagram

