

IL CAN BK-TC-PAC

Order No.: 2718701



CANopen bus coupler, 24 V DC, bus interface 2 x 5-pos. TWIN-COMBICON connector, complete with accessories (connector and labeling field)

CANopen

Commercial data

GTIN (EAN)	
sales group	K410
Pack	1 pcs.
Customs tariff	85389091
Catalog page information	Page 168 (AX-2011)

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Product description

The CANopen fieldbus coupler enables the flexible INTERBUS Inline automation kit to be operated in CANopen networks as well. The fieldbus coupler allows an INTERBUS Inline station to be inserted at any point in a CANopen network. The fieldbus coupler is a slave in the CANopen network and a master in the lower-level INTERBUS Inline local bus.

The address of the CANopen slave can easily be set via DIP switches from outside. The CANopen network is connected via a Twin Combicon connector. The operating voltage for the fieldbus coupler and the electronics can be fed using a separate power connector.

For the CANopen project planning, a regularly updated EDS file (Electronica Data Sheet) is provided in the Product Information Service (see below). The CANopen fieldbus coupler supports the proven INTERBUS Inline diagnostics as well as the typical diagnostics objects for CANopen. Local LEDs enable precise diagnostics.

Please note the following when you configure the system:

The total logic current of all terminals connected to a CANopen network must not exceed the maximum permissible total current of 2 A. Therefore, depending on your configuration, the number of terminal blocks that you can connect may be less than 63.

Technical data

General data

Width	85 mm
Height	119.8 mm
Depth	71.5 mm
Weight	240 g
Note on weight specifications	with male connectors
Mounting type	DIN rail
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-45 °C ... 85 °C
Permissible humidity (operation)	95 % (no condensation)
Permissible humidity (storage/transport)	95 % (no condensation)
Air pressure (operation)	80 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20
Test section	CANopen/local bus 500 V

Interface

Fieldbus system	Lokalbus
Name	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBaud
Fieldbus system	CANopen
Name	CANopen
Connection method	2x 5-pos. TWIN-COMBICON connectors
Transmission speed	1 MBaud, 500 kBaud, 250 kBaud, 125 kBaud, 50 kBaud, 20 kBaud, 10 kBaud (Can be set via DIP switch or programmed)
Address area assignment	0 ... 63, can be set
Name	Supply
Connection method	8-pos. Inline connector

Power supply for module electronics

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC

Current consumption	max. 1.25 A (from U_{BK})
Inline potential routing	
Communications power U_L	7.5 V DC $\pm 5\%$
Power supply at U_L	max. 2 A DC
Main circuit supply U_M	24 V DC -15% / +20% (in acc. with EN 61131-2)
Power supply at U_M	max. 8 A DC (Sum of $U_M + U_S$)
Segment supply voltage U_S	24 V DC -15% / +20% (in acc. with EN 61131-2)
Power supply at U_S	max. 8 A DC (Sum of $U_M + U_S$)
I/O supply voltage U_{ANA}	24 V DC -15% / +20%
Power supply at U_{ANA}	max. 0.5 A DC

Certificates / Approvals



Certification	CUL, GOST, UL
Certification Ex:	CUL-EX LIS, UL-EX LIS

Accessories

Item	Designation	Description
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Assembly

3022218	CLIPFIX 35	Snap-on end bracket, for 35 mm NS 35/7.5 or NS 35/15 DIN rail, can be fitted with Zack strip ZB 8 and ZB 8/27, terminal strip marker KLM 2 and KLM, width: 9.5 mm, color: gray
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Marking

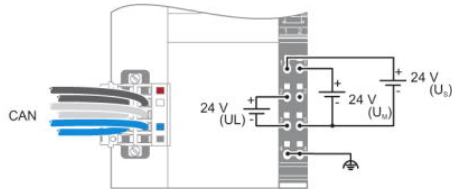
0809492	ESL 62X10	Insert strip for laser printer, lettering field: 62 x 10 mm
2727501	IB IL FIELD 2	Labeling field, width: 12.2 mm

Plug/Adapter

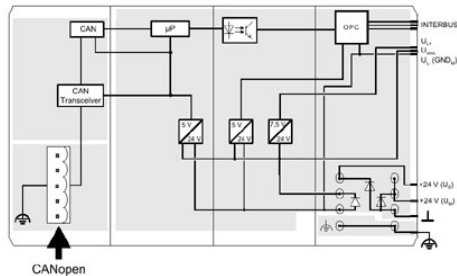
2727608	IB IL SCN-8-CP	Inline connector, colored
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Diagrams/Drawings

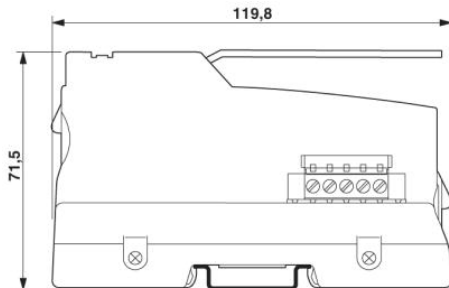
Connection diagram



Block diagram



Dimensioned drawing



FAQs

- **How does the autoconfiguration function on the IL CAN BK-TC bus coupler?**

The autoconfiguration function allows the bus coupler to be configured in the field without any software. The default settings with this function are: a. The receive PDO 1 maps the digital outputs 1 to 64. If fewer digital outputs are connected, fewer are mapped. b. The transmit PDO 1 contains the digital inputs 1 to 64. If fewer digital inputs are connected, fewer are mapped. c. The receive PDO 2 contains analog outputs 1 to 4, if they are available. d. The receive PDO 2 contains analog inputs 1 to 4, if they are available. e. The receive PDO 3 contains analog outputs 5 to 8, if they are available. f. The transmit PDO 3 contains analog inputs 5 to 8, if they are available. g. The receive PDO 4 contains analog outputs 9 to 12, if they are available. h. The transmit PDO 4 contains analog inputs 9 to 12, if they are available. i. All other I/O modules, such as function modules, must be configured manually. To use the autoconfiguration function, proceed as follows: 1. Set all the DIP switches for the address setting (1-7) to "0". 2. Switch the supply voltage of the bus coupler UL off and back on again after the desired I/O modules have been

connected. The "RUN" LED is green and stops flashing when the station has saved the local bus configuration in the memory. The bus coupler does not go "online" on the fieldbus as long as the address is set to "00 00 00 0". 3. Switch off power supply UL. 4. Set the address and baudrate. 5. Switch power supply UL back on.

- **What is the switch position of the CANopen fieldbus coupler when it is delivered?**

The CANopen fieldbus coupler is supplied with the address 1 and a baudrate of 20 k. (Switch 1,9 = On; all others Off).