



CANopen

TCO208-C, TCO216-C CAN slave Temperature Input/Output Modules

The temperature I/O modules, TCO208-C and TCO216-C are standalone CAN slave modules with 8 or 16 thermocouple inputs and 12 or 24 digital outputs.

Features

- Stand-alone, compact CAN slave module
- Thermocouple inputs for thermocouple types J and K
- Measuring range 0 °C to +500 °C / +800 °C parameterisable
- Sensor break detection
- Digital outputs each with 1 A
- Supply voltage 18 V DC to 34 V DC
- Field of application 0 °C to +60 °C
- Snappable on EN 50022 backplanes
- CAN node ID can be set (hex switch)
- Baud rate is adjustable (hex switch)

Part type designation	Part number
TCO208-C	00010850-00
TCO216-C	00008673-00

TCO208-C, TCO216-C

Temperature sensor input	
Number	8/16
Sensor types	J or K, selectable per input
Measuring range	0 °C to +500 °C/+800 °C parameterisable
Resolution	12 bit
Linearization	Polynomial acc. to DIN IEC 584
Cold junction compensation	0 °C to +133 °C (K)
Sampling time	16 ms
Sensor break detection	Yes
Digital outputs	
Number	12/24
Supply voltage	18 V DC to 34 V DC
Output current per channel	0.5 A (max. 1 A)
Output current (sum)	Max. 12 A
Switching frequency	Max. 500 Hz at 1 kΩ resistive load
Short-circuit-proof	Yes
Status indication	Green LEDs
CAN interface	
Transfer rate	10 k to 1 Mbaud
Connection	2x 9-pin D-sub sockets
Module ID	1 to 254
Galvanic isolation via interfaces	500 V
Terminating resistor	123 Ω, ext.
Status LED	RUN (guarding), INIT, ERROR
Communication profile	CiA DS 301
Device Profile	CiA DS 401
External power supply	
Supply voltage	18 V DC to 34 V DC
Current consumption (without I/O)	Typ. 105 mA/110 mA/120 mA at 24 V DC
Approvals/Certificates	
General	CE, UKCA, cULus
Environmental conditions	
Operating temperature	0 °C to +60 °C
Relative humidity, operation	5 % to 95 % noncondensing
Storage temperature	-40 °C to +85 °C
Relative humidity, storage	5 % to 95 % noncondensing

Order data

Part type designation	Part number	Description
TCO208-C	00010850-00	CAN slave - temperature input/digital output module; 8x thermocouple element type J, K; 12x digital Out 24 V/0.5 A; CAN/CANopen; 2x D-SUB 9 (In/Out); up to 1 Mbit/s; isolated
TCO216-C	00008673-00	CAN slave - temperature input/digital output module; 16x thermocouple element type J, K; 24x digital Out 24 V/0.5 A; CAN/CANopen; 2x D-SUB 9 (In/Out); up to 1 Mbit/s; isolated

Accessories

Part type designation	Part number	Description
KZ-TCO204-C B+C	00012022-30	Terminal set Phoenix cage clamp (1x KZ 51/03; 1x KZ 51/13; 1x KZ 35/12) with labeling strips + keying elements
KZ-TCO216-C B+C	00012015-50	Terminal set Phoenix cage clamp (1x KZ 51/03; 2x KZ 51/13; 4x KZ 35/12) with labeling strips + keying elements
K-CAN/xm		Cabel CAN with x m length (x = user-defined) male <> female, without terminating resistor
K-CAN/0.5 m	00008684-03	Cable CAN with 0.5 m length
K-CAN/1.0 m	00008684-08	Cable CAN with 1.0 m length
K-CAN/2.0 m	00008684-04	Cable CAN with 2.0 m length
K-CAN/5.0 m	00008684-06	Cable CAN with 5.0 m length
S-CAN/1B	00009383-00	Connector CAN-terminating resistor female
S-CAN/1S	00011036-00	Connector CAN-terminating resistor male for DIOxx-C, TCO2xx-C, DA3284- C and female-female CAN cable