



CANopen

TCO208-C, TCO216-C CAN Slave Temperatur-Ein-/ Ausgangsmodule

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

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

Item	Item-No.
TCO208-C	00010850-00
TCO216-C	00008673-00

TCO208-C, TCO216-C	
Temperature sensor inputs	
Quantity	8 / 16
Sensor types	J or K, selectable per input
Measuring range	0 to +500 °C / +800 °C configurable
Resolution	12 bit
Linearization	Polynomial in accordance with DIN IEC 584
Cold junction compensation	0 to +133 °C (K)
Sampling period	16 ms
Sensor break detection	Yes
Digital outputs	
Quantity	12 / 24
Supply voltage	18 to 34 VDC
Output current per channel	0.5 A (max. 1 A)
Output current (sum)	Max. 12 A
Switching frequency	Max. 500 Hz at 1 kOhm ohmic load
Short-circuit proof	Yes
Status display	Green LEDs
CAN interface	
Transfer rate	10 k to 1 Mbaud
Connection	2x 9-pin D-Sub female connectors
Module ID	1 to 254
Galvanic isolation via interfaces	500 V
Terminating resistance	123 ohm, external
Status LEDs	RUN (guarding), INIT, ERROR
Communication profile	CiA DS 301
Device profile	CiA DS 401
External power supply	
Supply voltage	18 to 34 VDC
Current consumption (without I / O)	normally 105 / 110 / 120 mA at 24 VDC
Approvals / Certificates	
General	CE, cULus, CCC
Marine	DNV GL, LR, ABS, BV
Ambient conditions	
Operating temperature	0 to +60 °C
Rel. humidity operation	5 to 95 % without condensation
Storage temperature	-40 to +85 °C
Rel. humidity storage	5 to 95 % without condensation
Pollution degree	2 (without condensation; according to IEC 60664-1)

Order Codes			
Item	Item No.	Description	
TCO208-C	00010850-00	CAN slave temperature input/digital output module; 8x thermocouple type J, K; 12x digital Out 24V / 0,5A; CAN/CANopen; 2x DSUB 9 (In/Out); up to 1Mbit/s; isolated	
TCO216-C	00008673-00	CAN slave temperature input/digital output module; 16x thermocouple type J, K; 24x digital Out 24V / 0,5A; CAN/CANopen; 2x DSUB 9 (In/Out); up to 1Mbit/s; isolated	
Accessories			
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 strip and coding 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 strip and coding elements	
K-CAN/xm		Cabel CAN with x m length (x = user-defined) male <-> female, without terminating resistor	
	K-CAN/0.5m	00008684-03	Cabel CAN with 0.5 m length
	K-CAN/1.0m	00008684-08	Cabel CAN with 1.0 m length
	K-CAN/2.0m	00008684-04	Cabel CAN with 2.0 m length
	K-CAN/5.0m	00008684-06	Cabel CAN with 5.0 m length
S-CAN/1B	00009383-00	Connector CAN-terminator, 37 mm high, 120 Ω, female	
S-CAN/1S	00011036-00	Connector CAN-terminator, 37 mm high, 120 Ω, for DIOxx-C, TCO2xx-C, DA3284-C and female-femal CAN cable	