



CANopen®

DA3284-C CAN-Slave Universal input/output module

Noteworthy compactness and a clever mix of possible signal types are offered by the CAN slave DA3284-C. As a stand-alone fieldbus module (CANopen), the module offers the complete I/O spectrum already integrated for small applications or distributed signal connection points. It is the ideal addition to the familiar family of CAN digital modules and is an optimum "all-in-one" peripheral for small applications.

The channel-specific programmable operation mode (on/off or applied standard signal) enables the unit to adapt ideally to a wide range of applications without any interface converter. The robust design and processing quality, its outstanding technical specifications, seldom available from the usual fieldbus peripherals, are very impressive.

Part type designation	Part number
DA3284-C	00013597-00

Features

- Compact CAN slave I/O module
- 8 analog inputs ± 10 V, ± 1 V, Pt100, Pt1000, 0(4) mA to 20 mA
- 4 analog outputs ± 10 V or 0(4) mA to 20 mA configurable
- 16 digital inputs
- 16 digital inputs or outputs (individually configurable)
- 2 integrated counter inputs
- Digital outputs each with 0.5 A continuous current
- Error detection for digital and analog channels
- Full wiring without additional backplanes
- Powerful 32-bit processor for fast cycle times

DA3284-C

Analog inputs	
Quantity	8
Measuring ranges, selectable by channel	±10 V, ±1 V Pt100, Pt1000: -100 °C to +500 °C 0(4) mA to 20 mA
Resolution	14 bit
Sampling rate	< 1 ms for all channels (500 µs)
Input cutoff frequency	750 Hz (3 dB)
Accuracy at 25 °C	Voltage 0.05 % Current/Pt100/Pt1000 0.1 %
Error in the entire temperature range	Voltage 0.2 % Current/Pt100/Pt1000 0.2 %
Error detection	Cable break (at voltage), current or temperature error
Analog outputs	
Quantity	4
Measuring ranges, selectable by channel	±10 V, 0(4) mA to 20 mA configurable
Resolution	14 bit
Conversion time	Depends on CAN protocol
Accuracy at 25 °C	Voltage 0.05 % Current 0.2 %
Error in the entire temperature range	Voltage 0.1 % Current 0.4 %
Error detection	Load error
Digital inputs	
Quantity	16 (max. 32)
Input delay	500 µs default value, filter adjustable
Input current	Typ. 3 mA at +24 V
Input type	Current consumption, type 1 acc. to IEC61131
Status indication	Green LED
Connection type	3-wire (+/-/signal)
Counters	
Counting channels	2 (digital input channels 1 and 2)
Count frequency	Max. 5 kHz
Counter functions	Counting, speed measurement (period duration, gate time measurement)
Counting modes	<ul style="list-style-type: none"> • Infinite up/down • One-time up/down to/from reference value • Periodic up/down to/from reference value
Digital outputs	
Quantity	16
Supply voltage	18 V DC to 34 V DC
Isolated output blocks	1 to 12, 13 to 24
Nominal output voltage	0.5 A
Output current sum/block	Max. 8 A / 4 A per block
Switching frequency	500 Hz (with ohm resistive load only)
Short-circuit-proof	Yes
Error detection	Short-circuit/temperature rise by block Power supply per block ≤ 16.5 V

Digital outputs	
Status indication	Green LED
Connection type	3-wire (+/-/signal)
CAN interface	
CANopen	DS 301 communication profile, DS 401 device profile
Status LED	RUN (guarding), INIT, ERROR
Transfer rate (kBaud)	10 to 1000 (adjustable via rotary switch)
Connection	2x 9-pin D-Sub
Module ID	1 to 127 (configurable via rotary switch or SW)
Galvanic isolation	500
Terminating resistor	123 Ω , external
Inputs/outputs connection type	
Connection for digital inputs/outputs and supply	Phoenix Contact COMBICON connector RM 5.8 with flange
Connection technology for digital inputs/outputs and supply	Screw-type terminal, spring-cage terminal block, crimp
Connection for analog inputs/outputs	Phoenix Contact MINI COMBICON RM 3.5 connector with flange
Connection technology for analog inputs/outputs	Screw-type terminal, spring-cage terminal block
Connection type general	Connector codable, labeling by channels
Conditions for use	
Voltage range	18 V DC to 34 V DC
Current consumption	≤ 270 mA at +24 V DC for module supply + load
Reverse polarity protection	Yes
Galvanic isolation CAN bus module	500 V _{RMS}
Galvanic isolation I/O channels	None
Approvals/Certificates	
General	CE, UKCA, cULus
Marine	ABS, BV, DNV, KR, LR, NK, RINA
Environmental conditions	
Operating temperature	-30 °C to +60 °C
Relative humidity, operation	5 % to 95 % noncondensing
Storage temperature	-40 °C to +85 °C
Relative humidity, storage	5 % to 95 % with condensation
Pollution degree (IEC 60664-1)	2 (noncondensing)

Order data

Part type designation	Part number	Description
DA3284-C	00013597-00	CAN slave universal input/output module; 16x DI; 16x DIO; 24 V/0.5 A; 4x AO ± 10 V, 20 mA; 8x AI ± 10 V, ± 1 V, 20 mA Pt100/1000; CAN/CANopen; 2x DSUB 9 (In/Out); up to 1Mbit/s

Accessories

Part type designation	Part number	Description
KZ-DA2384-C B+C	00013832-50	Terminal set Phoenix cage clamp (8x KZ 51/12; 1x KZ 51/07; 4x KZ 35/03; 4x KZ 35/12) with labeling strip and 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-terminator resistor, male for DIOxx-C, TCO2xx-C, DA3284-C and female-female CAN cable