



**CANopen**

Item	Item-No.
DA3284-C	00013597-00

## DA3284-C CAN-Slave Universal Analog/ Digital 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 mode (on/off or applied standard signal) enables the unit to be adapted 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.

- Compact CAN slave I/O module
- 8 analog inputs  $\pm 10$  V,  $\pm 1$  V, Pt100, Pt1000, 0 (4) to 20 mA
- 4 analog outputs  $\pm 10$  V or 0 (4) 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	
<b>Analog inputs</b>	
Quantity	8
Measuring ranges, selectable by channel	±10 V, ±1V Pt100, Pt1000: -100 °C to +500 °C 0 (4) to 20 mA
Resolution	14 bit
Sampling rate	< 1 ms for all channels (500 µs)
Input cutoff frequency	750 Hz (3 dB)
Basic accuracy at 25 °C	Voltage 0.05 % Current / Pt100 / Pt1000 0.1 %
Error at the entire temperature range	Voltage 0.2 % Current/Pt100/Pt1000 0.2 %
Error detection	Cable break (at voltage), current or temperature error
<b>Analog outputs</b>	
Quantity	4
Measuring ranges, selectable by channel	±10 V, 0 (4) to 20 mA configurable
Resolution	14 bit
Conversion time	Depends on CAN protocol
Basic accuracy at 25 °C	Voltage 0.05 % Current 0.2 %
Error at the entire temperature range	Voltage 0.1 % Current 0.4 %
Error detection	Load error
<b>Digital inputs</b>	
Quantity	16 (max. 32)
Input delay	500 µs default value, filter adjustable
Input current	Normally 3 mA at +24 VDC
Input type	Current consumption, type 1 in accordance with IEC61131
Status display	Green LED
Connection technology	3-wire (+ / - / signal)
<b>Counter</b>	
Counting channels	2 (digital input channels 1 and 2)
Counter frequency	Max. 5 kHz
Counter functions	Counting, speed measurement (period duration, gate time) measurement)
Counting modes	<ul style="list-style-type: none"> <li>• Infinite up / down</li> <li>• One-time up / down to / from reference value</li> <li>• Periodic up / down to / from reference value</li> </ul>
<b>Digital outputs</b>	
Quantity	16
Supply voltage	18 to 34 VDC
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 purely resistive load)
Short-circuit proof	Yes

<b>DA3284-C</b>	
<b>Digital outputs</b>	
Error detection	Short circuit / excess temperature by block power supply per block $\leq 16.5$ V
Status display	Green LED
Connection technology	3-wire (+ / - / signal)
<b>CAN interface</b>	
CANopen	DS 301 communication profile, DS 401 device profile
Status LEDs	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 resistance	123 ohm, external
<b>Input / output connection technology</b>	
Connection for digital inputs / outputs and supply	Phoenix Contact MINICOMBICON connector RM 5.8 with flange
Connection technology for digital inputs / outputs and supply	Screw clamp, spring tension clamp, crimp
Connection for analog inputs / outputs	Phoenix Contact MINI COMBICON RM 3.5 connector with flange
Connection technology for analog inputs / outputs	Screw clamp, spring tension clamp
Connection general	Plug codable, labeling by channels
<b>Operating conditions</b>	
Voltage range	18 to 34 VDC
Current consumption	$\leq 270$ mA at +24 VDC for module supply + load
Reverse polarity protection	Yes
Galvanic isolation CAN bus module	500 V <sub>RMS</sub>
Galvanic isolation I / O channels	None
<b>Approvals / Certificates</b>	
General	CE, cULus, CCC
Marine	DNV GL, LR, ABS, BV, NK, KR, RINA
<b>Ambient conditions</b>	
Operating temperature	-30 to +60 °C
Rel. humidity operation	5 to 95 % without condensation
Storage temperature	-40 to +85 °C
Rel. humidity storage	5 to 95 % with condensation
Pollution degree	2 (without condensation; according to IEC 60664-1)

Order Codes			
Item	Item No.	Description	
DA3284-C	00013597-00	CAN slave universal input/output module; 16x DI; 16x DIO; 24V/0.5A; 4x AO +10V 20mA; 8x AI +10V +1V 20mA Pt100/1000; CAN/CANopen; 2x DSUB 9 (In/Out); up to 1Mbit/s	
Accessories			
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 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	