



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 ± 10 V, ± 1 V, Pt100, Pt1000, 0 (4) to 20 mA
- 4 analog outputs ± 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 | |
|---|--|
| Analog inputs | |
| 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 |
| Analog outputs | |
| 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 |
| Digital inputs | |
| 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) |
| Counter | |
| 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"> • 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 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 |

| DA3284-C | |
|---|---|
| Digital outputs | |
| Error detection | Short circuit / excess temperature by block power supply per block ≤ 16.5 V |
| Status display | Green LED |
| Connection technology | 3-wire (+ / - / signal) |
| CAN interface | |
| 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 |
| Input / output connection technology | |
| 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 |
| Operating conditions | |
| Voltage range | 18 to 34 VDC |
| Current consumption | ≤ 270 mA at +24 VDC 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, cULus, CCC |
| Marine | DNV GL, LR, ABS, BV, NK, KR, RINA |
| Ambient conditions | |
| 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 | |