DATASHEET

CAN-CR300

The CAN repeater CAN-CR300 with four CAN/CAN FD interfaces can be used to improve the load capacity of the CAN bus with nodes, physical coupling of CAN/CAN FD bus systems or to insert a galvanic isolation.

It creates the necessary flexibility to optimize the structure of CAN/CAN FD networks and to free CAN networks from the restriction to the bus structure. Since there is no integrated bus termination resistor, it gives you flexibility in positioning resistors for CAN termination.

The CAN repeater separates a defective segment from the rest of the network, allowing the remaining network to continue working.

FEATURES AND BENEFITS

- CAN and CAN FD interfaces in one device
- Cost savings due to simple wiring
- Almost no influence on real-time behavior
- Greater flexibility in CAN network design
- Separates a defective segment, allowing the remaining network to continue working
- Increased system reliability
- 4 x CAN/CAN FD channels
- Galvanic isolation

ORDER NUMBER	1.01.0210.40200
Display	4 x CAN status LED (duo LEDs for communication and errors), Power LED
CAN FD/CAN channels	4
CAN bus interface	ISO 11898-2 with CAN choke. 4 x screw terminals
CAN bit rates	Up to 1 Mbit/s
CAN FD bus interface	ISO CAN FD and nonISO CAN FD
CAN FD bit rates	Arbitration rate: up to 1000 kbit/s, data rate: up to 8000 kbit/s (verified by testing). User defined bit rates are possible.
CAN bus termination resistors	None
CAN/CAN FD transceiver	MCP2562FD
Galvanic isolation	1 kV DC / 1 sec.; 500 V AC / 1 min. All CAN channels and power supply are galvanically isolated from each other.
CAN propagation delay (typical)	Typ. 175 ns (35 m bus length)

ORDER NUMBER	1.01.0210.40200
Power supply	+9 V to +36 V DC
Power consumption at 24 V	Typ. 90 mA, max. 125 mA
Operating temperature	-20 °C to +70 °C
Weight	Approx. 150 g
Dimensions	22.5 x 105 x 114 mm
Storage temperature	-40 °C to +85 °C
Protection class	IP20
Relative humidity	10 to 95 %, non-condensing
Certification	CE, FCC
Housing material	Polyamid

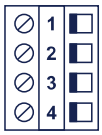
CERTIFICATES

ACCESSORIES

ACCESSORIES	ORDER NUMBER
Termination adapter for CAN/CAN FD (D-Sub male to female)	1.04.0075.03000
CAN Y cable 0.22 m	1.04.0076.00001
CAN cable 2.0 m (D-Sub male to female)	1.04.0076.00180

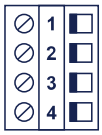
PIN ALLOCATION

CAN CONNECTOR ❶ ❷ ❹ ❺



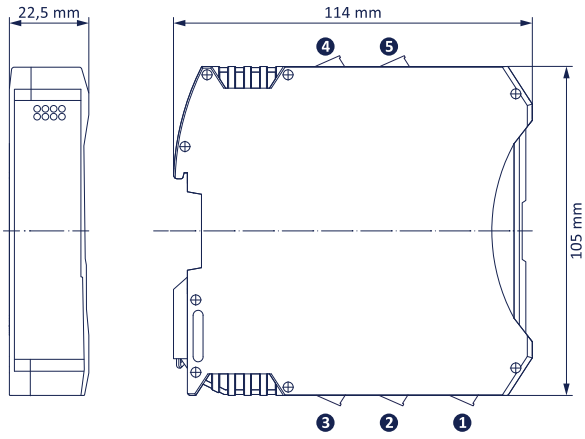
CAN-High
CAN-Low
CAN-GND
Shield

POWER CONNECTOR ❸



V+ (+9 V to +36 V DC)
V-
PE
PE

TECHNICAL DRAWING



CONNECTORS
1 = CAN 1
2 = CAN 3
3 = POWER
4 = CAN 2
5 = CAN 4