Short-haul modem, point-to-point

MD-12

- RS-232 Short haul modem
  - Serial speed up to 38 400 Kbit/s
  - Distance up to 18 km (11.18 mi)
  - RS-232 serial interface with control signals
- Easy to install and use
  - Transparent communication
  - Purpose built DIN rail casing with integral clip
  - D-sub or screw terminal
- Designed for use in harsh industrial applications
  - AC or DC power options
  - Total galvanic isolation & transient protection
  - Industrial EMC, shock and vibration approval
- Several configuration options
  - Transmission of serial data and control signal
  - Full or half duplex over 2 twisted pairs
  - Configuration options of control signals

CE FC Part 15

The MD-12 is a short haul modem allowing RS-232 systems to be connected over long distance. The serial interface is a standard RS-232 interface with five control signals. The connection between the modems is a balanced current loop allowing distances up to 18 km. (11.18 mi)

Since the communication is totally transparent no communication settings are necessary. The RS-232 serial interface is connected through a standard 9 pole D-sub or alternately through a terminal block with screw connectors.

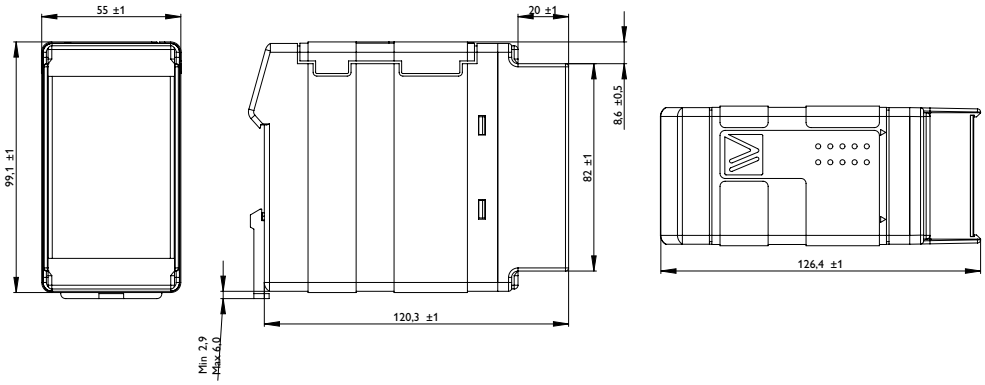
The MD-12 is designed for use in heavy duty industrial applications. The different power options, galvanic isolation, transient protection guarantees communication in the worst environments. The MD-12 has been tested to meet many EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments.

The design of the short haul modem makes the MD-12 suitable for a variety of applications with various speed and data bit options. DIP switches are used for configuration options of the control signals. One control signal can be transmitted in both directions.

Ordering Information	
Art.no	**Description**
3150-1001	MD-12, DIN model, 12–36 VDC.
3150-1005	MD-12, As above, with extended temperature range –40 to +70°C (–40 to 158°F), 12–36 VDC.
3150-2101	MD-12, DIN model, 230 VAC.

Specifications MD-12

Dimensional drawing



Dimension W x H x D	55 x 100 x 132 mm (2.16 x 3.93 x 5.19 in)
Weight	0.4 kg
Degree of protection	IP 20

Power	
Operating voltage	DC: 12 to 36 V AC: 230 V (+15% –10%
Rated current	DC: 65 mA @ 12 V 40 mA @ 36 V AC: 20 mA @ 230 V.

Interfaces	
RS-232	1 x up to 38.4 kbit/s
10 mA tri-state balanced current loop	1 x up to 38.4 kbit/s

Temperature	
Operating	5 – 50°C (41 – 122°F)

Agency approvals and standards compliance	
EMC	SS-EN 50081-1/SS-EN 55022 (1992): Class B
	SS-EN 50082-2/SS-EN 61000-4-2 (1995): 4 kV CD, 8 kV AD
	SS-EN 50082-2/SS-EN 61000-4-4 (1995): 4 kV power, 2 kV signals
	SS-EN 50082-2/SS-ENV50140 (1993): 10 V/m
	SS-EN 50082-2/SS-ENV50141 (1994): 10 V/m
	SS-EN 50082-2/SS-ENV50204 (1995): 10 V/m
Safety	EN 60950 (1992)