

NEED-MODBUS

communication modules NEED Master / ModBus RTU Slave

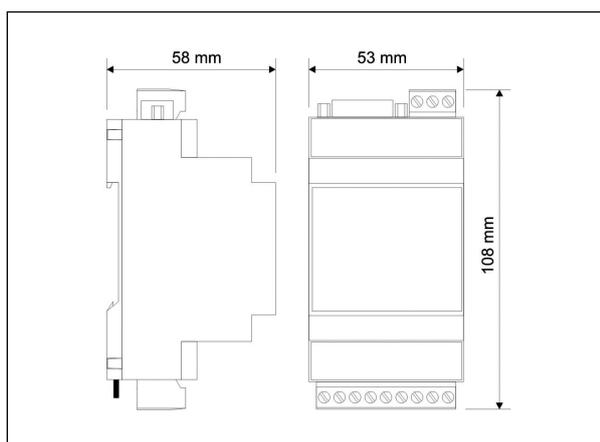


- **Appropriation:** data reading from NEED relays and availability of the data values with the ModBus RTU protocol; transmission of control commands to NEED; modification of the real time RTC clock setting; operation from COM1 side as NEED Master and from COM2 side as a device of ModBus RTU Slave type
- **Options:** operation mode change: STOP/RUN; RTC clock: current data reading (in the RUN mode) and setting change record (in the STOP mode); current data reading (in the RUN mode): status, program name and version, digital and analog inputs, digital outputs, phase sequence, timers, counters, fast counter current value, clocks, comparators, markers; setting reading and record (in the STOP mode): timers, counters, fast counter, comparators.

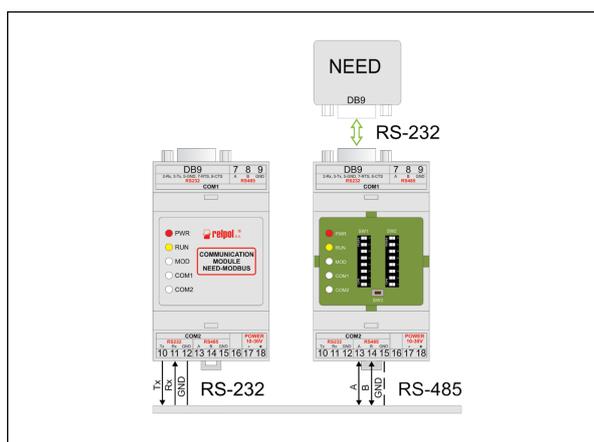
Input circuit

Rated supply voltage	7...26 V AC 50/60 Hz	7...35 V DC
Max. power consumption	no load: 2 VA	
Max. power consumption		
Parameter memory	EEPROM	
Introduction of the basic parameter transmission	with the use of DIP SWITCH	
Transmission parameters for ModBus RTU Slave	9600 bits/s, 1 bit start, 8 bits of data, 1 bit stop, without parity control	
RS-232	standard EIA/TIA-574	
• max. length of line	15 m	
RS-485	standard EIA/TIA-485	
• max. length of line	1200 m	
• max. number of devices on the line	32	
• port protection	100 mA / 600 W surge and short circuit protection	
• port line terminator	yes	
Connections	<ul style="list-style-type: none"> • RS-232 (COM1) • RS-485/RS-232 (COM2) 	
EMC electromagnetic compatibility	SUB-D 9M connection N/O connectors	
General data		
Cover	ABS	
Insulation rated voltage	COM1: supply	COM2: 1 kV DC
Dimensions with connectors / Weight	108 x 53 x 58 mm / 116 g	
Ambient temperature	• storage	-30...70 °C
(non-condensation and/or icing)	• operating	-30...60 °C
Protection category	cover: IP 43	terminals: IP 20
Relative humidity	20...95%	

Dimensions



Connection manner



Mounting

Modules **NEED-MODBUS** are designed for direct mounting on 35 mm rail mount acc. to EN 60715. **Connections:** max. cross section of the cables: 1 x 0,22...2,5 mm² (1 x 24...14 AWG).

PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.