

# COM462RTU

Modbus/RTU Communication Gateway  
For Supported BENDER Devices



# Modbus/RTU Communication Gateway COM462RTU



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## Features

- Communication gateway between compatible BENDER devices and Modbus/RTU communication systems
- Up to 150 BENDER devices connected to a single COM462RTU
- Communication from Modbus/RTU master to a single device for multiple BENDER devices connected across RS-485
- Slave on Modbus/RTU network
- Real-time system information including measured values accessible from Modbus/RTU system master

## Description

The COM462RTU is a Modbus/RTU communication gateway for compatible BENDER devices. Up to 150 compatible BENDER devices may be accessed from a single COM462RTU. The COM462RTU acts as a slave device on standard Modbus/RTU networks. A simple address mapping system allows for simple programming to access real-time information of connected BENDER equipment, including measured values.

## Supported BENDER devices

- IRDH275 / IRDH375 / IRDH575 "B" Series Ground Fault Detectors
- RCMS460 / RCMS490 Series Ground Fault Monitors
- LIM2010 Line Isolation Monitor
- EDS460 / EDS490 / EDS461 / EDS491 Series Ground Fault Location Modules
- RCMA421H / RCMA426H "DCB" Series GFCI Modules
- MK2430 / MK800 Series Remote Indicators

## Approvals

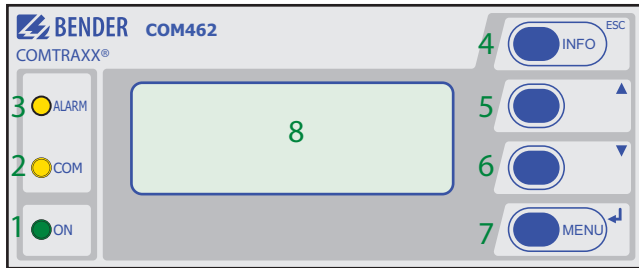


## Ordering Information

Supply voltage $U_s$ <sup>1)</sup>		Power consumption	Type	Ordering No.
AC	DC			
76 - 250 V (42 - 460 Hz) (Draw 10 - 35 mA)	76 - 250 V (Draw 6 - 21 mA)	3.5 - 40 VA	COM462RTU	B 9506 1022

<sup>1)</sup> Absolute values

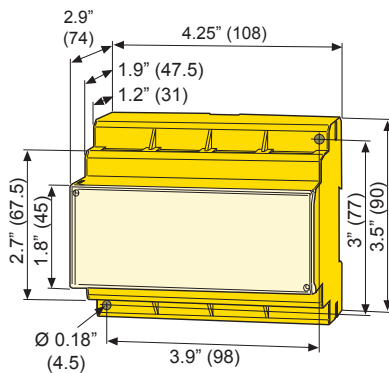
**Operating elements**



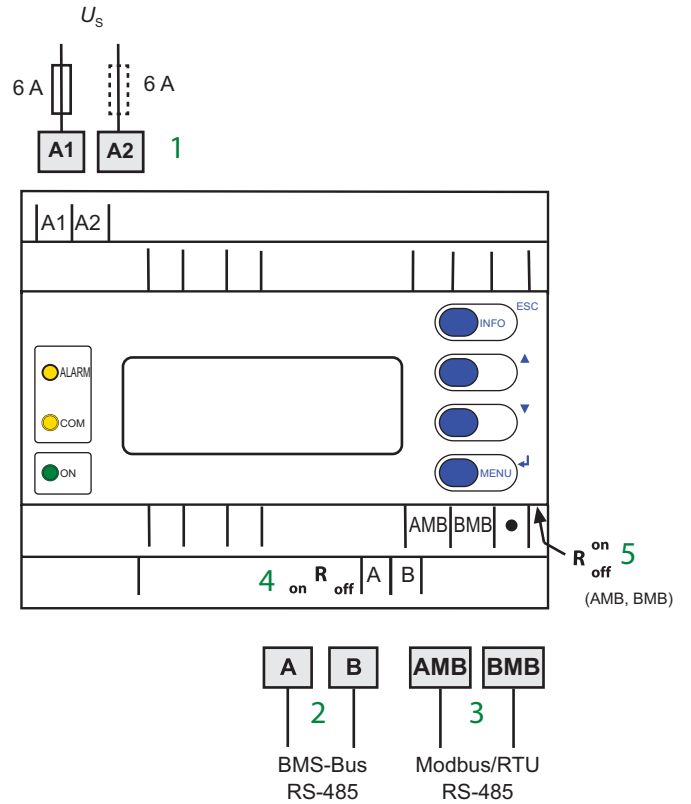
- 1 - "ON" LED, lights when supply voltage is applied
- 2 - "COM" LED, lights when the gateway is responding to BENDER RS-485 requests
- 3 - "ALARM" LED, lights when an internal device error occurs
- 4 - "INFO" button, to query the COM462RTU for device-specific information  
ESC Exits the menu function without changing parameters
- 5 - "▲" button: to move up in the menu, to increase values
- 6 - "▼" button: to move down in the menu, to decrease values
- 7 - "MENU" button for starting and exiting the menu  
"⏏" button to confirm parameter change
- 8 - LCD display

**Dimensions**

Dimensions in inches (mm)



**Wiring diagram**



- 1 - Connection to the supply voltage  
For UL and CSA applications, 5 A fuses are mandatory.
- 2 - Connection to BENDER RS-485 bus
- 3 - Connection to Modbus/RTU bus
- 4 - Switch for BENDER RS-485 bus termination. When the device is installed at the end of the bus, set the terminating switch to "on".
- 5 - Switch for Modbus/RTU bus termination. When the device is installed at the end of the bus, set the terminating switch to "on".

## Technical data

### Insulation coordination acc. to IEC 60664-1

Rated insulation voltage	AC 250 V
Rated impulse voltage/pollution degree	4 kV/3

### Supply voltage

Supply voltage $U_s$	see ordering information
Frequency range $U_s$	see ordering information
Power consumption	see ordering information

### LED indicators

ALARM	internal device error
COM	data traffic BMS bus
ON	operation indicator

### Interfaces

#### BMS bus, internal:

Interface/protocol	RS-485/BMS bus, internal
Operating mode	master/slave (slave)*
Baud rate BMS internal	9.6 kbit/s
Cable length	≤ 1200 m
Cable (twisted pair, shielded, shield connected to PE on one side)	recommended: J-Y(St)Y 2x0.8
Connection, BMS internal	terminals A, B
Terminating resistor	120 Ω (0.25 W)
Device address, BMS bus internal	1...99 (2)*

#### Modbus/RTU:

Interface/protocol	RS-485/Modbus/RTU
Operating mode	slave
Baud rate Modbus/RTU	9.6...57.6 kbit/s
Cable length	≤ 1200 m
Cable (twisted pair, shielded, shield connected to PE on one side)	recommended: J-Y(St)Y 2x0.8
Connection, Modbus/RTU	terminals D+, D
Terminating resistor	120 Ω (0.25 W)
Device address, Modbus/RTU	2...247 (2)*

### Environment/EMC

EMC	EN 61326-1
Classification of climatic conditions acc. to IEC 60721:	
Stationary use	3K5
Transport	2K3
Long-term storage	1K4
Operating temperature	-10...+55 °C
Classification of mechanical conditions acc. to IEC 60721:	
Stationary use	3M4
Transport	2M2
Long-term storage	1M3

### Connection

Connection	screw-type terminals
Connection properties:	
rigid/flexible	0.2...4/0.2...2.5 mm <sup>2</sup> (AWG 24...12)
Multi-conductor connection (2 conductors with the same cross section):	
rigid/flexible	0.2...1.5 0.2...1.5 mm <sup>2</sup>
Stripping length	8...9 mm
Tightening torque	0.5...0.6 Nm

### Other

Operating mode	continuous operation
Mounting	display oriented
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
Type of enclosure	X460
Screw mounting	2 x M4
DIN rail mounting acc. to	IEC 60715
Flammability class	UL94V-0
Software version	D402 V1.0x
Weight	≤ 310 g

( )\* = factory setting



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