
COMTRAXX® COM463BC

Gateway for data exchange
between the interfaces BCOM and external BMS



COMTRAXX® COM463BC

Gateway for data exchange
between the interfaces BCOM and external BMS



Device features

- Gateway for data exchange between the interfaces BCOM and external BMS
- Ethernet (10/100 Mbit/s) for remote access via LAN, WAN or the Internet
- Gateway with web interface
- Data exchange between devices at the following interfaces:
 - External BMS bus (max. 99 x 150 devices)
 - BCOM (max. 255 devices)
- Remote display of present measured values and operation/alarm messages
- Ethernet interface with 10/100 Mbit/s for remote access via LAN, WAN or the Internet
- Assignment of individual texts for devices, channels (measuring points) and alarms
- Device failure monitoring
- E-mail notifications to various users in the event of alarms and system errors
- 100 virtual devices with 16 channels each can be created. These are used to transfer information from a BCOM system to an external BMS system.

Intended use

The COM463BC connects devices via the interfaces BCOM and external BMS. It is operated and configured using the web user interface integrated into the device.

Address setting and termination

For proper functioning of the COM463BC correct address assignment and termination is of utmost importance.



CAUTION *Malfunction due to duplicated addresses*

Assigning addresses that are already used by existing devices in the bus systems concerned may cause serious malfunctions.

Make sure the COM463BC is correctly addressed and terminated.

Applications

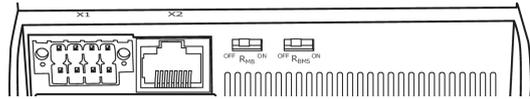
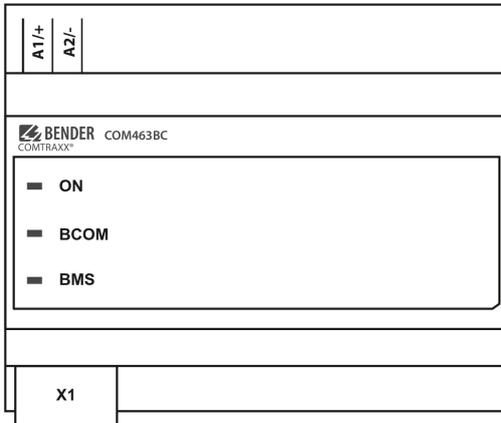
- Information exchange between BCOM and external BMS systems
- Configuration of the information to be transferred from one system to the other
- Several BMS-external systems can be displayed together with BCOM systems in one overview
- Selective notification to different users in case of alarms
- Remote diagnosis, remote maintenance

Function

The COM463BC gateways are integrated into the existing EDP structure like PCs. After connecting to the network and compatible Bender products, all system devices can be accessed from any PC using a web browser. In this way, all important system information is directly available.

Verified web browsers: Microsoft Edge, Mozilla Firefox, Google Chrome.

Connections and control elements



Element	Explanation
A1/+; A2/-	Power supply
Plug X1	BMS bus (Bender measuring device interface): Terminals ABMS and BBMS
Plug X2	Ethernet connection (RJ45) for the connection to the PC network as well as to BCOM
R_{BMS}	BMS bus terminating resistor switch

LED	Function
ON	"ON" LED: Flashes during the start process. The LED lights continuously as soon as the device is ready for operation.
BCOM BMS	LEDs indicate activity on the various interfaces.

Technical data

()* = Factory setting

Insulation coordination in acc. with IEC 60664-1/IEC 60664-3

Rated voltage	AC 250 V
Rated impulse withstand voltage/ overvoltage category	4 kV / III
Pollution degree	3
Protective separation (reinforced insulation) between	(A1/+, A2/-) - [(ABMS, BBMS), (X2)]

Supply voltage

Supply voltage U_s	AC/DC 24...240 V
Frequency range U_s	50...60 Hz
Power consumption	$\leq 6.5 \text{ VA} / \leq 4 \text{ W}$

Indications

LEDs	
ON	operation indicator
BCOM	data traffic BCOM
BMS	data traffic BMS
Ethernet (terminal X2)	lights during network connection flashes during data transfer

Memory

Individual texts	unlimited number of texts each with 100 characters
E-mail configurations and device failure monitoring	max. 250 entries

Interfaces

BMS-Bus (external)

Interface/protocol	RS-485/BMS external
Operating mode	master/slave (master)*
Baud rate BMS external	(19.2 / 38.4 / 57.6) kBit/s
Cable length	$\leq 1200 \text{ m}$
Cable	shielded, one end of shield connected to PE
Cable recommended	CAT6/CAT7 min. AWG23
Cable alternatively	twisted pair, J-Y (St) Y min. 2x0.8
Connection	X1 (ABMS, BBMS)
Connection type	see connection "Push-wire terminal X1"
Terminating resistor	120 Ω (0.25 W), can be switched on internally
Device address	2...99 (2)*

BCOM

Interface/protocol	Ethernet/BCOM
BCOM system name	(SYSTEM)*
BCOM subsystem address	1...255 (1)*
BCOM device address	0...255 (0)*

Environment / EMC

EMC	EN 61326-1
-----	------------

Ambient temperatures

Operating temperature	-25...+55 °C
Transport	-40...+85 °C
Long-term storage	-25...+70 °C

Classification of climatic conditions acc. to IEC 60721

Stationary use (IEC 60721-3-3)	3K22
Transport (IEC 60721-3-2)	2K11
Long-term storage (IEC 60721-3-1)	1K22

Mechanical conditions acc. to IEC 60721

Stationary use (IEC 60721-3-3)	3M11
Transport (IEC 60721-3-2)	2M4
Long-term storage (IEC 60721-3-1)	1M12

Connection

Connection type	pluggable push-wire terminals
-----------------	-------------------------------

Push-wire terminals

Conductor sizes	AWG 24-12
Stripping length	10 mm
rigid/flexible	0.2...2.5 mm ²
flexible with ferrule with/without plastic sleeve	0.25...2.5 mm ²
Multiple conductor, flexible with TWIN ferrule with plastic sleeve	0.5...1.5 mm ²

Push-wire terminal X1

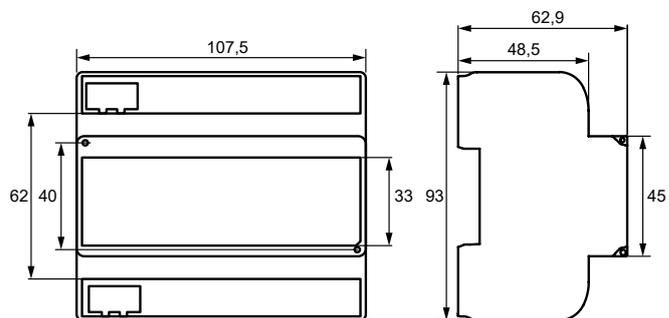
Conductor sizes	AWG 24-16
Stripping length	10 mm
rigid/flexible	0.2...1.5 mm ²
flexible with ferrule without plastic sleeve	0.25...1.5 mm ²
flexible with ferrule with plastic sleeve	0.25...0.75 mm ²

Other

Operating mode	continuous operation
Mounting position	front-orientated, air must pass through cooling slots vertically
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
Snap-on mounting on a DIN rail	IEC 60715
Screw mounting	3 x M4
Type of enclosure	J460
Enclosure material	polycarbonate
Flammability class	UL94V-0
Dimensions (W x H x D)	107.5 x 93 x 62.9 mm
Software	D0472
Weight	$\leq 240 \text{ g}$

()* = Factory setting

Standards, approvals and certifications

Dimensions


Dimension diagram (in mm)

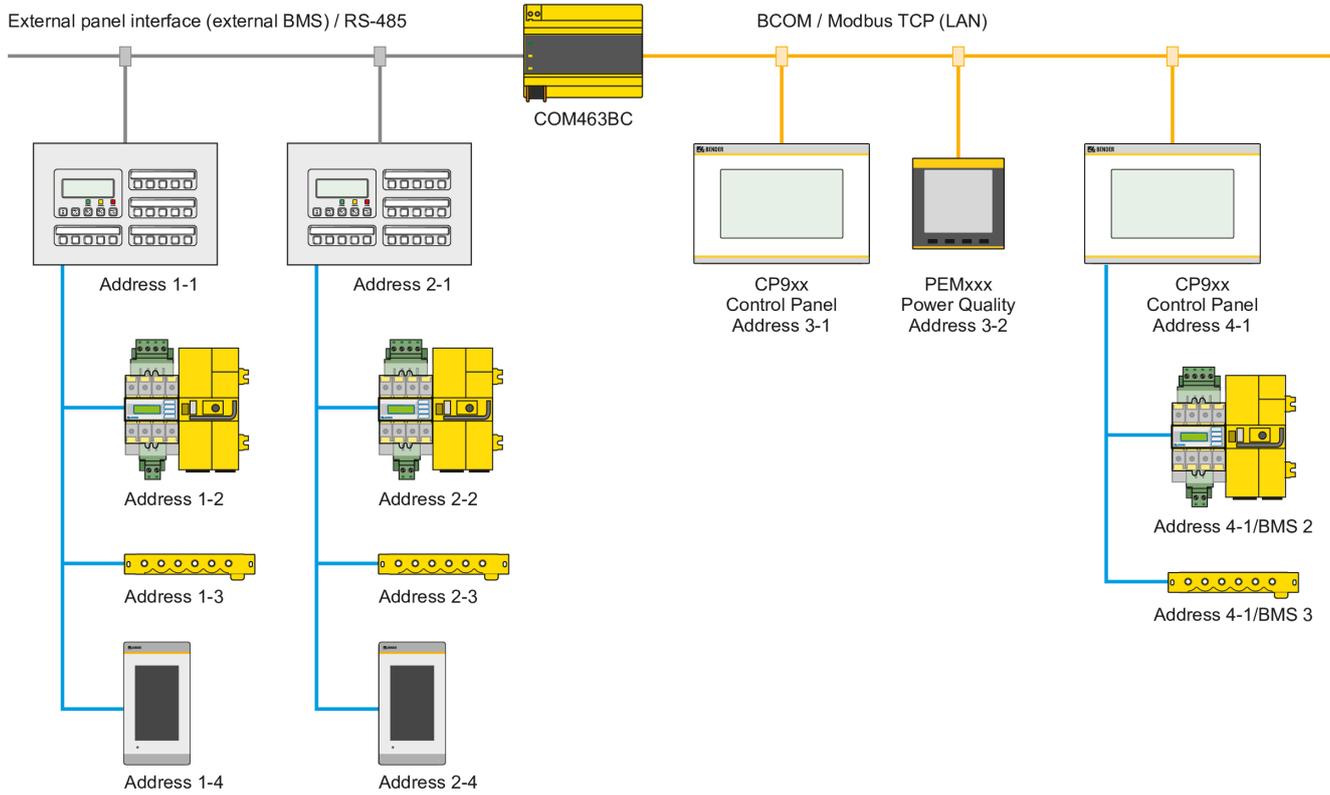
Ordering information
Device

Type	Application	Supply voltage/ frequency range U_s	Power consumption	Art. No.
COM463BC-230V	Gateway for the connection of systems with BCOM and external BMS	AC/DC 24...240 V 50...60 Hz	$\leq 6.5 \text{ VA} / \leq 4 \text{ W}$	B95061051

Application example

The COM463BC communicates via the following interfaces:

- External BMS (RS-485)
- BCOM (Ethernet)



Bender GmbH & Co. KG

Londorfer Straße 65
35305 Grünberg
Germany

Tel.: +49 6401 807-0
info@bender.de
www.bender.de



© Bender GmbH & Co. KG, Germany
Subject to change!
The specified standards take into account the
edition valid until 05.2024 unless otherwise
indicated.