COMTRAXX® COM463BC

Gateway for data exchange between the interfaces BCOM and external BMS

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BENDER

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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
- Configurable data exchange between BCOM and external BMS

Approvals and certifications

CE UK CA EHC

Product description

The COMTRAXX COM463BC gateway is integrated into the existing EDP structure like any Ethernet-capable device. After connecting to the network, the web interface can be accessed from any web browser.

The COMTRAXX COM463BC Gateway is exclusively responsible for data exchange between BCOM and BMS external systems. Data from BMS external systems automatically appear in the BCOM system and can be used there. It is also possible to distribute the data from the BCOM system to the BMS external systems, but this must then be configured individually.

Application

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

Range of functions

- Gateway with web interface
- Data exchange between devices at the following interfaces:
  - External BMS bus (max. 99 * 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.

Operating controls and connections
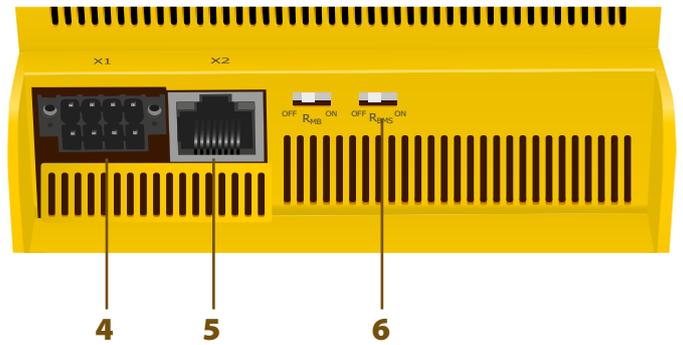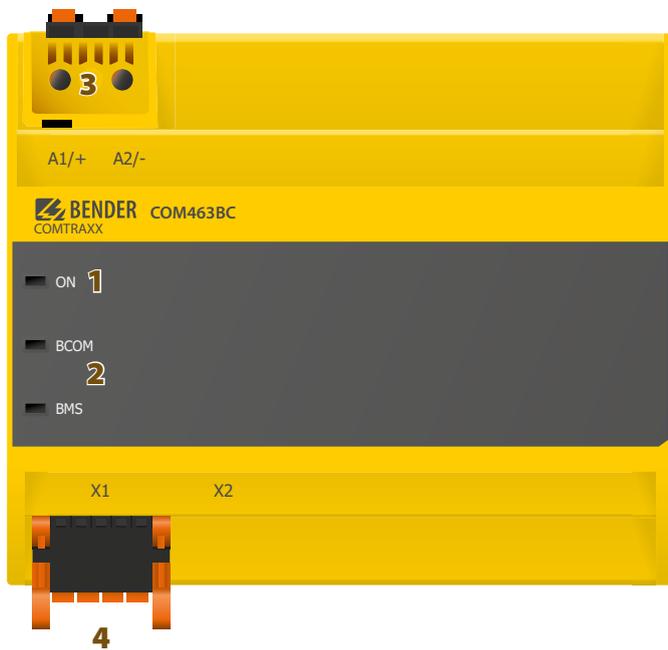
1 -	ON	"ON" LED: Flashes during start-up. The LED lights permanently as soon as the device is ready for operation.	
2 -	BCOM, BMS	LEDs show activities on the different interfaces	
3 -	A1/+, A2/-	Supply voltage: see nameplate and ordering information	
4 -	X1	BMS bus (Bender measuring device interface)	

5 -	X2	Ethernet port (RJ45) for connection to the PC network as well as to BCOM
6 -	$R_{\text{BMS on/off}}$	Terminating resistor BMS bus switch

Technical data

Insulation coordination acc. to IEC 60664-1/IEC 60664-3

Rated insulation voltage	AC 250 V
Rated impulse voltage/Overvoltage category	4 kV/III
Pollution degree	3
Protective separation (reinforced insulation) between	
	(A1/+, A2/-) - [(AMB, BMB), (ABMS, BBMS), (X2), (X3, X4)]

Supply voltage

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

Indications

LEDs:

ON	operation indicator
ETHERNET IP	data traffic Ethernet
BMS	data traffic BMS
Ethernet (terminal X2)	lights during network connection, flashes during data transfer

Memory

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

Interfaces

Ethernet

Port	RJ45
Data rate	10/100 MBit/s, autodetect
DHCP	on/off (on)*
t_{off} (DHCP)	5…60 s (30 s)*
IP address nnn.nnn.nnn.nnn, can always be reached over: 192.168.0.254, (169.254.0.1)*	
IP adresse	nnn.nnn.nnn.nnn (192.168.0.254)*
IP adresse static	169.254.0.1
Netmask	nnn.nnn.nnn.nnn (255.255.0.0)*
Protocols	TCP/IP, DHCP, SMTP, NTP

BMS bus (external)

Interface/protocol	RS-485/external BMS (external BMS)*
Operating mode	master/slave (master)*
Baud rate BMS	external 19.2; 38.4; 57.6 kBit/s
Cable length	≤1,200 m
Cable	Shield on one side connected to PE
recommended:	CAT6/CAT7 min. AWG23
alternative:	twisted pair, J-Y(St)Y min. 2x0,8
Connection	X1 (ABMS, BBMS)
Connection type	refer to connection "push-wire terminal X1"
Terminating resistor	120 Ω (0.25 W), can be connected internally
Device address, external BMS bus	2…99 (2)*

BCOM

Interface/protocol	Ethernet/BCOM
BCOM subsystem address	1…255 (1)*
BCOM device address	0…255 (0)*

Environment/EMC

EMC	EN 61326-1

Ambient temperatures

Operation	-25…+55 ℃
Transport	-40…+85 ℃
Long-term storage	-25…+70 ℃

Classification of climatic conditions acc. to IEC 60721

Stationary use (IEC 60721-3-3)	3K24 (except condensation and formation of ice)
Transport (IEC 60721-3-2)	2K11
Long-term storage (IEC 60721-3-1)	1K22

Classification of 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 mm²
flexible with ferrule, with/without plastic sleeve	0.25…2.5 mm²
Multiple conductor, flexible with TWIN ferrule with plastic sleeve	0.5…1.5 mm²

Push-wire terminal X1

Conductor sizes	AWG 24-16
Stripping length	10 mm
rigid/flexible	0.2…1.5 mm²
flexible with ferrule without plastic sleeve	0.25…1.5 mm²
flexible with ferrule with plastic sleeve	0.25…0.75 mm²

Other

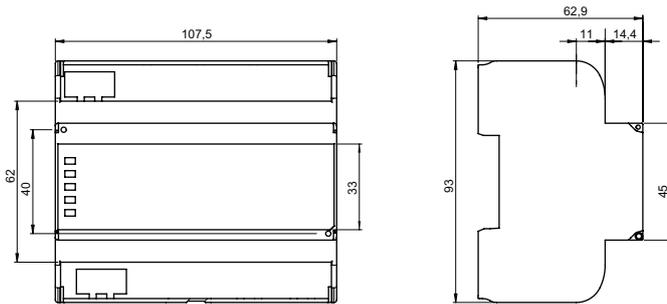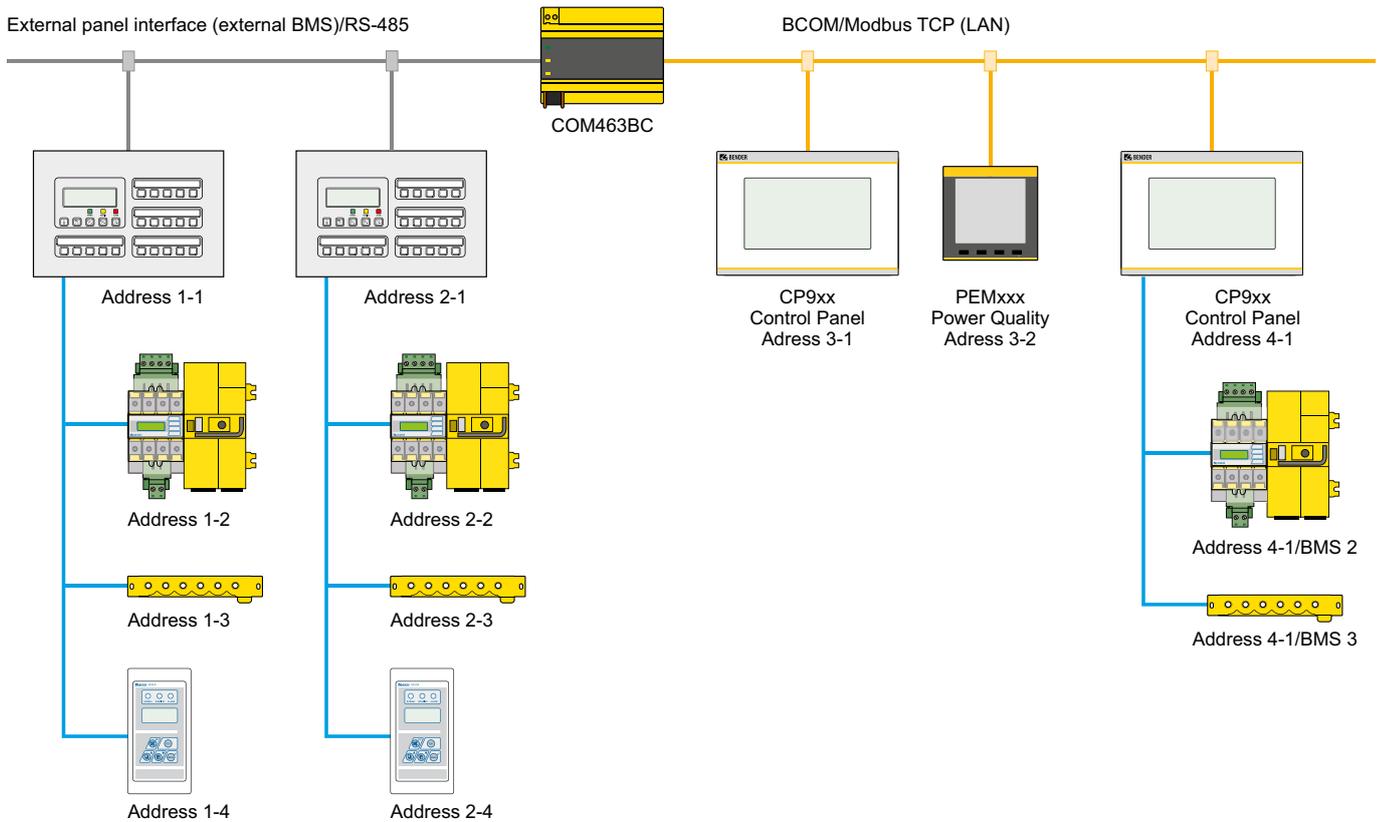|	
Operating mode	continuous operation
Mounting	front-oriented, cooling slots must be ventilated vertically
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
Quick DIN rail mounting acc. to	IEC 60715
Screw fixing	2 x M4
Enclosure type	J460
Enclosure material	polycarbonate
Flammability class	UL94V-0
Dimensions (W x H x D)	107.5 x 93 x 62.9 mm
Documentation number	D00427
Weight	≤ 240 g

( )* = factory settings

Ordering information

Supply voltage/ frequency range U_s AC/DC	Power consumption	Application	Type	Art. No.
24…240 V, 50…60 Hz	≤ 9.6 VA/≤ 4 W	Gateway for the connection of systems with BCOM and external BMS	COM463BC-230V	B95061051

Dimension diagram

Application example

External panel interface (external BMS)/RS-485

BCOM/Modbus TCP (LAN)

COM463BC

Address 1-1

Address 2-1

CP9xx Control Panel Adress 3-1

PEMxxx Power Quality Adress 3-2

CP9xx Control Panel Address 4-1

Address 1-2

Address 2-2

Address 4-1/BMS 2

Address 1-3

Address 2-3

Address 4-1/BMS 3

Address 1-4

Address 2-4

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