

## Fieldbus Module FBB-8DI.230

- Connection via BACnet MS/TP
  - for connecting digital inputs
  - Taking up general status messages using potential-free switching contacts
  - Decentralized collecting of data points (data collectors/remote I/Os)
  - Simple counting function integrated in the module (counter values not stored retentively)
- 
- Power supply 230 V AC
  - 8 digital-inputs



### Technical Data

<b>General Data</b>	Module type	FBB-8DI.230
	Item number	00003225
<b>Electrical Data</b>	Power supply	230 V AC
	Current consumption	depending on data point input signal (input active/inactive) min. 9 mA, max. 17 mA
	Power requirement	depending on data point input signal (input active/inactive) min. 0,5 W, max. 2,0 W
<b>Digital Inputs</b>	Quantity	8 (each with status LED)
	Input voltage	24 V, controlled by potential-free contact via DI and COM
	Counter values	not stored retentively in case of power failure
<b>Digital Outputs</b>	Quantity	None
<b>Communication</b>	Protocol / interface	BACnet MS/TP / RS485
	Address setting	via dip switches
	Baud rates	9600, 19200, 38400, 57600, 76800, 115200, 230400 Bd, automatic detection
<b>Safety</b>	Protection class IEC/EN	IP 67 (using cable glands) IP 66 (using membrane entry) IP 54 (for .AMP variants)
	Ambient temperature	0 ... 50°C
	Storage temperature	-10 ... 70°C
	Relative humidity	10 ... 90%, not condensing
	Maintenance	maintenance-free
	Weight	approx. 506 g
	Dimensions housing	160x140x81 (WxHxD)
	Dimensions including PG-glands	224x204x81 (WxHxD)


Product features

<b>System description</b>	<p>The <b>FBB-8DI</b> fieldbus modules provide digital inputs for decentralized installation in the building. Using the BACnet MS/TP interface, actuators and messages can be interconnected.</p> <p>By reading the inputs via BACnet communication, the <b>FBB modules</b> provide the option of taking up digital status messages decentrally in the building using potential-free switching contacts. The devices are thus operated as data collectors or remote I/Os. In addition, a simple counting function is integrated for the inputs (counter values not stored retentively in case of power failure).</p>
<b>Installation</b>	<p>The <b>FBB modules</b> are mounted decentrally in the immediate vicinity of sensors and actuators, e.g. directly next to motorized fire dampers, or in the case of heating circuits directly near the ventilation unit or in rooms with individual room control.</p>
<b>Connections</b>	<p>All terminals can be operated without tools thanks to the terminal design using push-in technology and operating lever.</p> <p>Wire cross sections:          up to 4 mm<sup>2</sup> (single-wire and fine-stranded conductors)          up to 2,5 mm<sup>2</sup> (fine-stranded conductors with wire end ferrules)</p>

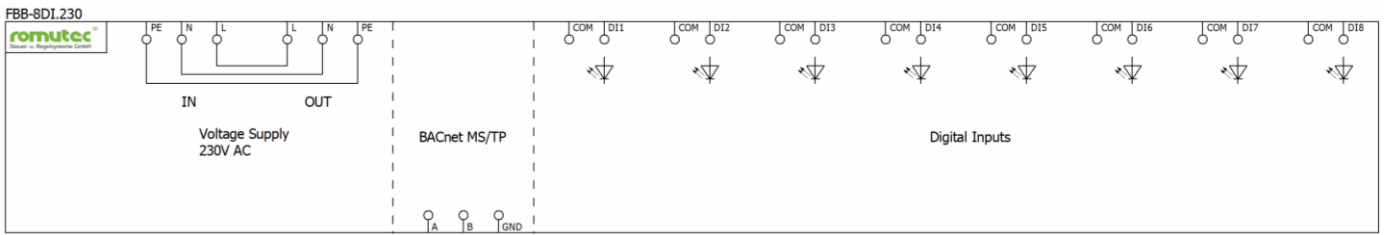
Status LEDs, meaning

<b>Bus</b>	Green, accelerated flashing	Start-up in progress
	Green, steady light	Module ready for operation
	Orange, flashing	Communication active
	Red, flashing	Faulty or invalid telegram received
<b>Digital inputs</b>	Orange, accelerated flashing	Start-up in progress
	LED off	DI inactive ( <b>logical</b> state)
	Orange, steady light	DI active ( <b>logical</b> state)

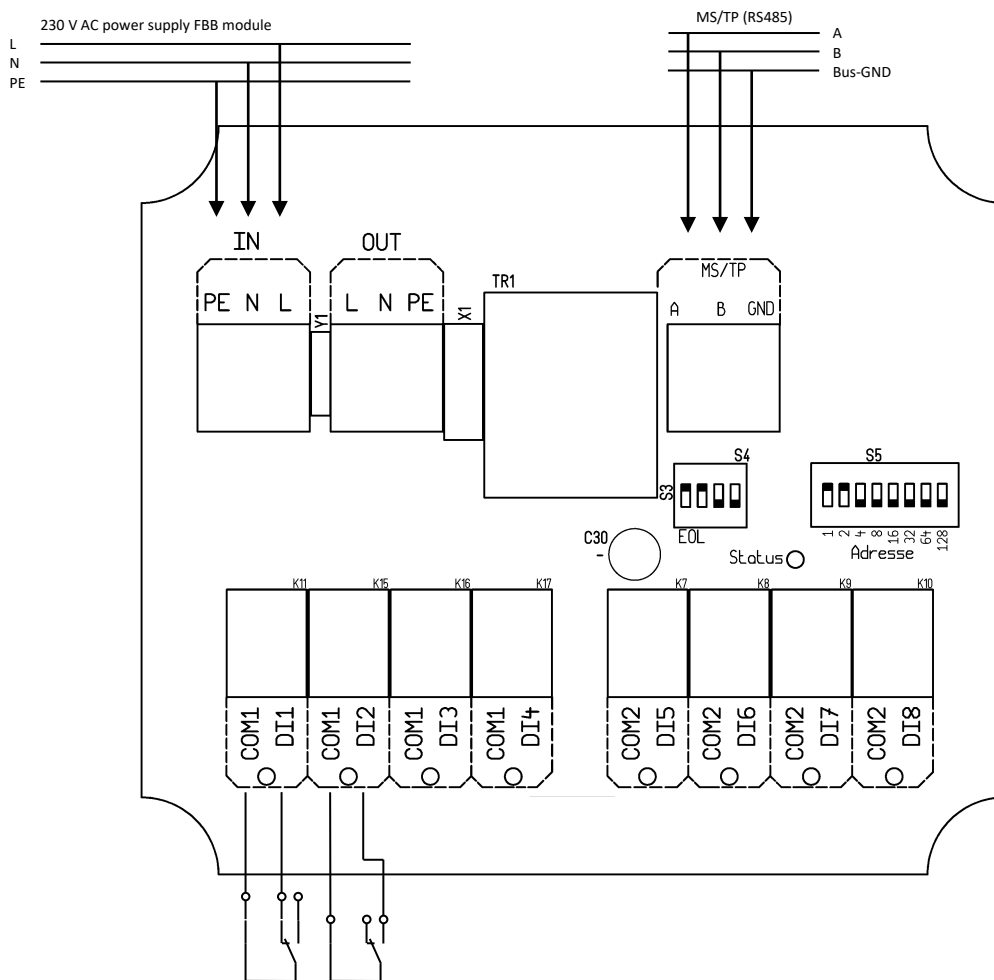
BACnet MS/TP, general notes

<b>Addressing</b>	DIP switch, 8-pole	Addresses 0 ... 254
		When setting an address from 0 to 127, the device behaves as a master. If an address in the range from 128 to 254 is set, the device will behave as a slave.
<b>Termination</b>	DIP switch, 4-pole	Dips 1+2 should be set to the ON position on the last device of the bus segment to terminate the bus (active termination using bias resistors provided within the device).
<b>Recommended cable types</b>	up to 100m:	LiYCY 2x2x0,5mm <sup>2</sup> , shielded Resistance < 4,0Ω / 100m Capacitance < 13.0nF / 100m
	more than 100m:	CYPiMF 2x2x0,5mm <sup>2</sup> , shielded Resistance < 4,0Ω / 100m Capacitance < 6.0nF / 100m

Electrical connection diagram



Connection example



**Notes:**

Activating a DI by closing the potential-free contact between DI and COM.

## Safety instructions



- The **FBB module** should not be installed in the immediate vicinity of frequency converters. Frequency converters must be wired with all protective measures so that the required regulations and guidelines are complied with (e.g. mains filter, etc.).
- The supply voltage must be as described in the documentation.
- The connection terminals located inside the device should only be wired by authorised, trained specialist personnel.
- Do not carry out wiring on live parts. There is a danger of electric shock, as some terminals may carry 230 V. Generally, avoid connecting and loosening plug connections when the system is live.
- All legal and official regulations must be adhered to.
- Make sure that no objects such as screws or other fixing materials get into the device.
- This device is designed for use in stationary heating, ventilation and air conditioning systems and may not be used outside the specified scope of application.
- Avoid installing in locations with extreme and rapid temperature fluctuations. Please note that outdoor usage is only possible if no water, snow, ice, sunlight and aggressive gases affect the device. The ambient conditions for storage and operation given in the data sheet must be complied with in order to ensure fault-free operation.

## Further documentation

Web: <http://www.romutec.de>

## Additional notes

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### Return of old devices



Electrical devices of the romutec brand fall within the scope of the ElektroG (Electrical and Electronic Equipment Act) and must not be disposed of in household waste or similar. The return of romutec brand old devices is handled through our return service, which we have set up for our B2B customers. You can request a return via [altgeraete@romutec.de](mailto:altgeraete@romutec.de) or by phone at +49-9867-97900. This ensures that the devices are properly recycled and disposed of in accordance with legal requirements.  
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