Technical Data 2CDC502086D0201

### ABB i-bus® KNX IP Router, MDRC IPR/S 3.1.1, 2CDG110175R0011



#### **Product description**

IP Router 3.1.1 is the interface between KNX installations and IP networks. It can be used as a line coupler or area coupler and can utilize the local network (LAN) for exchange of telegrams between lines/areas.

KNX devices can be programmed via LAN using ETS (five tunneling servers are available). The device uses the KNXnet/IP protocol from the KNX Association (routing and tunneling).

Alternatively, the device can communicate via unicast.

The device is powered by 12 to 30 V DC or PoE (Power over Ethernet).

#### Technical data

Supply	Auxiliary voltage U <sub>s</sub>	1230 V DC (+10 % / -15 %) or PoE (IEEE 802.3af class 1)	
	Power dissipation	Maximum 1.8 W	
	Auxiliary voltage current consumption	Maximum 120 mA at 12 V	
	Rated voltage U <sub>n</sub>	12 V DC	
	Current consumption KNX	< 10 mA	
Connections	KNX	Bus connection terminal	
	Plug-in terminal for operating voltage	Plug-in terminal	
	LAN	RJ45 socket for 10/100BaseT, IEEE 802.3 networks, AutoSensing	
Operating and display elements	Red LED and button	For assignment of the physical address	
	Green "On" LED	Operation readiness indicator	
	Yellow "LAN/Link" LED	Network connection indicator	
	Yellow "Telegram" LED	KNX telegram traffic indicator	
Protection degree	IP 20	To DIN EN 60 529	
Protection class	II .	To DIN EN 61 140	
Isolation category	Overvoltage category	III according to DIN EN 60 664-1	
	Pollution degree	2 according to DIN EN 60 664-1	
KNX safety extra low voltage	SELV 30 V DC		
Temperature range	Operation	-5+45 °C	
	Storage	-25+55 °C	
	Transport	-25+70 °C	
Ambient conditions	-	-25+70 °C 95 %, no condensation allowed	
Ambient conditions	Transport		
Ambient conditions  Design	Transport  Maximum air humidity	95%, no condensation allowed	
	Transport  Maximum air humidity  Atmospheric pressure	95%, no condensation allowed Atmosphere up to 2,000 m	
	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM	
	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D)	
	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules	
Design	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width  Mounting depth	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules 68 mm	
Design	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width  Mounting depth  On 35 mm mounting rail	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules 68 mm	
Design  Installation  Mounting position	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width  Mounting depth  On 35 mm mounting rail  Any	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules 68 mm	
Design  Installation  Mounting position  Weight	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width  Mounting depth  On 35 mm mounting rail  Any  0.1 kg	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules 68 mm	
Installation Mounting position Weight Housing, color	Transport  Maximum air humidity  Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width  Mounting depth  On 35 mm mounting rail  Any  0.1 kg  Plastic, halogen free, gray	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules 68 mm	
Design  Installation  Mounting position  Weight  Housing, color  Approvals	Transport  Maximum air humidity Atmospheric pressure  Modular installation device (MDRC)  Overall dimensions  Mounting width  Mounting depth  On 35 mm mounting rail  Any  0.1 kg  Plastic, halogen free, gray  KNX to EN 50 090-1, -2  In accordance with the EMC directive and low	95%, no condensation allowed Atmosphere up to 2,000 m Modular installation device, ProM 90 x 36 x 64 mm (H x W x D) 2x 18 mm modules 68 mm	

Device type	Application	Maximum number of	Maximum number of	Maximum number of
		communication objects	group addresses	assignments
IPR/S 3.1.1	IP Router/*	0	0	0

<sup>\* ... =</sup> Current version number of the application. Please refer to the software information on our website for this purpose.

#### Note

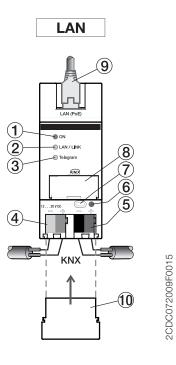
For a detailed description of the application see "IP Router IPR/S 3.1.1" product manual. It is available free-of-charge at www.abb.com/knx.

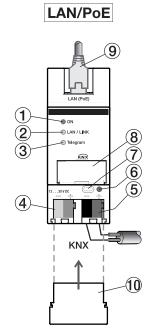
ETS and the current version of the device application are required for programming.

The current application can be found with the corresponding software information for download on the Internet at www.abb.com/knx. After import into ETS, it appears in the Catalogs window under Manufacturers/ABB/System components/Coupler.

The device does not support the locking function of a KNX device in ETS. If you use a BCU code to inhibit access to all the project devices, it has no effect on this device. Data can still be read and programmed.

#### **Connection schematics**

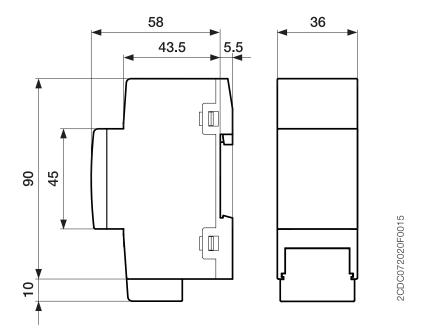




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- 1 ON LED
- 2 LAN/LINK LED
- 3 Telegram LED
- 4 Power supply connection
- 5 KNX connection
- 6 Programming LED
- 7 Programming button
- 8 Label carrier
- 9 LAN or LAN/PoE connection
- 10 Cover cap

#### **Dimension drawing**



### Contact

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