TECHNICAL DATA

ABB i-bus® KNX

ABA/S 1.2.1
Logic Controller

Description of product
The device is a modular installation device (MDRC) in Pro M design. The module width of the device is four space units. It is designed for installation in distribution boards on 35 mm mounting rails.

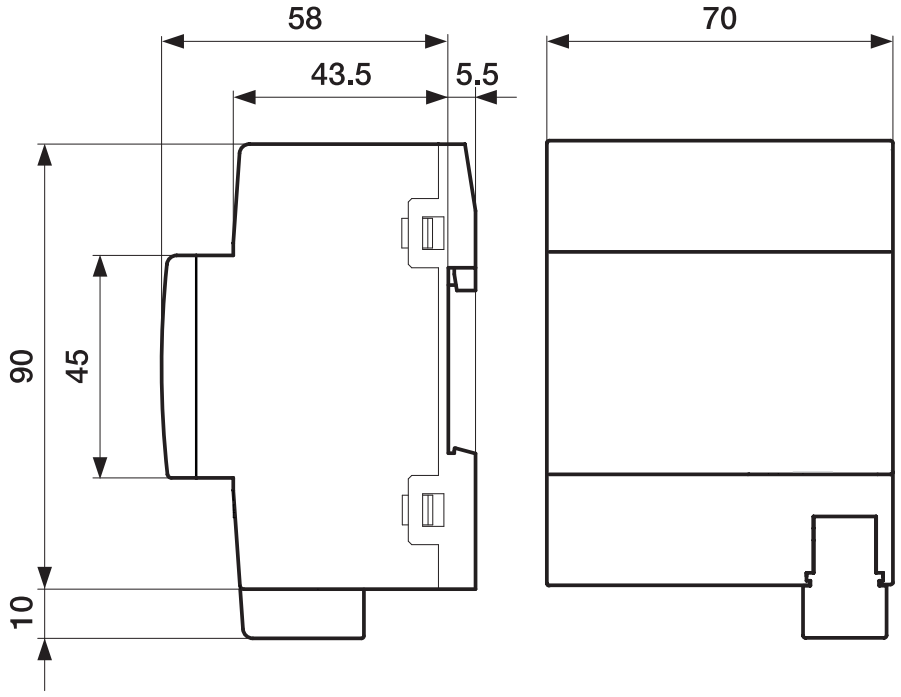
The device is supplied via the bus and requires an additional auxiliary voltage, either 24 V DC or Power over Ethernet (PoE). We recommend using a power supply from our range. When using timer functions, date and time must be provided via KNX/TP.

The device connects to the ABB i-bus® KNX via the front bus connection terminal.

Engineering Tool Software (ETS) is used for physical address assignment and parametrization.

Once the bus and auxiliary voltages are connected, the device is ready for operation.

Dimension drawing



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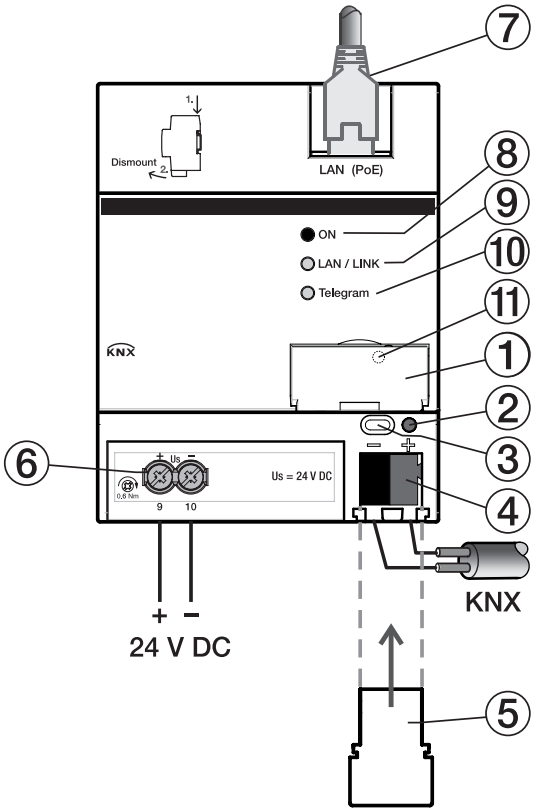
Connection



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LEGEND

1 Label carrier
2 KNX programming LED (red)
3 KNX programming button
4 KNX connection
5 Cover cap
6 Power supply connection U_s
7 Ethernet/LAN connection
8 On LED (green)
9 LAN/LINK LED (yellow)
10 KNX telegram LED (yellow)
11 Reset/factory settings button (behind label carrier)

Operating and display elements		
Button/LED	**Description**	**LED indicator**
	Assignment of the physical address	On: Device is in programming mode
	ON	Off: No auxiliary voltage (24 V or PoE) available On: System initialized Flashing slowly (1 Hz): System starting up Flashing quickly (4 Hz): Error
	LAN/LINK	On: Auxiliary voltage and Ethernet connection available Flickering: Data traffic via LAN
	telegram	On: Auxiliary voltage and KNX connection available Flickering: Data traffic via KNX/TP
	Reset (behind label carrier)	Press for less than 2 seconds: no reaction. Press for 2 to 10 seconds: device restart. Retains configuration and last states. Press for more than 10 seconds: factory reset. Deletes configuration and all states.

NOTE

Device restart and factory reset are only possible when bus voltage and auxiliary voltage are applied.

NOTE

A firmware update cannot be undone after a factory reset.

Technical data		
Supply	Bus voltage	21…32 V DC
	Current consumption, bus	< 12 mA
	Leakage loss, bus	Maximum 250 mW
	Leakage loss, device	Maximum 3 W
	Auxiliary voltage U_S	24 V DC (+20 % / -15 %) or PoE (IEEE 802.3af Klasse 2)
	Auxiliary voltage current consumption	60 mA typical, 120 mA peak current
	KNX connection	0.25 W
	KNX current consumption	< 10 mA
	Power backup if supply voltage fails	Min. 5 s, typically up to 20 s
Connections	KNX	Via bus connection terminal
	Inputs/Outputs	Via screw terminals
	LAN	RJ45 socket for 10/100BaseT, IEEE 802.3 networks, AutoSensing
Connection terminals	Screw terminal	Screw terminal with universal head (PZ1)
	Screw terminal 1	0.2…2.5 mm^2 stranded, 2 x (0.2…2.5 mm^2)
	Screw terminal 2	0.2…4 mm^2 solid, 2 x (0.2…4 mm^2)
	Wire end ferrule without plastic sleeve	0.25…2.5 mm^2
	Wire end ferrule with plastic sleeve	0.25…4 mm^2
	TWIN ferrules	0.25…4 mm^2
	Tightening torque	Max. 0.6 Nm
	Grid	6.35
Protection degree	IP 20	To EN 60529
Protection class	II	To EN 61140
Isolation category	Overvoltage category	III to EN 60664-1
	Pollution degree	II to EN 60664-1
SELV	KNX safety extra low voltage	SELV 24 V DC

Technical data		
Temperature range	Operation	- 5…+45 °C
	Transport	-25…+70 °C
	Storage	-25…+55 °C
Ambient conditions	Maximum air humidity	93 %, no condensation allowed
	Atmospheric pressure	Atmosphere up to 2,000 m
Design	Modular installation device (MDRC)	Modular installation device
	Design	Pro M
	Housing/color	Plastic housing, gray
Dimensions	Dimensions	90 x 70 x 63.5 mm (H x W x D)
	Mounting width in space units	4x 17.5 mm modules
	Mounting depth	68 mm
Mounting	35 mm mounting rail	To EN 60715
Mounting Position	Any	
Weight		0.192 kg
Fire classification		Flammability V-0 as per UL94
Approvals	KNX certification	To EN 50491
CE conformity	In accordance with the EMC directive and low voltage directive	

Software						
Device type	**Application**	**Maximum number of group objects**	**Maximum number of group addresses**	**Maximum number of associations**	**Maximum number of logic elements**	**WebUI inputs and outputs**
ABA/S 1.2.1	Logic Controller/...*	500	2000	2000	3000	60

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

Ordering details					
Device type	**Product Name**	**Order No.**	**bbn 40 16779 EAN**	**Weight 1 pcs. [kg]**	**Packaging [pcs.]**
ABA/S 1.2.1	Logic Controller	2CDG110192R0011	92993 6	0.192	1

NOTE

Please refer to the ABA/S 1.2.1 Logic Controller product manual for a detailed description of the application. 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 latest version of the application and corresponding software information is available for download from www.abb.com/knx. After import into ETS, it appears in the Catalogs window under Manufacturers/ABB/Controller/Controller Output.

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

ABB STOTZ-KONTAKT GmbH
Eppelheimer Straße 82
69123 Heidelberg, Germany
Telefon: +49 (0)6221 701 607
Telefax: +49 (0)6221 701 724
E-Mail: knx.marketing@de.abb.com

Further Information and Local Contacts:
www.abb.com/knx

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