

TECHNICAL DATA

**ABB i-bus® KNX**

VC/S 4.1.1

Valve Drive Controller

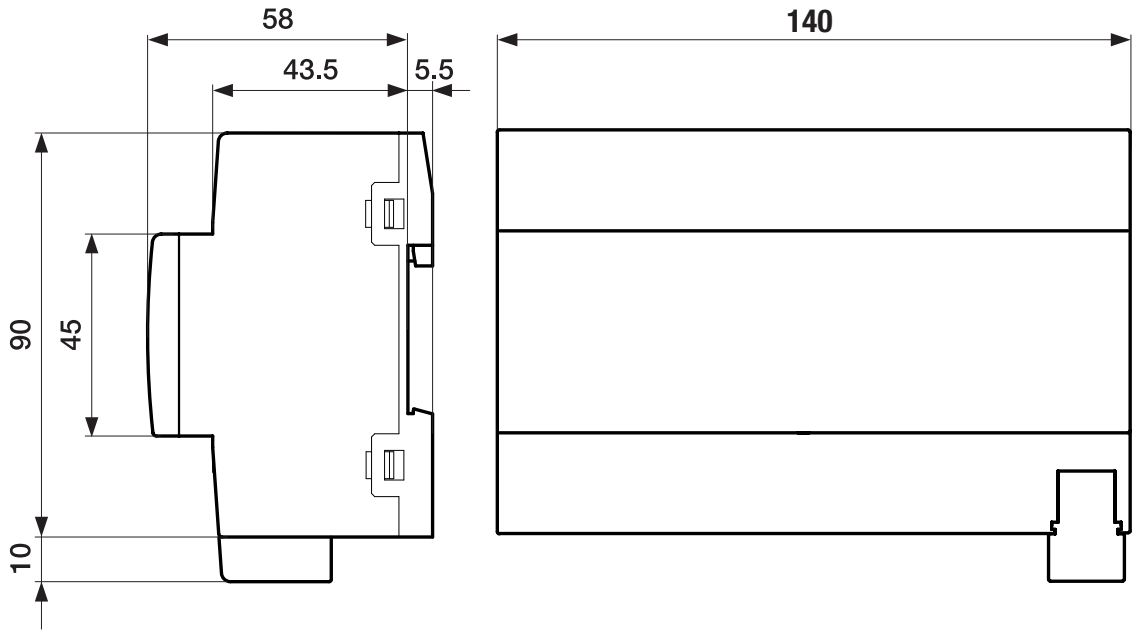
**Description of product**

The device is a modular DIN rail component (MDRC) in pro M design. It is intended for installation in distribution boards on 35 mm mounting rails. Physical address assignment and parametrization are carried out with ETS.

The device is powered via the ABB i-bus® KNX and requires no additional auxiliary voltage supply.

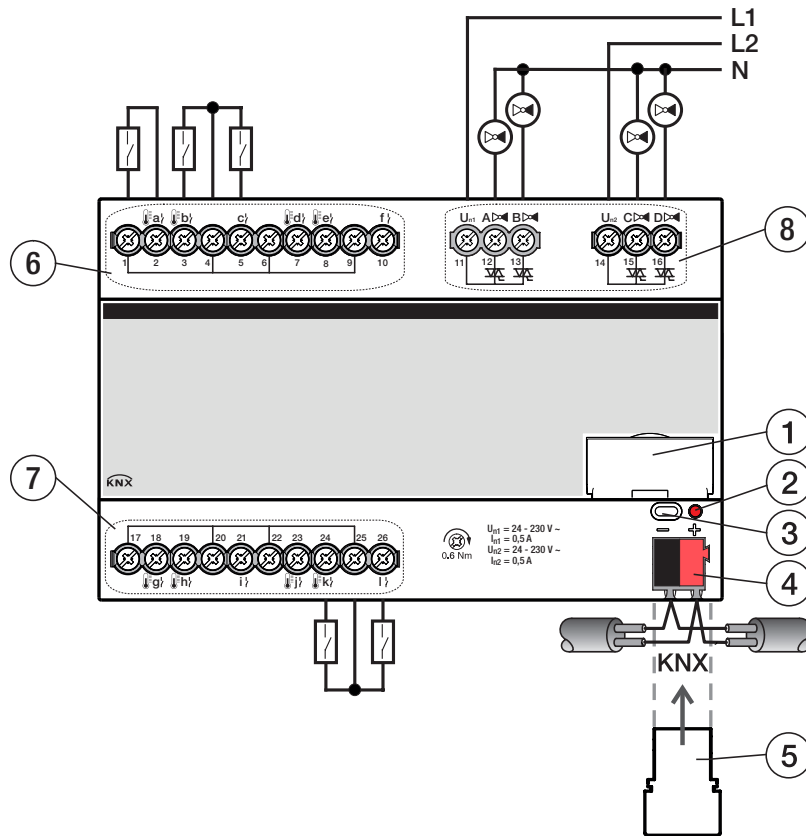
The device is ready for operation after connecting the bus voltage.

Dimension drawing




2CDC07202/F0017

Connection



LEGEND

- 1 Label carrier
- 2 KNX programming LED (red)
- 3 KNX programming button
- 4 Bus connection terminal
- 5 Cover cap
- 6 Inputs (a, b, c; d, e, f)
- 7 Inputs (g, h, i; j, k, l)
- 8 Valve outputs (A, B, C, D)

Operating and display elements		
Button/LED	Description	LED indicator
	Assignment of the physical address	On: Device is in programming mode

Technical data		
Power supply	Bus voltage	21...32 V DC
	Current consumption, bus	< 12 mA
	Power loss, bus	Maximum 250 mW
	Power loss, device	Maximum 3 W
	KNX connection	0.25 W
	Electronic outputs	2.4 W
Connections	KNX	Via bus connection terminal
	Inputs/outputs	Via screw terminals
Connection terminals	Screw terminal	Screw terminal with universal head (PZ1) 0.2...4 mm <sup>2</sup> stranded, 2 x (0.2...2.5 mm <sup>2</sup> ) 0.2...6 mm <sup>2</sup> solid, 2 x (0.2...4 mm <sup>2</sup> )
	Wire end ferrule without plastic sleeve	0.25...2.5 mm <sup>2</sup>
	Wire end ferrule with plastic sleeve	0.25...4 mm <sup>2</sup>
	TWIN ferrules	0.5...2.5 mm <sup>2</sup>
	Wire end ferrule contact pin length	At least 10 mm
	Tightening torque	Maximum 0.6 Nm
	Spacing	6.35
Protection degree	IP 20	According to EN 60529
Protection class	II	According to EN 61140
Isolation category	Overvoltage category	III according to EN 60664-1
	Pollution degree	II according to EN 60664-1
SELV	KNX safety extra low voltage	SELV 24 V DC

<b>Technical data</b>		
<b>Temperature range</b>	Operation	- 5...+45 °C
	Transport	-25...+70 °C
	Storage	-25...+55 °C
<b>Ambient conditions</b>	Maximum atmospheric humidity	93 %, no condensation allowed
	Atmospheric pressure	Atmosphere up to 2,000 m
<b>Design</b>	Modular DIN rail component (MDRC)	Modular installation device
	Design	pro M
	Housing/color	Plastic, gray
<b>Dimensions</b>	Dimensions	90 x 140 x 63.5 mm (H x W x D)
	Mounting width in space units	8x 17.5 mm modules
	Mounting depth	63.5 mm
<b>Installation</b>	35 mm mounting rail	According to EN 60715
<b>Mounting position</b>	Any	
<b>Weight</b>		0.27 kg
<b>Fire classification</b>		Flammability V-0 as per UL94
<b>Approvals</b>	KNX certification	According to EN 50491
	Certification	According to EN 60669
<b>CE marking</b>	In accordance with the EMC and Low Voltage Directives	

<b>Software</b>				
<b>Device type</b>	<b>Application</b>	<b>Maximum number of group objects</b>	<b>Maximum number of group addresses</b>	<b>Maximum number of assignments</b>
<b>VC/S 4.1.1</b>	Valve Drive Controller,4-f/...*	298	300	300

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

<b>Valve outputs (PWM)</b>		
<b>Rated values</b>	Quantity	4 (per channel 1)
	Non-floating	Yes
	U <sub>n</sub> rated voltage	24...230 V AC (50/60 Hz)
	U <sub>n</sub> rated voltage (per output pair)	0.5 A
	Continuous current at T <sub>u</sub> up to 20 °C	0.25 A resistive load per channel
	Continuous current at T <sub>u</sub> up to 45 °C	0.15 A resistive load per channel
	Starting current	Maximum 1.6 A, 10 s at T <sub>u</sub> up to 45 °C
		T <sub>u</sub> = ambient temperature
	Minimum load	1.2 VA per PWM output

<b>Inputs</b>		
<b>Rated values</b>	Quantity	12
<b>For analog room control unit</b>	Quantity	4 (per channel 1)
<b>Contact scanning</b>	Scanning current	1 mA
	Scanning voltage	12 V
<b>Resistance</b>	Select	User-defined
	PT 1.000	2-conductor technology
	PT 100	2-conductor technology
	KT	1 k
	KTY	2 k
	NI	1 k
	NTC	10 k
	NTC	20 k
<b>Cable length</b>	Between sensor and device input	Maximum 100 m, one-way

<b>Ordering details</b>					
<b>Device type</b>	<b>Product Name</b>	<b>Order No.</b>	<b>bbn 40 16779 EAN</b>	<b>Weight 1 pcs. [kg]</b>	<b>Packaging [pcs.]</b>
<b>VC/S 4.1.1</b>	Valve Drive Controller	2CDG110216R0011	01148 8	0.27	1

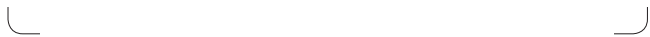
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**NOTE**

Please refer to the VC/S 4.x.1 Valve Drive Controller product manual for a detailed description of the application. It is available free of charge at [www.abb.com/knx](http://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](http://www.abb.com/knx). After import into ETS, it appears in the Catalogs window under Manufacturers/ABB/Heating, ventilation, air conditioning/ Valve drive controller.

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.



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