

ABB i-bus® KNX

Blind/Roller Shutter Actuators with travel detection and manual operation x-fold, 230 V, MDRC

JRA/S x.230.5.1, 2CDG 110 12x R0011



JRA/S 8.230.5.1

2CDC 071 018 S0011

The 2-fold, 4-fold and 8-fold Blind/Roller Shutter Actuators are used to automatically control independent 230 V AC drives, for positioning blinds, roller shutters, awnings and other shading products via ABB i-bus® KNX. The devices are also used, for example, to control doors, windows and ventilation flaps. The travel times of the drives are automatically determined via end position detection and stored.

The output contacts are mechanically interlocked, so that voltage cannot be applied to both contacts at the same time.

The outputs can be directly controlled on the device using the manual push buttons. The LEDs on the front of the device signal the status of the outputs. The devices do not require an auxiliary voltage.

Individual outputs can be copied or exchanged to reduce the programming effort.

The Blind/Roller Shutter Actuator is a modular installation device for installation in the distribution board on 35 mm mounting rails. The connection to the ABB i-bus® is implemented via bus connection terminals.

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Technische Daten

Supply	Operating voltage	21...30 V DC, via KNX		
	Current consumption KNX	< 12 mA		
	Power consumption KNX	maximum 250 mW		
Outputs	JRA/S Type	2.230.5.1	4.230.5.1	8.230.5.1
	Number of outputs UP/DOWN	2*	4	8
		(mutually mechanically interlocked)		
		* independent outputs, each with up to 2 drives operating in parallel.		
	U_N rated voltage	maximum 230 V AC, 45 ... 65 Hz		
	I_N rated current	6 A		
	Current detection for travel detection	> 300 mA		
	Maximum switching current	6 A (AC1/AC3) at 230 V AC or 6 A (AC1/AC3) at 400 V AC		
	Minimum switching current	100 mA at 5 V or 10 mA at 10 V or 1 mA at 24 V		
	Leakage loss per device at max. load	< 2 W		
Connections	Drives (terminals output A...X)	2 universal head screw terminals per output (UP/DOWN)		
	Phase L1...L3 (terminal U_N)	2 or 4 universal head screw terminals single-core 0.2...6 mm ² , stranded 0.2...4 mm ²		
	Screw terminal conductor cross-section	Flexible with ferrules without/with plastic sleeves 0.25...4 mm ²		
	Tightening torque	maximum 0.6 Nm		
	ABB i-bus® KNX	Bus connection terminal (black/red), 0.8 mm Ø, single-core		
Operating and display elements	Button/LED	For assignment of the physical address		
	Button	For toggling between manual operation/operation via ABB i-bus® and displays		
	Buttons	For control (move UP/DOWN, slat OPEN/CLOSE) of the output and status display		
Enclosure	IP 20	To EN 60 529		
Safety class	II, in the installed state	To EN 61 140		
Isolation category	Overvoltage category	III to EN 60 664-1		
	Pollution degree	2 to EN 60 664-1		

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KNX safety extra low voltage	SELV 24 V DC			
Temperature range	Operation	-20 °C...+45 °C		
	Storage	-25 °C...+55 °C		
	Transport	-25 °C...+70 °C		
Ambient conditions	Maximum air humidity	93 %, no condensation allowed		
Design	Modular installation device (MDRC)	Modular installation device, Pro M		
	Dimensions (H x W x D) in mm; JRA/S Type	2.230.5.1	4.230.5.1	8.230.5.1
	– Height	90	90	90
	– Width	72	72	144
	– Depth	64.5	64.5	64.5
	Mounting width in space units (modules at 18 mm)	4	4	8
	Mounting depth	64.5	64.5	64.5
Weight without packaging	JRA/S Type	2.230.5.1	4.230.5.1	8.230.5.1
	Weight in kg	0.2	0.25	0.45
Installation	On 35 mm mounting rail	To EN 60 715		
Mounting position	As required			
Housing/colour	Plastic housing, grey	Halogen free		
Approvals	KNX to EN 50 090-1, -2	Certification		
CE mark	In accordance with the EMC guideline and low voltage guideline			

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Device type	Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
JRA/S 2.230.5.1	Blind/Roller Shutter 2f 230V Travel Detection M/...*	69	255	255
JRA/S 4.230.5.1	Blind/Roller Shutter 4f 230V Travel Detection M/...*	129	255	255
JRA/S 8.230.5.1	Blind/Roller Shutter 8f 230V Travel Detection M/...*	249	255	255

* ... = current version number of the application program. Please observe the software information on our homepage for this purpose.

Note

For a detailed description of the application program see "Blind/Roller Shutter Actuators JRA/S" product manual. It is available free-of-charge at www.abb.com/knx.
The ETS and the current version of the device application program are required for programming.
The current version of the application program is available for download on the internet at www.abb.com/knx. After import in the ETS, it is available in the ETS under *ABB/Blind/Switch*.
The device does not support the closing function of a KNX device in the ETS. If you inhibit access to all devices of the project with a BCU code, it has no effect on this device. Reading out data and programming is still possible.

Important

When electronic drives are used, the closed circuit current may not exceed 150 mA, as otherwise the automatic travel detection function may not function correctly. In this case, the travel times for the drives must be determined manually and entered into the ETS parameters.

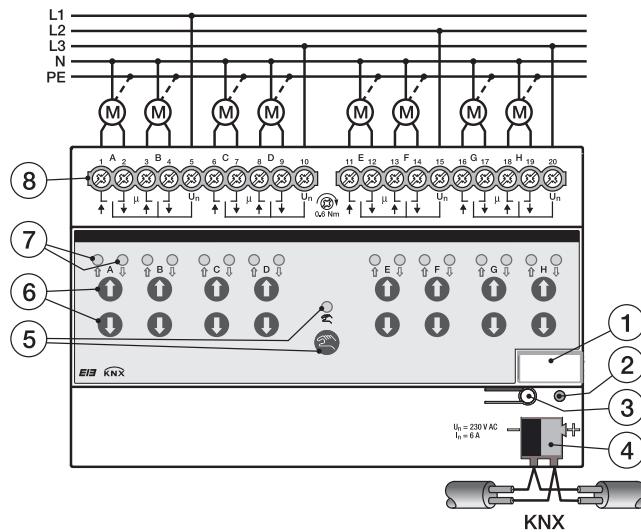
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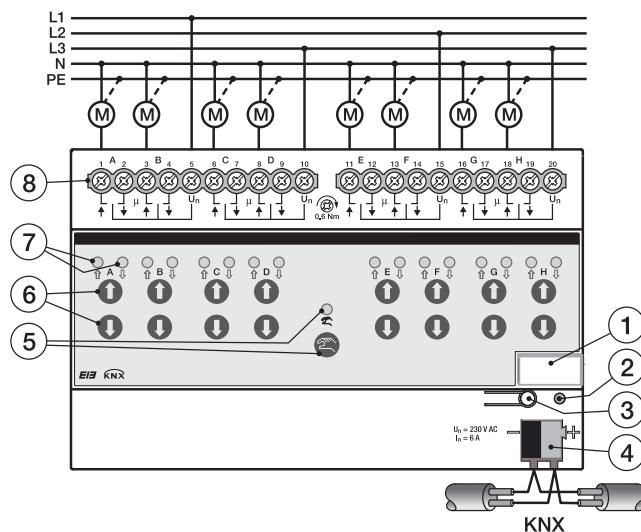
Connection schematics JRA/S x.230.5.1

Connection to the blind and roller shutter drives



2CDC:072 039 E0010

Connection to ventilation flaps



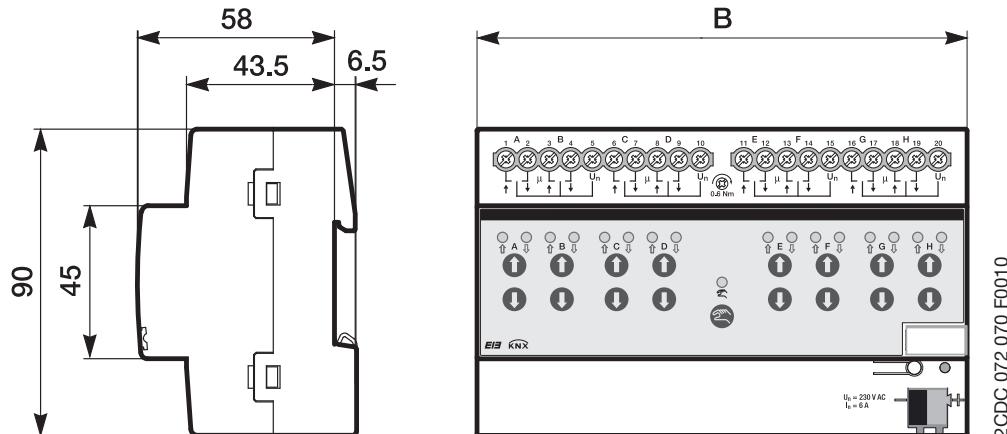
2CDC:072 034 E0010

- 1 Label carrier
- 2 LED
- 3 Button
- 4 Bus connection terminal ABB i-bus® KNX
- 5 Button and LED
- 6 Button (2 per output)
- 7 LEDs (2 per output, yellow)
- 8 Screw terminals (UP/DOWN, Phase L)

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Dimension drawing JRA/S x.230.5.1



	JRA/S 2.230.5.1	JRA/S 4.230.5.1	JRA/S 8.230.5.1
B	72	72	144

2CDC 072 070 F0010