

Shutter Actuator with Manual Operation, 4-fold, 230 VAC, MDRC JA/S 4.230.1M, GH Q631 0064 R0111



2CDC 071 234 F0003

The Shutter Actuator JA/S 4.230.1M is used to control a maximum of four independent 230 VAC drives for positioning shutters, blinds, awnings and other hangings as well as for controlling doors, windows and ventilation flaps.

Push buttons are located at the front of the device which are used to raise and lower the shutter/blind manually, to stop shutter movement and for louvre adjustment. The current direction of movement or the current position is displayed via LEDs. Depending on requirements, manual operation is possible either with mains voltage and no bus voltage or with bus voltage and no mains voltage.

The output contacts for the directions UP and DOWN are mechanically interlocked so that voltage cannot be applied at both contacts at the same time. The pause on change in direction can be set via the parameters.

The Shutter Actuator is a DIN rail mounted device for insertion in the distribution board. It is connected to the ABB i-bus® EIB via a Bus connection terminal.

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Technical data

Power supply	– Operating voltage	21...30 VDC, via the EIB for bus operation or manual operation with bus voltage or 230 VAC + 10/– 15 %, 45 ... 65 Hz for manual operation without bus voltage
	– Current input	typ. 10 mA
	– Power consumption via EIB	< 250 mW
	– Power consumption 230 VAC	< 1 W
Outputs	– Number of outputs	4 independent outputs, each with 1 changeover contact (UP/DOWN mechanically interlocked)
	– Nominal voltage	230 VAC
	– Max. switching current	6 A (AC1/AC3) at 230 VAC or 6 A (AC1/AC3) at 400 VAC
	– Min. switching current	100 mA at 5 V or 10 mA at 10 V or 1 mA at 24 V
Operating and display elements	– Red LED and push button	for entering the physical address
	– Manual operation	2 push buttons per output for UP and DOWN (long operation) or STOP/louvre adjustment (short operation)
	– Display of direction of travel/position	2 LEDs per output for UP and DOWN or top/bottom
	– Operating mode	1 push button for toggling between manual operation and operation via the EIB
Connections	– Display of operating mode	1 LED for displaying the mode
	– Load circuits	2 screw terminals for phase connection (e.g. L1 and L2) 2 screw terminals per output for UP and DOWN
	– 230 VAC auxiliary voltage	2 screw terminals for L 2 screw terminals for N Wire range: finely-stranded: 0.2 – 2.5 mm ² single-core: 0.2 – 4.0 mm ²
	– EIB	Bus connection terminal (black/red)
Type of protection	– IP 20, EN 60 529	

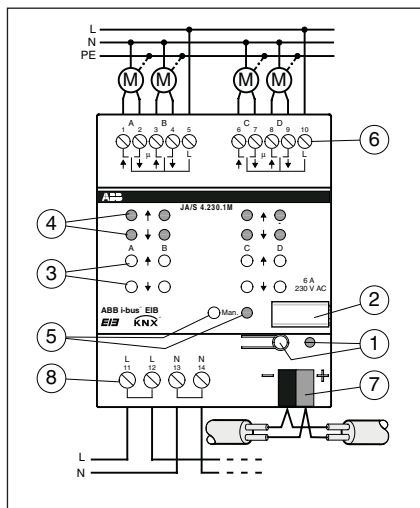
Ambient temperature range	– Operation	– 5 °C ... + 45 °C
	– Storage	– 25 °C ... + 55 °C
	– Transport	– 25 °C ... + 70 °C
Design	– Modular installation device, proM	
Housing, colour	– Plastic housing, grey	
Mounting	– on 35 mm mounting rail, DIN EN 50 022	
Dimensions	– 90 x 72 x 64 mm (H x W x D)	
Mounting depth/width	– 68 mm/4 modules at 18 mm	
Weight	– 0.26 kg	
Mounting position	– as required	
Certification	– EIB- and KNX-certified	
CE norm	– in accordance with the EMC guideline and the low voltage guideline	

Application programs

	Max. number of communication objects	Max. number of group addresses	Max. number of associations
Shutter, 4f M/1	124	254	254

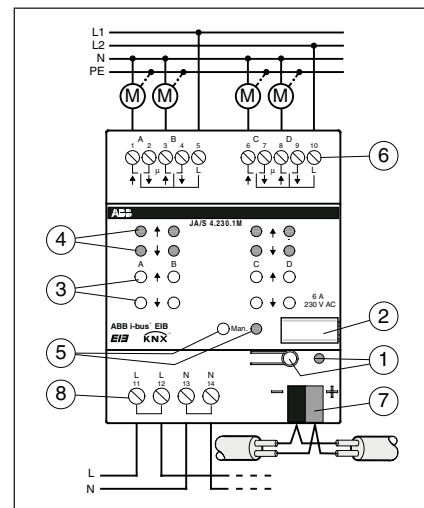
Circuit diagram

“Shutter” and “Blinds” operating modes



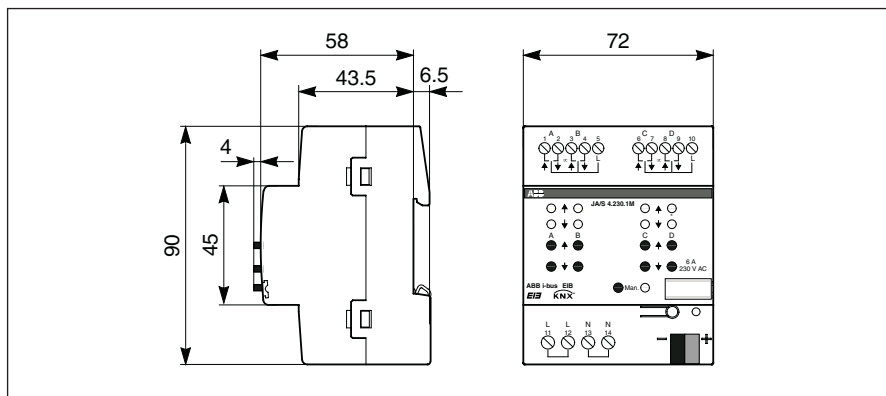
- 1 Programming LED, push button
- 2 Marker Tag
- 3 Push buttons Up/Down/Stop/Step
- 4 LED Position

“Ventilation flaps” operating mode



- 5 LED and push button “Man.”
- 6 Connection terminals
- 7 Bus terminal
- 8 230 V supply voltage

Dimension drawing



6

Note

The programming is carried out with ETS from version ETS2 V1.2a onwards.

To guarantee all the programmable functions, in particular the UP/DOWN directions of travel, it is important to ensure that the drive has been connected properly. The technical data supplied by the drive manufacturer must be taken into account!

If the outputs are switched several times in rapid succession, the switching of the output contacts is delayed.

The following process should be carried out during the initial commissioning of the shutter actuator:

1. Install and wire up the shutter actuator.
2. **First** connect the EIB voltage or 230 VAC auxiliary voltage. The output contacts automatically adopt the neutral position.
3. Only **then** connect the 230 VAC operating voltage for the shutter outputs.



If the preselected parameter settings have been modified during programming, the output contacts adopt the specified Position on bus voltage recovery once the EIB voltage has been connected.

The function “ventilation flaps/switch mode” may be inverted by connecting the load to the “Down” terminal instead of the “Up” terminal (e.g. terminal “2” instead of terminal “3”).



Depending on the position of the output contact, also the non-connected terminals are under voltage!

The Shutter Actuator is supplied with a downloaded application program. It is therefore only necessary to download the group addresses and parameters during commissioning. The complete application program can also be downloaded if required. Therefore the device must be unloaded. If the device is unloaded, it cannot be operated manually.



When delivered, the manual operation works according to the “Blinds” operation mode. If shutter, ventilation flaps or switching loads are connected, the shutter actuator must be programmed first. Only then the manual operation works accordingly!

6