

### MDT Universal 2-fold, flush mounted

Version		
AKU-02UP.03	Universal Actuator 2-fold	Flush mounted, 230 V AC, 10 A
AKU-B2UP.03	Universal Actuator 2-fold with 4 binary inputs	Flush mounted, 230 V AC, 10 A

The MDT Universal Actuator with monostable relays can be used as Switch Actuator 2-fold or Shutter Actuator 1-fold and is individually programmable by the ETS. Switching, alarm, central and blocking functions are available as well as extensive calibration and positioning functions. The exact position can be driven in tip mode and separate travel times for up / down can be set.

The MDT Universal Actuator has a practical ventilation function and automatic sun protection/slat tracking with sun position calculation. Automatic and scene functions can be programmed additionally. As well automatic and scene functions can be programmed. The Operation as a switching actuator enables heating control with PWM from 0 to 100 %.

If the mains voltage fails, all outputs are switched off. After bus voltage failure or recovery the switching positions of the relays can be programmed individually for each channel.

In addition to the function as a shutter actuator, the actuator has 4 potential free binary inputs that act as a universal interface. At these inputs, buttons, switches, door and window contacts can be queried. Each input can be set individually by the ETS. The roller and blind functions can be set for 1 and 2 button operation.

The interpretation of the connected window contacts takes place directly in the actuator. The transmission behaviour of the up/down objects can be set, either the internal switching contacts or actuators on the KNX bus can be controlled.

The Universal Actuator is a flush mounted device to be inserted in a installation box or behind a push button or switch. It has to be installed in dry rooms. For project design and commissioning of the MDT Shutter Actuator it is recommended to use the ETS. Please download the application software at [www.mdt.de/Downloads.html](http://www.mdt.de/Downloads.html)

AKU-02UP.03



AKU-B2UP.03



- **Switch Actuator 2-fold / Shutter Actuator 1-fold**
- Heating control with PWM 0-100 %
- **Automatic sun shading/slat adjustment with sun position calculation**
- **Practical ventilation function (window open/tilt)**
- Time functions (switch-on/switch-off delay, staircase light function)
- Logical linking of binary data, 8 scenes per channel
- Central switching functions and block functions
- Travel-, pause-at-change-of-direction- and step time adjustable
- 1 Bit automatic function and sun protection
- 8 Bit positioning for shutter and blinds

#### Functions Binary Inputs:

- To connect push-buttons or window/auxiliary contacts
- Integrated evaluation of the windows contacts
- **Adjustable transmission behaviour of the up/down objects** (To the internal contacts or actuators on the KNX bus)
- Operation of blinds and shutters, 1 and 2 button operation
- **Binary Inputs usable as Universal Interface**
- Dimensions (W x H x D): 41 mm x 41 mm x 22 mm
- 3 years warranty

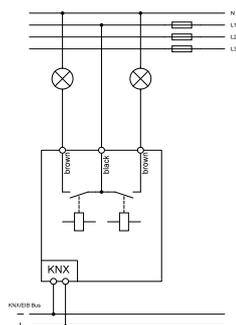
Technical Data	AKU-02UP.03	AKU-B2UP.03
Number of input channels	--	4
Contact voltage input channel	--	3,3 V DC * internal
Permitted input cable length	--	10 m
Number of outputs	2	2
<b>Output switching ratings</b>		
Ohmic load	10 A	10 A
Capacitive load	14 µF at 10 A	14 µF at 10 A
Voltage	230 V AC	230 V AC
<b>Maximum inrush current</b>	150 A / 150 µs 50 A / 600 µs	150 A / 150 µs 50 A / 600 µs
<b>Maximum load</b>		
Incandescent lamps	1500 W	1500 W
Halogen lamps 230 V	1200 W	1200 W
Halogen lamps, electronic transformer	500 W	500 W
Fluorescent lamps, not compensated	500 W	500 W
Fluorescent lamps, parallel comp.	120 W	120 W
Max. number of electronic transformers	2	2
Shutter motor	--	300 W ***
<b>Output life expectancy (mechanical)</b>	1.000.000	1.000.000
<b>Max. fuse per channel</b>	10 A	10 A
<b>Specification KNX interface</b>	TP-256 with long frame support for ETS 5	
<b>Available application software</b>	ETS 5	
<b>Wire gauge connection cables</b>		
Cable KNX bus and potential free inputs	Ø 0,8 mm, solid core	
Cable to connect outputs	1,5 mm <sup>2</sup>	
<b>Power supply</b>	KNX bus**	
<b>Power consumption KNX bus typ.</b>	< 0,3 W	
<b>Operation temperature range</b>	0 ... 45 °C	
<b>Enclosure</b>	IP20	
<b>Dimensions (W x H x D)</b>	41 mm x 41 mm x 22 mm	

\* There is no galvanic separation between contact voltage and KNX bus voltage.

\*\* Distances to 230 V lines must be maintained in accordance with applicable standards and regulations.

\*\*\* no three-phase asynchronous motor

Exemplary circuit diagram AKU-02UP.03



Exemplary circuit diagram AKU-B2UP.03

