MDT Universal Actuator

KNX®

MDT Universal Actuator 4/6/8/16/24-fold, MDRC

Version		
AKU-0416.03	Universal Actuator 4-fold	4 SU MDRC, 230 V AC, 16 A
AKU-0616.03	Universal Actuator 4-fold	4 SU MDRC, 230 V AC, 16 A
AKU-0816.03	Universal Actuator 8-fold	4 SU MDRC, 230 V AC, 16 A
AKU-1616.03	Universal Actuator 16-fold	8 SU MDRC, 230 V AC, 16 A
AKU-2416.03	Universal Actuator 24-fold	12 SU MDRC, 230 V AC, 16 A

The MDT Universal Actuator receives KNX/EIB telegrams and can be used as Switch Actuator or Shutter Actuator. Mixed applications from Switch- and Shutter Actuator are possible. Each output uses a bistable relay and can be operated manually via a push button. A green LED indicates the switching status of each channel.

Functions as Switch Actuator:

The outputs are set individually via ETS. The device provides extensive functions like logical operation, status response, block functions, central function, delay functions and staircase lighting function. Additionally the device provides several time and scene control. After bus voltage failure or recovery the relay position is selected in dependence on the settings.
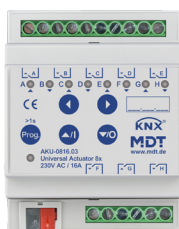
Functions as Shutter Actuator:

The outputs are set individually via ETS. The device provides extensive functions like status response, block functions, ventilation function (window opened/tilt) central function and positioning shutters, blinds and other hangings. Additionally the device provides up to 8 scenes per channel and heating control with PWM. If the mains voltage fails, all outputs are switched off. After bus voltage failure or recovery the position of the shutter is selected in dependence on the settings.

The MDT Universal Actuator is a modular installation device for fixed installation in dry rooms. It fits on DIN 35 mm rails in power distribution boards or closed compact boxes.
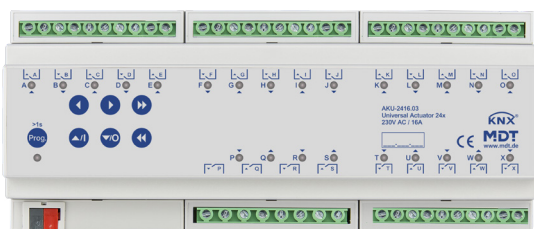
For project design and commissioning of the MDT Universal Actuator it is recommended to use the ETS or later. Please download the application software at www.mdt.de/Downloads.html

Mixed operation of nominal and safety extra low voltage (SELV) within the actuator is not permitted!

AKU-0816.03

AKU-2416.03

- Production in Germany, certified according to ISO 9001
- **Can be used as Switch Actuator (max. 24-fold) or Shutter Actuator (max. 12-fold)**
- **Mixed applications of Switch- and Shutter Actuator possible**
- Heating control with PWM 0-100 %
- Push Button and LED indicator for each channel
- **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)
- Status response (active/passive) for each channel
- Logical linking of binary data, 8 scenes per channel
- Central switching functions and block functions
- Operation mode blind/shutter adjustable
- Travel-, pause-at-change-of-direction- and step time adjustable
- 1 Bit automatic function and sun protection
- 8 Bit positioning for shutter and blinds
- Adjustable behaviour in case of bus voltage failure or return
- 4 mm² / 2 x 2,5 mm² screw terminals. Separate supply phases
- Quick application download (long frame support for ETS 5)
- 3 years warranty

Technical Data	AKU-0416.03 AKU-0616.03 AKU-0816.03 AKU-1616.03 AKU-2416.03	
Number of Switching outputs	4/6/8/16/24	
Number of Shutter outputs	2/3/4/8/12	
Output switching ratings		
Ohmic load	16 A	
Capacitive load	100 µF	
Voltage	230 V AC	
Maximum inrush current	400 A / 150 µs 200 A / 600 µs	
Maximum load		
Shutter motor *	600 W	
Incandescent lamps	2300 W	
Halogen lamps 230 V	2300 W	
Halogen lamps, electronic transformer**	1300 W	
Fluorescent lamps, not compensated	2000 W	
Fluorescent lamps, parallel comp.	1200 W	
Max. number of electronic transformers	15	
Output life expectancy (mechanical)	1.000.000	
Max. total current of the actuator	64 A / 64 A / 96 A / 128 A / 192 A	
Specification KNX interface	TP-256 with long frame support for ETS 5	
Available application software	from ETS 5	
Permitted wire gauge		
Screw terminal	0,5 - 4,0 mm²	
KNX bus connection terminal	Ø 0,8 mm, solid core	
Torque screw terminal	0,5 Nm	
Power consumption KNX bus typ.	< 0,15 W	
Operation temperature range	0 ... 45 °C	
Enclosure	IP20	
Dimensions MDRC (Space Units)	4/4/4/8/12 TE	

*   no three-phase asynchronous motor

Exemplary circuit diagram AKU-0816.03