

### MDT Switch Actuator 4/8/12-fold, MDRC

Version		
AKI-0416.04	Switch Actuator 4-fold	4 SU MDRC, 230 V AC, 16/20 A, C-Load 200 µF
AKI-0816.04	Switch Actuator 8-fold	8 SU MDRC, 230 V AC, 16/20 A, C-Load 200 µF
AKI-1216.04	Switch Actuator 12-fold	12 SU MDRC, 230 V AC, 16/20 A, C-Load 200 µF

The MDT Switch Actuator receives KNX/EIB telegrams and switches up to 12 independent electrical loads. Each output is switched via a bistable relay and can also be switched on the actuator by the mechanical manual control. The status of the switching channel is directly visible.

The MDT Switch Actuator is suitable for extreme high inrush currents and used for heavy loads (C-Load).

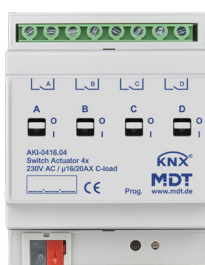
The outputs are set individually via ETS. The device provides extensive functions like logical operation, status response, block functions, central function, delay functions and staircase lighting function. Additionally the device provides several time and scene control. If the mains voltage fails, all outputs hold their current position. After bus voltage failure or recovery the relay position is selected in dependence on the settings.

The MDT Switch Actuator has separate power supply terminals for each channel. It 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.

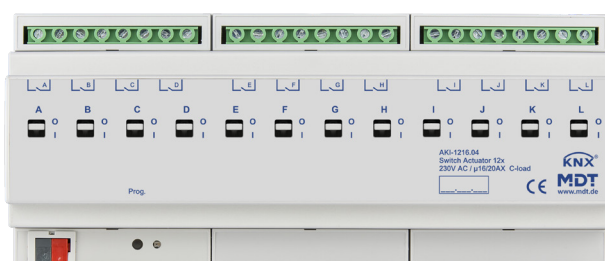
For project design and commissioning of the MDT Switch Actuator it is recommended to use the ETS or later. Please download the application software at [www.mdt.de/Downloads.html](http://www.mdt.de/Downloads.html)

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

AKI-0816.04



AKI-1216.04



- Production in Germany, certified according to ISO 9001
- **Comprehensive function extension**
- **Mechanical manual operation for direct actuation of the relay contact, status visible**
- NO and NC contact operation
- Status response by manual operation
- Time functions (switch-on/switch-off delay)
- Extensive staircase light and impulse functions
- **Extended logical and scene functions for each channel**
- Extended status functions (inverted, cyclic, at block)
- **Threshold switch (Byte/2 Byte/2 Byte float)**
- **Hour meter for switching**
- **Priority/forced operation with automatic release time**
- 4 mm<sup>2</sup> / 2x2,5 mm<sup>2</sup> screw terminals. Separate supply phases
- Power supply via KNX bus
- Quick application download (long frame support for ETS 5/6)
- Modular installation device for DIN 35 mm rails
- Integrated bus coupling unit
- 3 years warranty

Technical Data	AKI-0416.04	AKI-0816.04	AKI-1216.04
<b>Number of outputs</b>	4	8	12
<b>Output switching ratings</b>			
Ohmic load	16 A / 20 A *	16 A / 20 A*	16 A / 20 A*
Capacitive load	max. 200 µF at 16 A	max. 200 µF at 16 A	max. 200 µF at 16 A
Voltage	230 V AC	230 V AC	230 V AC
<b>Maximum inrush current</b>	600 A / 150 µs 300 A / 600 µs	600 A / 150 µs 300 A / 600 µs	600 A / 150 µs 300 A / 600 µs
<b>Maximum load</b>			
Incandescent lamps	3680 W	3680 W	3680 W
Halogen lamps 230 V	3680 W	3680 W	3680 W
Halogen lamps, electronic transformer**	2000 W	2000 W	2000 W
Fluorescent lamps, not compensated	3680 W	3680 W	3680 W
Fluorescent lamps, parallel comp.	2500 W	2500 W	2500 W
Max. number of electronic transformers	28	28	28
<b>Output life expectancy (mechanical)</b>	1.000.000	1.000.000	1.000.000
<b>Max. total current of the actuator</b>	64 A	96 A	128 A
<b>Specification KNX Interface</b>	TP-256 with long frame support for ETS 5/6		
<b>Available application software</b>	ab ETS 4	ab ETS 4	ab ETS 4
<b>Permitted wire gauge</b>			
Screw terminal	0,5 - 4,0 mm <sup>2</sup>	0,5 - 4,0 mm <sup>2</sup>	0,5 - 4,0 mm <sup>2</sup>
KNX bus connection terminal	Ø 0,8 mm, solid core	Ø 0,8 mm, solid core	Ø 0,8 mm, solid core
<b>Torque screw terminal</b>	0,5 Nm	0,5 Nm	0,5 Nm
<b>Power supply</b>	KNX bus	KNX bus	KNX bus
<b>Power consumption KNX bus typ.</b>	< 0,25 W	< 0,25 W	< 0,25 W
<b>Operation temperature range</b>	0 ... 45 °C	0 ... 45 °C	0 ... 45 °C
<b>Enclosure</b>	IP20	IP20	IP20
<b>Dimensions MDRC (Space Units)</b>	4 SU	8 SU	12 SU

\* total current carrying capacity neighbouring outputs max. 32 A

\*\* low voltage halogen lamps with electronic transformer

**Exemplary circuit diagram AKI-0816.04**

