MDT Switch Actuator 4/8/12-fold with current measurement, MDRC

Version		
AMI-0416.03	Switch Actuator 4 fold	4 SU MDRC, 16/20 A, 230 V AC, C-load, industry, 200 µF, current measurement
AMI-0816.03	Switch Actuator 8 fold	8 SU MDRC, 16/20 A, 230 V AC, C-load, industry, 200 µF, current measurement
AMI-1216.03	Switch Actuator 12 fold	12 SU MDRC, 16/20 A, 230 V AC, C-load, industry, 200 µF, current measurement

The channels of the MDT switch actuator are switched independently of each other via bistable relays. Manual operation is possible via the buttons on the actuator.

Each output can be individually programmed via the ETS. Logical links, threshold functions, status feedback, lock functions, central switching functions as well as comprehensive time functions such as on/off delays and staircase lighting functions are available for selection. Scene functions are also available.

The switch actuator enables current measurement per channel as well as measurement of the total current. Depending on the setting, the measured values can be sent to the KNX bus in different data formats (mA / A / W / kW). In addition, the actuator has an operating hours meter / service count down timer. The energy consumption (Wh / kWh) can be measured with the integrated meter function. The power is calculated via a factor to be set from voltage and cos φ. In the event of a mains voltage failure, all relays maintain their current switching position. In the event of a bus voltage failure or a return, the switching positions of the relays can be programmed individually for each channel.

The switch actuator is intended for fixed mounting on a 35 mm DIN rail in power distribution in dry indoor spaces.

The MDT switch actuator is commissioned using the ETS software.
The product application is available at www.mdt.de/downloads.html and in the ETS online catalogue.

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

AMI-0416.03
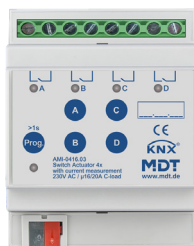
AMI-0816.03

- **Comprehensive application**
- **Integrated True RMS current measurement (current, kWh)**
- **Current measurement range 10 mA to 20 A**
- **Integrated energy consumption meter function (Wh / kWh)**
- **Fast reaction < 1 s at Master/Slave operation**
- Push Button for manual operation and LED indicator for each channel
- Time functions (switch-on/switch-off delay, staircase light function)
- **Threshold switch function and Consumption threshold value**
- Logical linking of binary data, 8 scenes per channel
- Operating hours meter
- Extended status functions (inverted, cyclic, when locked)
- Priority / forced operation with automatic release time
- Adjustable behaviour on bus voltage failure / -return
- All L-connections separated,
  4 mm² / 2 x 2,5 mm² connection terminals

MDT Switch Actuator AMI

Technical data	AMI-0416.03 AMI-0816.03 AMI-1216.03		
Number of outputs	4	8	12
Current measurement range	10 mA ... 20 A		
Measurement inaccuracy	2 %		
Sampling rate	2000 Measurements / 500 ms		
Output switching ratings			
Ohmic load	16/20 A *		
Capacitive load	200 µF		
Voltage	230 V AC		
Maximum inrush current	600 A / 150 µs 300 A / 600 µs		
Maximum lamp loads			
Incandescent lamps	3680 W		
Halogen lamps 230 V	3680 W		
Halogen lamps, electronic transformer	2000 W		
Fluorescent lamps, not compensated	3680 W		
Fluorescent lamps, parallel comp.	2500 W		
max. number of electronic transformers	28		
Output life expectancy (mechanical)	1.000.000		
Total current carrying capacity	64 A	96 A	128 A
Specification KNX interface	TP-256 with long frame support from 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 supply	KNX bus		
Power consumption KNX bus typ.	< 0,3 W	< 0,4 W	< 0,4 W
Operation temperature range	0 °C ... +45 °C		
Enclosure	IP20		
Dimensions MDRC (Space Units)	4 SU	8 SU	12 SU

* The total current of outputs next to each other is max. 32 A.

Example of connection AMI-0816.03