MDT Switch Actuator AMS/AMI

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

Version		
AMS-0416.02	Switch Actuator 4-fold	4SU MDRC, 230VAC, 16A, C-Load 140uF, current measurement
AMI-0416.02	Switch Actuator 4-fold	4SU MDRC, 230VAC, 16/20A, C-Load 200uF, current measurement
AMS-0816.02	Switch Actuator 8-fold	8SU MDRC, 230VAC, 16A, C-Load 140uF, current measurement
AMI-0816.02	Switch Actuator 8-fold	8SU MDRC, 230VAC, 16/20A, C-Load 200uF, current measurement
AMS-1216.02	Switch Actuator 12-fold	12SU MDRC, 230VAC, 16A, C-Load 140uF, current measurement
AMI-1216.02	Switch Actuator 12-fold	12SU MDRC, 230VAC, 16/20A, C-Load 200uF, current measurement

The MDT Switch Actuator receives KNX/EIB telegrams and switches up to 12 independent electrical loads . 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.

The outputs are parameterized 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.

The MDT Switch Actuator offers current measurement for each channel and measurement of the total current. In dependence on the parameterization the measured data can be transmit in different data formats (mA/A/kW) onto the KNX bus. Additionally the device provides an hour/service interval meter. The integrated counter allows to capture the power consumption easily. The active power is calculated by the voltage and the factor cos phi.

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 parameterization.

The MDT Switch Actuator is a modular installation device for fixed installation in dry rooms. It fits on DIN 35mm rails in power distribution boards or closed compact boxes. The MDT Switch Actuator has a separate power supply terminals for each channel.

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

AMS/AMI-04xx.02

AMS/AMI-08xx.02

- Production in Germany, certified according to ISO 9001
- NO and NC contact operation
- 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
- Hour meter
- Central switching functions and block functions
- Adjustable behaviour in case of bus voltage failure or return
- Each contact has an own supply phase
- **Integrated True RMS current measurement (current, kWh)**
- **Current measurement range 10mA-20A**
- **Fast reaction <1s at Master/Slave operation**
- **Integrated counter to capture power consumption (Wh/kWh)**
- Quick application download (long frame support for ETS5)
- Modular installation device for DIN 35mm rails
- Integrated bus coupling unit
- 3 years warranty

MDT technologies GmbH • 51766 Engelskirchen • Papiermühle 1
Tel.: +49-2263-880 • Fax: +49-2263-4588 • knx@mdt.de • www.mdt.de

Stand: 0217

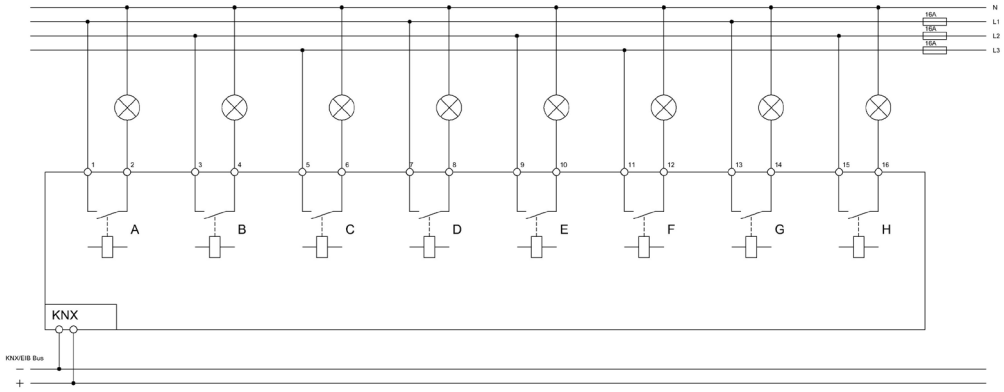
MDT Switch Actuator AMS/AMI

Technical Data	AMS-0416.02 AMS-0816.02 AMS-1216.02			AMI-0416.02 AMI-0816.02 AMI-1216.02		
Number of outputs	4	8	12	4	8	12
Current measurement range	10mA - 20A			10mA - 20A		
Measuring inaccuracy	2%			2%		
Sampling rate	2000 samples/500ms			2000 samples/500ms		
Output switching ratings						
Ohmic load	16A			16/20A*		
Capacitive load	140uF			200uF		
Voltage	230VAC			230VAC		
Maximum inrush current	600A/150µs 250A/600µs			600A/150µs 300A/600µs		
Maximum load						
Incandescent lamps	2500W			3680W		
Halogen lamps 230V	2500W			3680W		
Halogen lamps, electronic transformer**	1500W			2000W		
Fluorescent lamps, not compensated	2300W			3680W		
Fluorescent lamps, parallel comp.	1300W			2500W		
Max. number of electronic transformers	20			28		
Output life expectancy (mechanical)	1.000.000			1.000.000		
Specifikation KNX interface	TP-256 with long frame support for ETS5					
Available application software	ETS 4/5 Project file for ETS 3 (*.pr5)			ETS 4/5 Project file for ETS 3 (*.pr5)		
Permitted wire gauge						
Screw terminal	1 x 0,5 - 4,0mm² solid core / finely stranded 2 x 0,5 - 2,5mm² solid core / finely stranded (no mix allowed)					
KNX busconnection terminal	0,8mm Ø, solid core			0,8mm Ø, solid core		
Torque screw terminal	0,5Nm			0,5Nm		
Power supply	KNX bus			KNX bus		
Power consumption KNX bus typ.	< 0,3W	< 0,4W	< 0,4W	< 0,3W	< 0,4W	< 0,4W
Operation temperature range	0 to + 45°C			0 to + 45°C		
Enclosure	IP 20			IP 20		
Dimensions MDRC (Space Units)	4SU	8SU	12SU	4SU	8SU	12SU

* total current carrying capacity neighbouring outputs max. 32A

** low voltage halogen lamps with electronic transformer

Examplary circuit diagram AMS/AMI-0816.02



MDT technologies GmbH • 51766 Engelskirchen • Papiermühle 1

Tel.: +49-2263-880 • Fax: +49-2263-4588 • knx@mdt.de • www.mdt.de

Stand: 0217