MDT Dimming Actuator

MDT Dimming Actuator 1/2/4-fold, MDRC

Version		
AKD-0201.01	Dimming Actuator 2-fold	4SU MDRC, 230VAC, 250W
AKD-0401.01	Dimming Actuator 4-fold	8SU MDRC, 230VAC, 250W
AKD-0103.01	Dimming Actuator 1-fold	4SU MDRC, 230VAC, 600W
AKD-0203.01	Dimming Actuator 2-fold	8SU MDRC, 230VAC, 600W
AKD-0410V.02	Control Device 4-fold	4TE MDRC, 1-10V, With RGBW functionality

The MDT Dimming Actuator receives KNX/EIB telegrams and dimms/switches up to 4 independent electrical loads. Each output can be operated manually via a push button.

The outputs are for switching and dimming incandescent lamps, HV halogen lamps, LV halogen lamps (with conventionel or suitable electronic transformers), dimmable energy saving lamps and LED lightning. Leading or trailing edge principle can be chosen. The device has an integrated shortcircuit and excess temperature protection plus softstart function (Dimming speed adjustable) to increase lamp life time.

Programmable performance after mains voltage failure, bus voltage failure or return.

The 1-10V MDT Control Device has embedded switching relays for 30 ECG/30W, 20 ECG/58W, 15 ECG/2x36W or 10ECG/2x58W. Each channel offers control voltage up to 30 electronic transformers (ECG).

The MDT Dimming 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.

For project design and commissioning of the MDT Dimming Actuator it is recommended to use the ETS.
Please download the application software at www.mdt.de/Downloads.html

AKD-0201.01

AKD-0410V.02

AKD-0401.01

- Production in Germany, certified according to ISO 9001
- **2W minimum load for LED lightning possible**
- Push Button and LED indicator for each channel
- For dimming and switching incandescent lamps, HV halogen lamps, LV halogen lamps (with conventional or suitable electronic transformers), dimmable energy saving lamps and LED lightning
- Dimming operation in leading or trailing edge
- Short circuit and temperature protection with alarm, softstart
- Time functions (swich-on/switch-off delay, staircase light function)
- Each contact has an own supply phase/neutral conductor
- Modular installation device for DIN 35mm rails
- 3 years warranty

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Stand: 0217

MDT Dimming Actuator

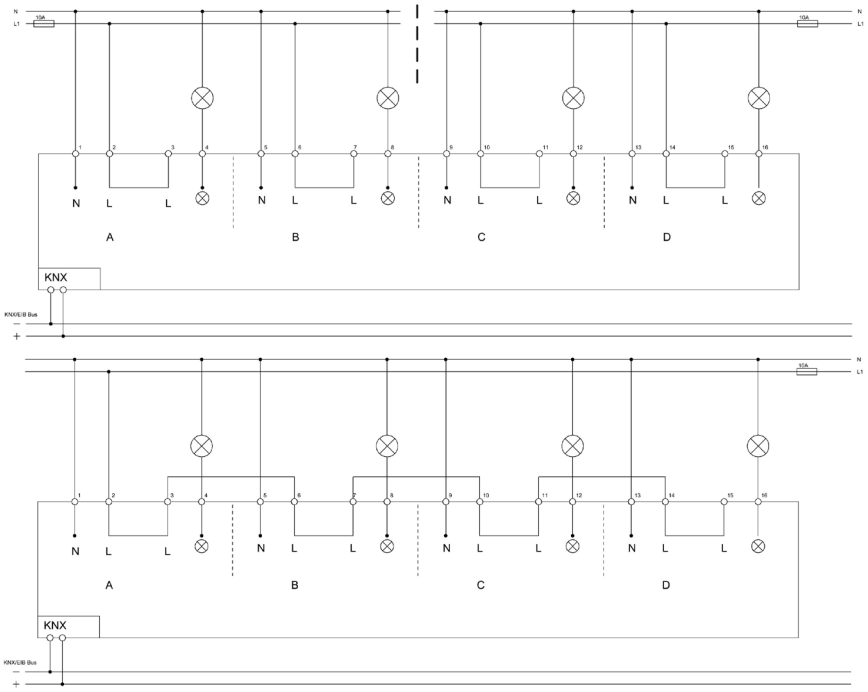
Technical Data	AKD-0201.01 AKD-0401.01	AKD-0103.01 AKD-0203.01	Technical Data	AKD-0410V.02
Number of outputs	2/4	1/2	**Number of outputs**	4
Switching voltage outputs	230VAC/50Hz	230VAC/50Hz	**Switching voltage outputs**	230VAC/50Hz
Max. fuse per channel	10A	10A	**Max. fuse per channel**	16A
			Switching voltage control outputs	1-10V
Maximum lamp load per channel*	250W	600W	**Maximum number of ECG**	30
Minimum lamp load per channel	2W**/12W	2W**/20W	**Maximum current switching relais**	16A/140uF
Permitted wire gauge			**Permitted wire gauge**	
Screw terminal	0,5 - 4,0mm² solid core 0,5 - 2,5mm² finely stranded		Screw terminal	0,5 - 4,0mm² solid core 0,5 - 2,5mm² finely stranded
KNX busconnection terminal	0,8mm Ø, solid core		KNX busconnection terminal	0,8mm Ø, solid core
Power supply	KNX bus	KNX bus	**Power supply**	KNX bus
Power consumption KNX bus typ.* **	< 0,3W	< 0,3W	**Power consumption*** **	< 0,3W
Power dissipation no load**	< 0,5W	< 0,5W		
Power dissipation nominal load**	< 4W	< 8W		
Operation temperature range	0 to + 45°C	0 to + 45°C	**Operation temperature range**	0 to + 45°C
Enclosure	IP 20	IP 20	**Enclosure**	IP 20
Dimensions MDRC (Space Units)	4/8SU	4/8SU	**Dimensions MDRC (Space Units)**	4SU

* Maximum load for dimmable energy saving lamps is 80W (AKD-xx01.01) or 200W (AKD-xx03.01)
Maximum load for dimmable LED lamps is, depending on the LED lamp manufacturer, 25-80W (AKD-xx01.01) or 60-200W (AKD-xx03.01)
** Minimum load for dimmable LED lamps is 2W, depending on the LED lamp manufacturer. Correct function of the LED lamps has to be checked before installation.
*** Power consumption from KNX Bus
**** Maximum power dissipation for each channel

Important assembly note:

- Conventionel transformers must be fused on primary side with adequate fuse according to the size of the transformator.
- The AC power line has to be connected separately to each Dimming Actuator. Connecting of several devices is not allowed.
- The neutral line has to be connected separately to each channel. Do not bypass directly on the screw terminals.

Examplary circuit diagram AKD-0401.01



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