

## 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 dims/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 conventional 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 ETS3f/ETS4 or later. Please download the application software at [www.mdt.de/Downloads.html](http://www.mdt.de/Downloads.html)

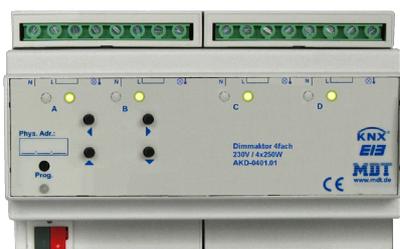
AKD-0201.01



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
- Characteristic dimming curve selectable
- Short circuit and temperature protection with alarm, softstart
- Time functions (switch-on/switch-off delay, staircase light function)
- Each contact has an own supply phase/neutral conductor
- Modular installation device for DIN 35mm rails
- Integrated bus coupling unit
- 3 years warranty

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 - 4,0mm <sup>2</sup> solid core 0,5 - 2,5mm <sup>2</sup> finely stranded		Screw terminal	0,5 - 4,0mm <sup>2</sup> solid core 0,5 - 2,5mm <sup>2</sup> finely str.
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

Note: Dimming Actuators **AKD** have separate Power supply terminals for each channel. The channel outputs can not be bridged.

### Important assembly note:

- Conventional transformers must be fused on primary side with adequate fuse according to the size of the transformer.
- 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.

Exemplary circuit diagram AKD-0401.01

