

# **MDT Dimming Actuators**



#### MDT Dimming Actuator MRDC 1-fold/ 2-fold/ 4-fold

Version					
AKD-0201.01	Dimming Actuator 2-fold	Dimming Actuator 2-fold 4TE MRDC, 230VAC, 250W			
AKD-0401.01	Dimming Actuator 4-fold	8TE MRDC, 230VAC, 250W			
AKD-0103.01	Dimming Actuator 1-fold	4TE MRDC, 230VAC, 600W			
AKD-0203.01	Dimming Actuator 2-fold	8TE MRDC, 230VAC, 600W			
AKD-0410V.01	Control device 4-fold	4TE MRDC, 1-10V			

The MDT Dimming Actuators receive KNX/EIB telegrams and dimm/switch 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 to increase lamp life time.

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

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

The 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 Dimming Actuator it is recommended to use the ETS3f/ETS4 or later. Please download the application software at www.mdt.de\downloads.





AKD-0410V.01



AKD-0401.01



- production in Germany, certified according to ISO 9001
- modern design
- fully compatible to all KNX/EIB devices
- 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
- Modular installation device for DIN 35mm rails
- · Integrated bus coupling unit
- 3 years warranty



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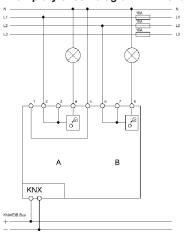
Technical Data	AKD-0201.01 AKD-0401.01	AKD-0103.01 AKD-0203.01	Technical Data	AKD-0410V.01
Configuration			Configuration	
Number of outputs	2/4	1/2	Number of outputs	4
Power supply			Power supply	
Supply voltage	230VAC / 50Hz	230VAC / 50Hz	Switched outputs	230VAC
Output voltage	230VAC	230VAC	Analog control outputs	1-10V
Power consumption	< 0,3W	< 0,3W	Power consumption	< 0,3W
Maximum lamp load *	250W	600W	Maximum number of ET	30
Minimum lamp load **	12W	20W	Maximum current switching relais	16A
max. fuse per channel	10A	10A	Maximum capacitive load	100uF
Permitted wire gauge			Permitted wire gauge	
Screw terminal	2,5mm²	2,5mm²	Screw terminal	2,5mm²
KNX busconnection terminal	0,8mm²	0,8mm²	KNX busconnection terminal	0,8mm²
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	4/8 TE	4/8 TE	Design	4 TE

Maximum load for dimmable energy saving lamps is 80W (AKD-xx01.01) or 200W (AKD-xx03.01)

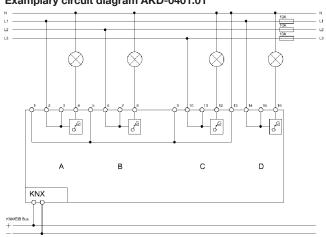
Maximum load for dimmable LED lamps is, depending on the LED lamp manufacturer, 25-80W (AKD-xx01.01) or 60-200W (AKD-xx03.01)

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

## Examplary circuit diagram AKD-0201.01



#### Examplary circuit diagram AKD-0401.01



## Important assembly note

• Conventionel transformers must be fused on primary side with adequate fuse according to the size of the transformator



 $<sup>^{\</sup>star\star}$  Minimum load for dimmable LED lamps is, depending on the LED lamp manufacturer, 4-12W