

Functional overview



Dimming Actuator [AKD-0x01.02]

The MDT AKD-0x01.02 Dimming Actuators dim up to 4 independent 230 V AC lighting circuits. With the extensive lighting functions, current LED lamps as well as conventional halogen lamps and transformers can be operated. For example: Convenient automatic and time-dependent dimming during the course of the day, or depending on the astronomical sunrise and sunset. The numerous diagnostic functions provide information on the power consumption and status of the individual lighting circuits. Up to 250 W is available per output, which can be connected in parallel up to 500 W for larger loads. In single-channel operation, separate circuits can be used for each channel.



Optimised for dimmable LED lights

Separate settings are available for each output to achieve the optimum dimming behaviour. The possibility of setting the load type separately for each output allows for example, the dimmable recessed spots with LED to be dimmed up and down just as smoothly as the halogen lighting above the dining table. The different load types can be operated both in leading-edge and trailing-edge. The selection of different dimming curves per channel and the possibility of limiting the dimming range offer further individual parameters to get the most out of the lights used.

Automatic time dependent dimming and Day/Night Object

"The right brightness at any time." For this purpose the MDT Dimming Actuators dim to the desired brightness at defined times or automatically after sunrise and sunset. For example, user defined brightness values can be parameterised for night, the morning hours, the day and the evening hours. As example: If the lighting is switched on in the morning hours at 30%, it is dimmed gently over time to the next parameterised brightness value until the lighting is switched off again. Manual intervention is possible at any time if required. Alternatively, the light can be switched depending on the "day/night object", for example at night with only 5% and during the day with 80% brightness.

Comprehensive application

In addition to the basic functions such as switching, relative dimming, absolute dimming, status, staircase light function, lock function and scenes, the application of the MDT dimming actuators provides a variety of other useful functions. These include for example the separately adjustable behaviour for day and night. Different dimming speeds, the switch-on behaviour and the switch-on and switch-off speed (soft start) can be parameterised globally and at channel level.

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Active power meter and lamp test

The active power can be measured channel by channel and the consumption recorded via the active power meter. The integrated lamp test provides important plain text information on the load of the individual output via the diagnostic object already during commissioning.

Single operation/ parallel operation

The outputs of the MDT Dimming Actuators can be connected both in single and parallel operation.

Art.No.	Description	Single operation	Parallel operation
AKD-0201.02	Dimming Actuator 2-fold	2 x 250 W	1 x 500 W
AKD-0401.02	Dimming Actuator 4-fold	4 x 250 W	1 x 500 W + 2 x 250 W
			2 x 500 W

Integrated diagnostic function with plain text message

The diagnostic function provides comprehensive information about the connected lights. Error objects for overtemperature, overload/short circuit, mains error and load failure are available separately for each channel.

Updateable via DCA App

If necessary, the Dimming Actuator can be updated via the MDT Update Tool (DCA). The download is available free of charge at www.mdt.de and www.knx.org.

Long Frame Support

The MDT Dimming Actuator supports "long frames" (longer telegrams). These contain more user data per telegram, which significantly reduces the programming time of the actuators with the ETS.

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