

## MDT RGB LED Controller

|              |                     |                             |
|--------------|---------------------|-----------------------------|
| Version      |                     |                             |
| AKD-0324V.01 | RGB LED Controller  | For 12/24V RGB LED Stripes  |
| AKD-0424V.01 | RGBW LED Controller | For 12/24V RGBW LED Stripes |
| AKD-0224V.01 | LED Controller      | For white LED Stripes       |

The MDT LED Controller receives KNX/EIB telegrams and controls 12/24V RGB LED stripes.

These functions are available:

- Absolute and relative dimming (HSV and RGB)
- Scene function
- Random function
- Dimming speed and hold time programmable
- Predefined sequences (e.g. sunrise)
- Repeating of sequences
- Defining of colors
- Overcurrent supervision
- Overtemperature supervision
- Suitable for 12/24V LED Stripes, 3A for each color channel (Common Anode)
- Suitable for LED with constant voltage (CV)
- Relay output to control external LED power supply maximum switching current 16A, capacitive load max. 140µF
- Commissioning with ETS4/5

The MDT LED Controller is an installation device for installation in dry rooms.

For project design and commissioning of the MDT Controller it is recommended to use the ETS4/ETS5 or later.

Please download the application software at [www.mdt.de/Downloads.html](http://www.mdt.de/Downloads.html)

AKD-0324V.01



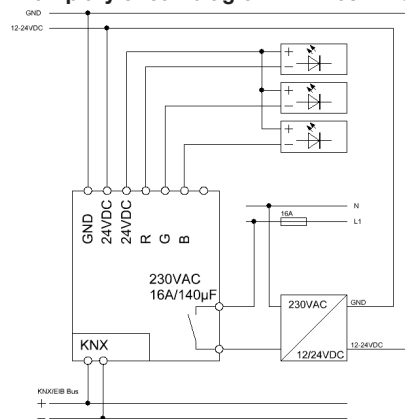
- Production in Germany, certified according to ISO 9001
- Absolute and relative dimming (HSV and RGB)
- Scene function
- Random function
- Dimming speed and hold time programmable
- Predefined sequences (e.g. sunrise)
- Repeating of sequences
- Defining of colors
- Overcurrent supervision
- Overtemperature supervision
- Suitable for 12/24V LED Stripes, 3A for each color channel (Common Anode)
- Suitable for LED with constant voltage (CV)
- Relay output to control external LED power supply maximum switching current 16A, capacitive load max. 140µF
- Commissioning with ETS4/5
- Dimensions (W x H x D): 46mm x 25mm x 113mm
- Integrated bus coupling unit
- 3 years warranty

| Technical Data                      | AKD-0324V.01  | AKD-0424V.01  | AKD-0224V.01  |
|-------------------------------------|---|---|---|
| Number of outputs                   | 3   | 4   | 2   |
| Dimming process*                    | PWM 600Hz   | PWM 600Hz   | PWM 600Hz   |
| Switching voltage outputs           | 230VAC/50Hz   | 230VAC/50Hz   | 230VAC/50Hz   |
| Max. fuse per channel               | 10A   | 10A   | 10A   |
| Maximum current switching relays    | 16A/140µF   | 16A/140µF   | 16A/140µF   |
| LED power supply                    | 12/24VDC +10%   | 12/24VDC +10%   | 12/24VDC +10%   |
| Max. current for each color channel | 3A  | 3A  | 3A  |
| Recommended length LED stripes**    | < 3m  | < 3m  | < 3m  |
| Max. length LED stripes**           | 10m   | 10m   | 10m   |
| Permitted wire gauge                |   |   |   |
| Screw terminal                      | 0,5 - 4,0mm <sup>2</sup> solid core<br>0,5 - 2,5mm <sup>2</sup> finely stranded | 0,5 - 4,0mm <sup>2</sup> solid core<br>0,5 - 2,5mm <sup>2</sup> finely stranded | 0,5 - 4,0mm <sup>2</sup> solid core<br>0,5 - 2,5mm <sup>2</sup> finely stranded |
| KNX busconnection terminal          | 0,8mm Ø, solid core   | 0,8mm Ø, solid core   | 0,8mm Ø, solid core   |
| Power supply                        | KNX bus   | KNX bus   | KNX bus   |
| Power consumption KNX bus typ.      | < 0,3W  | < 0,3W  | < 0,3W  |
| Operation temperature range         | 0 to + 45°C   | 0 to + 45°C   | 0 to + 45°C   |
| Enclosure                           | IP 20   | IP 20   | IP 20   |
| Dimensions (W x H x D)              | 46mm x 25mm x 113mm   | 46mm x 25mm x 113mm   | 46mm x 25mm x 113mm   |

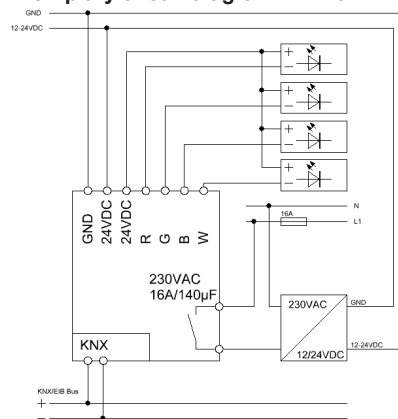
\* We suggest to use the LED Controller only to create light moods. If you use PWM devices for main light sensitive persons can be irritated by strobe effects or flickering.

\*\* The length of the single LED Stripes must be the the same for each actuator.

**Exemplary circuit diagram AKD-0324V.01**



**Exemplary circuit diagram AKD-0424V.01**



**Exemplary circuit diagram AKD-0224V.01**

