

## 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 CV LED Stripes, 3A for each color channel (Common Anode)
- Relay output to control external LED power supply maximum switching current 16A, capacitive load max. 140µF
- Commissioning with ETS 4/5

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

AKD-0324V.01



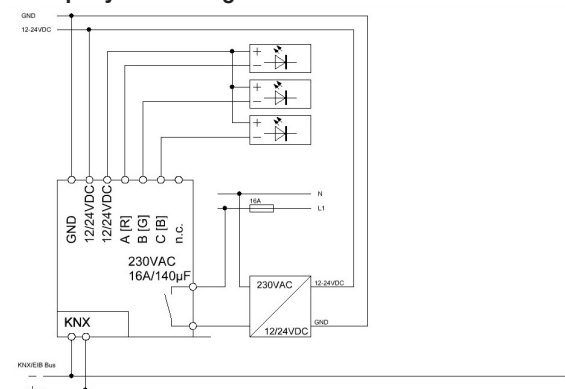
- Production in Germany, certified according to ISO 9001
- Absolute and relative dimming (HSV and RGB)
- Scene function
- Random function
- Dimming speed and hold time programmable
- Predefined sequences (e.g. sunrise)
- Repeating of sequences
- Defining of colors
- Overcurrent supervision
- Overtemperature supervision
- Suitable for 12/24V CV LED Stripes, 3A for each color channel (Common Anode)
- Relay output to control external LED power supply maximum switching current 16A, capacitive load max. 140µF
- Commissioning with ETS 4/5
- 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 relay output        | 230VAC/50Hz   | 230VAC/50Hz   | 230VAC/50Hz   |
| Max. fuse relay output                | 16A   | 16A   | 16A   |
| Maximum current relay output          | 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  |
| Max. current external power supply*** | 12A   | 12A   | 12A   |
| Recommended length supply line**      | < 3m, max. 10m  | < 3m, max. 10m  | < 3m, max. 10m  |
| Specification KNX interface           | TP-256  | TP-256  | TP-256  |
| Available application software        | ETS 4/5   | ETS 4/5   | ETS 4/5   |
| 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   |

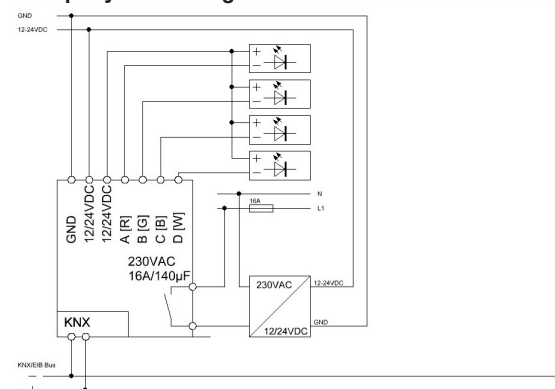
\* We suggest to use the LED Controller only to create light moods. If you use PWM devices for main light sensitive persons can be irritated by strobe effects or flickering.

\*\* The length of the single supply lines must be the same. \*\*\* It is required to use a power supply according to EN 61347-2-13.

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



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



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

