

AKD-0424R2.02

KNX LED Controller 4-channel, 2/4 A, RGBW, 2 SU MDRC



Product description:

The MDT LED controller AKD can be used to dim typical LED lamps with 12 V and 24 V constant voltage (CV). Whether single-colour LED spot, tunable white or RGB(W) strips, the outputs of the LED controllers are individually adjustable. The comprehensive setting options of the application enable customised lighting.

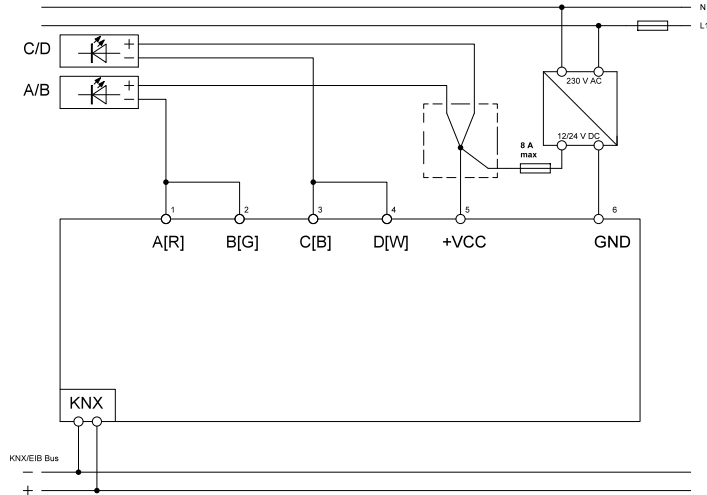
Product functions:

- **Comprehensive application**
- Absolute and relatives dimming for HSV colours and RGB
- **Tunable White colour temperature control**
- Selectable dimming curve, and PWM Frequency up to 1000 Hz
- General and individual Dimming speeds
- Individual and predefined sequences (e.g. TV simulator)
- Repetition of sequences for automatic colour control
- **Selectable load distribution: 4 channels each 2 A or 1 channel 3.5 A and 3 channels each 1.5 A**
- **Parallel operation of two channels with 4 A**
- **Operation modes: 4 x white, RGB, RGBW or 2 x Tunable White**
- **Automatic colour temperature control Dim2Warm**
- **Dynamic daylight control HCL (Human Centric Lighting)**
- **Automatic time dependent dimming**
- **Day/Night function**
- Over current- and temperature monitoring

Technical data:

| | | |
|---------------------------------|---|---|
| Device | Device type | AKD LED Controller |
| | Article Number | AKD-0424R2.02 |
| | EAN / GTIN | 4251916130084 |
| | Installation width | 2 SU / 36 mm |
| | Dimensions (H x W x D) | 90 x 36 x 65 mm |
| | Weight, gross (incl. packaging) | 0.101 kg |
| | Protection classification | IP20 |
| | Installation type | MDRC, DIN rail 35 mm |
| | Installation position | any |
| | Weight, net | 0.082 kg |
| Performance data | Nominal voltage U_n | 12 ... 24 V DC + 10 % |
| | Power dissipation of the device, typical | ≤ 4 W |
| Outputs | Number of outputs | 4 |
| | Dimming method | PWM 600/1000 Hz |
| Currents | Current per channel | 2 A |
| | Current per channel with load sharing | 1 channel 3.5 A + 3 channels 1.5 A each |
| | Current with parallel operation of channel A+B (C +D) | 4 A |
| | Permissible total current | 8 A |
| KNX | Nominal voltage KNX | 30 V DC SELV |
| | Voltage range KNX | 21 ... 31 V DC SELV |
| | Typical power consumption KNX bus | < 0,3 W |
| | KNX Medium | TP-256 with long frame support |
| | KNX Application | as of ETS 4 |
| Environmental conditions | Ambient operating temperature | 0 ... 45 °C |
| | Storage | -20 ... +55 °C |
| | Humidity | < 95 % |
| | Condensation permissible | No |
| Connections | Connection type | Screw terminal with slotted head |
| | Conductor cross section 1 x | 0,5 ... 2,5 mm ² |
| | Screw terminal tightening torque | 0.5 Nm |
| | KNX connection type | KNX terminal |
| | KNX cable cross section | 0.6 ... 0.8 mm, solid conductor |

Wiring diagram: Parallel circuit



Wiring diagram: single channel

