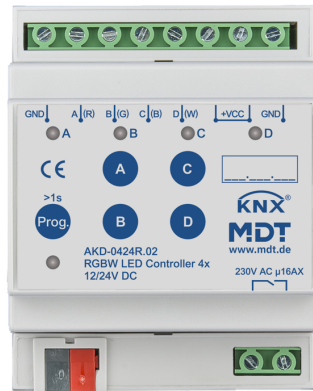


AKD-0424R.02

KNX LED Controller 4-channel, 4/8 A, RGBW, 4 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 4 A or 1 channel 7 A and 3 channels each 3 A**
- **Parallel operation of two channels with 8 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
- **Intelligent 16 A C-load relay output to switch the external LED Power supply**

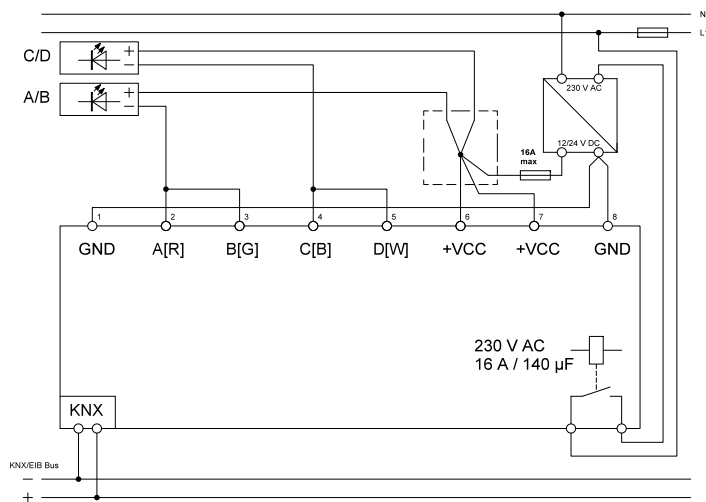
Technical data:

Device	Device type	AKD LED Controller
	Article Number	AKD-0424R.02
	EAN / GTIN	4251916130077
	Installation width	4 SU / 72 mm
	Dimensions (H x W x D)	90 x 72 x 65 mm
	Weight, gross (incl. packaging)	0.178 kg
	Protection classification	IP20
	Installation type	MDRC, DIN rail 35 mm
	Installation position	any
	Weight, net	0.148 kg
Performance data	Nominal voltage U_n	12 ... 24 V DC + 10 %
	Auxiliary relay	230 V AC / 50 Hz / 140 μ F / 16 A
	Mech. switching frequency	1.000.000
	Power dissipation of the device, typical	≤ 4 W
Outputs	Number of outputs	4
	Dimming method	PWM 600/1000 Hz
Currents	Current per channel	4 A
	Current per channel with load sharing	1 channel 7 A + 3 channels 3 A each
	Current with parallel operation of channel A+B (C +D)	8 A
	Permissible total current	16 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

Technical data:

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

