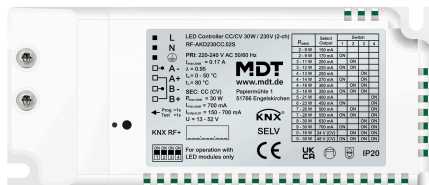


## RF-AKD230CC.02S

### KNX RF+ LED Controller CC/CV 30 W / 230 V 2-Channel, Secure



#### Product description:

The MDT LED Controller CC/CV 30 W is a compact LED controller with integrated power supply for constant current (CC) and constant voltage (CV). Two channels for connecting LED spots with a total output of 30 W. The operating modes "2x white" or "1x tunable white" are possible. Extensive KNX application with dynamic daylight control (HCL), time-dependent dimming and overcurrent/temperature monitoring.

#### Product functions:

- **KNX RF+ Protocol in System Mode**
- **MDT homeXpert compatible**
- **Optimised Hybrid dimming for improved light quality**
- **Dimming range from 0.2 % ... 100 %, Minimum current 0.7 mA**
- Perfect dim behaviour over the entire dimming range
- **Maximum output power: 30 W over both channels**
- **Output max. current 700 mA**
- Constant current selectable via DIP switch
- Constant voltage operation with 24 V or 48 V
- **Tunable White colour temperature control**
- Selectable dimming curve, individual sequences
- **Operation modes: 2 x white or 1 x Tunable White**
- **Automatic colour temperature control Dim2Warm**
- **Dynamic daylight control HCL (Human Centric Lighting)**
- **Automatic time dependent dimming**
- Over current- and temperature monitoring
- **Integrated compact power supply**
- **Secondary connection cable length up to 6 m**
- Dimensions (H x W x D): 54 x 129 x 25 mm

## Technical data:

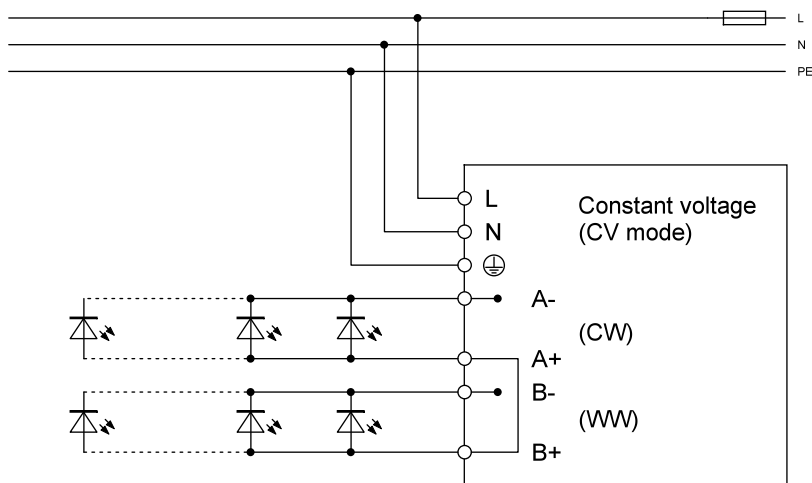
<b>Device</b>	Device type	RF+ Dimming Actuator
	Article Number	RF-AKD230CC.02S
	EAN / GTIN	4251916130923
	Dimensions (H x W x D)	54 x 129 x 25 mm
	Weight, gross (incl. packaging)	0.148 kg
	Protection classification	IP20
	Installation type	Surface mounted
	Installation position	any
	Transmission frequency	868.0 ... 868.6 MHz <sup>*1</sup>
	Range in the free field	150 m
	Output level	10 dBm
	Sensitivity	> -105 dBm
	Compatibility (mode)	KNX RF S-Mode
	Weight, net	0.124 kg
	<b>Performance data</b>	Supply voltage U
Power consumption		34 W (typ. @ 43 V / 700 mA)
<b>Outputs</b>	Number of outputs	2
	Dimming method	Hybrid dimming (PWM 1250 Hz @ 0.2 ... 10 %)
	Dimming range	0.2 ... 100 %, minimum current 0.7 mA
	Constant current range	14 settings, 150 ... 700 mA (dip switch) <sup>*2</sup>
	Constant voltage	24 V / 48 V (dip switch)
	Output voltage	13 ... 52 V DC <sup>*3</sup>
	Maximum supply current	700 mA
	Output power channel A+B	30 W
<b>KNX</b>	Nominal voltage KNX	30 V DC SELV
	Voltage range KNX	21 ... 31 V DC SELV
	Typical power consumption KNX bus	< 0,1 W
	KNX Medium	KNX RF 1.R
	KNX Application	as of ETS 5 (latest)
	KNX Secure	KNX Data Secure
<b>Environmental conditions</b>	Ambient operating temperature	0 ... 40 °C
	Storage	-40 ... +85 °C
	Humidity	< 95 %
	Condensation permissible	No

## Technical data:

<b>Connections</b>	Connection type	Screw terminal with slotted head
	Conductor cross section 1 x	0,5 ... 1,5 mm <sup>2</sup>
	Screw terminal tightening torque	0.5 Nm
	KNX connection type	KNX terminal
	Permissible cable length LED output	Maximum 6 m two-core cable per channel *4
	Stripping length	8,5 ... 9,5 mm
	KNX cable cross section	0.6 ... 0.8 mm, solid conductor

- \*1 The use of the 868 MHz frequency band is subject to national regulations. Before commissioning, ensure that the applicable legal requirements of the respective country are reviewed and complied with.
- \*2 The total current of channel A + B is limited to 700 mA. In the event of exceedance of the total maximum allowed current, an automatic balancing of the outputs will be conducted based on the set brightness of channel A and B.
- \*3 The used LED's must be compatible across the complete voltage range.
- \*4 The use of single wires is not permitted.

## Wiring diagram: Constant voltage



## Wiring diagram: Constant current

