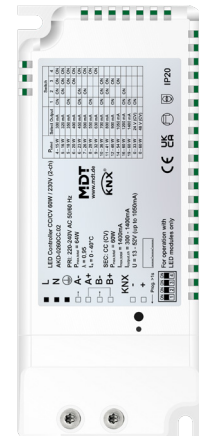


## LED Controller CC/CV 230 V, 2-channel [AKD-02x0CC.02]

The MDT LED Controller CC/CV has an integrated power supply for LED spotlights. In CC mode, currents of up to 700 mA (AKD-0230CC.02) / 1400 mA (AKD-0260CC.02) are possible. In CV mode, LED spotlights with a voltage of 24 V or 48 V can be used. The operating modes “2 x single channel” or “1 x tunable white” are possible. Extensive KNX application with Human Centric Lighting (HCL), time-dependent dimming and overcurrent/temperature monitoring.

### Hybrid dimming

Optimised hybrid dimming for better light quality. CC mode uses the best of both dimming methods and combines dimming via amplitude and pulse width modulation (PWM). This ensures an optimum dimming behaviour over the entire dimming range of 0.2 ... 100 %. A Selectable dimming curve (linear, MDT quadratic, semi-logarithmic and logarithmic) to optimise the dimming behaviour of connected LEDs.



AKD-0260CC.02

### Human Centric Lighting (HCL)

Human Centric Lighting (HCL), allows an automatic light control similar to natural light, where brightness and colour spectrum are accordingly adjusted at set times or based on the location in coordination with the sunrise and sunset. The right light level and brightness through the day is essential for the well-being, where, visually, emotionally and the non visual impact of light are taken into account by HCL.

### Automatic time-dependent dimming

In the operating mode “2 x single channel”, the light can be dimmed depending on the time or the sunrise/sunset of the location. Up to 10 levels can be set. For example, 10 % brightness at night, 100 % during the day and 60 % in the evening. When the light is already switched on, a smooth transition between the light levels is given. The steps can be adjusted as required. Time-dependent dimming can be overridden at any time.

### Dim2Warm

This function can be used to simulate the dimming of conventional light bulbs. Bright light has a colder and dark light a warmer colour tone. The colour temperatures and brightness values can be individually adjusted. (Requires Tunable White LEDs)

## Lamp test and diagnosis

The lamp test informs about the load and the status of the outputs via a 14-byte object. Double safety by checking the DIP switch position in the application programme. If the DIP switch setting differs from the parameters in the application programme, the channels are prevented from being switched on, thus protecting the LED lamps from overcurrent/overvoltage.

## Lock and forced guidance function

Two lock or forced guidance functions can be set for each channel. These can be set as 1-bit, 2-bit or 1-byte objects and execute different actions when lock and unlock.

## Scenes

Up to 8 scenes with different actions can be set for each channel. These can be, for example, the activation/deactivation of HCL, switch-on/switch-off commands, sequences, locking or dimming values.

## Bit Scenes

Up to four 1-bit scenes with different actions can be set for each channel. 1-bit scenes can, for example, activate HCL, send switch-on/switch-off commands, start sequences, set locks or dimming values.

## Sequences

Two sequences per channel can be used for presence simulation, as an example. Sequences contain up to 5 actions and can optionally be started in an endless loop. The behaviour after a sequence can be set, for example, after sequence 1, sequence 2, time-dependent dimming or HCL can be started.

## (Extended) switch-on/switch-off behaviour

The dimming speeds (relative and absolute), the switch-on and switch-off speed and the minimum/maximum brightness can be set separately for day and night.

Example of extended switch-on behaviour at day:

- Switch-on behaviour = time-dependent dimming
- Switch on again = Adjustable value 100 %

## Staircase light function

By pressing the light push-button several times, the time in the LED controller can be added up or restarted to extend the staircase light if required. The “Prewarning” function dims the light and warns before the staircase light is switched off.

## Updateable via DCA app

If necessary, the LED controller can be updated using the MDT update tool (DCA). The download is available free of charge at [www.mdt.de](http://www.mdt.de) and [www.knx.org](http://www.knx.org).

## Long Frame Support

The LED controller supports “long frames” (longer telegrams). These contain more data per telegram, which significantly reduces the programming time.