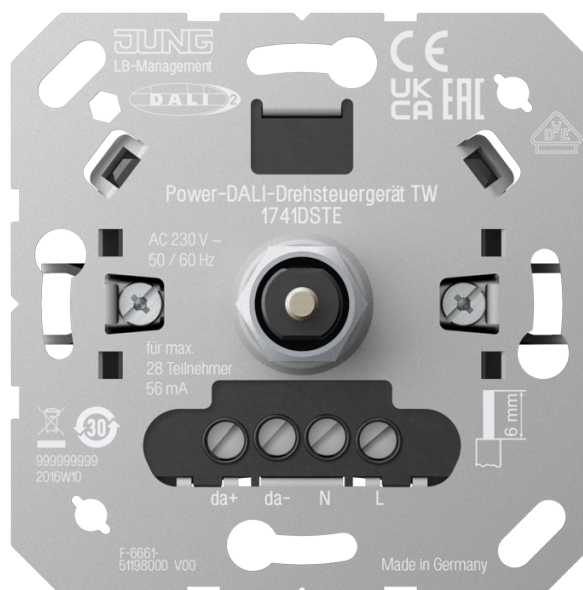


## Operating instructions

**Power DALI rotary controller TW**  
Art. no. 1741DSTE

**DALI rotary controller TW**  
Art. no. 1740DSTE



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## 1 Safety instructions



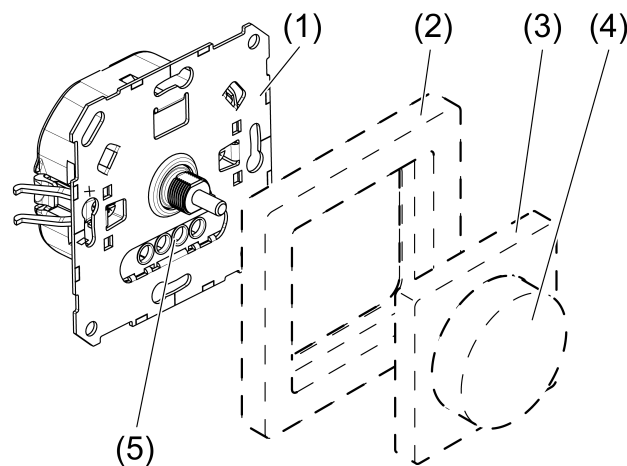
Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. Always disconnect before carrying out work on the device or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

This manual is an integral part of the product, and must remain with the end customer.

## 2 Device components



- (1) DALI rotary control device TW
- (2) Frame
- (3) Central plate
- (4) Control knob
- (5) Screw terminals

## 3 Function

### Intended use

- Brightness setting for luminaires with DALI interface
- Setting the colour temperature for luminaires with DALI Device Type 8 for Tunable White in accordance with IEC 62386-209
- Mounting in appliance box with dimensions according to DIN 49073

### Product characteristics

- The Power DALI rotary controller TW supplies the control current for up to 28 DALI subscribers.

- The DALI rotary controller TW takes power from the DALI voltage, which must be supplied by an external DALI power supply in accordance with IEC 62386-101.
  - Saving of colour temperature limiting values
  - Saving of basic brightness and switch-on brightness
- i** The device functions as a DALI-2 single-master and should not be combined with other DALI controllers.

### Behaviour after a mains voltage failure

When the mains voltage returns, the lighting is switched to the brightness and colour temperature present before the mains voltage failed.

## 4 Operation

- i** Operation always applies to all the connected subscribers, broadcast.

### Switching the light

- Press the control knob.

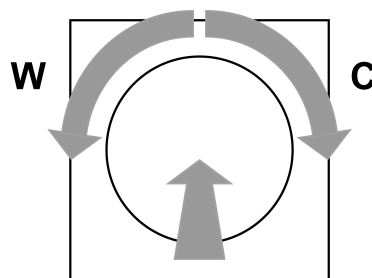
### Adjusting the brightness

- Turn the control knob.

Turn slowly = Brightness change small

Turn quickly = Brightness change great

### Setting the colour temperature



- Turn pressed control knob.  
Turn left (W) = warmer light (reduce colour temperature)  
Turn right (C) = colder light (increase colour temperature)

### Saving the switch-on brightness

If the lighting is not always to be switched on with the same brightness, then this can be saved as a switch-on brightness.

- Switch on light.
- Set required switch-on brightness.
- Press the control knob briefly twice in succession (double-click).

The lighting briefly switches to maximum brightness twice. The switch-on brightness is saved.

- i** If the lighting switches off after the double-click, then the time between the first and second presses was too long.

### Deleting the switch-on brightness

- Switch the light off.
- Press the control knob briefly twice in succession (double-click).  
After about 2 seconds the lighting switches to maximum brightness.

The switch-on brightness has been deleted. When the lighting is switched on, that brightness is set which existed the last time it was switched off.

## 5 Information for electrically skilled persons



### DANGER!

Mortal danger of electric shock.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts!

## 5.1 Mounting and electrical connection

### Connecting and fitting the device

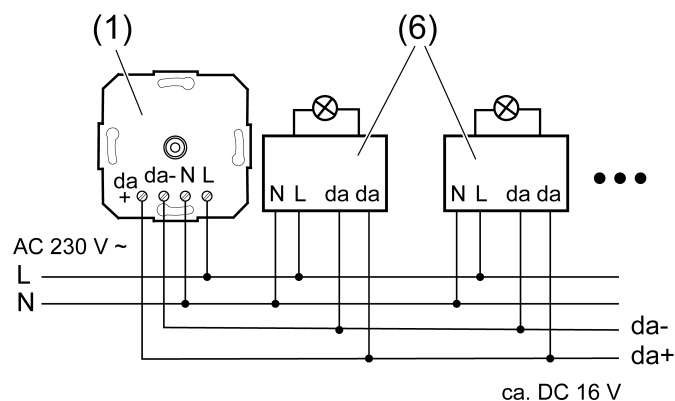


Image 1: Power DALI rotary control device TW wiring plan

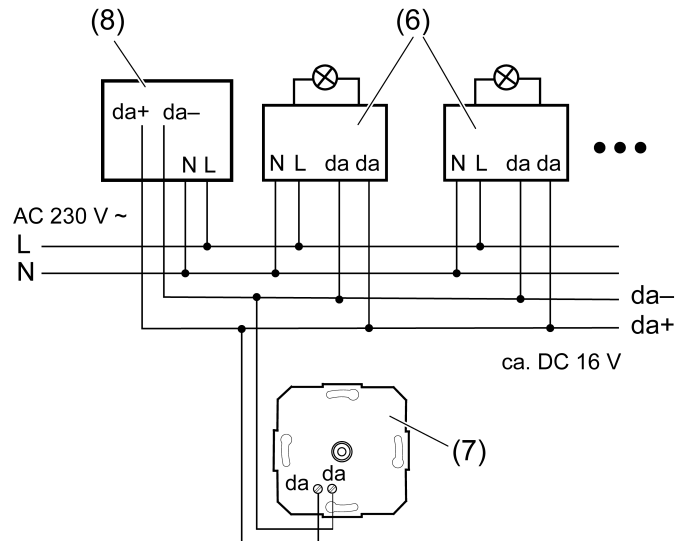


Image 2: DALI rotary control device TW wiring plan

- (1) Power DALI rotary control device TW
- (6) DALI subscriber e.g. DALI-EVG, DALI Device Type 8 for Turnable White
- (7) DALI rotary control device TW
- (8) DALI power supply

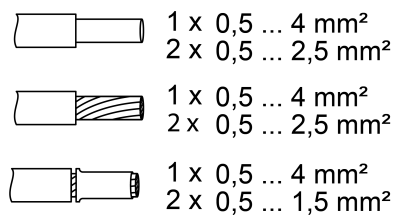


Image 3: Clampable conductor cross-section

- Connect the DALI rotary control device, DALI power supply and DALI EVG as shown in the wiring examples (see figure 1) and (see figure 2). In doing so, note the details of the EVG manufacturer and the clampable conductor cross-section (see figure 3).
- If multiple circuit breakers supply dangerous voltages to the device or load, couple the miniature circuit breakers or label them with a warning, to ensure disconnection is guaranteed.
- i** Ensure that the control cable is of the appropriate type, cross-section and routing for the VDE specifications for 250 V cable, control voltage has basic insulation.
- i** The control cable and load cable can be run in a shared cable, e.g. NYM J 5×1.5.
- i** The connected DALI subscribers may be operated on different phases.

## 5.2 Commissioning

### Saving a basic brightness

The basic brightness should be set to a state that does not directly lead to an increase in brightness when turning the DALI rotary control device at minimum brightness.

- Set lighting to minimum brightness.
- Turn the DALI rotary control device to the point where the brightness starts to increase.
- Press the control knob for longer than 10 seconds.

The lighting switches briefly off and on again. The basic brightness is saved.

### Saving colour temperature limiting values

The setting range of the DALI rotary control device can be adjusted to the colour temperature of the luminaire using this setting.

- i** When saving the colour temperature, you must ensure that the last turn of the pressed control knob (see figure ) is made to the left for the warmest light colour (W) and to the right for the coldest light colour (C).
- Turn pressed control knob to the left (W) until reaching the warmest light colour required, and hold it in this position for more than 10 seconds.  
The light switches off three times and then switches on again. The warmest light colour is saved.
- Turn pressed control knob to the right (C) until reaching the coldest light colour required, and hold it in this position for more than 10 seconds.  
The light switches off three times and then switches on again. The coldest light colour is saved.

### Deleting the basic brightness and colour temperature limiting values

- Switch the lighting off.
- Press the control knob for longer than 10 seconds.  
Briefly switch the lighting to maximum brightness and then off again. The stored values are deleted.

- i** DALI subscribers of different manufacturers may deviate from the acknowledgements given here.

## 6 Appendix

### 6.1 Technical data

Power DALI rotary controller TW

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Power consumption	max. 2 W
Ambient temperature	-5 ... +45 °C
Rated voltage DALI	DC 16 V (typ.)
Permitted bus power	max. 250 mA
Guaranteed bus power	56 mA
Short-circuit current	max. 61 mA
Colour temperature setting	2000 ... 10000 K
Number of DALI subscribers	max. 28

DALI rotary controller TW  
(external DALI power supply required in accordance with IEC 62386-101)

Rated voltage DALI	DC 16 V (typ.)
Current consumption	max. 2 mA
Ambient temperature	-5 ... +45 °C
Colour temperature setting	2000 ... 10000 K

## 6.2 Troubleshooting

### The colour temperature cannot be changed

Cause 1: Before saving the temperature limiting values, the control knob was turned in the wrong direction.

Delete basic brightness and colour temperature limiting values. Then repeat the save procedure.

Cause 2: The activated luminaire does not include a DALI Device Type 8 for Tunable White in accordance with IEC 62386-209.

Exchange DALI subscriber.

## 6.3 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

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