

Rotary potentiometer DALI with power supply Art. no.: 2998 Rotary potentiometer DALI, Tunable white Art. no.: 2997

Operating instructions

## 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 devise or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

These instructions are an integral part of the product, and must remain with the end customer.

## 2 Device components

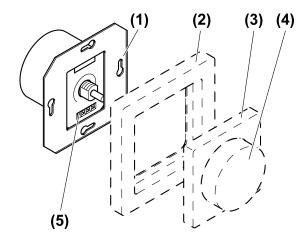


Figure 1

- (1) DALI potentiometer
- (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 according to DIN 49073

### **Product characteristics**

The DALI potentiometer with power supply unit supplies the control current for 26 DALI subscribers.



- Parallel switching of up to four DALI potentiometers with power supply unit with the option of supplying up to 104 DALI subscribers.
- The DALI potentiometer without a power supply unit is powered using the DALI voltage and serves as an additional control section.
- Saving of colour temperature limiting values and a basic or switch-on brightness.
- i To ensure fault-free operation, do not combine the device 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 can take place from multiple control sections and always applies to all connected subscribers (broadcast).

#### Switch light

Press the control knob.

### Adjust the brightness

Turn the control knob.

Turn slowly = Brightness change small Turn quickly = Brightness change great

### Setting colour temperature

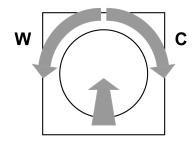


Figure 2

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

#### Save 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.

#### Delete 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.

# 5 Information for electrically skilled persons



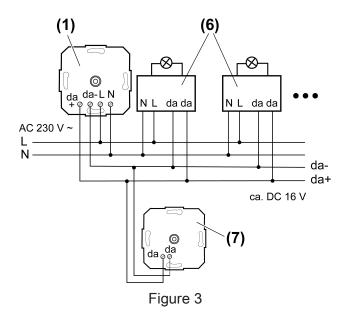
## DANGER!

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 Fitting and electrical connection

Connecting and fitting the device



- (1) DALI potentiometer with power supply unit
- (6) DALI subscriber e. g. DALI electrical ballast
- (7) DALI potentiometer without power supply unit
- Connect the DALI potentiometer and DALI electrical ballast according to the wiring example (Figure 3). In so doing, observe the data of the electrical ballast manufacturer.
- When switching multiple DALI potentiometers with a power supply unit in parallel, ensure correct polarity.
- 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 potentiometer at minimum brightness.



- Set lighting to minimum brightness.
- Turn the DALI potentiometer to the point that where the brightness begins 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 potentiometer can be adjusted to the colour temperature of the luminaire with this setting.

- i When saving the colour temperature, you must ensure that the last turn of the pressed control knob (Figure 2) 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

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.)
Output current	max. 52 mA
Colour temperature setting	2000 10000 K
Number of DALI subscribers	max. 26
Number of active DALI potentiometers	max. 4
Terminal-specific cable cross-section:	
single stranded	max. 4 mm <sup>2</sup>

# 6.2 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

Our products are under guarantee within the scope of the statutory provisions.

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.



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