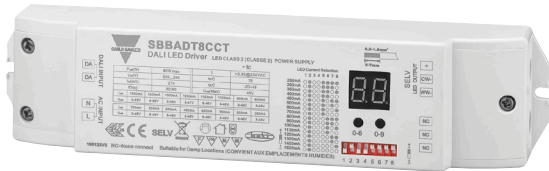


SBBADT8CCT



DALI driver for dimmable LED type 6 and tunable white Type 8



Benefits

- **Well-being and productivity.** Tunable White management help you mix warm and cool white light and light intensity so that you can mimic outdoor lighting conditions.
- **Energy and cost savings.** Dimming and constant light control optimise and save energy use.
- **Simple.** DALI devices can work straight out of the box for the simplest systems.
- **Flexible.** DALI devices can be reconfigured without having to touch the wiring.
- **Scalable.** DALI can function on small and large systems, with subnets in a large building.
- **Robust.** DALI works best with other DALI devices but can also be translated.
- **Recognised standard.** DALI is a recognised, widely used standard and is therefore compatible with a large range of ballasts.

Description

The SBBADT8CCT is a DALI driver for standard and tunable white LEDs. It controls warm white and cool white output via a single DALI address, providing high power factor and efficiency. The output current is programmed by means of dip-switches, while the address can be assigned either by a DALI master or manually by means of the push-button. It can be controlled by any DT8 DALI master: if connected to the UWP 3.0 platform, the DALI master SB2DALIT8230 must be used.

Applications

CARLO GAVAZZI tunable white solutions offer the freedom to create different ambiances in offices, schools, retail spaces, and healthcare environments.

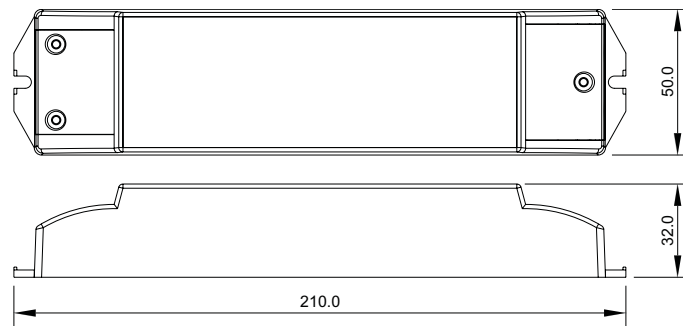
Main features

- 2 constant current output channels, total output power up to 50W
- Output current level selectable from 250mA to 1500mA
- Class II power supply, full isolated plastic case
- Built-in DALI interface, DALI DT6 and DT8 ballast
- Complies to IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2
- Color temperature adjustment according to DALI specifications of Device Type 8, Color Type Tc

Features

General


Dimensions (mm)	210 x 50 x 32
Weight	150 g
Protection degree	IP20
Rated impulse withstand voltage	Input to output 3.75 KVAC
Insulation resistance	Input to output 100M Ohms / 500 VDC / 25°C / 70% RH
MTBF	193.6 K hrs min. @ 230 VAC full load and 25°C ambient temperature



Environmental

Operating temperature	-20° to +45°C (-4° to 113°F)
Storage temperature	-40° to +80°C (-40° to 176°F)
Humidity (non-condensing)	10 to 95% RH

Compatibility and conformity

Electromagnetic compatibility (EMC) - immunity	EN61547, EN61000-4-2, 3, 4, 5, 6, 8, 11
Electromagnetic compatibility (EMC) - emissions	EN 55015, EN61000-3-2, EN61000-3-3
Approvals	
Safety standard	ENEC EN61347-1, EN61347-2-13 approved

Power Supply

Rated operational voltage	200 to 240 VAC
Frequency	50/60 Hz
Power factor	> 0.9
Total harmonic distortion (THD)	≤ 15% (@ full load / 230VAC)
Efficiency	87% @ 230 VAC full load
AC current (typ.)	0.27A @ 230VAC
Inrush current (typ.)	COLD START Max. 2A at 230VAC
Leakage current	< 0.5mA /230VAC

DALI input

Dimming interface	DALI Device Type 8
Dimming range	0%-100%
Dimming method	Pulse width modulation
Dimming curve	Logarithmic

DALI output

LED channel	2							
Selectable current	250 mA	300 mA	350 mA	400 mA	450 mA	500 mA	600 mA	700 mA
DC voltage range	8-48 V	8-48 V	8-48 V	8-48 V	8-48 V	8-48 V	8-48 V	8-48 V
Selectable current	800 mA	900 mA	1000 mA	1100 mA	1200 mA	1300 mA	1400 mA	1500 mA
DC voltage range	8-48 V	8-48 V	8-48 V	8-46 V	8-41 V	8-38 V	8-35 V	8-33 V
Current tolerance	±5%							
Rated power	Max. 50W							

DALI-2

Typical DALI-2 current	< 2 mA
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Connection Diagrams

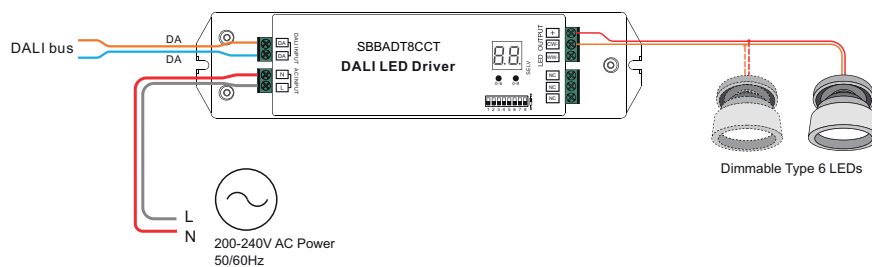


Fig. 1 DT6

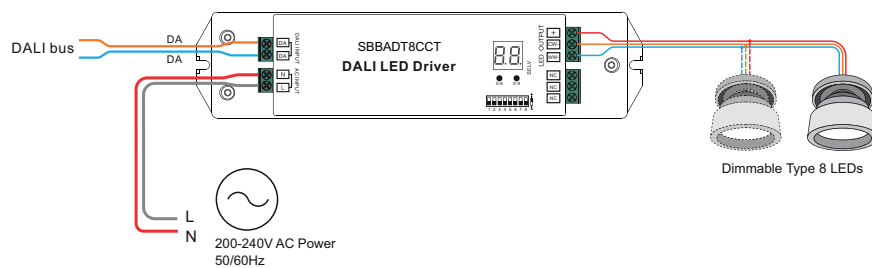


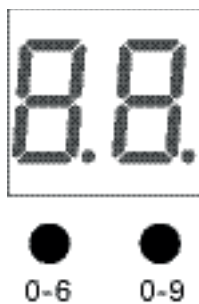
Fig. 2 DT8

Mode of operation

1. Output current

Select the correct output current before wiring to LED light by DIP Switches. Please make sure the power to the driver is disconnected before selection of the output current.

2. Set DALI address manually via buttons



2.1. Press and hold down any of the two buttons until numeric digital display flashes, then release the button.

2.2. Click any of the two buttons once to select a digit, click again to change the digit until the desired DALI address appears. Click first button to set “tens” position and second button to set “units” position. The address can be set from 00~63.

2.3. Then press and hold down any of the 2 buttons until the numeric digital display stops flashing to confirm the setting.

Note: DALI address can be manually assigned from 00-63-FF, by factory defaults, no DALI address is assigned for the dimmer, and the display shows **FF**. Setting DALI address as **FF** will reset the dimmer to factory defaults.

3. DALI address assigned by DALI masters

DALI address can also be assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations.

Note: The digital display will show **AU** when the DALI master is assigning addresses.

4. The address is selected

Once an address is selected, all two channels' address will be the same. For example, if the dimmer is addressed to 22 on the display then CH1 and CH2 will be the same address 22.

References

Further reading

Information	Document	Where to find it
Sx2WEB software manual	Sx tool manual	www.gavazziautomation.com/sx_tool_manual.pdf
SB2DALIT8230	Data sheet	www.gavazziautomation.com/SB2DALIT8230_DS_ENG.pdf

Order code

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