



## DALI CDC

### Datasheet

#### Circadian Daylight Control Device

DALI Control Device for automatic  
Tc-adjustment of tunable white  
luminaires

Art. Nr. 89453853  
Art. Nr. 89453853-HS

# DALI CDC Circadian Daylight Control Device

## Overview

- Control device for DALI DT8 luminaires (color mode Tc)
- biorythmic time-adjusted Tc reference value
- DALI real time clock
- daylight saving time (DST)
- configurable scene behaviour (firmware 1.5+)
- lightlevel curve (firmware 2.0+)
- the clock and the Tc characteristics over time can be configured with the help of the DALI Cockpit software tool
- The DALI CDC module must not be connected to the mains. It is supplied directly via the DALI signal line.
- Battery inside, clock is set to local time (GMT+1) as factory default
- Simple installation due to DALI double-clamp connector
- Types for backbox installation and dinrail mounting, suitable for installation in protection class II devices



## Specification, Characteristics

type	DALI CDC	
article number	89453853	89453853-HS

### DALI-Interface, supply: DA, DA

input type	DALI, supply
marking terminals	DA, DA
input voltage range	9,5Vdc ... 22,5Vdc (acc. to IEC62386)
max. current consumption DALI	5mA
max. power consumption	<100mW
number of DALI addresses	1

### insulation data:

impulse voltage category	II
pollution degree	2
rated insulation voltage	250V
insulation DALI / housing	reinforced isolation
Insulation test voltage DALI / housing	3000Vac

### environmental conditions::

storing and transportation temperature	-20°C ... +75°C
operational ambient temperature	0°C ... +50°C
rel. humidity, none condensing	15% ... 90%

**general data:**

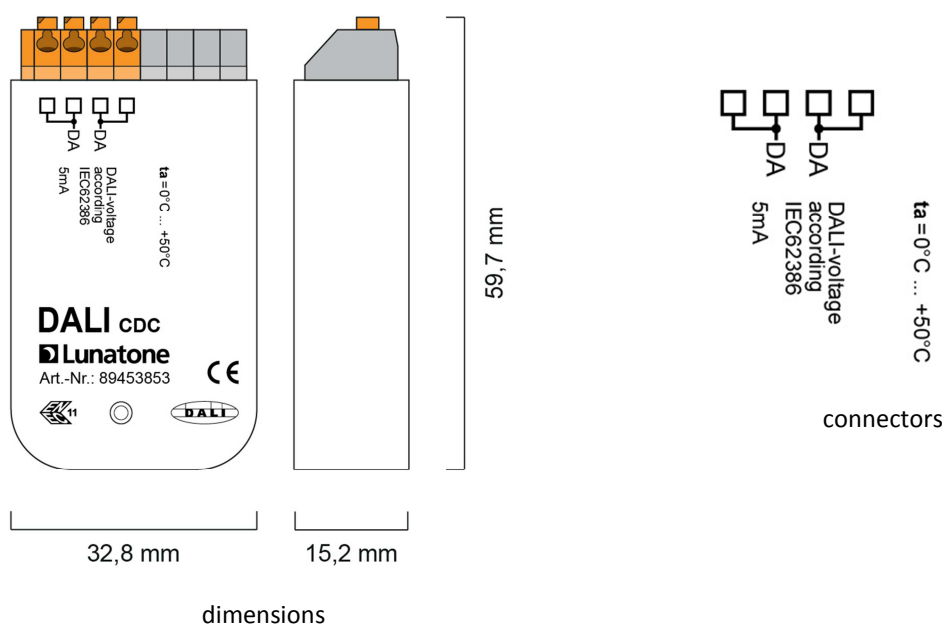
dimensions (l x w x h)	59mm x 33mm x 15mm	98mm x 17,5mm x 56mm
mounting	back box integration in class II devices	dinrail mounting integration in class II devices
rated max. temperature tc	50°C	
expected life time @tc	50.000 h	
protection class	II in intended use	
protection degree housing	IP40	
protection degree terminals	IP20	
real time clock (accuracy)	quarz based (~20ppm)	

**terminals:**

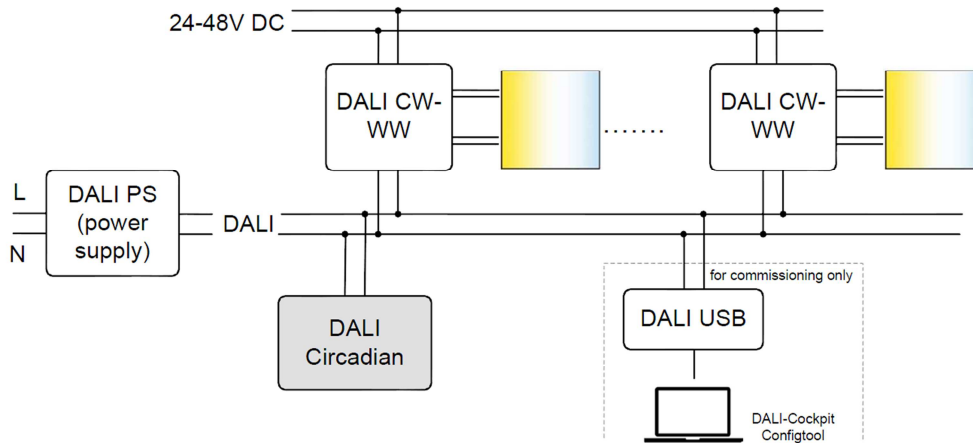
connection type	spring terminal connector	screw connector
wire size solid core	0,5 ... 1,5 mm <sup>2</sup> (AWG20 ... AWG16)	0,5 ... 2,5 mm <sup>2</sup> (AWG20 ... AWG14)
wire size fine wired	0,5 ... 1,5 mm <sup>2</sup> (AWG20 ...AWG16)	0,5 ... 2,5 mm <sup>2</sup> (AWG20 ...AWG14)
wire size using wire end ferrule	0,25 ... 1 mm <sup>2</sup>	0,25 ... 1,5 mm <sup>2</sup>
stripping length	8,5 ... 9,5 mm / 0,33 ... 0,37 inch	7 mm / 0,27 inch
locking torque	-	0,5Nm
release of wire	push button	open screw

**standards:**

EMC	EN 61547 EN 50015 / IEC CISPR15	
safety	EN 61347-2-11 EN 61347-1	
markings	ENEC-11, CE	CE







typical application

## Commissioning

- After installation the DALI CDC is ready for use
- The configuration can be done with the help of the DALI-Cockpit software (interface module to DALI-line required, e.g. DALI USB, DALI SCI RS232, DALI4Net)
- The DALI CDC is automatically detected during the addressing procedure and is then shown in the component tree
- The device can be selected – date and time can be set and the daylight curve can be configured.

Time	Tc[K]	Time	Tc[K]
0h	2700K	12h	5800K
1h	2700K	13h	5685K
2h	2700K	14h	5318K
3h	2700K	15h	4767K
4h	2700K	16h	4101K
5h	2700K	17h	3412K
6h	2700K	18h	2700K
7h	3412K	19h	2700K
8h	4101K	20h	2700K
9h	4767K	21h	2700K
10h	5318K	22h	2700K
11h	5685K	23h	2700K

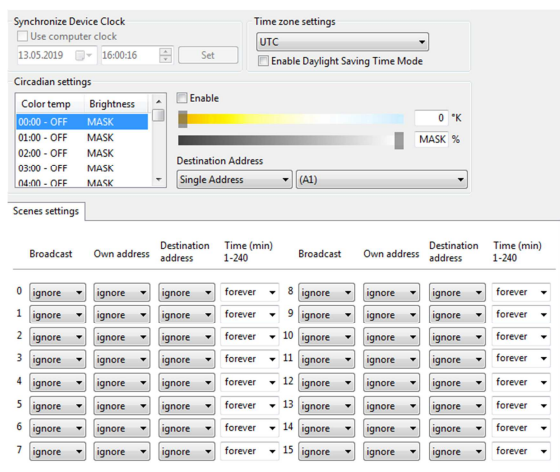
Up from firmware version 1.5 the reaction on a GOTO SCENE X command can be configured. The DALI CDC can be activated and deactivated by a scene recall or the command can just be ignored. The scene behaviour can be set up separately for the device address, the effective range and broadcast.

## Function

Each minute the DALI CDC module sends the Tc-value to the effective range. As effective range a single address, group address or broadcast can be used.

The Tc characteristic is based on the 24 set points (one for each hour). Between the set points the value is interpolated.

set point table (factory preset):



Date and time can be read using QUERY SCENE cmds:

QUERY SCENE 0 LEVEL: seconds

QUERY SCENE 1 LEVEL: minutes

QUERY SCENE 2 LEVEL: hours

QUERY SCENE 3 LEVEL: day of month

QUERY SCENE 4 LEVEL: month

QUERY SCENE 5 LEVEL: year-2000

## Purchase Information

Art.Nr. 89453853: DALI CDC, DALI control device for automatic adjustment of tunable light luminaires, back box installation and class II device integration

Art.Nr. 89453853-HS: DALI CDC, DALI control device for automatic adjustment of tunable light luminaires, dinrail mounting, built-in

## Additional Information and Equipment

Lunatone datasheets and manuals  
<http://lunatone.at/en/downloads/>

Lunatone DALI products  
<http://www.lunatone.at/en/>

## Contact

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## Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.