

DALI LED Power Supply

Datasheet Control Gear



LED Power Supply with DALI control
input (DT6)

constant voltage:

Art.Nr. 89453849-24V (CV, 24V, 25W)
(replaces: 89453849, 89453849-SD)

constant current:

Art.Nr. 89453849-250 (CC, 250mA)
Art.Nr. 89453849-350 (CC, 350mA)
Art.Nr. 89453849-500 (CC, 500mA)
Art.Nr. 89453849-700 (CC, 700mA)
Art.Nr. 89453849-1050 (CC, 1050mA)

DALI LED Power Supply Control Gear

Overview

- 1 channel LED Power Supply
- types for constant voltage (24V) and constant current (250mA, 350mA, 500mA, 700mA, 1050mA) available
- control via DALI-address (DT6)
- SwitchDim2: level control via switching inputs without DALI
- dimming range from 0.1%-100%
- pwm-frequency adjustable (122Hz/244Hz/488Hz/976Hz)
- suitable for integration in luminaires and remote ceiling
- supply voltage 230V AC
- CV-type: output 24V PWM, 1A max.
- CC-type: output with 250mA, 350mA, 500mA, 700mA or 1050mA
- low standby power consumption
- high efficiency
- configuration with DALI-Cockpit softwaretool and DALI USB interface
- overtemperature shutdown, integrated short circuit protection
- user-friendly factory default settings

Specification, Characteristics

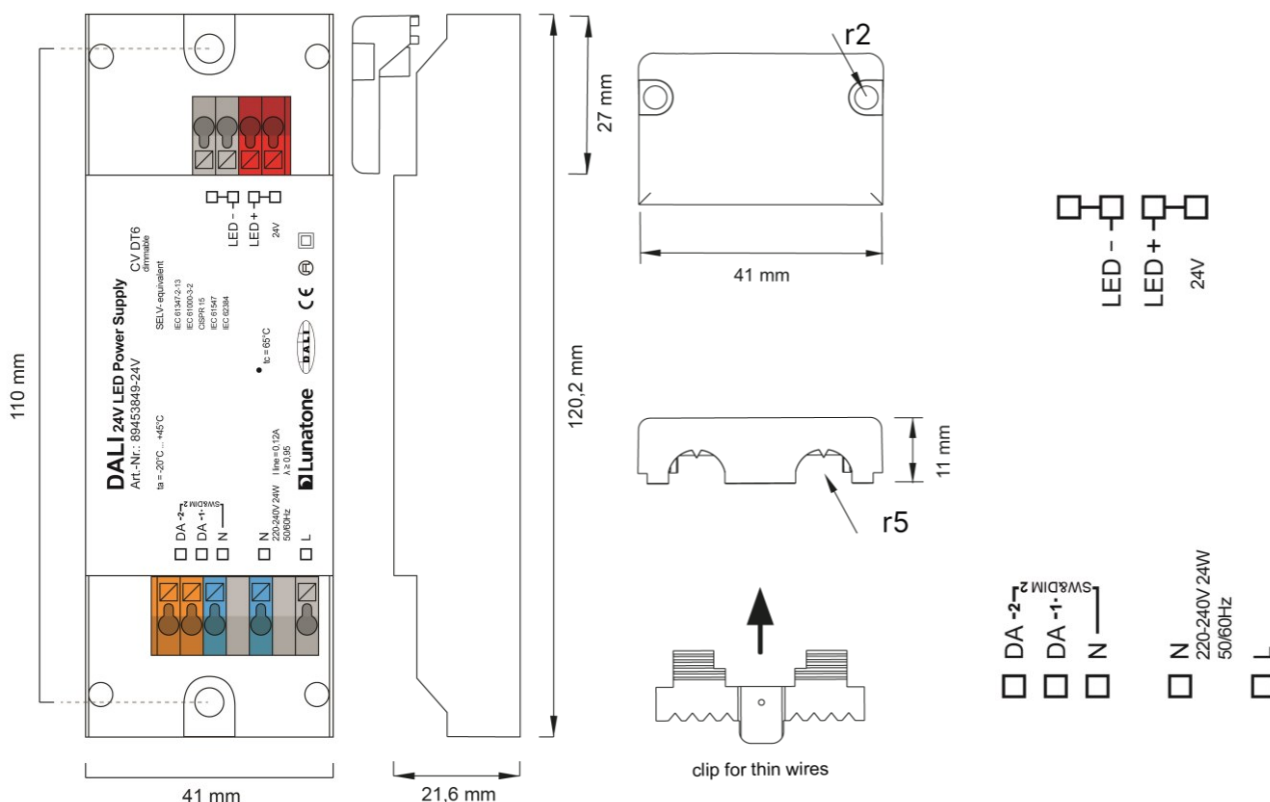
Constant Voltage (CV):

type	DALI 24V LED Power Supply CV DT6
article number	89453849-24V
electrical data:	
supply	220-240V AC / 50-60Hz, $I_{in}=0.12A$, power factor > 0.95, inrush current < 0.2A
control input	DALI or SwitchDim2
current consumption DALI	2mA
number of DALI addresses	1
output	24V \pm 0.5V PWM
galvanic isolation	SELV
max. output current	1A

type	DALI 24V LED Power Supply
article number	89453849-24V
technical data:	
power on behaviour	configurable via DALI: 0%-100% or last value
ambient temperature	-20°C to +45°C
expected lifetime (at tc<=65°C)	>50000h
protection class	IP20
max. connecting wire cross section	1.5 mm ²
dimensions (LxWxH)	120mmx41mmx22mm
mounting/housing	remote ceiling / integration in luminaires



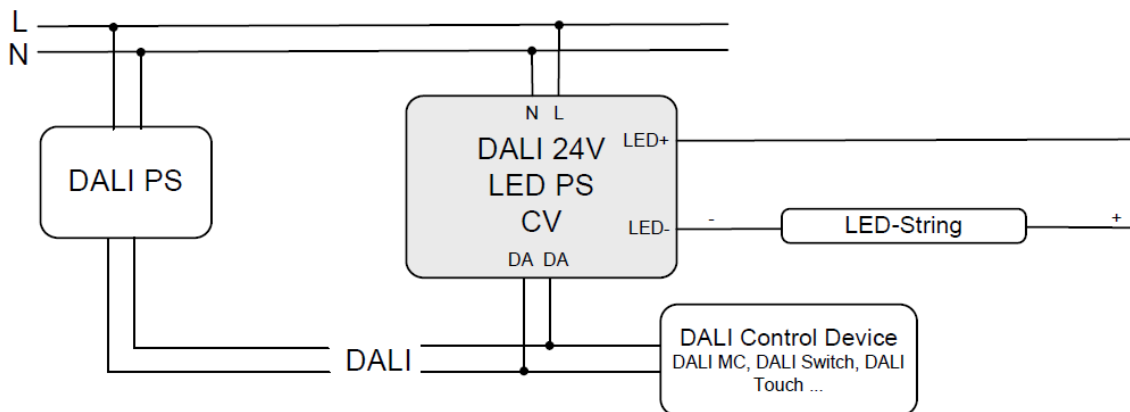
IEC 61347-2-13
 IEC 61000-3-2
 CISPR 15
 IEC 61547
 IEC 62384



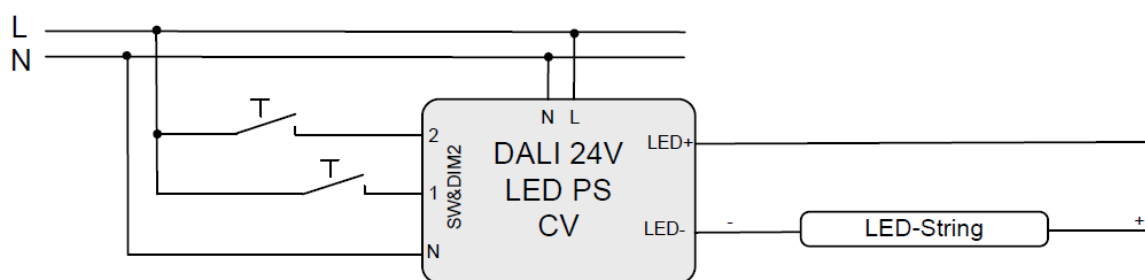
geometry CV

connection plan CV

RECOMMENDATION: Care should be taken on keeping cable lengths between dimmer and luminaires (Led-Strings) as short as possible. This kind of installation will minimize the influence of voltage drops.



typical application with DALI control



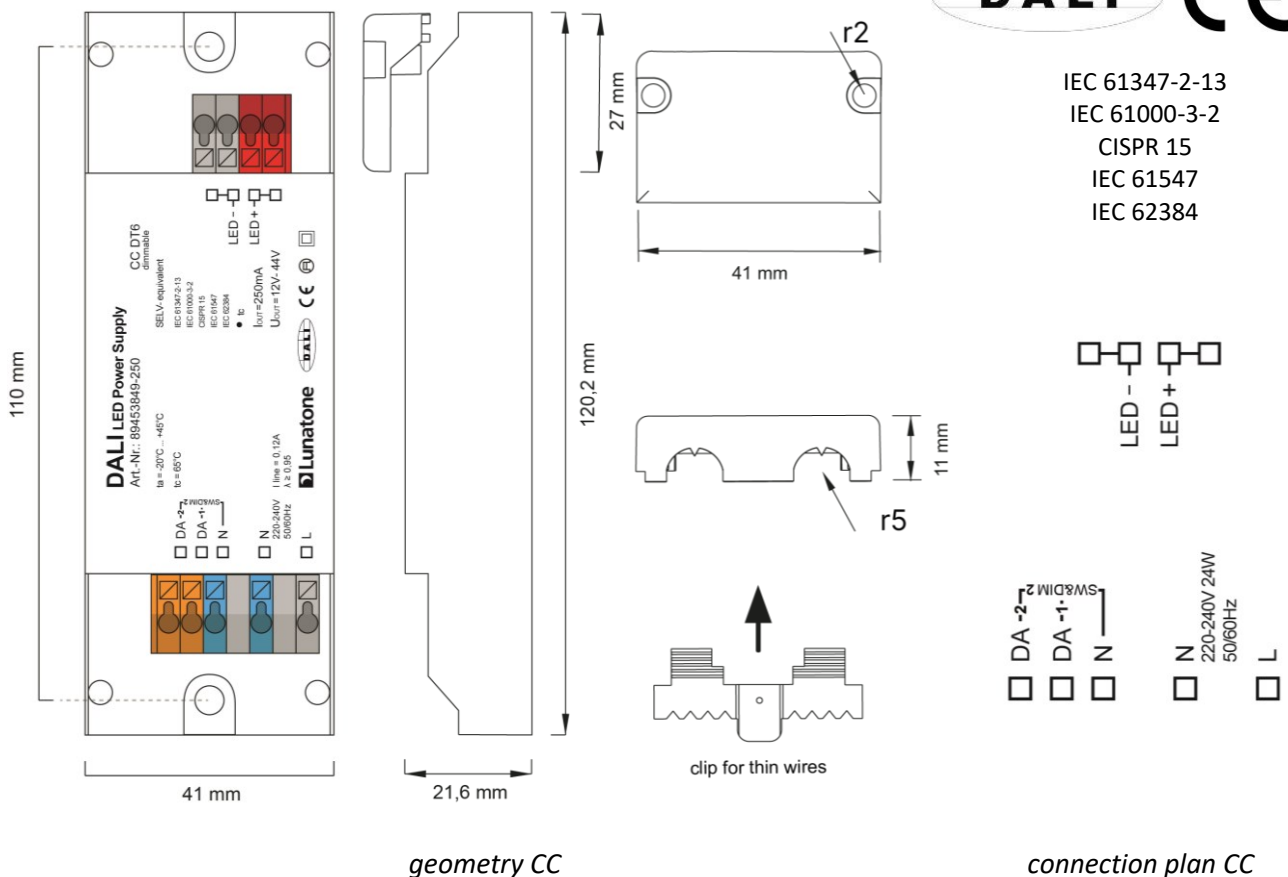
typical application with SwitchDim

Constant Current (CC):

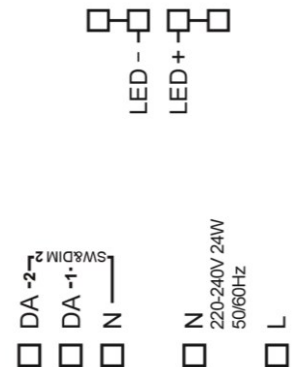
type	DALI LED Power Supply CC DT6				
article number	89453849-250	89453849-350	89453849-500	89453849-700	89453849-1050

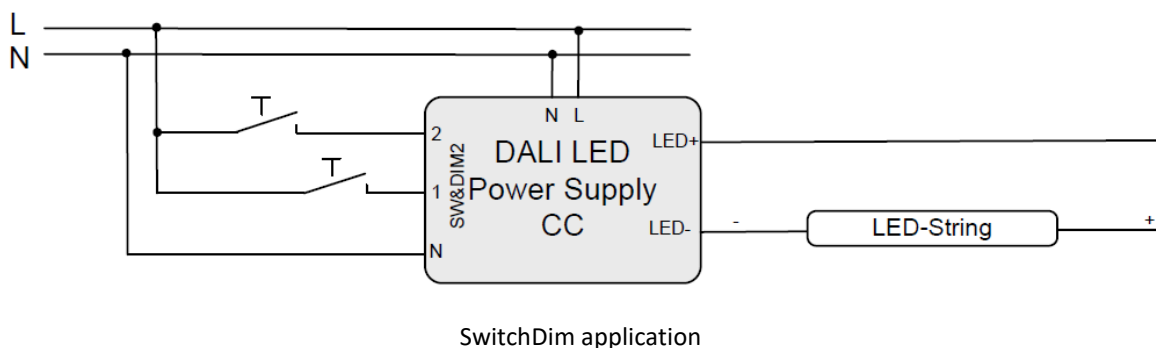
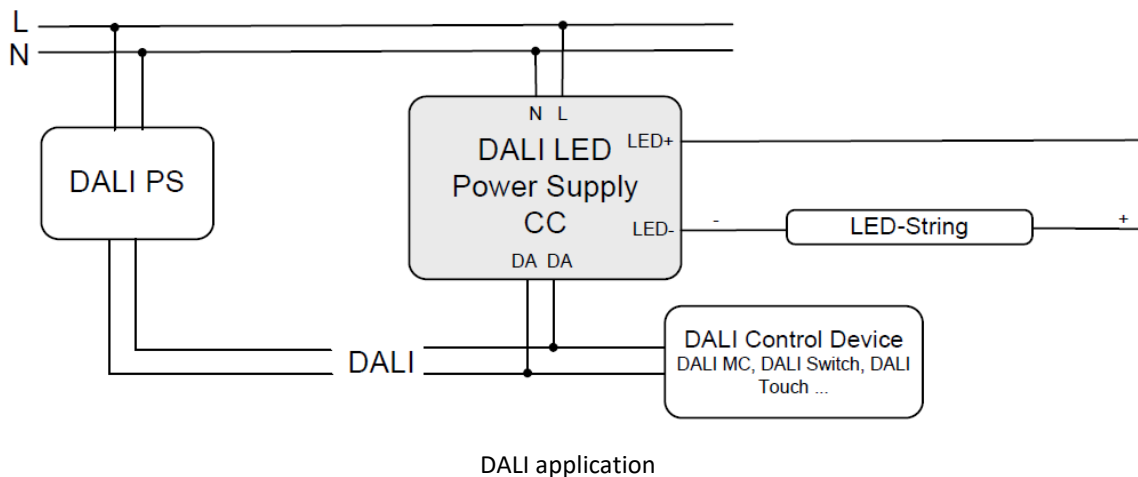
electrical data:					
supply	220-240V AC / 50-60Hz, $I_{in}=0.12A$, power factor > 0.95; inrush current < 0.2A				
control input	DALI or SwitchDim2				
current consumption DALI	2mA				
number of DALI addresses	1				
output current	250mA	350mA	500mA	700mA	1050mA
range of output voltage	12V-44V	12V-44V	12V-36V	12V-32V	12V-21V
galvanic isolation	SELV				

technical data:	
power on behaviour	configurable via DALI: 0%-100% or last value
ambient temperature	-20°C to +45°C
expected lifetime (at $t_c \leq 65^\circ C$)	>50000h
protection class	IP20
max. connecting wire cross section	1.5 mm ²
dimensions (LxWxH)	120mmx41mmx22mm
mounting/housing	remote ceiling / integration in luminaires



IEC 61347-2-13
IEC 61000-3-2
CISPR 15
IEC 61547
IEC 62384





DALI / SwitchDim2

The device can be controlled by different methods:

DALI

In this operating mode the light level of the device is controlled via its DALI address (Device Type 6).

SwitchDim2

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level

short press: On/Off

long press: dimming

SwD2: scene selector (short press)

Please note that prior versions provide an additional switch input marked as L'. This input has to be used in addition to the DALI-input and not instead of it.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by group address G0. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI Cockpit).

Summary of the factory default settings (delivery state):

SwitchDim2	SwD1: light level SwD2: scene selector
Min Level	0.1%

PowerOn Level	MASK (last value)
Fade Time	2 (1s)
Fade Rate	CC: 5 (89.4 steps/s) CV: 5 (63.3 steps/s)
PWM-frequency	CC: auto CV: 488Hz
Group control before initial addressing	G0

Purchase Information

Art. Nr. 89453849-24V: DALI 24V LED Power Supply, constant voltage (CV), 24V, 25W, I_{max}=1A, SwitchDim2, remote ceiling & integration in luminaires

Art. Nr. 89453849-250: DALI 15W LED Power Supply, constant current (CC), 250mA, U_{out}=12V-44V, SwitchDim2, remote ceiling & integration in luminaires

Art. Nr. 89453849-350: DALI 15W LED Power Supply, constant current (CC), 350mA, U_{out}=12V-44V, SwitchDim2, remote ceiling & integration in luminaires

Art. Nr. 89453849-500: DALI 20W LED Power Supply, constant current (CC), 500mA, U_{out}=12V-36V, SwitchDim2, remote ceiling & integration in luminaires

Art. Nr. 89453849-700: DALI 25W LED Power Supply, constant current (CC), 700mA, U_{out}=12V-32V, SwitchDim2, remote ceiling & integration in luminaires

Art. Nr. 89453849-1050: DALI 15W LED Power Supply, constant current (CC), 1050mA, U_{out}=12V-21V, SwitchDim2, remote ceiling & integration in luminaires

phase-out type:

Art. Nr. 89453849-SD: DALI 24V LED Power Supply, constant voltage (CV), 24V, 25W, I_{max}=1A, remote ceiling, extra switch-input

phase-out type:

Art. Nr. 89453849: DALI 24V LED Power Supply, constant voltage (CV), 24V, 25W, I_{max}=1A, remote ceiling

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Lunatone DALI products

<http://www.lunatone.at/en/>

Lunatone datasheets and manuals

<http://lunatone.at/en/downloads/>

Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com



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.