

0-10V to DALI Converter 30mA

Datasheet
Interface



Interface for converting 0-10V
control signals to DALI dim levels
with integrated DALI power supply

Art. Nr. 86468352-HS

0-10V to DALI Converter 30mA Interface

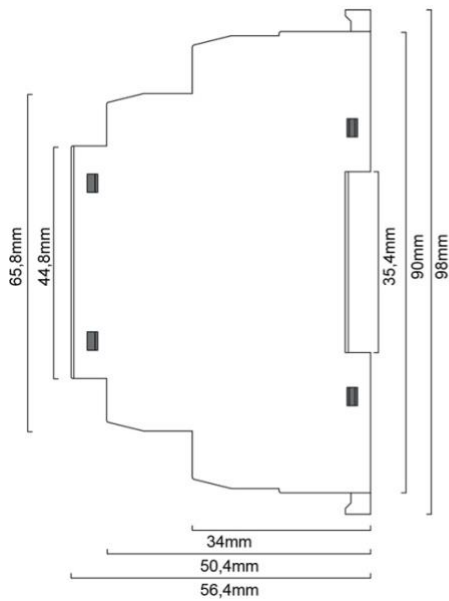
Overview

- Compact interface module for the conversion of 0-10V control signals to DALI dim levels
- The interface module provides a 30mA DALI power supply for up to 10 standard DALI ballasts, up to 64 ballasts controllable with the help of a DALI-Expander
- passive and active 0-10V input
- The converted value is sent broadcast on the DALI subnet
- A change in the 0-10V input voltage signal (>1%) is used as trigger event.
- The interface module requires a 12-24V power supply (e.g. 24V/300mA Art.Nr. 24166012-24HS)
- Easy set up of the dim characteristic with the help of jumpers
- **A galvanic isolation between the ballasts connected to the DALI-output (30mA) and the 0-10V signal input (and 24V supply input) can be realised with the help of a DALI-Expander.**

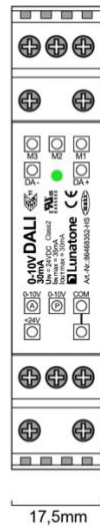


Specification, Characteristics

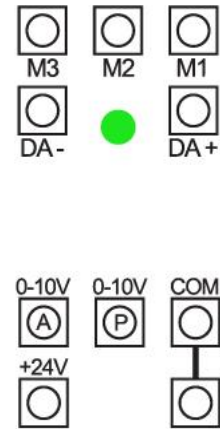
type	0-10V / DALI Converter
article number	86468352-HS
electrical data:	
supply voltage	12V-24V
typ. current consumption	4mA + current for DALI output
input	0-10V, passive or active
output	DALI I _{max} =30mA
function	signal converter, selection of dim characteristic with jumper
mechanical data:	
storing and transportation temperature	-20°C to +75°C
operating ambient temperature	-20°C to 60°C
protection class	IP20
maximum connecting wire cross section	0.5-2.5 mm ²
mounting	din rail
dimensions	98mm x 17.5mm x 56 mm
release of wire	open screw



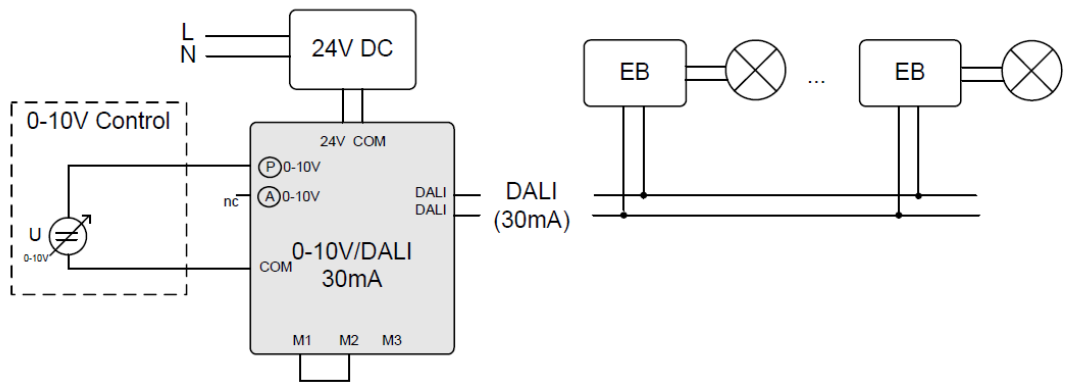
geometry



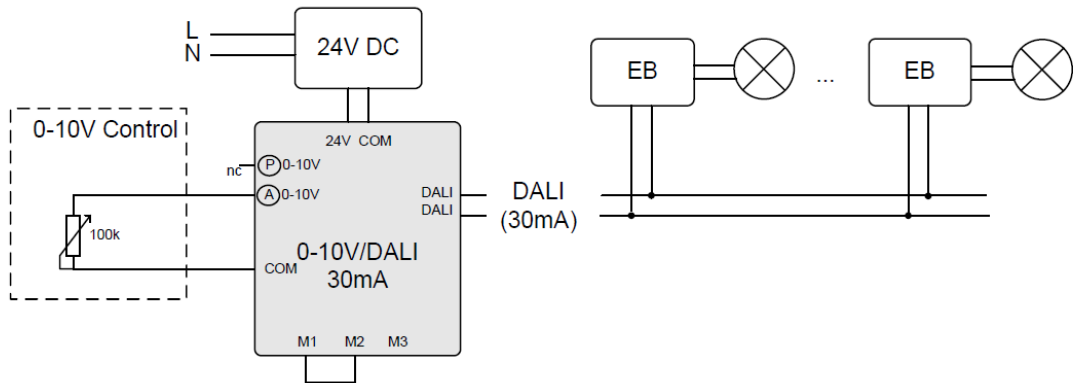
17,5mm



connection plan

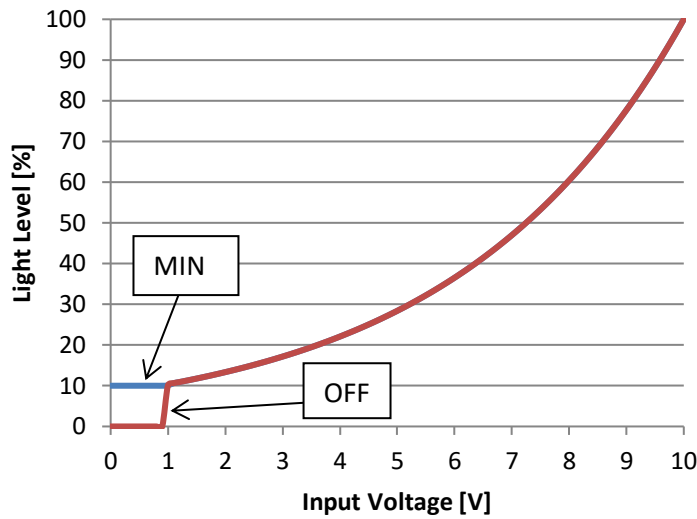


typical application with 0-10V voltage on input P (input passive, 0-10V control = source)



typical application with 100k potentiometer on input A (input active, 0-10V control = sink)

0-10V to DALI conversion



Conversion Curve:

The input voltage range of 1V-10V is converted to the light level range of the connected DALI ballast.

The input voltage is converted to either 1%-100% or 10% -100% light level

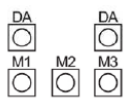
For a better visualisation only the characteristics of the 10% types are shown on the left.

ON/OFF:

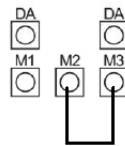
As behaviour below 1V the device can either switch OFF (red) or send the minimum level (blue).

The light level is the output power of a standard DALI-ballast (IEC62386-102) which is connected to the converter.

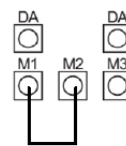
Dim Characteristic Selection by Jumper on M1 ... M3



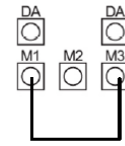
V1:
Dimming: 1%-100%
below 1V: OFF
(red characteristic)



V2:
Dimming: 10%-100%
below 1V: OFF
(red characteristic)

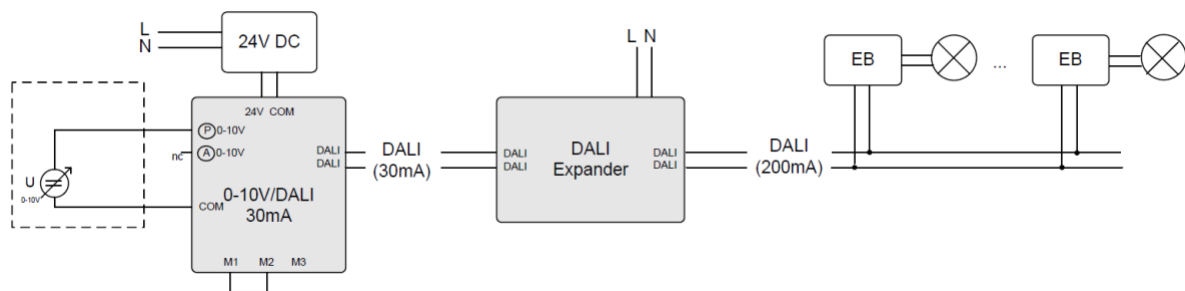


V3:
Dimming: 1%-100%
below 1V: Min (1%)
(blue characteristic)



V4:
Dimming: 10%-100%
below 1V: Min (10%)
(blue characteristic)

Application Example: Controlling up to 64 ballasts with DALI-Expander



Control of 64 DALI-luminaires with a 0-10V to DALI converter with the help of a DALI Expander (ArtNr: 89453847)

Notes UL

There is **no** electrical isolation between 24V, control input 0-10V and DALI. The 24V supply used has to have electrical isolation (Class2). If a separation between the control bus and DALI is necessary, this can be achieved with a Lunatone DALI Expander.

Il n'y a pas d'isolation électrique entre 24V, entrée de commande 0-10V et DALI.

L'alimentation 24 V utilisée doit avoir une isolation électrique (classe 2). Si une séparation entre le bus de commande et DALI est nécessaire, cela peut être réalisé avec un Lunatone DALI Expander.

Purchase Information

Art.Nr. 86468352-HS: 0-10V to DALI converter, internal 30mA DALI power supply, configurable dim characteristic, active and passive 0-10V input, din rail mounting

Accessories:

Art. Nr.: 24166012-24HS, PS 24V, 300mA: 24VDC/300mA power supply, dinrail, 1TE

Art.Nr.: 89453847, DALI Expander: DALI input 1 address to DALI broadcast output, DALI PS 200mA out, Sw&Dim input

Additional Information and Equipment

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

<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone DALI products

<https://www.lunatone.com/en/>

Lunatone datasheets and manuals

<https://www.lunatone.com/en/downloads-a-z/>

DALI-Expander

<https://www.lunatone.com/en/product/dali-expander/>



Contact

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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.