

## 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

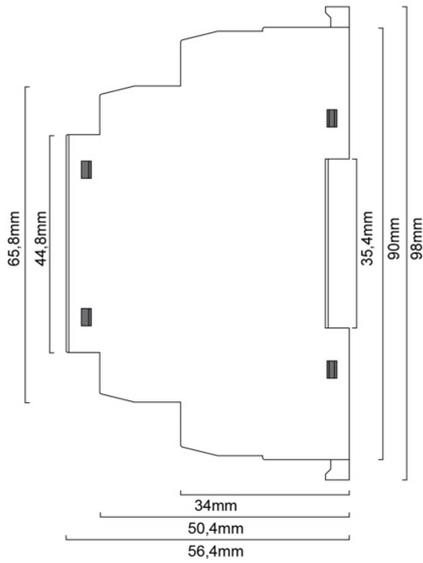
# 0-10V to DALI Converter 30mA Interface

## 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

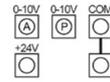
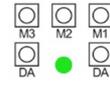
<b>type</b>	<b>0-10V / DALI Converter</b>
article number	86468352-HS
<b>electrical data:</b>	
supply voltage	12V-24V
typ. current consumption	4mA + current for DALI output
input	0-10V, passive or active
output	DALI I <sub>max</sub> =30mA
function	signal converter, selection of dim characteristic with jumper
<b>mechanical data:</b>	
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 <sup>2</sup>
mounting	din rail
dimensions	98mm x 17.5mm x 56 mm



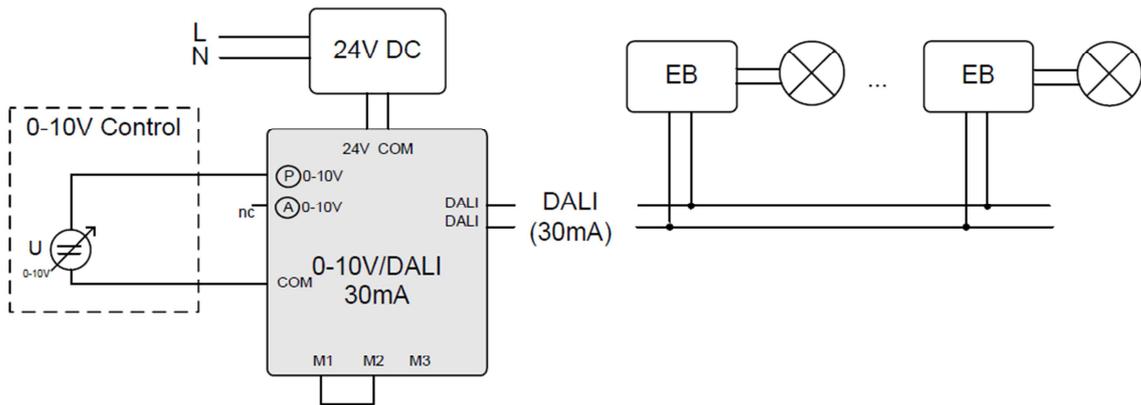
geometry



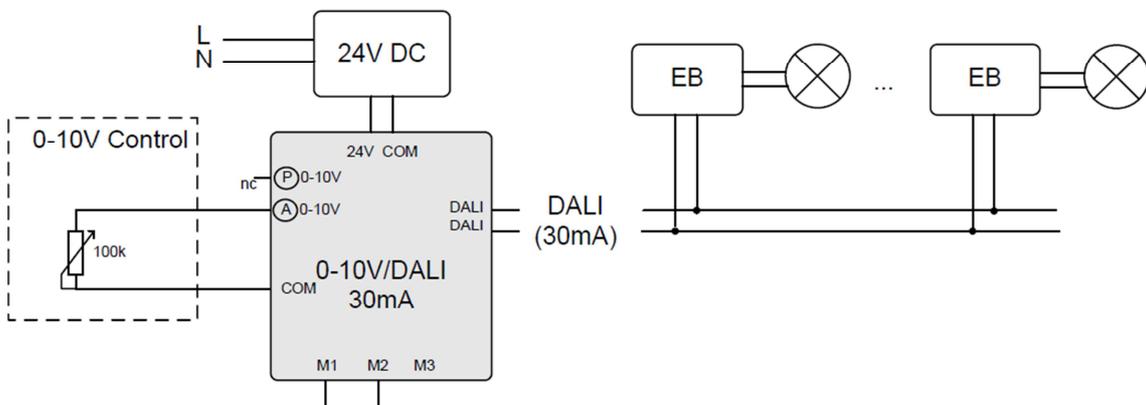
17,5mm



connection plan

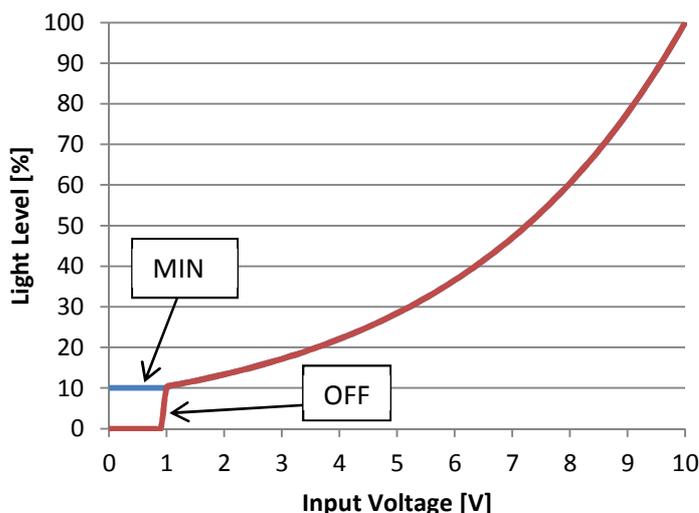


typical application with 0-10V voltage on input P (input passive, 0-10V control = source)



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

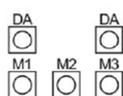
For a better visualisation only the characteristics of the 10% types are shown on the left.

### ON/OFF:

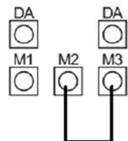
As behaviour below 1V the device can either switch OFF (red) or send the minimum level (blue).

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

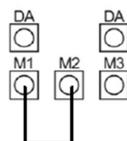
### Dim Characteristic Selection by Jumper on M1 ... M3



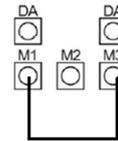
**V1:**  
Dimming: 1%-100%  
below 1V: OFF  
(red characteristic)



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

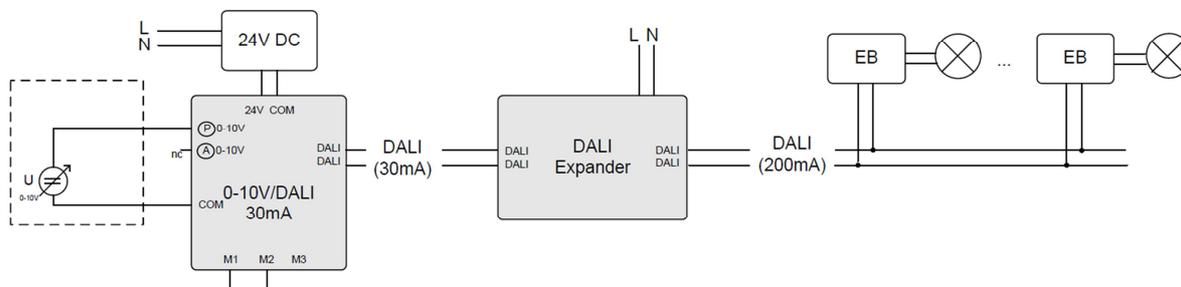


**V3:**  
Dimming: 1%-100%  
below 1V: Min (1%)  
(blue characteristic)



**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)

## 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,** 24VDC/300mA power supply, dinrail, 1TE

## 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](mailto:support@lunatone.com)

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[www.lunatone.com](http://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.