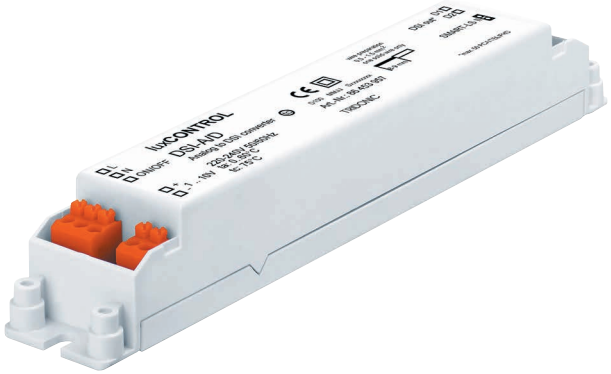
DSI-A/D

Converter for 1...10 V into DSI signal 1-channel for installation in luminaire

Product description

- Converter for converting analogue signals into DSI signals
- For connecting DSI devices in 1...10 V control systems
- For a maximum of 50 DSI devices
- Constant lighting control possible via terminal for SMART LS II
- On/off switching via separate switch input
- 5-year guarantee



Wiring diagrams and installation examples, page 3

RoHS

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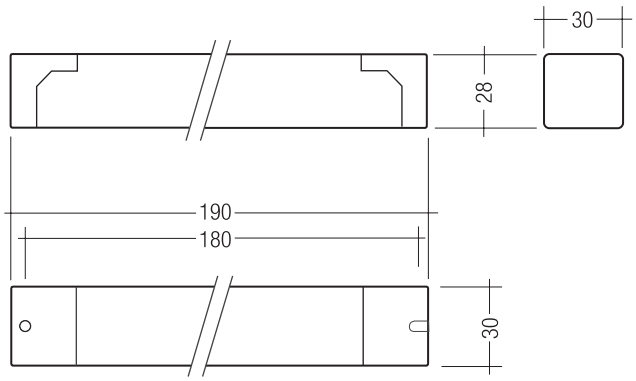
Technical data

Rated supply voltage	230 – 240 V
Mains frequency	50 / 60 Hz
Power	4 W
Ambient temperature ta	0 … +60 °C
Type of protection	IP20



Ordering data

Type	Article number	Packaging, carton	Weight per pc.
DSI-A/D	**28000850**	10 pc(s).	0.157 kg

Specific technical data

Type	Inputs				Outputs		
	Dimming	Dimming, potentiometer (optional)①	ON/OFF switch (220–240 V)	Ambient light sensor	Digital control line DSI	Control output per physical output (devices)	Maximum DSI cable length at 1.5 mm²
DSI-A/D	1 … 10 V	47 (≥47 ≤100) kΩ	1	1	1	50	100 m

① Potentiometer with linear characteristics, optimum: 47 kOhm, possible range: 47 – 100 kOhm; power ≥0,5 W.

1. Standards

1.1 Glow-wire test

according to EN 61347-1 passed.

2. Common

The DSI-A/D module converts an analogue 1–10 V signal into the digital DSI control signal. This enables PCA/TE one4all/PCD digital devices to be integrated in existing analogue control systems.

Operating devices connected can be adjusted for constant light by connecting a SMART LS II.

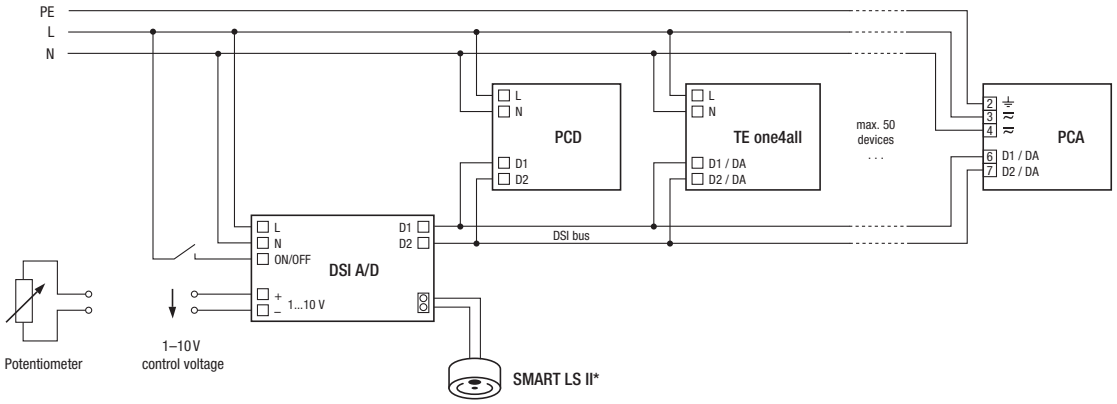
By connecting a SMART LS II the DSI-A/D can be used as a constant light control module.

This operation mode deactivates the analogue 1–10 V input.
ON/OFF switching via the ON/OFF input is possible.

- terminal cover and strain relief enclosed
- 5-year guarantee

3. Installation

3.1 Wiring



* is a SMART LS II sensor connected, the 1–10 V function is disabled.

4. Functions

If the 1-10 V input is open (unconnected) the lighting is set to maximum.

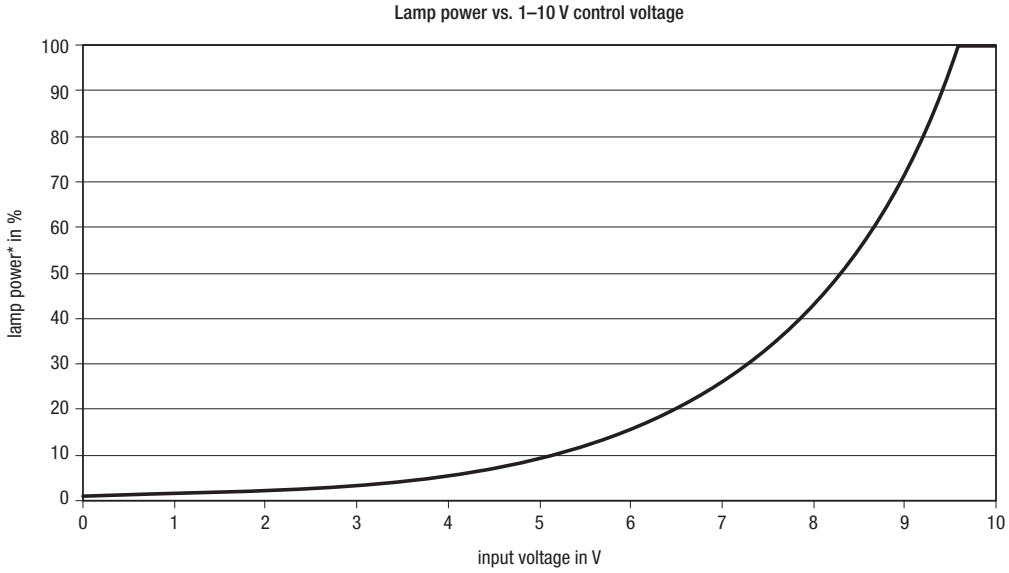
4.1 Control with passive potentiometers

To accurately adjust light levels it is recommended that you use a 47 kΩ potentiometer. If a 100 kΩ potentiometer is already in use, then install a resistor in parallel (68 kΩ, ≥ 0.5 W). Connect the 47 kΩ potentiometer only with a DSI A/D. The parallel wiring of the potentiometer is not allowed.

4.2 Control with a 1–10 V voltage source

The 1–10 V input is supplying a control current for operation with passive potentiometers. In the event of using an active voltage source please be aware that this source has to be able to sink a current of 2 mA to enable correct adjustment.

If the voltage source is not able to sink a 2 mA current it is possible to set a resistor (470 Ω, ≥ 0.5 W) in parallel. In this case the voltage source has to supply a minimum current of 20 mA to reach the maximum needed output voltage of +10 V.



* The lamp power changes logarithmic to dim according the eye sensitivity.

5. Miscellaneous

5.1 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Life-time declarations are informative and represent no warranty claim.
No warranty if device was opened.