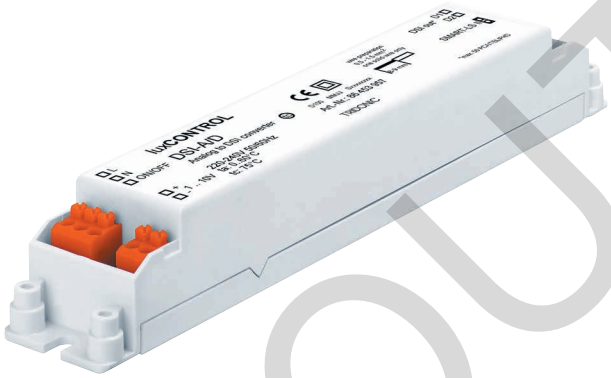
DSI-A/D

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

DSI-A/D

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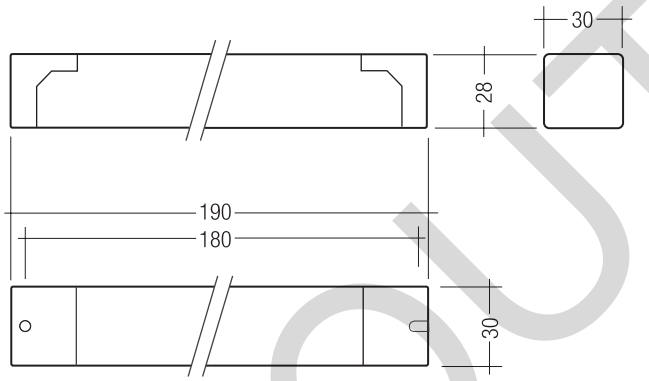
Technical data

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.

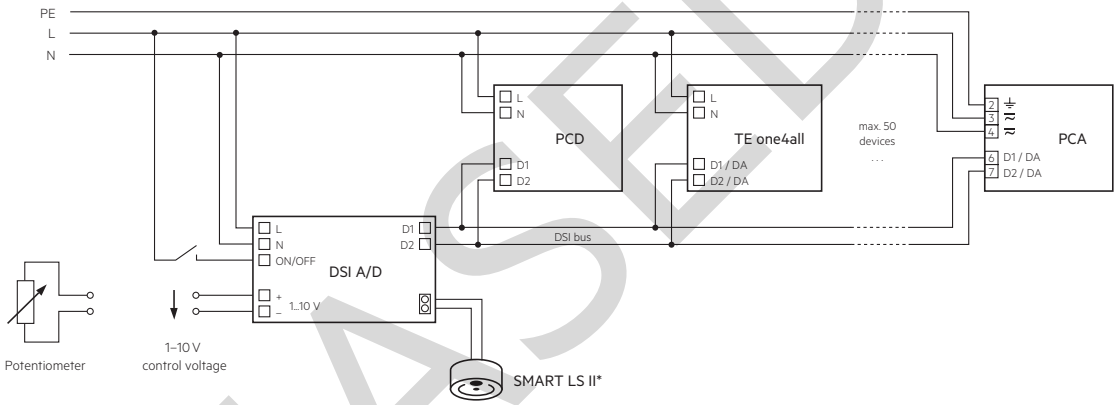
By connecting a SMART LS II the DSI-A/D can be used as a constant light control module.

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

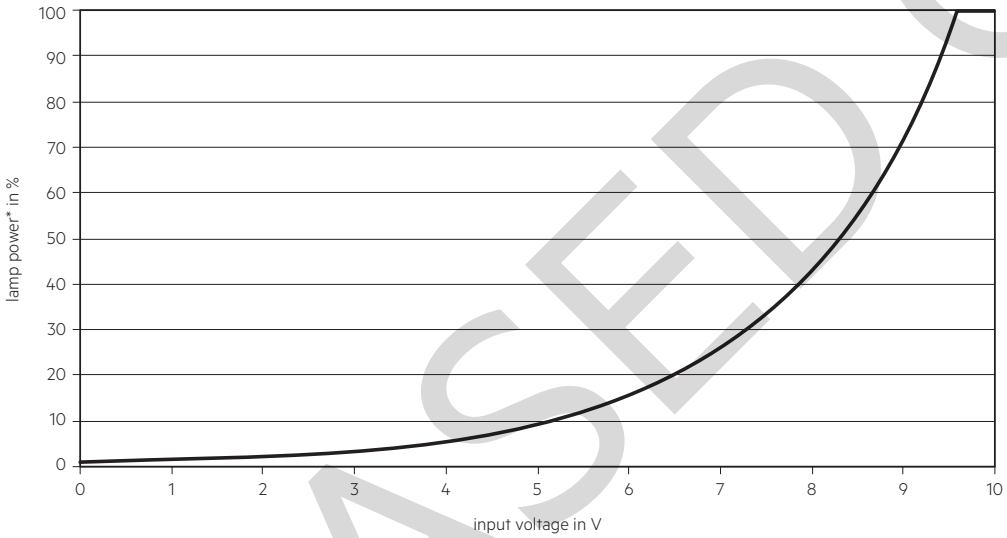
To accurately adjust light levels it is recommended that you use a 47 kΩ potentiometer. If a 100 kΩ potentiometer is already in use, then install a resistor in parallel (68 kΩ, ≥ 0.5 W). Connect the 47 kΩ potentiometer only with a DSI A/D. The parallel wiring of the potentiometer is not allowed.

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.

Lamp power vs. 1–10 V control voltage



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

5. Miscellaneous

5.1 Disposal

According to the WEEE directive return old equipment at appropriate collection facilities.

5.2 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.