TRIDONIC

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



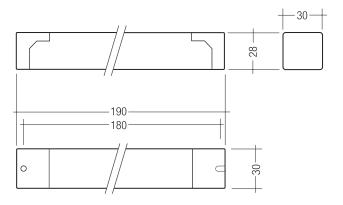
TRIDONIC



DSI-A/D

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

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

Туре	Article number	Packaging, carton		
DSI-A/D	28000850	10 pc(s).		

Specific technical data

Туре	Inputs					Outputs				
	Dimming	Dimming, potentiometer (optional) $^{\odot}$	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 mm ²			
DSI-A/D	1 10 V	47 (≥47 ≤100) kΩ	1	1	1	50	100 m			

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

Glow-wire test

according to EN 61347-1 passed.

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.

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

Control with passive potentiometers

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

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

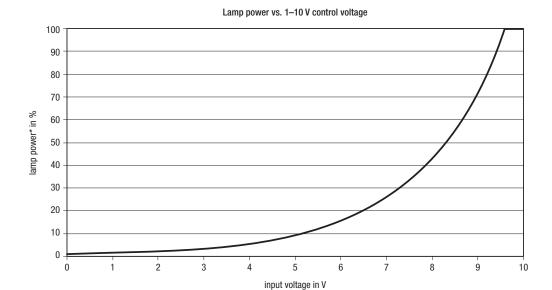
This operation mode deactivates the analogue 1–10 V input. ON/OFF switching via the ON/OFF input is possible.

• terminal cover and strain relief enclosed

Control with a 1-10 V voltage source

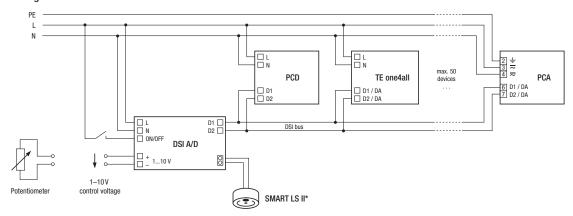
The 1–10 V input is supplying a control current for operation with passive potentiometers. In the event of using an active voltage source please be aware that this source has to be able to sink a current of 2 mA to enable correct adjustment.

If the voltage source is not able to sink a 2 mA current it is possible to set a resistor (470 $\Omega, \geq 0.5$ 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 $+10\,\text{V}.$



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

Wiring



 $^{^{\}star}$ is a SMART LS II sensor connected, the 1–10 V function is disabled.