Lighting Controls and Connectivity comfortDIM



DSI-A/DS

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

Product description

- Converter for converting analogue signals into DSI signals
- For installation in switching cabinets
- For connecting DSI devices in 1...10 V control systems
- For a maximum of 100 DSI devices
- On/off switching via separate switch input
- 5-year guarantee



Wiring diagrams and installation examples, page 3



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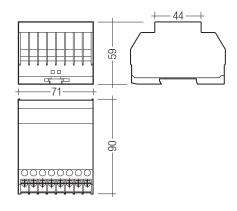


DSI-A/DS

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

Technical data

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



Ordering data

Туре	Article number	Packaging, carton	Weight per pc.	
DSI-A/DS	28000859	10 pc(s).	0.233 kg	

Specific technical data

Туре		Inputs			Outputs		
	Dimming	Dimming, potentiometer (optional)®	ON/OFF switch (220-240 V)	9	Control output per physical output (devices)	Maximum DSI cable length at 1.5 mm²	
DSI-A/DS	1 10 V	47 (≥47 ≤100) kΩ	1	1	100	250 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 60598-1 passed.

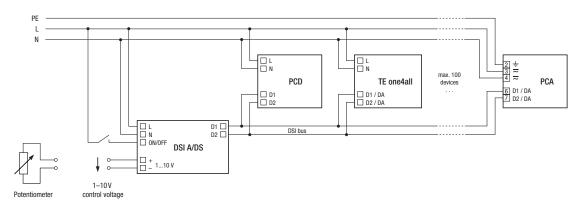
2. Common

The DSI-A/DS module translates the 1–10 V analogue signal into a DSI digital control signal.

In this way PCA/TE one4all/PCD units can be integrated into existing analogue control systems.

3. Installation

3.1 Wiring



4. Functions

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

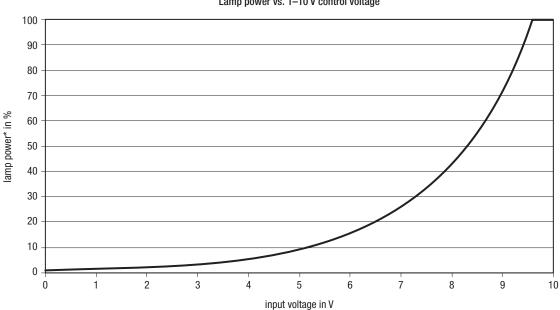
4.1 Control with passive potentiometers

To accurately adjust light levels it is recommended that you use a 47 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)

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 2mA current it is possible to set a resistor (470 Ω , \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 V.



Lamp power vs. 1-10 V control voltage

5. Miscellaneous

5.1 Additional information

Additional technical information at $\underline{www.tridonic.com} \rightarrow \mathsf{Technical}$ Data

Guarantee conditions at <u>www.tridonic.com</u> → Services

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

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