

#### 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



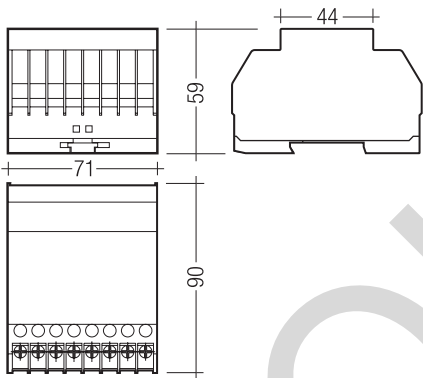


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Technical data

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

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

Specific technical data

Type	Inputs			Outputs		
	Dimming	Dimming, potentiometer (optional)®	ON/OFF switch (220–240 V)	Digital control line DSI	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

® Potentiometer with linear characteristics, optimum: 47 kΩ, possible range: 47 – 100 kΩ; power ≥0.5 W.

## 1. Standards

### 1.1 Glow-wire test

according to EN 60598-1 passed.

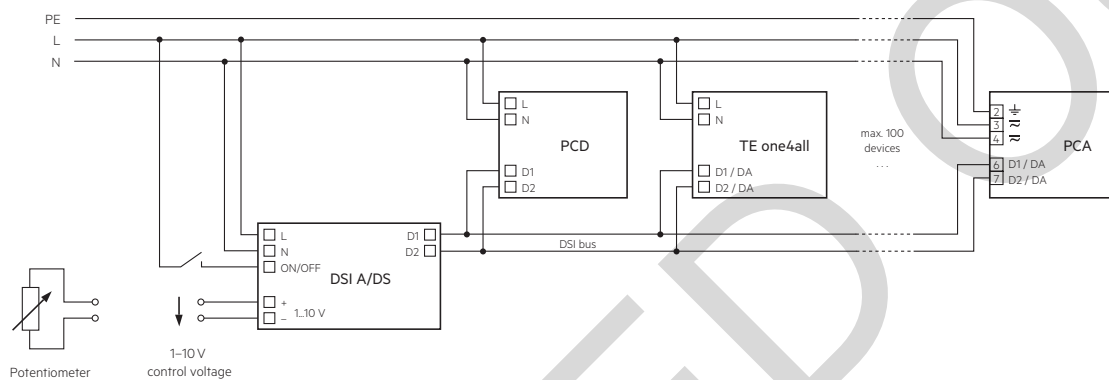
## 2. Common

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.

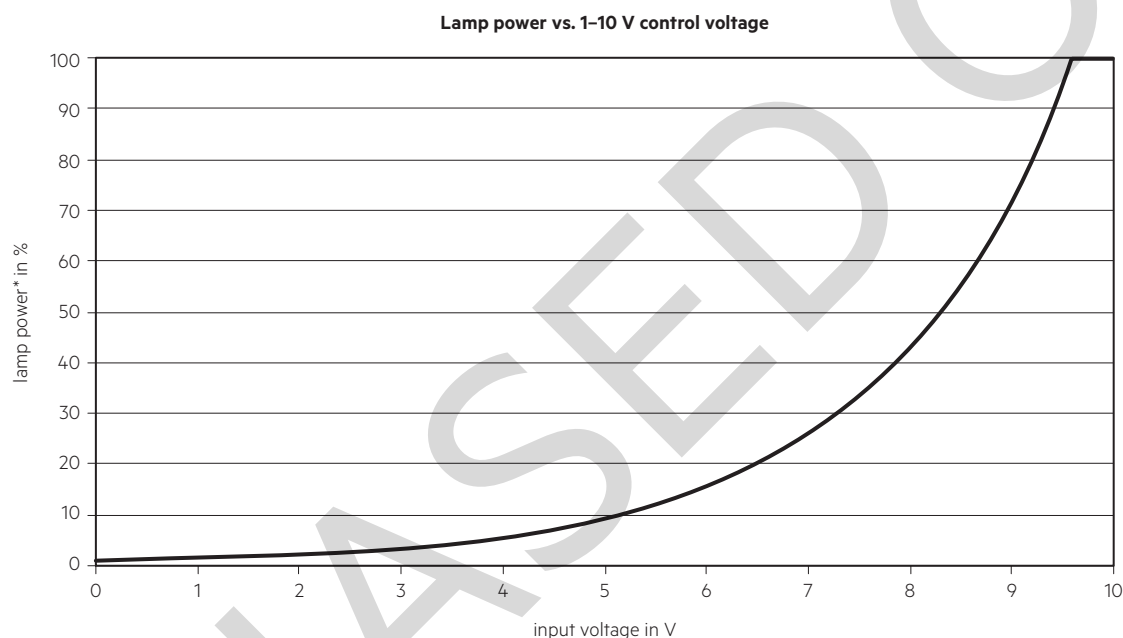
### 4.1 Control with passive potentiometers

To accurately adjust light levels it is recommended that you use a 47 k $\Omega$  potentiometer. If a 100 k $\Omega$  potentiometer is already in use, then install a resistor in parallel (68 k $\Omega$ ,  $\geq 0.5$  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  $\Omega$ ,  $\geq 0.5$  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 V.



\* 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](http://www.tridonic.com) → Technical Data

Guarantee conditions at [www.tridonic.com](http://www.tridonic.com) → Services

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