



### **DSI-01L-100**

#### General

The casing and technical data of light installation module DSI-01L-100 were especially designed for direct light installation. The module has a DSI interface which can be used to control up to 100 DSI-controllable appliances such as digital electronic ballasts for fluorescent tubes and low voltage transformers. The lights (ballasts) are permanently connected to the voltage with this type of control. All switching and

dimming functions can be performed digitally with the DSI signal.

The module is equipped with two microcontrollers and can therefore execute even very complex master commands independently. This increases the data throughput on the BUS and reduces the amount of system programming for the user.

#### The following functions can be performed independently by the DSI module:

- switch ON/OFF
- Calculation of increases with time constants of 0.5 seconds to 18 hours
- Independent switch from current ACTUAL analogue values to specified TARGET analogue values with a specified speed (optional in specified time)
- Feedback signal for end of analogue value output after time functions have been performed
- Stop function whilst time functions are being performed
- OVERSAMPLING error correction (the DA module independently corrects the analogue values skipped by the BUS system cycle times using "OVERSAMPLING". The analogue values between the BUS cycles are transformed back into the 8- bit resolution by means of linearisation, thus preventing, for example, flickering when controlling dimmers.. In programming OVERSAMPLING is called a SOFT function)
- Performs flash functions

### The definitions of the datas to the DSI device are:

Binary value	Function		
0	state OFF (standby)		
1	minimum dimm value		
	dimm values according to the		
	definitions of the DSI device		
	manufacturer		
255	maximum dimm value		

### Inputs / Output

• 1 DSI output for 100 DSI standard load

#### **Function displays**

1 yellow flashing LED signalise the communication to the master via subnet.
At "duration ON" the existing operating voltage will be indicated with no BUS function

#### Connections

- 2 connections for the subnet (BUS A and B, RS-485)
- 2 connections for the operating voltage (Ub, 0V)
- 2 connections for the DSI outputs



## Design

• steel casing for light installation

## Special function DIP switch 1

• reserve

# Special function DIP switch 9 and 10

• In each case 4 of these modules divides a "module address". The DIP switches 9 and 10 serve the so-called subaddress for adjusting.

These are to be adjusted as follows:

Subaddress	DIP-9	DIP-10	confirms to the analogue output in the program	
0	0	0	AA**.1	
1	0	1	AA**.2	
2	1	0	AA**.3	
3	1	1	AA**.4	

## **Technical data**

Туре	DSI-01L-100		
Art. Nr.	80027101		
Operating voltage	16V to 35V DC or 16V to 27V AC		
Current consumption	max. 400mA at 24V, and full load of the outputs		
Output	DSI output, maximum 100 DSI devices		
Isulation voltage	500V (ISYGLT-BUS / DSI-BUS)		
Subnet (RS-485)	max. 5,6V limited by Z-diodes		
Dimensions	LxBxH, 220x40x28mm		
Weight	200g		
Connection	Screw terminals 2,5 mm <sup>2</sup> / 1,0 mm <sup>2</sup>		
Operating temperature	-10+50°C		
Storage temperature	-25+70°C		
Humidity	085 % r. F. non condensing		
Protection class	IP20		
ESD immunity	Category 3 according to IEC1000-4-2		
EMV immunity	Use in typical industrial environment. Category 3 according to IEC-1000-4-4		
-	(Test was carried out within a whole system)		
CE sign	ves		

# **Terminal assignment**

≅Ub	Operating voltage	D1	DSI datas 1
OV	Operating voltage	D1	DSI datas 1
Α	Subnet (BUS A, RS-485)	D2	DSI datas 2
В	Subnet (BUS B RS-485)	D2	DSI datas 2



## View



# Wiring diagram

device for installation in luminaire

