



## DSI/DALI-04B-150

### General

The ISYGLT-DSI/DALI-04B-150 module serves for the control of electronic fluorescent lamp ballasts for fluorescent lamps and low voltage transformers, to which with digital DSI- or DALI signal can communicate. The module possesses 4 separate DSI-/DALI interfaces. 64 DSI-/DALI standard loads (2mA) max. can be connected to one DSI-/DALI channel. The power supply is able to float totally max. 150 DSI standard loads (all 4 DSI/DALI channels)..

All switch and dimmfunctions are available with the DSI/DALI signal. The Modul is furnished with an own power supply. Thus a freely configurable average function for the 4 DSI/DALI outputs is possible. If the 4 channels of this module have to work in the DSI- or DALI mode (Broadcast) can be parametred by using the Software.

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

- 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
- Adjustment to different illuminants and dimmers

### In- / Outputs

- 4 x DSI/DALI-BUS

### Function displays

● 1 x LED (red)	<b>LED status</b>	<b>Significance</b>
	OFF	no operating voltage
● 1 x LED (yellow)	<b>LED status</b>	<b>Significance</b>
	ON	operating voltage no error
	Operating voltage BUS	no bus signal detected
● 2 x LED (green)	<b>LED status</b>	<b>Significance</b>
	Steady flashing	Bus signal detects own address is not recognised
	P1 and P2 flash alternately	Bus signal and own module address detected
●	<b>LED status</b>	<b>Significance</b>
	P1 ON	No parameter data in module
●	P2 ON	Poti 1 is active
	P2 ON	Poti 2 is active

### Connections

- 1 voltage connection 230V / 50Hz
- 4 outputs DSI-BUS
- 1 connection for the subnet (BUS A und B, RS-485)

### Design

- light grey plastic casing, can be snapped onto a 35mm DIN rail mounting 6 separating units

### Special function DIP switch

DIP switch 8 pole

- S1 reserve (auf OFF stellen)
- S2 bis S8 Moduladresse ISYGLT

### Parameterisation

The ISYGLT ProgrammDesigner offers various parameterisation options.

Dimming curve setting

- Emergency mode in the event of bus failure
- The table below provides detailed information about these options:

Please note:

- 1st column = parameter tab
- 2nd column = setting (function)
- 3rd column = description of the parameter to be set
- 4th column = possible setting (default values are in bold italics)

Tab	Setting	Parameter	Value
Dimm-Speed	Speed interpretation	Speed value means (Speed value means that the specified fade time always refers to the time from 0-100% e.g. 10s. Dimming always occurs at the same speed which means that dimming from 50-100 only takes 5 seconds. This is the default setting which should always be set except for light sequence controls (multiscene). (Speed value time means the fade time is always calculated absolutely. If 10s is specified the change from 0-100% will take 10s. The change from 90-100% also takes 10s. This setting should be used for light sequence control (multiscene).	<b><i>Speed</i></b> time

Tab	Setting	Parameter	Value
	Speed resolution	1 digit equals (The speed resolution indicates the converted fade time. The default is 0.5s, which allows a fade time of 0-120s. A resolution of 0.1s is available for fast processes, which is equivalent to a fade time of 0-24s.)	0.5s standard 0.1s
Emergency operation	ISYGLT bus timeout	Time – bus failure detection (The time for detecting a BUS failure is stated in seconds here. This should be set as slightly longer than the programming time of the master module.)	25s (5...255s)
	Action after bus failure	Action after bus failure AA1 Setting (for each channel) to be implemented when the bus failure has been detected.	no change 0% 20% 50% 80% 100% Poti 1 Poti 2
		Action after bus failure AA2 – AA4	same as channel AA1
	Potentiometer operation	Potentiometer operation AA1	never Poti 1 > 0 Poti 2 > 0
		Potentiometer operation AA2 – AA4	same as channel AA1
Dimming curves	Dimming curves	Dimming curve AA1	linear logarithmic quadratic
		Dimming curve AA2 - AA4	same as channel AA1

The parameters are transferred to the module via the BUS cable and permanently stored in the module.

#### Technical data

<b>Type</b>	<b>DSI/DALI-04B-150</b>
Art. Nr.	80027104
Power supply	230V / 50-60 Hz
Output	4 x DSI/DALI-BUS max. each 50 devices, totally however max. 150 Geräte (standard load 2mA per equipment)

<b>DSI/DALI-04B-150</b>	<b>Continued</b>
Insulation voltage	3500V (ISYGLT, DSI / Netz)
Safety	EN 60669-T1+2 (IEC 60669-T1+2)
RFI	EN 55015, EN 50082-T1, EN 55103-T2
Subnet (RS-485)	max. 5,6V limited by Z-diodes
Dimensions	BxHxT 106x90x59mm (6 TE)
Weight	350 g
Connection	Screw terminals 1,5mm <sup>2</sup> pluggable
Operating temperature	-10...+50°C
Storage temperature	-25...+70 °C
Humidity	0...85 % r.F. non condensing
Protection grade	IP 30
Protection class	I
ESD immunity	Category 3 according to IEC-1000-4-2
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	yes

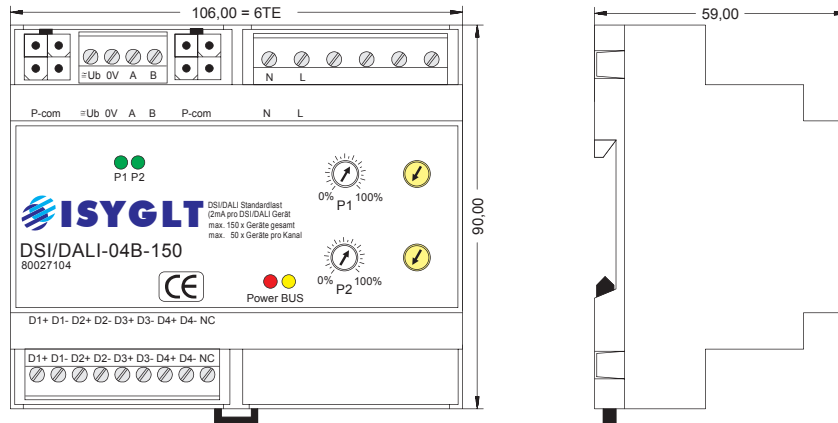
### Terminal assignment

<b>4 pole connector (left)</b>	
≅ U	Operating voltage (free)
0V	0V Operating voltage (free)
A	Subnet (BUS A, RS-485)
B	Subnet (BUS B, RS-485)

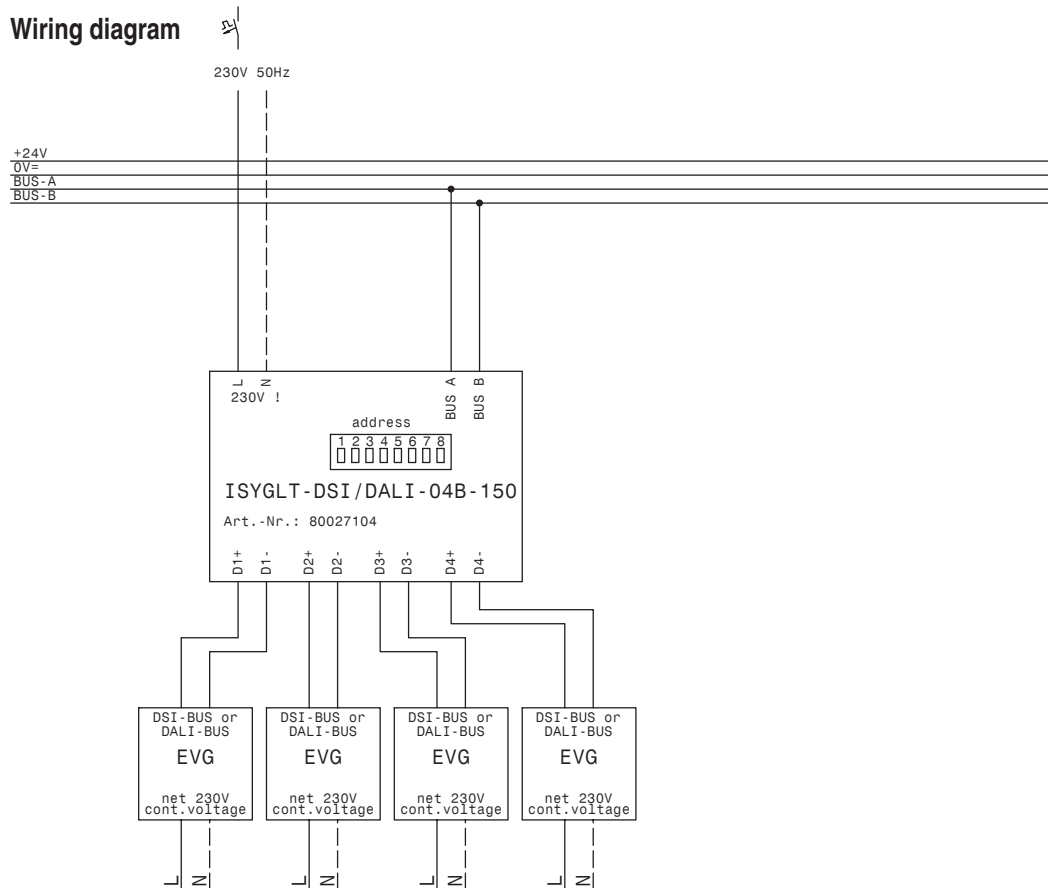
<b>6 pole connector (right)</b>	
L	Mains voltage 230V (50Hz - 60Hz)
N	Neutral conductors
	Reserved
	Reserved
	Reserved
	Reserved

<b>9 pole connector (below)</b>	
D1+	DSI/DALI channel 1
D1-	DSI/DALI channel 1
D2+	DSI/DALI channel 2
D2-	DSI/DALI channel 2
D3+	DSI/DALI channel 3
D3-	DSI/DALI channel 3
D4+	DSI/DALI channel 4
D4-	DSI/DALI channel 4
NC	not allocated

### View



### Wiring diagram



Continuous voltage !  
 Max. 50 EVG/output, max. 150 EVG totally !  
 Attention! The operating mode DALI or DSI  
 must be selected on the modul for all outputs!