
 The packing of several cable lengths is possible upon request.
The cable is also available as a shielded wire! 



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1 Introduction

1.1 Product Description

DALI (Digital Addressable Lighting Interface) is the definition for the standardised digital interface for operating devices. The multi-manufacturer DALI standard guarantees the interoperability and exchangeability of operating devices of different manufacturers and is described in the ballast standard IEC 60926, annex E.

The system control device DigiLED DALI 3CH has been designed for light and colour control of the LEDLine, MarkerLED and FloodLED lighting modules. The DigiLED DALI complies with the international standard DALI protocol. Vossloh Schwabe GmbH is a member of the "Activity Group DALI" in the Zentralverband der Elektrotechnik und Elektronikindustrie e.V. (Central Association of Electrical Engineering and Electronic Industry, German abbr. ZVEI). For a detailed description of the DALI standard please refer to the DALI manual which is available for downloading on the ZVEI internet page (www.zvei.org).

1.2 Scope of Delivery

Please check the delivery for completeness and transport damage when you unpack the device. You should have received the following items:

- 1 Control Device DigiLED-DALI
- 1 Short Instructions

1.3 Safety Instructions

Please ensure a good electrical connection of all cables and plugs and the compliance with the ESD regulations!

- + this Product serves exclusively for the operation of the LEDLine, FloodLED and MarkerLED module family
- + the DigiLED DALI may only be used indoors
- + install all components in de-energized state only
- + only qualified personnel may open the casing
- + immediately contact your distributor in case of damage or failure
- + pay particular attention to the maximum demand of supply and select the respective connection cables, if appropriate;
- + ensure the connect polarity when you connect the supply voltage

1.4 Assembly

The DigiLED DALI can be mounted on a firm base using 4mm bolts in the two recesses which are diagonally located.

2 Device Description

DALI 3-channel LED controller to control the LED modules. Also ideal for RGB colour control with e.g. MarkerLED, FloodLED, LEDLine or with distributors and separate modules. DigiLED DALI 3CH forms three devices in the DALI address area which are independent of each other. Even error recovery and signalling are effected separately which means that for example a short circuit of only one channel will not inevitably lead to the switching-off of the residual channels!

Characteristics:

- 3 DALI addressable 16bit PWM outputs, controllable via all DALI-compatible control units
- Dimming range: 0.1% ... 100%
- Separate-channel output current monitoring: LED currents exceeding the maximum current are displayed as lamp failure in the respective channels.
- Monitoring of the supply voltage: If the admissible DigiLED supply voltage is exceeded or undercut, a lamp failure will be displayed.
- Separate-channel short-circuit protection, overload protection, overtemperature protection, each with automatic restart
- SELV equivalent isolation with respect to the DALI interface
- reconfiguration possible as often as required according to patent DE 101 15 36

2.1 Description of the Connections

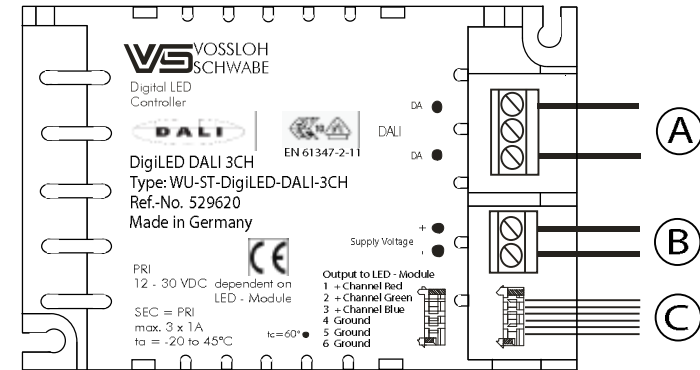
Figure 1 shows the connection scheme of the DigiLED DALI. The connections of the module are one 2-pole screw-type terminal (B) for voltage supply, one 2-pole screw-type terminal for the DALI bus (A) and one system terminal (C) as output to the LED modules. The number of controllable modules depends on the power consumption of the lighting modules where a total maximum of 1.0 A must not be exceeded per channel.

2.2 Settings

The DigiLED DALI can control 3 LED channels. The corresponding addresses are freely selectable via DALI according to the standard. Within the system, the DigiLED DALI announces "three devices" of which each one must be allocated one address. The address allocation / assignment is effected via a DALI control device which must be connected. The address allocation was successful, if the separate channels can be controlled independently. After the DALI system has been commissioned (address allocation – light allocation, group formation, scene setting) it is recommended to disconnect the voltage supply of the DigiLED for at least 5 seconds and to switch it on again afterwards. The devices will detect the voltage drop and store the current settings. Please find further details in the operating instructions of your DALI control device.

2.3 Fault detection

All faults except for supply voltage are treated for each channel separately. If the admissible supply voltage is exceeded or undercut at the terminals of the DigiLED DALI 3CH, a lamp failure will be displayed. Please ensure that the supply voltage is not exceeded or undercut in any operating mode. If your supply operates at the bottom limit (e.g. 12V), a poor voltage stabilisation or a voltage drop in the supply line may lead to a temporary undercutting of the minimum supply voltage which is also indicated as lamp failure. If no LEDs are connected, this will be indicated in the corresponding channel as lamp failure. If the maximum admissible output current of a channel is exceeded highly or if there is a short circuit, this will also be shown as lamp failure.



3

Technical Data

| | |
|--------------------------|---|
| Operating Voltage | 12 to 30 V DC |
| Current consumption | 3,1 A max. |
| Fuse protection | T 3,15 A ; internally |
| Inputs | 2-pole terminal for supply voltage 2-pole terminal for DALI BUS (to max. 250V) |
| Outputs | 3 controllable PWM (pulse-width-modulation) outputs via system plug (voltage corresponds to output voltage of the mains supply connected in series) |
| Output current | 3 x 1.0 A max. |
| Ambient temperature | -20°C to +45°C |
| Humidity | 0 - 95% (not condensing) |
| Casing | Plastics, PC white |
| Dimensions (LxWxH) in mm | 93 x 58 x 30 |
| Weight | 62 gr. |

4

EMV & CE

The DigiLED DALI complies with the lighting standards regarding electromagnetic Compatibility (EMC) and is certified according to CE.

Approval: VDE 10/ENEC EN 61347-2-11