L-DALI Relay Module

LDALI-RM8

Datasheet #89070424







The LDALI-RM8 Relay Module enables the control of standard loads via DALI. Typical application scenarios are the integration of non-DALI luminaires or other loads like fans in toilets or washrooms, motors for partition walls or screens and fire protection flaps in DALI lighting applications.

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DALI OPC

The device provides 8 built-in relay contacts, which can be controlled individually via separate DALI addresses as long as the corresponding digital input is open. Closing this input will always switch on the relay (override). Each relay provides a switch that indicates the state and that can be used to switch the relay manually (installation and maintenance). The built-in relay contacts can be used for currents of up to 16 A. They support a wide voltage range of 120 – 277 V AC and up to 30 V DC. The relays are suitable for loads with high inrush currents.

Together with the LOYTEC L-DALI controllers or LROC-40x room automation controllers, the LDALI-RM8 devices act as programmable switching output modules. The integration of the module in the DALI network follows the same simple steps as the integration of DALI lamps. The device supports the DALI specification IEC 62386-208 (Device Type 7, "switching function") for non-dimmable loads. The LDALI-RM8 is externally powered either by 24 V DC or 85 – 240 V AC.

As a unique safety feature the relay state for fault conditions can be partially configured. In case of a power loss on the DALI bus, the relays will switch to the position as defined with the DALI configuration register "System Failure Level". In case of a power loss on the 24 V DC / 85 - 240 V AC the relays keep their state until a "Power On" occurs, at which they will switch to the state defined in the "Power On Level" configuration register.

The LDALI-RM8 is intended to be used in a switching cabinet.

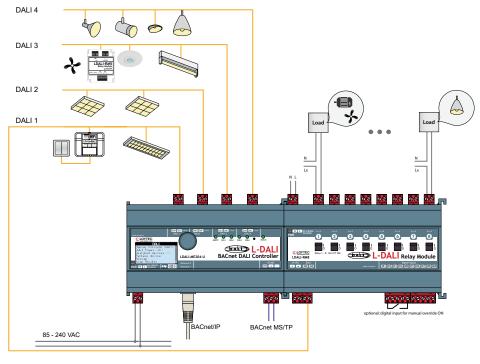
The LDALI-RM8 is DALI-2 certified.

Features

- Easy integration into LOYTEC L-DALI lighting systems and LROC-40x room automation controllers
- Device configuration with the free LINX-Configurator or via the built-in web server of the L-DALI controller
- Programmable switching outputs for standard loads in the power grid
- Relay contact switching voltage: 120 277 V AC
- Suitable for loads with high inrush currents
- Up to 8 LDALI-RM8 modules per DALI channel
- Supplied via 85 240 V AC or 24 V DC \pm 10 %
- · Potential-free, bi-stable relay make contact

- Relay contacts connectable with different phases
- DALI specification IEC 62386-208 (Device Type 7 – Switching Function) supported
- · DALI-2 certified
- Configurable relay positions in case of DALI line outage
- Relays keep their state in case of power loss
- Manual switches on device for indication and manual override
- Digital inputs forcing the corresponding relays to switch on (override, status can be queried)
- Firmware update over DALI

Functions



Туре	LDALI-RM8
Dimensions (mm)	159 x 100 x 75 (L x W x H), DIM064
Installation	DIN rail mounting following Din 43880, top hat rail EN 50022
Purpose of control	Operating control
Construction of control	Independently mounted control
Feature of automatic action	Type 1
Rated Impulse Voltage	2500 V
Overvoltage category	II
Power supply	85 – 240 V AC or 24 V DC ±10 %, typ. consumption: < 1 W
Operating conditions	0 °C to 40 °C, 10 – 90 % RH, non-condensing, degree of protection: IP40, IP20 (terminals)
Interfaces	1 x DALI, protected against overvoltage (mains voltage), current consumption: 2 mA 8 x digital input (dry contact, not protected against overvoltage)
Number of DALI-addresses	8
DALI protocol conformance (IEC 62386 parts)	101 ed2, 102 ed2, 208 ed1 (switching)
Certificates	DALI-2, cULus
Connection wires profile	0.2 – 2.5 mm ² [AWG 26 – 12]
Nominal switching capacity AC and expected electrical life time	16 A, 277 V AC (resistive, inrush: 480 A); 100 000 cycles (ON:OFF=1s:9s) 16 A, 277 V AC (electronic ballast, inrush: 480 A); 6 000 cycles (ON:OFF=1s:9s) 16 A, 250 V AC (capacitive load 200 μF, inrush 400 A); 30 000 cycles (ON:OFF=1s:9s)
Nominal switching capacity DC and expected electrical life time	16 A, 30 V DC; 100 000 cycles (ON:OFF=1s:9s)
Relay contact switching voltage	120 - 277 V AC
Min. relay switching interval	500 ms
Minimum delay between switching action on different channels	20 ms
For use with	LDALI-3E101-U, LDALI-3E102-U, LDALI-3E104-U, LDALI-ME201-U, LDALI-ME204-U, LDALI-PLC2, LDALI-PLC4, LROC-40x
Resource limits	
Number of LDALI-RM8	max. 8 per DALI channel
Order number Product description	
LDALI-RM8 DALI Relay Module, 8-ch	nannel

Routers, NIC

Dimensions of the devices in mm and [inch]



