Lunatone

DALI Expander 3

Datasheet

**Expander for 3 DALI-Lines and
integrated 3x50mA power supply**

Device for DALI-line expansion with
integrated bus power supply for 3
DALI sub-circuits

Art. Nr. 89453847-3

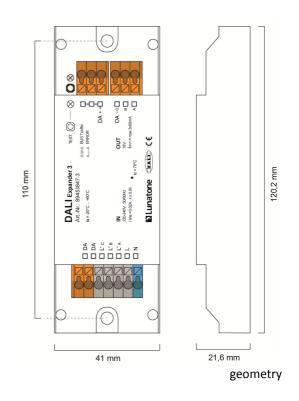# DALI Expander 3 Expander with 3x50mA DALI Power Supply

Overview

- Einheit zur Erweiterung eines DALI-Kreises

- Several DALI-devices can be controlled via one DALI-address

- 3 DALI outputs (DALI A,B,C) with integrated DALI power supply (50mA each) for powering control gear and control devices

- For the superordinate DALI circuit the DALI expander acts like 3 DALI control gear, with a DALI address for each subnet (A, B, C)
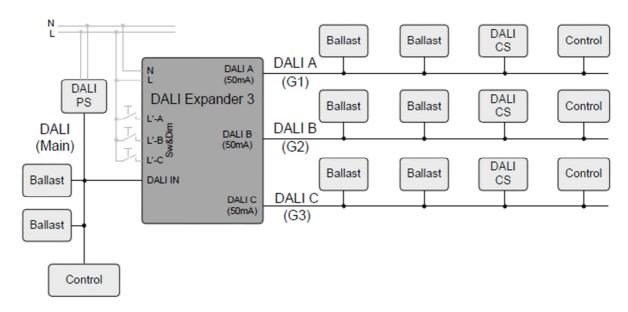
- Forwarding commands received at the input (DALI IN) to the corresponding output (DALI A, B, C) broadcast

- Alternative control options of the DALI-output circuits via Switch&Dim-inputs (Broadcast).

- Group commands are passed from one to the other output circuits (cross function)

- Galvanic isolation between DALI-input and DALI-outputs

Specification, Characteristics

Type	DALI Expander 3
article number	89453847-3
supply	100V-240V AC
typ. current consumption DALI input (DALI IN)	2 mA
output (DALI A, B, C) maximum current	3x 50 mA
input/ouput	DALI / DALI
geometry	120mm x 41mm x 21mm
ambient temperature	-20°C bis +60°C
protection class	IP20

geometry

Expansion of a DALI-circuit (Main) with up to three DALI-sub-circuits

Function

The DALI-Expander 3 can be used for DALI-line expansion. For each of the three DALI-outputs the device provides an integrated DALI power supply (50mA).

Each of the 3 DALI subnets is represented by a DALI short address at the input and commands sent to these addresses are forwarded to the corresponding output broadcast. Hence all connected ballasts on an output-circuit can be controlled simultaneously via a single short address.

An alternative for control of the output circuits are the Switch&Dim inputs (short press: On/Off, long press: Dim), as a result the device can be used as stand-alone solution without DALI-circuit on the input.

For the transmission of DALI commands between the output lines (e.g. for controlling 2 of the output lines with one DALI CS sensor only), group commands can be used.

By factory default a group command is forwarded broadcast as listed below:

G1 -> DALI A
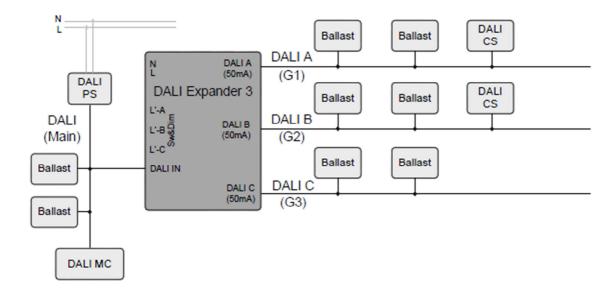G2 -> DALI B
G3 -> DALI C
G4 -> DALI A + DALI B
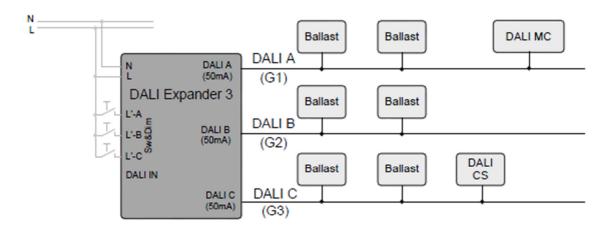G5 -> DALI A + DALI C
G6 -> DALI B + DALI C
G7 -> DALI A + DALI B + DALI C

With the help of the test button a test sequence for testing the sub circuits can be started and stopped.

Typical Application

DALI input circuit available (separate DALI PS required). Control of DALI-sublines via short addresses from the DALI-Main-circuit or with the help of controls (e.g. DALI CS) in the output circuits

Stand Alone solution without DALI-circuit at the input. Control of the DALI output lines with Switch&Dim inputs or with controls in the output circuits (e.g. DALI MC or DALI CS) – if the DALI CS sends control commands to Group 5, per factory default line A and line C will receive this command broadcast

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Purchase Order Information

ArtNr. 89453847-3: DALI Expander 3, device for DALI-line expansions with 3 subnets and integrated 50mA bus power supply for each line

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Lunatone DALI products
http://www.lunatone.at/en/

Lunatone datasheets and manuals
http://lunatone.at/en/downloads/

Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com

Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.