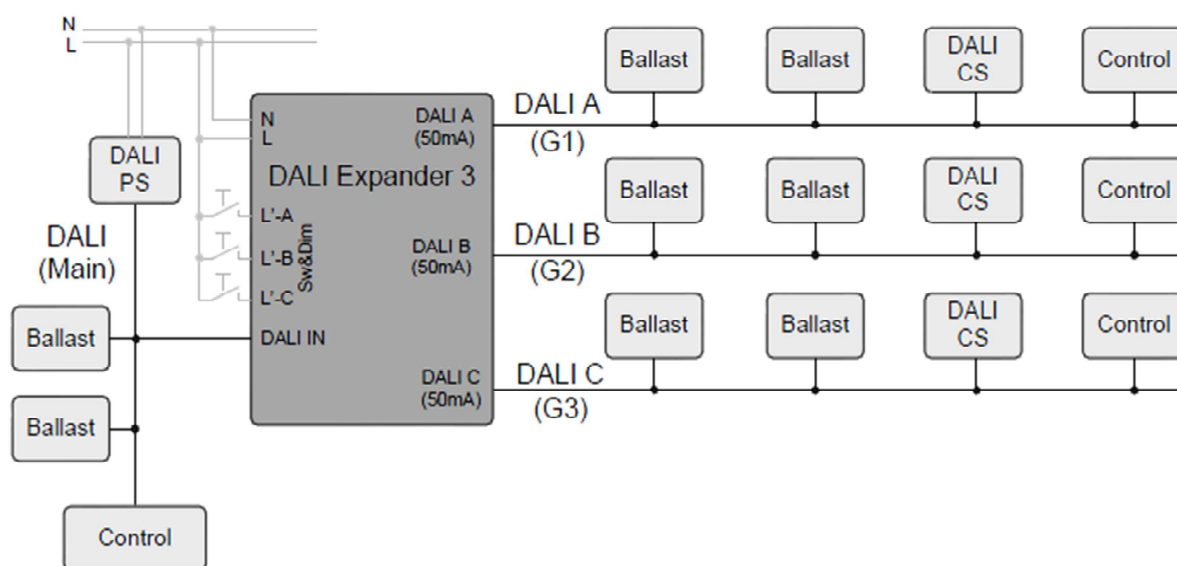# Lunatone

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

- Device for DALI-line expansion
- Several DALI-devices can be controlled by using one DALI-address only
- 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 separate DALI control gear – 3 DALI addresses, one 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
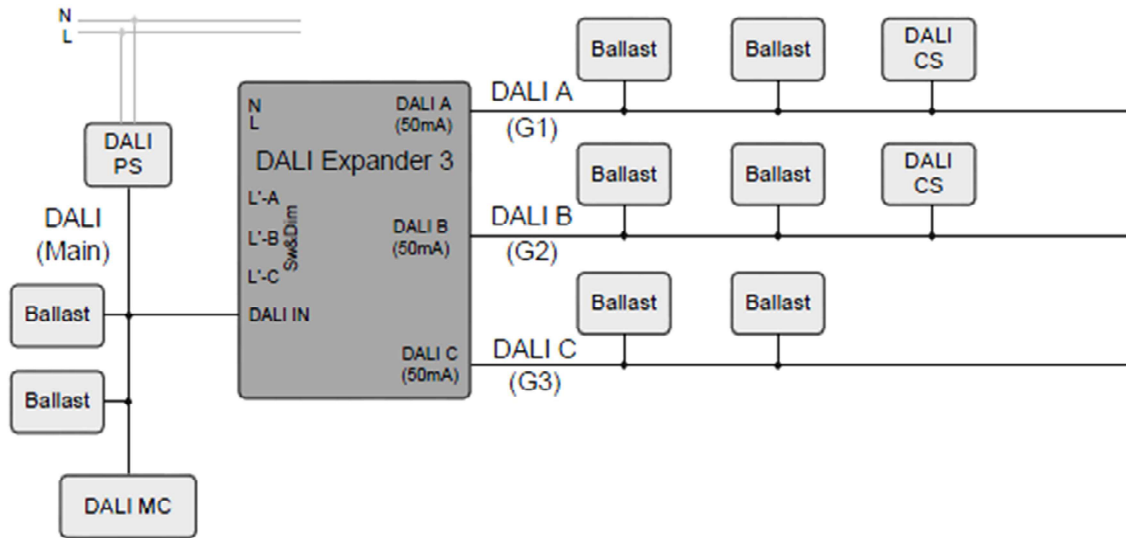
DALI input circuit available (separate DALI PS required). Control of DALI-sublines via short addresses from the DALI-Main-circuit or with the help of controls (e.g. DALI CS) in the output circuits
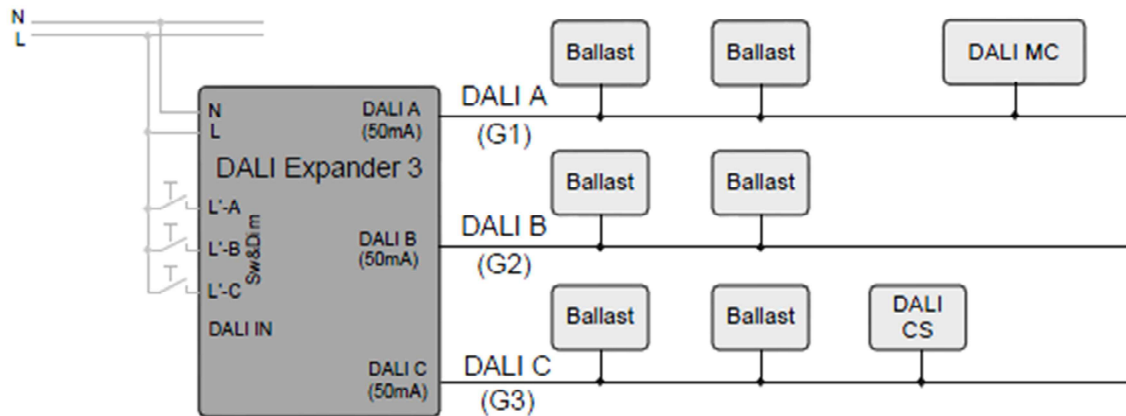
Stand Alone solution without DALI-circuit at the input. Control of the DALI output lines with Switch&Dim inputs or with controls in the output circuits (e.g. DALI MC or DALI CS) – if the DALI CS sends control commands to Group 5, per factory default line A and line C will receive this command broadcast

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

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www.lunatone.com
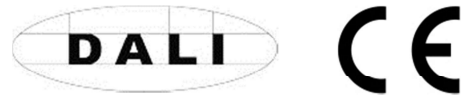
Disclaimer

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

The compatibility with other devices must be tested in advance to the installation.