



DALI XC

DALI control module with switch inputs

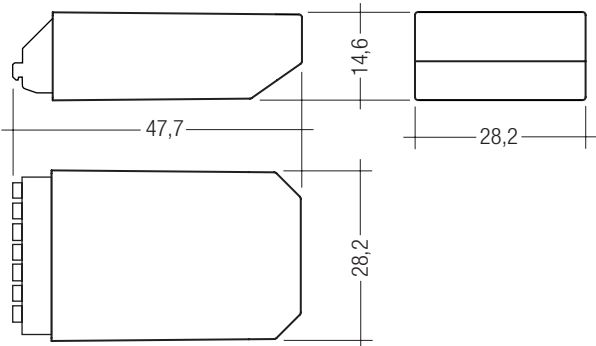
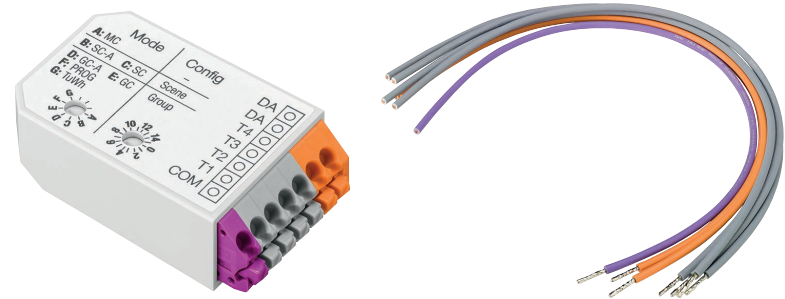
Product description

DALI input controller

- 4 independent inputs for floating contacts
- For connecting standard momentary-action switch or switches
- Adjustable operating mode and range via 2 rotary selector
- Multiple DALI XCs possible on the DALI line
- Power supply via DALI line
- Connection wires according to the terminal colours with 25 cm length included
- 5 years guarantee

Technical data

Supply via	DALI cable
Current draw	6 mA
Input	4 momentary-action switches or relais
Output	DALI
Ambient temperature ta	0 ... +60 °C
Storage temperature	-25 ... +80 °C
Turn on time	≤ 6 s
Humidity	20 ... 90 % (non-condensing)
Type of protection	IP20
Mounting	Mounting box 60 x 61 mm (ø x D)
Casing material	PC, halogen-free polycarbonate, non-flammable
Dimension L x W x H	47.7 x 28.2 x 14.6 mm



Ordering data

Type	Article number	Packaging, carton	Weight per pc.
DALI XC	28001716	125 pc(s).	0.035 kg



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1. Standards

IEC CISPR 15
IEC 61547
IEC 61347-2-11
IEC 61347-1

1.1 DALI standard

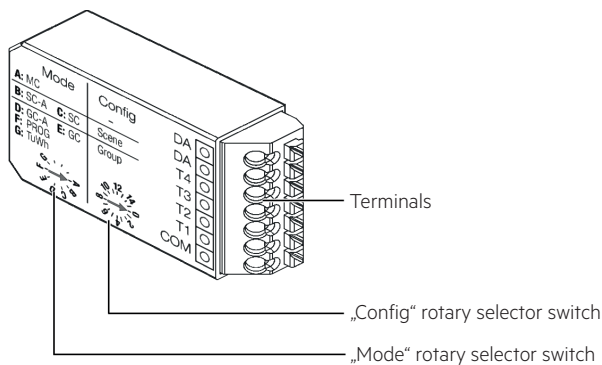
DALI XC is designed to control control gear with DALI standard IEC 60929 (DALI V0) and IEC 62386 (DALI V1).

1.2 Glow wire test

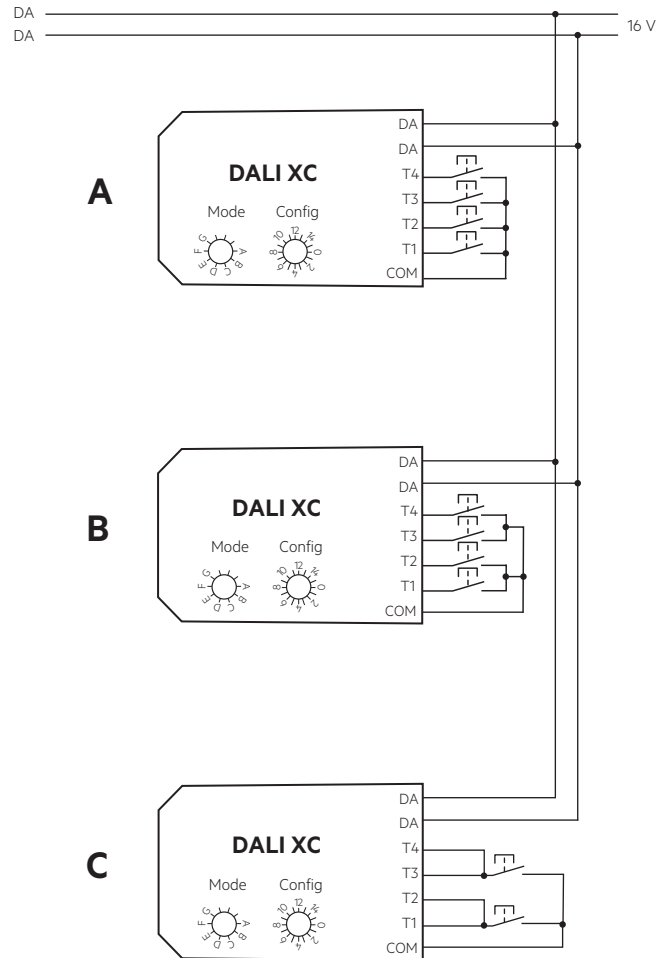
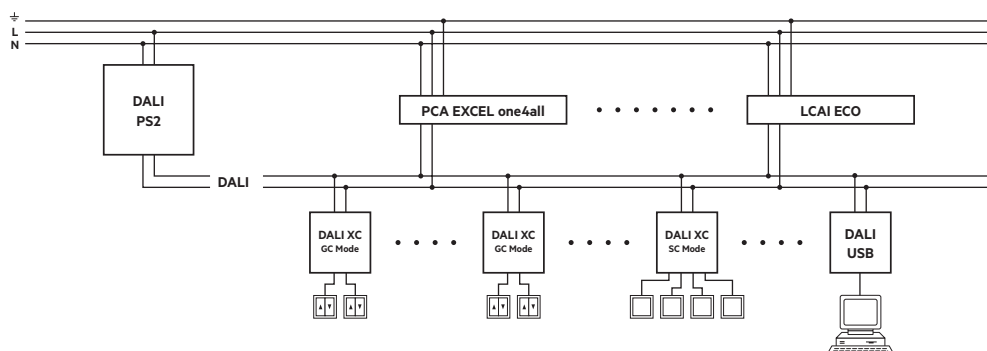
according to IEC 61347-1 passed.

2. Installation

- The DALI XC can be inserted into the mounting box for the momentary switch.
- The DALI XC must not be connected to the mains. It is supplied directly via the DALI signal line.
- The momentary switches are connected directly to the DALI XC (potential free contacts) and must not be connected to the mains.
- DALI signals are not SELV. Therefore the same procedures should be applied as working with mains voltage.
- Only one momentary switch each DALI XC output.
- DALI XC modules allow multi master operation. Multiple control modules can be used on the same proDIM DALI network.
- Short press < 500 ms < long press

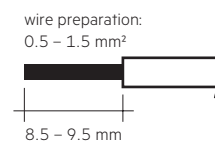


2.1 Connection diagrams



2.2 Wiring type and cross section

The wiring can be solid wire or stranded wire with end sleeve with a cross-section of 0.5 mm² to 1.5 mm². Maximum cable length between momentary-action switch and DALI XC is 50 cm. Connecting wires are supplied inside the package.



3. Operating modes

Changing the operating mode

- The operating mode can be changed using the „Mode“ rotary selector switch.

MC operating mode „Mode“ rotary selector switch position A

- Programmed functions can be recalled via single momentary-action switches and/or double momentary-action switches and/or standard switches.
- The MC operating mode is only configured using the masterCONFIGURATOR software.
- Connection diagram: A, B or C

SC-A operating mode „Mode“ rotary selector switch position B and SC operating mode „Mode“ rotary selector switch position C

- Scenes can be recalled via single momentary-action switches.
- The SC operating mode also allows scenes to be saved using the single momentary-action switches.
- Connection diagram: A or B
- Different scenes can be assigned to inputs T1–T4 using the „Config“ rotary selector switch.

Rotary selector switch „Config“	Scene			
	Input T1	Input T2	Input T3	Input T4
0	0	1	2	3
1	1	2	3	4
2	2	3	4	5
3	3	4	5	6
4	4	5	6	7
5	5	6	7	8
6	6	7	8	9
7	7	8	9	10
8	8	9	10	11
9	9	10	11	12
10	10	11	12	13
11	11	12	13	14
12	12	13	14	15
13	13	14	15	0
14	14	15	0	1
15	15	0	1	2

Acoustic signal

Three times 0.2 s on/off supply voltage was connected

Once after approx. 1 s rotary selector switch position was changed

Different acoustic signals configuration steps were carried out

„Prog“ operating mode rotary selector switch position F

- Commissioning or a system extension can be started and completed in this operating mode.
- The lighting system is in programming mode while these processes are ongoing.

GC-A operating mode „Mode“ rotary selector switch position D and GC operating mode „Mode“ rotary selector switch position E

- Groups can be switched on and off and dimmed and brightened via single momentary-action switches and/or double momentary-action switches.

Commands send out:

T1 ... short press = DALI Command 0 = OFF

long press = DALI Command 2 = DOWN

T2 ... short press = DALI Command 5 = Recall max. level

long press = DALI Command 1 = UP

T3 ... short press = DALI Command 0 = OFF

long press = DALI Command 2 = DOWN

T4 ... short press = DALI Command 5 = Recall max. level

long press = DALI Command 1 = UP

- The GC operating mode also allows luminaires to be grouped using the momentary-action switches.
- Connection diagram: A, B or C
- Different groups can be assigned to inputs T1 and T2 and inputs T3 and T4 using the „Config“ rotary selector switch.

Rotary selector switch „Config“	Group	
	Input T1 and T2	Input T3 and T4
0	All	0
1	0	1
2	1	2
3	2	3
4	3	4
5	4	5
6	5	6
7	6	7
8	7	8
9	8	9
10	9	10
11	10	11
12	11	12
13	12	13
14	13	14
15	14	15

Tunable White operating mode „Mode“ rotary selector switch position G

- The intensity of a group can be set via a double momentary-action switch (Inputs T1 and T2).

Commands send out:

T1 ... short press = DALI Command 0 = OFF

long press = DALI Command 2 = DOWN

T2 ... short press = DALI Command 5 = Recall max. level

long press = DALI Command 1 = UP

T3 ... DALI Command 233 = Tc step warmer

T4 ... DALI Command 232 = Tc step cooler

- The colour temperature (Colour temperature Tc) of the Tunable white luminaires in a group can be set using the other double momentary-action switch (Inputs T3 and T4).
- Connection diagram: A or B
- Different groups can be assigned to the DALI XC using the „Config“ rotary selector switch.

Rotary selector switch „Config“	Group
0	All
1	0
2	1
3	2
4	3
5	4
6	5
7	6
8	7
9	8
10	9
11	10
12	11
13	12
14	13
15	14

4. Miscellaneous

4.1 Disposal



According to the WEEE directive return old equipment at appropriate collection facilities.

4.2 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.
No warranty if device was opened.