

DALI Tronic transformer 105 W

Order-No. : 2380 00

Operating instructions**1 Safety instructions**

Electrical equipment may only be installed and fitted by electrically skilled persons.

Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

Danger of electric shock. Always disconnect before carrying out work on the device or load. At the same time, take into account all circuit breakers that supply dangerous voltage to the device or load.

These instructions are an integral part of the product, and must remain with the end customer.

2 Device components

Figure 1

- (1) Fastening screws for terminal cover
- (2) Mounting holes
- (3) Terminal covers

3 Function**Intended use**

- Power supply for LV halogen lamps
- Switching and brightness adjustment is performed with DALI control units or installation buttons
- Installation in false ceilings or surface mounting

Product characteristics

- No-load proof
- Electronic short circuit protection
- Electronic overload protection
- Electronic over-temperature protection
- Suitable for emergency current installation

- i** Flickering of the connected lamps is possible if the load is below the specified minimum. This does not represent any defect in the device.

Behaviour after mains voltage failure in operation with DALI control unit

The behaviour is dependent on the DALI control unit.

- i** The brightness of the lighting when DALI telegrams are missing – PowerON-Level – and in case of DALI system voltage failure – SystemFailure-Level – is stored in the transformer and can be changed using suitable DALI control units. In the state as supplied this is maximum brightness.

Behaviour after mains voltage failure in operation with installation button

After mains return the switching position and the brightness that were stored before the mains voltage failure are set.

4 Operation

Operation with DALI control unit

The operation and the behaviour of the transformer are dependent on the DALI control unit (see instructions for the control unit).

Switching light with installation button

- Press installation button briefly.
Light is switched on with the last brightness set or light is switched off.
- i** If a fixed switch-on brightness was stored, the light is always switched on to this brightness value.

Adjusting brightness with installation button

Light is switched on.

- Make a long press on the installation button.
Light becomes brighter or dimmer as far as the respective limit value.
- i** The dimming direction is reversed when there is another long press on the installation button.

Switching light on to minimum brightness with installation button

- Make a long press on the installation button until the light switches on.
- i** If the installation button is still pressed, the light becomes brighter up to maximum brightness.

Saving a fixed switch-on brightness

- Set light to the required brightness.
- Press installation button briefly twice in succession.
Fixed switch-on brightness has been saved permanently. For confirmation the light flashes twice and switches to the saved brightness.

Deleting fixed switch-on brightness

Light is off.

- Press installation button briefly twice in succession.
Fixed switch-on brightness has been deleted. For confirmation the light switches to maximum brightness.

Synchronising transformers with installation button

In systems with more than one transformer it may be necessary to synchronise them, e.g. because the brightness is no longer the same.

- Make a long press on the installation button.
All transformers switch on.
- Press installation button briefly.

- All transformers switch off.
- Make a long press on the installation button.
All transformers switch on to minimum brightness.
- ❏ If the installation button is still pressed, the light becomes brighter up to maximum brightness.

5 Information for qualified electricians

5.1 Fitting and electrical connection



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

Fitting the transformer

Ensure adequate installation space for heat dissipation. In critical cases, carry out temperature measurement. The housing temperature at the tc point (see transformer label) must not be exceeded.

Do not fit in the vicinity of heat sources, e.g. lamps.

- Loosen screws (1) and remove terminal covers (3).
- Fasten transformer with screws through mounting holes (2).

Connection instructions

The transformer can be operated either with a DALI control unit or an installation button. Operation with a DALI control unit and an installation button at the same time is not possible.

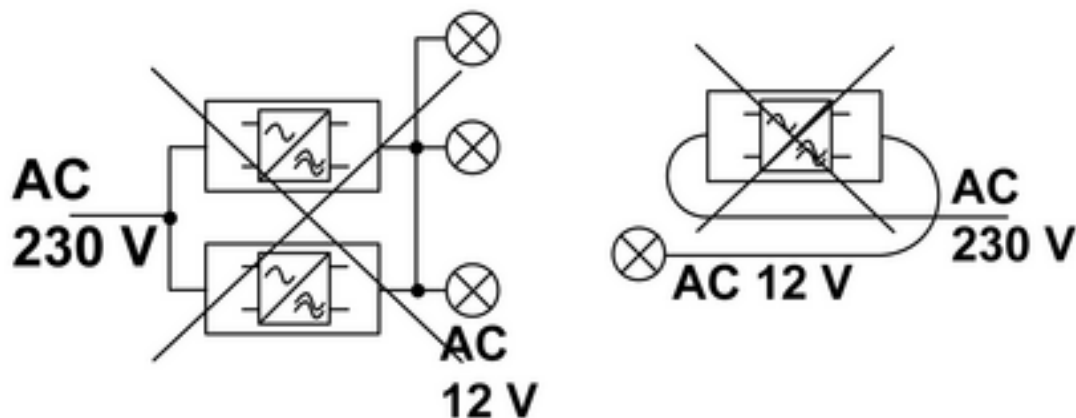


Figure 2

- ❏ Do not connect secondary cable with additional transformers (Figure 2).
- ❏ Do not lay secondary cable parallel to mains cable or transformer (Figure 2).
- ❏ Do not lay secondary cable on metal surfaces.
- ❏ Ensure that the control cable is of the appropriate type, cross-section and routing for the VDE specifications for 250 V cables, DALI interface has basic insulation.
- ❏ For reliable strain relief, use only cables of the same type on the primary side and on the secondary side.

Cable recommendations for reliable strain relief

Primary side	Secondary side
H03VV-F 2×0.50mm ²	H03VV-F 2×0.75mm ²
H03VV-F 2×0.75mm ²	H05VVH2-F 2×0.75mm ²
H03VVH2-F 2×0.75mm ²	H05VV-F 2×1.5mm ²
H05VVH2-F 2×0.75mm ²	H05VV-F 2×2.5mm ²
NYM-J 3×1.5mm ²	NYM-J 3×1.5mm ²
NYM-O 2×1.5mm ²	NYM-O 2×1.5mm ²
	NYM-J 3×2.5mm ²

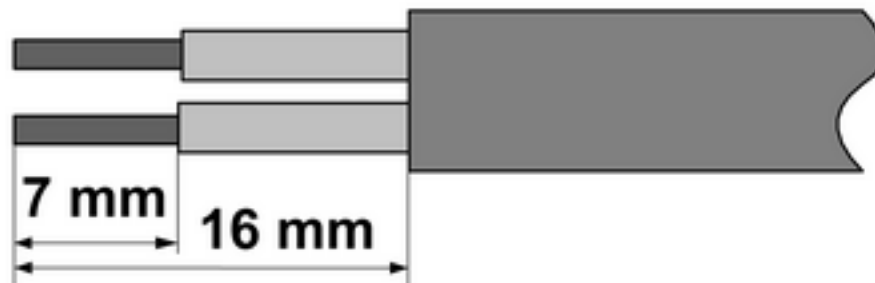


Figure 3: Stripping lengths

- Strip connecting cables according to specifications (Figure 3).

Terminal designations

PRI	AC 230 V ~
TDi	Connection for installation button
DA	DALI interface
SEC	AC 11.8 V ~

Connecting transformer with DALI control unit

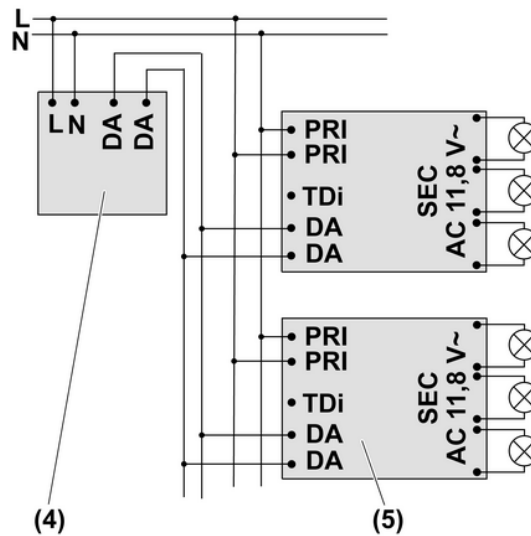


Figure 4: Connection diagram with DALI control unit

- Connect transformer (5) and DALI control unit (4) according to connection diagram (Figure 4).
- ⓘ The connected transformers and the DALI control unit may be operated on different outer conductors.

Connecting transformer with installation button

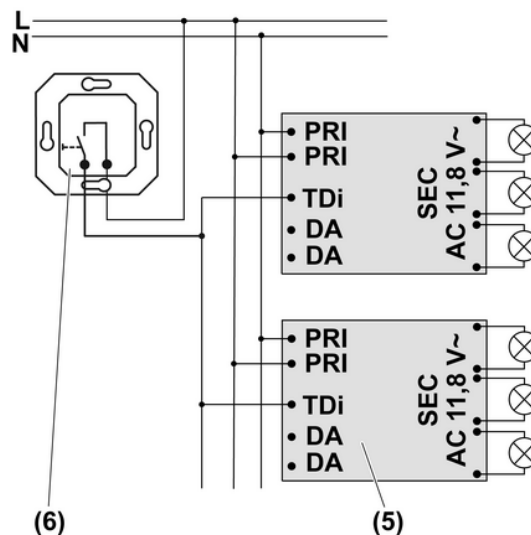


Figure 5: Connection diagram with installation button

- ⓘ Illuminated installation buttons may only be connected if they have a separate N terminal.
- ⓘ Connect all transformers and installation buttons to the same outer conductor.
- ⓘ Ensure that the primary terminals are connected in a uniform manner.
- Connect transformer (5) and installation button with NO contact (6) according to connection diagram (Figure 5).

5.2 Commissioning

Commissioning with DALI control unit

Commissioning depends on the control unit being used.

The system is fitted and connected.

- Switch on mains voltage.
Transformer switches to maximum brightness.
- Perform commissioning (see instructions for control unit)

Commissioning with installation button

The system is fitted and connected.

- Switch on mains voltage.
Transformer switches to maximum brightness.
- Press installation button until the transformer starts dimming.
The transformer has detected the installation button and can now be operated.

6 Appendix

6.1 Technical data

Rated voltage	AC 230 / 240 V ~
Mains frequency	50 / 60 Hz
Rated voltage	DC 230 / 240 V
Battery voltage	DC 176 ... 275 V
Primary current	0.16 ... 0.5 A
Rated load	35 ... 105 W
Minimum connected load	35 W
Standby power	max. 0.5 W
Power loss	max. 6 W
Power factor	0.95
Output voltage	AC 11.8 V~ eff.
Ambient temperature	-20 ... +50 °C
Housing temperature	75 °C (tc)
Protection rating	IP 20
Safety class	II
Primary side connection	
Single stranded	0.5 ... 1.5 mm ²
finely stranded with conductor sleeve	0.5 ... 1.5 mm ²
finely stranded without conductor sleeve	0.5 ... 1.5 mm ²
Secondary side connection	
Single stranded	0.75 ... 2.5 mm ²
finely stranded with conductor sleeve	0.75 ... 2.5 mm ²
single stranded without conductor sleeve	0.75 ... 2.5 mm ²
Secondary cable length	0.3 ... 2 m
Dimensions W×H×D	170×44×34 mm

6.2 Troubleshooting

Device switches off

Cause: short-circuit protection has tripped.

Eliminate short-circuit.

 The transformer switches on again after the short-circuit is eliminated

Light becomes dimmer without being operated and brighter again after some time

Cause: overheating protection adjusts the power downwards to allow the transformer to cool, and then raises it again.

Check the installation situation.

Reduce the connected load.

Device switches to maximum brightness without being operated

Cause: device is not receiving any DALI telegrams (see section Behaviour in case of mains voltage failure).

Check DALI control unit.

6.3 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

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