

**Booster for Dimming**

GBO-300 (performance upgrade) 108393

**1. Designated use**

The **GBO-300** booster serves to upgrade the performance of universal dimming actuators up to 300 W per channel.

The boosters switches and dims the brightness of different light sources such as incandescent lamps, halogen lamps, HV and LV halogen lamps, (conventional or with electronic transformer) or dimmable LED lamps for 230 V.

The device is designed for installation on DIN top hat rails (in accordance with EN 60715) and conforms with EN 60669-2-1. Only to be used in closed, dry rooms.

**2. Safety instructions**

WARNING

**Danger of death through electric shock or fire!**

- Installation should only be carried out by a professional electrician!

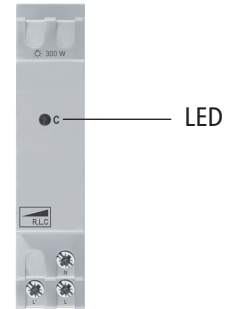
Tampering with, or making modifications to, the device will invalidate the guarantee.

- Always operate electronic and conventional transformers with the minimum load designated by the manufacturer.
- When replacing lamps, switch off the power supply (at the appropriate circuit breaker)
- Do not bypass or short-circuit the dimmer.
- Do not install an isolation or adjustable transformer before the dimmer.
- Do not mix wound and electronic transformers in the installation.
- Correct, automatic load detection is only possible with a connected load.
- Only use transformers approved by the manufacturer for dimmer operation.

**3. Description**

GBO-300 (performance upgrade)

- 1 channel for 5–300 W incandescent lamps
- For performance upgrade of GDA2K-400 KNX and GDA4K-400 KNX

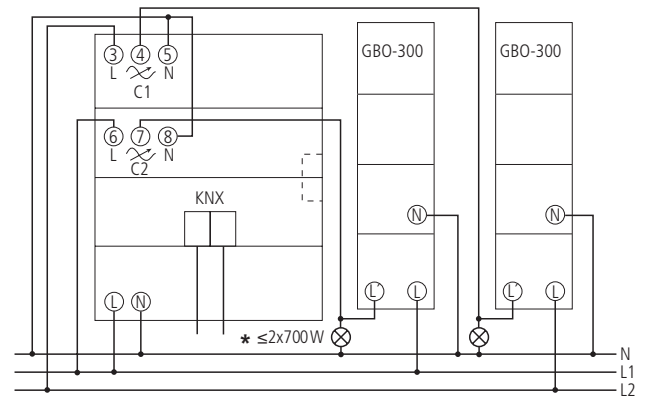


**Status LED**

LED flashes	mains on
LED flashes permanently	dimming
LED flashes quickly	error of excess temperature

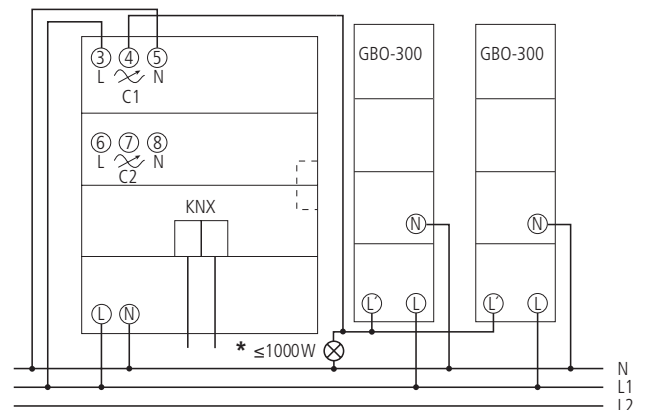
**4. Electrical connection**

Performance upgrade up to 2 x 700 W



- Maintain ventilation space of 8 mm right and left.

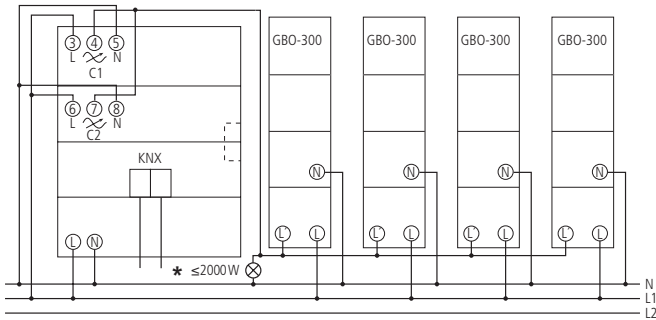
Performance upgrade up to 1000 W



\* Incandescent lamp load

- Maintain ventilation space of 8 mm right and left.

**Performance upgrade up to 2000 W  
(parallel operation for dimmer)**



\* Incandescent lamp load

- Maintain ventilation space of 8 mm right and left.
- Connect max. 2 boosters GBO-300 per dim channel.
- Connect max. 4 boosters GBO-300 in parallel operation.

The performance upgrade must only be operated on the same line conductor as the relevant channel of the dimmer (GDA2K-400 KNX und GDA4K-400 KNX).

**6. Technical data**

- Operating voltage: 230 V AC +10 % –15 %
- Frequency: 50 Hz
- Standby min.: 0.2 W
- Permissible ambient temperature: –5 °C to +45 °C
- Protection class: II subject to correct installation
- Protection rating: IP 20 in accordance with EN 60529

- Load types: R/L/C
- Incandescent lamp load: 300 W
- Halogen lamp load: 300 W
- Inductive load: 300 W
- Electronic transformers: 300 W
- Max. load with dimmable 230 V LED lamps: 45 W
- Min. switching capacity: 5 W

Dimming outputs > 1000 W for professional use only

Observe deviating technical data on the device rating plate!  
 Technical changes reserved.  
 The ETS database is available at [www.garo.se](http://www.garo.se).

Please refer to the KNX Handbook for detailed functional descriptions.