

## LED Converters

### Safety notes

- The electrical connection must be carried out by qualified electricians only. Make sure that the circuit is de-energized before connecting. If any malfunction or damage is detected after switching on, the supply voltage must be switched off immediately.
- Only use original parts from the manufacturer for maintenance and repair.
- Do not make any modifications. If subsequent modifications are carried out on the converters, liability will pass on to the person carrying out the modifications.
- The manufacturer accepts no liability for damage caused by improper use or extreme external influences. These are for example:
  - **Mistakes during installation of the converters:**
    - mechanical modifications to the housing, e.g. by drilling or grinding
    - excessive mechanical stress, e.g. due to bending or squeezing
    - overtemperature due to inadequate clearances
    - heat accumulation due to thermally insulated installation
- **Environmental and natural influences:**
  - overheating due to excessive ambient temperatures
  - chemical influences from the environment (e.g. sulphur)
  - overvoltage due to lightning
- **Disturbances in the power grid:**
  - mains over- or undervoltage, voltage imbalance
  - transient overvoltage in the grid or due to contact problems
  - ripple control signals outside the specified limit values

Keep these instructions with the inspection documentation of the system.

### Intended use

- **Non-dimmable LED converters:** electronic converters for the operation of LED in series connection.
- **Dimmable LED converters:** electronic converters for the operation of LEDs in series connection; dimming capability is provided by an additional 0–10 V control input.
- The converter is intended as a component to be installed in electrical systems by qualified personnel.

### Unpacking and checking the content

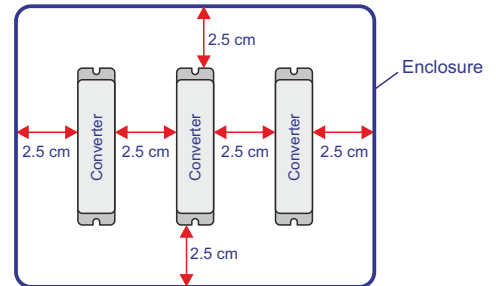
The packaging must be opened in such a way that the content cannot be damaged. Particular care must be taken when using sharp tools. After unpacking, immediately check the content for damage and compliance with the delivery note. Any defects or deficiencies must be notified to us immediately.

### Mechanical installation

- **Surface:** A solid and flat supporting surface is required to ensure good heat dissipation.
- **Fixing:** With 4 mm screws in the cut-outs provided.
- The ambient temperature must not exceed the specified limit during operation.

### Avoid accumulation of heat

- When installing the converters, make sure that any accumulation of heat is avoided.
- The **minimum clearance** between individual converters must be **2.5 cm all round**. Sufficient air circulation must be ensured. Exposure to additional heat by sunlight must be avoided. The converters can be installed directly on metal surfaces to ensure better heat dissipation.



### Fusing resistor

The red cable on the converter output is equipped with a fusing resistor. The function of this resistor is to damp current peaks to protect the LEDs against damage.

A typical example of such a situation are contact problems during installation. If the current gets too high, the resistor will be destroyed. The LED circuit is interrupted, and the LEDs will stop lighting.

The fusing resistor can be replaced after such a fault. To do so, cut out the resistor at the end of the heat-shrink tubing using suitable diagonal pliers and strip the insulation from both cable ends.

The fusing reactor is available as a spare part and is connected to the two open cable ends using Wago push-in connectors and insulating caps. The fusing resistor has no polarity, i.e. it can be connected either way round.



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### Commissioning

- Prior to commissioning the converter with LED load, the responsible qualified electrician must make sure that the maximum rated output current of the converter does not exceed the rated operating current of the LED load.
- The operating voltage required by the LED circuit must not exceed the output voltage supplied by the converter. Overloading of the converter is not permitted. When connecting the system to the mains, the voltage and type of current as well as the protection degrees, conductor cross-sections and fuse protection must be observed.
- The LED load must only be connected in a de-energized state. The mains voltage must not be switched on before the electrical connections are complete and the contacts have been checked.
- The converter housing must not be covered with paint. The type plates must always remain legible and may not be removed or covered after installation.
- Mechanical modification of the converters is not permitted and will void the warranty.
- The electrical connection to the mains must be carried out by a qualified electrician. For converters with no galvanic isolation between input and output (types C25/300, C25/300D, C40/300, C50/160, C100/160), the installation on the output side must also be carried out in accordance with the relevant regulations for electrical installations in the low-voltage grid.
- Protection class I converters must be safely connected to the positive earth conductor and, if applicable, to the equipotential bonding system of the electrical installation. If protection class II converters are used in devices of the overall protection class II, the connections and the entire output circuit must be insulated in accordance with the requirements of protection class II (double or reinforced insulation).
- The connections of the converters are not protected (degree of protection IP00, even if the converter itself is IP67-compliant) and must be installed in such a way that the degree of protection required at the installation location (i.e. within the protective enclosure, if applicable) is ensured. The connecting cables attached to the converter are not longitudinally watertight. The types of cables attached to the converter according to the data sheet are approved for protected installation (mechanical protection, UV protection) only.
- Protective enclosures must be provided with suitable means to drain water (and condensate).
- The converter must be fixed safely and must not be used as fixing point for other components (including cables).