

ELD-250

Microprocessor-controlled inverter



1. Introduction

The EL-Driver ELD-250 is a microprocessor-controlled inverter, destined to run electroluminescence lighting panels. For an optimal and secure use of all possible options we recommend you to read this operating instructions carefully. Best feature will be made of all advantages of this lighting medium, based on the concept of electroluminescence, when operated properly:

- homogeneous light emission
- high temperature resistance
- low power consumption
- minimal self-warming
- high freedom from maintenance
- eye-protecting
- various possibilities of configuration and flexibility in processing

2. Delivery contents

The ELD-250 is ex-factory adjusted to 150V 400Hz and can then be run as an independent device. However, it is possible to undertake the settings yourself. Therefore we offer a RS232 interface cable (type 3250 0280) and the appropriate software (ELFI) with programme description (E250 PRG1.DOC).

If you wish to adjust the output voltage manually in your company we offer a stick (type 3250 0270) that you can plug into the outlet for the interface. By turning the control knob the brightness of the lighting-panel can be regulated progressively.

3. Compliance

The inverter ELD-250 disposes of the following CE-compliances:

The device is in line with the requirements of the standard 2004/108EG and the low voltage standard 2006/95/EG.

4. Features

Essential features of the ELD-250 inverter:

- wide operating range due to wide range input voltage
- high safety owing to galvanic separation
- overloading protection due to power limitation
- over-current- and short-circuit protection
- silent cooling (no ventilation noise)
- sinusoidal-shaped output voltage of high quality
- increase of voltage freely programmable depending on the operating time of the panel
- PC-Interface for tuning and monitoring of all important factors.
- soft-start and soft-turn-off for the protection of the lighting panels
- progressive dimming by means of plug on stick

- small size and sturdy structure

5. Technical facts

| | |
|--------------------------|--|
| Input voltage | 110 V – 240 V AC |
| Output voltage | 20 V – 200 V AC (sinusodial) |
| Output frequency | 300 Hz – 750 Hz |
| Output power | < 250 VA |
| Output current | max. 2 A (automatic switching) |
| Humidity range | 0 % - 60 % r.F. (non-condensing) |
| Temperature range | -20 °C – 40 °C |
| Maximal lighting surface | ca. 1 m ² (depending on the system of lighting-panel) |
| Measurements (BxHxT) | 157 x 45 x 216 mm |

6. Displays and operating components

LED-display:

| | |
|-----------------|---|
| green: | regular operating condition |
| green flashing: | operating condition with power limitation |
| red: | temperature shutdown (inside temperature max. 80 °C) |

red flashing: overload cut-off

Power switch:

On-off switch

Resetting the inverter into regular operating condition after limit exceedance (after breaking, wait for at least 5 sec. before switching-on again!)

Manual dimming:

The voltage of the ELD-250 can be amended with the stick (type 3250 0270) no matter what the initial software settings were. The stick can be plugged into the 8-pole outlet, at the back of the device underneath the black cover.

To make this work out the nub of the stick has to be turned while the inverter is running. The Lamp voltage must be measured with an AC-voltmeter. In order to avoid undesired voltage changes, the stick should not be removed while the inverter is running. If the inverter is plugged in without the stick the Lamp voltage is conform to the programmed values

Programming:

The possibility is given to undertake the settings yourself. Therefore we offer a RS232 interface cable (type 3250 0280) and the appropriate software (ELFI) with programme description (E250 PRG1.DOC).

7. Warranty terms:

Enz Electronic AG issues a one-year guarantee from the date of purchase. Warranty claims are void in case of damages due to wear and tear, overloading or inappropriate handling of the inverter.

A T T E N T I O N

Mains plug must be unplugged whilst the lighting panel is linked!

- This system is run with a dangerous power voltage. Therefore it should only be maintained by technically qualified and trained staff.
- For all workings the device has to be disconnected from the mains Line.
- All workings on the device have to be in line with the national safety procedures.
- Don't carve, deviate or bend the components of the system.
- Do not use the inverter in a wet or damp environment.
- Do not cover the inverter (danger of overheating).
- The manufacturer does not assume liability for any damages due to inappropriate handling or maintenance works.