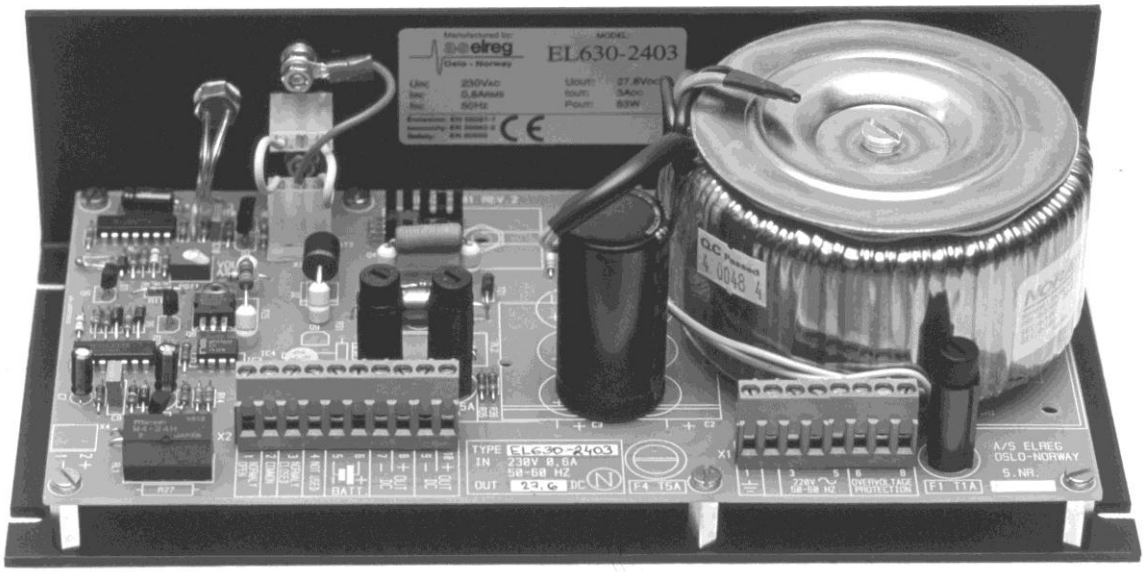
General information:

EL630-1203 has been specifically developed to meet the DC powering requirements for telecommunications, industrial and marine applications. The output is current limited, with short circuit protection. EL630-1203 is a high quality and reliable linear power supply. It is designed to work in parallel with a 12V battery, giving a no-break power supply for different electronic equipments such as fire alarm systems, intruder alarm, access control systems aso. EL630-1203 has relay contact output (potential free) giving information about battery condition, mains and charger failure. Light emitting diodes indicates battery condition, mains/charger "OK", overload and fuse errors.



- **EL630-1203 key data:**
- **Output power (13,8V/3A)**
- **2 output circuits with fuses and LED's which illuminates by fuse break.**
- **Temperature compensated chargervoltage.**
- **Potential free alarm output for main/charger fault and battery failure.**
- **Separate input for battery connection to achieve a "No-Break distribution system"**
- **Built in battery test function, controlled automatically or externally.**
- **Automatic protection against deep discharging of the battery.**
- **Approved by NEMKO and marked with CE label.**

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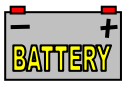

Battery supervision and battery protection

EL630-1203 has an automatic battery test procedure. The battery will be tested every 3 min. If the battery voltage falls below 12V, the LED marked BATTERY OK will be switched off.
This LED will illuminate again when battery voltage increases to 11,9V.
When mains disappear, the battery will supply current to the load and the LED will start flashing.
During mains failure the battery will be discharged. In order to protect the battery from completely discharging and risk for destroying, the load will be disconnected when the battery voltage has fallen down to 9,5V.
When the mains is back and the voltage has increased to 11,9V, the load will automatically be connected to the power supply again.

Supervising the Mains and the Charger

The LED marked MAINS/CHARGER OK illuminates when the charger supplies current.
This LED will turn off when the charger stops supplying current.

Alarm outputs

EL630-1203 has common output in order to send information about battery condition and mains/charger condition externally.
The relay contact are potential free and withstand a current up to 2 Amps

Mains/Charger and battery faults:

Relay contacts marked COMMON and NORMALY CLOSED is connected by battery fault or mains/charger fault

Protection against overload and short-circuiting:

The rectifier will limit the output current to max 3,5A and the output voltage decrease in order to maintain the output current constant without any danger for the power supply.

The charger is equipped with 2 separate outputs, each with a 5 amp fuse.
The basic purpose of these fuses are to protect the battery against irregular current draw.

Red LED`s placed with fuses illuminates when the respective fuses are broken. The LED`s will only illuminate if a load is connected to the power supply.

Over voltage protection:

The Mains input is protected by a MOV (Metal oxide varistor) against transients and over voltage.

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Technical data:

Input:

Input voltage:	210 - 250VAC 50-60 Hz
Input power:	78W (On full load on all outputs)
Over voltage protection:	Yes, MOV (metal oxide varistor)
Input fuse:	20x5mm glass fuse 1A slow blow
Connections:	Screw terminals max 2,5mm^2

Output:

Voltage:	13,8VDC +/- 100mV (Adjustable +/- 2,5V)
Current max:	3A continuously.
Power max:	42W
Voltage accuracy:	<0,5% by 0-100% load and/or input voltage variations from 210 to 250VAC
Output circuits :	2 pcs. Each with a 20x5mm glass fuse 5A slow blow
Battery input:	1 pcs. 12V
Short circuit protected	Yes.
Protected against overload:	Yes, Current limiting at 3,5Amp +/- 0,5Amp
Ripple and noise on output:	<20mV p-p DC-30MHz, measured with a noise probe direct on the output connectors.
All connections:	Screw terminals max 2,5mm^2

Information output / Input:

Mains/charger faults	Potential free relay contacts no,nc,c max load 2 Amp
Battery fault:	Potential free relay contacts no,nc,c max load 2 Amp
Connections:	Screw terminals max 2,5mm^2

General data:

Battery connections:	Screw terminals max 2,5mm^2
Efficiency:	>65%, by full load.
Soft start:	Yes
Temperature protected:	Yes
Mounting:	4 pcs. Holes for screws
Weight:	2400g
Dimensions:	L*W*H: 124mm*260mm*73mm
Density:	IP 20
Cooling:	Free air passage
Ambient temperature:	-20 - +60^{o}C

Approvals:

Meet the requirements in the safety standard EN60950.
Meet the requirements in RFI/EMI standard EN55022 level B
EL630-1203 is approved by NEMKO and marked with a CE label.

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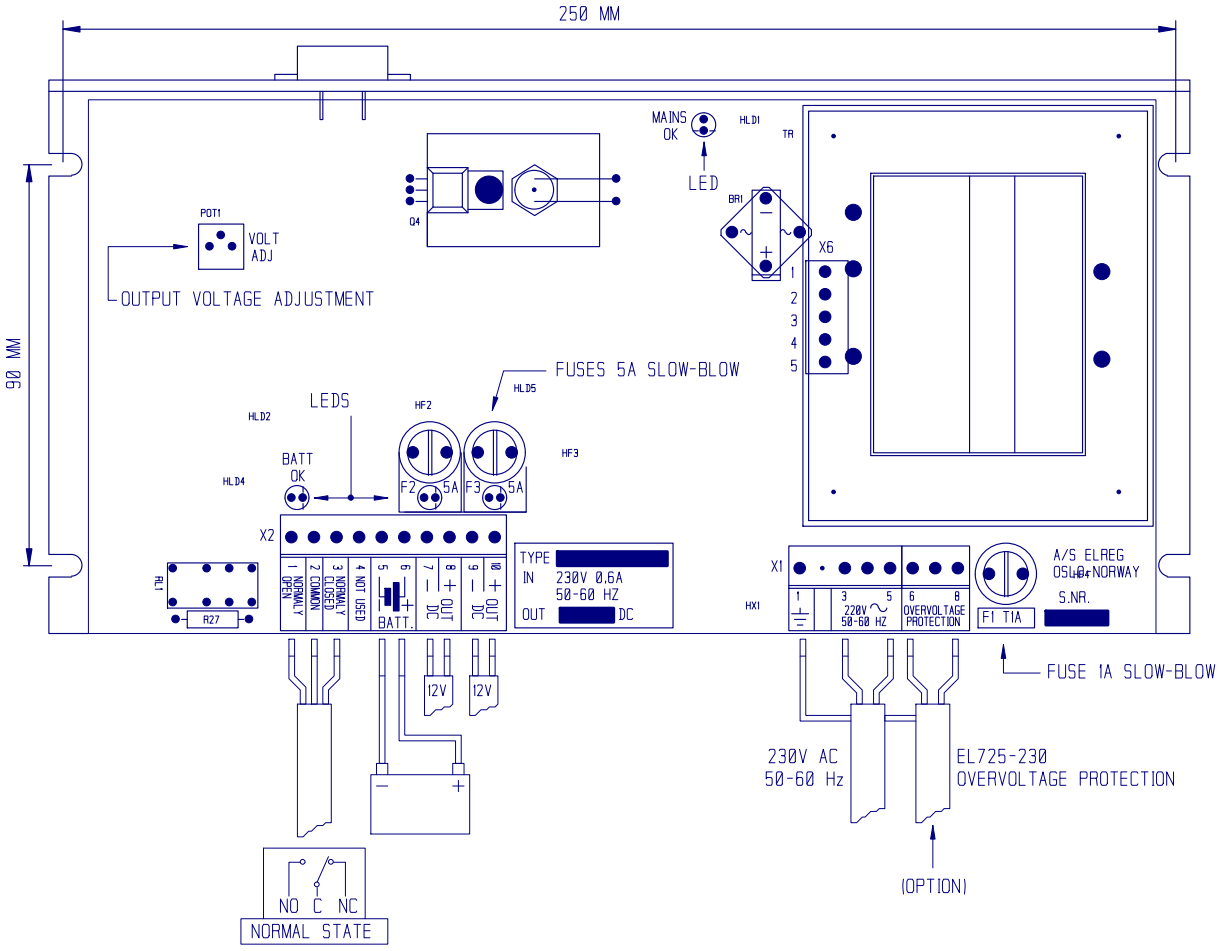
Installation and Connection



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TEST REPORT

Model:

EL630-1203 **Serial no**:.....

- **Output voltage adjustment** ☐
- **Current limiting function tested** ☐
- ☐
- **Measured noise and ripple** ☐
- **Battery control function tested** ☐
- **Mains fault function tested** ☐
- **Deapdischarge protection tested** ☐
- **Fuses tested** ☐
- **Earth connection / Isolation test acc.to EN50116** ☐

Tested by:

Date:…… Sign:……..

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