

Constant voltage charger in miniature format

Type UP 310



*»We store  
the world's energy«*

**Network**

## Type UP 310

### Constant voltage charger in miniature format

The charger is primary switched with high frequency, 40 kHz, which gives high efficiency > 85%, excellent load and line regulation, small dimensions and low weight. The charger is protected by two fuses and the battery connections are also protected by two fuses.

The unit is equipped with alarm and is delivered fully equipped.

The charger type UP 310 is specially designed for operating together with lead acid batteries, open or valve regulated batteries.

Through a specific care and attention, the charger obtained a very low ripple level 0,05%.

On the front panel there is an exact digital volt- and amperemeter, which with the aid of a push button can either show output voltage or output current. On the front door there is also an illuminated main switch and terminals for connecting a voltmeter.

A new type of operation indication "Normal" has been introduced. This green LED shows that no alarms exist and that normal operation status exists.

The electronic alarm board contains the following standard alarms:

Mains power failure, Charger failure, and two voltage level alarms, that either can be configured as Charge level over/under voltage limit or as Low battery voltage and High battery voltage. The alarm levels are easily adjusted and the level can be shown on the digital display.

#### Standard Alarms

Sum-alarm that is indicated by a red LED. Alarm that goes away are automatically reset and the red alarm LED are extinguished. Sum-alarm has one relay with potential free changeover contact.

The charger is designed for indoor wall mounting. The charger is built in a metal case with an easily removable front. The unit is lacquered in a beige colour.

#### Benefits for the user

- > Very good load and line regulation
- > High efficiency
- > Low noise level
- > Small dimensions
- > Sum-alarm
- increased lifetime of the battery.
- low energy consumption.
- almost totally silent.
- easy to install.
- easy to use.

#### Product program

Order code	Voltage	Current	Primary fuse	Cabinet size	Weight kg
UP 310-12/5	12V	5A	6A	LH 1	7
UP 310-12/10	12V	10A	6A	LH 1	7
UP 310-12/20	12V	20A	6A	LH 2	10
UP 310-24/2,5	24V	2,5A	6A	LH 1	7
UP 310-24/5	24V	5A	6A	LH 1	7
UP 310-24/10	24V	10A	6A	LH 2	10
UP 310-24/15	24V	15A	6A	LH 2	11
UP 310-24/20	24V	20A	6A	LH 2	11
UP 310-24/35	24V	35A	10A	LH 2	11
UP 310-48/2,5	48V	2,5A	6A	LH 2	10
UP 310-48/5	48V	5A	6A	LH 2	11
UP 310-48/10	48V	10A	6A	LH 2	11
UP 310-48/15	48V	15A	10A	LH 2	11

Made for fixed installation, input: 230V 1-phase, and output: 12 , 24 or 48V DC.

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### Constant voltage charger

<b>Cabinet dimensions:</b>	LH1	330 x 315 x 120 mm (WxHxD)
	LH2	430 x 370 x 150 mm (WxHxD)

### Technical specification

#### Charger:

AC input voltage	230V +15% -15%, 1-phase 47-63Hz
Powerfactor	Better than 0,99
Cos fi	Better than 0,99
DC output voltage	Nominal 12V, 24V or 48V DC
Load and line regulation	Better than $\pm 0,05\%$
Output current limit	100-105% of nominal current
Constant voltage	I/U according to DIN 41773
Efficiency	Better than 85%
Ripple	Less than 0,05% RMS
Emission	Enl. EN 50 081-1 and EN 50 081-2 (1993)
Immunity	Enl. EN 50 082-1 and EN 50 082-2 (1993)
Harmony	Enl. EN 61000-3-2
Harmony standard	Enl. EN 60742 and EN 60950
RFI / EMI	According to EN 55022 B and CISPER 22 B
Cabinet	IP 20 wall
	IP 40 wall

#### Accessories:

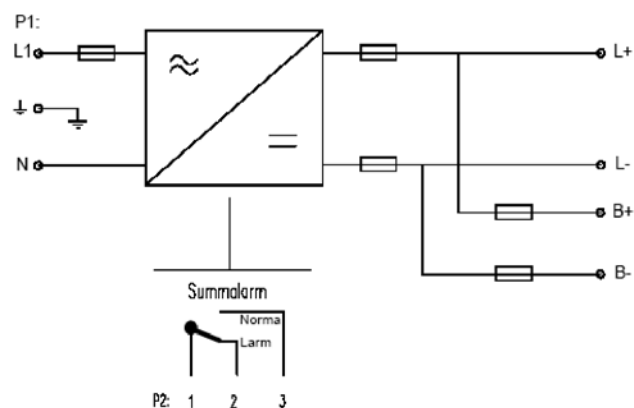
Cabinet for additional batteries - please request.

#### Standard Alarms:

- Mains power failure
- Charger failure
- High / Low battery voltage or
- Floating voltage failure

#### Sum-alarm

- relay with potential free changeover contact.



**Exide Technologies**, der har aktiviteter i mere end 80 lande og over 120 års erfaring, er en af verdens største virksomheder inden for produktion og genanvendelse af blysyrebatterier. Virksomheden udvikler avancerede energilagringssystemer til både automobilbranchen og industrien generelt. Førende producenter af biler, lastbiler og gaffeltrucks har endvidere valgt Exide Technologies som deres OEM-leverandør. Exide leverer også etablerede og velkendte varemærker til eftermarkedet.

Exide Transportation producerer batterier til både lette køretøjer og erhvervskøretøjer samt til landbrugssektoren, marinsektoren og fritidssektoren. Industrial-markedet, der hører under divisionen **GNB Industrial Power**, omfatter effektive energilagringssystemer til Motive Power-applikationer som f.eks. gaffeltrucks, rengøringsmaskiner og andre elektriske køretøjer, der anvendes i industrien, samt Network Power-applikationer som f.eks. telekommunikationssystemer, vedvarende energianlæg og UPS-anlæg.

Exides ingeniører og teknikere har altid været helt i front, når det gælder udvikling af nye teknologiske løsninger. Exides ISO-/TS-certificerede fabrikker er en garanti for, at produkterne er fremstillet så effektivt som muligt, og at de opfylder de højeste kvalitetskrav samtidig med, at de belaster miljøet mindst muligt.

Exides store salgs- og distributionsnetværk står for kvalitetsservice og levering til aftalt tid. Virksomhedens topmoderne genvindingsanlæg sikrer, at batterierne genanvendes, og yder dermed et positivt bidrag til miljøet. Exide tilbyder også diverse ydelser, tilbehør og energirådgivning.



- Batterifabrikker
- Genvindingsanlæg
- Distributionscentre
- Europæisk hovedkontor
- Salgskontorer

Alle batterifabrikker er certificeret i henhold til ISO 9001  
Alle startbatterifabrikker er certificeret i henhold til ISO/TS 16949  
Alle batterifabrikker er certificeret i henhold til ISO 14001