

Switchmode rectifier type

Type UP 610 3-phase



*»We store
the world's energy«*

Network

Type UP 610 3-phase

Switchmode rectifier type

- > Two level charging
- > Excellent load and line regulation
- > High efficiency
- > Power factor PF 0.99
- > Small dimensions
- > Fully equipped with micro controller alarm
- > Display of output power
- > Display of earth resistance
- Suits all types of batteries, Shorter recharge time.
- Increased battery lifetime.
- Low energy consumption.
- Sine wave input.
- Easy to install.
- Perfect system control
- Utilization overview.
- Easy fault localization of earth failure.

Rectifier with sine wave input. Microprocessor controlled and two charging voltage levels

The rectifier type UP610 is primary switched, with two charging voltage levels, float rate charge and high rate charge. This implies that UP610 fits perfectly for alkaline (NiCd) batteries, but can of course be utilised for systems with stationary lead acid batteries, either open or recombining (valve) types. UP610 is delivered fully equipped including a micro-processor controlled alarm.

Applications

The two level charging capability of UP610 makes it especially suitable for applications where short recharging times are needed, and in battery systems that requires a very long time to get fully charged on float level charging. UP610 is also suitable for applications where high demands are needed for battery and system surveillance.

Technical description

The rectifier is primary switched with high frequency, 160 kHz, which gives high efficiency > 85%, excellent load and line regulation, small dimensions and low weight. Exact charging is achieved by the very fast regulation. The rectifier is equipped with terminals for connection of remote sense wires which compensate for voltage drop over the battery wiring. A break or a short circuit of the remote sense has no effect on the regulation. The rectifier is prepared for external temperature compensation. Through a specific care and attention, the constant voltage rectifier type UP610 has obtained a very low ripple voltage (0.05% RMS), low acoustic noise and low weight. The front panel includes all user facilities such as main switch, voltmeter terminals, digital volt- and amperemeter, control push buttons and alarm LEDs.

Alarm functions

The electronic alarm board is microcomputer based and contains the following standard alarms:

- > Mains power failure
- > Charger failure, temp sensor failure
- > Battery circuit failure
- > Charging level over/under voltage limit
- > Low battery voltage
- > High battery voltage
- > Ground fault +
- > Ground fault -
- > A-alarm
- > B-alarm
- > Sum-alarm

Reset and LED-test are included. All alarms can easily be inhibited with push buttons on the front. A-, B- and Sum-alarm has separate relays with changeover contacts. The time delay of A- and B-alarm is a programmable standard feature.

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Product program

Type	Voltage	Current	Primary fuse	Dimensions (mm)			Weight (kg)
				W	H	D	
UP 610-24/100	24V	100A	16A 3-phase	430	410	365	19
UP 610-24/120	24V	120A	16A 3-phase	430	410	365	19
UP 610-24/140	24V	140A	16A 3-phase	430	700	365	36
UP 610-24/175	24V	175A	16A 3-phase	430	700	365	38
UP 610-24/200	24V	200A	16A 3-phase	430	700	365	40
UP 610-24/240	24V	240A	26A 3-phase	430	700	365	42
UP 610-24/280	24V	280A	25A 3-phase	430	1250	365	76
UP 610-24/320	24V	320A	25A 3-phase	430	1250	365	78
UP 610-24/350	24V	360A	25A 3-phase	430	1250	365	80
UP 610-48/59	48V	50A	16A 3-phase	430	410	365	19
UP 610-48/60	48V	60A	16A 3-phase	430	410	365	19
UP 610-48/70	48V	70A	16A 3-phase	430	700	365	36
UP 610-48/80	48V	80A	16A 3-phase	430	700	365	38
UP 610-48/100	48V	100A	16A 3-phase	430	700	365	40
UP 610-48/120	48V	120A	16A 3-phase	430	1250	365	76
UP 610-48/140	48V	140A	25A 3-phase	430	1250	365	78
UP 610-48/150	48V	150A	25A 3-phase	430	1250	365	80
UP 610-48/160	48V	160A	25A 3-phase	430	1250	365	78
UP 610-48/180	48V	180A	25A 3-phase	430	1250	365	80
UP 610-110/20	110V	20A	16A 3-phase	430	410	270	15
UP 610-110/22,5	110V	22,5A	16A 3-phase	430	410	365	19
UP 610-110/30	110V	30A	16A 3-phase	430	410	365	36
UP 610-110/30	110V	30A	16A 3-phase	430	410	365	19
UP 610-110/37,5	110V	37,5A	16A 3-phase	430	700	365	38
UP 610-110/45	110V	45A	16A 3-phase	430	700	365	40
UP 610-110/50	110V	50A	20A 3-phase	430	1250	365	76
UP 610-110/60	110V	60A	16A 3-phase	430	1250	365	78
UP 610-110/67	110V	67A	25A 3-phase	430	1250	365	80
UP 610-110/70	110V	70A	25A 3-phase	430	1250	365	80
UP 610-110/80	110V	80A	25A 3-phase	430	1250	365	78
UP 610-110/90	110V	90A	25A 3-phase	430	1250	365	80
UP 610-220/15	220V	15A	16A 3-phase	430	700	365	38
UP 610-220/20	220V	20A	16A 3-phase	430	700	365	40
UP 610-220/25	220V	25A	20A 3-phase	430	1250	365	76
UP 610-220/30	220V	30A	20A 3-phase	430	1250	365	78
UP 610-220/33	220V	33A	20A 3-phase	430	1250	365	80

Technical specification

AC input voltage	400/230V \pm 15%, 3-phase 47-63Hz
Emission	According to EN 50081-1 and EN 50 081-2 (1993)
Power factor PF	Better than 0.99
Cos phi	Better than 0.99
Immunity	According to EN 50 082-1 and EN 50 082-2 (1993)
DC output voltage	Nominal 24V, 48V, 110V and 220V
EMC	According to EN 61000-3-2
Load and line regulation	Better than \pm 0.05%
RFI / EMI	According to EN 55022B and CISPER 22 B
Output current limit	102% of nominal current
Constant voltage	I/U according to DIN 41773
Harmonized standard	According to EN 60742 and EN 60950
Efficiency	Better than 85%
Ripple	Better than 0.05% RMS
Cabinet	IP 40 dl

Cabinet

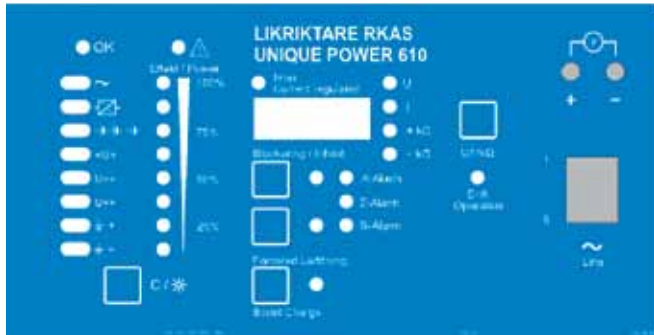
The rectifier is designed for indoor use. The rectifier is built in a metal case with a hinged front door. The front door has the hinge on the right side and the unit is lacquered in a grey colour.

The cabinet has 7 inlet holes for cables, all directed downwards.

Protection

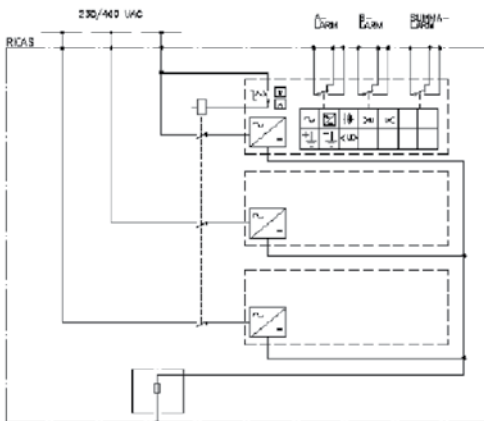
The rectifier is short circuit proof, and the output is fused by a 2-pole fuse.

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Options

- > Sensor for temperature compensation type TG
- > Separate alarm relay card type SL
- > Battery room fan control



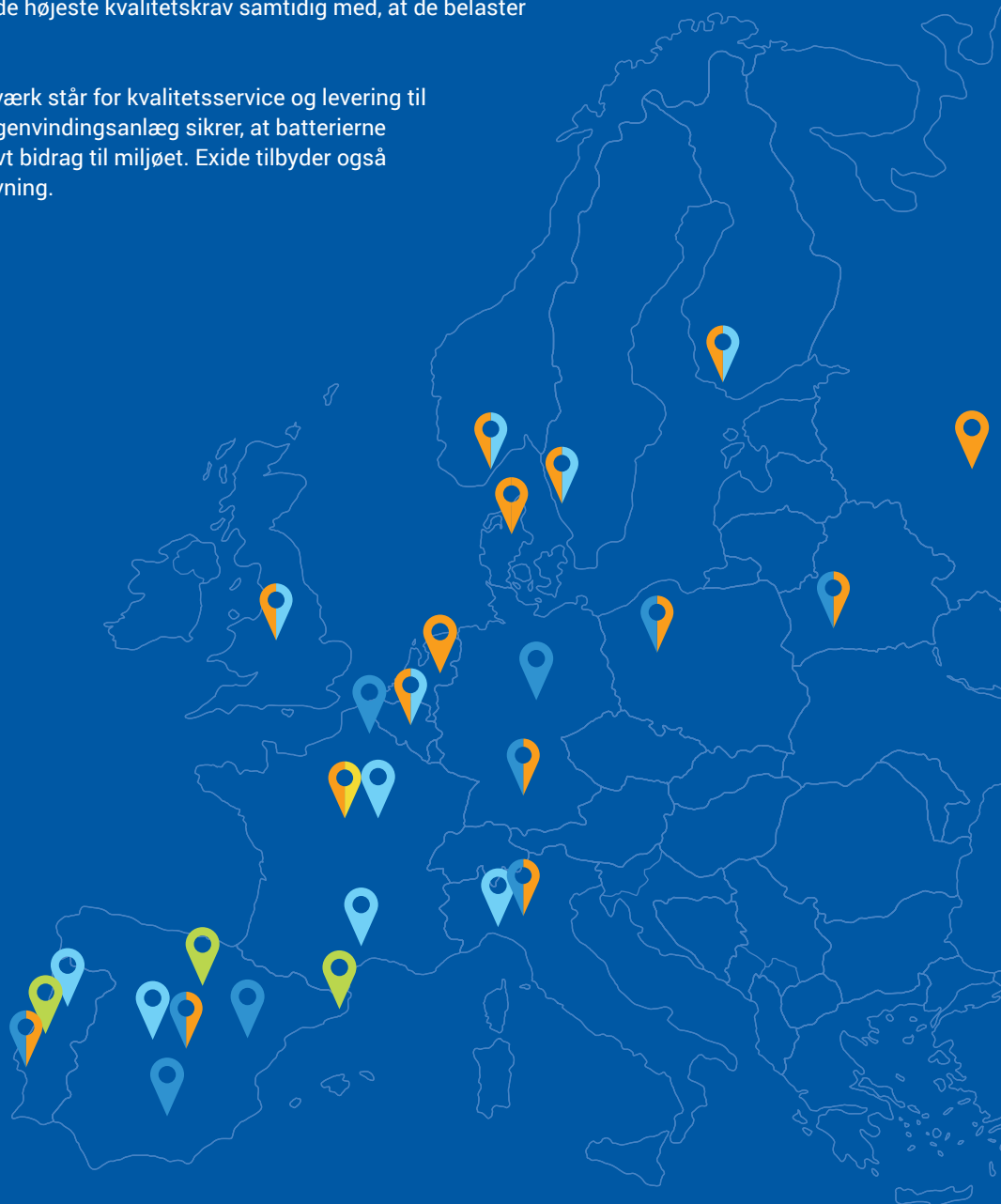
Cabinet size 430 x 410 x 175 mm is for wall mounting
 Cabinet size 430 x 410 x 270 mm is for wall mounting
 Cabinet size 430 x 410 x 365 mm is for wall mounting
 Cabinet size 430 x 700 x 365 mm is for wall mounting
 Cabinet size 430 x 1250 x 365 mm is a floor cabinet

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