

RKA Power

Switchmode rectifier type LEIF with PFC



Rectifier / DC-UPS
- with or without batteries
- with or without alarm.

Usage:

The rectifier is specially designed for charging and maintenance charging of lead acid batteries. A battery can easily be added inside the rectifier to make a complete unit.

Applications:

The rectifier type LEIF is primary designed for alarm applications, but suits most industrial purpose that needs continuous power or as a backup power unit.

Technology:

The charger is primary switched with high frequency (100kHz) which gives good load and line regulation, small dimensions high efficiency and low weight.

Internal batteries:

A battery can easily be added to the unit. Suitable batteries are valve regulated 12V 7Ah types, with a typical lifetime of 5 years.

Design:

The charger LEIF is designed for indoor wall mounting. The cabinet has 2 downward directed inlet holes for cables. The charger is built in a metal case and is lacquered in a gray color.

Fuses:

The charger is short circuit proof and is protected by fuses. The battery has 2 fuses, one in each branch. The battery fuses protects the battery and load. The fuses are of Autofuse type.

Manufacturer: RKA Power AB

Benefits for the user:

+ Complete unit	→	every thing ready in one unit.
+ Easy installation	→	ready, only cable in / out.
+ Tested in factory	→	saves time and money.
+ Small dimensions	→	easy to install.
+ Excellent load and line regulation	→	increased lifetime of the battery.
+ High efficiency	→	low energy consumption.
+ Low noise level	→	almost totally silent.
+ Powerfaktor PF 0.99	→	sine wave input.

Product program:

Made for permanent installation, input 230V AC 1-phase 50 or 60Hz and output 12V, 24V, 48V or 110V DC.

Art-no	Order code	Voltage	Current	Rec. linefuse	Room for batteries	Dim i mm			Weigth with and without battery	
		Volt	Amp	Amp		W	H	D	kg	kg
E52 431 02	LEIF 12/5	12V	5A	6A	1-2 pcs.	310	315	80	4.4	7
E52 431 04	LEIF 12/10	12V	10A	6A	1-2 pcs.	310	315	80	4.4	12
E52 431 06	LEIF 12/20	12V	20A	6A	_	435	370	150	8	_
E52 431 10	LEIF 24/1.25	24V	1.25A	6A	2 pcs.	310	315	80	4.2	10
E52 431 12	LEIF 24/2.5	24V	2.5A	6A	2 pcs.	310	315	80	4.2	11
E52 431 14	LEIF 24/5	24V	5A	6A	2 pcs.	310	315	80	4.4	12
E52 431 16	LEIF 24/10	24V	10A	6A	_	435	370	150	8	_
E52 431 18	LEIF 24/15	24V	15A	6A	_	435	370	150	9	_
E52 431 20	LEIF 24/20	24V	20A	6A	_	435	370	150	10	_
E52 431 22	LEIF 24/35	24V	35A	10A	_	435	370	150	10	_
E52 431 30	LEIF 48/2.5	48V	2.5A	6A	_	435	370	150	10	_
E52 431 32	LEIF 48/5	48V	5A	6A	_	435	370	150	10	_
E52 431 34	LEIF 48/10	48V	10A	6A	_	435	370	150	10	_
E52 431 36	LEIF 48/15	48V	15A	10A	_	435	370	150	10	_
E52 431 40	LEIF 110/2.5	110V	2.5A	6A	_	435	370	150	10	_
E52 431 42	LEIF 110/5	110V	5A	6A	_	435	370	150	10	_
E52 431 44	LEIF 110/7.5	110V	7.5A	10A	_	435	370	150	10	_
E52 431 90	Battery box	12-48V	16A		1-4pcs	310	315	80	2	

Product program charger with alarm:

Made for fixed installation, input 230V AC 1-phase 50 or 60Hz and output 12V or 24V DC

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 charger has a green OK LED and a red sum-alarm LED on the front panel. Alarm that goes away are automatically reset.

Sum-alarm is signaled by one relay with potential free changeover contact.

Art-no	Order code	Voltage	Current	Rec. linefuse	Room for batteries	Dim i mm			Weight with and without battery	
		Volt	Amp	Amp		W	H	D	kg	kg
E52 431 03	LEIF 12/5L	12V	5A	6A	1-2 pcs.	310	315	80	4.6	7
E52 431 05	LEIF 12/10L	12V	10A	6A	1-2 pcs.	310	315	80	4.6	12
E52 431 07	LEIF 12/20L	12V	20A	6A	_	435	370	150	9	_
E52 431 13	LEIF 24/2.5L	24V	2.5A	6A	2 pcs.	310	315	80	4.4	11
E52 431 15	LEIF 24/5L	24V	5A	6A	2 pcs.	310	315	80	4.6	12
E52 431 17	LEIF 24/10L	24V	10A	6A	_	435	370	150	9	_
E52 431 19	LEIF 24/15L	24V	15A	6A	_	435	370	150	10	_
E52 431 21	LEIF 24/20L	24V	20A	6A	_	435	370	150	11	_
E52 431 23	LEIF 24/35L	24V	35A	10A	_	435	370	150	11	_
E52 431 90	Battery box	12-48V	16A		1-4pcs	310	315	80	2	

Typical maximal load currents and backup time for different units: (Max 15A battery fuse)

Battery	5 min	10min	30 min	1 hour	2 hour	3 hour	5 hour	10 hour	24 hour
7Ah	5A	5A	5A	3.9A	2.3A	1.6A	1.1A	0.6A	0.2A
2x7Ah	10A	10A	10A	7.8A	4.6A	3.2A	2.2A	1.2A	0.4A

Technical specification

Rectifier:

AC input voltage	230V +15% -15%, 1-phase 47-63Hz
Powerfactor PF	Better than 0.99
Cos phi	Better than 0.99
DC output voltage	Nominal 12V, 24V, 48V or 110V DC
Load and line regulation	Better than $\pm 0.05\%$ before output fuse
Output current limit	102% of nominal current
Constant voltage	I/U according to DIN 41773
Efficiency	Better than 85%
Ripple	Better than 0.05% RMS
Emission	According to EN 50 081-1 and EN 50 081-2
Immunity	According to EN 50 082-1 and EN 50 082-2
EMC	According to EN 61000-3-2
RFI / EMI	According to EN 55022 B and CISPER 22 B
Harmonized standard	According to EN 60742 and EN 60950
Cabinet	IP 20

Battery:

Battery capacity

7Ah, 1 x 12V or 2 x 12V

Battery fuse

fuse in positive and negative branch

Extra battery case:

Battery

12V batteries 6.5-7Ah

Battery size

65x151x94 mm

Number of batteries

1-4 pcs.

Output voltage

12V, 24V or 48V

Battery fuse


16A 2-pole

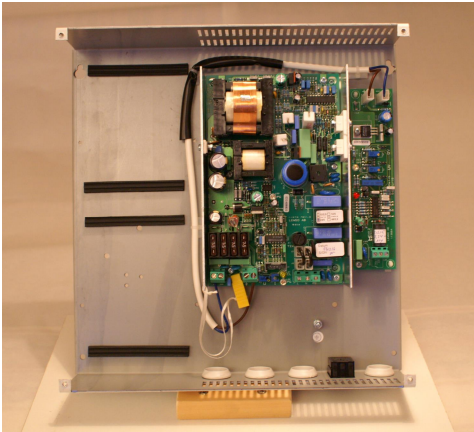
Dimensions

310x315x80 mm (WxHxD)

Cabinet

IP 20

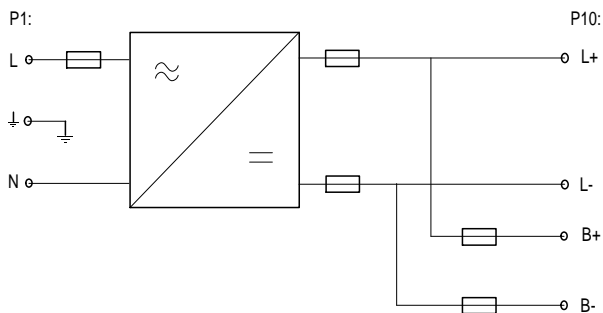
 CE-MARKED.



Rectifier type LEIF 24/5L with
place for 2pcs battery 7Ah.

Internet home page: www.rattkraft.se or www.rka.se

Block diagram



Made in Sweden.

Developed and produced in Sweden.

We reserv us the right to change technical data without prior notice.

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