

RKA Power

Switchmode rectifier type RKAS with PFC



New technique → sine wave input.
New principle → fully equipped.
New technology → easy to use.
High rate charging → fits with all type of stationary batteries.
Complete program.

The constant voltage rectifier is primary switched, and is delivered fully equipped including a microprocessor controlled alarm. The charger type RKAS is specially designed for charging and maintenance charging of lead acid batteries of the open vented or valve regulated type and NiCd-batteries. 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 shortcircuit 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 RKAS has obtained a very low ripple voltage (0.05% RMS), low acoustic noise and low weight.

The rectifier is designed for indoor wall mounting. The cabinet has 7 inlet holes for cables, all directed downwards. 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 front panel includes all user facilities such as main switch, voltmeter terminals, digital volt and amperemeter, control push buttons and alarm LEDs.

Manufacturer: RKA Power AB.

The electronic alarm board is microcomputer based and contains the following standard alarms: Mains power failure, Charger failure, Battery circuit failure, Supply voltage over/under voltage limit, Low battery voltage, High battery voltage, Ground error + and -, A-alarm, B-alarm, Sum-alarm, Reset and LED-test. 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.

The rectifier is short circuit proof, and the battery output is fused by a 2-pole fuse.
Manufacturer: RKA Power AB.

Benefits for the user:

+ Excellent load and line regulation	→	increased lifetime of the battery
+ High efficiency	→	low power consumption
+ Powerfaktor PF 0.99	→	sine wave input
+ Small dimensions	→	easy to install
+ Fully equipped	→	easy to use
+ Display of output power	→	utilization overview
+ Display of earth resistance	→	easy fault localization of earth failure

Product program RKAS

Made for permanent installation, input 230V 1-phase or 400/230V 3-phase
output 12V, 24V, 48V, 60V, 110V or 220V DC.

Art-no Weight	Order code	Voltage	Current	Primary fuse	Dim. (mm)			(kg)
					W	H	D	
Out put 12V DC								
E52 434 19	RKAS 12/5	12V	5A	6A 1-phase	430	410	175	11
E52 434 20	RKAS 12/10	12V	10A	6A 1-phase	430	410	175	11
E52 434 21	RKAS 12/20	12V	20A	6A 1-phase	430	410	175	11
E52 534 26	RKAS 12/35	12V	35A	6A 1-phase	430	410	175	11
Out put 24V DC								
E52 434 22	RKAS 24/2.5	24V	2.5A	6A 1-phase	430	410	175	11
E52 434 23	RKAS 24/5	24V	5A	6A 1-phase	430	410	175	11
E52 434 24	RKAS 24/10	24V	10A	6A 1-phase	430	410	175	11
E52 434 25	RKAS 24/15	24V	15A	6A 1-phase	430	410	175	11
E52 434 26	RKAS 24/20	24V	20A	6A 1-phase	430	410	175	11
E52 434 50	RKAS 24/35	24V	35A	10A 1-phase	430	410	175	11
E52 434 27	RKAS 24/40	24V	40A	10A 1-phase	430	410	175	11
E52 434 28	RKAS 24/60	24V	60A	16A 1-phase	430	410	270	15
E52 434 51	RKAS 24/70	24V	70A	16A 1-phase	430	410	270	15
E52 534 27	RKAS 24/80	24V	80A	16A 1-phase	430	410	270	15
E52 434 52	RKAS 24/100	24V	100A	20A 1-phase	430	410	365	19
E52 534 28	RKAS 24/120	24V	120A	25A 1-phase	430	410	365	19
E52 434 53	RKAS 24/140	24V	140A	16A 3-phase	430	700	365	36
E52 434 54	RKAS 24/175	24V	175A	16A 3-phase	430	700	365	38
E52 434 55	RKAS 24/200	24V	200A	16A 3-phase	430	700	365	40
E52 534 29	RKAS 24/240	24V	240A	16A 3-phase	430	700	365	42
E52 534 30	RKAS 24/280	24V	280A	25A 3-phase	430	1250	365	76
E52 534 31	RKAS 24/320	24V	320A	25A 3-phase	430	1250	365	78
	RKAS 24/400	24V	400A	35A 3-phase	430	1250	365	82

Art-no Weight	Order code	Voltage	Current	Primary fuse	Dim. (mm)			(kg)
					W	H	D	
Out put 48V DC								
E52 434 29	RKAS 48/2.5	48V	2.5A	6A 1-phase	430	410	175	11
E52 434 30	RKAS 48/5	48V	5A	6A 1-phase	430	410	175	11
E52 434 31	RKAS 48/10	48V	10A	6A 1-phase	430	410	175	11
E52 434 60	RKAS 48/15	48V	15A	10A 1-phase	430	410	175	11
E52 434 32	RKAS 48/20	48V	20A	10A 1-phase	430	410	175	11
E52 434 33	RKAS 48/30	48V	30A	16A 1-phase	430	410	270	15
E52 434 61	RKAS 48/50	48V	50A	20A 1-phase	430	410	365	19
E52 434 62	RKAS 48/60	48V	60A	25A 1-phase	430	410	365	19
E52 434 63	RKAS 48/70	48V	70A	16A 3-phase	430	700	365	36
E52 434 64	RKAS 48/80	48V	80A	16A 3-phase	430	700	365	38
E52 434 65	RKAS 48/100	48V	100A	16A 3-phase	430	700	365	40
E52 434 66	RKAS 48/120	48V	120A	16A 3-phase	430	700	365	42
E52 434 57	RKAS 48/140	48V	140A	25A 3-phase	430	1250	365	76
E52 434 58	RKAS 48/150	48V	150A	25A 3-phase	430	1250	365	78
E52 534 37	RKAS 48/160	48V	160A	25A 3-phase	430	1250	365	78
E52 534 38	RKAS 48/180	48V	180A	25A 3-phase	430	1250	365	80
	RKAS 48/200	48V	200A	35A 3-phase	430	1250	365	82
Out put 110V DC								
E52 434 34	RKAS 110/2.5	110V	2.5A	6A 1-phase	430	410	175	11
E52 434 35	RKAS 110/5	110V	5A	6A 1-phase	430	410	175	11
E52 434 67	RKAS 110/7.5	110V	7.5A	10A 1-phase	430	410	175	11
E52 434 36	RKAS 110/10	110V	10A	10A 1-phase	430	410	175	11
E52 434 37	RKAS 110/15	110V	15A	16A 1-phase	430	410	270	15
E52 434 68	RKAS 110/20	110V	20A	20A 1-phase	430	410	270	15
E52 434 69	RKAS 110/25	110V	25A	25A 1-phase	430	410	365	19
E52 434 80	RKAS 110/30	110V	30A	25A 1-phase	430	410	365	19
E52 434 81	RKAS 110/40	110V	40A	16A 3-phase	430	700	365	36
E52 434 83	RKAS 110/50	110V	50A	16A 3-phase	430	700	365	40
E52 434 84	RKAS 110/60	110V	60A	16A 3-phase	430	700	365	42
E52 534 39	RKAS 110/70	110V	70A	25A 3-phase	430	1250	365	76
E52 534 40	RKAS 110/80	110V	80A	25A 3-phase	430	1250	365	78
E52 534 41	RKAS 110/90	110V	90A	25A 3-phase	430	1250	365	80
	RKAS 110/100	110V	100A	35A 3-phase	430	1250	365	82
Out put 220V DC								
E52 434 38	RKAS 220/2.5	220V	2.5A	6A 1-phase	430	410	175	11
E52 434 39	RKAS 220/5	220V	5A	10A 1-phase	430	410	175	11
E52 434 41	RKAS 220/7.5	220V	7.5A	16A 1-phase	430	410	270	15
E52 434 71	RKAS 220/10	220V	10A	20A 1-phase	430	410	270	15
E52 434 72	RKAS 220/15	220V	15A	10A 3-phase	430	410	365	19
E52 434 73	RKAS 220/20	220V	20A	16A 3-phase	430	700	365	36
E52 434 74	RKAS 220/25	220V	25A	16A 3-phase	430	700	365	40
E52 434 75	RKAS 220/30	220V	30A	20A 3-phase	430	700	365	42
E52 434 76	RKAS 220/35	220V	35A	25A 3-phase	430	1250	365	76
	RKAS 220/40	220V	40A	25A 3-phase	430	1250	365	78
	RKAS 220/50	220V	50A	35A 3-phase	430	1250	365	82

Art-no Weight	Order code	Voltage	Current	Primary fuse	Dim. (mm)			(kg)
					W	H	D	
Out put 60V DC								
	RKAS 60/4	60V	4A	6A 1-phase	430	410	175	11
	RKAS 60/8	60V	8A	6A 1-phase	430	410	175	11
	RKAS 60/12	60V	12A	10A 1-phase	430	410	175	11
	RKAS 60/16	60V	16A	10A 1-phase	430	410	270	15
	RKAS 60/24	60V	24A	16A 1-phase	430	410	270	15
	RKAS 60/40	60V	40A	20A 1-phase	430	410	365	19

Technical specification

AC input voltage	230V +15% -15% 1-phase 47-63Hz 400/230V +15% -15% 3-phase with neutral 47-63Hz
Powerfactor PF	Better than 0.99
Cos phi	Better than 0.99
DC output voltage	Nominal 12V, 24V, 48V, 110V and 220V
Load and line regulation	Better than +/- 0.05 %
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 (1993)
Immunity	According to EN 50 082-1 and EN 50 082-2 (1993)
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 40

Cabinet with dim. 430 x 410 x 175 mm is for wall mounted
Cabinet with dim. 430 x 410 x 270 mm is for wall mounted
Cabinet with dim. 430 x 410 x 365 mm is for wall mounted
Cabinet with dim. 430 x 700 x 365 mm is for wall mounted
Cabinet with dim. 430 x 1250 x 365 mm is for flore mounted.

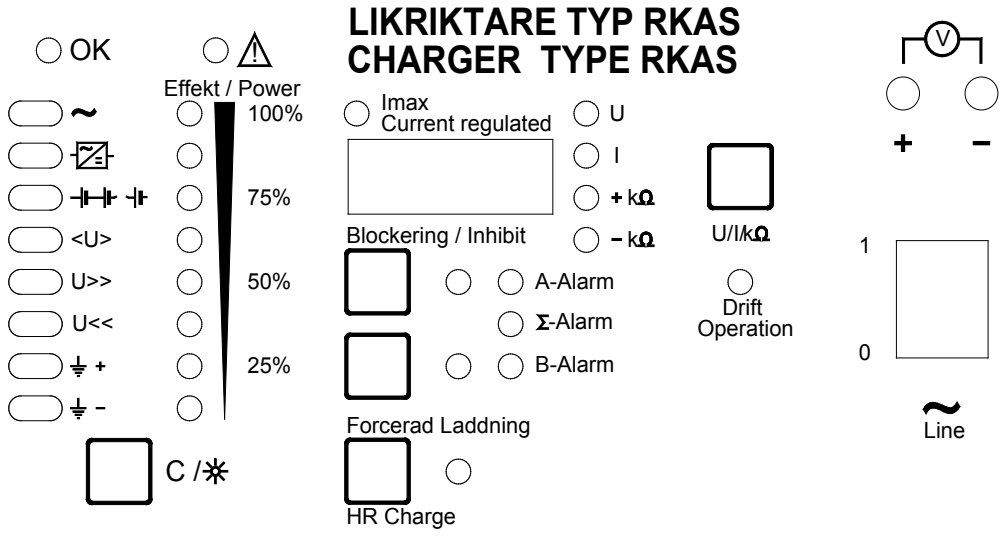
Option

E52 434 49	Sensor for temperature compensation type TG
E52 434 47	Separate alarm relay card type SL

Front panel (standard)

+

+



+

P1 P2 P3 P4 P5

GND

+



RKAS 110/90 PFC

Standard Alarms

Following alarms are included as standard:

Mains power failure

Charger failure

Battery circuit failure

Floating voltage failure, over & under

High battery voltage

Low battery voltage

Ground fault +

Ground fault -

Reset and LED-test

A-alarm

Single relay with programmable time delay and potential free contacts

B-alarm

Single relay with programmable time delay and potential free contacts

Sum-alarm

Relay with potential free contacts

Other information

All alarms can easily be inhibited



Internet home page:

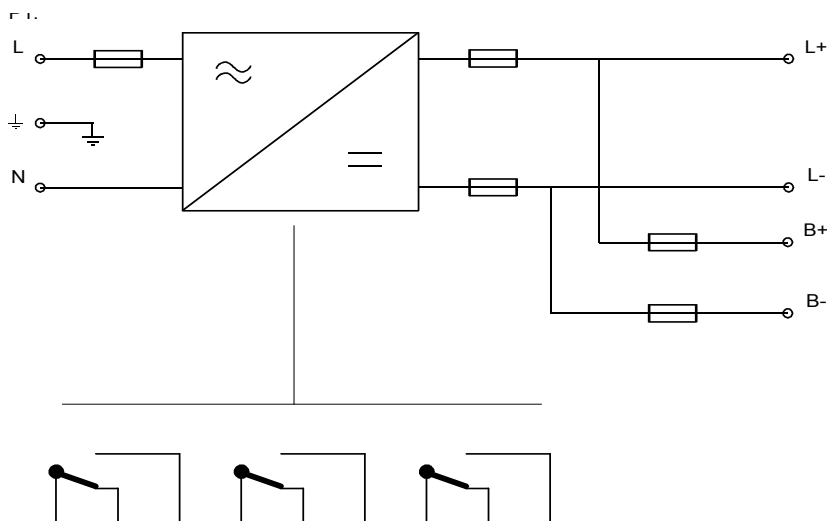
www.rattkraft.se

Made in Sweden.

Developed and produced in Sweden.



Block diagram



We reserv us right to change technical date without prior notice.

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