BATTERY CHARGING RECTIFIERS

AS-REC 1000 Series

AS-REC Series
Mono Phase Input Battery Charger / Rectifier

Main purpose of Battery Charging Rectifier is to convert AC Voltage to DC Voltage. Rectifiers are designed to charge batteries and to provide energy needs of DC power-fed devices. According to the fields of application, Rectifiers are entitled as Rectifier, Battery Charger and Rectifier & Charger. In accordance with input voltage, rectifiers are produced in two types as 1 phase 220VAC and 3 phase 380VAC. Battery chargers can be designed in 12V, 24V, 48V, and 110 and 220 VDC output voltages to the type of applications.

AS-REC 3000 Series

AS-REC 3000 Series
3 Phase Input Battery Charger / Rectifier

AS-REC Series Battery chargers (rectifiers) can usually charge all battery types like as gel battery, liquid battery or dry battery etc. Recently, solar charger, wind charger, solar and wind inverters are widely used together with inverter & battery charging rectifier in solar and wind energy applications. The most common uses of direct current power supplies are zones where storage of energy is needed (stored), emergency lighting, security systems and routing systems.

AS-VREC series Battery Chargers are designed by using today's technology for charging batteries of electric vehicles and DC energy necessity of the equipment's which are supplied with the very sensitive direct current. To provide the minimum ripples, Battery Charger uses DSP Controlled IGBT technology and advanced filters at the input and output.

AS-VREC Series

AS-VREC Series
3 Phase Input Electric Vehicle Battery Charger

Battery chargers' most common usage areas are telecommunications, power distribution stations, sea and land transport vehicles, industrial and military facilities, substations, wind and solar power plants, power stations, UPS (Uninterruptible Power Supply) systems, intelligent building projects and all kinds of battery charging applications.

AS-REC 1000 Series

Up to 1,2 kW

Up to 10 kW

Up to 33 kW

AS-REC 1000 Series Technical Specifications
Mono Phase Input Rectifier / Battery Charger with Transformer

MODEL (See Below Tables)		
INPUT		
Voltage		220 Vac (Optional 230/240 Vac)
Voltage Tolerance		± 20%
Frequency		50 Hz (Optional 60 Hz)
Frequency Tolerance		± 5%
OUTPUT		
Voltage Range (Vdc)		12, 24, 48, 110, 220 Vdc (Others on Request)
Voltage Regulation		± 2%
Output Currents (A)		10, 15, 20, 25, 30, 40, 50, 60, 75, 80,100, 120, 125 (Others on Request)
Ripple		< 5% (Without Battery)
Efficiency		Up to 88%
GENERAL		
Control		Microprocessor Controlled
Protections		Short Circuit, Over Current, Over Temperature, Ouput Voltage Low/High, DC Ground Missing Warning
Battery Charge Mode		Automatic Charge, Boost Charge
		Float Charge : 2 - 2.45V/Cell (Depends Battery Type)
Display		128x64 Graphic LCD, 4 key, 6 pcs LED
Isolation		Input-Output: 2000 V, Input/Output-Ground: 500V
ENVIRONMENTAL		
Operating Temperature		0...+40 °C
Storage Temperature		-20...+70 °C
Relative Humidty		% 0-95 (Non-condensing)
Cooling		Forced Cooling with Fan
Protection Level		IP20 (Others on Request)
Acoustic Noise		55 dBA
PHYSICAL		
Dimensions (HxWxD) mm.	Up to 1,2 kW	500x370x630
	Up to 10 kW	580x470x870
STANDARDS		
Harmonized Standaerds		EN62040-1, EN 61204 (LVD), EN61204-3 (EMC)

BATTERY CHARGING RECTIFIERS

AS-REC 1000 series rectifiers are designed by today's technology for charging batteries and for the DC energy necessity of the equipment's which are supplied with the direct current. Common usage areas are telecommunication, energy distribution stations, land and marine transport vehicles, industrial and military foundations and all kinds of battery charging applications. Rectifiers have completely electronic structure and they check the output current and voltage by power part with thyristor. To provide the minimum ripples, the output part is equipped with the filter containing capacitors, and shock inductors.

GENERAL FEATURES

- Thyristor Phase Control Technology
- Voltage Controlled Automatic Charge
- Usage as DC Power Supply
- Wide Power Range
- High Efficiency and Reliability
- Electronic Protections
- User Friendly LCD Panel
- Optional Double LCD for Load and Battery,
- Optional Portable LCD Panel
- LCD works without AC Input
- Easy to Use

AS-REC SINGLE PHASE MODELS

V \ A	10	12	15	20	30	40	50	60	100	Page
24	1024-10	1024-12	1024-15	1024-20	1024-30	1024-40	1024-50	1024-60	1024-200	30
48	1048-10	1048-12	1048-15	1048-20	1048-30	1048-40	1048-50	1048-60	1048-200	30
110	1110-10	1110-12	1110-15	1110-20	1110-30	1110-40	1110-50	1110-60	1110-200	30

AS-REC 3000 Series

AS-REC 3000 Series Technical Specifications

3 Phase Input Rectifier / Battery Charger with Transformer

MODEL (See Below Tables)		
INPUT		
Voltage		380 (Optional 400/415/440) Vac 3 Ph+N+PE
Voltage Tolerance		± 20%
Frequency		50 Hz (Optional 60 Hz)
Frequency Tolerance		± 5%
OUTPUT		
Voltage Range (Vdc)		24, 48,110, 220 Vdc (Others on Request)
Voltage Regulation		± 2%
Output Currents (A)		30, 40, 50, 60, 80, 100, 150, 200, 250, 300, 400, 600 (Others on Request)
Ripple		< 5% (Without Battery)
Efficiency		Up to 90%
GENERAL		
Control		Microprocessor Controlled
Protections		Short Circuit, Over Current, Over Temperature, Ouput Voltage Low/High, DC Ground Missing Warning
Battery Charge Mode		Automatic Charge, Boost Charge
		Float Charge : 2 - 2.45V/Cell (Depends Battery Type)
Display		128x64 Graphic LCD, 4 key, 6 pcs LED
Isolation		Input-Output: 2000 V, Input/Output-Ground: 500V
ENVIRONMENTAL		
Operating Temperature		0...+40 °C
Storage Temperature		-20...+70 °C
Relative Humidty		% 0-95 (Non-condensing)
Cooling		Forced Cooling with Fan
Protion Level		IP20 (Others on Request)
Acoustic Noise		55 dBA
PHYSICAL		
Dimensions (HxWxD) mm.	Up to 10 kW	580x470x870
	Up to 33 kW	650x1100x700
	Others	Ask for Other Models
STANDARDS		
Harmonized Standards		EN62040-1, EN 61204 (LVD), EN61204-3 (EMC)

BATTERY CHARGING RECTIFIERS

AS-REC 3000 series rectifiers are designed by today's technology for charging batteries and for the DC energy necessity of the equipment's which are supplied with the direct current. Common usage areas are telecommunication, energy distribution stations, land and marine transport vehicles, industrial and military foundations and all kinds of battery charging applications. Rectifiers have completely electronic structure and they check the output current and voltage by power part with thyristor. To provide the minimum ripples, the output part is equipped with the filter containing capacitors and shock inductors.

GENERAL FEATURES

- Thyristor Phase Control Technology
- Voltage Controlled Automatic Charge
- Usage as DC Power Supply
- Wide Power Range
- High Efficiency and Reliability
- Electronic Protections
- User Friendly LCD Panel
- Optional Current Sharing Parallel Operating
- Optional Double LCD for Load and Battery,
- Optional Portable LCD Panel
- LCD works without AC Input
- Easy to Use

AS-REC THREE PHASE MODELS

V \ A	30	40	50	60	100	150	200	250	300	400	600	Page
24	3024-30	3024-40	3024-50	3024-60	3024-100	3024-150	3024-200	3024-250	3024-300			31
48	3048-30	3048-40	3048-50	3048-60	3048-100	3048-150	3048-200	3048-250	3048-300	3048-400	3048-600	31
110	3110-30	3110-40	3110-50	3110-60	3110-100	3110-150	3110-200	3110-250	3110-300	3110-400		31
220	3220-30	3220-40	3220-50	3220-60	3220-100	3220-150	3220-200	3220-250	3220-300			31

AS-VREC Series

AS-VREC Series Technical Specifications
3 Phase Input Vehicle Battery Charger With Isolation Transformer

MODEL (See Below Tables)		
INPUT		
Voltage		380 Vac (Optional 400/415 Vac)
Voltage Tolerance		± 20%
Frequency		50 Hz , (Optional 60 Hz)
Frequency Tolerance		± 5%
OUTPUT		
Voltage Range (Vdc)		400, 600 Vdc (Others on Request)
Voltage Regulation		± 1%
Output Currents (A)		40,125A (Others on Request)
Ripple		<1% (Without Battery)
Efficiency		90% >
GENERAL		
Control		Microprocessor Controlled
Protections		Short Circuit, Over Current, Over Temperature, Ouput Voltage Low/High, input voltage Low/High
Battery Charge Mode		Float Charge
Display		128x64 Graphic LCD, 4 key, 6 pcs LED
Isolation		Input-Output: 2000 V, Input/Output to Ground: 1000V
ENVIRONMENTAL		
Operating Temperature		0...+40 °C
Storage Temperature		-20...+70 °C
Relative Humidty		% 0-95 (Non-condensing)
Cooling		Forced Cooling with Fan
Protection Level		IP20, IP43 (Others on Request)
Acoustic Noise		60 dBA
PHYSICAL		
Dimensions (HxWxD) cm.	Up to 24 kW	1300x800x590
	Up to 50 kW	1546 x 800 x 738
	Others	Ask for Other Models
STANDARDS		
Harmonized Standaerds		EN62040-1, EN 61204 (LVD)

BATTERY CHARGING RECTIFIERS

AS-VREC series Battery Chargers are designed by using today's technology for charging batteries of electric vehicles and DC energy necessity of the equipment's which are supplied with the very sensitive direct current. To provide the minimum ripples, Battery Charger uses DSP Controlled IGBT technology and advanced filters at the input and output.

GENERAL FEATURES

- Ideal Charger for Electric Vehicle Battery
- IGBT Rectifier
- Voltage and Current Controlled Automatic Charge
- Low Ripple Value
- High Efficiency and Reliability
- Electronic Protections
- Microprocessor Controlled
- CANBUS Communication for Smart Battery Charging
- User Friendly LCD Panel
- Easy to Use

AS-VREC												
V \ A	30	40	50	60	100	150	200	250	300	400	600	Page
400	400-30	400-40	400-50	400-60	400-100	400-150	400-200	400-250	400-300	400-400	600-400	32
600	600-60	600-40	600-50	600-60	600-100	600-150	600-200	600-250	600-300	600-400	600-600	32