

Output Voltage	Output Current	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)
MONO PHASE INPUT					
12 / 24 V DC	10 AMP.	410	220	330	15
12 / 24 V DC	30 AMP.	410	220	330	36,5
12 / 24 V DC	60 AMP.	570	390	410	51,5
12 / 24 V DC	100 AMP.	660	380	480	95
48 V DC	10 AMP.	410	220	330	20
48 V DC	30 AMP.	570	390	410	40
48 V DC	60 AMP.	660	380	480	65
48 V DC	100 AMP.	730	450	530	85
110 V DC	10 AMP.	570	390	410	45
110 V DC	30 AMP.	570	390	410	65,5
110 V DC	60 AMP.	730	450	530	80
110 V DC	100 AMP.	730	450	530	190

THREE PHASE INPUT

12 / 24 V DC	30 AMP.	570	390	410	45
12 / 24 V DC	60 AMP.	660	380	480	73
12 / 24 V DC	100 AMP.	660	380	480	90
12 / 24 V DC	200 AMP.	730	450	530	120
48 V DC	30 AMP.	570	390	410	55
48 V DC	60 AMP.	660	380	480	65
48 V DC	100 AMP.	700	450	530	90
48 V DC	200 AMP.	770	510	710	120
110 V DC	10 AMP.	570	390	410	65
110 V DC	30 AMP.	660	380	480	78,5
110 V DC	60 AMP.	700	450	530	92
110 V DC	100 AMP.	770	510	710	169
110 V DC	200 AMP.	1100	650	600	210
220 V DC	10 AMP.	660	380	480	78
220 V DC	30 AMP.	660	380	480	90
220 V DC	60 AMP.	770	510	710	110
220 V DC	100 AMP.	770	510	710	235

MICRO CONTROLLED
DC RECTIFIERS
BATTERY CHARGERS

GENERAL SPECIFICATIONS

MICROCONTROLLED DC RECTIFIERS BATTERY CHARGERS

- Useable DC Current Source or DC Battery Charger
- Microcontrolled
- Adjustable Output Current
- Adjustable Output Voltage
- Adjustable Float and Boost Charging Voltage
- Adjustable Timer for Boost Charging
- Individual Output for Battery and Load
- Electronic Over / Under Voltage, Reverse Voltage Protection
- Over Temperature, Short Circuit Protection
- Parallel or Serial Connection
- Thyristor Controlled and Full Automatic Systems with Isolated Input Transformer
- Dry Contact and Indicators



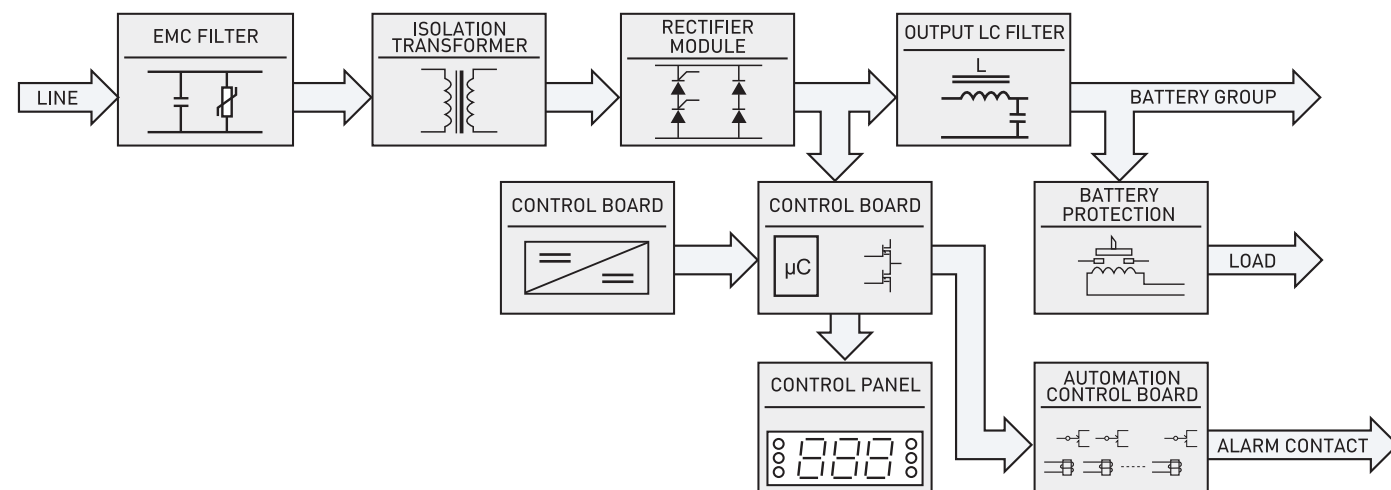
Optional External Alarm Contacts

- Mains Switch Failure
- Battery Switch Failure
- Load Switch Failure
- Low Battery Failure
- Low Output Voltage
- Over Output Voltage
- Mains Failure
- Charger Failure
- Over Load
- Over Temperature
- Earth Fault

Our DC rectifiers are constant current and constant voltage type semi conductor controlled systems. We manufacture full isolated systems so the load is not affected from any failure of the rectifier. In our rectifiers, we use current module instead of shunt resistor so the output ripple is low and fully isolated.

Input and output are protected with MCB's and all settings like boost charge, floating charge and battery charge current can adjusted front panel touchpad digitally. DC output is filtered by L/C, so DC ripple at full load always lower than 1% to increase battery life. All rectifiers have standards low-battery and rectifier failure alarm contacts.

You can use our DC rectifiers in transformer energy distribution centers, gas oil energy distribution centers, natural gas energy distribution centers, in mining industry security and lighting, building automation systems and special telecommunication applications.



TECHNICAL SPECIFICATIONS

INPUT	
Voltage	220/230/380/400 VAC
Voltage Tolerance	± 15
Frequency	50 Hz ± %5
Protection	Thermal – Magnetic Over Current Protection, Over Voltage Protection
Power Factor	> 0.8

OUTPUT	
Voltage	12/24/48/110/220 VDC
Nominal Charger Voltage Adjustment	- 20% / + 30%
Boost Charger Voltage	Adjustable between 100 % and 120 % of the Nominal Charger Voltage
Static Tolerance	± 1%
Current Adjustment	0- 100%
Maximum Current	110%
Output Ripple	< ± 1% RMS AC of Output DC Voltage (At Full Load w/o Battery Group)
Dynamic Response	< 5% of Output Voltage (At 50 % Load, 25% Changing Load)
Output Protection	Short Circuit, Over Voltage, Reverse Voltage Protection

DISPLAY PANEL	
Measurements	Two 3 Digits 7-Segment Display for Output Current and Voltage
Indicators	Boost Charging, Float Charging, Charger Failure, Over Load, Over Temperature, Mains OK.
Buttons	Boost Voltage Setting, Float Voltage Setting, Output Current Setting, Boost Charging Timer.

GENERAL	
Boost Charging Timer	0-600 Minutes Adjustable by 1 Minute Accuracy
Cooling	Thermic Controlled Internal Fan
Isolation Voltage	2500 VAC Output/Chassis, Input/Chassis, Input/Output
Efficiency	At Full Load > 85%
Circuit Breakers	Double Pole Magnetic Circuit Breakers for Load, Battery Output, AC Input MBC
Operation Technique	Phase Angle Controlled Thyristor Module
Protection Level / Color	IP54 / RAL 7035

ALARM CONTACTS	
Sound Alarm	On Failure 2 short 'beep' per 2 seconds
Charger Failure	DC Low / High, Charger Failure, Over Temperature, No Mains, Output Short Circuit, Low Battery, Earth Fault (On these situations indicators lights and alarm contacts status changes.)

ENVIRONMENT	
Operating Temperature	-10 / +50 °C
Relative Humidity	5 - 90 %
Operating Attitude	Max. 3000 Mt.
Noise Level	Max. 60 db
Electrical Standards	EN 50091-1 (Security) / EN 50091-2 (EMC)

OPTIONAL	
Silicon Dropper Circuit For Output Load	
Both Charger and Battery Group inside the same cabinet	
12 Pulsed Rectifier	
LVD Deep Discharge Battery Protection	