

BORA **3**
Phase
Series

Bora Series Technical Specifications
3 Phase Input Rectifier / Battery Charger with Transformer



MODEL (See Below Tables) *

INPUT		
Voltage	380 (Optional 400/415/440) Vac (3P+N+PE)	
Voltage Tolerance	± 20%	
Frequency	50/60 Hz (Automatic Selection)	
Frequency Tolerance	± 5 Hz	
OUTPUT		
Voltage Range (Vdc)	24, 48, 110, 220 Vdc (Others on Request)	
Voltage Regulation	± 2%	
Output Currents (A)	10, 20, 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, Output Voltage Low/High, DC Ground Missing Warning	
Battery Charge Mode	Float Charge, Boost Charge, Equalizing Charge Float Charge : 2 - 2.45V/Cell (Depends Battery Type)	
Display	128x64 Graphic LCD, 4 Buttons, 6 pcs LED	
Isolation	Input-Output: 2000 V, Input/Output-Ground: 500V	
Communication	Dry Contacts, (Optional MODBUS)	
ENVIRONMENTAL		
Operating Temperature	0 ~ +40 °C	
Storage Temperature	-20 ~ +70 °C	
Relative Humidity	% 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 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

BORA 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 choke inductors.

GENERAL FEATURES

- Thyristor Phase Control Technology
- Voltage and Current Controlled Automatic Charge
- Usage as DC Power Supply
- Temperature Controlled Charge
- Battery Test Function
- Event History
- 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

BORA THREE PHASE MODELS

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

* Other models are available per request.