

# RTB.e

## Rectifier Battery Charger



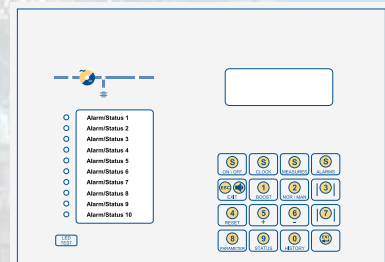
Product Snapshot	
<b>Technology:</b>	6 or 12p SCR bridge
<b>Current Rating:</b>	50A - 1000A
<b>Voltage:</b>	400Vac 3Ph 50/60Hz IN 24/48/110/220Vdc OUT

The RTB.e system is a heavy duty industrial rectifier-battery charger, designed to supply critical dc loads and to recharge any type of battery (Ni-Cd, Pb-acid, sealed Pb).

Development of the system took into account the requirements of our customers and the experience acquired by Borri over more than 70 years of activity in the area of power conversion technology.

The RTB.e system is based on a 6-pulse or 12-pulse thyristor bridge controlled by microprocessor.

The system is provided with a digital mimic control panel, displaying the operational status of the equipment (signals, alarms, meters, history events). Serial interfaces are available for remote control of the system. Upon request supervision application software is available for monitoring via PC.



LDC Multifunctional Mimic Panel

### Main Features

- ▶ Industrial layout
- ▶ Easy maintenance/front access
- ▶ Input isolation transformer protected by MCCB
- ▶ Full set of battery charging methods available.
- ▶ Microprocessor control.

### Main Options

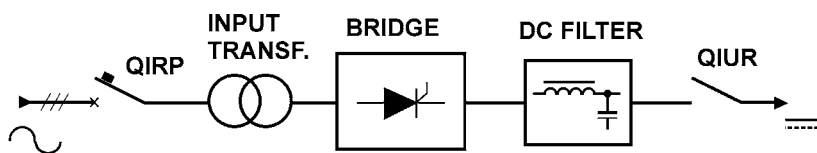
- ▶ Customized input and output voltage
- ▶ AC mains failure monitoring
- ▶ DC earth fault monitoring
- ▶ Temperature compensated battery voltage
- ▶ Timer controlled battery charging
- ▶ Reversible operation (battery discharging to the ac mains)
- ▶ 12 pulse bridge
- ▶ Additional RFI filters
- ▶ Additional THD filters
- ▶ Special painting and protection degree
- ▶ DC/DC stabilizer (dropping diodes or chopper regulator)
- ▶ Parallel active load sharing (up to 6 can bus connection) double branch configuration
- ▶ Output distribution panels.

# RTB.e Rectifier Battery Charger

## RTB Technical characteristics

Size (A)		50	100	150	200	300	500	750	1000	
Input voltage		3Ph. 400 +/-15% Vac (other as option)							50 - 60Hz +/-5Hz	
Input THD		27% 6P, 12% 12P, 6% THD Filter + 12P								
Output voltage		110Vdc - 220Vdc (other as option)								
Ripple		+/-2%Vn (RMS)								
Static stability		+/-1%Vn								
Overload		120% for 20 min								
Ventilation		Natural			Natural			Natural		
Efficiency (%)		> 93%								
Noise 1m (dBA)		< 60 - 62								
Dimensions mm	W	600	600	800	800	800	900	1200	1200	
	H	2100	2100	2100	2100	2100	2100	2100	2100	
	D	800	800	800	800	800	800	900	900	
Weight (kg)		490	560	660	720	890	1100	1280	1660	
Degree of protection		IP20 (other as option)								
Colour		RAL 7035 (other as option)								
Operat. Temperature		-10 to 40°C								

## One Line Diagram



## Standards

low voltage assemblies	IEC EN 60439-1, EN 60439-2, EN 60439-3
Semiconductor convertors	IEC EN 60146-1-1, EN 60146-1-3, EN 60146-2
Power transformers	IEC EN 6076
Degree of protection	IEC EN 60529
Safety (CE marking)	IEC EN 50178
Electromagnetic compatibility (CE marking)	IEC EN 61000-6-1, IEC EN 61000-6-2, IEC EN 61000-6-4

## Ordering Information (Typical)

RTB.e 0100.110.S

model. size. Vdc. config

(S=Single Unit, P= Parallel (block diode), D= Double Branch)

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