

# THYRISTOR CONTROLLED BATTERY CHARGERS

## CRT RANGE



Using robust thyristor technology, the CRT range battery chargers can be associated to any battery technology (recombined sealed lead, open lead, calcium lead, classic lead, nickel cadmium batteries...).

They insure the charging and maintenance of the batteries and an adequate current for the outputs.

Using robust and reliable thyristor technology, they can be used in numerous applications: marine – offshore – military – railway – industry...

Bureau Veritas certificate of type approval n° 04682 BV



## STANDARD RANGE

DESCRIPTION	Item code Input 230Vac 3 Phase	Item code Input 400Vac 3 Phase	Output current (A)	Type of case	Weight
<b>24 VDC RANGE</b>					
CRT 24/50	SEEL000560	SEEL000561	50	CFE50	60 kg
CRT 24/60	SEEL000562	SEEL000563	60	CFE50	60 kg
CRT 24/80	SEEL000564	SEEL000565	80	CFE80	80 kg
CRT 24/100	SEEL000566	SEEL000567	100	CFE100	100 kg
CRT 24/150	SEEL000568	SEEL000569	150	CFE150	130 kg
CRT 24/200	SEEL000570	SEEL000571	200	CFE200	150 kg
CRT 24/250	SEEL001033	SEEL001046	250	CFE250	200 kg
<b>48 VDC RANGE</b>					
CRT 48/60	SEEL007760	SEEL007761	60	CFE100	100 kg
CRT 48/80	SEEL007762	SEEL007763	80	CFE150	130 kg
CRT 48/100	SEEL007764	SEEL007765	100	CFE200	170 kg
<b>110 VDC RANGE</b>					
CRT 110/25	SEEL007767	SEEL006027	25	CFE100	80 kg
CRT 110/50	SEEL007768	SEEL006028	50	CFE200	100 kg
CRT 110/70	SEEL007769	SEEL006029	70	CFE250	140 kg
CRT 110/80	SEEL007770	SEEL007771	80	CFE250	170 kg
CRT 110/100	SEEL007772	SEEL007773	100	CFE250	200 kg

## CRT – MAIN TECHNICAL SPECIFICATION

### INPUT

- 230 Vac or 400 Vac  $\pm$  10% 576 three phase
- Frequency: 50 to 60 Hz  $\pm$  5%
- Other voltages, frequency: upon request

### OUTPUT

- 24 Vdc – floating voltage: 27, 2 Vdc
- 48 Vdc – floating voltage: 54,4 Vdc
- 110 Vdc – floating voltage: 112.5 Vdc
- Other voltages: upon request

### TECHNOLOGY

- Rectified, controlled filtered technology
- Filtered direct current (possible operation as power supply)
- Electronic limitation of the output current
- Short-circuit possible without damage to the charger
- Designed to reduce interferences reinjected to the mains network

### OUTPUT ELECTRICAL CHARACTERISTICS

- Regulation:  $\pm$  1 % (steady state)
- Residual ripple:  $<$  5%
- Input / Output galvanic insulation
- Current: see table, others upon request
- Type of charge: I/U type charge, Floating
- Manual charge on 24 Vdc model
- Other charges (Boost, manual clock 0-12H) upon request
- Factory set for lead batteries (consult us for Ni-Cd)

### DISPLAY, CONTROL

- "Power on" indicator.
- Voltmeter and ammeter.
- ON/OFF switch.
- Others upon request: Fault indicators, emergency stop..

### PROTECTION

- Input: fuses, contactor, thermal relay
- Output: bipolar fuse
- Protected against short-circuit and polarity reversal
- Thermal protection
- Tropicalization of the electronic boards and the windings
- Equipment designed for resistance to on-board shock and vibration

### PRESENTATION

- Metal case – IP 23
- Connection on terminal
- Access through cable glands underneath the cabinet
- Polyester finish: colour grey RAL7035
- Salt atmosphere resistant
- Door with key locking system

### CLIMATIC SPECIFICATIONS

- Operating temperature: -10 to 50°C
- Storage temperature: -20 to 70°C
- Humidity: from 0 to 95 % without condensation

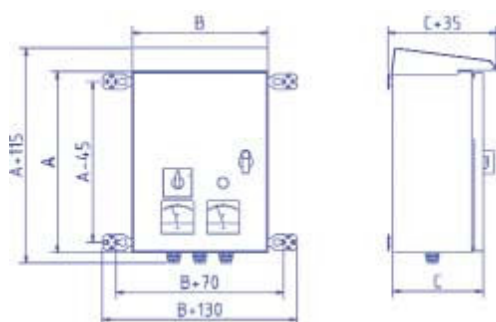
### OPTIONS

- Additional outputs.
- Voltage threshold control
- Charge fault PCB.
- Insulation monitor
- Temperature probe for voltage compensation
- Dry contacts.
- For further options, please consult us

### STANDARDS

- EC Marking ; Bureau Veritas certified

## CRT - MECHANICAL CHARACTERISTICS



TYPE OF CASE	DIMENSIONS IN MM		
	A	B	C
CFE20	400	300	200
CFE50	500	400	250
CFE80	600	600	300
CFE100	600	600	400
CFE150	800	600	400
CFE200	1000	600	400
CFE250	1200	800	400

The information contained in this leaflet is not of a contractual nature. ENAG reserves the right to amend the technical details of its products without advance notice.  
Please consult us before installing the units.

FC-CRT-EN-F