

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 |
|----------------------|--------------------------------------|--------------------------------------|--------------------------|-----------------|--------|
| 24 VDC RANGE | | | | | |
| 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 |
| 48 VDC RANGE | | | | | |
| 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 |
| 110 VDC RANGE | | | | | |
| 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 $\pm 10\%$ 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

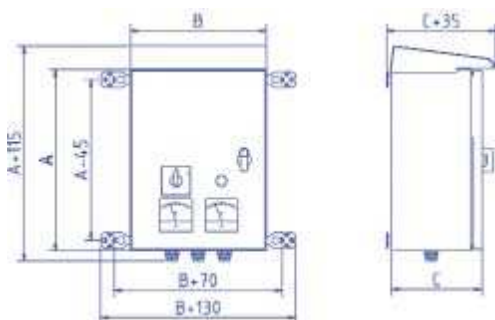
OPTIONS

- 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 |