

# Battery Chargers – Sentry and Guardian Models



## Features

- High-quality constructed stainless steel cases, suitable for wall mounting
- Auto boost operation provides increased output voltage when batteries are below a preset point
- Remote temperature compensation provides control of output voltage based on temperature
- Current limiting will only output the rated current of the charger

The Sentry and Guardian battery chargers provide automatic, current limited and voltage controlled charging to vented lead acid batteries. They may be used in a wide range of industrial charging applications, including standby engines, pumps and generators.

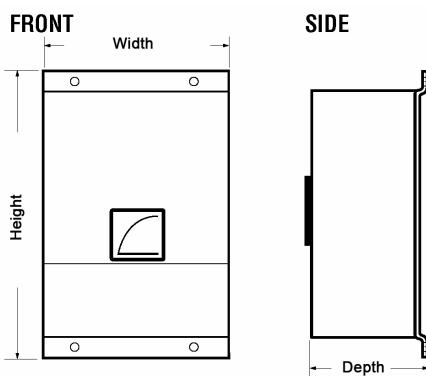
Each unit consists of a transformer, rectifier and thyristor control circuit. The control circuit ensures that the charger maintains a battery voltage at the pre-calibrated float level, while supplying any additional load current up to the specified maximum.

### Sentry Model

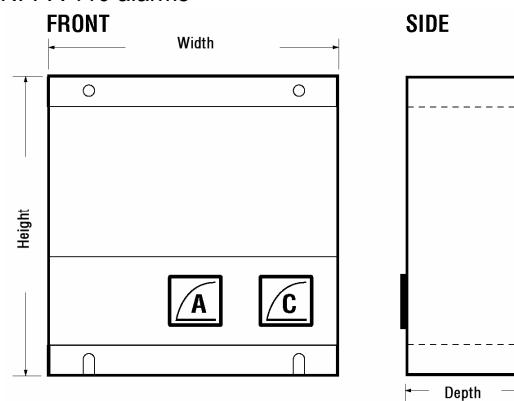
- CE and UL approvals
- Float Charging 5A at 12v
- Auto boost operation
- Electronic self-resetting output fuse protection
- Temperature compensation
- Charge fail relay output
- Stainless steel enclosure

### Guardian Model

- CE and UL approvals
- Heavy duty float charging: 10A at 12/24 VDC, 20A at 24 VDC
- Short circuit and reverse polarity protection
- Lead acid calibrations
- Auto boost operation
- Charge fail relay output
- Under volts and over volts alarms
- Temperature compensation
- NFPA 110 alarms



| Model     | W                | D               | H               | Weight            |
|-----------|------------------|-----------------|-----------------|-------------------|
| BCES-12-5 | 11.1"<br>(281mm) | 4.6"<br>(115mm) | 5.5"<br>(140mm) | 11.9 lbs<br>5.6Kg |



| Model      | W                 | D                | H                 | Weight             |
|------------|-------------------|------------------|-------------------|--------------------|
| BCEG-12-10 | 10.83"<br>(275mm) | 4.92"<br>(125mm) | 11"<br>(280mm)    | 22 lbs<br>10.0Kg   |
| BCEG-24-10 |                   |                  |                   |                    |
| BCEG-24-20 | 13.9"<br>(335mm)  | 5.71"<br>(145mm) | 12.20"<br>(310mm) | 38.5 lbs<br>17.5Kg |

## Specifications

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### Sentry Model

#### Power Supply

- Nominal operating voltages: 120V units
- Permissible voltage variation:  $\pm 6\%$  of nominal
- Nominal operation frequency: 50-60Hz

#### DC Charge Output

- Maximum current ADC: 5
- Nominal voltage VDC: 12

#### Float/Boost Voltages

| Battery Type            | Float Volts (VDC) | Boost Volts (VDC) |
|-------------------------|-------------------|-------------------|
| 12V Lead Acid (6 cells) | 13.6              | 14.1              |

#### Charge Fail Output

- Relay type: volt free SPDT contacts; relay de-energized on fault
- Contact rating: 1A at 30V, DC (resistive load)

#### General

- Operating temperature: +14 to +131°F (-10 to +55°C)
- EMC emission/immunity: EN 58801-2 / EN50082-2

#### Model Info

- BCES-12-5 12 volt, 5A, lead acid cells

### Guardian Model

#### Power Supply

- Nominal operating voltages: 120VAC  $\pm 6\%$
- Permissible voltage variation: 120VAC  $\pm 6\%$
- Nominal operation frequency: 50-60Hz

#### DC Charge Output

- Maximum current ADC: 20/20
- Nominal voltage VDC: 24/12

#### Float/Boost Voltages

| Battery Type             | Float Volts (VDC) | Boost Volts (VDC) |
|--------------------------|-------------------|-------------------|
| 12V Lead Acid (6 cells)  | 13.6              | 14.1              |
| 24V Lead Acid (12 cells) | 27.2              | 28.2              |

#### Charge Fail Output

- Relay type: volt free SPDT contacts; relay de-energized on fault
- Contact rating: 1A at 30V, DC (resistive load)

|                      | Normal Output VDC |    |
|----------------------|-------------------|----|
|                      | 12                | 24 |
| Under Volts Alarm    | 12.5              | 25 |
| Over Volts Alarm     | 15.5              | 31 |
| Delay on under volts | 120 seconds       |    |

#### General

- Operating temperature: +14 to +131°F (-10 to +55°C)
- EMC emission/immunity: EN 58801-2 / EN50082-2

#### Mounting hole dimensions:

- Width (between holes): 6.8" (173mm)
- Height (between holes): 10" (255mm)
- Mounting holes =0.2" (6mm)

#### Model Info

- BCEG-12-10 12 volt, 10A, lead acid cells
- BCEG-24-10 24 volt, 10A, lead acid cells
- BCEG-24-20 24 volt, 20A, lead acid cells

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