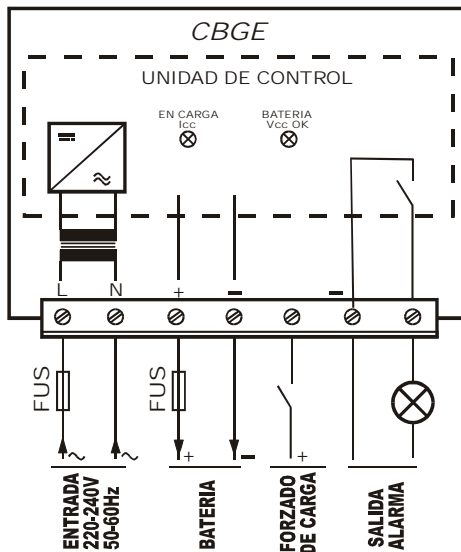


# AUTOMATIC BATTERY CHARGER CBGE



## CONNECTIONS



## DESCRIPTION

CBGE is a battery charger at constant voltage and current for maintaining the charge in Lead batteries.

### IT IS SUPPLIED WITH:

#### Two signal LEDs:

- LED "BATTERY" OFF SHOWS:
  - No power supply
  - Battery below 80% of its nominal voltage
  - Inverted battery voltage
  - Battery disconnected
- LED "BATTERY" ON SHOWS:
  - Battery is available
  - Battery is over 80% of its nominal voltage
- LED "ON CHARGE":
  - Flashing: Battery on charge.
  - Steady: Battery charged.

#### Input signal (+) to force charge

Output contact (NA), for remote "battery failure" signal.

## CONNECTIONS

Static terminal block, screw connection.

Cable section 4 mm<sup>2</sup>

## PROTECTION:

- Charge inhibitor for:
  - Short circuit to terminals on unit.
  - Inverted polarity on battery.
  - Low battery voltage (<0.5Ue)
  - Battery disconnected.
  - Current limitation.

The technical details contained in this document are subject to alteration and change at any time, and have no contractual effect. The CBGE unit must be handled by qualified staff under the prevailing standards to prevent damage and dangerous situations.

### IMPORTANT

- For use indoors.
- Do not use the charger near explosive gases or other inflammable material.
- Disconnect the power supply before making any connection or disconnection on the terminal block.
- Make sure there is sufficient circulation of air during recharging.

## INSTALLATION

This series of battery chargers must be mounted on electrical panels, sealed off by a cover or door.

Vertical mounting is essential. It is fixed to the mounting plate by 4 screws.

There must be at least 5 cms of free space left surrounding the battery charger to allow adequate heat dissipation and ventilation. Power supply to the battery charger must be protected by a fuse.

## ALTERNATING CURRENT INPUT FUSES

- CBGE 5 A. 12 Vcc. External delayed 1 A.
  - CBGE 5 A. 24 Vcc. External delayed 2 A.
  - CBGE 10 A. 12 Vcc. External delayed 2 A.
  - CBGE 10 A. 24 Vcc. External delayed 3 A.
- The battery charger output must be protected by a fuse.

## DIRECT CURRENT OUTPUT FUSES

- CBGE 5 A. 12 Vcc. External rapid 10 A.
- CBGE 5 A. 24 Vcc. External rapid 10 A.
- CBGE 10 A. 12 Vcc. External rapid 20 A.
- CBGE 10 A. 24 Vcc. External rapid 20 A.

A good rule is to place the battery charger as close as possible to the battery and use suitable cable section. If not, there may be problems of voltage drop which will prevent the battery from charging correctly.

## BATTERY FAILURE ALARM

CBGE chargers are fitted with an output relay with contact free of potential, closed when running normally.

The led "BATTERY" off

The relay de-energises. (CBGE-10A has a 1 minute delay)

Possible causes for the alarm are:

- Low battery voltage.
- Battery fuse open.
- Inverted battery polarity.

## Characteristics of output contact

Nominal charge: 0.5 A. to 125Vca. 1 A. to 24 Vcc

Current: 2 A.

Commutation voltage: 125 Vca., 60 Vcc

Commutation current: 1 A.

Commutation power: 62.5 VA, 30W.

Minimum charge allowed: 1mA to 5 Vcc.

## OPERATING CONDITIONS

Operating temperature: -10° to +50° C

Storage temperature: -30° to +80°

# AUTOMATIC BATTERY CHARGER CBGE



## BATTERY CHARGING CIRCUIT

Charge cycle: DIN 41773

Lead battery charge voltage  $U_c$ :  
12V battery: 13.8 VDC (2.3 V cell)  
24V battery: 27.6 VDC (2.3 V cell)

## CBGE ELECTRICAL CHARACTERISTICS

Power supply voltage  $U_e$ : 220-240 VAC  
Operating limit:  $\pm 10\%$   
Operating frequency: 50-60 Hz  $\pm 5\%$

Maximum power consumption (240VAC)

12V battery charger	5 A	90VA
	10 A	180VA
24V battery charger	5 A	180VA
	10 A	350VA

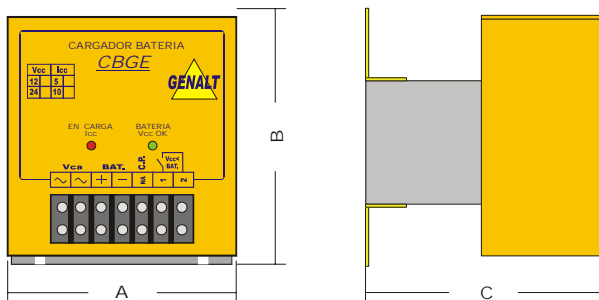
CONNECTION: Permanent.

## NOMINAL CHARGE CURRENT $I_c$ :

12V battery charger	5 A
	10 A
24V battery charger	5 A
	10 A

CURRENT LIMITATION: YES

## DIMENSIONS CBGE



MODEL	$I_{dc}$	A mm	B mm	C mm	Weight Kgs-
CBGE-12V	5 A	115	120	100	1
CBGE-12V	10 A	115	120	110	3,750
CBGE-24V	5 A	115	120	110	3,750
CBGE-24V	10 A	115	120	120	4,300

## FASTENING TO RAIL or BASE PLATE

## GUARANTEE

### LENGTH OF GUARANTEE

Guarantee is for 1 year from date of delivery of the goods.

### APPLICATION OF GUARANTEE

The guarantee is limited to design or manufacturing defects or faulty material arising under:

- Conditions of use and service as stipulated in this operating manual.
- Normal storage conditions.

The guarantee does not cover normal wear, nor breakdowns resulting from faulty connections, poor maintenance, wrong movements, repairs carried out, without previous consent, by other than this Company's staff, not using original part replacements, any other reason outside normal use, application and set up of the product, or circumstances beyond control.

### MODES OF EXERCISING THE GUARANTEE

The guarantee is limited to repair in our premises, or, failing this, the substitution of parts recognised as faulty.

In case of accidents or damage to goods other than those in the contract GENALT 2000, S.L. responsibility is limited to exchanging or repairing the unit recognised as faulty.

In no case does the guarantee entail the possibility of a petition for damages or detriment, whatever the cause.

