

Enclosed Sentry Range of Automatic Battery Chargers



This document describes the enclosed option for the Sentry range of chargers.

Description

The Sentry range provides fully automatic, current limited, thyristor controlled, charging of vented lead acid or NiCd batteries. The units may be used in a wide range of industrial charging applications, including standby engines, pumps and generators. The charger comes in a wall mounting enclosure complete with mains switch, output fuse and ammeter.

Each unit consists of a transformer, rectifier and 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.

Boost option

A 'boost' mode of operation provides increased voltage output. Selection of boost mode is via two terminals, allowing activation by a time delay relay or switch. The calibration table over leaf shows details of float and boost voltages.

Charge fail option

A self diagnostic 'charge fail' circuit and relay output is provided. The volt free relay de-energises in the event of a charging fault or loss of AC input. Electrical connection of the AC supply, DC output charge fail relay and boost connector link are via spring clamp connections.

- **Float Charging**
3A or 5A @ 12V - 3A, 5A or 7A @ 24V
- **DC ammeter**
- **Lead Acid or Ni-Cd calibrations**
- **Optional boost mode**
- **Optional charge fail relay output**
- **Stainless steel enclosure**

Product Specification

Power Supply:

nominal operating voltages	110-120 VAC (115V Units) 220-240 VAC (230V Units) 260-295 VAC (277V Units)
permissible voltage variation	± 6% of nominal
nominal operating frequency	50-60Hz

DC Charge Output:

maximum current ADC	5	5
nominal voltage VDC	24	12
float / boost voltages	see table over leaf	

Charge Fail Output:

relay type	volt free SPDT contacts relay energized on fault
contact rating	1A @ 30V,DC (resistive load)

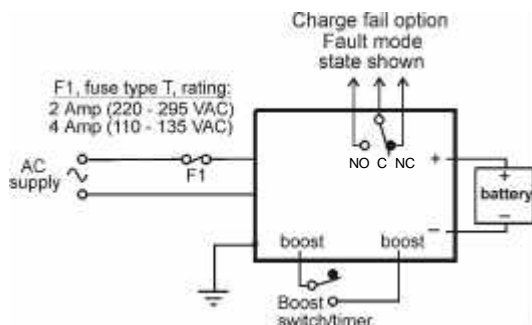
General:

operating temperature	-10 to +55°C
overall dimensions	see table over leaf
weight	see table over leaf
EMC emission / immunity	EN 58801-2 / EN50082-2

Warranty

A one year limited warranty on materials and workmanship is given with this product. Details are available upon request.

Electrical connection



Notes:

- 1) battery output is isolated from chassis
- 2) chassis must be connected to a low impedance earth

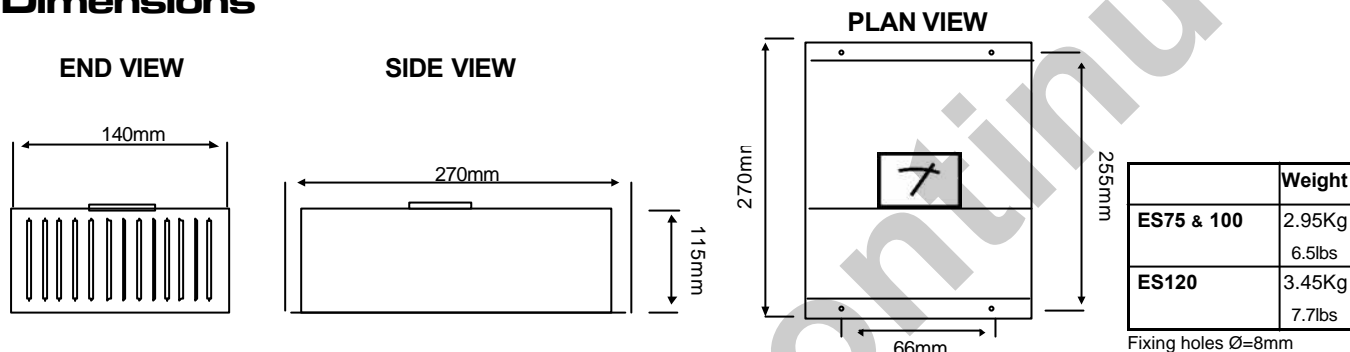
Calibration

Battery type*		float volts (VDC)	boost volts (VDC)
12V	Lead Acid (6 cells)	13.6	14.1
	Ni-Cd (10 cells)	14.1	16.0
24V	Lead Acid (12 Cells)	27.2	28.2
	Ni-Cd (18 Cells)	25.38	28.8
	Ni-Cd (20 Cells)	28.2	32.0

*Note: the sentry range is designed for use with vented batteries only. These chargers are NOT suitable for valve regulated lead acid (VRLA) or sealed type cells. For charging non vented chargers see the switch mode range.

If in doubt, contact our technical department .

Dimensions



How to order

When ordering, please specify:-

PRODUCT	Nominal Output VDC		Nominal Output Current		
	12	24	3	5	7
ES75123	•		•		
ES100243		•	•		
ES100125	•			•	
ES120245		•		•	

INPUT VOLTAGE			
CODE	115VAC	230VAC	277VAC
C	•		
D		•	
E			•

	BATTERY TYPE			
	Lead Acid	10 Cell Ni Cad	18 Cell Ni Cad	20 Cell Ni Cad
LA	•			
10		•		
18			•	
20				•

OPTIONS		
	Charge Fail	Manual Boost
CF	•	
MB		•

The above 3 part number codes must be filled in to complete your order.

Insert options when required, if no options are required, leave empty.

ES100125

D

LA

CF

The above example shows the order code for an enclosed Sentry with a 230 VAC input, 12V@5A,DC output charger, calibrated for a vented lead acid battery, and with the charge fail option.

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