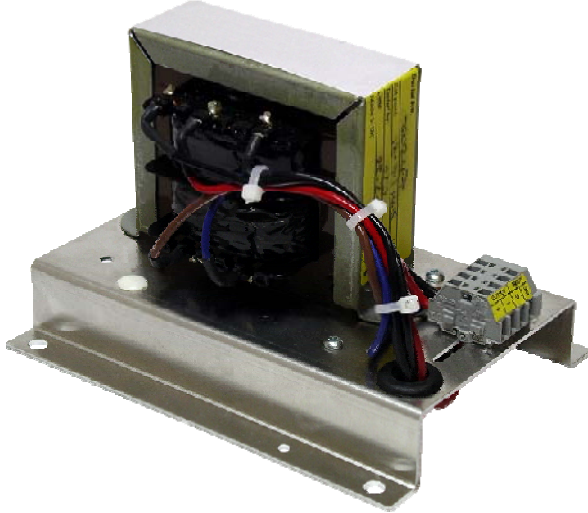




Sentry series Automatic battery chargers



- **Float charging:**
5A @ 12V, 3 or 5A @ 24 VDC
- **Simple, low cost design**
- **For vented lead acid or NiCd batteries**

Description

The Sentry range provides automatic, current limited and 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 uses an open frame construction, designed for surface mounting in an enclosed panel. 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, whilst supplying any additional loads current up to the specified maximum.

The unit is designed to give a constant current output while battery voltage is below a 'knee point' (approx. 13V on a 12V LA). Above the knee-point, as the battery approaches its float voltage, the Sentry output current ramps down. This multi-stage charge regime gives an optimum combination of fast charge rate, followed by float charge without overcharging.

Electrical connection of the AC supply and DC output is via spring clamp terminals. Transformer, circuit board and terminal blocks are mounted on an open chassis baseplate/heatsink, designed for surface mounting in an enclosed control panel.

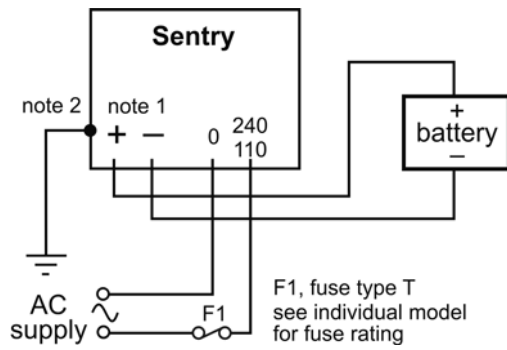
Warranty

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

Product specification

power supply:	S100	S120
supply voltage, 110/120 V units:	104 – 127 V ac	
220/240 V units:	207 – 254 V ac	
operating frequency	50 / 60 Hz	
DC charge output:		
maximum power output, W	100	120
nominal voltage, V	12	24
maximum current limit, A	5	3
float / boost voltages	see separate table	
general:		
operating temperature	-10 to +55°C	
dimensions	see separate diagram/table	
weight	1.8 kg / 4.0 lb	2.6 kg / 5.8 lb
EMC emission / immunity	EN50081-2 / EN50082-2	

Electrical connection



Notes:

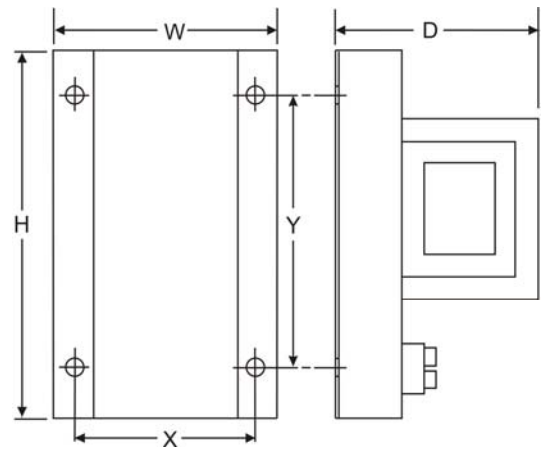
- 1) battery output is isolated from chassis.
- 2) chassis earth stud must be connected AC supply earth

Output calibration

Battery type		float volts (V DC)	boost volts (V DC)
12V	Vented lead acid (6 cells)	13.5	14.1
	Calcium-Calcium (6 cells)	13.8	15.6
	NiCd (10 cells)	14.1	14.5
24V	Vented Lead acid (12 cells)	27.0	28.2
	Calcium-Calcium (12 cells)	27.6	31.2
	NiCd (18 cells)	25.6	26.1
	NiCd (20 cells)	28.2	29.0

Note: Sentry chargers are designed for vented batteries only, and are NOT suitable for VRLA or sealed batteries. If in doubt, contact our technical department

Dimensions



	S100	S120
Overall:-		
H	148 mm / 5.83 in	
W	110 mm / 4.33 in	
D	117 mm / 4.61 in	125 mm / 4.92 in
Fixing holes:-		
X	98.8 mm / 3.89 in	
Y	130 mm / 2.95 in	

Approximate dimensions for reference only. Use actual product as a mounting template.

For safe heat dissipation, mount product in the orientation shown, with minimum air-gap clearance of 40mm above/below and 25mm at sides.

How to order

When ordering, please specify:-

Product	Nominal Output Voltage, V DC		Max. Output Current, A DC	
	12	24	3	5
S1001205	●			●
S1002403		●	●	
S1202405		●		●

Code	Input voltage	
	120 VAC	240 VAC
C	●	
D		●

Code	Battery type				
	Vented L/Acid	Vented L/Acid (Ca/Ca)	10 cell NiCd	18 cell NiCd	20 cell NiCd
LA	●				
CA		●			
10NC			●		
18NC				●	
20NC					●

product/output	input volts	battery type
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The above 3 part number codes must be used

e.g. **S1001205 D LA**

The above example shows the order code for a Sentry 12V/5A charger, 240VAC input, with output calibrated for vented lead acid batteries.