

## Automatic Battery Charger User's Guide





## **SECTION 1 : SPECIFICATION**

#### **Power Input**

Voltage 100 – 277 Vac Frequency 47 – 63 Hz

#### **DC Output**

CH3612	13.8 Vdc / 6A Max.
CH3624	27.6 Vdc / 3A Max.

#### **DC Voltage Regulation**

< +/- 1%

#### **Charge Mode**

Float

#### Efficiency

> 80% @ Full load

Low Battery Voltage Alarm Output Capacity 0.5A @ 40 Vdc

#### Suitable Battery Type

Gel, Flooded Lead Acid & AGM

### SECTION 2: INSTALLATION AND OPERATION

- 2.1 Make sure that the correct battery charger is selected for your battery.
- 2.2 Check correct line power for the battery charger.
- 2.3 Connect line voltage to the charger, then the "power indicator" should be lit up and display will show the output voltage and current, the DC output voltage be as follow :

CH3612 : 13.8 Vdc +/- 1%

CH3624 : 27.6 Vdc +/- 1%

2.4 AC power off before connect the charger DC output to battery leads "+ & -".

# Caution!! Crimp and property secure terminal lugs on to power wires to avoid shorts.

- 2.5 Turn on AC power, battery charger will charge the battery with an automatic adjusted current related to battery voltage and cyclically displays charging voltage and current on screen.
- 2.6 Floating charge mode with current-limiting function built-in. Charger can remains connected during engine cranking heavy load condition.

#### Protection

Constant output voltage, limited charge current reverse polarity & short circuit protections.

#### Environment

Operation Temperature	-20 – +60 °C
Storage Temperature	-30 – +80 °C
Relative Humidity	Max. 90%
Vibration	1.5 Gs @ 5 – 30 Hz
	5.0 Gs @ 30 – 500 Hz

#### Mounting Type

Panel Mount or DIN Rail \*1

#### Dimensions

159.0 (L) x 112.0 (W) x 66.0 (H) mm

#### Weight

0.67 Kg +/- 2%

- <sup>\*1</sup> Optional DIN Rail Mounting Kit is sold separately
- 2.7 For CH3612, minimum battery voltage must higher than 6 Vdc or the battery charger will automatically shut-down and all the indicators on the panel will be went out. (For CH3624, the minimum battery voltage is 12 Vdc ).
- 2.8 Voltage sensing circuit automatically stops charging battery when the battery is fully charged.
- 2.9 Input and output connection cable size  $\geq$  1.25mm<sup>2</sup> (AWG 16).

## SECTION 3 : LOW DC VOLTAGE ALARM

For CH3612 when battery volt less than 10 Vdc For CH3624 when battery volt less than 20 Vdc

" Low DC indicator " will be lit up with solid state 0.5A battery negative alarm output.



## SECTION 4 : DISPLAY & ALARM INDICATORS



Current reading

## **SECTION 5 : DANGER**

- 5.1 Charger has been completely tested and calibrated precisely, Potentially lethal voltages are present inside. Do not open case and attempt to adjust or repair this unit.
- 5.2 Ventilate battery enclosure, batteries generate explosive hydrogen gas.
- 5.3 Always avoid flames and sparks near batteries, avoid high humid or corrosive gases.
- 5.4 In case of detaching charger, turn the line power off first.
- 5.5 This is not a power supply. Use only as a battery charger.
- 5.6 Build-in AC power input protect fuse, no external fuse is needed. Do not attempt to replace it when blew.

## **SECTION 6 : OUTLINE / SIZE**



## **SECTION 7 : DIN Rail Kit Mounting**

7.1 DIN Rail Accessory installation



7.2 Charger Installation



7.3 Dismount Charger

