

# Automatic 3 Stage Switch-Mode Battery Chargers

#### **12 VOLT MODELS**

THC-15, THC-35, THC-45, THC-55, THC-75, THC-100

**24 VOLT MODELS** 

THC-20-24, THC-30-24, THC-40-24, THC-50-24

**48 VOLT MODEL** 

THC-20-48



### **Design Features**

- · Affordable and fast battery charging
- Switchable charging options
- Rapid or float charging
- Longer charging options
- Robust design
- 2 year warranty



#### **THOR Smart Battery Chargers**

This charging system provides an optional automatic charging system in three steps. 1.A fast charge to bring a good, drained battery back up to full voltage rapidly ("Boost"). 2. A standard charge to bring the battery up to a full charge at a safe rate to prolong the life of the battery and provide power to run 12V lighting and appliances in the vehicle/device ("Normal"). 3. A trickle charge to keep the battery fresh during times of load inactivity ("Storage"). The charger automatically changes modes to accommodate changes in conditions.

### 12V Charger Models



	,				MANUFACTURING	
	THC-15	THC-35	THC-45	THC-55	THC-75	THC-100
DC Output Voltage:	(No Load) approx- 13.6V/14.4(DC)					
Output Voltage Tolerance:	(No Load) + or7%					
Output Amperage:	Max Continuous 15 Amps	Max Continuous 32 Amps	Max Continuous 45 Amps	Max Continuous 55 Amps	Max Continuous 75 Amps	Max Continuous 100 Amps
Output Voltage (Full Load):	Approx. >13.4V (DC)					
Max Power Output:	Continuous 200 Watts	Continuous 430 Watts	Continuous 600 Watts	Continuous 780 Watts	Continuous 1065 Watts	Continuous 1230 Watts
Input Voltage Range:	105-135 AC					
Input Voltage Frequency:	47-63	47-63	47-63	47-63	47-63	47-63
Max AC Current:	@108VAC 3 Amps	@108VAC 5 Amps	@108VAC 5Amps	@108VAC 7Amps	@108VAC 12 Amps	@108VAC 13 Amps
Typical Efficiency:	>85%	>85%	>85%	>85%	>85%	>85%
Overload Protection:	>100%	>100%	>100%	>100%	>100%	>100%
Fan Control:	Proportional	Proportional	Proportional	Proportional	Proportional	Proportional
Short Circuit & Thermal Protection:	YES	YES	YES	YES	YES	YES
Working Temp:	0-45C	0-45C	0-45C	0-45C	0-45C	0-45C
Withstand Voltage:	1240V @ leads					
Dimensions:	7.15X10.5X3.45"	7.15X10.5X3.45"	7.15X10.5X3.45"	7.15X10.5X3.45"	7.15X10.5X3.45"	7.15X10.5X3.45"
Weight:	5.0 lbs	7.0 lbs	7.0 lbs	7.0 lbs	7.0 lbs	11.0 lbs
						_

## 24V & 48V Charger Models

	THC-20-24	THC-30-24	THC-40-24	THC-50-24	THC-20-48
DC Output Voltage:	(No Load) approx- 27.2V(DC)	(No Load) approx- 27.2V(DC)	(No Load) approx- 27.2V(DC)	(No Load) approx- 27.2V(DC)	(No Load) approx- 54.4V(DC)
Output Voltage Tolerance:	(No Load) + or7%				
Output Amperage:	Max Continuous 20 Amps	Max Continuous 30 Amps	Max Continuous 40 Amps	Max Continuous 50 Amps	Max Continuous 20 Amps
Output Voltage (Full Load):	Approx. >27.2V (DC)	Approx. >27.2V (DC)	Approx. >27.2V (DC)	Approx. >27.2V (DC)	Approx. >54.4V (DC)
Max Power Output:	Continuous 545 Watts	Continuous 820Watts	Continuous 1120Watts	Continuous 1460Watts	Continuous 1088Watts
Input Voltage Range:	105-135 AC				
Input Voltage Frequency:	47-63	47-63	47-63	47-63	47-63
Max AC Current:	@108VAC 7 Amps	@108VAC 6 Amps	@108VAC 6 Amps	@108VAC 12 Amps	@108VAC 10 Amps
Typical Efficiency:	>85%	>85%	>85%	>85%	>90%
Overload Protection:	>100%	>100%	>100%	>100%	>100%
Fan Control:	Proportional	Proportional	Proportional	Proportional	Proportional
Short Circuit / Thermal Protection:	YES	YES	YES	YES	YES
Working Temp:	0-45C	0-45C	0-45C	0-45C	0-45C
Withstand Voltage:	1240V @ leads				
Dimensions:	5X10X4"	5X10X4"	5X10X4"	5X10X4"	5X10X4"
Weight:	9.0 lbs	9.0 lbs	9.0 lbs	11.0 lbs	9.0 lbs

THOR Mftg. is dedicated to the AC/DC Power needs. With our engineering and manufacturing facilities in the USA and China, we strive to provide a cost effective solution for our customers. We do this while maintaining high quality levels demanded by the industry.

