

# MERLIN EXTREME DUTY BATTERY CHARGERS

Designed specifically for the most challenging applications, Merlin's Extreme Duty Battery Chargers are robustly designed using the highest quality components for maximum efficiency, ultimate reliability, and best battery charging performance.

Combining the latest technologies and the best available parts with years of power electronics design expertise, the Merlin Extreme Duty Battery Chargers will deliver long life performance even in the most demanding applications. Utilizing high efficiency converter technology, will reduce running costs and guarantees a maximum charge current per AC Watt.

A unique new feature of the Merlin Extreme Duty Battery Chargers range is the autonomous battery output setup. All outputs are not only isolated from each other, but these are also individually programmable. This enables the possibility to charge a combination of different battery types and sizes by a single battery charger.

All Merlin Extreme Duty Battery Chargers models are equipped with advanced temperature compensated charge programs, with or without a float stage. Standard available are AGM, GEL, Flooded and Lithium charge programs. Each charge program can also be modified to different voltage and current levels in case the connected battery has special requirements. Also available is a 'Night Mode', which prevents the fans from spinning when absolute silence is desired.

All Merlin Extreme Duty Battery Charger units are easy to install and come standard with temperature sensor and a very clear installation and operating instruction manual.

- **Autonomous battery output** setup with all outputs not only isolated from each other, but also individually programmable.
- **Easy to use** with a clear backlit display for easy readout and configuration.
- **Advanced protection** against battery failure, high temperature, overload, short circuit, low input voltage, and reverse polarity.
- **Robust industrial design** designed for continuous high output duty.
- **Universal AC input** with full power factor correction.
- **Easy to access connection bay** for installing AC, DC, and control wiring.
- **Variable speed fan** for low noise operation.
- **Industry leading warranty** of 2 years, upgradeable to 5 years.



PART #	30-3006	30-3008	30-3012	30-3014
RATING	40A, 12V	60A 12V	20A 24V	30A 24V
<b>AC INPUT</b>				
VOLTAGE (NOMINAL)	90-265Vac / 47-63Hz	90-265Vac / 47-63Hz	90-265Vac / 47-63Hz	180-260Vac / 47-63Hz
FULL LOAD POWER CONSUMPTION	700VA	1050VA	700VA	1050VA
AC INPUT CURRENT	6A/3A	9A/4.5A	6A/3A	9A/4.5A
<b>DC OUTPUT</b>				
BULK/ ABSORPTION	14.4VDC	14.4VDC	28.8VDC	28.8VDC
FLOAT	13.5VDC	13.5VDC	27.0VDC	27.0VDC
BATTERY RECOVERY (EQUALISE)	15.5VDC	15.5VDC	31.0VDC	31.0VDC
CHARGING CONTROLS	IUOUOP, INTELLIGENT 4 STAGE	IUOUOP, INTELLIGENT 4 STAGE	IUOUOP, INTELLIGENT 4 STAGE	IUOUOP, INTELLIGENT 4 STAGE
NUMBER OF OUTPUTS	3 (INTERNALLY ISOLATED)	3 (INTERNALLY ISOLATED)	3 (INTERNALLY ISOLATED)	3 (INTERNALLY ISOLATED)
BATTERY TYPE PROGRAMMES	FLOODED, GEL, AGM, LITHIUM	FLOODED, GEL, AGM, LITHIUM	FLOODED, GEL, AGM, LITHIUM	FLOODED, GEL, AGM, LITHIUM
<b>TEMPERATURE</b>				
OPERATING TEMP. RANGE	-20°C ... +60°C	-20°C ... +60°C	-20°C ... +60°C	-20°C ... +60°C
STORAGE TEMP. RANGE	-40°C ... +70°C	-40°C ... +70°C	-40°C ... +70°C	-40°C ... +70°C
COOLING	VARIABLE SPEED FAN	VARIABLE SPEED FAN	VARIABLE SPEED FAN	VARIABLE SPEED FAN
<b>PROTECTION</b>				
LOW AC VOLTAGE	YES	YES	YES	YES
OUTPUT SHORT CIRCUIT	YES	YES	YES	YES
HIGH TEMPERATURE	YES	YES	YES	YES
BATTERY OVERCHARGING	YES	YES	YES	YES
REVERSE POLARITY	YES	YES	YES	YES
<b>INDICATIONS</b>				
LCD SHOWING CHARGING STATUS	YES	YES	YES	YES
VOLTAGE AND CURRENT LEVELS	YES	YES	YES	YES
ERROR	YES	YES	YES	YES
<b>ENCLOSURE</b>				
COMMUNICATION PORT	QUICKLINK	QUICKLINK	QUICKLINK	QUICKLINK
DC OUTPUT CONNECTIONS		M6 STUDS (3X POSITIVE, 1X COMMON NEGATIVE)		
AC INPUT CONNECTIONS		FIXED AC CORD WITH SCHUKO PLUG (1.5 METER LENGTH)		
ENCLOSURE BODY SIZE (MM)	295 X 206 X 86	356 X 206 X 99	295 X 206 X 86	356 X 206 X 99
TOTAL WEIGHT (KG)	3.0	4.0	3.0	4.0
STANDARDS		EMC: ENN55016-2-1(/A1), EN55016-2-3(/A1), EN6100-4-2(3/4/5/6). SAFETY: EN60335-1, EN60335-2-29		