Amperis MMF universal battery charger

Amperis universal battery charger with IGBT Technology

Amperis MMF universal battery charger

- The Most Energy Efficient technology available.
- Universal charger for all types of batteries (multivoltage, multi-capacity and multi-chemistry) from single cells to complete batteries.
- Full set of standard charging curves factory programmed and possibility to create and save customized charging curves of any type.
- From 200 to 600 VCA and from 0 to 700 VCC.

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The Amperis MMF is a universal charger, programmable and digitally controlled. It can work with batteries of any type and supports applications of any type (Formation, Conditioning, Recovery, Desulphation and Regeneration). It has a very complete set of charging curves. In addition the user can program new curves in a simple way.
It is based on a new power conversion technology, which combines very high efficiency, unit power factor (PFC), universal capabilities and precise load control.
The MMF charger ensures a minimal temperature rise in the battery during the recharge process, thanks to the ultra-filtered output current (perfectly constant charge current and zero ripple).
The MMF is equipped with alphanumeric display and keypad, charge history logger, programable real-time clock and calendar, audible alarm and connectivity package.

Applications:

- Battery formation.
- Battery test.
- Conditioning and desulfation.

Optional equipment:

- Submersible probe for battery temperature.
- Enclosure type IP54 or NEMA 3R.
- Extended data-logger with miniUSB port or Bluetooth.

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Technical specifications

AC INPUT	
TYPE	MMF Universal Battery Charger
STANDARD VOLTAGES	Single-phase 220-230-240 VAC ± 10% Three-phase 220-240, 400, 440, 480, 600 VAC ± 10% Frequency 50/60 Hz ± 5 Hz
EFFICIENCY	>90%
POWER FACTOR	>90%
DC OUTPUT	
STANDARD VOLTAGES	From single battery cell to 600 VDC.
CURRENT RATINGS	From 50A to 500A
CHARGING CURVE	Completely configurable by the user.
PROTECCIÓN	
WRONG BATTERY AND REVERSE POLARITY	The charger remains in stand-by mode and gives an error message
ELECTRONIC OVERLOAD PROTECTION	Complete protection in case of output short circuit or overload.
ANTI-ARCING	WITHOUT AUXILIARY WIRES: When the battery is connected, no arcing is generated at the connectors. If the battery is disconnected while it's being charged, arcing is possible, (it's necessary to turn off the charger before to disconnect the battery). WITH AUXILIARY WIRES (RECOMMENDED): Full Anti-arcing protection in case of battery disconnection, even while the charge is in progress.
POWER-ON SELF-TEST	Self-test at each power-up (<10s). In the event of an error, an error message is displayed.
AUTOMATIC SHUTDOWN ON BATTERY DISCONNECTION	The charger is switched off (<3s) in case of disconnection of the battery during the charging process.

SAFETY TIMER	An independent safety timer turns the charger off in case of malfunction of the control panel.
MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS	
DIMENSIONS (W x H x D mm)	CABINET A: 500 x 900 x 440 (mm) CABINET B: 620x 1050 x 550 (mm)
ENCLOSURE TYPE	Steel enclosure.
COOLING	FORCED VENTILATION with active fan control.
AUDIBLE NOISE	< 65 dBA at 1 meter.
ENCLOSURE PROTECTION	IP21 (Standard) IP54 (Optional)
AMBIENT TEMPERATURE	Operation: -10/+50 ºC Storage: -10/+70 ºC
ALTITUDE	< 2000 m (According to EN62040-3)
USER INTERFACE AND CONNECTIVITY	
USER INTERFACE	LCD Display + LEDs, keyboard and audible alarm.
CONNECTIVITY	Internal storage of 200 cycles (expandable to 600 with miniUSB, optional). BLUETOOTH Wireless extension.
STANDARDS	
QUALITY	ISO 9001:2015
MARKING	CE
EMC	IEC EN 61000-6-2, IEC EN 61000-6-4
SAFETY	IEC EN 50178, IEC EN 62040-1
TEST RUN	IEC EN 62040-3
NORTH AMERICAN STANDARDS	UL 1564 "Industrial Battery Chargers" CSA 22.2 107.2-01 "Battery Chargers" cCSAus Listed

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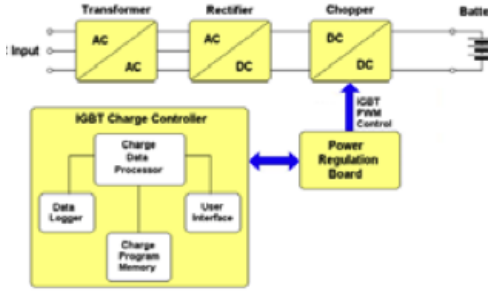
NOTE: Reported Efficiency and Power Factor values are AVERAGE values, measured over the entire charging cycle. Peak Efficiency and Power Factor are higher.



The following table shows all available models of the MMF battery charger:

STANDARD		
MODEL	**VOLTAGE**	**CURRENT**
A-50	2-48V	0-50A
A-100	2-48V	0-1OOA
A-150	2-48V	0-150A
A-200	2-48V	0-200A
A-300	2-48V	0-300A
B-50	2-80V	0-50A
B-100	2-80V	0-1OOA
B-150	2-80V	0-150A
C-50	2-96V	0-50A
C-100	2-96V	0-1OOA
C-150	2-96V	0-150A
C-200	2-96V	0-200A
D-80	50-200V	0-80A
E-50	50-400V	0-50A
F-50	2-120V	50A
F-100	2-120V	100A

Para otras configuraciones póngase en contacto con nosotros, indíquenos sus requerimientos y nos encargaremos de ofrecerle la solución que mejor se adapta a sus necesidades.

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