TECHNICAL

DATA SHEET

ABCM BATTERY CHARGER

BATTERY CHARGERS

Applications

The Ampcontrol ABCM Single Phase Battery Charger uses a microprocessor to control a switched mode rectifier unit. This produces a highly stable output voltage which is designed to maintain the charge of stand-by batteries, where a constant voltage and current limiting is desired. A high resolution colour display allows for local communication for metering, alarm messages and to allow for parameter configuration.

The battery charger may be used, for example, to provide back-up power for control voltage applications and for emergency lighting.

Features

- Modular design
- Ethernet connectivity for local or remote monitoring
- Manual, automatic and interval Boost charge modes
- High resolution colour display for metering, alarm messages and parameter configuration
- LEDs for local visual alarms
- Comprehensive logging for trending of data to increase system efficiency

Product description

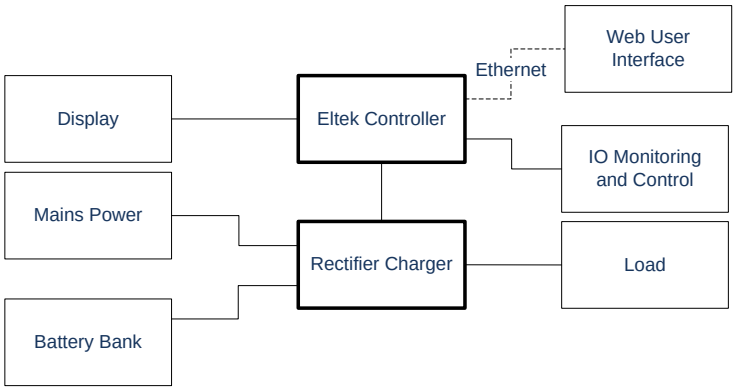
The ABCM Battery Charger assembly comprises of an Eltek controller, rectifier, and input and output monitoring and control for interface circuits and batteries.

The controller consists of Master and Basic units. The Basic unit provides control and monitoring of the internal system functionality. The Master unit provides a graphical user interface which allows access to voltage and current measurements and system alarms and faults. LEDs are also installed on the display unit to provide indication of local alarms. Remote access to functions and parameters is provided via a standard web browser, or using a PC application via SD card or Ethernet connection.

The rectifier controls the DC output voltage, providing a fully regulated output. The charger includes protection for over and under voltage, earth fault, short circuit and over temperature.

Battery charging is achieved through manual, automatic and interval boost charge modes. The batteries are charged at a constant voltage level with current limiting. The constant voltage, boost voltage and current limit can be set to ensure optimum charging times whilst preserving battery life.

Diagram



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Specifications	
Supply Voltage	
Voltage	85-290VAC, 50/60Hz
Power Factor	>0.98 at 50% load

Output Supply	
Voltage Range	12 to 120VDC
Current Range	5 to >100A
Current Limit	>100%
Static Voltage Regulation	+/- 0.5% from 10% to 100% load
Voltage Indication Regulation	+/- 0.5% from 10% to 100% load
Current Indication	Tolerance: +/- 10%, +/- 1A
Efficiency	Up to 90%
Output Ripple Voltage (RMS)	<1%, full load with battery if its capacity is >40% of current, where current is 10h x charger rated current

Environmental	
Temperature Compensation	-10 to 60°C continuous (battery life will be shortened at temperatures above 40°C)
Humidity	
Operating	20% to 90% RH non-condensing
Storage	10% to 95% RH non-condensing

Mechanical	
Relay Contacts	6 x NO or NC
Rating	2A; 75V
Enclosure	
Dimensions	12 to 48VDC, 100Ah: 1575mm H x 600mm W x 320mm D 48VDC 200Ah: 1575mm H x 600mm W x 550mm D 108VDC 100Ah: 1800mm H x 600mm W x 600mm D
IP Rating	IP20

Battery Supply	
Type	Virtually Sealed Lead Acid (valve regulated accumulators) **NOTE: can also be used for NiCad and Lithium batteries**

	163225	157865	160294	158248	143477	143618	143658	144642	158492	XXXXXX	XXXXXX
Output Supply Voltage (VDC)	24	24	32	36	48	48	48	48	48	120	120
Output Supply Current (A)	1 to 10	15	10	10	5	10	10	20	32	110	30
Storage Capacity (AHr)	40	100	100	100	18	100	100	100	400	100	200
Dimensions (HxWxD in mm)	1575 x 600 x 320				600 x 600 x 312	1575 x 600 x 320	600 x 400 (pan only)	1575 x 600 x 320	1575 x 600 x 550	1800 x 600 x 600	
Supply Voltage	85-290VAC, 50/60Hz Nominally 240VAC										
Power Factor	>0.98 at 50% load										
Static Voltage Regulation	+/- 0.5% from 10% to 100% load										
Voltage Indication Regulation	+/- 0.5% from 10% to 100% load										
Current Indication	Tolerance: +/- 10%, +/- 1A										
Efficiency	Up to 90%										
Output Ripple Voltage	<1%, full load with battery if its capacity is >40% of current, where current is 10h x charger rated current										
Temperature Compensation	-10 to 60°C continuous (battery life will be shortened at temperatures above 40°C)										
Humidity	Operating: 20% to 90% RH non-condensing Storage: 10% to 95% RH non-condensing										
Relay Contacts	6 x NO or NC										
Rating	2A; 75V IP Rating: IP20										
Battery Type	Virtually Sealed Lead Acid (valve regulated accumulators)										
Battery Testing	Battery cycle and life testing (including discharge tests) automatically completed by the system.										

Ampcontrol offer customised solutions to suit different applications – contact Customer Service to discuss specific system requirements.

Ordering	
Modules	**Part Number**
ABCM BATTERY CHARGER	*Contact Ampcontrol for more information*
CHARGER BATTERY 100AH	143644

DISCLAIMER

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