



LaMARCHÉ®

ISO 9001 CERTIFIED

A45M
MINE BATTERY CHARGER



THE LAMARCHE A45M MINE BATTERY CHARGER COMBINES RUGGED COMPONENTS WITH CIRCUIT SIMPLICITY, FOR UNMATCHED RELIABILITY

The LaMarche A45M Mine Battery Charger offers exceptional reliability and performance while striving for the highest level of Safety for Mine personnel. Built-in standard features such as Ground Check Circuitry, Ground Shielding of the Primary and Secondary of Magnetics (Transformers and Reactors) and Emergency Stop Pushbuttons are contributing elements to our ongoing efforts to enhance Safety.

Reliability is unsurpassed - our A45M's Magnetic Amplifier Circuitry achieves the greatest reliability without compromising performance. The inherent design features of the A45M prevent drifts from the DC charging curve due to surges or voltage drops while eliminating the need for voltage sensitive relays. It prevents Battery overheating and Fuse blowing, ensuring a long Battery and Charger life. To ensure the highest quality standards, LaMarche designs and manufactures all its transformers and reactors to UL Class H/180°C for protection against the rough, dirty and damp environments typically found in Mines.

The A45M is completely automatic and simple to operate - just plug the Battery in and it will do the rest. It senses the Battery's charge status and delivers the optimum charge. The built-in Electronic Timer circuit has an Auto Start/Stop feature - the unit starts 5 seconds after the Battery is connected and automatically stops charging when the Timer has timed out or when the Battery is disconnected. As a preventive measure, an additional independent Timer is provided to shut off the Battery Charger to protect your Battery from overcharging. The A45M returns a maximum charge to the Battery in the shortest time; 88% of the capacity of a completely discharged Battery is returned in the first five hours of charging.

"Power On", "80% Charge", "Fault", "Equalize" and "Battery Ready" LED's giving visual status indication are located on the Charger front panel. Additionally, a Daily/Equalize charge and a Normal/Stop switch are provided to manually select the desired charge cycle and to control the operation of the Battery Charger.

Standard Features

- Proven Magnetic Amplifier Technology ensures trouble free operation and outstanding performance
- Class H Insulation on Transformers and Reactors
- Rugged Design with Oversized Components - Built to Handle the Toughest Applications
- Low Profile Towable Enclosure - Convection Cooled
- Easy to Operate - Automatic Start and Stop Feature with Emergency Stop Switch (Red)
- Ground Shielding Between Primary and Secondary of Magnetics (Transformers and Reactor) and Ground Check Circuitry provides Added Safety Measures
- Controlled Charging Cycle - Electronic Timer Circuit with Built-in Auto Start/Stop Feature, LED's for: Power On, 80% Charge, Fault, Equalize, Battery Ready. Manual Switches for Normal or Stop Operation and Equalize or Daily Charge functions.
- Terminal Board for Easy Hook-up of AC & DC Cables
- Automatic AC Input Voltage Compensation
- Automatic Surge Suppression
- AC input and DC output fusing protects Battery and Charger
- Hermetically Sealed Silicon Diode Full Wave Rectifiers
- Automatic DC Voltage Regulation
- Automatic Current Limiting
- 5% Accuracy Analog DC Ammeter
- Environmental:
 - Operating Temperature: 0 to 50°C (32 to 122°F)
 - Storage Temperature: -40 to 85°C (-40 to 185°F)
 - Relative Humidity: 0 to 95% non-condensing
- AC Input Voltages of 480/575, Three-Phase, 60Hz (Consult Factory for other available input voltages or 50Hz models)
- Low Profile Enclosure No. 26 - Pretreated with Three Iron Phosphate Wash and De-Ionized Rinse. Finished with Environmentally Safe Water Base Visible Yellow Enamel
- 5-year Warranty

Our optional Multi-Circuit feature, consisting of two independent charging circuits built in the same enclosure, allows the user to recharge two Batteries simultaneously. An optional Manual DC Start Kit, also known as our "Big Green Pushbutton", is available as an added Safety measure. This option enables the operator to connect the Battery to the Charger while eliminating the possibilities of arcing. The Charger can then be safely started by pressing the pushbutton.

We also offer an enhanced version of our A45M that gives you the flexibility to recharge Batteries within a wider A.H. capacity range - eliminating the need for separate Chargers (please consult factory for available models).

Reliability at its best - the Controlled Magnetic Amplifier design provides years of trouble-free operation. The A45M assures the quality, reliability and performance you have come to expect from LaMarche.

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Made in USA

A45M

MINE BATTERY CHARGER

A45M Models

Model Number	DC Output			Battery Amp-Hour Capacity 100% Discharge (8hr recharge)	AC Input Current Draw* C E 480 / 575	Case No.	Shipping Weight (Approximate)		
	Amps	Volts	Fuse Size				lbs	kgs	
64 VDC 32L	A45M-60-32L-CE3	60	64V	100A	300-450	11 / 8.9	26	520	235.9
	A45M-70-32L-CE3	70	64V	130A	350-525	13 / 11	26	570	258.6
	A45M-85-32L-CE3	85	64V	130A	425-650	16 / 13	26	673	305.3
	A45M-105-32L-CE3	105	64V	150A	525-790	19 / 16	26	722	327.5
	A45M-130-32L-CE3	130	64V	200A	650-975	24 / 20	26	827	375.1
	A45M-145-32L-CE3	145	64V	250A	725-1100	26 / 22	26	845	383.3
	A45M-160-32L-CE3	160	64V	250A	800-1200	29 / 24	26	860	390.1
	A45M-180-32L-CE3	180	64V	300A	900-1350	32 / 27	26	910	412.8
	A45M-200-32L-CE3	200	64V	300A	1000-1500	36 / 30	26	975	442.3
A45M-250-32L-CE3	250	64V	350A	1100-1650	45 / 38	26	1210	548.9	
128 VDC 64L	A45M-60-64L-CE3	60	128V	100A	300-450	22 / 18	26	785	356.1
	A45M-70-64L-CE3	70	128V	130A	350-525	25 / 21	26	840	381.0
	A45M-85-64L-CE3	85	128V	130A	425-650	31 / 26	26	1046	474.5
	A45M-105-64L-CE3	105	128V	150A	525-790	38 / 32	26	1144	518.9
	A45M-130-64L-CE3	130	128V	200A	650-975	47 / 39	26	1354	614.2
	A45M-145-64L-CE3	145	128V	250A	725-1100	52 / 44	26	1390	630.5
	A45M-160-64L-CE3	160	128V	250A	800-1200	57 / 48	26	1542	699.5
	A45M-180-64L-CE3	180	128V	300A	900-1350	65 / 54	26	1610	730.3
	A45M-200-64L-CE3	200	128V	300A	1000-1500	72 / 60	26	1675	759.8
A45M-250-64L-CE3	250	128V	350A	1100-1650	89 / 75	26	1880	852.8	

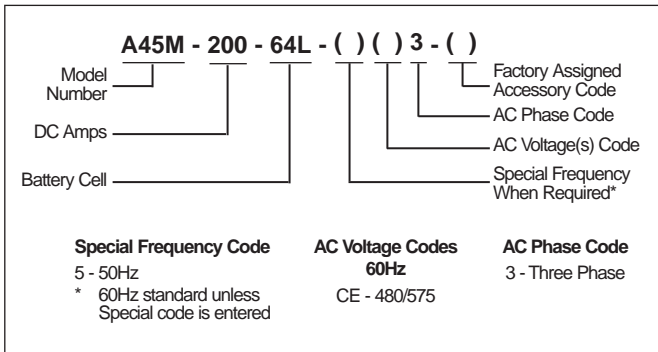
Optional Accessories

- 04L Manual DC Start Kit (Green Pushbutton)
- 06B 5% Accuracy Analog DC Voltmeter
- 091 Special Paint
- 093 Magnetics Treated with a Red Fungus Resistant Dip
- 094 Export Packing
- 119 Multi-Circuit (Two Circuit Unit mounted in one Enclosure - Consult Factory for availability)
- 193* DC Cables 15ft Length
- 194* DC Cables 20ft Length
- 195* DC Cables 25ft Length
- 196 AC Ground Fault Detection and Shutdown System with Warning Light (PA Spec. BOTE 314-78)

*Consult Factory for other available DC Cable Lengths

All above models designed for optimal performance at 60Hz. They will operate at 50Hz with reduced performance. Consult factory for units designed specifically at 50Hz. Please consult factory for availability of other DC cell ranges such as 20L, 40L and 48L.
*AC Current Draws based @ 100% load. Maximum Current Draw is typically 140% of ratings shown.

Model Number Nomenclature

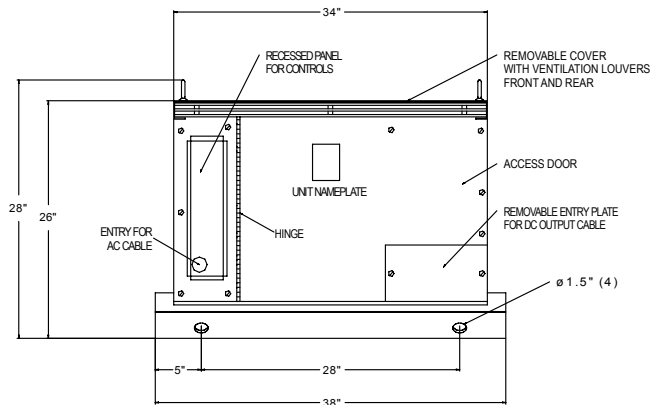
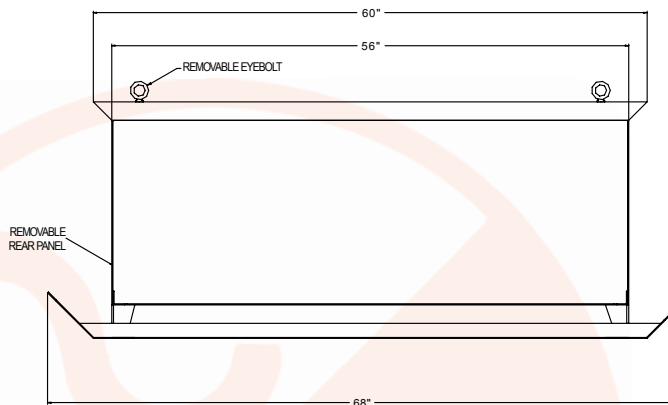


Ordering Information

When ordering, please specify:

- LaMarche Model Number A45M
- Input Voltage, Frequency, Phase
- Number and Type of Battery Cells
- Ampere Hour Capacity of Battery
- Allowable Recharge Time (8 or 16 hrs) (8hrs supplied if not specified)
- Optional Accessories

No. 26 Case Drawing



Specifications subject to change without notice

P25-DSA45M-1
ECN 15209
02-02



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