



# La MARCHÉ

ISO 9001:2000 CERTIFIED

## A46 / A46F ENGINE STARTING BATTERY CHARGER WITHOUT / WITH FILTERING



Unit shown with optional 46E LCD C.A.P. System.

## A46 / A46F ENGINE STARTING BATTERY CHARGER WITHOUT / WITH FILTERING

The La Marche A46/A46F battery charger is specially designed for maintaining and recharging starting batteries of engine generator sets. The controlled magnetic amplifier technology provides the highest reliability that is necessary for the continued operation of the emergency standby equipment and eliminates most starting problems by maintaining batteries at a proper charge, ensuring optimum performance and maximum life.

They are completely automatic, solid state constant voltage battery chargers, built to carry continuous and intermittent loads up to 80% of its maximum rated output capacity. It automatically senses the battery and load conditions and delivers the necessary amount of charge. Once the battery becomes charged, the output current will automatically decrease to a very low trickle charge to prevent overcharging of the batteries. The DC current limiting circuitry eliminates the need for cranking disconnect relay.

These units are designed and built to charge Flooded Lead Acid or Nickel-Cadmium batteries. The A46F provides filtering for charging Valve-Regulated batteries, while the A46 is suitable for charging Flooded type batteries only. These models are not battery eliminators.

### Standard Features

- Magnetic Amplifier Circuitry
- Automatic AC Input Voltage Compensation +/- 10%
- Automatic Surge Suppression
- AC input and DC output fusing
- AC Power Failure Relay w/ (1) set of Form "C" contacts
- Float/Equalize Mode Switching
- Automatic DC Voltage Regulation
- DC Current Limiting Circuitry
- Analog DC Ammeter & DC Voltmeter, 5% Accuracy
- Charger design prevents battery from discharging if AC line fails (A46 Model)
- Complete isolation of the AC line from the DC charging circuit
- Model A46F is filtered for Valve-Regulated batteries
- AC Input Voltages of 120, 208 or 240, single phase
- NEMA 1 enclosure ANSI 61 gray baked enamel paint
- A46 models are U.L. 1564 listed
- A46F models are pending U.L. 1564 listed
- 10-year limited Warranty

### Options

- Refer to the back of this page for further details.

The front panel Float/Equalize switch is provided to manually initiate a periodic equalize charge to optimize battery longevity. This operation can also be achieved automatically by selecting one of our electronic equalize timer options; either by itself or in our Digital C.A.P. (Combination Accessory Package) that incorporates several alarm contacts and status LED's.

These chargers can also be customized to meet the ABS (American Bureau of Shipping) and U.S.C.G. (United States Coast Guard) standards for applications such as offshore and onboard vessels.

The A46/A46F assures the quality reliability and performance that our customers have come to know and expect from La Marche products. The controlled magnetic amplifier circuitry provides years of trouble-free operation – our confidence in the reliability of these models is reflected by our 10-year limited Warranty.

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Made in USA

# A46 / A46F

## ENGINE STARTING BATTERY CHARGER

### WITHOUT / WITH FILTERING

## A46 & A46F Models

Model Number	DC Output			AC Input Current Draw* at 100% Load (Amps)			A46 Case No.	A46 Shipping Weight (Approximate)		A46F Case No.	A46F Shipping Weight (Approximate)		
	Amps	Volts	Fuse Size	A 120	D 208	B 240		lbs	kgs		lbs	kgs	
12VDC 6L, 9 or 10NC	A46-6-12V	6	12V	15A	1.5	0.9	0.8	1	28	12.7	2	39	17.8
	A46-10-12V	10	12V	20A	2.5	1.4	1.3	1	30	13.6	2	41	18.7
	A46-20-12V	20	12V	35A	5	2.9	2.5	2	56	25.4	7	68	31.0
	A46-30-12V	30	12V	50A	7.5	4.3	3.8	2	66	29.9	3	91	41.4
24VDC 12L, 19 or 20NC	A46-6-24V	6	24V	15A	3	1.7	1.5	1	38	17.2	7	50	22.8
	A46-10-24V	10	24V	20A	5	2.9	2.5	2	62	28.1	7	74	33.7
	A46-20-24V	20	24V	35A	10	5.8	5	2	73	33.1	7	85	38.7
	A46-30-24V	30	24V	50A	15	8.7	7.5	7	108	49.0	3	127	57.8
32VDC 16L	A46-6-32V	6	32V	15A	4	2.3	2	2	58	26.3	7	70	31.9
	A46-10-32V	10	32V	20A	6.7	3.9	3.3	2	68	30.8	7	80	36.4
	A46-20-32V	20	32V	35A	14	7.7	6.7	2	74	33.6	3	92	41.9
	A46-30-32V	30	32V	50A	21	12	10	7	112	50.8	3	131	59.6
36VDC 18L	A46-6-36V	6	36V	15A	4.5	2.7	2.4	2	58	26.3	7	70	31.9
	A46-10-36V	10	36V	20A	7.5	4.2	3.9	2	68	30.9	7	80	36.4
	A46-20-36V	20	36V	35A	15	8.7	7.5	7	74	33.6	3	92	41.9
	A46-30-36V	30	36V	50A	22.5	12.9	11.4	7	112	50.8	3	131	59.6

## Case Specifications

Case No.	Overall Dimensions Width x Depth x Height
1	10" x 8" x 16" 264 x 200 x 413mm
2	13" x 10" x 17" 326 x 254 x 435mm
3	15" x 11" x 24" 391 x 279 x 603
7	14" x 11" x 20" 362 x 270 x 505

Note: 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. Must specify only one battery type and number of cells. Please consult factory for other available cell ranges if desired range not shown. \*AC Current Draws based @ 100% load using standard battery cells of 6L(12V), 12L(24V) and 16L(32V), 18L(36V) Maximum Current Draw is typically 140% of ratings shown. (1) U.L. Listing is Pending on all A46F Units.

## Options

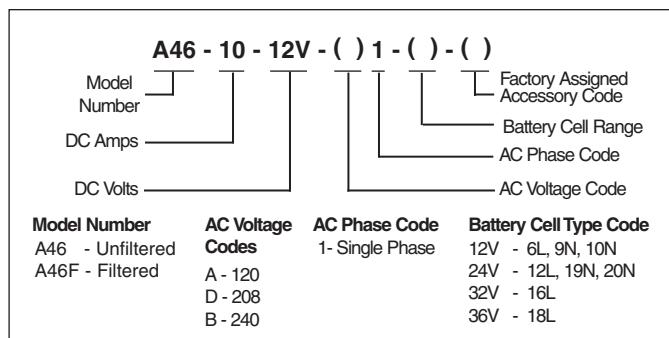
<b>Circuit Breakers</b>	46J	LCD C.A.P. System (Meets NFPA 110) Includes all the features of 46E package (above) plus Ground Detection Alarm. (Refer to the LCD C.A.P. System data sheet for complete details.)
011 AC Breaker Single pole (120VAC only)		
012 DC Breaker Single Pole		
016 AC Breaker Two Pole		
017 DC Breaker Two Pole		
<b>Choose options from Discrete or Combination Accessory Packages (C.A.P.)</b>	204	C.A.P System (Meets NFPA110) includes (1) set of form "C" contacts for AC Power Failure. Low DC Voltage, High DC Voltage, and Low DC Current.
<b>Discrete</b> (Choose one or more of the options in this category)	03M	Low/High DC Voltage Alarm & Lights with (1) set of Form "C" contacts each for Low Voltage & High Voltage w/LED's.
055 Float Light		
056 Equalize Light		
060 AC Pilot Light		
04J Multi-Mode Equalize Timer & Lights Adjustable from 1-144hrs in (5) selectable modes; Standard, 7-day, 14-day, 30-day and Equalize after Low DC Voltage includes Float and Equalize Lights ( 055 and 056).		
<b>Combination Accessory Packages (C.A.P.)</b> (Choose only one of these options)	10B	U.S.C.G. Accessories, includes a drip shield, on/off switch & water tight connectors.
16E Digital C.A.P. System (Meets NFPA 110) Features a selectable LED display along with the AC Pilot Light, Equalize Timer and many more features. (Refer to the Digital C.A.P. System data sheet for complete details.)	38G	ABS (American Bureau of Shipping) Type Approval with option 060, 16E, or 16J.
16J Digital C.A.P. System (Meets NFPA 110) Includes all the features of 16E package (above) plus Ground Detection Alarm. (Refer to the Digital C.A.P. System data sheet for complete details.)	38J	ABS & U.S.C.G Accessories with option 060, 16E, or 16J.
<b>Internal Charge Dividers</b> (consult factory may increase case size)	100	To charge 2 batteries with negative common
46E LCD C.A.P. Systems (Meets NFPA 110) features Selectable Display, Multi-Mode Equalize Timer, Equalize light, Float light and many more features(Refer to the LCD C.A.P. System data sheet for complete details.)	10U	To charge 2 batteries with a positive common
	101	to charge 3 batteries with a negative common
	10V	To charge 3 batteries with positive common

### 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

- NEMA 1 enclosure ANSI 61 gray baked enamel paint
- A46 models are U.L. 1564 Listed
- A46F models are pending U.L. 1564 Listed

## Model Number Nomenclature



Specifications subject to change without notice.  
P25-DSA46-1  
ECN 18380  
07/09



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