MASTER

BATTERY CHARGER OPTIONS & ACCESSOR'

MASTER LIST PRICES Effective: September 1, 2012 Supersedes: July 1st, 2008, Rev. A **Customer Service** (847) 295-1010

sales@mastercontrols.com

NOTES:

- (1) The following options or accessories are available with series MBC6 or MBC7 Chargers only, unless otherwise specified.
- (2) Regulator Plug-in P.C. Boards are conformal coated as standard practice.
- (3) N/A = Not Applicable or Not Available.
- (4) N/C = No Added Cost or No Charge.
- (5) Per Cent Adders are the percent of base price and added to base price individually. E.G., price + (5% of price) + (2% of price).

ALARM CONTACTS - SPDT (1C) 10 Amp maximum @ 115 VAC or 28 VDC.

SYMBOL	DESCRIPTION	LIST PRICE
NOTE: Some of th	ese alarm modules can be adapted for use outside the Chargers; consult factory.	
(A1) MFA	Malfunction Alarm Contacts (latching alarm) Detects A.C. failure, low D.C. voltage, loss of current, and failure to equalize. (Reset by high rate current signal). For high rate standby applications (MBC6 only, UL Listed).	\$180.00
(A2) CFA	Charger Failure Alarm Contacts. Detects A.C. failure, low D.C. voltage and loss of current. (High rate current signal overrides low D.C. voltage monitor). For floating applications (MBC6 or MBC7, UL Listed).	\$180.00
(A3) LVA	Low Voltage Alarm Contacts. Detects A.C. failure, low D.C. voltage and loss of current. (Remains tripped whenever battery voltage is below float level). For floating applications (MBC6 or MBC7, UL Listed).	\$180.00
(A4) HVA	High Voltage Alarm Contacts. Detects high D.C. voltage. Trips when battery voltage exceeds equalize level. (MBC6 or MBC7, UL Listed).	\$180.00
(A5) LCA	Low Charge Alarm Contacts. Detects low battery voltage. Trips when battery voltage indicates a partial discharge. (MBC8 and MBC9 ONLY)	\$180.00
(A6) HCA	High Charge Alarm Contacts. Similar to HVA, but for MBC8 and MBC9 ONLY.	\$180.00
(A7) PFA	Power Fail Alarm Contacts. Detects only A.C. failure (MBC6 or MBC7, UL Listed) NOTE: For Power Failure Contacts for MBC8 or MBC9, specify R1 (ACF)	\$180.00
	Additional, multiple or special contacts	QUOTE

CHASSIS MOUNTED CHARGER (Less Cabinet)

SYMBOL	DESCRIPTION	LIST PRICE
(B)	All required cabinet and field wiring terminates on binding screw barrier block	N/C
	type terminal strips. Normal door mounted components (fuses, meters, etc.)	
	shipped loose.	

CIRCUIT BREAKERS & CIRCUIT PROTECTORS

SYMBOL	DESCRIPTION	LIST PRICE
(C1)	A.C. Circuit Protector (Non-Switchable, trip free, manual reset button type	ADD 5%
	"circuit breaker") replacing A.C. fuse. Standard on some models. Single pole	
	for single phase input only (UL Listed).	
(C2)	D.C. Circuit Protector (as Above) replacing D.C. fuse. Standard on some models	ADD 5%
	(UL Listed).	
(C3)	A.C. Circuit Breaker (Switchable). Replaces A.C. fuse(s). One or two pole for	ADD 10%
	single phase or three phase. Standard on some models (UL Listed).	
(C4)	D.C. Circuit Breaker (Switchable). For isolating (disconnecting) battery. Two	ADD 10%
	pole. Not recommended for battery voltages below 40 VDC (UL Listed).	



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DRAWING

SYMBOL	DESCRIPTION	LIST PRICE
(E)	Instruction Manual; one per unit	N/C
	Instruction Manual; additional copies with original Charger order	25.00
	Instruction Manual; ordered after original Charger order	90.00
	NOTE: Instruction Manual includes:	
	Installation Instructions and field wiring sizes.	
	Mounting Dimension Drawing	
	Field Wiring Diagram	
	Operating & Operation Instructions	
	Theory of Operation	
	Wiring (or Schematic Diagram)	
	Option Drawings and Descriptions if applicable	

FUSING

SYMBOL	DESCRIPTION	LIST PRICE
(F1)	Dual A.C. Fuses replacing single AC Fuse. Standard on some models (UL Listed)	ADD 5%
(F2)	Dual D.C. Fuses replacing single DC Fuse. Standard on some models (UL Listed)	ADD 5%

D.C. GROUND DETECTORS (For use on Ungrounded Systems ONLY)

	1 7	
SYMBOL	DESCRIPTION	LIST PRICE
(G5)	Ground detecting lights, relay, momentary reset switch, and test switch (UL Listed)	\$340.00

ENVIRONMENTAL (Humidity)

SYMBOL	DESCRIPTION	LIST PRICE
(H1)	Fungus Resistant Treatment (per MCS spec SP-016). Coats all fungus nutrient material (Notably laminated phenolic) with fungicidal varnish. P.C. Boards conformal coated (UL Listed).	\$160.00
(H2)	Hood (Drip Shield) for 12x12x8 Enclosure. Adds 6 inches (21 cm) to height (UL Listed).	\$180.00
(H3)	Drip Proof vented enclosure 16x20x9 (41 cm x 51cm x 23cm)	\$290.00
(H4)	Insect screens for (H3) cabinet	\$160.00



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INPUT VOLTAGES (N/C for 115 VAC Input)

(See Price List	(See Price List for Standard inputs and fuse size chart for preferred inputs). Consult factory for UL listings sta	
SYMBOL	DESCRIPTION	LIST PRICE
(J)	208 VAC, 60 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	208 VAC, 60 HZ, 1 Phase (MBC8, MBC9 & MBC19)	ADD 15%
	220 VAC, 50 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	220 VAC, 50 HZ, 1 Phase (MBC8, MBC9 & MBC19)	ADD 15%
	230 VAC, 50/60 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	230 VAC, 50/60 HZ, 1 Phase (MBC8, MBC9 & MBC19)	ADD 15%
	240 VAC, 60 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	240 VAC, 60 HZ, 1 Phase (MBC8, MBC9 & MBC19)	ADD 15%
	440 VAC, 50 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	440 VAC, 50 HZ, 1 Phase (MBC8, MBC9 & MBC19)	N/A
	460 VAC, 50/60 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	460 VAC, 50/60 HZ, 1 Phase (MBC8, MBC9 & MBC19)	N/A
	480 VAC, 60 HZ, 1 Phase (MBC6 & MBC7)	ADD 10%
	480 VAC, 60 HZ, 1 Phase (MBC8, MBC9 & MBC19)	N/A
	550 to 600 VAC - Special	QUOTE
	Dual Input Voltages	QUOTE

LINE CORDS

SYMBOL	DESCRIPTION	LIST PRICE
(K1)	Line Cord & Plug. Six feet, #18 AWG. For use with any model, 12 or 24 volt, 5 or 10 amp output	\$60.00
(K2)	Line Cord - Other	ADD 10%

METERS

	SYMBOL	DESCRIPTION	LIST PRICE
	(M2)	2% Voltmeter or Ammeter - Each (Standard on some models, not recommended	\$180.00
		on others unless adjusting potentiometer are ordered, since Chargers are factory	
		set for battery type)	
Ī	(M3)	3% Meter(s). Standard on smaller sizes	N/C

PILOT LIGHTS

SYMBOL	DESCRIPTION	LIST PRICE
(N1)	A.C. Pilot Light (UL Listed)	\$70.00
(N2)	Alarm Light, (Use in conjunction with MFA, CFA, LVA, HVA, LCA or HCA). Each	\$70.00
	(See R4 for remote alarm contacts. (UL Listed)	
(N3)	Auxiliary Light - Includes wired lamp and socket only (UL Listed)	\$70.00

POTENTIOMETER

NOTE: St	NOTE: Standard chargers are factory adjusted for the exact battery type and are not field adjustable.		
SYMBOL	DESCRIPTION	LIST PRICE	
(O1)	Float Adjust - Locking type, door mounted, MBC7 only (UL Listed)	\$160.00	
(O2)	Equalize Adjust - Locking type, door mounted, MBC7 only (UL Listed)	\$160.00	



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PAINT

SYMBOL	DESCRIPTION	LIST PRICE
(P1)	Standard Paint (UL Listed)	
	Blue Scotch Grain (MCS Spec. SP-008) Baked Silicone Enamel	
	(over phosphatized surface) which is hard and relatively corrosion resistant.	
(P2)	Special Paint (UL Listed)	QUOTE

RELAYS - SPDT (1C), 10 Amp. Maximum @ 115 VAC or 28 VDC

SYMBOL	DESCRIPTION	LIST PRICE
(R1)	A.C. Power Fail (see MFA, CFA, LVA or PFA) - DPDT (UL Listed)	\$140.00
(R2)	D.C. Crank Disconnect Relay (Not normally required with MBC6 or MBC7)	
	Standard in MBC8, MBC9 & MBC19 (UL Listed)	QUOTE
(R3)	Current Fail Alarm, Low D.C. Voltage or High D.C. Voltage (UL Listed)	SEE ALARMS
(R4)	Remote Alarm Contacts for use with alarm lights. DPDT	\$140.00
	(2C, 10 Amp. Maximum @ 115 VAC or 28 VDC (UL Listed)	

SWITCHES

	NOTE: A.C. On-Off Switches Not Normally Recommended. See Option (C3).	
SYMBOL	DESCRIPTION	LIST PRICE
(S1)	A.C. On-Off Power Switch. 115 VAC, 12 or 24 VDC, 5 or 10 Amp DC (UL Listed)	\$90.00
(S2)	Auxiliary Switch (4 Amp @ 115 VAC) - SPST	\$90.00
	Auxiliary Switch (4 Amp @ 115 VAC) - DPDT	\$100.00

TIMERS

	MBC7 ONLY (See MBC6 Models for Stand-by Service)			
SYMBOL	DESCRIPTION	LIST PRICE		
(T3)	12/24 Hour Maximum Equalize Timer (Electronic, Manual Set, UL Listed)	\$250.00		
(T4)	Weekly Equalize (Program) Time Clock. Factory set for 10:00 to 11:45 Tuesday morning. Field Programmable (in daily and 1/4 hour increments). Mounted external on some models. 50/60 HZ (UL Listed)	\$410.00		

See Charger Price Sheet for Terms and Conditions of Sale.