This Low Cost Charger is Competitively Priced but Superior to unregulated "Battery Boiler" chargers and trickle chargers.

**Performance Advantages:**

- For PERMANENT CONNECTION to provide continuous 24 HOUR SERVICE
- REGULATED Semi-Float Operation
- ELIMINATES EXCESSIVE GASSING (prevents high water consumption)
- Provides CURRENT TO MEET the Battery DEMAND
- LINE COMPENSATED and D.C. Voltage Regulated
- Price INCLUDES CRANK DISCONNECT RELAY
- FULLY RATED
- Provides CONTINUOUS Rated OUTPUT when needed TO MAINTAIN FULL CHARGE on Batteries
- Fully CHARGES BATTERIES at least TWICE AS FAST as similar or lesser rated unregulated units
- Factory PREADJUSTED to battery type
- NO TAPS No field adjustments
- Low voltage shutdown for REVERSE POLARITY and SHORT CIRCUIT PROTECTION

**Construction Features:**

- Proven Design and Components
- Solid State Control
- Components are all sealed and are Industrial Grade or better
- Heavy Duty Construction thruout
- Heavy External Mounting Tabs
- Hinged Cover with Latch — No disassembly required for installation
- Ammeter, D.C. output fuse, and A.C. circuit breaker — All door mounted
- OUTPUT completely ISOLATED from A.C. Line

**Technical Performance Summary**

- **OUTPUT CURRENT** — 5 Amp Min. for any state of Battery Charge
- **RATED** — for 5 Amp Continuous Duty
- **LINE REGULATION** — 1.0% Max.
- **LOAD REGULATION** — 1.0% Max.
- **RECOMMENDED BATTERY CAPACITY** — 25 to 115 Amp-Hour (up to 230 Amp-Hour [8D] when line voltage NOT excessive)
- **ENVIRONMENT** — For use indoors for any ambient conditions suitable for the battery
- **BATTERY DRAIN (A.C. OFF or LOW)** — 10mA Max.

*We like to Boast! . . . ask us for detailed specifications*
The Model MBC-19 is a highly regulated (better than 1%) and fully rated battery charger. On discharged batteries it will provide full output longer, followed by a fast drop down to very low maintaining current (see curves). It will also provide full rated output to external loads without discharging the battery. This makes maximum use and availability of battery capacity and prevents excess water consumption (gassing or 'boiling'). With no field adjustments and simplified installations, these rugged chargers extend both the utilization and the life of batteries compared to similar or more expensive semi-float, unregulated, or trickle chargers. This low cost high quality product increases the reliability of Standby Engines.

### MODEL NUMBER

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>D.C. OUTPUT VOLTAGE</th>
<th>MAX. LINE CURRENT DRAW (115VAC)</th>
<th>MAX. LINE CURRENT DRAW (AC)</th>
<th>WEIGHT LBS (KG)</th>
<th>NUMBER OF BATTERY CELLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBC-19-12-5- ***</td>
<td>12 Volts 5 Amps</td>
<td>1.5 Amps</td>
<td>1.5 Amps</td>
<td>19 (9)</td>
<td>6</td>
</tr>
<tr>
<td>MBC-19-24-5- ***</td>
<td>24 Volts 5 Amps</td>
<td>3.0 Amps</td>
<td>3.0 Amps</td>
<td>22 (10)</td>
<td>12</td>
</tr>
<tr>
<td>MBC-19-30-5- ***</td>
<td>30 Volts 5 Amps</td>
<td>4.0 Amps</td>
<td>4.0 Amps</td>
<td>26 (12)</td>
<td>15</td>
</tr>
<tr>
<td>MBC-19-32-5- ***</td>
<td>32 Volts 5 Amps</td>
<td>4.0 Amps</td>
<td>4.0 Amps</td>
<td>26 (12)</td>
<td>16</td>
</tr>
</tbody>
</table>

* Add suffix 'LA' for automotive (truck) lead acid batteries (1.265-1.285 Sp. Gr.) or add suffix 'FL' for float service lead acid batteries (1.200-1.220 Sp. Gr.) or add suffix 'NC' for nickel cadmium (high rate). Consult factory for other types.

### TYPICAL LOAD REGULATION CURVE

![TYPICAL LOAD REGULATION CURVE](image)

### TYPICAL CHARGE CURVE

![TYPICAL CHARGE CURVE](image)

### ORDERING INFORMATION

- MCS Model number — with suffix *
- A.C. Input (115VAC, 60Hz, 1 standard —220VAC, 50Hz, 1 available)
- Number and type of battery cells
- Battery capacity and specific gravity or model & mfr.
- Continuous D.C. loads (if any)

### SAMPLE SPECIFICATIONS

— For More Reliable Systems Please Specify —

'The battery charger shall be a Master Control Systems Model MBC-19. It shall have line and load regulations of ±1% or better. It shall be capable of carrying 100% of rated output continuously without allowing any battery discharge. It shall be factory preset and require no field adjustments.'

Specifications subject to change without notice.

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**MASTER CONTROL SYSTEMS, INC.**

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