

# Automatic Transfer Switch Option Battery Charger System 12Vdc

## Introduction

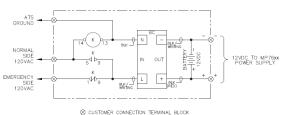
This option provides a 12Vdc battery and charger kit for the MP7650 processor controls installed into a molded case ATS.

It will automatically fix the transfer switch code to "M" for the DC voltage. Please refer to the transfer switches' schematic for unit specific reference.

### Product Description for Microprocessor Controls (Option BC)

For this option, custom wiring is added to the ATS to include a 12 Volt, 7AH (Amp-Hours) battery to power the microprocessor controls. This will also include a battery charger to keep the equipment running continuously.

#### See Figure 1 for general wiring of the battery charger system.



TOMER CONNECTION TERMINAL



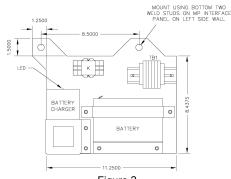


Figure 2

## Recommendations

The general operating battery life is approximately two years before replacement is recommended.

Lake Shore Electric Corporation believes in providing the customer with a full turnkey solution to their needs. If the equipment does not fully meet your needs, please consult the factory for further information.

## **Product Specifications**

| BATTERY INFORMATION                               |   |
|---|---|
| Nominal Voltage                                   | 12 volts, (6 cells)                       |
| Nominal Capacity                                  | 20-hr. (350mA to 10.50 volts), 7.00 AH    |
| Energy Density (20-hr. rate)                      | 1.49 W-h/in <sup>3</sup> (90.95 W-h/l)    |
| Specific Energy (20-hr. rate)                     | 17.50 W-h/lb. (38.58 W-h/kg)              |
| Internal Resistance (approx.)                     | 23 milliohms                              |
| Max Discharge Current (7 Min.)                    | 21.0 amperes                              |
| Max Short-Duration Discharge<br>Current (10 Sec.) | 70.0 amperes                              |
| Battery Shelf Life                                | 1 Month, 97%                              |
| (% of nominal capacity                            | 3 Months, 91%                             |
| at 68°F (20°C))                                   | 6 Months, 83%                             |
| Ambient Temperature:                              | Charge: -20°C to 50°C [-4°F to 122°F]     |
| Operating   | Discharge: -40°C to 60°C [-40°F to 140°F] |
| CHARGER INFORMATION                               |   |
| Overload Protection                               | <3A                                       |
| Short Circuit Protection                          | Within 5 sec.                             |
| Reversed Polarity Protection                      | Prohibit                                  |
| Ambient Temperature:<br>Operating                 | 0°C to +40°C [32°F to 104°F]              |
| Ambient Temperature:<br>Storage                   | -30°C to +85°C [-22°F to 185°F]           |
| Operating Relative Humidity                       | 8% to 90%                                 |
| Storage Relative Humidity                         | 5% to 95%                                 |
| Indicator Status: Green LED On                    | Empty Load or Float Charge                |
| Indicator Status: Red LED On                      | Bulk Charge                               |
| GENERAL EQUIPMENT INFORMATION                     |   |
| Weight  | Approx. 11.7 lbs.                         |
| Warranty  | 1 year                                    |
| Industrial Control Equipment                      | UL 1008 Listed                            |
| Dimensions (W x H x D)*                           | 12 ½" x 10" x 3" *                        |
| Mounting Holes (w)*                               | 8 1/2" apart, diameter 9/16" hole         |
| * Reference Figure 2                              |   |

\* Reference Figure 2.

## **Order Guide**

Part Number Examples:

- MCDA30400CMSA/BC Molded Case ATS, 3 pole, 400 Amp, 277/480Vac, 12Vdc Microprocessor Controls, 35kAIC @ 480Vac, NEMA 1 Wall Mount Enclosure with Option BC.
- 2. 70LSEBA9907047 When ordering the battery charger option by itself for field installation into existing unit.





Contact Information p:800.225.0141 f:440.232.5644 sales@lake-shore-electric.com www.lake-shore-electric.com Global Headquarters Lake Shore Electric 205 Willis Street Bedford, OH 44146

Information subject to change without notice and not to be used for construction. © 2016 Lake Shore Electric Corporation - All Rights Reserved Rev: September 2019