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CHG-75 Battery Charger

Section: Power Supplies/Accessories

GENERAL

The CHG-75 battery charger is designed to charge lead-acid batteries that provide emergency standby power for a Fire Alarm Control Panel (FACP) and related equipment. Two 12-volt batteries are used in series to supply a nominal 24 VDC. The battery charger is compatible with any FACP that uses lead-acid batteries with a rating of 25 AH (amp-hours) to 75 AH. The FACP must have a feature that allows the disabling of the control panel battery charger.

FEATURES

- 120 VAC or 220/240 VAC operation.
- Rated for batteries 25 to 75 AH.
- Charger can connect to the Signaling Line Circuit (SLC) of a Fire•Lite intelligent control panel (e.g., MS-9200, MS-9600, and MS-9200UD) for trouble monitoring.
- Mounts in a BB-26, BB-55F, MS-9600 or MS-9200 enclosure.
- Screw terminal connections for battery, battery backup to other equipment and SLC loop.
- 6.25 A fuse (F1) for AC overload protection.
- 15.0 A replaceable fuse (F2) provides battery with current-limiting, short circuit, and overload protection.
- 15.0 A replaceable fuse (F3) provides battery with current-limiting and overload protection for output to connected equipment.
- Form-C trouble relay rated for 2.0 A @ 30 VDC (resistive).
- Ground fault detection circuit (can be disabled).
- Battery, charger, and AC voltage supervision.
- AC loss reporting delay option for 8- or 16-hour delay.
- Connectors for trouble input and output — direct CHG-75 troubles to FACP and allow daisy-chaining of external troubles through the charger without affecting charger operation.
- Master trouble input allows monitoring of another device or zone.
- Connectors for optional **AM-1** ammeter and **VM-1** voltmeter.
- Diagnostic LEDs for monitoring: Primary AC On, Charger Trouble, Ground Fault, Charging, SLC Communication, Low Battery.

CONSTRUCTION AND OPERATION

The CHG-75 consists of a PC board and mounting chassis. Aside from mounting options (see *Installation*), the only options involved in ordering the CHG-75 are the choice of an AM-1 Ammeter or a VM-1 Voltmeter.



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CHG-75

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Charging current is provided automatically when the battery voltage falls below the charger's output voltage. While charging the batteries, the CHGING (charging) LED will turn on. When batteries are fully charged, the charger maintains a float charge of 27.6 VDC. The SLC LED and AC LED are the only other LEDs that should be on during normal operation if SLC communication is programmed at the FACP and the SLC enable switch is On.

APPLICATIONS

Use the CHG-75 with Fire•Lite MS-9200 or MS-9600 when batteries required for standby are rated equal to or greater than 25 AH.



When installing the batteries, make certain that proper polarity is observed between the power leads and the battery terminal posts.

Fire•Lite® Alarms is a Honeywell company.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For more information, contact Fire•Lite Alarms, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll-Free FAX: (877) 699-4105.

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CHG-75 SPECIFICATIONS

Primary AC power in (TB1): 120 VAC, 60 Hz, 2.0 A; or 220/240 VAC, 50 Hz, 1.0 A. Wire size: minimum 14 AWG (2.0 mm²) with 600-volt insulation.

Form-C relay (TB4): 2.0 A at 30 VDC (resistive).

Float charge voltage: 27.6 VDC.

Maximum charging current: 4.5 A (peak).

Battery sizes: 25 AH to 75 AH.

INSTALLATION

The CHG-75 has a variety of mounting options. It can be mounted in either the FACP (MS-9200, MS-9600), or remotely in the BB-26 or BB-55F battery backbox. Install the CHG-75 within 20 feet (6.096 m) of the main FACP.

When mounting in a FACP: The CHG-75 can be mounted in the bottom of the MS-9600 backbox, using the self-tapping screws included with the charger. In a similar fashion, the supplied nuts can be used to mount the charger to pem studs located in the bottom of the MS-9200 backbox. A separate battery box must be used to house the batteries when employing these configurations.

When mounting remotely in the BB-55F: The CHG-75 mounts to the right of the AM-1/VM-1 mounting holes positioned at the top of the cabinet. Use the supplied self-tapping screws to secure the charger to the backbox.

When mounting remotely in the BB-26: The CHG-75 mounts just below the AM-1/VM-1 mounting holes positioned at the top center of the cabinet. Use the supplied nuts to mount the charger to pem studs located in the backbox.

Meter configurations/installation: Order the AM-1 (ammeter) and/or the VM-1 (voltmeter) when either option is required and the charger is mounted in the BB-26 or BB-55F battery backbox.

- **VM-1 voltmeter** can be installed on the CHG-75 to provide a visual indication of the battery/charger voltage. When the battery is disconnected, the voltmeter measures charger voltage only. The VM-1 can mount into a mounting slot on the front of the BB-26 or BB-55F battery box.
- **AM-1 ammeter** can be installed on the CHG-75 to provide a visual indication of the charger current. The AM-1 can mount into a mounting slot on the front of the BB-26 or BB-55F battery box.

AGENCY LISTINGS AND APPROVALS

The CHG-75 complies with the following standards:

- **NFPA 72** National Fire Alarm Code.
- **UL 1481** Power Supplies for Fire Alarm Systems.

See the first page of this data sheet for listing agencies and file numbers. These listings and approvals apply to the CHG-75. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

PRODUCT LINE INFORMATION

CHG-75: battery charger circuit board and mounting chassis. Includes mounting hardware and installation instructions.

BAT-12260: 26 AH, 12-volt, sealed lead-acid battery.

BB-26: battery backbox — holds up to two BAT-12260 26 AH batteries. *Box dimensions:* 15.6" (39.62 cm) wide x 15.5" (39.37 cm) high x 5.125" (13.02 cm) deep. *Door dimensions:* same dimensions as backbox.

BB-55F: battery backbox — holds up to two BAT-12550 55 AH batteries. *Box dimensions:* 24.0" (61.0 cm) wide x 14.0" (35.6 cm) high x 7.75" (19.7 cm) deep. *Door dimensions:* 24.125" (61.3 cm) wide x 14.25" (36.2 cm) high x (door adds 0.063" [approx. 0.16 cm] to depth).

AM-1: ammeter, 0-10 amps, for CHG-75 mounted in BB-26 or BB-55F.

VM-1: voltmeter, 0-50 volts, for CHG-75 mounted in BB-26 or BB-55F.

PANEL BATTERY CONNECTION

CHG-75 BOARD AND WIRING

