# MS-25(E) Rev 2

# Addressable FACP With Built-in Communicator



#### **Addressable Fire Alarm Control Panels**

#### General

The Fire\*Lite MS-25(E) is a 25 point addressable Fire Alarm Control Panel (FACP) with built-in Digital Alarm Communicator Transmitter (DACT). This control panel supports up to 25 addressable devices in any combination of detectors and modules. With simple programming, operation on standard wire, and features such as drift compensation and maintenance alert, the MS-25(E) is a preferred alternative to conventional control panels in both new and retrofit applications.

The JumpStart® (or auto-learn) feature and easy-to-set codewheel addressing of Honeywell Fire Systems (HFS) or equivalent Fire•Lite detectors and modules enable the system to be configured for fire protection without a programming utility. The default programming can be modified using the panels embedded web server.

The integral DACT transmits system status (alarms, troubles, supervisories, etc.) to a remote monitoring location via the public switched telephone network. Reporting formats are contact ID, SIA 8 or SIA 20.

NOTE: Unless otherwise specified, the term MS-25 is used in this data sheet to refer to the MS-25 and the MS-25E. For details on the Canadian version, see DF-60704.

### **Features**

- · SBUS supports two ANN-80 Remote Annunciators
- JumpStart® auto-learn feature reduces installation time and makes programming easy.
- · Built-in digital communicator.
- · IP communicator compatible
- Two programmable Style Y (Class B) notification appliance circuits (NACs).
- Selectable strobe synchronization for System Sensor®, Gentex®, Wheelock® or AMSECO devices.
- Two programmable Form-C relays and one Form-C trouble relay.
- Automatic detector sensitivity testing (NFPA 72 compliant).
- Point status eliminates calibrated smoke test requirements for NFPA 72.
- · Drift compensation.
- Alarm verification per zone of detectors.
- · Walk-test.
- Detectors and modules are code-wheel addressed for faster installation time.
- Maintenance alert region.
- · Uses standard wire (unshielded or twisted pair).
- · Central Station reporting up to five zones.
- Custom programming performed through the control panel's built-in browser; no programming software is required.



#### **SLC Communication**

- Single addressable SLC loop which meets NFPA Style 4 (Class B) requirements.
- 25 addressable device capacity (any combination of addressable detectors and modules).
- Compatible with Honeywell Fire Systems (HFS) or equivalent Fire-Lite detectors and modules.

#### **Notification Appliance Circuits (NACS)**

- Two independently programmable output circuits. Circuits can be configured for the following outputs:
  - Style Y (Class B).
  - Door Holder Service (cannot be used for notification appliances).
  - Aux Power Source (cannot be used for notification appliances).
- Silence Inhibit and Auto-silence timer options.
- · Continuous or Temporal code.
- Selectable strobe synchronization per NAC.
- Up to 2.0 A total output power, 1.0 A for auxiliary power and door holder. Each circuit can source up to the total system current 2.0 A.

# **Programming and Software**

- Auto-learn JumpStart® feature for easy programming reduces installation time.
- Two programmable Form-C relay outputs.
- 5 programming zones.
- Custom programming can be performed through control panel's built-in browser.

#### **User Interface**

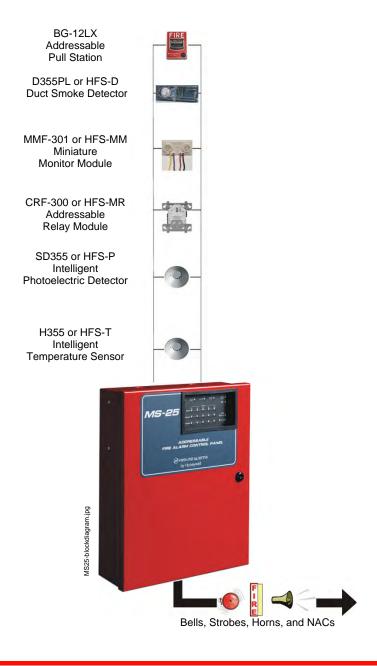
#### **LED INDICATORS**

- AC Power (green)
- · Fire Alarm (red)
- Supervisory (yellow)
- Alarm Silenced (yellow)
- System Trouble (yellow)
- · Disabled (yellow)

- · Low Battery Fault (yellow)
- Ground Fault (yellow)
- Walk Test (yellow)

#### **KEYPAD CONTROLS**

- Acknowledge
- Silence
- Drill
- System Reset (lamp test)
- 10-key numeric keypad
- · 5 Zones Disable keypad
- · 2 NACs Disable keypad



#### **Product Line Information**

**MS-25:** Combination DACT/Fire Alarm Control Panel with one SLC loop. Includes main circuit board with display, transformer, backbox with door, manual, and required screws, cables, key, etc. Red, 120 VAC.

MS-25E: Same as MS-25, but operates from 220/240 VAC.

**MS-25C:** Same as **MS-25**, but listed for Canadian applications. For details on the Canadian version, see DF-60704.

#### HONEYWELL FIRE SYSTEMS DEVICES

**HFS-P:** Honeywell Fire Systems addressable photoelectric smoke detector, Includes base.

**HFS-PT:** Honeywell Fire Systems addressable photoelectric smoke detector with thermal sensor. Includes base.

**HFS-T:** Honeywell Fire Systems addressable fixed temperature heat detector. Includes base.

**HFS-MM:** Honeywell Fire Systems addressable Mini-Monitor module for normally-open contact devices.

**HFS-MR:** Honeywell Fire Systems addressable relay module.

**HFS-D:** Honeywell Fire Systems addressable photoelectric duct smoke detector. Includes detector.

#### FIRE•LITE EQUIVALENT DEVICES

BG-12LX: Addressable dual-action manual pull station.

**SD355:** Addressable low-profile photoelectric smoke detector.

**SD355T:** Addressable low-profile photoelectric smoke detector with thermal sensor.

**H355:** Fast-response, low-profile heat detector.

**D355PL:** InnovairFlex low-flow non-relay duct-detector housing; includes SD355R.

**MMF-301:** Miniature version of MMF-300. Excludes LED and Style D option. Connects with wire pigtails. May mount in device backbox.

**CRF-300:** Addressable relay module containing two isolated sets of Form-C contacts, which operate as a DPDT switch.

**I300:** This module isolates the SLC loop from short circuit conditions

#### **COMPATIBLE ANNUNCIATORS**

**ANN-80(-W):** Remote LCD annunciator mimics the information displayed on the FACP LCD display. Recommended wire type is un-shielded. (Basic model is red; order -W version for white; see DF-52417.)

**ANN-SB80KIT-R:** Red surface mount backbox with angled wedge.

**ANN-SB80KIT-W:** White surface mount backbox with angled wedge.

#### **MISCELLANEOUS**

SB-I/O: Surface-mount backbox for the BG-12LX, plastic.

**BG12TR:** Optional trim ring for semi-flush mounting the pull-station.

**BB-26:** Battery backbox, holds up to two 25 AH batteries and CHG-75.

BB-55F: Battery box, houses two 55 AH batteries.

**CHG-75:** Battery charger for lead-acid batteries with a rating of 25 to 75 AH.

**CHG-120F:** Remote battery charging system for lead-acid batteries with a rating of 55 to 120 AH. Requires additional BB-55F for mounting.

BAT Series: Batteries. See DF-52397.

005220: City Box Transmitter Module.

007860: DACT Phone Cord (2 required).

IPDACT-2/2UD, IPDACT Internet Monitoring Module: Connects to primary and secondary DACT telephone output ports for internet communications over customer provided ethernet internet connection. Requires compatible Teldat VisorALARM Central Station Receiver. Can use DHCP or static IP. (See DF-60407 or DF-52424 for more information.)

**IPSPLT:** Y-adaptor option allows connection of both panel dialer outputs to one IPDACT-2/2UD cable input.

**IPENC:** External mounting enclosure consisting of mounting bracket IPBRKT, and screws. When using the supplied phone cables, enclosure must be mounted within 6" (15.24 cm) of the FACP. Red.

#### **Wiring Requirements**

While shielded wire is not required, it is recommended that all SLC wiring be twisted-pair to minimize the effects of electrical interference. Refer to the panel manual for wiring details.

# SYSTEM SPECIFICATIONS

# **System Capacity**

•	Intelligent Signalling Line Circuits	1
•	Addressable device capacity	25
•	Programmable software zones	5
•	Annunciators	2

## **Electrical Specifications**

- AC Power: MS-25: 120 VAC, 60 Hz, 1.5 A. MS-25E: 230 VAC, 50/60 Hz, 0.75 A. AC wire size is minimum 14 AWG (2.00 mm²) with 600 V insulation. Nonpower-limited, supervised.
- Battery: Charging capacity 7-33 AH (18 AH for ULC applications). MS-25 cabinet holds maximum of two 7 AH batteries. Larger batteries require a separate battery cabinet, such as the BB-26 or BB-55F.
- Communication Loop: Supervised and power-limited.
- Notification Appliance Circuits:
  - Terminal Strip provides connections for two NACs, Style Y (Class B).
  - Maximum signaling current: 2.0 A.
  - End-of-Line Resistor: 4.7 kOhm, ½ watt (P/N 71252 UL listed) for Style Y (Class B) NAC. Refer to the MS-25 manual for listed compatible devices.
- Standby Current: 135 mA
   Alarm Current: 220 mA
- Aux Power Circuits: 1.0A @ 24 VDC per circuit, powerlimited
- Two Programmable Relays and One Fixed Trouble Relay:
  - Contact rating: 2.5 A @ 24 VDC (resistive).
  - Form-C relays, nonpower-limited, nonsupervised.

#### **Physical Specifications**

- Dimensions: 15.2" H (38.42 cm) x 12.75" W (32.39 cm) x 3.4" D (8.57 cm)
- Weight: 11.5 lbs. (5.2 kg)
- Color: Red

# **Temperature and Humidity Ranges**

This system meets NFPA requirements for operation at 0 –  $49^{\circ}\text{C}/32 - 120^{\circ}\text{F}$  and at a relative humidity  $93\% \pm 2\%$  RH (noncondensing) at  $32^{\circ}\text{C} \pm 2^{\circ}\text{C}$  ( $90^{\circ}\text{F} \pm 3^{\circ}\text{F}$ ). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of  $15 - 27^{\circ}\text{C}/60 - 80^{\circ}\text{F}$ .

# **Agency Listings and Approvals**

The listings and approvals below apply to the basic MS-25(E) control panel. 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.

• UL Listed: S624

CSFM: 7165-0075:0217

For the ULC-listed version, see DN-60641.

# **NFPA Standards**

The MS-25(E) complies with the following NFPA 72 Fire Alarm Systems requirements:

- LOCAL (Automatic, Manual, Waterflow and Sprinkler Supervisory).
- AUXILIARY (Automatic, Manual and Waterflow) (requires 5220 module).
- REMOTE STATION (Automatic, Manual, Waterflow and Sprinkler Supervisory) (Where a DACT is not accepted, the alarm, trouble and supervisory relays may be connected to UL 864 listed transmitters.
- PROPRIETARY (Automatic, Manual and Waterflow).
- CENTRAL STATION (Automatic, Manual and Waterflow, and Sprinkler Supervised).

Fire\*Lite® Alarms®, JumpStart®, and System Sensor® are registered trademarks of Honeywell International Inc. ©2011 by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.



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.

