MS-25C Rev 2

Addressable FACP
With Built-in Communicator

FIRE·LITE ALARMS

by Honeywell

Addressable Fire Alarm Control Panels

General

The Fire•Lite MS-25C 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 and then reports these devices into one of 5 available zones.

With simple programming, operation on standard wire, and features such as drift compensation and maintenance alert, the MS-25C is a preferred alternative to conventional control panels in both new and retrofit applications.

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

The integral DACT transmits system status (alarms, troubles, supervisories, etc.) for up to 5 zones to a remote monitoring location via the public switched telephone network. Reporting formats are contact ID, SIA 8 or SIA 20.

Features

- SBUS supports two ANN-80C 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® or Wheelock® devices.
- Two programmable Form-C relays and one Form-C trouble relay.
- 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.

DCL Communication

- Single addressable DCL loop which meets ULC requirements (DCLA, DCLB, DCLC).
- 25 addressable device capacity (any combination of addressable detectors and modules).
- Compatible with Honeywell Fire Systems (HFS) or equivalent Fire•Lite detectors and modules.

ms25_sm.jpg

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.
- Custom programming can be performed through control panel's built-in browser. (Requires PC with MS Internet Explorer or Mozilla Firefox and standard Cat5e Ethernet cable)
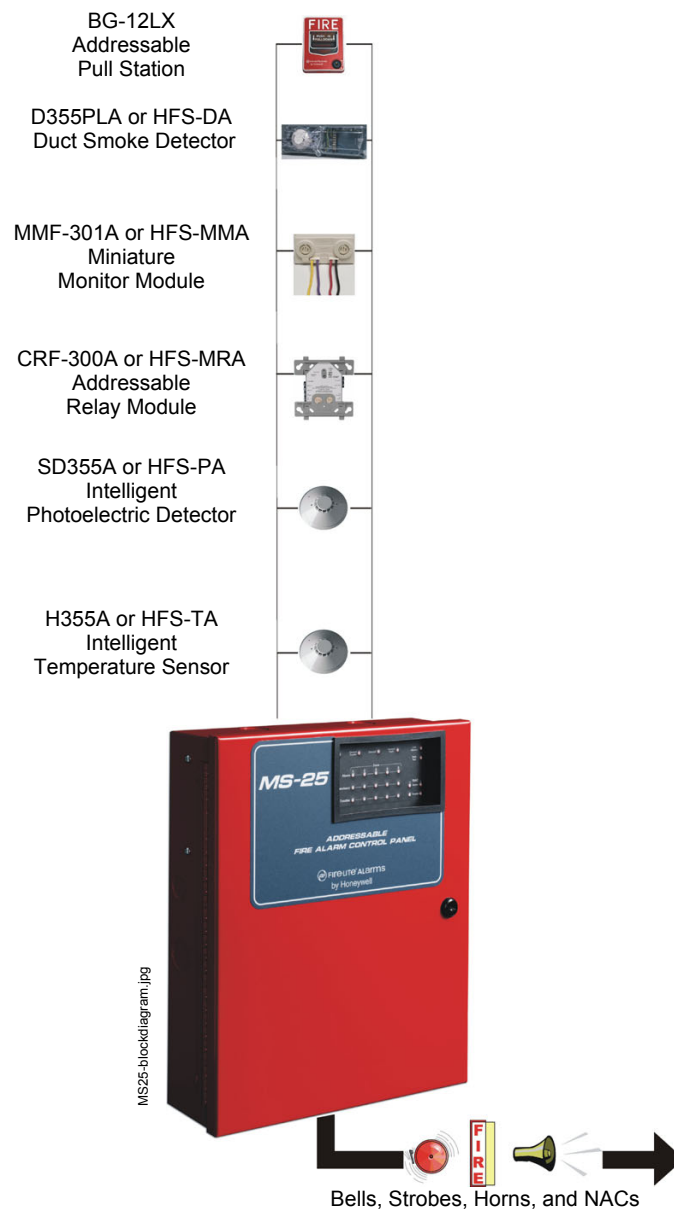- 5 programmable zones (combination of alarm / supervisory)

User Interface

The panel has a 3-character, 7-segment display for Point ID status.

LED INDICATORS

- AC Power (green)
- Fire Alarm per zone (red)
- Supervisory per zone (yellow)
- Trouble / Disable per zone (yellow)
- Active per NAC (green)
- Trouble / Disable per NAC (yellow)
- Alarm Silenced (yellow)
- System Trouble (yellow)
- Low Battery Fault (yellow)
- System Ground Fault (yellow)
- Walk Test (yellow)

KEYPAD CONTROLS

- Acknowledge
- Silence
- Reset (Lamp Test)
- Drill
- Walktest
- Disable per zone
- Disable per NAC
- JumpStart
- 0 - 9 numeric keypad

BG-12LX
Addressable
Pull Station

D355PLA or HFS-DA
Duct Smoke Detector

MMF-301A or HFS-MMA
Miniature
Monitor Module

CRF-300A or HFS-MRA
Addressable
Relay Module

SD355A or HFS-PA
Intelligent
Photoelectric Detector

H355A or HFS-TA
Intelligent
Temperature Sensor

MS25-blockdiagram.jpg

Bells, Strobes, Horns, and NACs

Product Line Information

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

Note: For versions used outside Canada, see DF-60702.

HONEYWELL FIRE SYSTEMS DEVICES

HFS-PA: Honeywell Fire Systems addressable photoelectric smoke detector. Includes base.

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

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

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

HFS-MRA: Honeywell Fire Systems addressable relay module.

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

FIRE•LITE EQUIVALENT DEVICES

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

SD355A: Addressable low-profile photoelectric smoke detector.

SD355TA: Addressable low-profile photoelectric smoke detector with thermal sensor.

H355A: Fast-response, low-profile heat detector.

D355PLA: InnovairFlex low-flow non-relay duct-detector housing; includes SD355RA.

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

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

I300A: This module isolates the SLC loop from short circuit conditions

COMPATIBLE ANNUNCIATORS

ANN-80C: Remote fire alarm indicator mimics the information displayed on the FACP LCD display. Recommended wire type is un-shielded.

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.*

007860: DACT Phone Cord (2 required)

Wiring Requirements

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

SYSTEM SPECIFICATIONS

System Capacity

- Intelligent DCL Circuits 1
- Addressable device capacity 25
- Programmable software zones 5
- Annunciators 2

Electrical Specifications

- **AC Power:** MS-25C: 120 VAC, 60 Hz, 1.5 A. AC wire size is minimum 14 AWG (2.00 mm²) with 600 V insulation. Non-power-limited, supervised.
- **Battery:** Charging capacity 7-18 AH. MS-25C cabinet holds maximum of two 7 AH batteries. Larger batteries require a separate battery cabinet, such as the **BB-26 or BB-55F.**
- **DCL Circuit:** 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-25C manual for listed compatible devices.
- **Standby Current:** 135 mA
- **Alarm Current:** 220 mA
- **Aux Power Circuits:** 1.0A @ 24 VDC per circuit, power-limited
- **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:** 38.42 cm H x 32.39 cm W x 8.57 cm D
- **Weight:** 5.2 kg
- **Color:** Red

Temperature and Humidity Ranges

This system meets NFPA requirements for operation at 0 – 49°C and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C. 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°C.

Agency Listings and Approvals

The listings and approvals below apply to the basic MS-25C 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.

- **ULC Listed:** S624 (DAYRC, UOJZC)

Note: For versions used outside Canada, see DF-60702.

NFPA Standards

The MS-25C 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 ULC listed transmitters.
– **PROPRIETARY** (Automatic, Manual and Waterflow).
– **CENTRAL STATION** (Automatic, Manual and Waterflow, and Sprinkler Supervised).

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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.

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