Notes:

> This is a typical schematic, not an 'as-wired' drawing.
> Wire all devices from a dedicated life safety power supply.
> Third-party control panels vary: some provide one network, some provide two. Number of networks, network cable type, cable length, device numbers and addressing are all to the selected control panel manufacturer's recommendations.
> Each damper is powered from a local supply to match the actuator voltage: 24 Vac, 120 Vac or 230 Vac (fused spur).
> Addressable field modules are third-party, by others. Wire to their manufacturer's data.
> Power to the actuator drives the damper open. Loss of power spring-closes the damper.
> Wire to local codes and Honeywell data 63-2740. Use cable rated for at least 75 °C (167 °F).

Cable Specification

Network cable – manufacturer specific

Network cable differs between control systems. Cable type, core size, screening and maximum network length must be to the selected control panel manufacturer's recommendations. Confirm with the panel supplier before installation.

Fire-rated cable (life safety circuits)

Enhanced fire-resistant cable to the project fire strategy, local codes and the panel manufacturer's recommendations.

Power and switch wiring

2-core L&N local supply to each damper JB; switch leads 18 AWG (0.8 mm^2), rated for at least 75 °C (167 °F).

Legend

- Network 1 (cable to panel manufacturer's recs.)
- Network 2 – only where the panel provides it
- Damper power (L&N)
- LS — Local damper supply (24, 120 or 230 Vac)
- Junction box (JB)
- FlameSafe MSFD-180/90 damper
- AFM — Addressable field module (third party, by others)

Network Options (panel dependent)

Option A – single-network panel

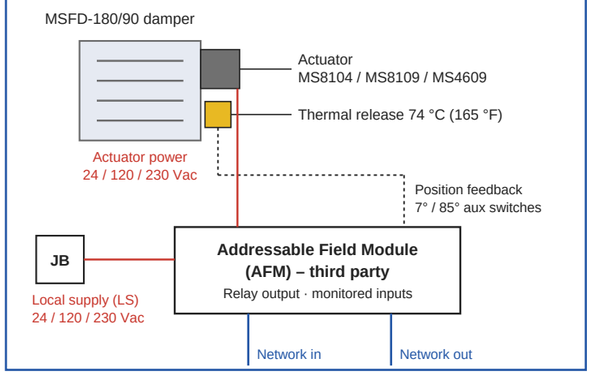
PANEL — All dampers on Network 1

Max. devices per network to the panel manufacturer.

Option B – two-network panel

PANEL — Dampers split across Networks 1 and 2 (e.g. by floor / zone)

Typical Wiring Detail – Damper and AFM



Typical system:

FlameSafe MSFD-180/90 fire and smoke dampers
Honeywell spring-return actuators: MS8104 / MS8109 (24 Vac), 120 Vac models or MS4609 (230 Vac)
One third-party addressable field module (AFM) per damper
Each damper powered from a local supply (LS)
1 or 2 networks to the panel, depending on the panel manufacturer
Network cable to the panel manufacturer's recommendations

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1	For information	14-10-26
2	Network qty panel dependent (1 or 2); network cable to panel manufacturer	20-10-26

PROJECT	Typical	TITLE	MSFD-180/90 Addressable Damper Control Schematic
CLIENT	—	DWG REF	FF-SCH-MSFD-01
ISSUE	2 DATE 20-10-26	DRN BY	CJ SHEET 1 of 1