INTERFACE FIRING MODULE

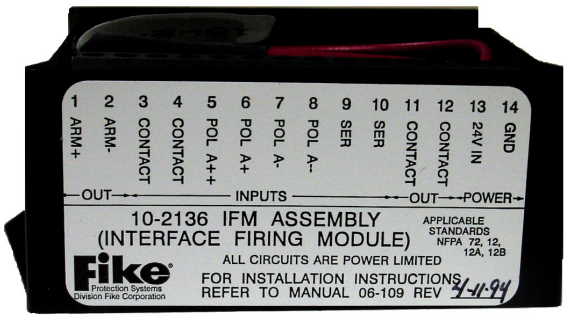
CATALOG NUMBER 1099

Fike® Protection Systems

Clean Agent Suppression Systems

Architect and Engineering Specifications

10-2136
UL/cUL Listed - S5566



FEATURES

- Interfaces with existing approved releasing control panels
- Operates from any one of three different inputs
- Connects up to 20 Agent Release Modules (ARMs)
- Supervises the ARM circuit
- Has test mode
- Provides programmable output contact

DESCRIPTION

The Interface Firing Module (IFM), Fike P/N 10-2136, is designed to allow an existing control panel (approved for releasing service) to connect with a Fike Clean Agent system.

The IFM is designed to operate from any one of three different input signals from a listed control panel:

Dry Contact
A dry contact closure from a releasing circuit of a UL listed control panel will cause the IFM to enter the release state after the contacts are closed for a minimum of 1.1 seconds.

Polarity Reversal
A polarity reversal circuit input from a releasing circuit of a UL listed releasing control panel will cause the IFM to enter the release state after the polarity signal is reversed for at least 1.1 seconds. The listed releasing control panel supervises this circuit by allowing current to flow in one direction during normal operation and the reverse direction during the discharge state. When the IFM enters a trouble state, and immediately after power-up, the IFM opens the polarity reversal circuit to signal a trouble at the control panel. The polarity reversal circuit can be wired for Class A or Class B operation. If wired for Class B operation, the EOL resistor must be installed across terminal 5 and 8. (Value determined by specific panel manufacturer.)

Series Firing
A series firing circuit from a compatible control panel which is UL listed for releasing operation will cause the IFM to enter the release state after a sufficiently large current is passed through the circuit for at least 1.1 seconds. The panel supervises the circuit by passing a lesser current level through the circuit. When the IFM enters a trouble state, and immediately after power-up, the IFM opens the series firing circuit to signal a trouble on the control panel.

The IFM is provided with an agent release circuit that is capable of connecting with up to 20 Containers/Agent Release Modules (ARM III, Fike P/N 10-1832). It also supervises the integrity of the ARM circuit via Class B wiring by utilizing a 1.5K ohm end-of-line device connected at the ARM.

Upon activation of any one of the three types of inputs for a period of at least 1.1 seconds, the IFM will energize the ARM III module (s), which in turn fires the actuator(s) to release the agent.

The programmable output contact is a form A dry contact which can be set via Dip switches for NO or NC operation. It also can be programmed for activation upon trouble or system alarm.

The IFM is a power limited device which requires 24VDC input power from the existing control panel.

This module is designed to electrically isolate the input circuits from the output circuits to provide flexibility.

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INSTALLATION

The IFM is housed in an enclosure (4" x 3" x 1.5") (10.2 x 7.62 x 3.81 cm). This housing can be mounted in the control panel or a separate enclosure. An optional metal enclosure (10" x 6" x 2.5") (25.4 x 15.24 x 6.35 cm) with cover is offered; P/N 10-2137.

All wiring shall be with conductors approved for use in this application. The IFM includes a removable terminal strip that can accommodate wiring sizes from 18 to 14 AWG.

CIRCUIT RATINGS

Operating Voltage	21-27 VDC
Current: Normal	45 mA Max.
Release	70 mA Max.
Trouble	150 mA Max.

INPUTS

Polarity Reversal Input

Maximum supervision voltage	30 VDC
Maximum release voltage	30 VDC
Minimum release voltage	12 VDC
Minimum release current required	5 mA

Series Firing Input

Maximum supervision current	3.0 mA
Minimum release current	8.0 mA
Maximum release voltage	25.5 VDC
Minimum release voltage	20.7 VDC
Typical input impedance	1.5K ohm

Dry Contact Input

Maximum Voltage across contact	30 VDC
Maximum Current through contact	50 mA

OUTPUTS

Dry Contact Output Rating

Maximum voltage	30 VDC
Maximum current	1.0 A

ARM Circuit rating

Maximum Agent Release Modules	20

WIRING DIAGRAM