

IMPULSE RELEASING INTERFACE

DESCRIPTION

The Impulse Releasing Interface, P/N 70-290, is designed to provide an interface between the supervised releasing circuit(s) of a non Fike releasing panel (approved for suppression releasing service) and Fike's Impulse Valve Operator (IVO). The IVO is the mechanism that is used to release the fire suppressant agent from a Fike impulse valve container. With the inclusion of the IRI module, the releasing panel can connect up to 4 clean agent cylinders allowing for more flexibility than previous systems. (see Releasing Circuit Limitations)

The IRI comes pre-assembled from the factory and includes all of the components: mounting plate, IRI circuit board, cable gland connector (6 ttl.), IRI enclosure, and wire termination.



RELEASING CIRCUIT LIMITATIONS

The total number of IRI modules that can be connected to the host control panel's releasing circuit varies depending upon the voltage supplied by the control panel to the releasing circuit. Exhibit 2 below shows the maximum number of IRI modules that can be connected to the circuit based on the supplied panel voltage.

Number of IRI	Minimum Circuit Voltage
1	17.8 VDC
2	18.8 VDC
3	19.8 VDC
4	20.8 VDC

SPECIFICATIONS

Power Input (Vdc):	17.8 V to 30 V
Current Consumption:	+24V Supervisory: 22.0 mA (during capacitor charging, 60 sec. or less) 2.0 mA (after capacitor is charged) -24V Activated: 57.0 mA (both LEDs active)
Temperature:	0°C to 54.4°C, 93% maximum humidity
Module Wiring:	All IRI connections (P1 and P2) are supervised and power-limited.
Compatible Actuation Devices:	02-12728, Impulse Valve Operator (IVO)

OPERATION

The IRI circuit board utilizes the 24 VDC current supplied by the host control panel to charge the two capacitors on the IRI. Upon activation of the panel's releasing circuit, the relays on the IRI module transfer causing the stored energy in the capacitors to be released to the Impulse Valve Operator; thus activating the suppression system valve. Ground fault detection for the IRI module is performed by the releasing circuit connection to the host control panel (if applicable). The IRI module supervises the Impulse Valve Operator wiring for opens and shorts.

MODULE LEDs

The IRI is equipped with a red and yellow LED. The red LED, when illuminated, provides positive indication that the IRI is in the active (discharge) state or that the field wiring has been installed incorrectly (polarity reversal). The yellow LED, when illuminated, provides indication of an open or short on the IVO circuit.

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