Features

IDNet addressable communications supply both data and power over a single wire pair to provide**:

- Supervised Class B monitoring of normally open, dry contacts
- Total wiring distance from IAM to supervision resistor(s) of up to 500 ft (152 m)
- Monitored connection is compatible with Simplex 2081-9044 Overvoltage Protectors for outdoor or electrically noisy applications

For use with Simplex model 4010 addressable fire alarm control panels

Compact, sealed construction:

- NEMA 2 enclosure rating
- Allows mounting in single gang electrical box
- Screw terminals for wiring connections
- Reduces dust infiltration

Provides current limited monitoring:

- To monitor tamper switch (trouble) and waterflow switch (alarm) on same circuit using one point

Multiple operation modes are available and are selectable at the control panel:

- Contact closure status can be tracked
- Momentary contact closure conditions can be latched, such as from rate-of-rise heat detectors

Description

The 4090-9001 is an individual addressable module (IAM) with both power and communications supplied by a two-wire IDNet circuit. It provides location specific addressability to a single initiating device (such as single station smoke detector alarm contacts or heat detector contacts) or multiple devices at the same location by monitoring normally open dry contacts and the wiring to an end-of-line resistor.

Closure of the monitored contacts initiates an alarm or other response as programmed at the 4010 Fire Alarm Control Panel. An open in the monitored circuit wiring will cause a trouble to be reported.

Selections can be made at the control panel to maintain the alarm condition if the initiating device contacts are momentary, such as from a rate-of-rise heat detector, or to track the device contact status.

Current Limited Operation Applications

The 4090-9001 can sense normal, open circuit, short circuit, and current limited conditions. With the proper end-of-line and current limiting resistors, dual functions such as tamper switch and waterflow switch monitoring can be determined and communicated by a single addressable point.

Specifications†

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<tr>
<th>Power and Communications</th>
<th>IDNet, 1 address per IAM</th>
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<td>Wire Connections</td>
<td>Screw terminals for in/out wiring, for #18 to #14 AWG wire</td>
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</table>
| Distance from IAM to Contacts | • 500 ft (152 m) w/o protectors  
| | • 400 ft (122 m) with 2081-9044 Overvoltage Protectors |
| IDNet Wiring Distance | • Up to 2500 ft (762 m) from fire alarm control panel,  
| | • Up to 10,000 ft (3048 m) total wiring distance (including T-Taps) |
| Dimensions | 1 9/16" x 1 3/4" x 1 1/4"  
| | (40 mm x 44 mm x 32 mm) |
| Housing Material | Black thermoplastic |
| Temperature Range | 32°F to 120°F (0°C to 49°C)  
| | intended for indoor operation |
| Humidity Range | Up to 93% RH at 100°F (38°C) |
| Supervision Resistor** | 6.8 kΩ, 1/2 W |
| Resistors for Current Limited Operation ** | 1.8 kΩ and 4.7 kΩ, 1/2 W |
| Input Requirements | normally open, dry contacts |

* Accepted for use – City of New York Department of Buildings – MEA35-93E.
** Simplex IDNet addressable communications are protected by U.S. Patent 4,796,025.
† Refer to installation instructions 574-331 and field wiring diagram 842-073 for additional information.
Mounting Information

- 4090-9001 IDNet supervised IAM
- Field wiring shown for reference
- Single gang electrical box 2 1/2" (64mm) minimum depth (supplied by others)
- Address setting under resealable label
- Single gang blank cover plate and mounting screws (supplied by others)