

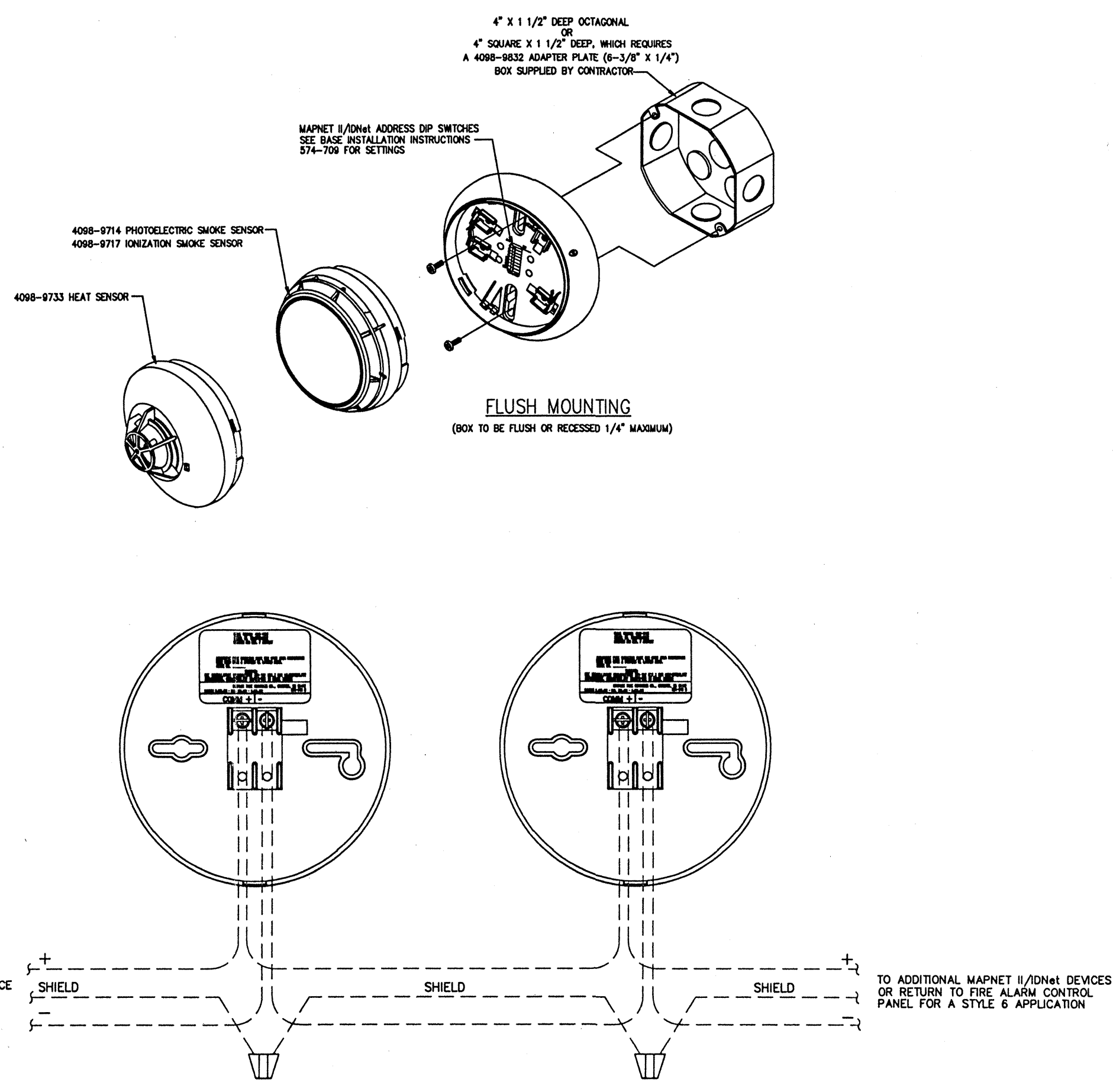
4098-9792 STANDARD SENSOR BASE

PRODUCT INFORMATION

- FEATURES:
- UL LISTED, FM APPROVED
  - TRUEALARM ANALOG SENSING PROVIDES DIGITAL TRANSMISSION OF ANALOG SENSOR VALUES VIA MAPNET II, OR IDNet TWO WIRE COMMUNICATIONS
  - FIRE ALARM CONTROL PANEL PROVIDES:
    - INDIVIDUAL SENSITIVITY SELECTION FOR EACH SENSOR
    - PEAK VALUE LOGGING ALLOWING ACCURATE ANALYSIS FOR SENSITIVITY SELECTION
    - AUTOMATIC ENVIRONMENTAL COMPENSATION
    - DISPLAY OF SENSITIVITY IN PERCENT PER FOOT
    - MULTI-STEP ALARM OPERATION
    - ABILITY TO DISPLAY AND PRINT DETAILED SENSOR INFORMATION IN PLAIN ENGLISH LANGUAGE
  - PHOTOELECTRIC SMOKE SENSOR 4098-9714:
    - SEVEN LEVELS OF SENSITIVITY FROM 0.2% TO 3.7%
    - IONIZATION SMOKE SENSOR 4098-9717:
      - FOUR LEVELS OF SENSITIVITY FROM 0.5% TO 1.7%
  - HEAT SENSOR 4098-9733:
    - RATE-OF-RISE TEMPERATURE DETECTION IS SELECTABLE AT THE CONTROL PANEL FOR EITHER 15°F OR 20°F PER MINUTE
    - RISE TEMPERATURE SENSING IS INDEPENDENT OF RATE-OF-RISE AND PROGRAMMABLE TO OPERATE AT 135°F OR 150°F
    - TRUEALARM HEAT SENSORS CAN BE PROGRAMMED AS A UTILITY DEVICE TO MONITOR FOR TEMPERATURE EXTREMES IN THE RANGE FROM 32° F TO 120° F.
  - UL STANDARD SPACING:
    - 60 FT SPACING FOR 135° F
    - 40 FT SPACING FOR 150° F
  - INTEGRAL RED LED FOR POWER-ON (PULSING), OR ALARM OR TROUBLE (STEADY ON)
  - BASE MOUNTED ADDRESS SELECTION:
    - ACCESSIBLE FROM FRONT (ON SWITCH UNDER SENSOR)
    - ADDRESS REMAINS WITH ITS PROGRAMMED LOCATION
    - FOR USE WITH SIMPLEX 4010, 4100, 4020, AND 4120 SERIES CONTROL PANELS
  - MAXIMUM QUANTITY OF DEVICES:
    - 127 FOR 4020, 4100, 4120
    - 250 FOR 4010
    - MOUNTING: CEILING OR WALL
    - COLOR: FROST WHITE
    - BASE DIMENSIONS: 15/16" X 1-7/8"

- SPECIFICATIONS:
- UL LISTED TEMPERATURE RANGE: 32°F TO 100°F
  - OPERATING TEMPERATURE RANGE: 32°F TO 120°F
  - HUMIDITY RANGE: 10% TO 95% RH
  - PHOTOELECTRIC SENSOR AIR VELOCITY RANGE: 0-2000 FT/MIN
  - IONIZATION SENSOR AIR VELOCITY RANGE: 0-300 FT/MIN
  - IONIZATION, OR HEAT SENSORS OUTPUT IS DIGITIZED AND TRANSMITTED TO THE SYSTEM FIRE ALARM CONTROL PANEL EVERY FOUR SECONDS.
  - SINCE TRUEALARM SENSORS USE THE SAME BASE, DIFFERENT SENSOR TYPES CAN BE EASILY INTERCHANGED TO MEET SPECIFIC LOCATION REQUIREMENTS. THIS FEATURE ALLOWS INTENTIONAL SENSOR SUBSTITUTION DURING BUILDING CONSTRUCTION, WHEN CONDITIONS ARE TEMPORARILY DUSTY, INSTEAD OF COVERING THE SMOKE SENSORS.
  - HEAT SENSORS MAY BE INSTALLED WITHOUT REPROGRAMMING THE CONTROL PANEL. ALTHOUGH THE CONTROL PANEL WILL INDICATE AN INCORRECT SENSOR TYPE, THE HEAT SENSOR WILL OPERATE AS A DEFAULT SENSITIVITY PROVIDING HEAT DETECTION FOR BUILDING PROTECTION AT THAT LOCATION.

- DESCRIPTION:
- TRUEALARM SENSOR BASES CONTAIN INTEGRAL ADDRESSABLE ELECTRONICS THAT CONSTANTLY MONITOR THE STATUS OF THE DETACHABLE PHOTOELECTRIC, IONIZATION, OR HEAT SENSORS. EACH SENSOR'S OUTPUT IS DIGITIZED AND TRANSMITTED TO THE SYSTEM FIRE ALARM CONTROL PANEL EVERY FOUR SECONDS.
- SINCE TRUEALARM SENSORS USE THE SAME BASE, DIFFERENT SENSOR TYPES CAN BE EASILY INTERCHANGED TO MEET SPECIFIC LOCATION REQUIREMENTS. THIS FEATURE ALLOWS INTENTIONAL SENSOR SUBSTITUTION DURING BUILDING CONSTRUCTION, WHEN CONDITIONS ARE TEMPORARILY DUSTY, INSTEAD OF COVERING THE SMOKE SENSORS.
- HEAT SENSORS MAY BE INSTALLED WITHOUT REPROGRAMMING THE CONTROL PANEL. ALTHOUGH THE CONTROL PANEL WILL INDICATE AN INCORRECT SENSOR TYPE, THE HEAT SENSOR WILL OPERATE AS A DEFAULT SENSITIVITY PROVIDING HEAT DETECTION FOR BUILDING PROTECTION AT THAT LOCATION.
- WIRING:
- ALL WIRING TO COMPLY WITH LOCAL CODE.
  - CONDUCTORS MUST TEST FREE OF ALL GROUNDS.
  - MAINTAIN CORRECT POLARITY
  - MAPNET II/IDNet WIRING TO BE #18 AWG TWISTED SHIELDED PAIR
  - IF SHIELD IS USED, TWIST SHIELD WIRES TOGETHER AND CAP WITH WIRE NUT. SHIELD SHOULD BE KEPT FROM ELECTRICAL BOX.
  - REFER TO INSTALLATION INSTRUCTIONS (574-707)
  - REFER TO APPLICATION MANUAL (574-709)



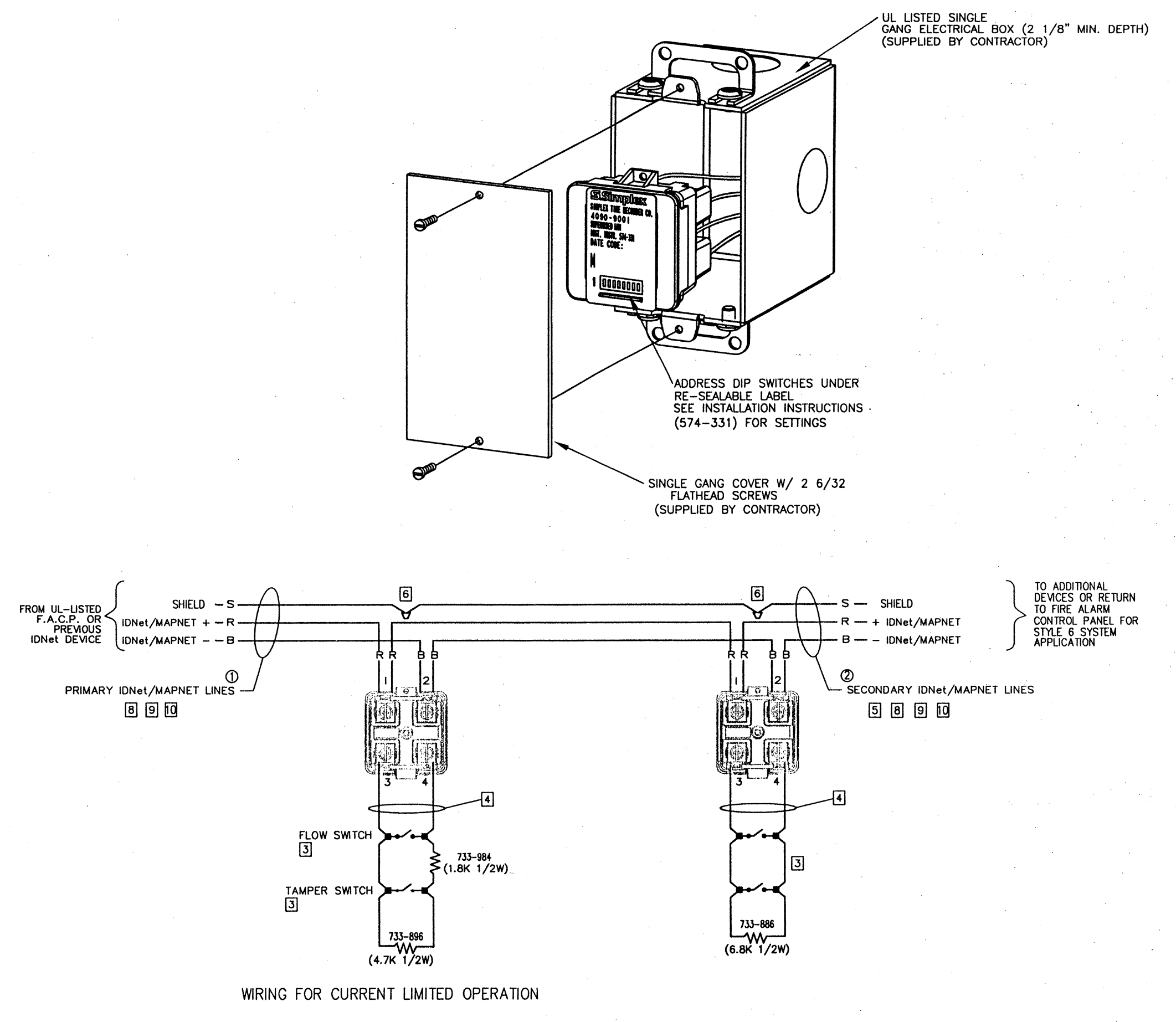
PRODUCT INFORMATION 4090-9001 IDNET, SUPERVISED INDIVIDUAL ADDRESSABLE MODULE (IAM)

FEATURES:

- UL LISTED
- ADDRESSABLE COMMUNICATIONS SUPPLY BOTH DATA AND POWER TO PROVIDE:
  - SUPERVISED STYLE 8 MONITORING OF NORMALLY OPEN DRY CONTACTS
  - COMMUNICATIONS WIRING USING ONE TWISTED, SHIELDED WIRE PAIR
- COMPATIBLE WITH SIMPLEX ADDRESSABLE FIRE ALARM CONTROL PANELS
- COMPACT, SEALED CONSTRUCTION:
  - ALLOWS MOUNTING IN A SINGLE GANG BOX
  - REDUCES DUST INFILTRATION
- PROVIDES CURRENT LIMITED MONITORING:
  - TO MONITOR TAMPER SWITCH (TROUBLE) AND WATER FLOW SWITCH (ALARM) ON SAME CIRCUIT
  - REQUIRES ONLY ONE ADDRESSABLE POINT
- SELECTABLE LATCHING OPERATION:
  - MONITORS MOMENTARY CONTACT CLOSURES SUCH AS RATE-OF-RISE HEAT DETECTORS

- SPECIFICATIONS:
- WIRE CONNECTIONS: SCREW TERMINALS FOR IN/OUT WIRING FOR WIRE FROM #18 TO #14 AWG.
  - DIMENSIONS: 1 9/16" X 1 3/4" X 1 1/4"
  - TEMPERATURE RANGE: 32° F TO 120° F
  - HUMIDITY: UP TO 93% RH AT 100° F
  - SUPERVISION RESISTOR: 6.8k Ω 1/2W, (SUPPLIED) SIMPLEX PART NO. 733-886
  - RESISTOR FOR CURRENT LIMITED OPERATION: 2.2k Ω 1/2W, (SUPPLIED)
  - INPUT REQUIREMENTS: NORMALLY OPEN, DRY CONTACTS
  - HOUSING MATERIAL: BLACK THERMOPLASTIC

- DESCRIPTION:
- THE 4090-9001 IS AN INDIVIDUAL ADDRESSABLE MODULE (IAM) WITH POWER AND COMMUNICATIONS SUPPLIED BY A TWO WIRE ADDRESSABLE 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 FIRE ALARM CONTROL PANEL. AN OPEN IN THE MONITORED CIRCUIT WIRING WILL CAUSE A TROUBLE TO BE REPORTED.
- IF THE INITIATING DEVICE CONTACTS ARE MOMENTARY, SUCH AS FROM A RATE-OF-RISE HEAT DETECTOR, ENABLING THE LATCH FEATURE WILL MAINTAIN CONTACTS ON 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 FIRE ALARM CONTROL PANEL. AN OPEN IN THE MONITORED CIRCUIT WIRING WILL CAUSE A TROUBLE TO BE REPORTED.
- IF THE INITIATING DEVICE CONTACTS ARE MOMENTARY, SUCH AS FROM A RATE-OF-RISE HEAT DETECTOR, ENABLING THE LATCH FEATURE WILL MAINTAIN CONTACTS ON 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.
- WIRING NOTES:
- ALL WIRING TO COMPLY WITH LOCAL CODE.
  - CONDUCTORS MUST TEST FREE OF ALL GROUNDS.
  - ONLY N.O. DRY CONTACTS ARE ALLOWED.
  - MAXIMUM WIRE LENGTH (NO. 18 AWG) IS 400 FT. W/2081-9044 OVER VOLTAGE PROTECTORS OR 400 FT. W/O PROTECTORS.
  - A MAXIMUM QUANTITY OF DEVICES PER CIRCUIT: CONTROL PANEL MODULE DEPENDENT
  - WIRE NUT, SPLICE, OR SOLDER THE SHIELD WIRES. (TAPE EXPOSED SHIELD WIRE)
  - REFER TO INSTALLATION INSTRUCTIONS 574-331.
  - MAXIMUM ALLOWABLE LINE RUN FROM THE F.A.C.P. TO THE FARTHEST DEVICE IS NOT TO EXCEED 2500 FEET.
  - MAXIMUM TOTAL WIRE (INCLUDING ALL T-TAPS) FROM THE FIRE ALARM CONTROL PANEL
  - FOR STYLE 8 CIRCUIT WIRING IT IS RECOMMENDED THAT THE PRIMARY (P) AND THE BACK-UP (B) LINES BE IN SEPARATE WIRE RUNS AND IN COMPLIANCE WITH LOCAL REQUIREMENTS.
  - REFER TO FIELD WIRING DIAGRAM 842-073

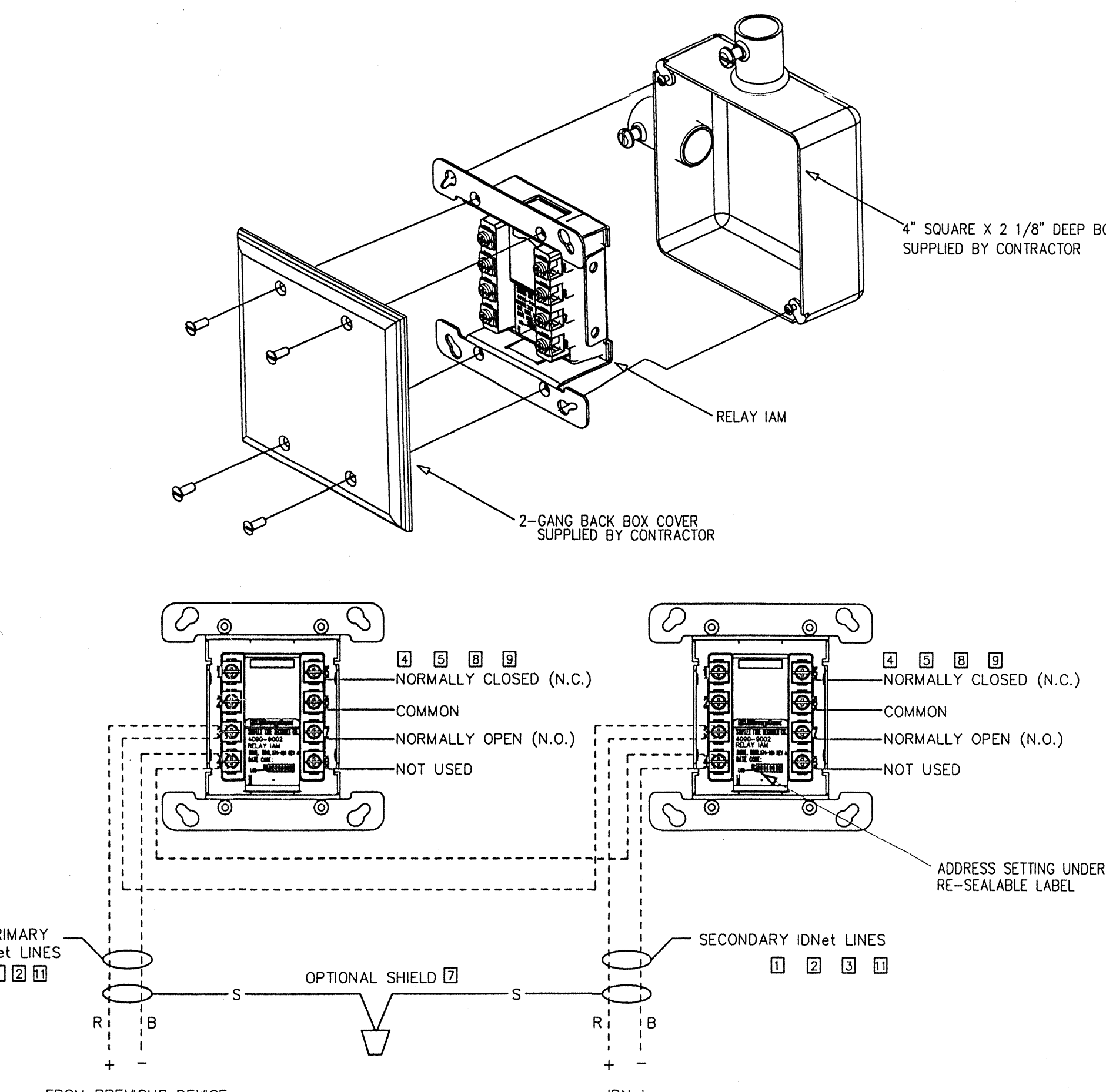


PRODUCT INFORMATION 4090-9002 IDNet, INDIVIDUAL ADDRESSABLE MODULE RELAY (IAM)

- FEATURES:
- UL LISTED
  - SINGLE ADDRESSABLE POINT BOTH CONTROLS A 2A FORM C CONTACT AND TRACKS ITS STATUS
  - COMPATIBLE WITH SIMPLEX MODEL 4010 AND 4100 ADDRESSABLE FIRE ALARM CONTROL PANELS
  - LATCHING RELAY DESIGN ALLOWS DATA AND POWER TO BE BOTH SUPPLIED BY IDNet COMMUNICATIONS
  - COMPACT, SEALED CONSTRUCTION:
    - SCREW TERMINALS FOR WIRING CONNECTIONS
    - REDUCES DUST INFILTRATION

- SPECIFICATIONS:
- RELAY IAM POWER: SUPPLIED BY IDNet COMMUNICATIONS
  - RELAY IAM CONTACTS: FORM "C" (SPDT)
  - POWER LIMITED RATINGS: 2A @ 24VDC, TRANSIENT SUPPRESSED LOADS, 1A @ 24VDC FOR INDUCTIVE LOADS
  - NON POWER LIMITED RATINGS: 1/2A @ 24VAC, TRANSIENT SUPPRESSED LOADS, 1A @ 24 VDC FOR INDUCTIVE LOADS
  - WIRE CONNECTIONS: SCREW TERMINALS FOR IN/OUT WIRING, #18 TO #14 AWG WIRE
  - COMPATIBLE WITH SIMPLEX 2081-9044 OVER VOLTAGE PROTECTORS
  - DIMENSIONS: 2 1/8" H X 4 1/8" W X 1 3/8" D (105mm X 105mm X 35mm)
  - HOUSING MATERIAL: BLACK THERMOPLASTIC
  - MOUNTING PLATE MATERIAL: SHEET METAL, GALVANIZED
  - 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)

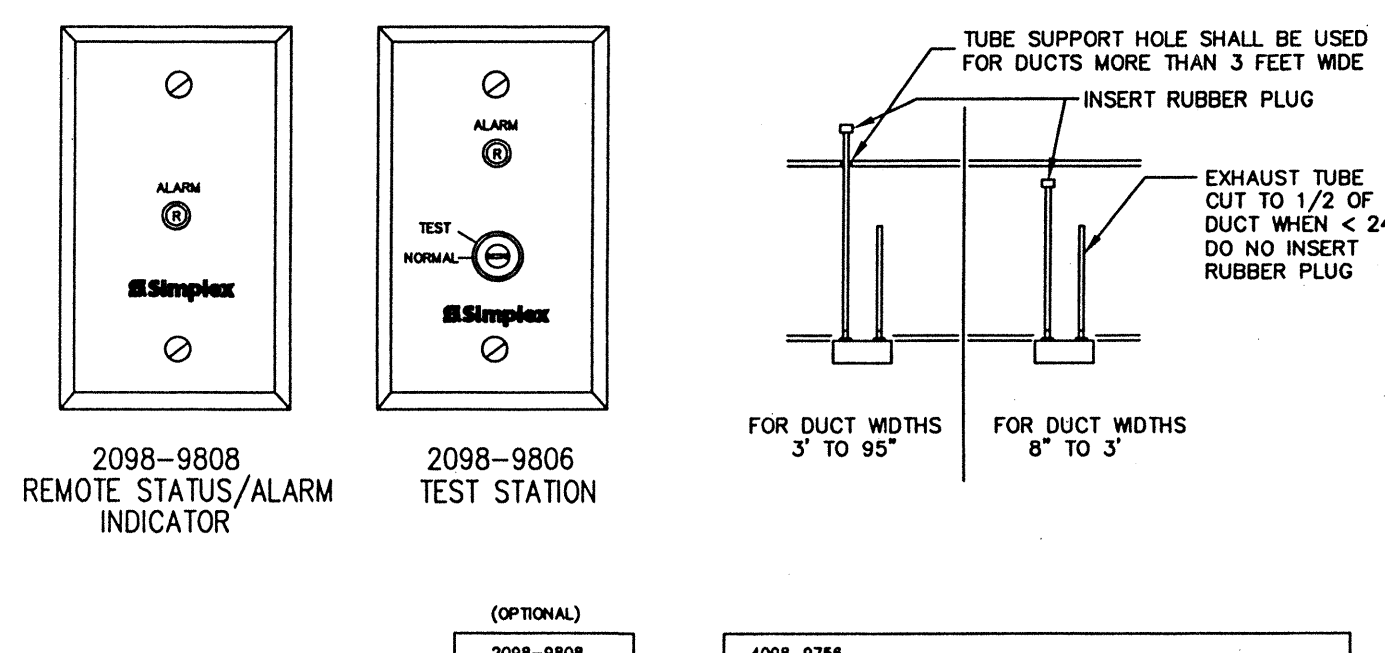
- DESCRIPTION:
- IDNet RELAY IAMs ALLOW THE SIMPLEX FIRE ALARM CONTROL PANEL TO CONTROL A REMOTELY LOCATED FORM "C" CONTACT USING IDNet ADDRESSABLE COMMUNICATIONS FOR BOTH DATA AND POWER. TYPICAL APPLICATIONS WOULD BE FOR SWITCHING LOCAL POWER FOR CONTROL FUNCTIONS SUCH AS ELEVATOR CAPTURE, OR CONTROL OF HVAC COMPONENTS, PRESSURIZATION FANS, DAMPERS, ETC. RELAY STATUS IS ALSO COMMUNICATED REQUIRING ONLY ONE ADDRESS.
- WIRING NOTES:
- IDNet LINES ARE TO BE #18 AWG TWISTED PAIR (CONSULT FIRE SAFETY ENGINEER FOR EXCEPTIONS) SHIELD RECOMMENDED.
  - MAXIMUM ALLOWABLE LINE RUN, FROM THE F.A.C.P. TO THE FARTHEST DEVICE, NOT TO EXCEED: 2500 FEET
  - MAXIMUM QUANTITY OF DEVICES PER CIRCUIT: CONTROL PANEL MODULE DEPENDENT
  - CONTRACTOR WIRING TO RELAY CONTACTS IS UNSUPERVISED. USE #14 AWG WIRE TO LOCAL CODE.
  - RELAY CONTACTS RATED 2A, 24VDC (1A FOR INDUCTIVE LOAD) RELAY CONTACTS RATED 0.5A 120VAC (NON POWER LIMITED) FOR POWER-LIMITED OPERATION, POWER MUST BE PROVIDED FROM FACP OR POWER-LIMITED POWER SUPPLY LISTED FOR FIRE PROTECTIVE SIGNALING USE.
  - SEE INSTALLATION INSTRUCTIONS 574-184.
  - IF SHIELD IS "PRESENT," IT SHOULD BE CONNECTED TO THE OUTGOING IDNet SHIELD TO PROVIDE A CONTINUOUS SHIELD OVER THE LENGTH OF THE IDNet CHANNEL.
  - WHEN CONNECTED TO A NON POWER-LIMITED SOURCE, THE WIRING MUST MAINTAIN A MINIMUM 1/4 INCH SEPARATION FROM IDNet WIRING.
  - WHEN USED WITH NON POWER-LIMITED SOURCE, THE "POWER LIMITED WIRING" INDICATION ON THE DEVICE LABEL MUST BE OBLITERATED.
  - WHEN BOTH "POWER-LIMITED AND NON POWER-LIMITED SOURCES ARE PRESENT, USE TYPE FPL, FPLR OR FPLP POWER LIMITED CABLE FOR POWER-LIMITED CIRCUITS.
  - MAXIMUM TOTAL WIRE (INCLUDING ALL T-TAPS) ON CIRCUIT, FROM THE F.A.C.P. NOT TO EXCEED: 10,000 FEET OR 580'. (CLASS B ONLY)
  - REFER TO FIELD WIRING DIAGRAM 842-073



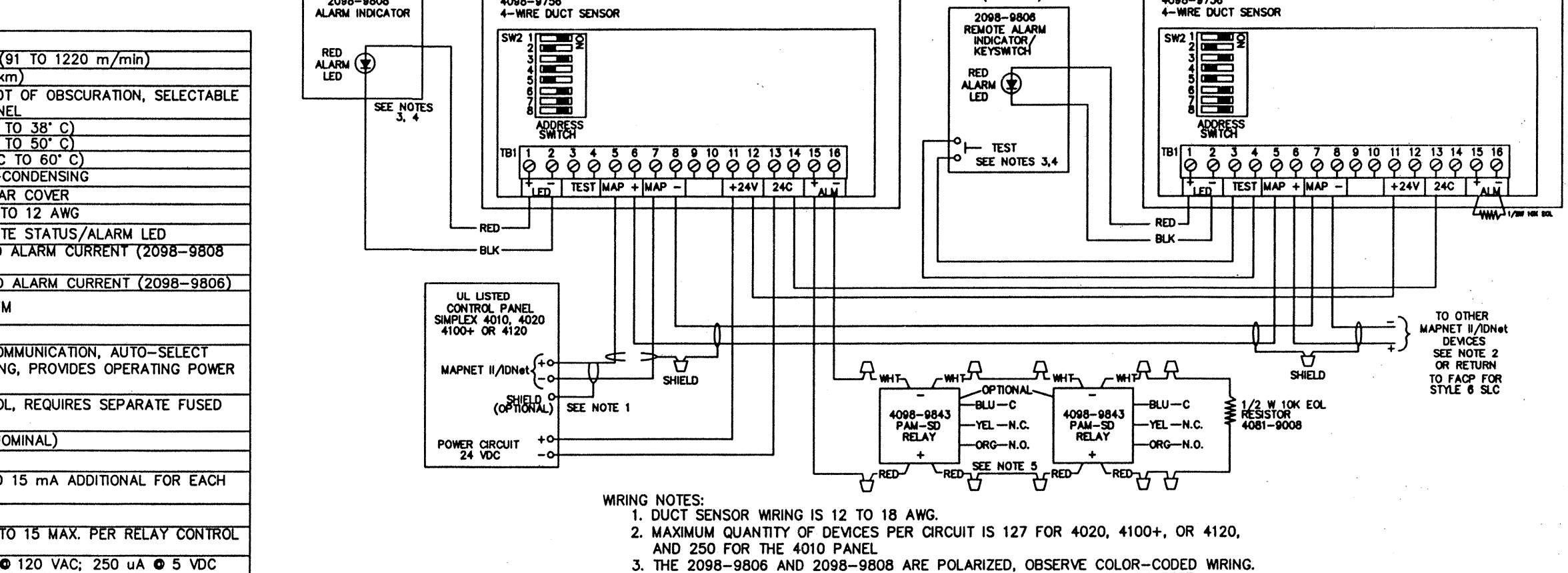
PRODUCT INFORMATION 4098-9756 ADDRESSABLE 4-WIRE DUCT SENSOR MAPNET II/IDNet WITH 24VDC RELAY

- FEATURES:
- COMPACT AIR DUCT SENSOR HOUSING WITH CLEAR COVER TO MONITOR FOR THE PRESENCE OF SMOKE
  - INCLUDES FACTORY INSTALLED TRUEALARM PHOTOELECTRIC SMOKE DETECTOR AND FEATURES:
    - INDIVIDUAL SENSOR INFORMATION PROCESSED BY THE HOST CONTROL PANEL TO DETERMINE SENSOR STATUS
    - DIGITAL TRANSMISSION OF ANALOG SENSOR VALUES VIA MAPNET II OR IDNet 2-WIRE COMMUNICATIONS
    - PROGRAMMABLE SENSITIVITY CONSISTENT ACCURACY, ENVIRONMENTAL COMPENSATION, STATUS TESTING, AND MONITORING OF SENSOR DIRT ACCUMULATION

| MODEL   | DESCRIPTION   | COMPATIBILITY   |
|---|---|---|
| 4098-9756   | DUCT HOUSING WITH SUPERVISED MULTIPLE RELAY CONTROL FOR UP TO 10 4098-9843 RELAYS (ORDERED SEPARATELY). REMOTE TEST STATION WITH 24 VDC FIRE ALARM POWER AND RELAY END-OF-LINE RESISTOR | SIMPLEX FIRE ALARM CONTROL MODELS 4010, 4020, 4100, AND 4120.         |
| REMOTE LED INDICATOR AND TEST STATION, SELECT ONE IF REQUIRED |   |   |
| MODEL   | DESCRIPTION   | MOUNTING  |
| 2098-9808   | RED LED STATUS INDICATOR  | USE SINGLE GANG BOX, 3 1/4" X 2 1/2" W X 2" D (76 mm X 51 mm X 51 mm) |
| 2098-9806   | TEST STATION WITH KEYSWITCH AND RED LED STATUS (TURNING SWITCH TO TEST INITIATES ALARM FOR SYSTEM TESTING)  |   |



- GENERAL FEATURES:
- UL LISTED TO STANDARD 268A
  - CLEAR COVER ALLOWS VISUAL INSPECTION
  - TEST POINTS PROVIDE FUNCTIONAL SMOKE TESTING ACCESS WITH COVER IN PLACE
  - MOUNTS TO RECTANGULAR DUCTS OR ROUND DUCTS (MINIMUM SIZE 8" SQUARE OR 18" DIAMETER)
  - MAGNETIC TEST FEATURE FOR ALARM INITIATION AT HOUSING
  - ORIGINAL WEATHERPROOF ENCLOSURE IS AVAILABLE SEPARATELY (REFER TO DATA SHEET 54098-0032)
- DIAGNOSTIC LEDS (ON INTERFACE BOARD):
- RED ALARM/TROUBLE LED FOR SENSOR STATUS AND COMMUNICATIONS POLLING DISPLAY
  - YELLOW LED FOR OPEN OR SHORTED TROUBLE INDICATION OF SUPERVISED RELAY CONTROL
- SAMPLING TUBES (ORDERED SEPARATELY):
- AVAILABLE IN MULTIPLE LENGTHS TO MATCH DUCT SIZE
  - INSTALLED AND SERVICED WITH HOUSING IN PLACE
- REMOTE MODULE OPTIONS (ORDERED SEPARATELY):
- RED STATUS/ALARM LED (2098-9808)
  - TEST STATION WITH LED (2098-9806)
  - RELAYS USED (4098-9843)



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FIRE ALARM SYSTEM PERIPHERAL DEVICE DETAILS  
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 1671 BELLEVUE AVE  
 MT. PLEASANT, SC 29464

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 DESIGNED BY: DATE:  
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