

**PRODUCT INFORMATION**

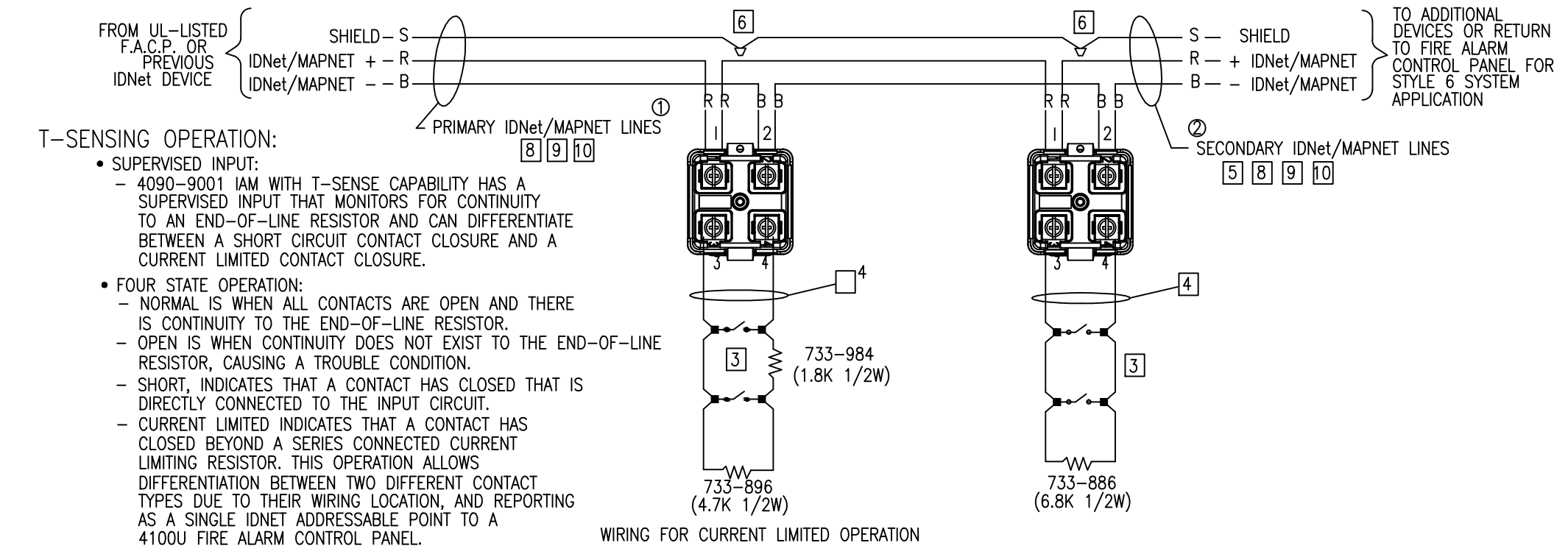
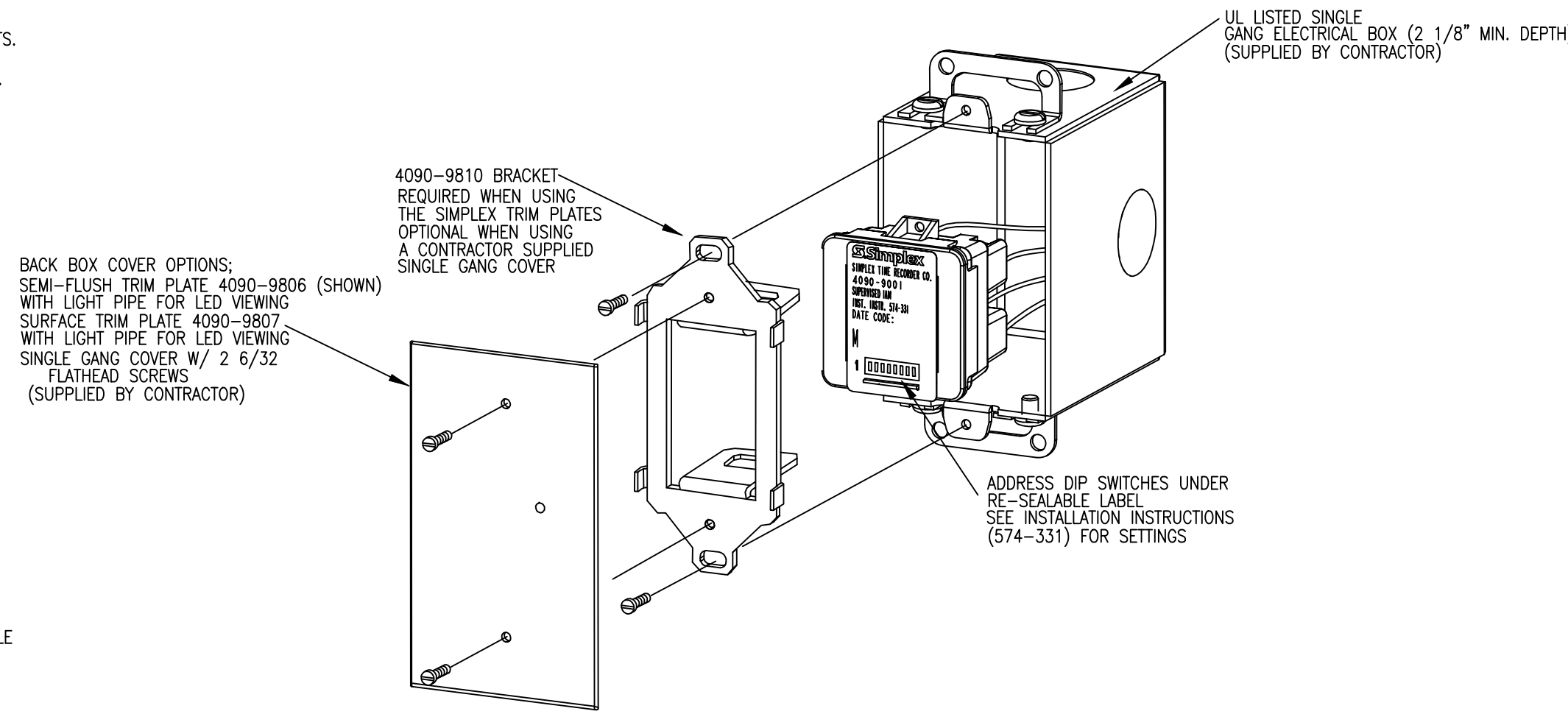
**4090-9001 IDNET, SUPERVISED INDIVIDUAL ADDRESSABLE MODULE (IAM)**

- FEATURES:**
- UL LISTED
  - ADDRESSABLE COMMUNICATIONS SUPPLY BOTH DATA AND POWER TO PROVIDE:
    - SUPERVISED STYLE B 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 (SUPERVISORY) 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.
  - TEMPERATURE RANGE: 32° F TO 158° F (0° C TO 70° C)
  - HUMIDITY: UP TO 93% RH AT 100° F
  - SUPERVISION RESISTOR: 6.8kΩ 1/2W (SUPPLIED)
  - RESISTOR FOR CURRENT LIMITED OPERATION: 4.7kΩ 1/2W WITH A 1.8kΩ 1/2W
  - 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 THE ALARM CONDITION UNTIL THE SYSTEM IS RESET. FOR APPLICATIONS WHERE THE CONTACT CLOSURE LATCHES, OR IF ITS CONDITION NEEDS TO BE TRACKED AT THE CONTROL PANEL, NON-LATCHING OPERATION MAY BE ENABLED.

- 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, SOLDER OR SHIELD 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, NOT TO EXCEED 2500 FEET.
  - MAXIMUM TOTAL WIRE (INCLUDING ALL T-TAPS) FROM THE FIRE ALARM CONTROL PANEL.
  - FOR STYLE 6 CIRCUIT WIRING IT IS RECOMMENDED THAT THE PRIMARY (Q) AND THE BACK-UP (R) LINES BE IN SEPARATE WIRE RUNS AND IN COMPLIANCE WITH LOCAL REQUIREMENTS.
  - REFER TO FIELD WIRING DIAGRAM 842-073

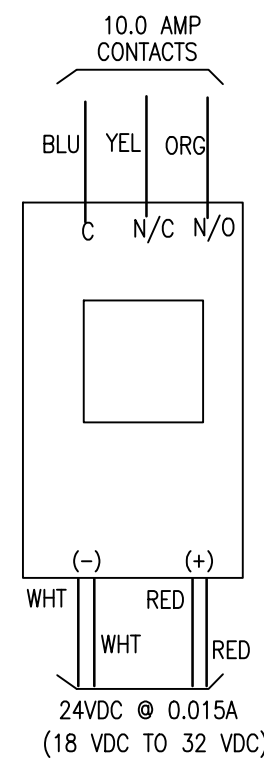
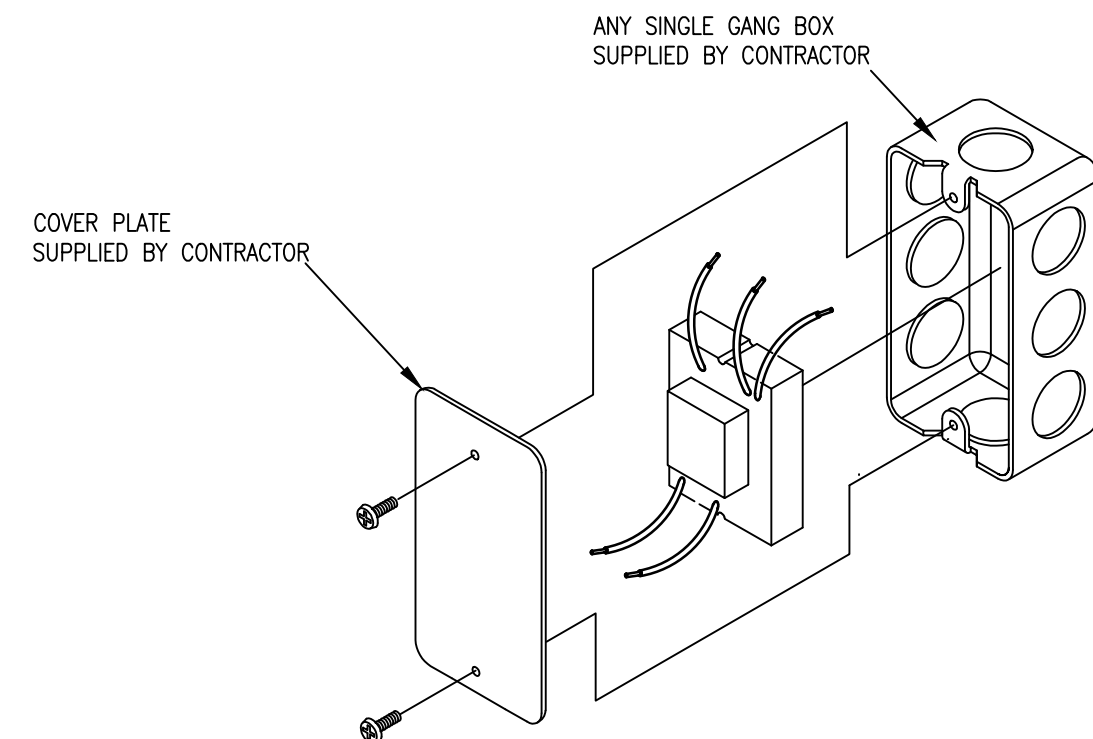


**AIR PRODUCTS PAM-SD 24VDC POLARIZED RELAY MODULE**

(SIMPLEX 4098-9843)

- SPECIFICATIONS:**
- POWER REQUIREMENTS: 0.015 AMP @ 24VDC (17 VDC TO 32 VDC)
  - RELAY: U.L. RECOGNIZED SPDT
  - CONTACT RATING: 7 AMPS @ 120VAC & 28 VDC 250 MICRO AMPS @ 5 VDC
  - AMBIENT TEMPERATURE: -50° F TO 85° F (-50° C TO 85° C)
  - APPROVALS: UNDERWRITERS LABORATORIES LISTED
  - 12" 18 AWG WIRE LEADS
  - DIMENSIONS: 1-1/2" H X 1 7/8" W X 13/16" D (38.1mm H X 47.625mm W X 20.638mm D)

- FEATURES:**
- SINGLE SPDT RELAY
  - DOUBLE-SIDED ADHESIVE TAPE
  - MOUNTING SCREW
  - 5 WIRE NUTS



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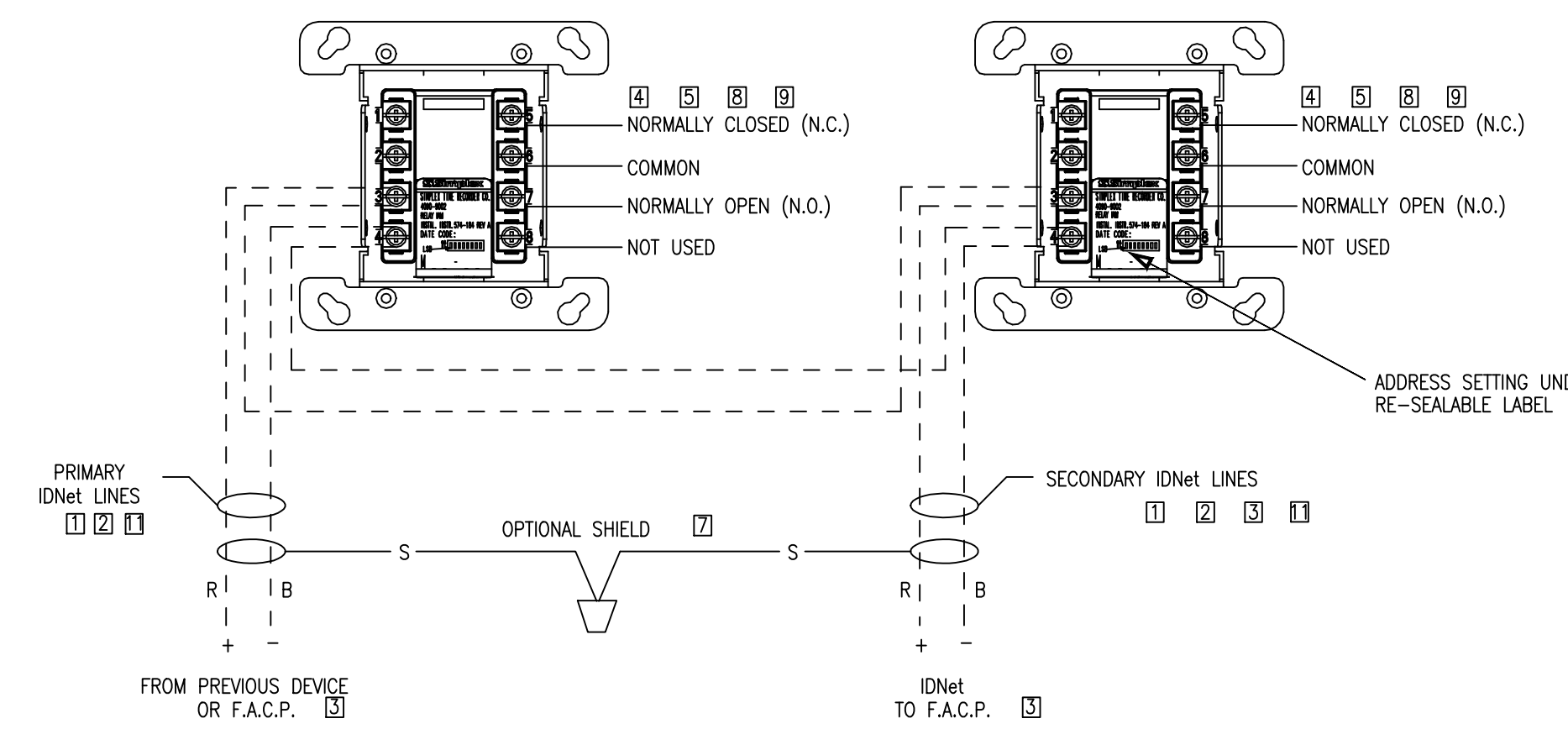
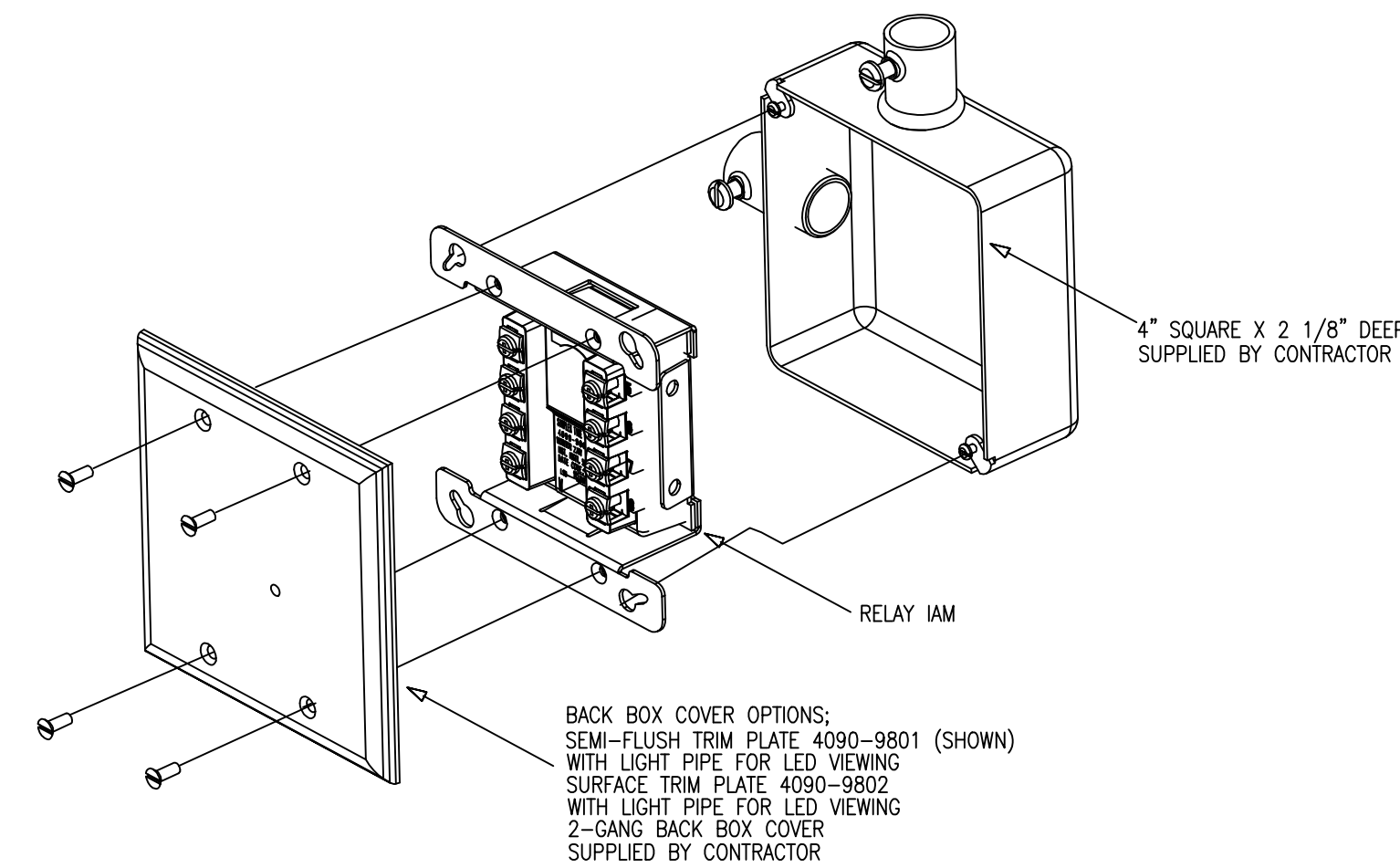
**4090-9002 IDNET, INDIVIDUAL ADDRESSABLE MODULE RELAY (IAM)**

- FEATURES:**
- UL LISTED
  - A 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 PANEL
  - 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 RATING: 2A @ 24VDC, TRANSIENT SUPPRESSED LOADS, 1A @ 24VDC FOR INDUCTIVE LOADS
  - NON POWER LIMITED RATING: 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: 4 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 DEVICE ADDRESS.

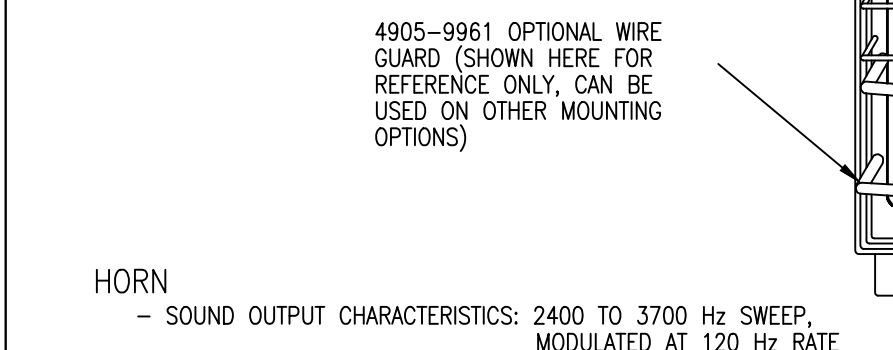
- WIRING NOTES:**
- IDNET LINES ARE TO BE #18 AWG TWISTED PAIR (CONSULT FIRE SALES ENGINEERING FOR EXCEPTIONS) SHIELD RECOMMENDED.
  - MAXIMUM ALLOWABLE LINE RUN, FROM THE F.A.C.P. TO THE FARTHEST DEVICE, NOT TO EXCEED 2500 FEET.
  - MAXIMUM QUANTITY OF DEVICES PER CIRCUIT: CONTROL PANEL MODULE DEPENDENT
  - 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 580F. (CLASS B ONLY)
  - REFER TO FIELD WIRING DIAGRAM 842-073



**TrueAlert™ NON-ADDRESSABLE MULTI-CANDELA AUDIBLE/VISIBLE NOTIFICATION APPLIANCE**

(ELECTRONIC HORN W/STROBE)

- FEATURES:**
- CLASS B (STYLE Y) OPERATION REQUIRES CONNECTION TO A COMPATIBLE SMARTSYNC NAC OR TO SMARTSYNC CONTROL MODULE (SCM) 4905-9938
  - CLASS A (STYLE Z) OPERATION WHEN CONNECTED TO THE 4905-9938 SCM OR 4100U SERIES FIRE ALARM CONTROL PANEL NAC'S
- SPECIFICATIONS:**
- HOUSING DIMENSIONS (INCLUDING LENS): 5 1/8" H X 5" W X 2 3/4" D
  - TEMPERATURE RANGE: 32° F TO 122° F (0° TO 50° C)
  - HUMIDITY RANGE: 10% TO 93% NON-CONDENSING AT 100° F (38° C)
  - TERMINAL BLOCKS FOR 18 AWG TO 12 AWG; TWO WIRES PER TERMINAL FOR IN/OUT WIRING.



**HORN SOUND OUTPUT RATINGS @ 10 FT. (3m)**

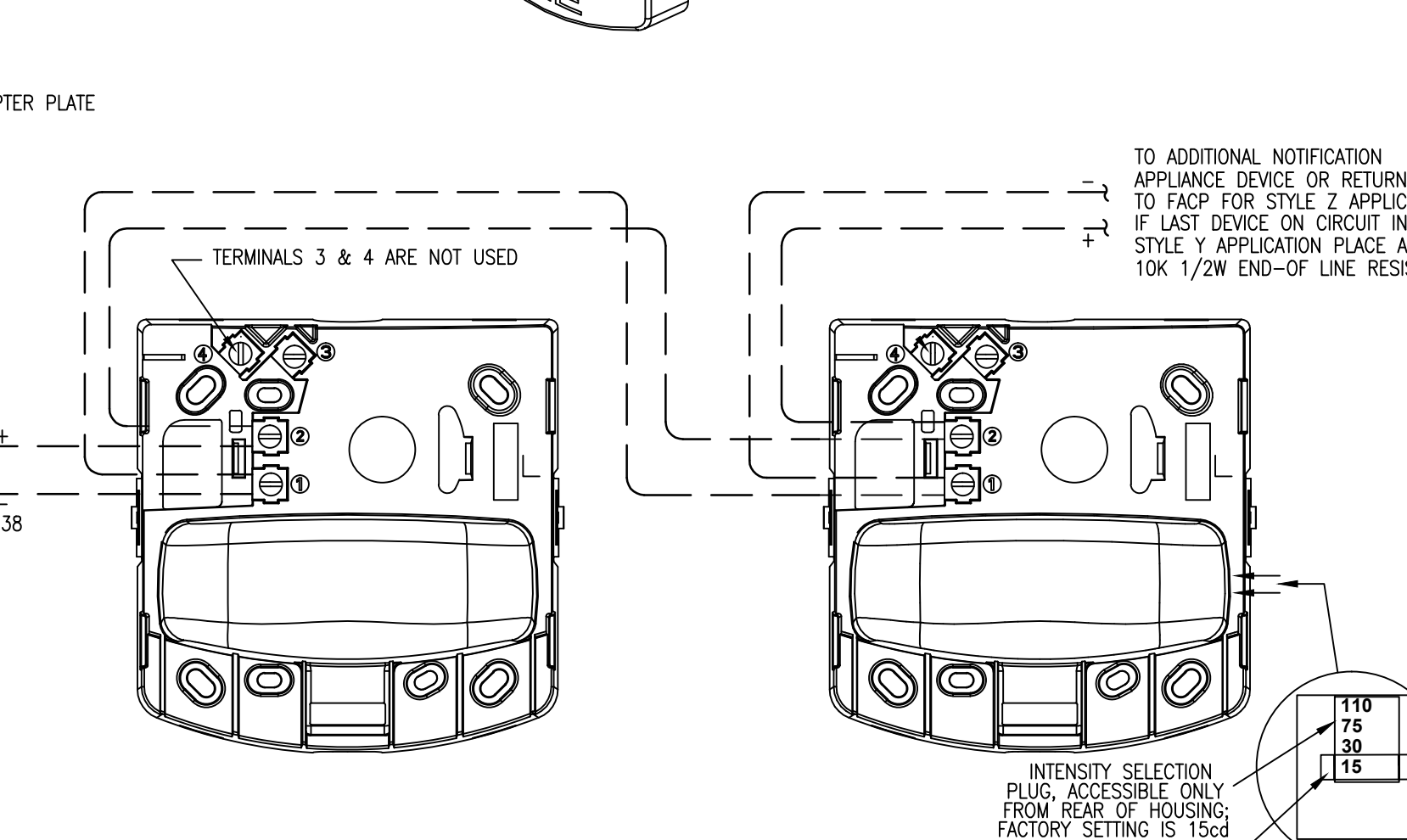
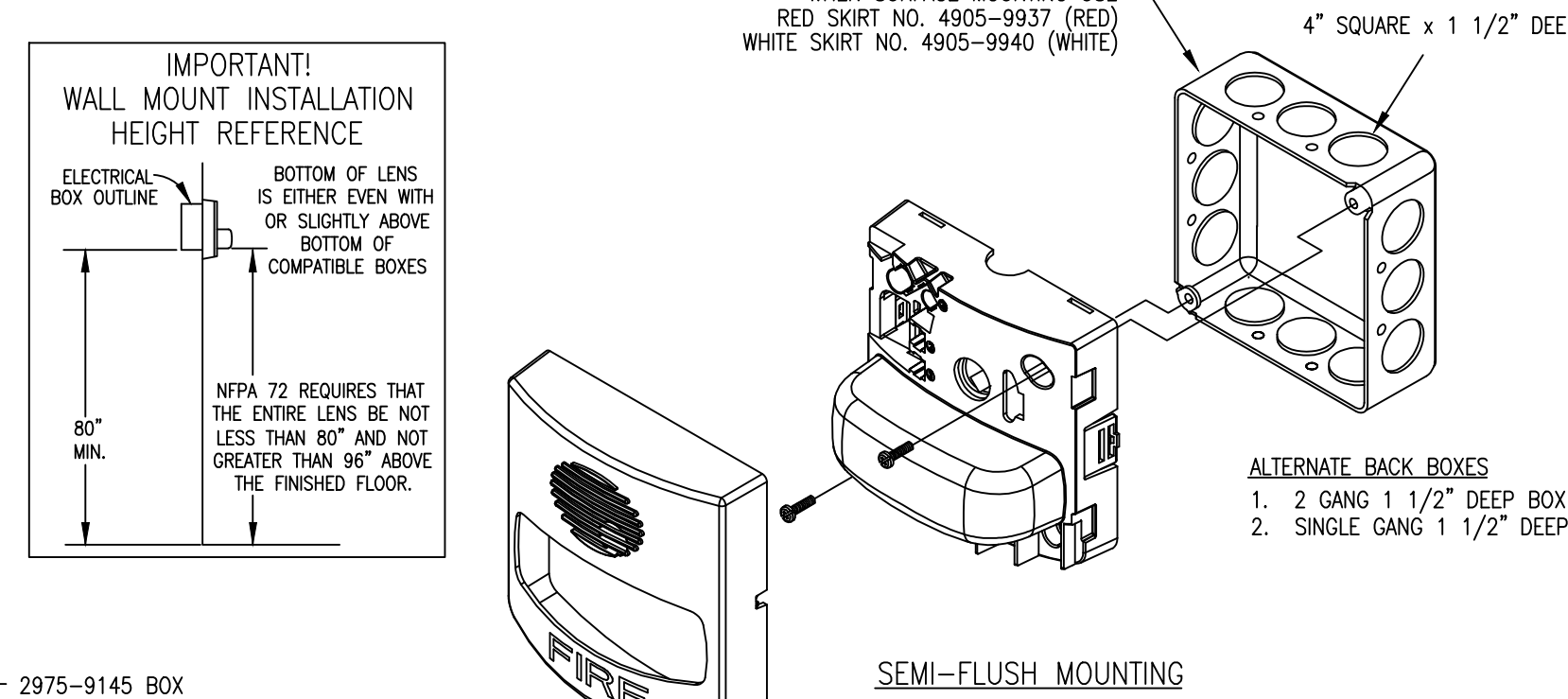
VOLTAGE	16 VDC		24 VDC		33 VDC	
	STEADY	CODED	STEADY	CODED	STEADY	CODED
REVERBERATE CHAMBER UL 464 TEST	86 dBA	82 dBA	88 dBA	84 dBA	90 dBA	86 dBA
ANECHOIC CHAMBER	92 dBA	91 dBA	94 dBA	95 dBA	96 dBA	96 dBA

\* CODED VALUES ARE TYPICAL OF THE OUTPUT MEASURED WITH A TEMPORAL CODED OR A MARCH TIME CODED PULSE AND WITH A SOUND LEVEL METER READING ON A "FAST" SETTING, UNDER THE SAME TEST CONDITIONS, CODED HORN OUTPUT "PEAK" SOUND LEVEL READINGS ARE TYPICALLY 4 dBA HIGHER.

**STROBE**

- RATED VOLTAGE RANGE: UL: REGULATED 24VDC PER UL 1971 ULG: 20VDC TO 30VDC PER ULG S526-M878
- FLASH RATE: 1Hz
- SYNCHRONIZED MODE NAC LOADING: MAXIMUM OF 35 SYNCHRONIZED STROBES PER NAC CIRCUIT.
- \*CURRENT DRAWS REFLECT STROBE FLASHING AND HORN ON.

MODEL NUMBER	HOUSING COLOR	LETTERING COLOR	STROBE RATING	16 VDC	24 VDC	33 VDC
4906-9127	RED	WHITE	15cd	75 mA	67 mA	50 mA
			30cd	116 mA	103 mA	77 mA
			75cd	221 mA	196 mA	147 mA
			110cd	285 mA	253 mA	190 mA
			15cd	75 mA	67 mA	50 mA
			30cd	116 mA	103 mA	77 mA
4906-9129	WHITE	RED	15cd	75 mA	67 mA	50 mA
			30cd	116 mA	103 mA	77 mA
			75cd	221 mA	196 mA	147 mA
			110cd	285 mA	253 mA	190 mA
			15cd	75 mA	67 mA	50 mA
			30cd	116 mA	103 mA	77 mA



**tyco** SimplexGrinnell

20 THOMAS DRIVE  
WESTBROOK, ME 04092  
207-842-6440  
SALES  
207-842-6440  
SERVICE  
207-842-6439  
FAX

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CHG BY	SK	REVISION DESCRIPTION
		PER SUBMITTAL REVIEW DATED 10/31/13
DATE		
11/08/13		
NO.		

FIRE ALARM & AREA OF RESCUE SYSTEMS  
DEVICE WIRING DETAILS  
MARRIOTT COURTYARD  
PORTLAND MAINE

DRAWN BY: STEPHENS DATE: 8/27/13  
CHECKED BY: KALAFARSKI DATE: 9/4/13  
PROJECT NUMBER: 972833401  
SHEET TITLE: FIRE ALARM SYSTEM DEVICE WIRING DETAILS  
SHEET NUMBER: FA-703