

PRODUCT INFORMATION

4098-9792 STANDARD SENSOR BASE

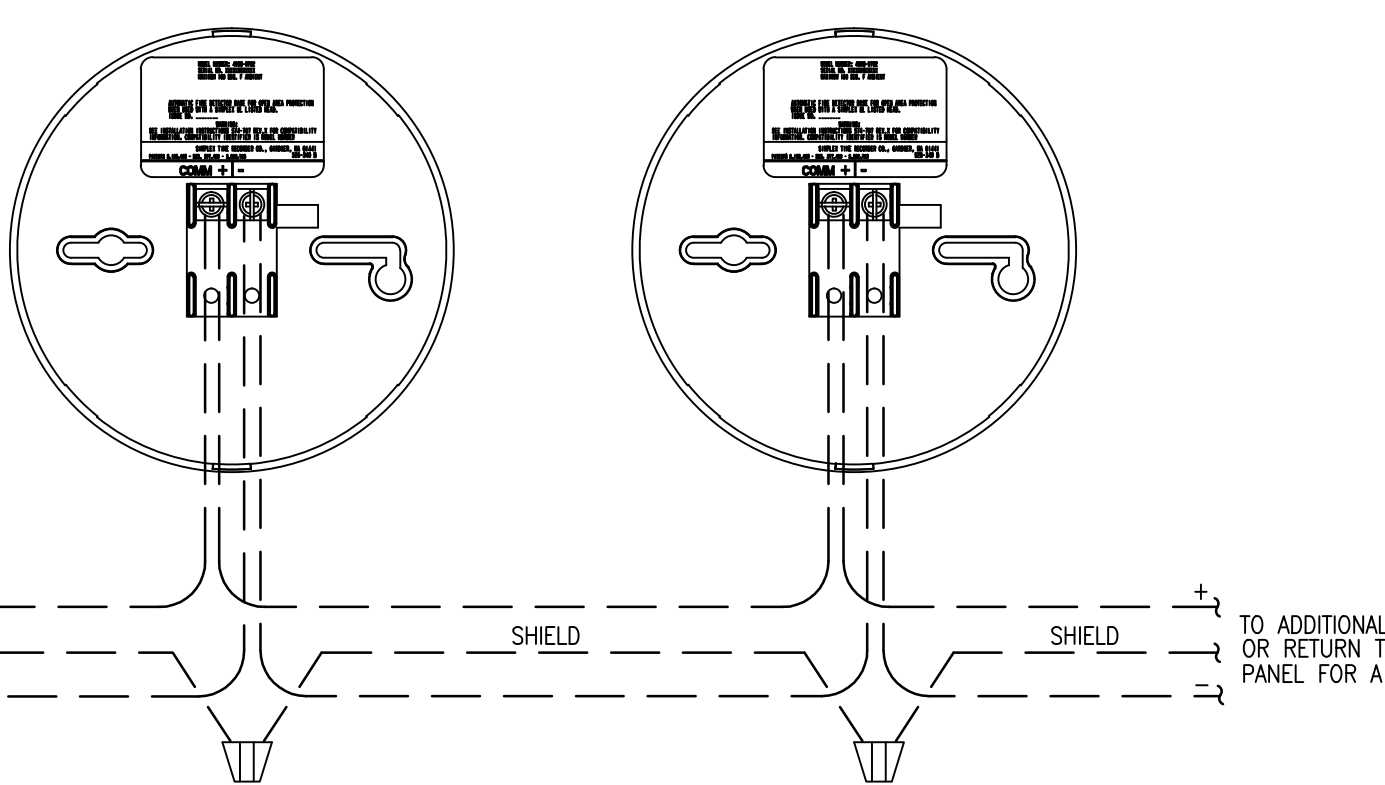
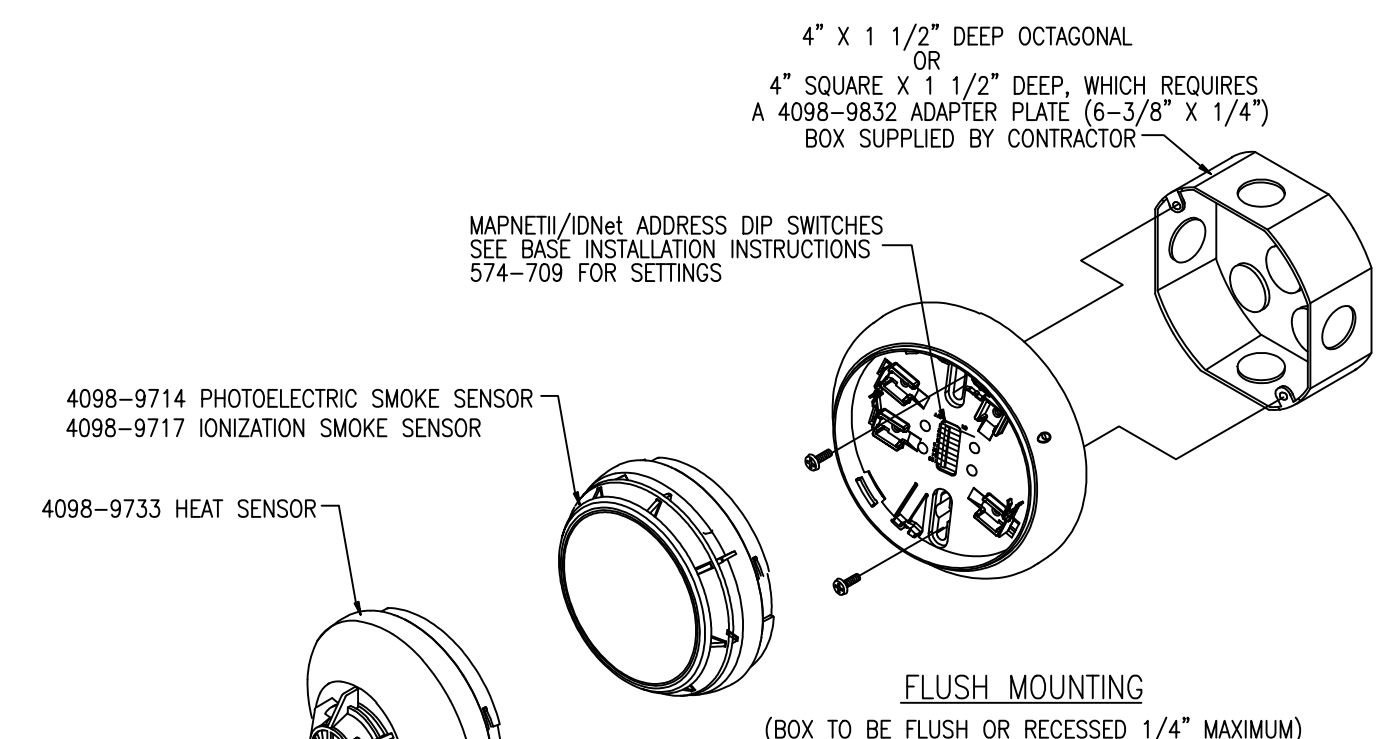
- FEATURES:
- UL LISTED, FM APPROVED
 - TRUEALARM ANALOG SENSING PROVIDES DIGITAL TRANSMISSION OF ANALOG SENSOR VALUES VIA MAPNET, OR IDNet TWO WIRE COMMUNICATIONS
 - FIRE ALARM CONTROL PANEL PROVIDES:
 - INDIVIDUAL SENSITIVITY SELECTION FOR EACH SENSOR
 - PEAK VALUE LOGGING ALLOWING ACCURATE ANALYSIS FOR SENSITIVITY SELECTION
 - AUTOMATIC ENVIRONMENTAL COMPENSATION
 - DISPLAY OF SENSITIVITY IN PERCENT PER FOOT
 - MULTISTAGE 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
 - FIXED TEMPERATURE SENSING IS INDEPENDENT OF RATE-OF-RISE AND PROGRAMMABLE TO OPERATE AT 135°F OR 155°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 155° F
 - INTEGRAL RED LED FOR POWER-ON (PULSING), OR ALARM OR TROUBLE (STEADY ON)
 - BASE MOUNTED ADDRESS SELECTION:
 - ACCESSIBLE FROM FRONT (DIP 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, 4100
 - MOUNTING: CEILING OR WALL
 - COLOR: FROST WHITE
 - BASE DIMENSIONS: 15/16" X 4-7/8"

- 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 SMOKE SENSOR AIR VELOCITY RANGE: 0-2000 FT/MIN
 - IONIZATION SMOKE SENSOR AIR VELOCITY RANGE: 0-300 FT/MIN
 - WIRING CONNECTIONS: SCREW TERMINALS FOR IN/OUT WIRING, #18 TO #14 AWG
 - COMMUNICATIONS MAPNET/IDNet: 1 ADDRESS PER BASE
 - VOLTAGE (MAPNET/IDNet): 24-40VDC
 - CURRENT: 400mA TYPICAL

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/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 INSULATED FROM ELECTRICAL BOX.
 - REFER TO INSTALLATION INSTRUCTIONS (574-707)
 - REFER TO APPLICATION MANUAL (574-709)



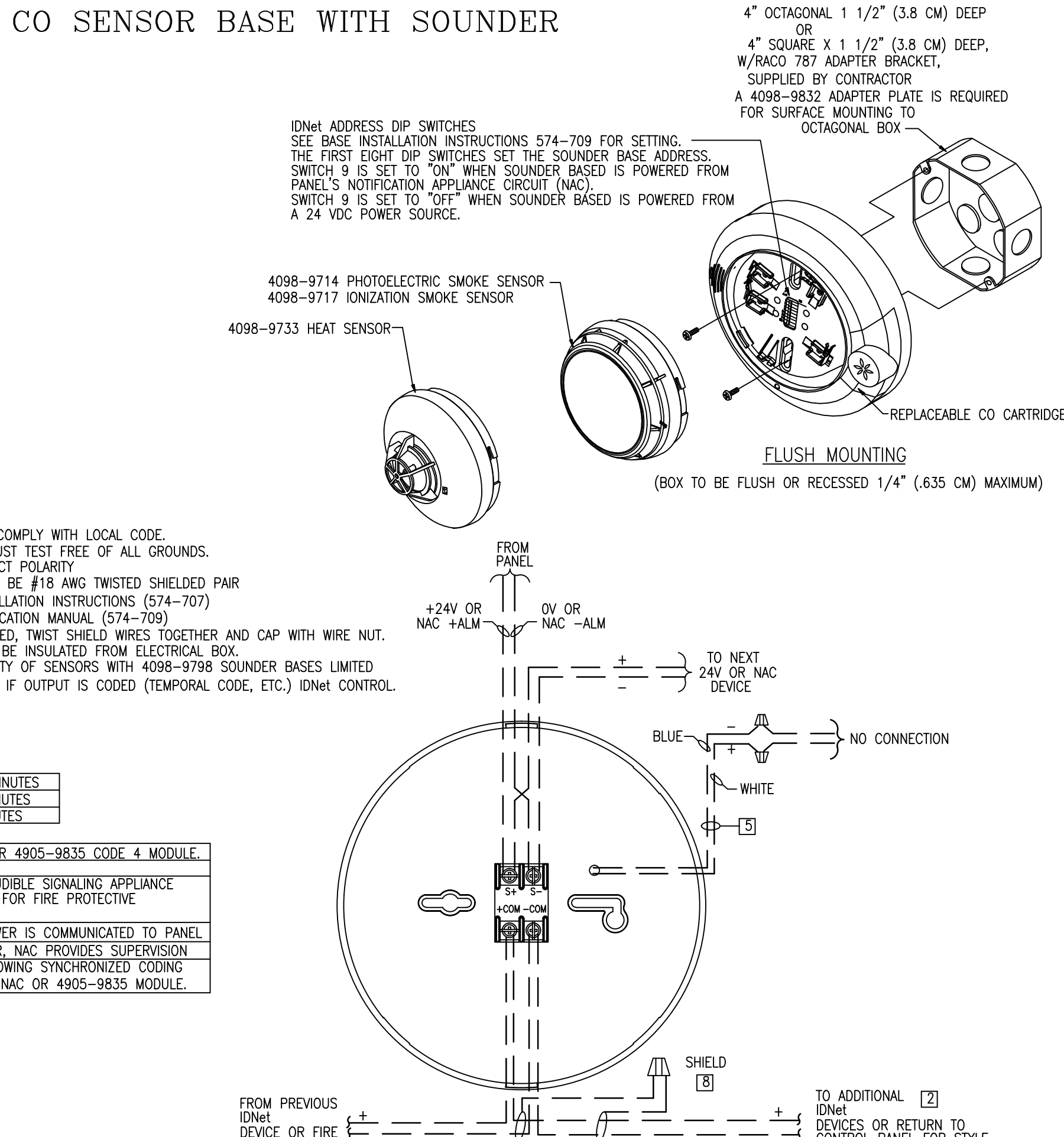
PRODUCT INFORMATION

4098-9798 CO SENSOR BASE WITH SOUNDER

- FEATURES:
- UL LISTED TO STANDARD 268, SMOKE DETECTORS FOR FIRE ALARM SIGNALING SYSTEMS AND STANDARD 2075, GAS AND VAPOR DETECTORS AND SENSORS ALLOWING SYSTEMS TO BE LISTED TO STANDARD 2034, SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS.
 - CO SENSOR BASES SUPPORT (AND REQUIRE) A TRUEALARM PHOTOELECTRIC, PHOTO/HEAT, HEAT, OR IONIZATION SENSOR.
 - 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 (-9°C) OR 20°F (-6.7°C) PER MINUTE
 - FIXED TEMPERATURE SENSING IS INDEPENDENT OF RATE-OF-RISE AND PROGRAMMABLE TO OPERATE AT 135°F (57°C) OR 155°F (68°C)
 - TRUEALARM HEAT SENSORS CAN BE PROGRAMMED AS A UTILITY DEVICE TO MONITOR FOR TEMPERATURE EXTREMES IN THE RANGE FROM 32° F TO 155° F (0° C TO 68° C).
 - UL STANDARD SPACING: 60 FT (18.3 M) SPACING FOR 135°F (57°C), 40 FT (12.2 M) SPACING FOR 155° F (68°C)
 - CO SENSOR BASES ARE MULTI-POINT DEVICES, CONSUME ONLY ONE IDNET ADDRESS, AND RECEIVE BOTH COMMUNICATIONS AND SENSOR POWER FROM THE IDNET CHANNEL.
 - MODULAR TRUEALARM SENSOR BASE WITH BUILT-IN ELECTRONIC ALARM SOUNDER:
 - SOUNDER OPERATOR IS UL LISTED AS AN AUDIBLE NOTIFICATION APPLIANCE TO UL STANDARD 464.
 - SOUNDER CAN BE POWERED FROM 24 VDC OR FROM A COMPATIBLE NOTIFICATION APPLIANCE CIRCUIT (NAC)
 - SOUNDER CAN BE SYNCHRONIZED CODED/TEMPORAL CODED BY COMMUNICATIONS, NAC OR TEMPORAL CODE. MODULE 4905-9835
 - SOUNDER CAN BE MANUALLY ACTIVATED FROM THE CONTROL PANEL

- CO SENSOR SPECIFICATIONS:
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|--------------------------------|-----------------------|--------------------------------|
| UL 2034 REQUIREMENTS REFERENCE | 70 PPM CONCENTRATION | ALARM WINDOW 60 TO 240 MINUTES |
| | 150 PPM CONCENTRATION | ALARM WINDOW 10 TO 50 MINUTES |
| | 400 PPM CONCENTRATION | ALARM WINDOW 4 TO 15 MINUTES |
- SOUNDER OPERATING SPECIFICATIONS:
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|--|---|
| SOUNDER VOLTAGE | 16 TO 32 VDC FROM STEADY EXTERNAL SOURCE, NAC OR 4905-9835 CODE 4 MODULE |
| ALARM CURRENT (SOUNDER ON) | 17 mA @ 24 VDC, 24 mA MAXIMUM @ 32VDC |
| SOUNDER OUTPUT | 88 dBA MINIMUM @ 10 FT., PER UL STANDARD 464, AUDIBLE SIGNALING APPLIANCE APPLIANCES AND UL STANDARD 268, SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS |
| SOUNDER POWER SUPERVISION (SUPERVISED) | SELECT FOR CONTINUOUS 24 VDC POWER, LOSS OF POWER IS COMMUNICATED TO PANEL |
| (UNSUPERVISED) | SELECT WHEN CONNECTED TO NAC FOR SOUNDER POWER, NAC PROVIDES SUPERVISION |
| NAC POWERED OPERATION | WHEN IN ALARM, WILL SOUND WHEN NAC IN ALARM, ALLOWING SYNCHRONIZED CODING (TEMPORAL OR MARCH TIME, ETC.) CONTROLLED BY THE NAC OR 4905-9835 MODULE. |

- 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. THREE TYPES OF CO INCLUSIVE OPERATION ARE AVAILABLE: UL 2034 CO ALARM DETECTION; UL 2075 CO (CSHA) LEVEL MONITORING FOR VENTILATION CONTROL; AND MULTI-CRITERIA FIRE SENSOR ANALYSIS WITH ALGORITHMS THAT COMBINES OPTICAL AND CO GAS MONITORING INFORMATION OPERATION OF A CO SENSOR BASE WITH A PHOTOELECTRIC SENSOR.



4905-9835 TEMPORAL CODE 4 MODULE (TC4M) FOR CO GAS ALARM NOTIFICATION (STYLE Z)

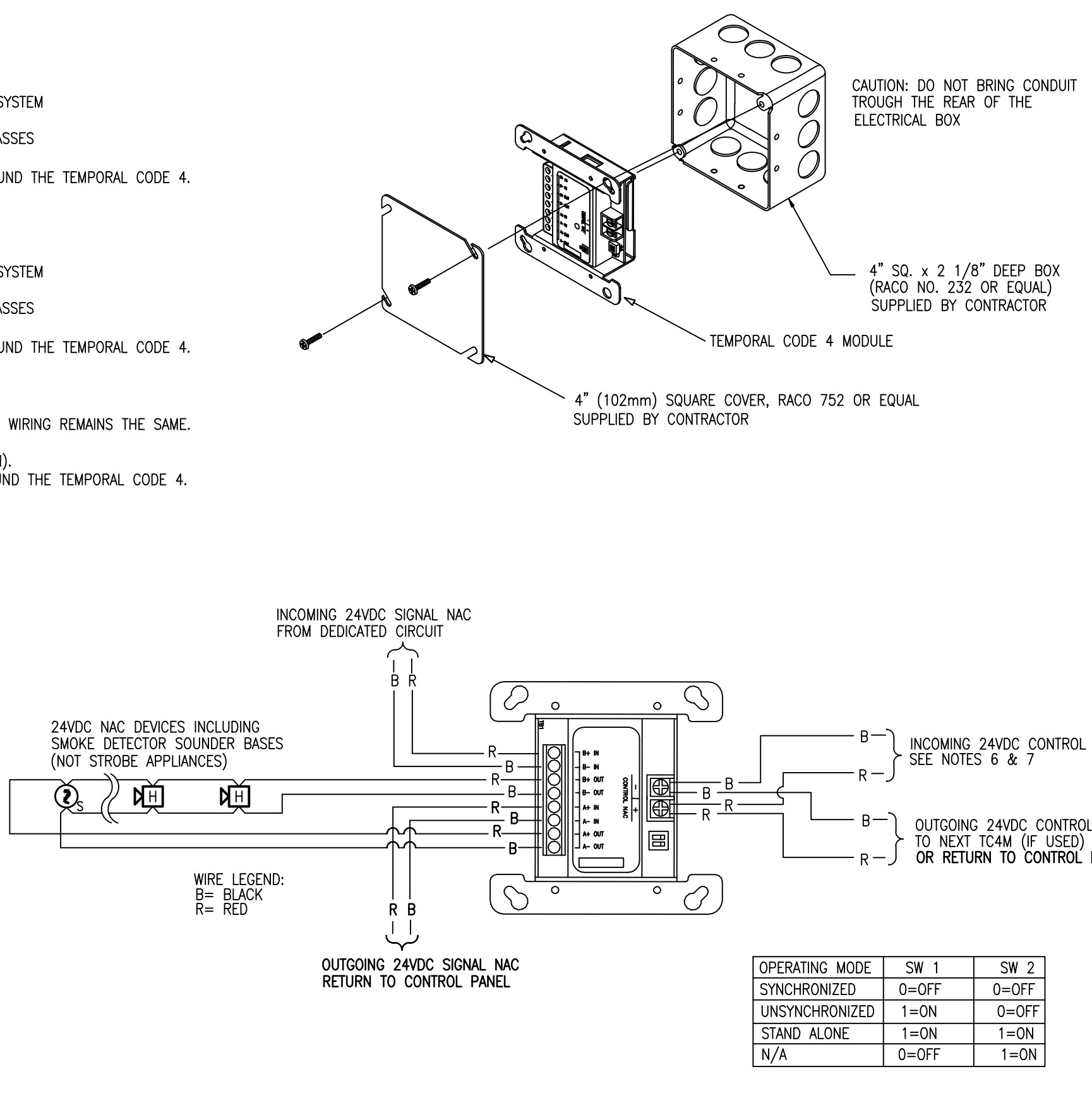
PRODUCT INFORMATION

- SPECIFICATIONS:
- UL LISTED STANDARD 864
 - THREE SELECTABLE OPERATING MODES:
 - SYNCHRONIZED:** ALLOWS A DEDICATED CONTROL NAC TO BOTH ACTIVATE AND SYNCHRONIZE THE TEMPORAL CODE 4 OUTPUT TIMING OF MULTIPLE 4905-9835 MODULES
 - THE PANEL CONTROL NAC OUTPUTS A SYNCHRONIZATION PATTERN
 - SIGNALS ARE SYNCHRONIZED BETWEEN TC4Ms
 - ONE DEDICATED CONTROL NAC IS RESERVED TO COMMAND ALL TC4Ms WITHIN A SYSTEM OF A FIRE (NAC OFF) OR CO ALARM (NAC ON) WHILE SYNCHRONIZING THEM.
 - THE CONTROL NAC IS OFF DURING A FIRE ALARM, AND THEREFORE THE TC4M PASSES THROUGH ANYTHING THAT IS PLAYED ON THE SIGNAL NAC.
 - DURING A CO ALARM, THE SIGNAL NAC IS REQUIRED TO BE ON STEADILY TO SOUND THE TEMPORAL CODE 4.
 - UNSYNCHRONIZED:** ALLOWS A DEDICATED CONTROL NAC TO ACTIVATE THE TEMPORAL CODE 4 OUTPUT TIMING OF MULTIPLE 4905-9835 MODULES
 - THE PANEL CONTROL NAC IS ON DURING A CO GAS ALARM.
 - SIGNALS ARE NOT SYNCHRONIZED BETWEEN TC4Ms.
 - ONE DEDICATED CONTROL NAC IS RESERVED TO COMMAND ALL TC4Ms WITHIN A SYSTEM OF A FIRE (NAC OFF) OR CO ALARM (NAC ON) WHILE SYNCHRONIZING THEM.
 - THE CONTROL NAC IS OFF DURING A FIRE ALARM, AND THEREFORE THE TC4M PASSES THROUGH ANYTHING THAT IS PLAYED ON THE SIGNAL NAC.
 - DURING A CO ALARM, THE SIGNAL NAC IS REQUIRED TO BE ON STEADILY TO SOUND THE TEMPORAL CODE 4.
 - STAND ALONE:** ALLOWS THE INPUT NAC TO ACTIVATE TEMPORAL CODE 4 TIMING FOR NACS DEDICATED FOR CO GAS ALARM
 - ONLY THE TEMPORAL CODE 4 IS OUTPUT.
 - NO CONTROL NAC WIRE IS USED AT THE NAC OR AT THE TC4M. ALL SIGNAL NAC WIRING REMAINS THE SAME.
 - WALKTEST CANNOT BE PLAYED ON THE SIGNAL NAC TIED TO THE TC4M.
 - THE NAC IS ONLY USED FOR CO GAS ALARM (CANNOT BE USED FOR FIRE ALARM).
 - DURING A CO ALARM, THE SIGNAL NAC IS REQUIRED TO BE ON STEADILY TO SOUND THE TEMPORAL CODE 4.
 - OPERATING TEMPERATURE RANGE: 32° F TO 120° F (0° C TO 49° C)
 - HUMIDITY RANGE: UP TO 93% RELATIVE HUMIDITY @ 100° F (38° C)
 - OUTPUT CAPACITY: FOR 24 VDC NACS, UP TO 3 A MAXIMUM, LIMIT IS PER THE INPUT NAC RATING; FOR CONTROL OF AUDIBLE NOTIFICATION APPLIANCES COMPATIBLE WITH CODE PULSE DUTY CYCLE
 - SCREW TERMINALS FOR IN/OUT WIRING, 18 TO 12 AWG WIRE

DESCRIPTION:

CO GAS ALARM WARNINGS ARE REQUIRED TO BE DIFFERENT FROM FIRE ALARM WARNINGS. IN THE EVENT OF A CO GAS ALARM, THE PRESENCE OF TEMPORAL CODE 4 AUDIBLE SIGNAL PATTERN IDENTIFIES THE TYPE OF CONDITION TO THE RESPONDERS TO ASSIST IN DETERMINING THE PROPER ACTIONS TO BE TAKEN. CO GAS ALARM OR FIRE ALARM: USE OF THE 4905-9835 TEMPORAL CODE 4 MODULE ALLOWS THE NFPA 720 TEMPORAL CODE 4 SIGNAL TO BE GENERATED FROM THE STANDARD STEADY ON AUDIBLE APPLIANCE NAC INPUT. UNDER THE FIRE ALARM PANEL'S CONTROL, THE AUDIBLE NOTIFICATION SIGNAL CAN BE SELECTED PASS THROUGH THE CONVENTIONAL FIRE PULSE PATTERN FOR A FIRE ALARM CONDITION, OR THE TEMPORAL CODE 4 PATTERN CAN BE ACTIVATED FOR A CO GAS ALARM CONDITION.

- WIRING NOTES:
- FOR MAXIMUM VOLTAGE DROP, ETC., REFER TO SIMPLEX FIELD WIRING GUIDE.
 - MAXIMUM NO. 12 AWG WIRE FOR 24 VDC WIRING, OR TO LOCAL CODE.
 - MAXIMUM POWER OF NAC LOOP = 3 AMPS AT 24 VDC.
 - NAC CIRCUIT WIRING DISTANCES WITH MAXIMUM VOLTAGE DROP OF 3 VOLTS. WHEN COMPUTING DISTANCES ON THE TC4 MODULE OUTPUT, REMEMBER TO ACCOUNT FOR THE WIRING DISTANCE (LOSS) FROM THE CONTROL PANEL TO THE TC4 MODULE. MAXIMUM LINE DISTANCE = 2000 FEET (RESTRICTED FOR DC SUPERVISION LIMITATIONS)
 - ALL CONNECTIONS MUST TEST FREE OF GROUNDS.
 - SEE INSTALLATIONS INSTRUCTIONS 579-840.
 - WHEN OPERATING WIRING LEAVES THE BUILDING, OVERVOLTAGE PROTECTORS ARE REQUIRED.

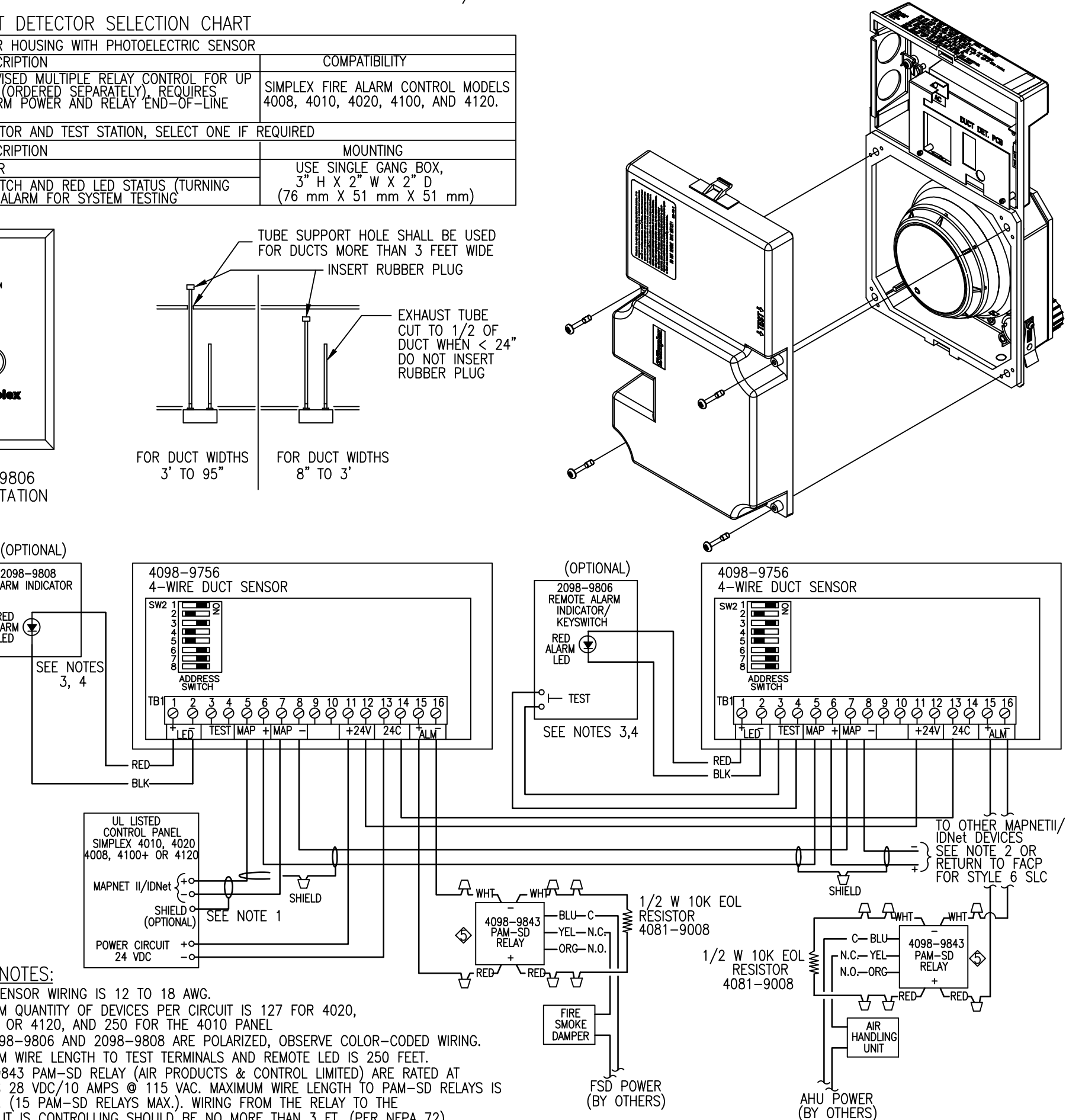


4098-9756 ADDRESSABLE 4-WIRE DUCT SENSOR MAPNET II/IDNet WITH 24VDC RELAY

PRODUCT INFORMATION

- 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 DETECT SENSOR STATUS
 - DIGITAL TRANSMISSION OF ANALOG SENSOR VALUES VIA MAPNET II OR IDNet 4-WIRE COMMUNICATIONS
 - PROGRAMMABLE SENSITIVITY, CONSISTENT ACCURACY, ENVIRONMENTAL COMPENSATION, STATUS TESTING, AND MONITORING OF SENSOR DIRT ACCUMULATION
 - DUCT SENSOR HOUSING WITH SUPERVISED OUTPUT FOR MULTIPLE REMOTE RELAY CONTROL (UL 2075 CO (CSHA) RELAYS ARE UNDER PANEL CONTROL AND CAN BE ACTIVATED MANUALLY OR BY A SEPARATE ALARM/INPUT)
 - GENERAL FEATURES:
 - UL LISTED TO STANDARD 268A
 - CLEAR COVER ALLOWS VISUAL INSPECTION
 - TEST PORTS PROVIDE FUNCTIONAL SMOKE TESTING ACCESS
 - EXHAUST TUBE CUT TO 1/2 OF DUCT WHEN < 24"
 - MOUNTS IN RECTANGULAR DUCTS OR ROUND DUCTS (MINIMUM SIZE 8" SQUARE OR 18" DIAMETER)
 - MAGNETIC TEST FEATURE FOR ALARM INITIATION AT HOUSING
 - OPTIONAL WEATHERPROOF ENVELOPE IS AVAILABLE SEPARATELY (REFER TO DATA SHEET 4098-0032)
 - DIAGNOSTIC LEADS (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)

- SPECIFICATIONS:
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|------------------------|---|--|
| GENERAL SPECIFICATIONS | AIR VELOCITY RANGE (LINEAR FT/MIN) | 300 TO 4000 FT/min (91 TO 1220 m/min) |
| | ALTITUDE | UP TO 8000 FT (2.4 km) |
| | SENSOR SENSITIVITY RANGE | 10% TO 3.7% PER FOOT OF OBSCURATION, SELECTABLE AT HOST CONTROL PANEL |
| | UL LISTED TEMPERATURE RANGE | 32° F TO 100° F (0° C TO 38° C) |
| | OPERATING TEMPERATURE RANGE | 32° F TO 120° F (0° C TO 49° C) |
| | STORAGE TEMPERATURE RANGE | 0° F TO 140° F (-18° C TO 60° C) |
| | HUMIDITY RANGE | 10% TO 95% RH, NON-CONDENSING |
| | HOUSING COLOR | BLACK BASE WITH CLEAR COVER |
| | WIRING CONNECTIONS | TERMINAL BLOCKS, 18 TO 12 AWG |
| | REMOTE STATUS/ALARM LED AND TEST STATION WITH REMOTE STATUS/ALARM LED | |
| | REMOTE ALARM LED CURRENT | 15 mA @ 24 VDC, ADD 15 mA ADDITIONAL FOR EACH 4098-9843 RELAY |
| | 4098-9843 RELAY OUTPUT RATINGS, SINGLE FORM C | |
| | COIL CURRENT | 15 mA @ 24 VDC UP TO 15 MAX. PER RELAY CONTROL |
| | RELAY CONTACTS, RESISTIVE RATINGS | 7 A @ 28 VDC & 120 VAC; 250 uA @ 5 VDC |
| | LOCATION DISTANCE | 500 FT. (152m) MAX. TO RELAY COILS, RELAY MUST BE WITHIN 3 FT. (0.91m) OF DEVICE BEING CONTROLLED PER NFPA 72, SECTION 3-9.2.1 |



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CHG BY	DATE	REVISION DESCRIPTION
JS	7/19/13	REVISED PER ENGINEERS REVIEW COMMENTS DATED 7/19/13 & 8/5/13
SK	9/10/13	REVISED PER SUBMITTAL REVIEW DATED 8/29/13
	10/07/13	REVISED PER SUBMITTAL REVIEW DATED 10/1/13

FIRE ALARM & AREA OF REFUGE SYSTEMS
DEVICE WIRING DETAILS
HYATT PLACE PORTLAND - OLD PORT

DRAWN BY: LORION
DATE: 6/14/13

CHECKED BY: KALAFARSKI
DATE: 7/12/13

PROJECT NUMBER: 971237001

SHEET TITLE: FIRE ALARM SYSTEM DEVICE WIRING DETAILS

SHEET NUMBER: FA-702

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