



NYC Department of Buildings
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Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 294-95-E Vol.4

Manufacturer: Apollo Fire Detectors, Ltd.

Trade Name(s): Apollo Fire Detectors, Ltd.

Product: Smoke & Heat Detectors for commercial use used in conjunction with compatible control equipment to detect fire condition.

Pertinent Code Section(s): Reference Standard RS-17, Subchapter 17.

Prescribed Test(s): UL 268, UL 521.

Laboratory: Underwriters Laboratories Inc.

Test Report(s): File S5022 Vol. 3 Sec. 2 Project 94NB188157, dated October 12, 1994 and revised December 15, 2004; File S5022 Vol. 3 Sec. 3 Project 00NK23629, dated August 2, 2000 and revised May 02, 2002; File S5022 Vol. 6 Sec. 2 Project 99NK43597, Dated March 30, 2001 and Revised October 08, 2004; File S5022 Vol. 10 Sec. 1 Project 99NK33455, Dated January 6, 2001 and Revised May 02, 2002; File S5022 Vol. 11 Sec. 1 Project 99NK33453, Dated February 22, 2001 and Revised May 02, 2002; File S5022 Vol. 12 Sec. 1 Project 99NK33457, Dated July 31, 2001 and Revised October 08, 2004; File S5022 Vol. 13 Sec. 1 Project 98NK33456, Dated August 02, 2001 and Revised October 08, 2004; File S5022 Vol. 14 Sec. 1 Project 00NK42306, Dated September 20, 2001 and Revised October 08, 2004; File S5022 Vol. 17 Sec. 1 Project 01NK20080, Dated February 18, 2002 and Revised October 08, 2004; File S5053 Vol. 4 Sec. 1 Project 99NK33461, Dated April 17, 2001 and Revised May 02, 2002; File S5053 Vol. 5 Sec. 1 Project 99NK21778, Dated August 08, 2001 and Revised October 08, 2004; File S7003 Vol. 1 Sec. 1 Project 94NK28945, Dated March 21, 1995 and Revised July 13, 1999.

Description –

SERIES 60A MOUNTING BASES

45681-200 4" STANDARD MOUNTING BASE

The Series 60A mounting base has been designed to enable detectors to be fitted without any need for force. Particularly useful when fitted to suspended ceilings. To make it even easier the base has a one way only fit. All Series 60 bases are lockable. The detectors are polarity insensitive and the bases are easy to wire. All bases have an earth connector. The standard base contains no electric parts which could be damaged during installation. File #S5022

45681-220 6" MOUNTING BASE

The Series 60A 6" mounting base assembly comprises a 45681-200 mounting base, a backplate and skirt assembly. The base is designed for use with mounting boxes of up to 4" in diameter and for retro-fit installations where surface damage around a standard base needs to be hidden. File #S5022

45681-227 6" RELAY MOUNTING BASE

The Series 60A 6" relay mounting base is identical to the 45881-220 mounting base, but incorporates a small PCB and provides two form C sets of relay contacts. The mounting base may be used in two or four wire configurations. File #S5022

45681-230 6" MOUNTING BASE WITH RED FLASHING LED

The Series 60A 6" mounting base with RED flashing LED indicating that it is powered up by the flashing of the LED. A small PCB incorporated in the base regulates the flashing of the LED, which has a duration is 50ms and a mark to space ratio is 1:120. A remote indicator may be connected by using the positive supply line and the R-Terminal. File #S5022

45681-231 6" MOUNTING BASE WITH GREEN FLASHING LED

The Series 60A 6" mounting base with GREEN flashing LED indicating that it is powered up by the flashing of the LED. A small PCB incorporated in the base regulates the flashing of the LED, which has a duration is 50ms and a mark to space ratio is 1:120. A remote indicator may be connected by using the positive supply line and the R-Terminal. File #S5022

45681-232 6" LOW PROFILE MOUNTING BASE

The Series 60A 6" low profile mounting base comprises a universal mounting bar, a standard Series 60 base and a low profile skirt which simply clips onto the standard base after the detector has been fitted. The mounting bar offers fixing centers for all commonly used fixing modes. File #S5022.

45681-251 6" E-Z FIT MOUNTING BASE

The Series 60A 6" E-Z Fit mounting base is similar to the 45681-232 mounting base, but with the 6 in. adapter plate built into the unit.

45681-252 6" E-Z FIT MOUNTING BASE WITH FLASHING LED

The Series 60A 6" E-Z Fit mounting base is similar to the 45681-251, but incorporates a small PCB which regulates the flashing of the LED, similar to the 45681-230.

SERIES 65A MOUNTING BASES

45681-255 4" STANDARD RELAY MOUNTING BASE

The 4" standard relay mounting base is similar to the 45681-232 6" low profile mounting base, but also incorporates a mounting plate on the bottom of the base onto which is mounted a PCB which provides a set of relay contacts.

45681-256 4" AUXILIARY RELAY MOUNTING BASE

The 4" auxiliary relay mounting base is similar to the 45681-255 but incorporates two sets of relay contacts.

45681-257 4" 12V EOL RELAY MOUNTING BASE

The 4" 12V EOL relay mounting base is similar to the 45681-256 but can be used with 4 wire circuits with a supply voltage of 9 to 18V DC. It also incorporates terminals for connection of and end of line device.

45681-258 4" 24V EOL RELAY MOUNTING BASE

The 4" 24V EOL relay mounting base is similar to the 45681-257 but can be used with 4 wire circuits with a supply voltage of 16 to 33V DC. It also incorporates terminals for connection of and end of line device.

SERIES 65A HEAT AND SMOKE DETECTORS

55000-138, -139, -140, -141, -142, -143, -144, -145, -146 HEAT DETECTORS

The Series 65A heat detectors each contain a pair of matched negative temperature coefficient thermistors mounted on a printed circuit board within a white polycarbonate housing. One thermistor is exposed and is therefore in good thermal contact with the surrounding air and responds quickly to changes in the air temperature. The other thermistor is insulated from the surrounding air and responds more slowly. The detectors have a wide operating voltage range of 9 to 33 VDC. Detectors 55000-139, -142 and -145 incorporate an additional circuit on the PCB that causes the alarm LED to flash periodically in the standby condition. Detectors 55000-138, 141 and -144 also incorporates the additional circuit to flash the LED, but also incorporates a reed switch which can be used to test the alarm circuit of the detector by placing a magnet in closed proximity to the reed switch. 55000-138, 55000-139 and 55000-140 - Ordinary (135°F); 55000-141, 55000-142, 55000-143 - Ordinary (170°F); 55000-144, 55000-145 and 55000-146 - Intermediate (200°F). File #S5053

55000-225, -226, -227 IONIZATION SMOKE DETECTOR

The Series 65A ionization smoke detectors have a molded self extinguishing white polycarbonate case with wind resistant smoke inlets. Stainless steel wiper contacts connect the detector to the terminals in the mounting base. Inside the detector case is a printed circuit board which has the ionization chamber system mounted on the one side and the signal processing electronics on the other. The detectors have a wide operating voltage range of 9 to 33 VDC. Detector 55000-226 incorporates an additional circuit on the PCB that causes the alarm LED to flash periodically in the standby condition. Detector 55000-225 also incorporates the additional circuit to flash the LED, but also incorporates a reed switch which can be used to test the alarm circuit of the detector by placing a magnet in closed proximity to the reed switch. File #S5022

55000-325, -326, -327, -328 PHOTOELECTRIC SMOKE DETECTOR

The Series 60A photoelectric smoke detector comprises a sensing chamber and a printed circuit board within a white polycarbonate housing. The sensing chamber is a black molding configured as a labyrinth which prevents ambient light from penetrating into the chamber. The labyrinth has a fine gauze cover to prevent insects from migrating into the chamber. The detectors have a wide operating voltage range of 9 to 33 VDC. Detector 55000-326 incorporates an additional circuit on the PCB that causes the alarm LED to flash periodically in the standby condition. Detector 55000-325 also incorporates the additional circuit to flash the LED, but also incorporates a reed switch which can be used to test the alarm circuit of the detector by placing a magnet in close proximity to the reed switch. Detector 55000-328 is a high sensitivity version of the 55000-325. File #S5022

XP95A MOUNTING BASES

45681-210 4" STANDARD MOUNTING BASE (A. A.)

The XP95A mounting base is of a similar design to the Series 60A mounting 45681-200, except that it has been designed specifically for use with Apollo analog addressable detectors. It also enables detectors to be fitted without any need for force. Particularly useful when fitted to suspended ceilings. To make it even easier the base has a one way only fit. All XP95A bases are lockable. By means of unique "EXPERT" card, the address information is held in the base while keeping the base free of electronic parts. The coded plastic card is inserted into the base so that it maintains the same address no matter how often a monitor is removed and replaced during installation and servicing. File #S5022

45681-242 4" LOW POWER RELAY MOUNTING BASE

The XP95A 4" low power relay mounting base is similar to the 45681-234 6" low profile mounting base, but also incorporates a mounting plate on the bottom of the base onto which is mounted a PCB which provides the relay contacts.

45681-250 6" E-Z FIT MOUNTING BASE

The XP95A 6" E-Z Fit mounting base is similar to the 45681-234 mounting base, but with the 6 in. adapter plate built into the unit.

55000-886 MULTISENSOR DETECTOR

The XP95A multisensor detector has both a photoelectric and heat sensor. The heat sensor is mounted in an exposed cage above the optical chamber. Stainless steel wiper contacts connect the monitor to the terminals in the mounting base. Inside the detector case is a printed circuit board which has the optical/thermal measuring system mounted on one side and the address capture, signal processing and communications electronics on the other. The heat sensor enhances the response of the photoelectric sensor by modifying the alarm point of the detector as the temperature increases. The multisensor detector is however unaffected by slow temperature variations, even if the ambient temperature reaches a high level. File #S5022

55000-266 BEAM DETECTOR

The XP95A beam detector consists of three parts: the transmitter, which projects a beam of infra-red light, the receiver, which registers the light and produces an electrical signal, and the interface, which processes the signal and generates alarm and fault signals as necessary. The transmitter and receiver are fitted to opposite walls of the protected area and any smoke entering the infra-red light beam will obscure the light and at a predetermined level of obscuration will cause an alarm to be generated. The detector incorporates drift compensation for signal drift, dirtying and other environmental conditions. When the compensation limit has been reached the detector will signal a fault condition. The beam detector is designed to protect large, open spaces such as museums, churches warehouses and factories. File #S5022

45681-211 ISOLATOR MOUNTING BASE

The XP95 isolator base is designed so that only XP95A isolators can be fitted. This ensured that XP95 monitors can not be fitted to isolator base in error. The isolator base is visually similar to standard XP95A bases, but has only three terminals and the earth connection. File #S5022

55000-750 ISOLATOR

Most XP95A systems are connected as closed loop systems that can be interrogated from either end so that all devices can remain in operation if an open circuit faults when wiring occurs. The isolators disconnect the shorted portion of the loop from the rest. When the short circuit is removed the isolators automatically restore power and data to the section. File #S7003.

45681-321 ISOLATING MOUNTING BASE

The isolating mounting base consists of a 45681-210 4" standard mounting base and additional mounting plate on to which is mounted a PCB, similar to the configuration of the 45681-242 4" low power relay mounting base. The PCB incorporates a similar circuit to the 55000-750 isolator and performs the same function as this isolator. Since an analogue addressable detector can be fitted to this base it therefore saves using a separate isolator/isolating base.

DISCOVERY HEAT AND SMOKE DETECTORS

58000-450 HEAT DETECTOR

The Discovery heat detector has a common profile with ionization and photoelectric smoke detectors, but has a low air flow resistance case made of self-extinguishing white polycarbonate. The device monitors temperature by using a single thermistor. Stainless steel wiper contacts connect the monitor to the terminals in the mounting base. Inside the detector case is a printed circuit board which has the thermistor mounted on the one side and the address capture, signal processing and communications electronics on the other. The Discovery heat detector can be set to any one of five modes corresponding to five temperature ratings as defined in UL 521. Mode 1 - 135°F fixed temperature; Mode 2 - 150°F fixed temperature; Mode 3 - 150°F fixed temperature and rate-of-rise; Mode 4 - 200°F fixed temperature and rate-of-rise; Mode 5 - 200°F fixed temperature. File #S5053

58000-550 IONIZATION SMOKE DETECTOR

The Discovery ionization smoke detector has a molded self-extinguishing white polycarbonate case with wind resistant smoke inlets. Stainless steel wiper contacts connect the detector to the terminals in the mounting base. Inside the detector case is a printed circuit board which has the ionization chamber system mounted on the one side and the address capture, signal processing and communications electronics on the other. The Discovery ionization smoke detector can be set to any one of five sensitivity modes. The Discovery ionization smoke detector incorporates drift compensation which compensates for changes in sensor output caused, for example, by dust in the chamber. When the compensation limit has been reached a signal is sent to the connected control panel which can then provide a suitable indication that the detector needs cleaning. File #S5022

58000-650 PHOTOELECTRIC SMOKE DETECTOR

The Discovery photoelectric smoke detector has a molded self-extinguishing white polycarbonate case with wind resistant smoke inlets. Stainless steel wiper contacts connect the detector to the terminals in the mounting base. Inside the detector case is a printed circuit board which has the optical measuring system mounted on the one side and the address capture, signal processing and communications electronics on the other. The Discovery photoelectric smoke detector can be set to any one of five sensitivity modes. The Discovery photoelectric smoke detector incorporates drift compensation which compensates for changes in sensor output caused, for example, by dust in the chamber. When the compensation limit has been reached a signal is sent to the connected control panel which can then provide a suitable indication that the detector needs cleaning. File #S5022

58000-750 MULTISENSOR DETECTOR

The Discovery multisensor detector has both a photoelectric and heat sensor. The heat sensor is mounted in an exposed cage above the optical chamber. Stainless steel wiper contacts connect the monitor to the terminals in the mounting base. Inside the detector case is a printed circuit board which has the optical/thermal measuring system mounted on one side and the address capture, signal processing and communications electronics on the other. The Discovery photoelectric smoke detector can be set to any one of five modes. In one of the modes the signaling process is only affected by the heat sensor. In a second mode modes the signaling process is only affected by the optical sensor. In the remaining three modes the heat sensor enhances the response of the photoelectric sensor, by varying degrees, by modifying the alarm point of the detector as the temperature increase. The multisensor detector is however unaffected by slow temperature variations, even if the ambient temperature reaches a high level. The Discovery multisensor detector incorporates drift compensation which compensates for changes in the optical sensor output caused, for example, by dust in the chamber. When the compensation limit has been reached a signal is sent to the connected control panel which can then provide a suitable indication that the detector needs cleaning. File #S5022

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992. The Bureau of Fire Prevention has no objections letter dated June 15, 2005, F.P. Index #0506018.

Terms and Conditions: That the above units be accepted on condition that:

1. All uses, configurations, arrangements and functions, application and installations shall comply with the provisions of New York City Buildings Code, specifically Subchapter 17, and Reference Standard 17-3. Further, the installation and spacing of detectors shall be in accordance with the manufacturer's recommendation, NFPA 72, and UL Standard.
2. The above products shall be used only with approved and compatible control panels and accessories.
3. Periodic maintenance and sensitivity tests where required shall be conducted in accordance with the regulations of Fire Department.
4. UL and manufacturer's maintenance procedures and limitations shall be complied with.

All shipments and deliveries of such equipment shall be provided with a metal tag suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance April 3, 2006
Examined By Donald J. Hoff