

APPROVAL REPORT

**SERIES 60A DETECTORS AND SERIES TP90
ADDRESSABLE SENSORS FOR USE WITH THORN
AUTOCALL TFX-500/800 CONTROLS**

Prepared For:

**Apollo Fire Detectors Limited
6 Solent Road
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**J.I. 0Y5A1.AY
Class 3230
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Appendix I

Apollo Fire Detectors Limited.

FIRE DETECTION, HEAT-ACTUATED

Combination Rate-of-Rise, Fixed-Temperature Detector. Series 60A, P/N 55000-151, factory set to operate at 160°F (71°C); P/N 55000-152, 210°F (99°C) and P/N 55000-153, 135°F (57°C). Operating voltage range of 16.0 to 34.0 Vdc, with the standby current of 30 to 45µA. Spacing guide: 30 by 30 ft (9 by 9 m) max. To be used with the following bases: P/N 45681-200 and P/N 45681-220 two wire and P/N 45681-227, for 2-and 4-wire installations with an alarm relay with two sets of contacts both rated 1 A at 30 Vdc.

The following 2-wire controls are compatible with the subject conventional detectors (S60A, P/N 55000-151, -152, and -153) and its two wire bases (S60A, P/N 45681-200, -220 and -227): Gamewell Flex 300, Faraday MPC-2000, Thorn Autocall Firequest 200, Firequest 100-24, TFX-500, TFX-800, MP400, AP400, Merlin MP400, Federal Signal FireLarm 2000, FireLarm 4000, FireLarm 6000 and FireLarm 8000.

FIRE DETECTION, SMOKE-ACTUATED

Photoelectric Type Smoke Detector. Series 60A, P/N 55000-350 and 351. Operating voltage range of 16.0 to 34.0 Vdc, with the standby current from 30 to 45µA. Suitable for indoor use only (unheated, but not refrigerated areas) with temperatures from -5°F to 140°F (-20.5°C to 60°C). To be used with the following bases: P/N 45681-200 and P/N 45681-220 two wire and P/N 45681-227, for 2-and 4-wire installations with an alarm relay with two sets of contacts both rated 1 A at 30 Vdc.

Ionization Type Smoke Detector. Series 60A, P/N 55000-250 and 251. Operating voltage range of 16.0 to 34.0 Vdc, with the standby current from 30 to 45 µA. Temperature range 32°F to 140°F (0°C to 60°C). To be used with the following bases: P/N 45681-200 and P/N 45681-220 two wire and P/N 45681-227, for 2-and 4-wire installations with an alarm relay with two sets of contacts both rated 1 A at 30 Vdc.

The following 2-wire controls are compatible with the subject conventional detectors (S60A, P/N 55000 -250 and -350) and its two wire bases (S60A, P/N 45681-200, -220 and -227): Gamewell Flex 300, Faraday MPC-2000, Thorn Autocall Firequest 200, Firequest 100-24, TFX-500, TFX-800, MP400, AP400, Merlin MP400, Federal Signal FireLarm 2000, FireLarm 4000, FireLarm 6000 and FireLarm 8000.

Electrical Signaling

Electrical protective signaling systems are configurations of components used to produce alarm signals indicative of fire, smoke, sprinkler waterflow or other emergency and to produce supervisory signals indicative of conditions needing attention with respect to protection equipment or watch service. System configurations are classified according to where and how the signals are received. The categories are commonly designated as local, municipal, remote station, proprietary and central station. Auxiliary systems are either local or proprietary systems interconnected with a municipal system.

This category presents the major system component categories and the integrated system configurations. The selection of components to form a hybrid system should be made only by those skilled in system design. Also, the suitability of any system application should be judged on the basis of the hazard(s) being protected.

Alarm Signal Initiating Devices

Alarm signals are initiated either automatically or manually. Automatic detectors respond to changes in characteristic phenomena associated with fire or other emergency conditions.

Fire Detection, Heat-Actuated

Heat sensitive devices may be either "spot" or "line" type and operate at a fixed temperature or on a rapid increase in temperature (rate-of-rise). Some detectors combine the fixed and rate sensitive principles.

The spacing guides listed are indicative of each detector's relative sensitivity and, in each case, the spacing guide is the maximum recommended separation between detectors for smooth-ceiling installations. For a given temperature rating, a fixed-temperature detector which has a 30 ft (9 m) listing and one which has a 15 ft (5 m) listing will both respond at approximately the same time to a geometrically growing fire if each is installed at its listed spacing. FM Approved rate-of-rise detectors all have 30 ft (9 m) listed spacings, the maximum separation recommended by FM Approvals.

Installation of heat detectors at less than maximum spacing is necessary: to achieve earlier response; to compensate for ceiling obstructions such as beams and joists; and to compensate for ceiling heights greater than 15 ft (5 m). Proper location and use of heat detectors involves consideration of ceiling construction, the location of partitions, the maximum normal room temperature, heat produced by the occupancy, and whether detector function is to warn occupants or to automatically actuate protection equipment. Refer to Standard 72-1993 of the National Fire Protection Association and design specifications published by jurisdictional authorities, as appropriate.

Combination Rate-of-Rise Fixed Temperature Detector...

Combination Rate-of-Rise, Fixed Temperature Detector. Series 60A. P/N 55000-151, factory set to operate at 160°F (71°C); P/N 55000-152, 210°F (99°C), P/N 55000-153, 135°F (57°C). Operating voltage range of 16 to 34 V dc, with the standby current of 30 to 45 µA. Spacing guide: 30 by 30 ft (9 by 9 m) max. To be used with the following bases: P/N 45681-200, P/N 45681-220, two wire; and P/N 45681-227, for two- and four-wire installations with an alarm relay with two sets of contacts both rated 1 A at 30 V dc.

The following two-wire controls are compatible with the subject conventional detectors (60A, P/N 55000-151, -152, -153) and its two-wire bases (60A, P/N 45681-200, -220, -227): Gamewell Flex 300, Faraday MPC-2000, Thorn Autocall Firequest 200, Firequest 100-24, TFX-500, TFX-800, MP400, AP400, Merlin MP400, Federal Signal FireLarm 2000, FireLarm 4000, FireLarm 6000 and FireLarm 8000.

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Listing Country:	United Kingdom
Certification Type:	FM Approved