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, emergency voice/alarm communication, emergency communication, 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.

Model APDL-Z1(M/PG) Alarm Point Distance Locating Controller

The model APDL-Z1(M/PG) Alarm Point Distance Locating controller is used as a service tool with FM Approved Thermocable (Flexible Elements) Ltd Linear Heat Detection cables. The APDL-Z1(M/PG) is designed to interface between an Approved fire alarm control panel or addressable module and a single length of Linear Heat Detection cable. The APDZL-Z1(M/PG) detection range of alarm point is from 300-10000 ft (100-3000 m). The controller software version is 2.0. The controller is suitable for indoor use and for a temperature range of 32° to 120°F (0° to 49°C), requires 24 V dc power, provides LCD display and a test switch for fault location and is equipped with alarm and trouble relay contacts for connection to the initiating device circuit of an FM Approved fire alarm control panel.

Company Name:	Thermocable FE Ltd
Company Address:	Pasture Lane, Clayton, West Yorkshire, Bradford BD14 6LU, United Kingdom
Company Website:	
New/Updated Product Listing:	No
Listing Country:	United Kingdom
Certification Type:	FM Approved