Electrical Signaling

Electrical protective signaling systems are configurations of components used to produce alarm signals indicative of fire, smoke, sprinkler workflow 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.

Automatic Releases for Extinguishing Systems and Other Fire Protection Equipment

The function of a release system is to cause, mechanically or electrically, a desired operation to be performed in case of fire. The releases listed are actuated automatically by FM Approved fire detection devices. If electrically operated for extinguishing system release, provision for at least 24 hours of standby power is required and means for manual operation should also be provided.

FM Approved releases are also used to operate fire protection equipment such as fire doors, ventilation and blower systems, hatches, dip tank covers and drain valves, motor stops, dampers and valves controlling hazardous liquids.

See AUTOMATIC RELEASES FOR PREACTION AND DELUGE SPRINKLER SYSTEMS.

LIFECO

LIFECO Fire Alarm Control Panel and Release is a three zone conventional control panel. (See descriptions under LOCAL PROTECTIVE SIGNALING). The releasing devices are to be connected to the following panel Class B releasing terminals: “Mode Select”, “Man. Release”, “Abort”, “Rel Press Switch”, “Exting” and “Low P Switch”. Each releasing output is supervised via an end of line resistor. The solenoid release circuit (“Exting” terminal) is rated 1 Amp. The Elite Abort Switch (model LF1823-10) is required for the agent release operation: it connects to the “Abort” terminals of the release. A Manual Extinguishant Disablement Switch (model LF1832-10) may be connected between panel solenoid outputs and releasing solenoid along with the 0V & FLT connections of the panel.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Lichfield Fire &amp; Safety Equipment Co Ltd</th>
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</thead>
<tbody>
<tr>
<td>Company Address</td>
<td>Unit 8 Calibre Industrial Park, Laches Close, Four Ashes, Wolverhampton, Staffordshire WV10 7DZ</td>
</tr>
<tr>
<td>Company Website</td>
<td><a href="http://www.lifeco-uk.com">http://www.lifeco-uk.com</a></td>
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<td>New/Updated Product Listing</td>
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<td>Certification Type</td>
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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.

Local Protective Signaling

Local systems produce alarm and/or supervisory signals within the protected property, which may not be constantly attended. The systems are electrically supervised, include a secondary power supply having sufficient capacity to operate the system for 24 hours under maximum normal load and often are primarily for the purpose of providing occupant evacuation signals. Some local systems also provide for signaling to a constantly attended remote location.

The heart of a signaling system consists of a control unit to which are connected the initiating and signal indicating circuits. The control unit is usually in a separate enclosure, provides power to its external circuits, and often is of modular design to enable flexibility in obtaining multiple functions. In a coded signaling system, transmitters may be either separate from or integral to a control; they transmit to the control or from a control to remote receiving equipment. The equipment listed below, in conjunction with peripheral devices, may be used to form a complete system or a portion of a multizone system.

LIFECO

LIFECO Fire Alarm Control Panel and Release is a three zone conventional control panel. The variants include the red 115 Vac panel (model LF1810-12), the red 230 Vac panel (model LF1810-13). Control uses firmware revision XTUS_17.HEX. The main board contains: power supply, rated 3 Amps and provides the charge for two, in series, 12 Volt, 7 AH batteries; three Initiating Device Circuits (each can be programmed Style C or Style B) for detector input or as manual release; three Style Y Notification Appliance Circuits (500 mA output) and one Auxiliary Power output (rated 500 mA). There are the following six relay outputs, each relay contacts rated at 30 Vdc and 1Amp: Fire Relay, Local Fire Relay, Trouble relay, First Stage Relay, Second Stage Relay and Extract Relay. The following ancillary devices can be used with the LIFECO panel: Elite Si (model LF1821-13) Releasing System Status Indicator and Ancillary PCB (model LF1821-44). (See also AUTOMATIC RELEASES FOR EXTINGUISHING SYSTEMS AND OTHER FIRE PROTECTION).