

Other System Features

The range of control equipment is micro-processor controlled and is configured to handle a large volume of information. Features of a typical control panel include:

Inputs

- * Low speed signal
- * Cylinder pressure monitoring
- * Actuation monitoring
- * Detector fault monitoring

Outputs

- * Audible and visual alarms
- * Actuation signal

Applications Include

High Speed Locomotives:	* ETR 500	* Eurostar	* Amtrak Flyer
Freight Locomotives:	* Class 92/57/59/60		
Metro Vehicles :	* Turbostar (CL 168's & 170's)	* Coradia (CL 175/180)	* Voyager (CL 220/221)
	* Singapore Metro	* Docklands Light Rail	

Detection Equipment



Unit Firewire

Unit Firewire

Is a linear fire and overheat sensor which consists of a flexible sensing element with a stainless steel outer sheath. Properties of resistance and capacitance give the sensor its detection capabilities. The Firewire can withstand very high temperatures, (up to 1000°C) and will reset after being exposed to fire or overheat. Unit Firewire's construction provides immunity to damage from the harsh trackside environment.



Alarmline Digital

Linear Heat Detection

Utilises a length of cable or metallic element which can sense an increase in heat. The cable is normally mounted in a loop around an engine or other hazardous area.



Alarmline Analogue

Pneumatic Linear Detection

The Kidde Aerospace pneumatic detector is a gas-filled device with a sensing tube operating two pressure switches. Its two sensing functions respond to an overall average temperature threshold or to a highly localised discrete temperature caused by flames or hot gases.

Alarmline Digital

This is a linear heat sensor cable which operates when the insulation between its two conductors melts at a pre-determined temperature, creating a short-circuit which generates an alarm. The cable is constructed to allow the control unit to distinguish fire from false alarm caused by crushing or breaking the cable.



Point Heat Detector

Alarmline Analogue

Is a linear heat sensor cable. As the cable is exposed to heat, the associated control unit detects a change in the cable's resistance, and will indicate a fire alarm at a pre-determined temperature. Alarmline is recoverable in that it will normally revert to its standby state once the heat source has been removed, provided the cable is not severely burned.



Point Smoke Detector

Point Heat Detectors

Thermostatic heat detection switches are available in a wide range of settings. These are usually positioned in or adjacent to hazardous areas in a locomotive or passenger coach.

Point Smoke Detectors

Optical or Ionisation smoke detectors are used in coaches or passenger vehicles giving early warning of smoke from a wide range of burning materials.

Extinguisher Equipment

Kidde Graviner cylinders are fitted with fast acting high rate discharge valves that have been proved reliable through many years service on the world's railways.

A variety of actuation options are available. Systems can be operated automatically by the control unit on detection of fire, or require manual operation (fired electrically from the driver's cab or mechanically from outside the vehicle).

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