

# Kidde Graviner

## Rail Protection

### Special Hazard Systems



Rack Mounted Control Panel

## Introduction

Kidde Graviner, as part of the Kidde plc group is a world wide organisation. In January 2002 Kidde Graviner took over from its sister company Kidde Fire Protection (KFP) their Rail Protection Special Hazard Systems. The Kidde group has pioneered and specialised in fire detection and suppression equipment for rail applications for over 45 years.

The equipment is fitted to the majority of British locomotives, diesel multiple units and special purpose vehicles and is in service in many other parts of the world.

## The Hazard

Modern Locomotives and Diesel Multiple Units have high-powered turbocharged engines, transmission units and sophisticated electrical and electronic equipment, together with ancillary systems such as air conditioning units and generator sets.

Although fires are unusual, they do occur, and these complex and expensive pieces of hardware require systems which rapidly detect a fire and can initiate suppression quickly, thus avoiding major capital loss, disruption of service and risk to public safety.

Normally the risks encountered are a combination of fuel or oil leakages, overheating engines, traction motors, transformers, switchgear, transmissions and braking systems. Accumulations of dirt and oils on the underframe area are another possible hazard.

## The Solution

Kidde Graviner offers custom-made systems that will meet the needs of new design rail vehicles and fire system renewal programmes. The system includes the following:

- \* An approved extinguishing agent
- \* Off-the-shelf or custom-built control equipment (supplied under Railtrack Group, ISO 9001, MIL QA and IEC standards)
- \* A choice from a range of fire detectors

## Control Equipment

Control equipment must be reliable in the tough operating environment which the equipment on rail vehicles must endure (such as vibration, shock, EMC and temperature). All equipment supplied is designed and tested to the rigorous specifications set by British and other international rail authorities and have been developed from many years of operational experience.

From single detector and control unit systems to sophisticated, micro-processor controlled multizone extinguishing systems, Kidde Graviner offers a range of control panels which have been proved over many years of service in the demanding environment of the rail industry.

## Typical Rail Fire Protection System

The fire system consists of a detection system, an extinguishing system and a control unit.

