overview & technical specifications

Features:

- Fully self contained automatic fire detection and extinguishing system.
- 'Out of the box fire protection solution' requiring no fire engineering design; quick and easy to install and simple to operate.
- 19" rack mounted chassis.
- 2U (88mm) height.
- Redetec systems are designed around EN54-2 C&IE design standards
- LPCB approved Point type or HSSD high sensitivity smoke detection options; both detection types aspirated.
- Choice of extinguishing agent – FM200 or Novec1230
- Approved and tested bottle & valve sets, specially designed & performance tested discharge nozzles, proven fire tested performance.
- Depth 520mm, suitable for 600mm deep cabinets, supplied with options for 800/1000mm deep cabinets.

General Description:

Representing the future in cabinet protection; Redetec is a self contained automatic fire extinguishing system for rack enclosures and equipment cabinets, which can be used in all industry sectors to protect valuable assets and critical systems and processes.

Designed to be housed in 19" racking systems for the protection of electronic equipment, Redetec is fully capable of detecting a fire using a range of proven and approved fire detection sensors. If a fire condition is detected, Redetec can automatically respond to the hazard by controlling a planned release of proven fire extinguishing gas into the enclosure; all within 10 seconds of the detection of a fire condition. Redetec also carries on-board processing and communication functions to pass on information to building management and security systems. Signals can be sent to other equipment via Form 'C' VFCC to inform of the units status and to key personnel for immediate investigation.

Redetec is also suitable for non-19" applications through its unique mounting tray layout, which can be accommodated within top and side-mounted boxes, as well as being installed to side walls within non-19" equipment cabinets.

Where standard rack enclosures are used, Redetec is sited at the top of each rack. By sitting the 19" redetec at the top of each equipment rack the individual piece of equipment is being protected right at the heart of the potential risk, therefore more accurately pinpointing the fire at a very early stage and eliminating the need to discharge large costly amounts of fire suppressant.

Redetec is designed around existing fire detection and control standards and also within the existing performance requirements for extinguishing systems. This is crucial in ensuring that all parts, bottles, valves, smoke detectors, etc; are pre-approved.

Similarly, Redetec undergoes continual assessment testing under different fire and hazard conditions; again to ensure that each application is fully understood and Redetec is able to detect a fire hazard and take the appropriate action to annunciate and contain the condition.

Protect your business with Redetec...
putting fire protection where it counts.
19" rack-mount fire protection solutions

t: 0161 874 1942 - f: 0161 872 3282 – email: sales@redetec.co.uk – web: www.redetec.co.uk
registered office: unit 1, fifth street, the village, trafford park, manchester, m17 1jx –reg no: 06399133

Technical Specification - Redetec

Input Voltage	110/230VAC 50/60Hz via single fused IEC socket
Output Voltage	As input voltage via 1 x 8A IEC female socket can be used to power and control a rack fan tray
Output Switching	1st stage fire alarm contacts form 'C' volt free contacts 2nd stage alarm contacts form 'C' volt free contacts Common Fault form 'C' volt free contacts All output contact ratings - 8A @ 24V dc 24v dc output fused @ 500mA Rack power shutdown output. All wired outputs use Wiedmuller plug-in terminals.
Output data port	Extinguishant delay time 0,4,32,64,128 seconds
Remote Output	Extinguishant output
Remote Inputs	Extinguishant Release Hold off Release
Back up power	2 x 1.2 AH SLAB - 24hrs for standard Redetec unit
Operating Temperature	0 to +50^{0}C
Operating Humidity	0 to 95% (non-condensing)
Power Supply Rating	750mA max @ 28v dc (350mA cont)
Dimensions	19" (485mm) width 2U (88mm) height 520mm deep* (incl nozzles: for use in 600mm cabs. Additional parts required for deeper cabinets 800/1000mm)
Extinguishant Types	FM200 (atmospheric lifetime is 36.5 years) Novec 1230 (atmospheric lifetime is 0.014 years) Pyrogen (atmospheric lifetime is 0 years)
Fire detector types	Point type (aspirated) - 2 x Conventional Photoelectric Smoke Detector High sensitivity (aspirated) - HSSD
Shipping dimensions	190mm x 570mm x 590mm
Shipping weight	Min 6Kg, max weight 13Kg, depending on Redetec type.

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Technical Specification – Conventional Photoelectric Smoke Detector

Disposable Chamber	Yes
Operating Voltage	9.5 - 30Vd.c.
Quiescent Current (typ)	35µA
Maximum Current Alarm	40mA
Remote Indicator Drive	20mA (max) / 9.5-14mA (typ)
Operating Temperature Range	-10°C to + 50°C
Storage Temperature Range	-30°C to + 60°C
Maximum Humidity	95%RH - Non Condensing (at 40°C)
Ingress Protection Rating	IP42
Colour / Case Material	Ivory White / ABS
Weight (g)	95
Diameter (mm)	100
Height (mm)	38
Base Heights (mm)	8 13
Base Fixing Centres (mm)	48 ~ 74
Approvals	EN54:2000 Part 7 LPCB VdS (G204043)

Technical Specification – FM200

Environmental	Zero Ozone Depleting Potential 36.5 Atmospheric Lifetime (yrs).

Classifications

Suitable for fire:	Class A – Combustible Solids Class B – Flammable Liquids Class C – Flammable Gases Class E – Electrically Energised Fire Class F – Fats and Cooking Oils
Mechanism suppression	Physical
Chemical Name	Heptaflouropropane
Firing Mechanism	Metron Electric Actuator
Low Pressure Switch	12 bar falling

Technical Specification – Novec™1230

Environmental	Zero Ozone Depleting Potential 0.014 Atmospheric Lifetime (yrs).

Classifications

Suitable for fire:	Class A – Combustible Solids Class B – Flammable Liquids Class C – Flammable Gases Class E – Electrically Energised Fire Class F – Fats and Cooking Oils
Mechanism suppression	Physical
Chemical Name	1,1,1,2,2,4,5,5,5-Nonaflouro-4-(triflouromethyl)-3-pentanone
Firing Mechanism	Metron Electric Actuator
Low Pressure Switch	12 bar falling

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Industry Sectors suitable for Redetec applications

Telecommunications Cabinets
--
Banking Computer Rooms
--
CCTV Equipment Racks
--
Cabinet Manufacturers
--
IT Networks
--
Website Servers and Hosting Equipment
--
Public Address System Racks
--
Gas Pumping Stations
--
Electrical Manufacturing Control Cabinets
--
Oil & Gas Pipe Line Pumping Stations
--
Oil/Gas Exploration & Production Installations
--
Chemical Production Installation Control Equipment

and many more….