



DATA CENTRES

Challenge

Protecting; business critical information, business continuity and people.

Solution

SAPPHIRE 25 or 42 bar systems.

Application

Protecting enclosed spaces with rapid detection and activation of the SAPPHIRE system to protect business and human life with minimal environmental impact.

Effective fire suppression for data centres

The potential for fires in data centres is great. A robust and reliable fire protection solution is necessary to protect expensive equipment and safeguard highly valuable data. Electronic systems cannot be shut down in an emergency and clean-up of agents is not an option in a high risk environment such as a data centre. Effective fire protection can also prevent companies from incurring huge losses through downtime. The use of water-based solutions could lead to irreparable damage to servers and the loss of irretrievable data, meaning that it could take weeks or even months for the facility to return to full operational capacity. A fire suppression system that both extinguishes a fire safely and quickly, while at the same time protecting lives, data and equipment offers the best solution.

The SAPPHIRE system is an environmentally friendly clean agent system, with zero ozone depletion (ODP) and negligible global warming potential (GWP). It uses 3M™ Novec™ 1230 Fire Protection Fluid, a clear, odourless fluid that vaporises upon discharge and absorbs heat to suppress the fire rapidly. This results in less damage to electronic equipment, facilitating a much shorter recovery time, and therefore reduced downtime. Safe for use in occupied areas, the SAPPHIRE system protects occupants, ensures business continuity and delivers effective asset protection in data centres.

The 42 bar SAPPHIRE system offers greater flexibility in layout as the higher pressure systems allows for containers to be placed further from the hazard area and with the additional option of selector valves to protect multiple areas from one bank of containers. Further benefits in using a higher pressure system are the opportunity to reduce pipe size and combined this with the ability to design a systems around selector valves, space that is often at a premium can be used for more valuable purposes.

SAPPHIRE 42 bar systems are LPCB and VdS approved and carry several Marine approvals. 25 bar systems carry all major approvals including UL, FM, LPCB, VdS, CNPP as well as Marine approvals. The systems can be designed to meet the requirements of EN 15004, ISO 14520 and NFPA 2001 and components are approved according to EN 12094 to ensure the highest quality fire suppression system.