PRODUCT DATA SHEET

Koorsen FIRE & SECURITY

AMEREX COBRA™

Commercial Kitchen Fire Suppression System

FEATURES:

- Uniform stainless steel appearance
- Proprietary push-to-lock fittings & maximum flexibility
- Low pH agent – Non-corrosive to appliances
- No cooking interference - 60" maximum nozzle height
- Fully supervised electronic detection and actuation
- UL Listed – Meets UL 300 Requirements

APPLICATION:

The Amerex COBRA Restaurant Fire Suppression System was developed primarily for kitchens that reconfigure cooking appliances frequently to accommodate the change in menu or cooks. It is designed to protect cooking equipment and ventilation equipment, including:

Ventilation Equipment

- Hoods
- Ducts
- Pollution Control Units
- Plenums
- Filters

Cooking Equipment

- Fryers
- Griddles
- Upright Broiler
- Range Tops
- Salamanders
- Chain-type Broiler
- Woks
- Electric-radiant Broiler
- Lava Rock Char-Broiler
- Gas-radiant Broiler

SYSTEM DESCRIPTION:

The Amerex COBRA Restaurant Fire Suppression System is a unique pre-engineered system designed to utilize electronic detection and actuation interfaced with the STRIKE Electronic Control System (ECS). The COBRA combines Zone of Protection and Application Specific, two proven protection schemes. The system's agent distributing network eliminates unneeded assembly steps with Push-to-Lock fittings and cut-to-length stainless steel tubing. The system operates either automatically if actuated by a detector or manually if actuated by a manual pull station.

COMPONENT DESCRIPTION:

Wet Chemical Agent

The fire-fighting agent found in the COBRA system is a proven potassium acetate based solution used in existing Amerex Kitchen Systems and K Class extinguishers. It will not freeze or crystallize under harsh conditions. In addition, the wet agent is non-corrosive to kitchen appliances. Less than 16 liters (4.1 gallons) of agent is used to supply 12 flow points of the distribution network.

Agent Cylinder 410

The agent tank is a lightweight mild-steel cylinder that comes in one size, 4.1 gallons. The tank has a working pressure of 110 psi (7.6 bar). The agent storage cylinders must not be installed in environments below 32°F or above 130°F (0°C to 54°C). Up to 6 tanks can be used per actuation network, allowing up to 72 flow points. When coupled with the STRIKE Electronic Control System, two actuation networks can be operated, totaling up to 12 agent tanks and 144 flow points.

Propellant Gas Cartridge

When activated, the propellant gas cartridge discharges nitrogen gas pressure to the agent cylinder, forcing agent through the distribution network. The cartridge is charged with nitrogen gas to 2500 psi (172 bar) and manufactured with a pressure gauge for an accurate pressure reading that can be viewed at any time. In addition, a pressure switch may be installed to monitor the pressure of the nitrogen cartridge. The switch will send a signal to the STRIKE Electronic Control System if the pressure drops below the working pressure.

Discharge Nozzles

The COBRA system offers five nozzles to cover all hazards, including a nozzle specific to COBRA. The Zone of Protection nozzles must be mounted 44-60" high and 16" apart. Each nozzle comes with metal blow-off caps, designed to prevent grease build-up in the nozzle orifices.

Agent Distribution Network

The distribution network is made up of stainless steel tubing. The outer diameter of the pipe is 5/8" with a wall thickness of .032". The stainless steel pieces are cut to dimension and inserted into the Push-to-Lock fittings.

Push-to-Lock Fittings

The Push-to-Lock fittings are an exclusive Amerex product group that provides quick and accurate installs. The liquid-tight fittings can be easily disconnected at any time with the appropriate removal tool. The removable and reusable fittings allow the COBRA system to be adaptable to any kitchen and appliance reconfiguration.

DETECTION NETWORK:

The COBRA system offers two supervised detection options:

1. Electronic detection is offered by joining linear heat detection cables, 356°F (185°C), and or spot detectors, 350°F and 485°F (177°C and 252°C). All of the electronic components in the system are connected using plug and play connectors. The detection cables and spot detectors work in tandem with the STRIKE Electronic Control System for stand-alone 24/7/365 protection.

2. Pneumatic detection is provided with the Pneumatic Release Module (PRM), made up of rugged mechanical components and a linear pneumatic detection interface. The detection tubing is rated to a burst temperature of 435°F (224°C) and a burst pressure of 70 psi (4.8 bar).

Pull Station Assembly

The manual pull station may be either surface or recess mounted. The cover is large enough to envelop the sheetrock access hole for a standard 4" octagonal box. The pull station is to be offered in an electric or mechanical version operated by the STRIKE or PRM.

Single & double tank enclosures

Koorsen® FIRE & SECURITY

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