Sustainable By Design

The CaptiveAire Pollution Control Unit, PCU Series, is designed specifically for the removal of grease particles and abatement of smoke from the air stream of commercial kitchen exhaust systems. The unit, if ordered with the optional odor control section, will reduce odors from the air stream. The PCU is designed for use with a CaptiveAire high efficiency self-cleaning or baffle ventilator but may be used with other high efficiency exhaust hoods.

Features
- Constructed specifically to meet kitchen exhaust duct standards
- Optional Odor Removal Module
- Suitable for indoor or outdoor installation
- Unit may be shipped in one piece or in sections to facilitate entry and installation
- Optional Pre Filter Section
- Optional exhaust fan
- Optional Advanced Filter Monitoring System
- Optional CORE Protection Fire System

Benefits
- Pre-engineered for the most efficient and cost-effective systems
- Listed by ETL Testing Laboratories, assuring acceptance by local building officials
- Two year parts warranty
Fan Features & Benefits

- TEFC, Class H insulation, washdown duty motors
- Heavy duty construction, durable and weather resistant
- Non-overloading backward inclined wheels
- Fully Adjustable motor mounting base
- Quick release latches allow for easy access to motor compartment
- Variable pitch motor pulley allows for field adjustment and system balancing
- High efficiency combined with low tip speeds results in quiet operation
- Standard emergency disconnect switch

Fan Options

- Opposite Side Controls
- Roof Equipment Rails
- Side Discharge Outdoor Screen

Advanced Filter Monitoring System

The Pollution Control Unit (PCU) with Advanced Filter Monitoring option offers an automated assessment of the unit to ensure proper operation.

Advanced Filter Monitoring Benefits

- **Sustainability** – Sustainability - Extends life of various filters, addresses specific filters which need replacement based on monitoring
- **Ease of Installation and Startup** – automatic calibration of the system via HMI
- **Maintenance** – Provides advanced notice, pinpoints specific faults to address
- **Reliability** – Ensures proper operation of the PCU

PCU - Fire Suppression Systems

The CORE Protection Fire System is an automatic, pre-engineered fire suppression system. The CORE protection System is designed to provide primary coverage for Pollution control equipment including ducts and filters.
**Application**

The system is ideally suited for use in restaurants, hospitals, nursing homes, hotels, schools, airports, and other similar facilities. The PCU CORE control panel is limited to interior applications only. The system must be designed and installed within the guidelines of the Listed Design, Installation, Recharge, and Maintenance Manual.

**Features**

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<td>Fire Suppression sprays until risk of fire is eliminated</td>
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**Component Descriptions**

Overview of all the pieces and parts that make up the CORE Fire Protection System.

**CORE Circuit Board**

The CORE Fire System printed circuit board is a microprocessor based control that provides all the necessary monitoring, timing and supervision functions required for the reliable operation of the CORE Protection Fire System. If a fault is detected anywhere in the CORE system, the audible alarm will periodically sound and the “Fire System Activated” light will flash a fault code to indicate the specific fault detected.

**Electric System with Battery Backup**

The detection and pull station for CORE comprise an electric circuit that is connected to a battery backup system. In the event of a power outage, the power to all gas and electric appliances must be disrupted through the use of electric gas valves or shunt trip breakers. The battery powers the detection and pull station circuits, as well as monitoring those devices.

**Supervised Loop**

The supervised loop incorporates both redundancy and fault detection. It is the means by which fire sensors and pull stations are connected to the CORE system.

**CORE Control Cabinet**

The CORE Control Cabinet contains most of the necessary components for the fire system to function. The control cabinet holds the manifold, surfactant tank and pump, CORE control board, power supply and battery backup.