

CORE Protection Fire System for Pollution Control Units Specification

The system is capable of automatic detection and actuation and/or remote manual actuation. The detection portion of the fire suppression system allows for automatic detection by means of an electric thermal detector located in the Pollution Control Unit's discharge and intake openings. The optional FSF103 Pull station is provided to allow for manual activation of the fire system. With the electric fire detection, a battery backup system is provided. The battery powers the automatic detection and pull station circuits, as well as monitoring those devices.

The basic system consists of a wall mount package consisting of a supervised manifold, microcontroller based supervision and activation system, and surfactant injection system. The Pollution Control Unit is pre-piped with 1.5 GPM nozzles to protect the filters. Quantity of nozzles varies based upon the size of the Pollution Control Unit. The manifold package must be installed indoors with properly sized piping connecting to the Pollution Control unit and to the building fire suppression system. A drain must be supplied to ensure proper package testing.

A system owner's guide is available containing basic information pertaining to system operation and maintenance. A detailed technical manual is also available including system description, design, installation, recharge, and maintenance procedures, plus additional equipment installation and resetting instructions. The system is installed and serviced by authorized distributors that are trained by the manufacturer.

Pollution Control Unit Protection

The nozzles, located inside the Pollution Control Unit, consume 1.5 GPM at 30 PSI. All exterior piping and fittings will be manufactured from stainless steel to prevent corrosion. The nozzles will be manufactured from stainless steel with a tethered stainless steel cap installed. Each module of the Pollution Control Unit must be connected to the remote manifold, located in the conditioned space.

Remote Mounted Controls

The remote mounted controls contain the supervision board, manifold, and surfactant injection. The supervision board controls monitors the fire detection stats, solenoid valves, surfactant pump, surfactant level, and if they are installed, additional Core Protection systems. The manifold contains three valves, one normally closed valve to control the discharge of the fire system, one normally open valve to control the drain and test functions, and one normally open valve to discharge to the Pollution Control Unit. The extinguishing agent, SC-5 surfactant, is injected into the manifold inside the control package.

CORE Protection Fire System Timer

The timer is built into the electrical control package is energized when the fire system is activated. The fire system is activated either by the Firestat in the duct or a remote pull station. The timer holds the fire system duct and plenum protection on for a factory setting of 30 minutes.

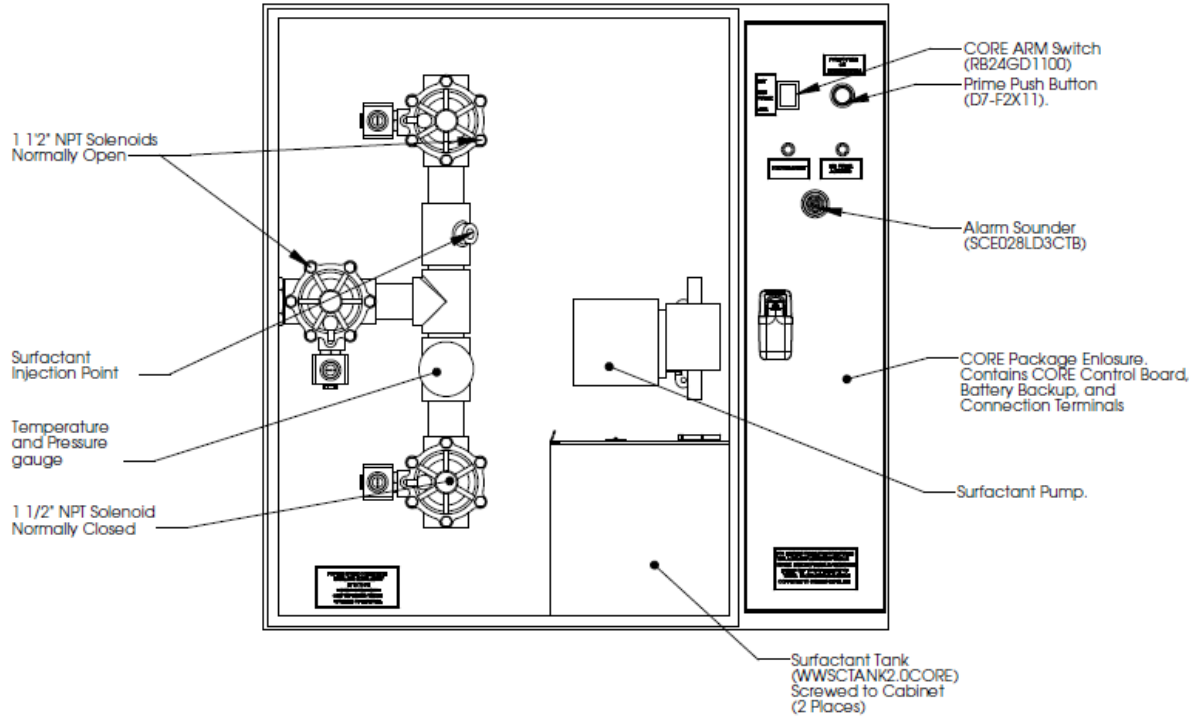
CORE Protection Firestat

The Fenwal Firestat is a device installed in the Pollution Control Unit's intake and discharge that measures temperature. The standard temperature setting is 360°F, but other temperatures are available. If a temperature higher than the set point is sensed, the Firestat contacts will close and energize the fire system.

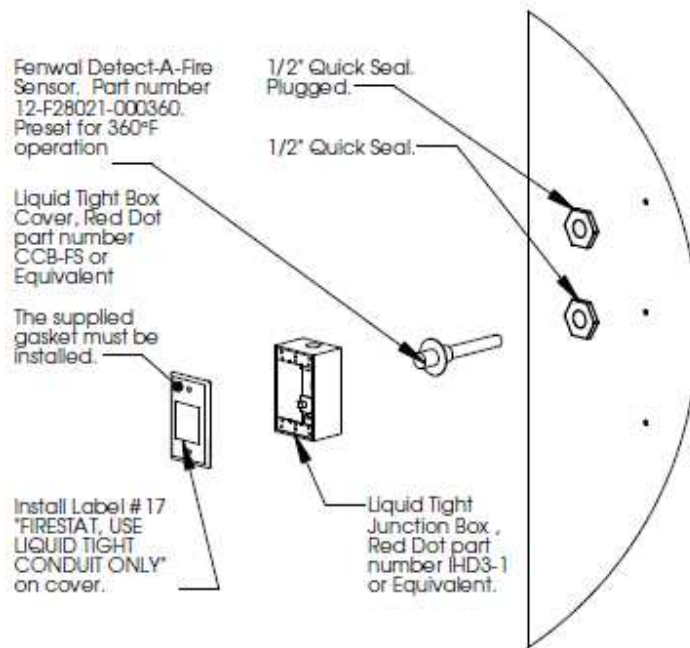
CORE Protection Fire System Controls

The control wiring for the CORE Protection system will be 24 Vdc and will be monitored by the microcontroller based control board. The control board supervises the Fenwal Firestat sensor loop, solenoid valves, optional pull stations, and communications with additional CORE Protection packages.

Typical Pollution Control Unit CORE Manifold



CORE Firestat



CORE Surfactant Tank

