

PERTRONIC INDUSTRIES LTD

DATASHEET

F220 Fan Control System

FCSU, FCSRU, FCRESETU, DCSWU, DCSWUF



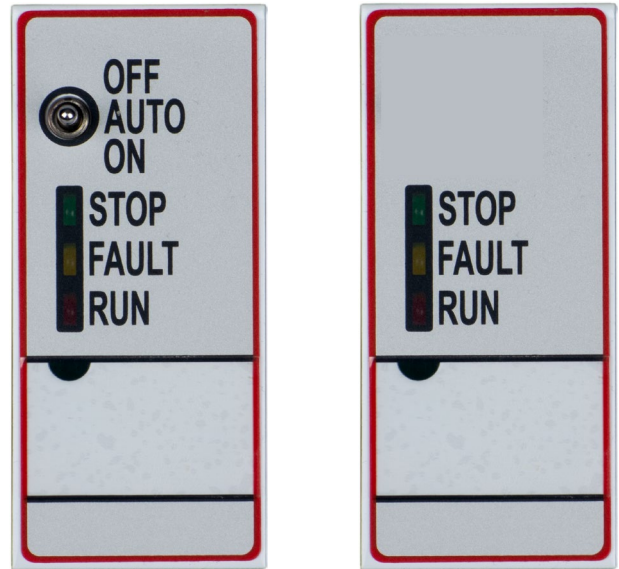
Overview

The Pertronic F220 Fan Control System is used with the Pertronic F220 fire panel to monitor and control air handling equipment for AS 1670.1-compliant smoke control or air handling systems. The system automatically controls fans, dampers, louvres, and other air handling devices based on the state of detectors, controls and mechanical building services.

The F220 Fan Control System consists of configurable Fan Control Block software in the fire panel, together with a range of fan control units. These components control and monitor air handling devices through addressable input/output modules such as the M500DMR, interfaced with the relevant mechanical services switchboard(s).

The Fan Control Block software is well-proven on the largest and most complex projects. The software implements control and timing features required under AS 1670.1:2018. Each individual fan control block may be configured to satisfy the specific requirements of the associated air handling device.

Air handling and smoke control systems built with the F220 Fan Control System can be monitored from connected Pertronic F220® fire panels or Pertronic FireMap® workstations.

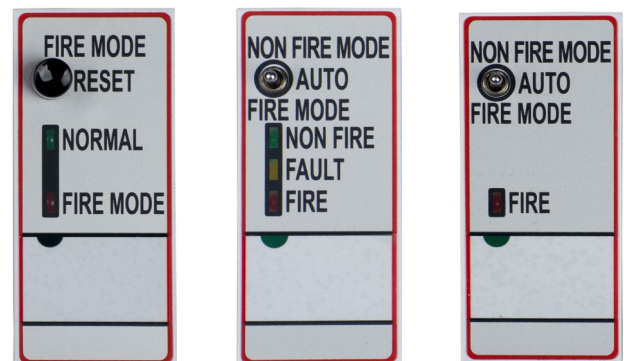


Above Left: The Pertronic FCSU Fan Control Switch Unit features “Stop”, “Fault” and “Run” indicators and a three-position toggle switch.

Above Right: The Pertronic FCSRU Fan Control Switch Repeater Unit has the same indicators as the FCSU, without the toggle switch

Features

- » The system controls fans, dampers, and other air handling equipment via addressable input / output modules
- » Configurable for Clean Air or Smoke Exhaust and Pressurisation operation
- » Configurable for Cascade or Non-Cascade operation
- » Multiple control option allows several fans to be controlled from a single F220 Fan Control Unit
- » Fan Control Block software in the Pertronic F220 fire panel implements timing and control functions
- » Compatible with the Pertronic F220 fire panel and the Pertronic Net2 Network
- » One “3U” control plate on a rack-style F220 fire panel cabinet accommodates up to ten F220 fan or damper control units
- » F220 fan and damper control units may be factory-fitted to F220 cabinet styles
- » F220 fan and damper control units may be installed in custom-built cabinets
- » Each fan control unit has a window for a slide-in label
- » F220 fire panel history logs store a detailed record of fan control system events



Left: The FCRESETU Fan Control Reset Unit features “Normal” and “Fire Mode” indicators and a press-button rest switch

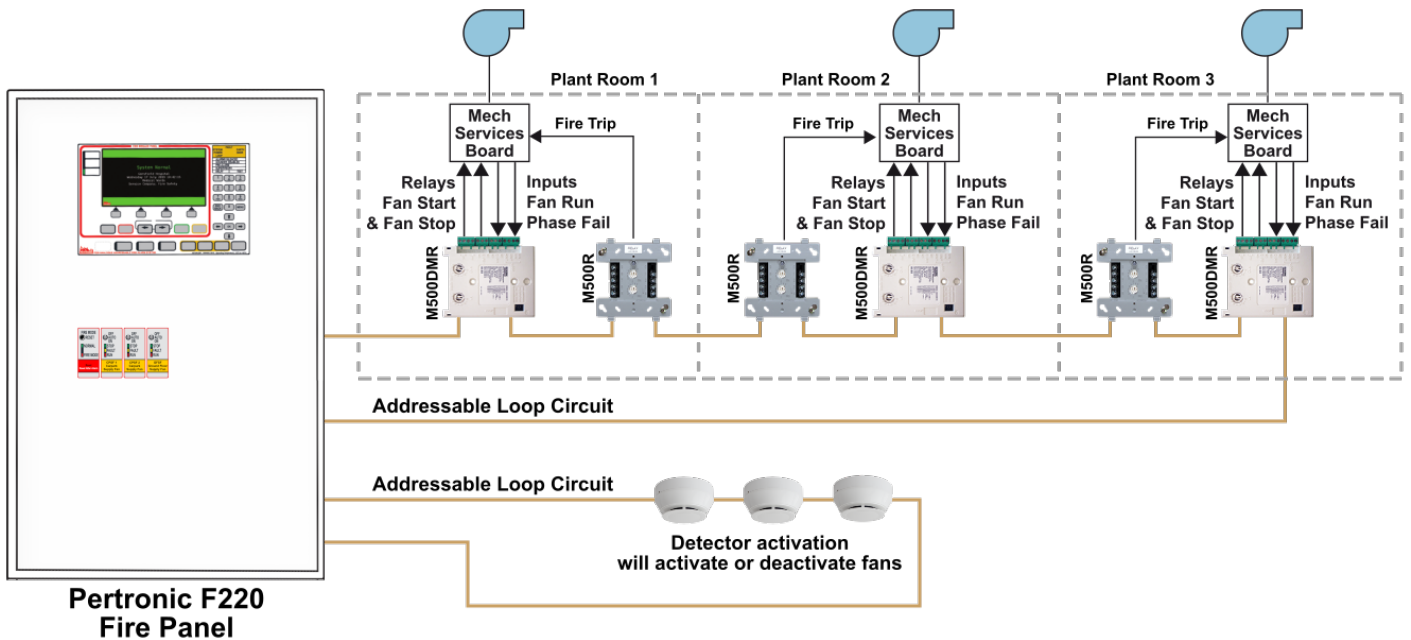
Centre: The DCSWU Damper Control Switch Unit has “Normal”, “Fault”, and “Fire Mode” indicators and a three-position toggle switch

Right: The DCSWUF Damper Control Switch Unit features a “Fire” indicator and a three-position toggle switch

Specification

Operating Voltage		15 to 32 V dc
Average Standby Current		150 µA (note 2)
Current Draw	Fan Control Switch Unit	10 mA (One LED on)
	Fan Control Reset Unit	7 mA
Dimensions (Typical)		35 mm W x 85 mm H x 60 mm D
Operating Temperature		-10 °C to 50 °C
Humidity		10% to 93% RH non-condensing

Typical System Arrangement



Ordering Information

Product Code	Description
FCSU	Fan Control Switch Unit (AS1670.1 2018)
FCSRU	Fan Control Switch Repeater Unit (AS1670.1 2018)
FCRESETU	Fan Control Reset Unit (AS1670.1 2018)
DCSWU	Damper Control Switch Unit with NF, FLT, FIR Indicators (AS1670.1 2018)
DCSWUF	Damper Control Switch Unit with Fire only indicator (AS1670.1 2018)

Notes:

- Pertronic F220 fan control units do not need to be wired to the same loop as their associated input / output modules.
- Pertronic F220 fan control units may be used as spare part replacements for Pertronic F120 fan control units in existing Pertronic F220 and F120A fire alarm systems.

This information must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements.

Unless explicitly stated otherwise, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.

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