PFC-8500
ANALOG ADDRESSABLE FIRE ALARM CONTROL PANEL

S735 7165-0328:0196

Product includes a 5 year warranty

Features

Max No. of Addressable Devices	508 addresses
AC Input Rated Voltage	120/230 VAC
AC input voltage frequency	50 / 60 HZ
Auxiliary Power ratings	0.5 A at 24VDC (20.4 to 26.4 VDC)
Dry contact output ratings	2 A at 30 VDC (resistive)
24 VDC output wiring style	NFPA Style Y or Z
24 VDC maximum output current	1.5 A per output×4 outputs 3.0 A per output×2 outputs 3.0 A per output×1, 1.5 A per output×2 outputs
Addressable Loop Wiring Style	NFPA Style 4, 6 or 7
Max No. of Devices per Loop	127 addresses
Max Loop Circuit Resistance	50 ohms
Annunciator buss wiring style	NFPA Style 4
Max remote annunciator	31 units

Description

The PFC-8500 Fire Control Panel has the capability of storing setpoints, adding and removing devices as well as defining operational behavior. All changes are stored in a configuration data file, which enables the user to easily configure the systfrom either the FACP or at a remote computer. This flexibility allows ongoing system upgrades and modifications to support building expansion and increased safety objectives.

The panel can be programmed to communicate with addressable modules and supports a total of 127 devices on a single SLC. The PFC-8500 may be expanded to support up to 508 devices when three (3) ALE-127 modules are configured. The panel also contains all the necessary terminals to communicate with all other system components directly, including smoke sensors, heat detectors, and modules.

The operator interface consists of a LCD display, system status LEDs, a local status buzzer, system control switches and a numeric keypad. The 80 character LCD display and system status LED's communicate the latest system status information to the operator. The local buzzer audibly attracts the operator's attention during status change occurrences.

The remote annunciator output provides the panel with the ability to interface to remote annunciators. The annunciator connection is a proprietary protocol operating over an RS-485 style communications bus.

The PFC supervises and maintains the 24 VDC batteries that supply secondary power for the system. The PFC has dedicated outputs for the ALE-127. The PFC also supplies 24 VDC output on auxiliary output terminal blocks for use by external devices such as option components (such as Remote Annunciator and Sounder Base), addressable output devices and 4-wire smoke detectors.

SLC Loop Accessories

The control panel may be connected with up to 127 addressable devices or modules in any combination. The SLC is not restricted by any special wire requirements and may be wired with any wire that complies with the NEC. Additional loop expanders (ALE-127) may be added to increase the total number of devices to 508.

SLC Loop Devices

Device	Description
PSA	Analog Photo Electric Smoke Detector is a smoke detector with a listed obscuration of 1.02 to 3.83 percent per foot.
PSHA	Combination Analog Photo Electric Smoke/Heat Detector – a smoke detector with a listed obscuration of 1.02 to 3.83 percent obscuration and a fixed temperature 135° Fahrenheit heat detector
FHA	Analog Fixed Temperature Heat Detector that is selectable from 135° F to 185°F
RHA	Analog Rate or Rise Heat Detector that has a fixed temperature selection from 135°F and 174°F and also will alarm if the temperature increase 12-15°F in one minute
AB-6	6” round base that is mounted to an electrical box and wired for connection of one of the above sensors
AB-4	4” round base that may be mounted to an electrical box and wired for connection to the above sensors
AIB	Isolater base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop
ARB	Addressable Relay Base that contains two relays controlled by the SLC. One relay is rated at 8 amps at 240 VAC/30VDC and the other is rated at 2 amps 240 VAC/30 VDC
ASB	Addressable Sounder Base that contains and addressable sounder module that may be configured for local, group and all call. The sounder follows the pattern sent to the device.

Modules

Device	Description
MCM	Miniature Contact Module provides a small foot print contact module for mounting inside an enclosure, typically used to monitor a pull station
SCM-4	Single Contact Module is a standard contact module with an LED that mounts into a 4” square electrical box. The contact monitors normally open contacts and the LED will provide an indication when the device has activated.
DCM-4	Dual Contact Module is a device that can monitor two distinct inputs with a single device or in a Class A mode. The DCM-4 mounts into a 4” square electrical box and has a cover plate with an LED as a status indication.
TRM-4	Twin Relay Module provides two form C relays that simultaneously active when the module is triggered by the control panel. Each relay is rated for 2 amps at 24VDC or 0.5 amps at 125VAC.
MOM-4	Monitored Output Module is a power switching module that monitors the circuit that is controlled by the control panel.
CIZM-4	Conventional Input Zone Module is used to connect conventional smoke detectors to the system that receive their power from the module. This module is like a conventional zone on the SLC.
SCI	Short Circuit Isolater interrupts a short on the SLC and prevents the short from affecting protected devices on the loop. These or the AIB are required in Class A, Style 7 installations.

SLC Circuit Diagram