FEATURES

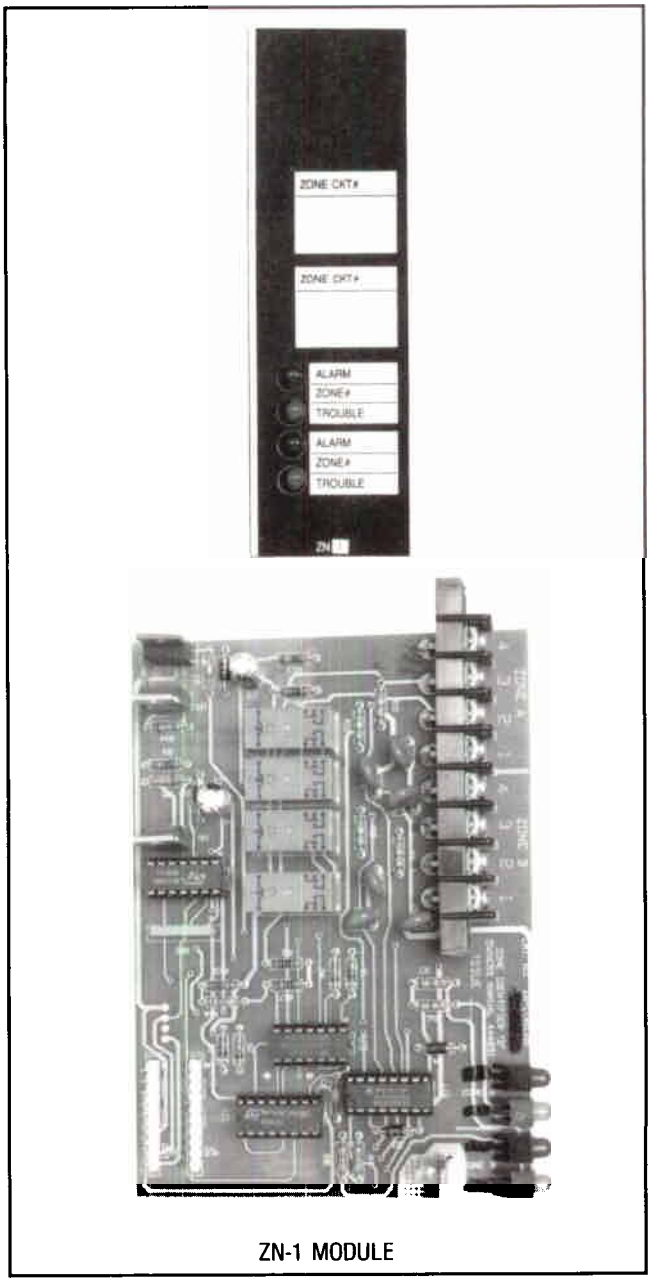
- **UL. Listed, File #S405, Standard #864 under the MPC-2000 System Control Unit (UOJZ)**
- **CSFM. Listed #7165-065:123 under the MPC-2000**
- **BSA. approved, calendar #524-77-SA under the MPC-2000**
- **Dual conventional zone circuits**
- **Each conventional initiating circuit independently programmable**
- **Individual zone cutoff function via software disconnect switch**
- **Class "A" (Style "D") or Class "B" (Style "B") wiring/operation compatible**
- **Programmable for zone alarm verification function**
- **Completely power limited**
- **Built-in transient protection**
- **100 Ohms of loop wire resistance maximum**
- **Individual red alarm and yellow trouble indications per zone**
- **Normally open manual and automatic alarm and supervisory/waterflow device compatible**
- **Software compatible with other MPC-2000 modules to provide individual zone alarm contacts and supervised zone alarm/trouble annunciator**
- **Capacity for up to (30) UL. listed compatible "2-wire" smoke detectors**
- **EOL. resistors supplied with module**
- **Custom labeling areas provided on the module**
- **IBEW./USA. Crafted**

MADE IN USA

GENERAL

The ZN-1 module consists of two electrically and programmable independent conventional initiating (zone) circuits capable of operating in either 2-wire/Class "B" (Style "B") or 4-wire/Class "A" (Style "D") configurations. The module is capable of operating with "2-wire" (zone powered) or "4-wire" (separately powered) compatible listed smoke detectors and other normally open manual and automatic contact devices. The ZN-1 module may also be programmed to operate with normally open waterflow alarm and supervisory (tamper) switch devices. Each zone circuit may be conditioned for alarm verification type operation and manual and automatic type devices may be intermixed on the verified zone circuit(s). Each zone circuit also provides access to software enabled zone cutoff/bypass, individual visable red alarm and amber trouble LEDs, custom zone labeling area and software access to other MPC-2000 modules to provide for zone alarm contact and alarm/trouble annunciation operations. All conventional initiating circuit wiring is power limited thus eliminating the necessity of externally fusing the wiring and allowing for the use of power limited cabling. Field wiring connections are made via pressure type screw terminals to insure positive connections. The ZN-1 module includes a supervisory network to detect open circuit or grounded wiring faults on the associated alarm initiating circuit. Detection of a fault condition will light the appropriate yellow zone trouble LED as well as activate the MPC-2000's system trouble circuitry and system status display(s). In addition, if the initiation circuit is wired in the 4-wire/Class "A" (Style "D") mode, the circuit will be automatically "healed" to allow all devices electrically before or past the single break or single ground to activate an alarm condition. (See Class "A" (Style "D") note.)

In a verified alarm condition (loop shorted through verification or second alarm) the appropriate red zone alarm LED will light and an alarm output signal will be sent to the MPC-2000's CU central control module. The CU control will then distribute the alarm information to other MPC-2000 modules to accomplish alarm tasks such as a signalling, auxiliary contact device control, annunication, etc. In addition, the CU control will display all pertinent zone data on the system status display(s).



ZN-1 MODULE

DESCRIPTION

The ZN-1 dual zone module serves as the focal point of supervision and alarm detection for two independent conventional initiating (input) circuits. All field mounted alarm initiating devices are connected to the ZN-1 module(s) via monitored conventional "hard wired" loops. The module constantly checks this wiring for open circuits as well as positive and negative ground faults and reports these status' as trouble conditions. On board circuitry provides for complete alarm initiating circuit operation with a single fault condition if the field circuit is wired using the 4-wire/Class "A" (Style "D") configuration. If an increase in current flow is sensed and reconfirmed (if alarm verification is desired and enabled) the ZN-1 module will report an alarm condition to the MPC-2000 system control unit thus initiating all associated programmed alarm control operations for the particular zone circuit.

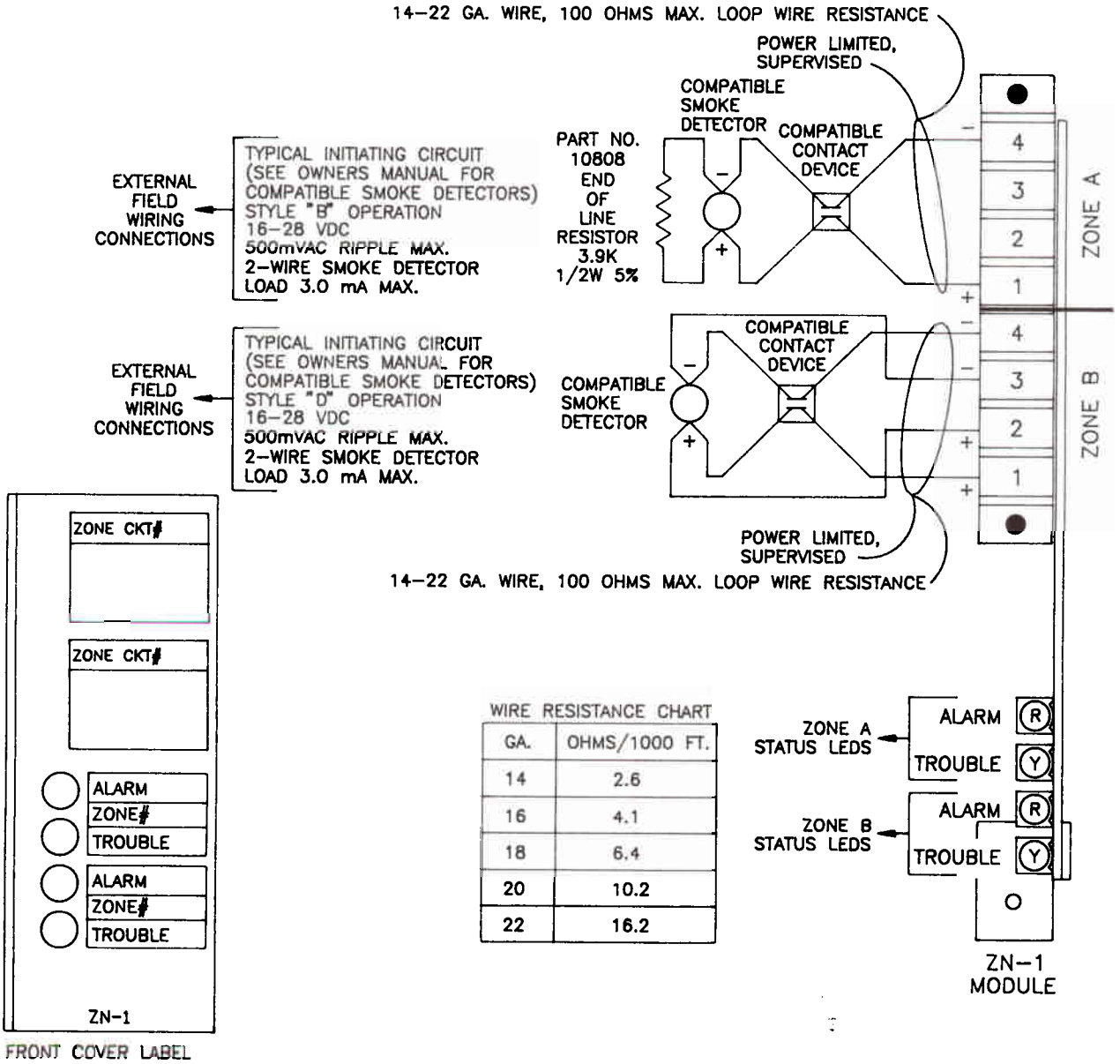
FARADAY

TYPICAL INITIATING CIRCUIT WIRING (ZONE IDENTIFIER "D")
CAT. NO. ZN-1 / PART NO. 401310 CONVENTIONAL DUAL ZONE

MODULE POWER CONSUMPTION REQUIREMENTS:
ALARM – .100 AMP.
NORMAL – .020 AMP.

SPACE REQUIREMENTS:
MODULE – 1
TRANSFORMER – 0

SEE OWNERS MANUAL (P/N 444851A)
FOR TYPICAL CABLE HOOK-UP DIAGRAM
FOR MPC-2000 FIRE ALARM SYSTEM
CONTROL UNIT



WIRE RESISTANCE CHART

GA.	OHMS/1000 FT.
14	2.6
16	4.1
18	6.4
20	10.2
22	16.2