

FEATURES

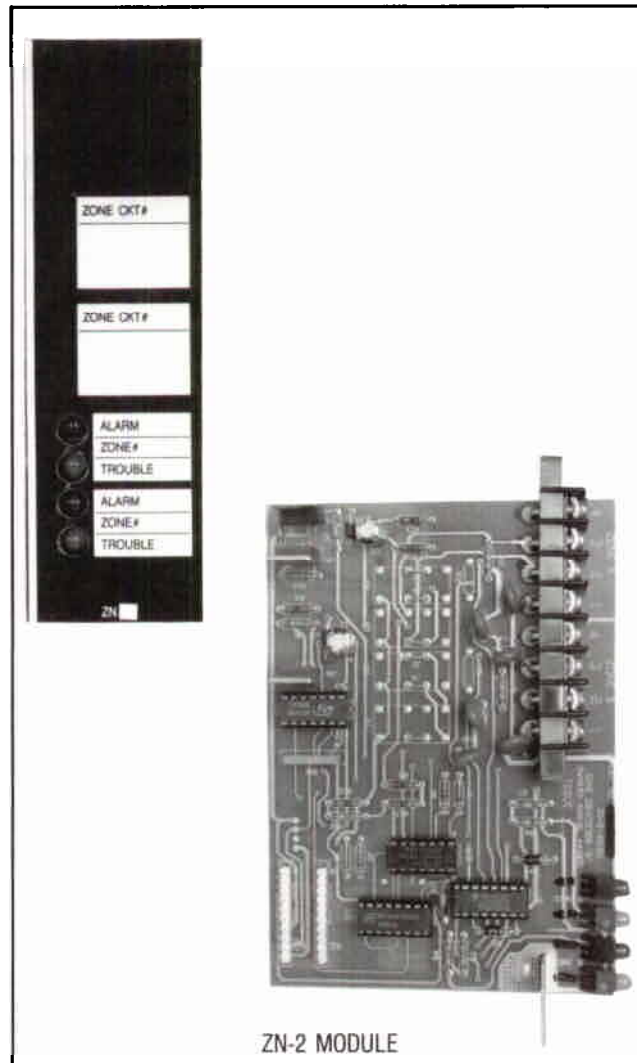
- UL. Listed, File #S405, Standard #864 under the MPC-2000 System Control Unit (UOJZ)
- CSFM. Listed #7165-065:123 under the MPC-2000
- BSA. approved, calendar #524-77-SA under the MPC-2000
- Dual conventional zone circuits
- Each conventional initiating circuit independently programmable
- Individual zone cutoff function via software disconnect switch
- Class "B" (Style "B") wiring/operation compatible
- 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 annunciation
- 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



GENERAL

The ZN-2 module consists of two electrically and programmably independent conventional initiating (zone) circuits capable of operating in either 2-wire/Class "B" (Style "B") 4-wire/Class "B" (Style "B") 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-2 module may also be programmed to operate with normally open waterflow alarm and supervisory (tamper) switch devices. Each zone circuit provides access to software enabled zone cutoff/bypass, individual visible red alarm and amber trouble LEDs, custom zone labeling area and software access to other MPC-2000 modules to provide for zone alarm contacts 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-2 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 an alarm condition (loop shorted) the appropriate red zone alarm LED will light and an alarm output signal will be sent to the MPC-2000's CU-2 main control module. The CU-2 control will then distribute the alarm information to other MPC-2000 modules to accomplish alarm tasks such as signalling, auxiliary contact device control, annunciation, etc. In addition, the CU-2 control will display all pertinent zone data on the system status display(s).

DESCRIPTION

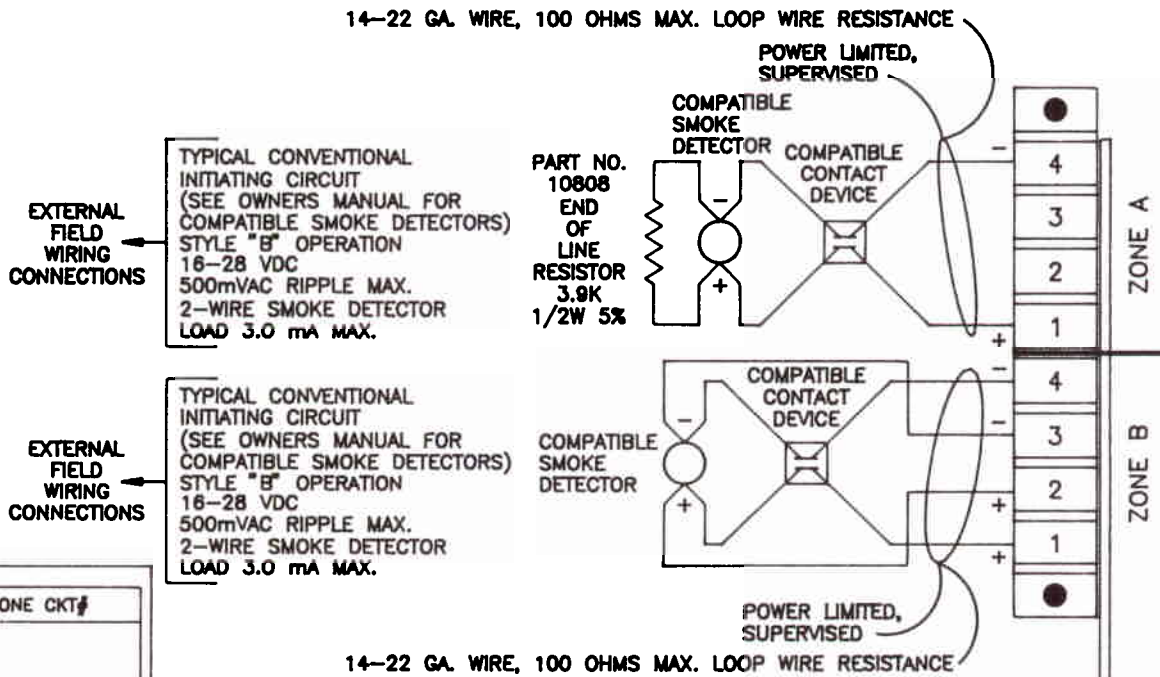
The ZN-2 dual zone module serves as the focal point of supervision and alarm detection for two independent conventional initiating (input) circuits. All field mounted alarm initiating devices are connected to the ZN-2 module(s) via monitored conventional "hard wired" loops. The module consistently checks this wiring for open circuits as well as positive and negative ground faults and reports these status' as trouble conditions. If an increase in current flow is sensed in the circuit, the ZN-2 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.

TYPICAL INITIATING CIRCUIT WIRING (ZONE IDENTIFIER "D") CAT. NO. ZN-2 / PART NO. 401311 CONVENTIONAL DUAL ZONE

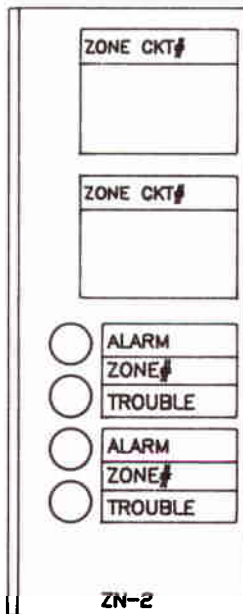
MODULE POWER CONSUMPTION REQUIREMENTS:
ALARM - .100 AMP.
NORMAL - .020 AMP.

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

SPACE REQUIREMENTS:
MODULE - 1
TRANSFORMER - 0



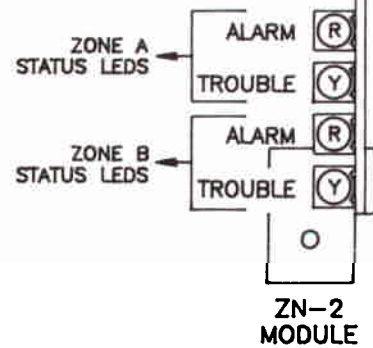
14-22 GA. WIRE, 100 OHMS MAX. LOOP WIRE RESISTANCE



FRONT COVER DECAL

WIRE RESISTANCE CHART

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



APPLICATIONS

- 1.) When using smoke detectors for fan shutdown, elevator recall or bypass, or other auxiliary functions it is recommended that "4-wire" (separately powered) type detectors be used rather than "2-wire" (zone powered) type detectors. This situation assures subsequent device operations even if a contact device or another detector on the loop has already been activated.
- 2.) The maximum number of initiating devices on a circuit should not exceed 30. This limit constitutes a practical upper limit for service, trouble-shooting and operation of the circuit as recommended by NFPA-72E. Refer to individual detection device data sheets and MPC-2000 owner's manual for actual number limitations and UL-listed compatible detection device lists.
- 3.) Shielded wire is not required on this system and in most cases will create more problems than it prevents. Faraday alarm equipment is designed with built-in transient suppression networks thus negating the requirements of shielded cabling.
- 4.) Never run low voltage conventional zone wiring in the same conduit with high voltage power wiring. Most electrical codes will not permit this as it can cause problems with any low voltage system.
- 5.) In addition to the basic features described in this data sheet many other initiating circuit features and functions are available thru the use of system software. Consult the MPC-2000 owner's / programmer's manuals for programming options.
- 6.) ZN-2 modules do not allow access to alarm verification software. If alarm verification is desired use ZN-1 modules or alarm verifying smoke detectors.

TECHNICAL DATA

Power Provision	Each Circuit: .003 Amp. @ 24 VDC filtered, regulated, power limited and resettable for up to (30) compatible "2-wire" smoke detectors.
Power Consumption	Each Circuit: Alarm - .050 Amp. @ 24 VDC Standby - .010 Amp. @ 24 VDC
Space Provision	None
Space Consumption	(1) Module space
Channel Provision	None
Channel Consumption	(2) Circuits on the conventional input (initiating) channel

ORDERING INFORMATION

<u>Model #</u>	<u>Part #</u>	<u>Description</u>
ZN-2	401311	Conventional Dual Zone Module