

Installation Instructions

Model CZM-4

Conventional Zone Module

OPERATION

The Model CZM-4 Conventional Zone Module from Siemens Building Technologies, Inc. is used with the MXL to provide four Class A (Style D) or Class B (Style B) conventional initiating device circuits. Each circuit can monitor up to thirty 2-wire photoelectric or ionization smoke detectors and an unlimited number of normally open contact devices. Projected beam and flame detectors, detector relay bases, and remote indicator lamps may also be used with the CZM-4.

Activation of any device on the circuit initiates a zone alarm and causes any previously programmed functions to operate. Any circuit in alarm or trouble condition is identified by a user-specified, 32-character, alphanumeric message displayed on the MXL LCD annunciator.

The CZM-4 is designed to function in a local degrade mode during failure of the MXL main processor or during the loss of the System communication network. While in the degrade mode, the CZM-4 can report both alarm and trouble conditions and can activate local outputs on other modules within the same enclosure.

Note: When verification is used on a CZM-4 zone, do not use shorting devices on that circuit.

Any or all of the CZM-4 circuits may be programmed to operate with Alarm Verification. This allows the automatic verification of alarm conditions caused by smoke detectors in order to prevent nuisance alarms.

The CZM-4 has five LEDs which indicate alarm, transmit, trouble, and two user programmable functions, respectively.

For additional information on the MXL/MXLV System, refer to the *MXL/MXLV Manual, P/N 315-092036*.

INSTALLATION

Remove all system power before installation, first battery and then AC. (To power up, first connect the AC and then the battery.)

The CZM-4 module plugs into two half-width slots, forming one full slot on the MOM-4 (See Figure 1). As many as two CZM-4 modules may be plugged into a MOM-4 Card Cage.

Each CZM-4 can be in either the upper or lower slots of the MOM-4. The position it is in determines whether the device loops are on TB1 or TB2 of the MOM-4.

Setting the Address

Before the CZM-4 is installed into the MOM-4, set the network address on switch S1 (See Figure 2). Set the address to the one selected in the CSG-M for this particular CZM-4. Follow the switch positions in Table 1 on the back to set the address.

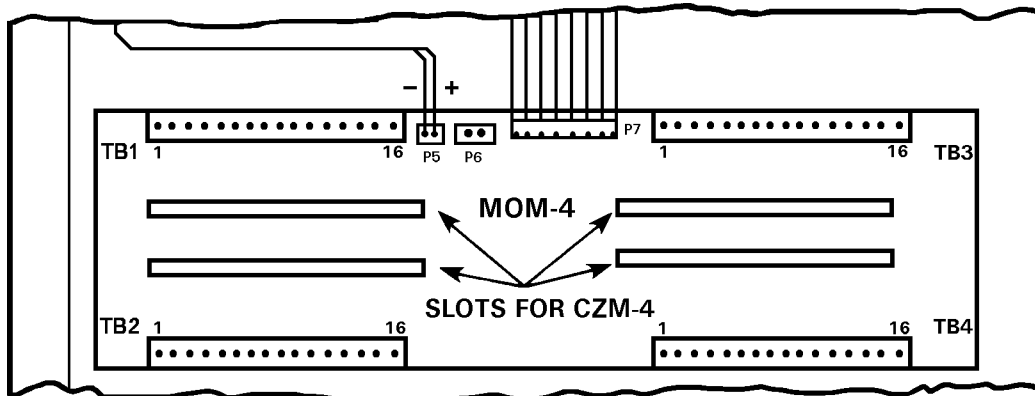


Figure 1
MOM-4 PC Board

Mounting the CZM-4

After the address is set, install the CZM-4 into the MOM-4 module, being sure that the CZM-4 is firmly seated in the card edge connector.

ELECTRICAL RATINGS

Active 5VDC Module Current	10mA
Active 24VDC Module Current	45mA + 180mA per active zone
Standby 24VDC Module Current	50mA

Initiating Circuits

Voltage range: 21.7-22.8 V unfiltered full wave
 Supervisory circuit: 4mA max
 Alarm current: 180mA per zone max

INITIATING DEVICES

Up to 30 detectors, listed in Table 2 (except the PBA-1191), may be used on a CZM-4 zone. Manual fire alarm stations and smoke detectors can be mixed on zones where local codes allow. Detectors of different models are not to be mixed or matched

TABLE 2
COMPATIBLE DETECTORS FOR CZM-4

Detector	Base	Installation Instructions Part Number
DI-3/3H*	DB-3S	315-081943
DI-A3/A3H*	DB-3S	315-081943
DI-B3/B3H*	AD-3I/3ILP SA-3I	315-093234 315-096274
DT-11*‡	DB-11 DB-3S + DB-ADPT	315-095429 315-095429
PBA-1191†	PBB-1191	315-095424
PE-3/3T*	DB-35* AD-3ILP AD-3RP	315-090875 315-093234 315-086591
PE-11/11T*	DB-11 DB-3S + DB-ADPT AD-11P/11PR SA-11P	315-094198 315-094198 315-095659 315-096274

* May use up to 30 detectors of any type but PBA-1191.

‡ Do not use with alarm verification.

† Only one PBA-1191 per zone (See Figure 3).

on a system. Up to five waterflow switches and any number of direct shorting thermal detectors also may be used with each zone on the CZM-4. Only one PBA-1191 may be used on a zone. The model numbers listed are the UL compatibility identifiers.

Refer to Figure 3. All circuits are power limited to NFPA 70 per NEC 760. Each detector or group of detectors must use a 2-wire circuit of at least 18 AWG, thermoplastic fixture wire, enclosed in conduit. If permitted by local building codes, 18

AWG limited energy, shielded cable without conduit may also be used.

Total circuit resistance must not exceed 70 ohms—40 ohms if relay bases are used.

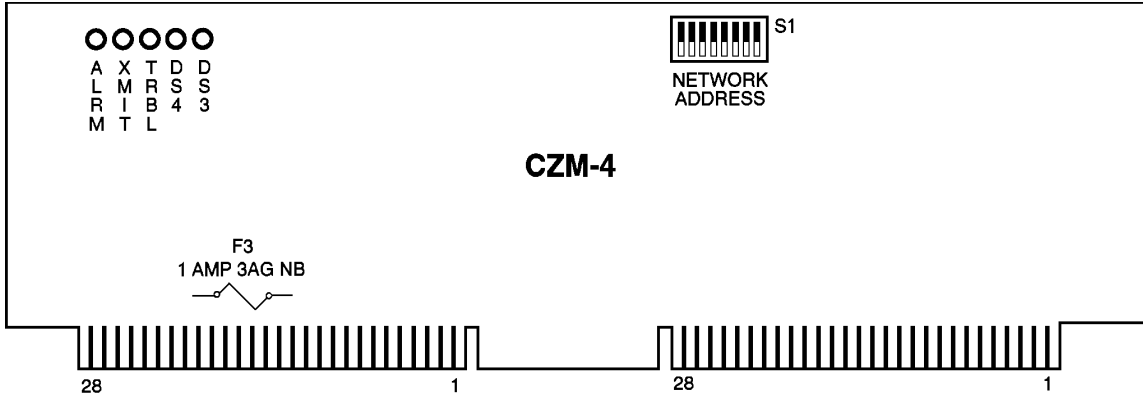
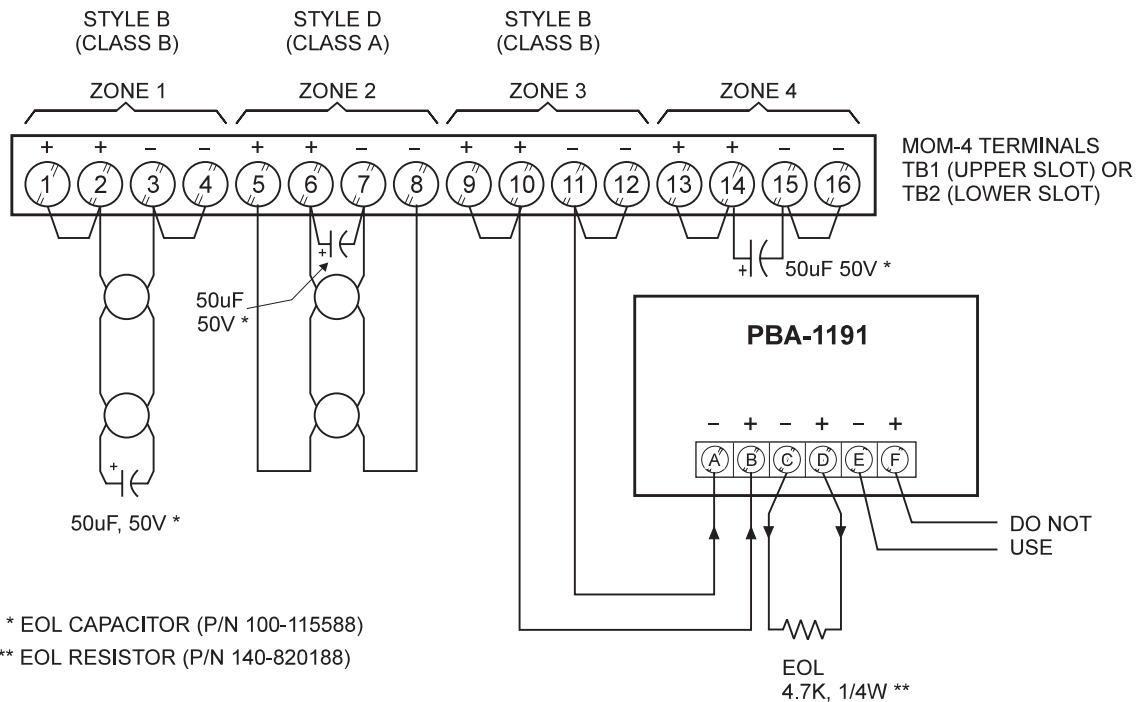


Figure 2
CZM-4 PC Board



NOTES:

1. All circuits can be Class A or Class B.
2. All circuits are power limited per NEC 760.
3. All circuits are supervised.
4. Do not connect more than one PBA-1911 to each zone. (Refer to PBA-1191 Instructions, P/N 315-095424, for further information.)
5. Do not mix smoke detectors with the PBA-1191.
6. Maximim resistance: 70 ohms/circuit.
7. The PBA-1191 requires Rev. 3 or higher of CZM-4 software.
8. Positive and negative ground fault detected at <20 ohms for terminals 1-16.

Figure 3
Wiring Diagram

**TABLE 1
NETWORK ADDRESS PROGRAMMING**

ADDR	87654321	ADDR	87654321	ADDR	87654321	ADDR	87654321
000	ILLEGAL	064	OX000000	128	X0000000	192	XX000000
001	ILLEGAL	065	OX00000X	129	X000000X	193	XX00000X
002	ILLEGAL	066	OX00000X	130	X000000X	194	XX00000X
003	000000XX	067	OX0000XX	131	X00000XX	195	XX0000XX
004	00000X00	068	OX000X00	132	X0000X00	196	XX000X00
005	00000X0X	069	OX000X0X	133	X0000X0X	197	XX000X0X
006	00000XX0	070	OX000XX0	134	X0000XX0	198	XX000XX0
007	00000XXX	071	OX000XXX	135	X0000XXX	199	XX000XXX
008	0000X000	072	OX00X000	136	X000X000	200	XX00X000
009	0000X00X	073	OX00X00X	137	X000X00X	201	XX00X00X
010	0000X0X0	074	OX00X0X0	138	X000X0X0	202	XX00X0X0
011	0000X0XX	075	OX00X0XX	139	X000X0XX	203	XX00X0XX
012	0000XX00	076	OX00XX00	140	X000XX00	204	XX00XX00
013	0000XX0X	077	OX00XX0X	141	X000XX0X	205	XX00XX0X
014	0000XX0X	078	OX00XX0X	142	X000XX0X	206	XX00XX0X
015	0000XXX	079	OX00XXX	143	X000XXX	207	XX00XXX
016	000X0000	080	OX0X0000	144	X00X0000	208	XX0X0000
017	000X000X	081	OX0X000X	145	X00X000X	209	XX0X000X
018	000X00X0	082	OX0X00X0	146	X00X00X0	210	XX0X00X0
019	000X00XX	083	OX0X00XX	147	X00X00XX	211	XX0X00XX
020	000X0X00	084	OX0X0X00	148	X00X0X00	212	XX0X0X00
021	000X0X0X	085	OX0X0X0X	149	X00X0X0X	213	XX0X0X0X
022	000X0XX0	086	OX0X0XX0	150	X00X0XX0	214	XX0X0XX0
023	000X0XXX	087	OX0X0XXX	151	X00X0XXX	215	XX0X0XXX
024	000XX000	088	OX0XX000	152	X00XX000	216	XX0XX000
025	000XX00X	089	OX0XX00X	153	X00XX00X	217	XX0XX00X
026	000XX0X0	090	OX0XX0X0	154	X00XX0X0	218	XX0XX0X0
027	000XX0XX	091	OX0XX0XX	155	X00XX0XX	219	XX0XX0XX
028	000XXX00	092	OX0XXX00	156	X00XXX00	220	XX0XXX00
029	000XXX0X	093	OX0XXX0X	157	X00XXX0X	221	XX0XXX0X
030	000XXX0X	094	OX0XXX0X	158	X00XXX0X	222	XX0XXX0X
031	000XXXX	095	OX0XXXX	159	X00XXXX	223	XX0XXXX
032	00X00000	096	OX000000	160	X0X00000	224	XX000000
033	00X0000X	097	OX00000X	161	X0X0000X	225	XX00000X
034	00X000X0	098	OX0000X0	162	X0X000X0	226	XX0000X0
035	00X000XX	099	OX0000XX	163	X0X000XX	227	XX0000XX
036	00X00X00	100	OX000X00	164	X0X00X00	228	XX000X00
037	00X00X0X	101	OX000X0X	165	X0X00X0X	229	XX000X0X
038	00X00XX0	102	OX000XX0	166	X0X00XX0	230	XX000XX0
039	00X00XXX	103	OX000XXX	167	X0X00XXX	231	XX000XXX
040	00X0X000	104	OX00X000	168	X0X0X000	232	XX00X000
041	00X0X00X	105	OX00X00X	169	X0X0X00X	233	XX00X00X
042	00X0X0X0	106	OX00X0X0	170	X0X0X0X0	234	XX00X0X0
043	00X0X0XX	107	OX00X0XX	171	X0X0X0XX	235	XX00X0XX
044	00X0XX00	108	OX00XX00	172	X0X0XX00	236	XX00XX00
045	00X0XX0X	109	OX00XX0X	173	X0X0XX0X	237	XX00XX0X
046	00X0XXX0	110	OX00XXX0	174	X0X0XXX0	238	XX00XXX0
047	00X0XXX	111	OX00XXX	175	X0X0XXX	239	XX00XXX
048	00XX0000	112	OX000000	176	X0XX0000	240	XX000000
049	00XX000X	113	OX00000X	177	X0XX000X	241	XX00000X
050	00XX00X0	114	OX0000X0	178	X0XX00X0	242	XX0000X0
051	00XX00XX	115	OX0000XX	179	X0XX00XX	243	XX0000XX
052	00XX0X00	116	OX000X00	180	X0XX0X00	244	XX000X00
053	00XX0X0X	117	OX000X0X	181	X0XX0X0X	245	XX000X0X
054	00XX0XX0	118	OX000XX0	182	X0XX0XX0	246	XX000XX0
055	00XX0XXX	119	OX000XXX	183	X0XX0XXX	247	XX000XXX
056	00XXX000	120	OX000000	184	X0XX0000	248	ILLEGAL
057	00XXX00X	121	OX00000X	185	X0XX000X	249	ILLEGAL
058	00XXX0X0	122	OX0000X0	186	X0XX00X0	250	ILLEGAL
059	00XXX0XX	123	OX0000XX	187	X0XX00XX	251	ILLEGAL
060	00XXX0X0	124	OX0000X0	188	X0XX00X0	252	ILLEGAL
061	00XXX0X0	125	OX0000X0	189	X0XX00X0	253	ILLEGAL
062	00XXXXX0	126	OX000000	190	X0XXXXX0	254	ILLEGAL
063	00XXXXXX	127	OX000000	191	X0XXXXXX	255	ILLEGAL

O = OPEN (or OFF) X = CLOSED (or ON)