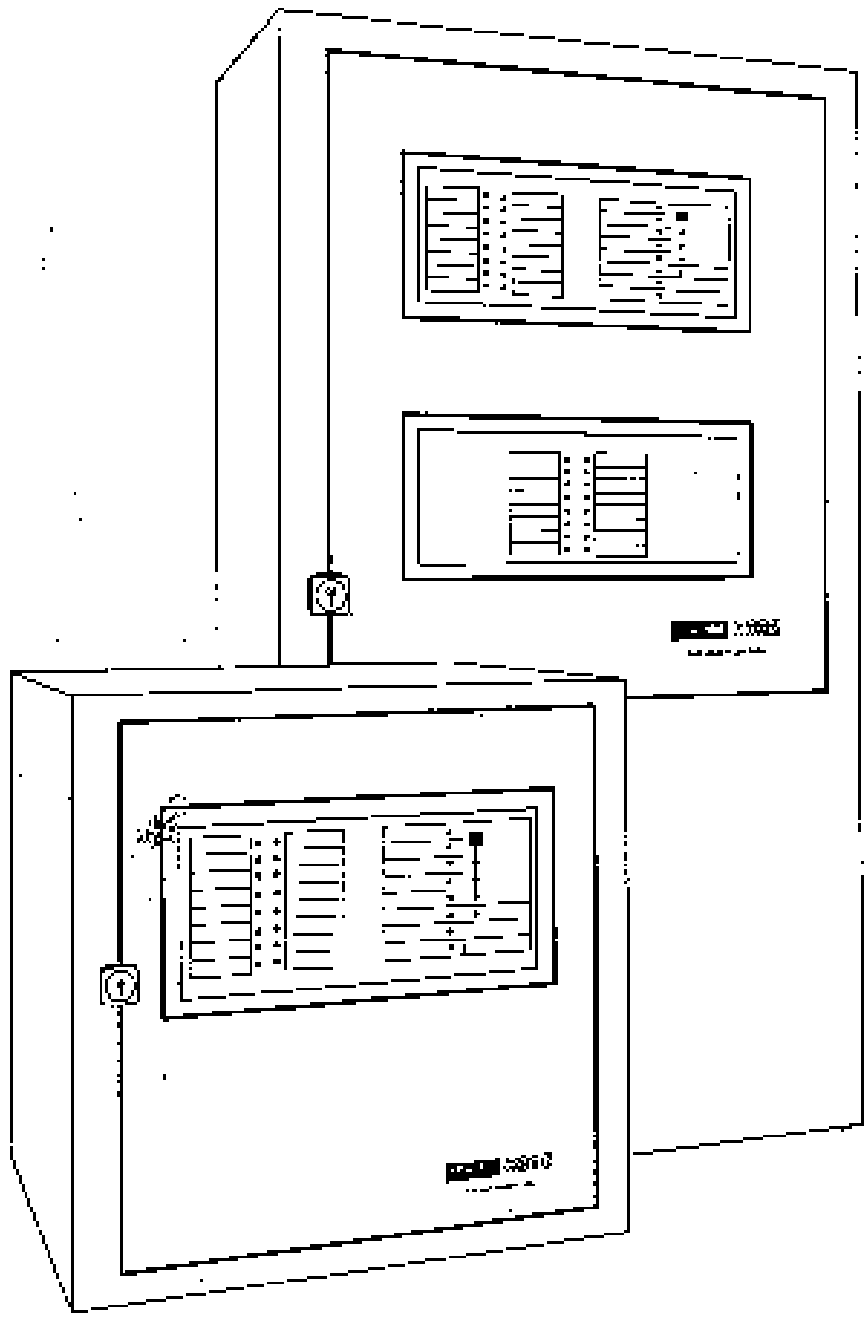
F.F. 46000-0759
Issue 2

EDWARDS

6616 SIXTEEN ZONE AND 6632 THIRTY-TWO ZONE FIRE ALARM CONTROL PANELS



OPERATION AND INSTALLATION MANUAL

TABLE OF CONTENTS

Section	Title		Page
1.0		DESCRIPTION	2
	1.1	Standard panel features	2
	1.2	Additional panel features	2
	1.3	Field Selectable features	2
	1.4	Optional equipment	2
	1.5	Configurations	2
	1.6	Common control assembly	3
2.0		INSTALLATION	3
	2.1	Unpacking and inspection	3
	2.2	Mounting	3
	2.3	Installation procedure	4
3.0		INSTALLATION WIRING	4
	3.1	Module placement	4
	3.2	Alarm receiving module (class B)	4
	3.3	Circuit testing procedure	5
	3.4	Supervisory receiving module	5
	3.5	Alarm/supervisory receiving module	5
	3.6	Alarm receiving module (class A)	6
	3.7	Alarm output module	6
	3.8	Auxiliary alarm relay module	7
	3.9	I/O programming module	7
	3.10	Fire department module	8
	3.11	Auxiliary power module	8
	3.12	Annunciator driver module	8
	3.13	Expanded features module	10
	3.14	Field selectable features	11
	3.15	Primary, secondary and system power	11
4.0		SYSTEM CHECK OUT PROCEDURES	12
	4.1	General information	12
	4.2	Preliminary test	12
	4.3	Indicators	12
	4.4	Installation verification	13
	4.5	Alarm test	13
	4.6	Ground fault test	13
	4.7	Open circuit test	14
	4.8	Battery power test	14
	4.9	Battery supervision test	14
5.0		OPERATIONS	14
	5.1	Functions of control switches and indicators	14
	5.2	Silent test switch	14
	5.3	Drill switch	15
	5.4	Auxiliary disconnect switch	15
	5.5	Alarm verification	15
	5.6	Individual zone disconnect	15
	5.7	A.C. power on LED	15
	5.8	Alarm zone LED	15
	5.9	Alarm silenced LED	15
	5.10	Zone fault LED	15
	5.11	Ground fault LED	15
	5.12	Battery fault LED	15
	5.13	Silent test LED	15
	5.14	Auxiliary disconnect LED	15
	5.15	Common trouble LED	15
6.0		OPERATION MODES	16
	6.1	General information	16
	6.2	Supervisory mode	16
	6.3	Alarm	16
	6.4	Responding to an alarm	16
	6.5	Trouble	16
	6.6	Responding to a trouble	17
7.0		PERIODIC SYSTEM OPERATIONAL TEST OUTLINE	17
	7.1	General information	17
	7.2	Initiating device test	17
		BATTERY SELECTION CHART APPENDIX A	18
		CUSTOMER DRAWINGS APPENDIX B	20

1.0 DESCRIPTION

The Edwards Catalogue #6516 Fire Alarm Control Panel is a 24VDC supervised panel that provides plug in modules for Alarm Inputs (up to 16), Alarm Outputs, Ancillary and Auxiliary Control Circuits and I/O programming for single stage system applications. The modular design plus field selectable options allows on site customizing of the system for specific operating configurations. The Catalogue #6632 Fire Alarm Control Panel may be configured with up to 32 Input Circuits. The panel is UL listed and meets all performance and operational requirements of UL 864 and NFPA 72A.

1.1 STANDARD PANEL FEATURES

(See Figure 1)

- (1) Power on LED
- (2) Common alarm LED
- (3) Alarm silenced LED
- (4) Zone fault LED
- (5) Ground fault LED
- (6) Battery fault LED
- (7) Silent alarm test switch and indicator
- (8) Drill and Ancillary disconnect switch
- (9) Smart Switch and Operator prompt LED's for:
- (9.1) System reset
- (9.2) Alarm signal silence
- (9.3) Trouble signal silence
- (10) Common trouble LED and signal
- (11) Individual zone alarm and service trouble LED's

See Section 5 for Description and Function of each feature.

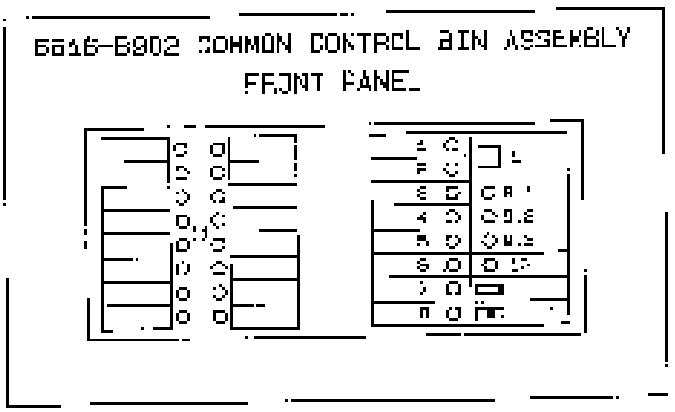


FIG. 1

1.2 ADDITIONAL PANEL FEATURES

(available on 6516-B904)

- Installation Verification
- Alarm Verification
- Individual Zone Bypass

1.3 FIELD SELECTABLE FEATURES

- One minute manual signal silence and reset inhibit.
- Continuous, 120 ppm or 3-5-3 signal rate.
- Two to thirty minute automatic signal silence.
- Alarm output module selectable for Class A or B configuration.
- Continuous alarm output may be selected for silence by system reset only.

1.4 OPTIONAL EQUIPMENT

6516 B351	Alarm Receiving module Class B
6516-B352	Supervisory Rec. module
6516-B353	Alarm/Sup. Rec. module
6516-B354	Alarm Receiving module Class A
6516-B501	Alarm Output module
6516-B521	Ancillary Relay module
6516-B931	I/O Programming module
6516-B402	Annunciator Driver module
6516-B403	Expanded Features module
6R16 B711	Remote Station module
6516-B712	Municipal Tie module
6516-B713	Reverse Polarity module
6516-B714	Auxiliary Power module
6516-B201	16 LED Annunciator c/w features
6516-B202	16 LED Annunciator less features
6516-A601	Flush trim for 7516
6632-A601	Flush trim for 7532
6500-2110	Remote Trouble Unit

1.5 CONFIGURATIONS

1.5.1 The panel packaging for the Catalogue #6516 Fire Alarm Control Panel consists of three cartons, one for each of the following:

- 6516-B901 Cabinet Assembly
- 6516-B902/B904 Common Control Bin Assembly and Power Supply
- One Standby Battery
- See Drawing 46000-0781 in Appendix B

1.5.2 The Catalogue #6532 panel consists of five cartons, one for each of the following:

- 6532-B901 Cabinet Assembly
- 6516-B902/B904 Common Control Bin Assembly and Power Supply
- 6532-B902/B901 Expander Control Bin Assembly and Power Supply

1.6 COMMON CONTROL ASSEMBLY

1.6.1 Either Common Control Bin Assembly includes a bin complete with a Common Control Module and space for eight additional modules. The hinged cover includes the associated system control indicators, switches and 16 zone alarm indicators.

1.6.2 The Expander Bin Assembly includes space for nine additional modules. The hinged cover includes 16 zone alarm indicators.

2.0 INSTALLATION

2.1 UNPACKING AND INSPECTION

Carefully inspect all items for possible damage incurred in shipment. If damage is found immediately notify the local shipping company representative. Be sure that all installation instructions are not discarded along with packaging materials.

2.2 MOUNTING

Unpack the wallbox and door. Store the door in a safe place to prevent damage prior to assembly. Proceed to mount the wallbox as described below (Refer to Figure 2 for 6613 detail or Figure 2A for 6632 detail).

2.2.1 Remove required knockouts for conduit entrance.

2.2.2 FOR SURFACE MOUNTING. Mark the four mounting hole positions per dimensions A and B shown in Figure 2 or 2A. Mount panel to surface using suitable fasteners.

2.2.3 FOR FLUSH MOUNTING USE FLUSH TRIM. (See Figure 2 or 2A).
Note back box outer dimensions C and D to plan required wall cut out. Also note dimension for required installation depth. Mark four mounting hole positions per dimensions A and B. Install panel in wall, and secure using suitable fasteners. Install flush trim to wallbox with screws provided.

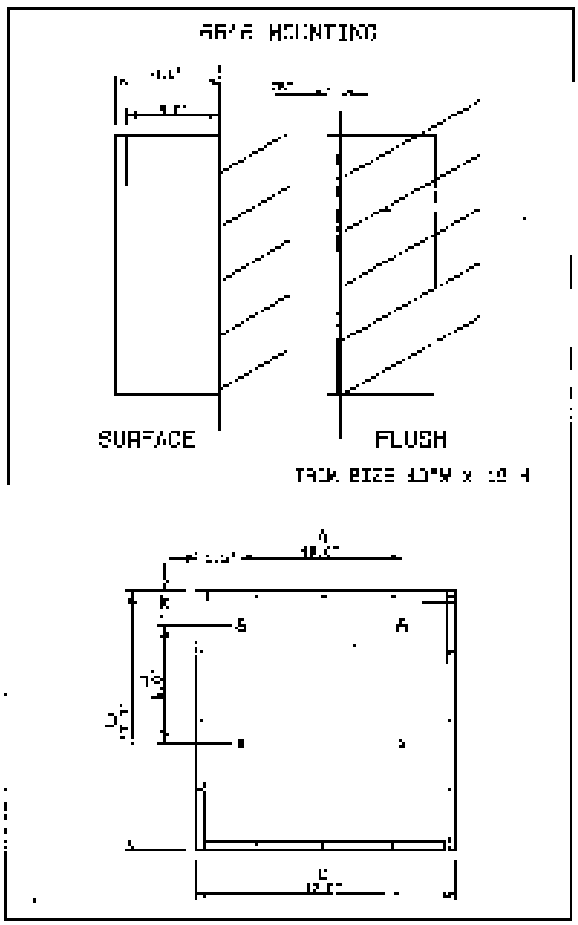


FIG. 2

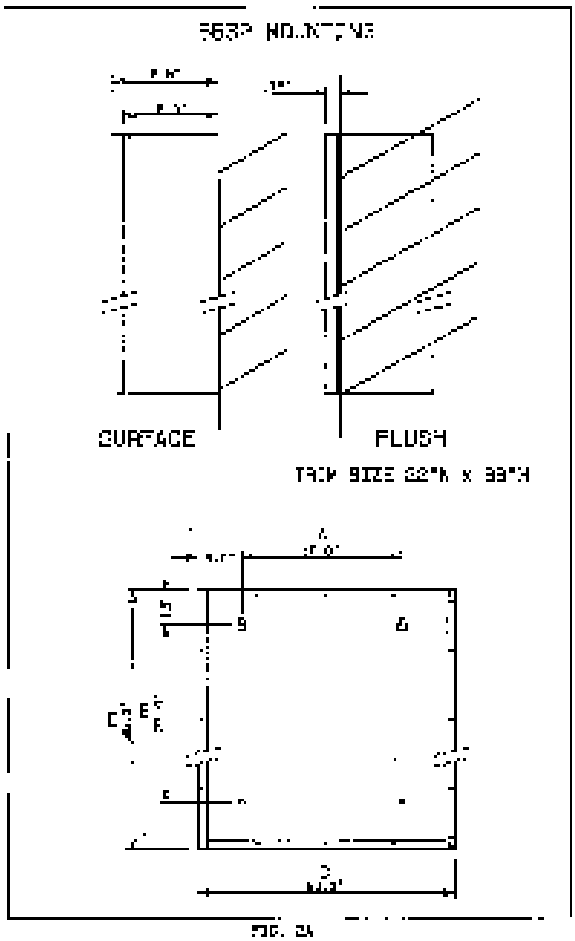


FIG. 2A

2.9 INSTALLATION PROCEDURE

CAUTION
DO NOT CONNECT AC POWER OR BATTERY TO THE PANEL UNTIL INDICATED BY THIS MANUAL

See Drawings D48000-0779 or 0760 in Appendix B.

2.9.1 Install the Common Control Bin Assembly on the studs provided using four #8 nuts and washers. The 6602 requires the Common Control and Expander Bin Assemblies.

2.9.2 Install the Power Supply in the bottom of the wallbox for a 6016 configuration. Secure using a #8 nut and washer on the stud provided. The 6602 required two power supplies to be mounted on the back of the wallbox using two #8 nuts and washers.

2.9.3 Install the additional and or optional modules into the bin assembly(ies).
Note: These modules should be configured prior to installation. Refer to respective module installation drawing or section 3.0 prior to installing the modules.

2.9.4 Install the battery in the bottom of the wallbox after all installation wiring is complete. Do not connect battery leads to battery at this time.

2.9.5 Hinge pluos are packed with the bin assembly for mounting of the door to the surface wallbox or flush trim.

3.0 INSTALLATION WIRING

All Fire Alarm System Components must be installed in accordance with the latest issues of UL 864, NFPA Standards 72A, 72B and 72C and the National Electrical Code. Parallel branching from a circuit is not permitted. When splicing of wires is required, connections must be made in a junction box.

All wiring must be tested for opens, shorts and grounds using an ohmmeter. Any fault must be corrected before making connections to any plug-in module located in the Common Control or Expander Bin Assembly.

3.1 MODULE PLACEMENT

The zero ohm resistor (beige with a black ring) located adjacent to each socket on the printed circuit board in each bin assembly must be removed prior to inserting additional and/or optional modules. See Chart A for module placement.
Note: Never insert a module with the Power On

3.2 ALARM RECEIVING MODULE (Class B)

Catalogue 6618-3351 Alarm Receiving Modules provide four alarm initiating circuits configured for Class B operation.

Normally open devices, such as manual fire alarm stations, automatic heat detectors and water flow switches can be connected to the initiating circuits in the quantities required.

Up to 20 Edwards approved Two Wire Ionization Smoke Detectors or 20 Two Wire Photo-electric Smoke Detectors may be connected. (ie 6420B, 6250B Ionization; 6269B, 6270B Photoelectric). If detectors with relay bases are required, one detector with a relay base should be the only device installed on the circuit, to ensure the activation of the base relay.

6618-3351 modules may be inserted into either Bin Assembly as indicated in Chart A.

Install wiring as shown in Figure 3. Also install the Edwards UL listed 3K9 ohm, 1/2 watt, end of line resistor (P/N 446460-0056 supplied in parts bag) beyond the last initiating device on the circuit. Test the circuit for opens, grounds and shorts using an ohmmeter as shown in Figure 3.

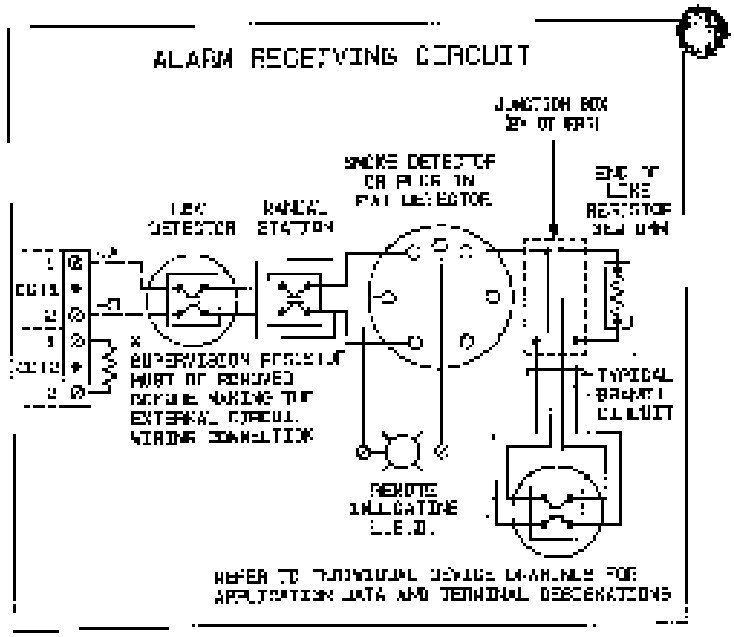


FIG. 3

3.6 CIRCUIT TESTING PROCEDURE

1. With the positive lead (+) of the ohmmeter connected to wire (A) and the negative connected to wire (B) the measurement obtained should be 3K9 ohms. The value of the end of line resistor.
2. Reversing the ohmmeter leads should result in the same measurement.

Note: a) if a short circuit is present a resistance of zero ohms will be indicated.

b) If an open circuit is present an infinite resistance value will be indicated.

3. Measure the resistance between ground and (A) and ground and (B). An infinite resistance should be measured in each case.
4. When testing is complete, connect the wiring to terminals as indicated in Figure 3.

Detailed circuits operation and wire run charts are provided on Drawing C46000-1075 supplied with the module and in Appendix B.

3.4 SUPERVISORY RECEIVING MODULE

Catalogue 6816-B352 Supervisory Receiving Modules provide four supervisory receiving circuits configured for Class B operation.

Each circuit may be configured for N.O. or N.C. initiating devices and for latching or non latching operation. For N.O. Devices, each circuit may be selected for open and short supervision or open supervision only. The maximum number of devices is limited to five if open and short supervision is required and for N.C. device operation. Each module is factory set for N.O. Devices with open circuit supervision and latching operation. Check to ensure each module is configured for the proper operation before connecting field wiring.

Test the circuits for opens, grounds and shorts as indicated in 3.2. When testing is complete, connect the wiring to the terminals as indicated in Figure 4.

6816-B352 modules may be inserted into either Bin Assembly as indicated in Chart A.

Detailed circuit operation, jumper selection and wire run charts are provided on Drawing C46000-1073 supplied with the module and in Appendix B.

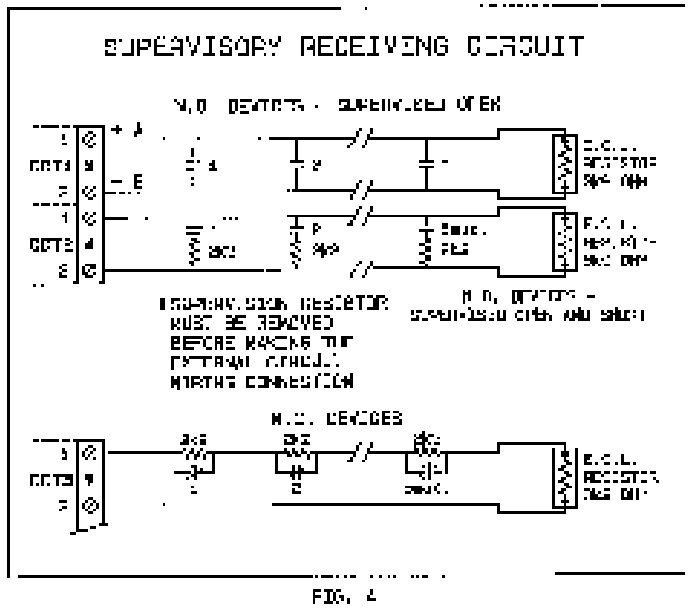


FIG. 4

3.5 ALARM/SUPERVISORY RECEIVING MODULE

Catalogue 6816-B353 Alarm/Supervisory Receiving Modules provide two Class B Alarm receiving and two Class B supervisory receiving circuits. Circuits 1 and 2 are configured for Alarm receiving and circuits 3 and 4 are Supervisory receiving. Refer to Section 3.2 and 3.4 for alarm and supervisory circuit specifications.

Test the circuits for opens, grounds and shorts as described in 3.3. When testing is complete connect the wiring to the terminals as indicated in Figure 5.

6816-B353 modules may be inserted into either Bin Assembly as indicated in Chart A.

Detailed circuit operation, jumper selection and wire run charts are provided on Drawing C46000-1071 supplied with the module and in Appendix B.

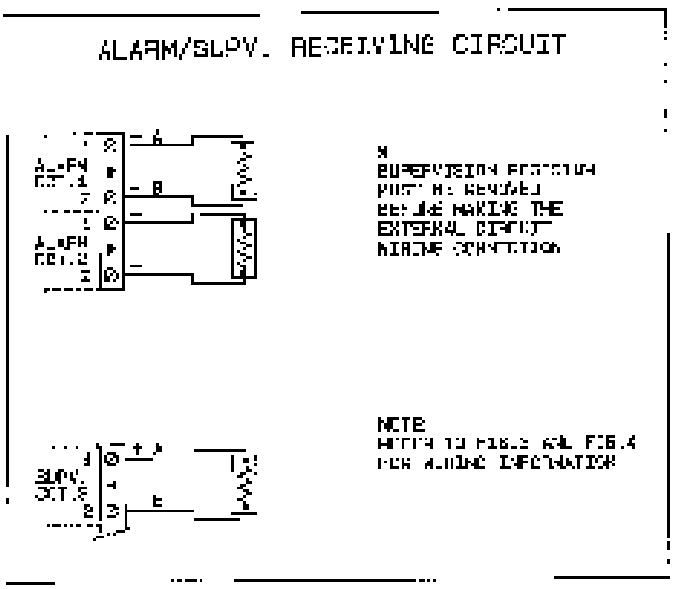


FIG. 5

3.6 **ALARM RECEIVING MODULE** (Class A)
Catalogue #6816-B354 Alarm Receiving Module provides four alarm initiating circuits configured for Class A operation.

Normally open devices, such as manual fire alarm stations, automatic heat detectors and water flow switches can be connected to the initiating circuits in the quantities required.

Up to 50 Edwards approved Two Wire Ionization Smoke Detectors of 30 Two Wire Photoelectric Smoke Detectors may be connected as described in 3.2.

Install the wiring as shown in Figure 6. Test the circuits for opens, grounds and shorts using an ohmmeter as described in 3.3.

6816-B354 modules may be inserted into either B/I Assembly as indicated in Chart A.
Detailed circuit operation, and wire run charts are provided on Drawing C46000-1077 supplied with the module and in Appendix 2.

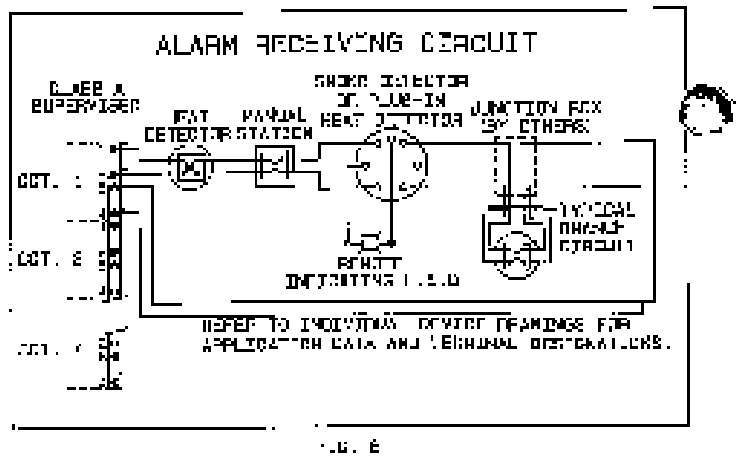


FIG. 6

3.7 **ALARM OUTPUT MODULE**
The Catalogue 6816-B311 Alarm Output Module provides two Class B or one Class A 24VDC signalling circuits. All signalling devices must be polarized and connected in parallel to the circuit. The maximum signal load for the circuit is 2.0 Amps.

Install wiring as shown in Figure 7A. For Class B, install the 5K9 ohm 1/2 watt, end of line resistor (supplied in parts bag) beyond the last signalling device on the circuit as shown. For Class A, wires from the last signalling device on the circuit must be returned to the control panel.

The operation of the 6816-B311 Alarm Output Module is preset at the factory for Class B operation, Alarm Output controlled by Alarm Silence, and Alarm Output common.

To set the module for Class A operation, remove fuses F1 and F2 and replace one fuse in the F3 position and place the four pin plug in position A as shown in Figure 7.

To set the module for silence by system Reset, position jumper J2 as shown in Figure 7.

To allow the module to be programmed through the I/O Programming module, remove jumper J1 as shown in Figure 7.

Test the circuit for opens, grounds and shorts using an ohmmeter as shown in Figure 7A.

1. With the positive (+) of the ohmmeter connected to wire (A) and the negative (-) of the ohmmeter connected to wire (B) the measurement should be approximately zero ohms.
2. Reversing the ohmmeter leads will result in a 5K9 ohms measurement which is the value of the end of line resistor.

3. Measure the resistance between ground and (A); and ground and (B). An infinite resistance should be measured in each case.
4. When tests are complete, connect the wiring to terminals as shown in Figure 7A. Observe polarity indicated.

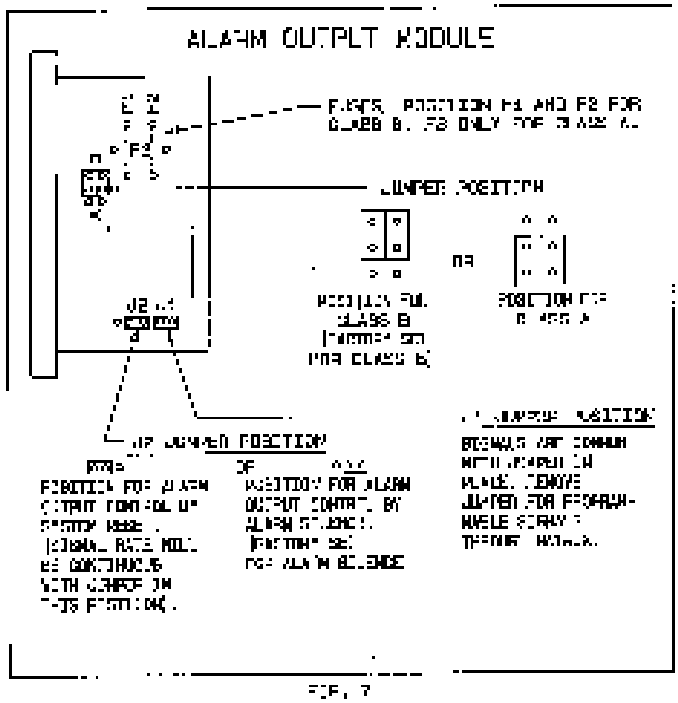


FIG. 7

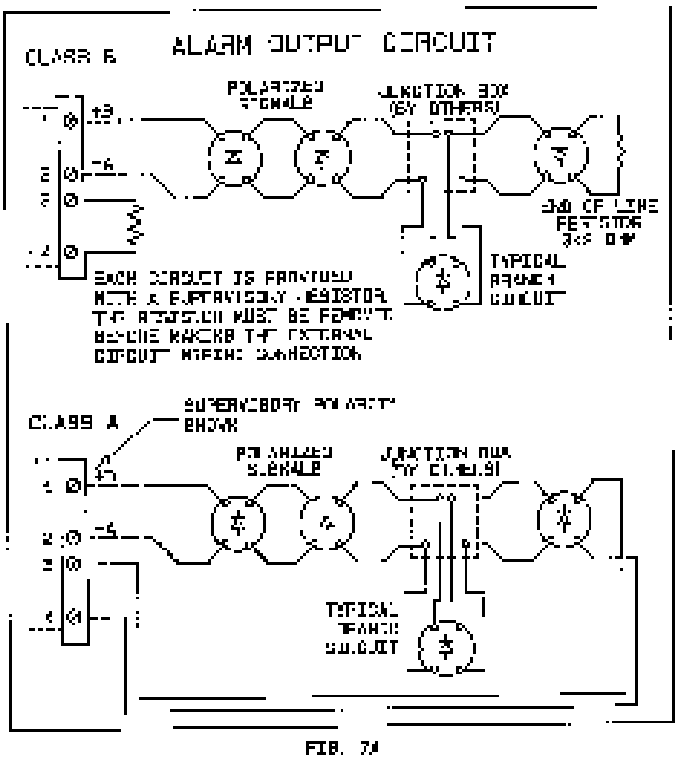


FIG. 7A

6616-B311 modules may be inserted into either Bin Assembly as indicated in Chart A.
Detailed circuit operation and wire run charts are provided on Drawing 045000-0773 supplied with the module and in Appendix B.

3.8 ANCILLARY ALARM RELAY MODULE

The Catalogue 6616-B321 Ancillary Alarm Relay Module provides four relays. Each relay provides a form C contact. The contacts transfer when any alarm zone becomes active, and restores when the system is reset. The transfer of contacts may be inhibited by the Ancillary Disconnect switch. The contacts are rated at 5.0 Amp. resistive/2.5 Amp inductive at 28VDC/120VAC.

Connect wiring to terminals as shown in Figure 8.

6616-B321 modules may be inserted into either Bin Assembly as indicated in Chart A.

Detailed circuit operation is shown on Drawing 045000-0774 supplied with the module and in Appendix B.

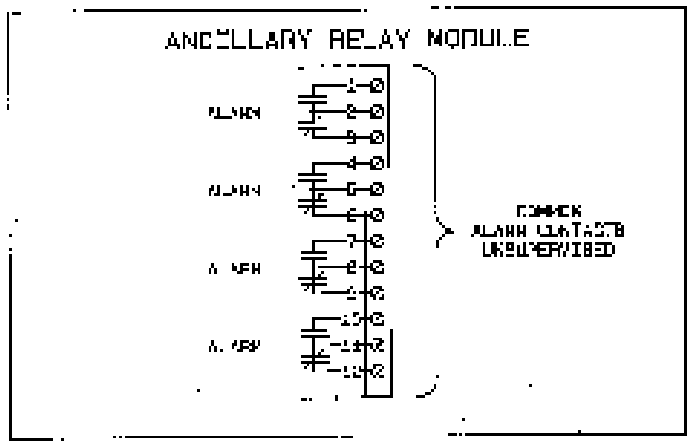


FIG. 8

3.9 I/O PROGRAMMING MODULE

The Catalogue 6616-B321 I/O Programming Module provides a 16 X 7 Diode Pin matrix and 4 programmable relays. The matrix inputs are labelled 1 thru 16 for each receiving circuit and outputs 1,2,3,4,5,8 and 9 for this individual module locations. See Figure 9.
These 7 outputs provide two system programming functions:
1) Signal Programming - Cat.#6616-B311
Alarm Output modules may be programmed to any input circuit by removing jumper J1 on the module, placing the module into an appropriate module location and inserting diode pins into the corresponding sockets in the matrix.
2) Relay Programming - The seven matrix outputs are connected to seven Relay Program-

ming Pins on the module labelled 1,2,3,4,5,8 and 6. The 4 on-board relays are commented to four Relay Pins labelled K1,K2,K3 and K4. Relays are programmed to one or more of the 7 outputs by installing a wire jumper across the appropriate pins.

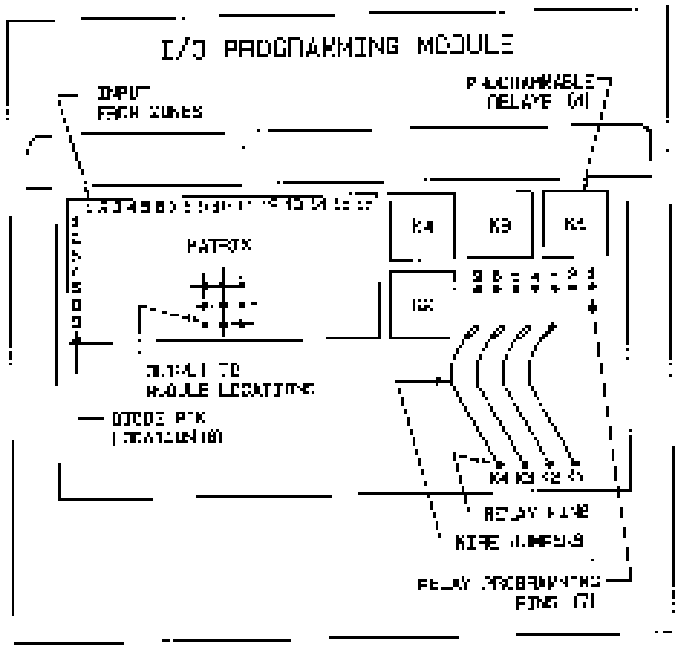


FIG. 8

Only the 6616-B311 Alarm Output modules have the option of being programmed, by removing jumper J1 on the module. (See 3.7). No other modules will be affected by a matrix output.

A matrix output can only be programmed to a signal module, not a signal circuit. For example, if two individually programmed signal circuits are required, two 6616-B311 Alarm Output modules are required. The individual circuits on each module will be programmed the same.

When configuring a 6632 Control Panel, one matrix may be required per bin. The matrix in the common control bin can only accommodate inputs from zones 1 through 16. A matrix in the expander bin, would accommodate the remaining zones, 17 through 32. The matrix module can be inserted into module location 6 or 7 of each bin.

Each programmable relay provides a form C contact. These contacts transfer when their correlated input(s) become active, and restores when the system is reset. The transfer of contacts may be inhibited by the Ancillary Disconnect switch. The contacts are rated at 5.0 Amp resistive/120VAC.

PROGRAMMABLE RELAY TERMINALS

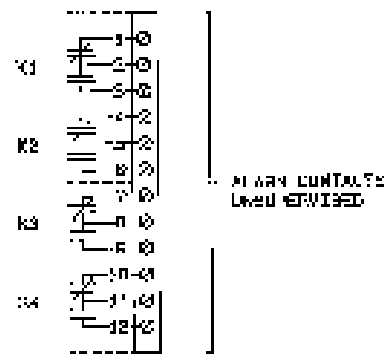


FIG. 9A

Connect wiring to terminals as shown in Figure 9A.

Note: In the Installation Verification Mode, the alarm contacts on this module will transfer. The activation of the Ancillary Disconnect switch before a System Verification is recommended.

6616-B331 modules may be inserted into module location 6 & 7 of either bin as indicated in Chart A.

Detailed circuit operation is shown on Drawing D16000-0513 supplied with the module and in Appendix B.

3.10 FIRE DEPARTMENT MODULES

3.10.1 REMOTE STATION MODULE (n/w 24VDC Auxiliary Power)

The Catalogue #6616-B711 Remote Station Module provides 1 set of "C" Alarm contacts, 1 set of "C" Trouble contacts, a Remote Station connection and two 24 VDC sources. (See 3.11 for 24VDC Auxiliary Power description.) Contacts are rated at 5.0 Amp resistive/2.5 Amp inductive at 28VDC/120VAC.

Under normal supervisory conditions, a current limited to 2.5mA is supplied from output terminals 1 and 2. An alarm on the fire alarm system will cause the alarm contacts to transfer and the output current to increase to a maximum of 250mA sending an alarm to the Remote Station. A trouble on the system will cause the trouble contacts to transfer and send a trouble signal to the Remote Station if connected accordingly.

The transmission of an alarm may be inhibited by the Ancillary Disconnect switch located on the Common Control Bin Assembly cover.

The 6616-B711 may be installed in either Bin Assembly as indicated in Chart A. Connect the field wiring to the terminals as shown in Figure 10.

Detailed circuit operation is shown on Drawing C46000-0777 supplied with the module and in Appendix B.

REMOTE STATION MODULE

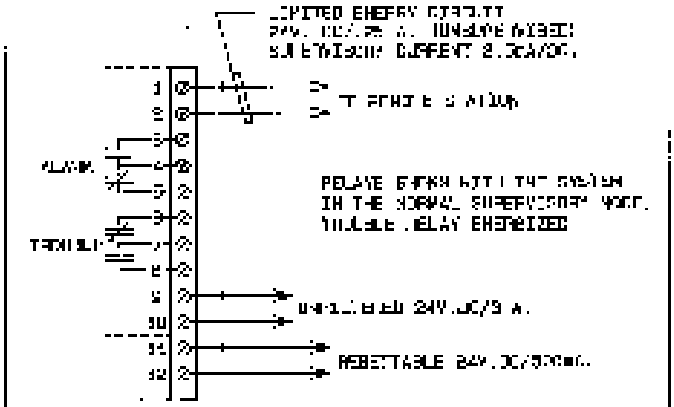


FIG. 10

3.10.2 MUNICIPAL TIE MODULE
(c/w 24VDC Auxiliary Power)

The Catalogue #6616-B712 Municipal Tie Module provides 1 set of "C" Alarm contacts, 1 set of "C" Trouble contacts, a Municipal Box connection and two 24VDC sources. (See 3.11 for 24VDC Auxiliary Power description.) Contacts are rated at 5.0 Amp resistive/2.5 Amp inductive at 28VDC/120VAC.

An alarm on the fire alarm system will cause the alarm contacts on this module to transfer. This will send an alarm signal to the Municipal Box, causing it to send its code to the Fire Hall or Remote Station.

The red Remote Station operated LED will light when the Municipal Box has operated. When the fire alarm system is being reset, also reset the Municipal Box. The Remote Station operated LED will then extinguish.

An open in the trip circuit wiring between the local fire alarm panel and the Municipal Box (terminals 1 and 2) will cause the amber Remote Station module LED to light. A common trouble signal on the local fire alarm system will also sound and the Trouble contacts on this module will transfer.

The transmission of an alarm may be inhibited by the Ancillary Disconnect switch located on the Common Control Bin Assembly cover.

The 6616-B712 may be installed in either Bin Assembly as indicated in Chart A. Connect field wiring to the terminals as shown in Figure 10A.

Detailed circuit operation is shown on Drawing C46000-0832 supplied with the module and in Appendix B.

MUNICIPAL TIE MODULE

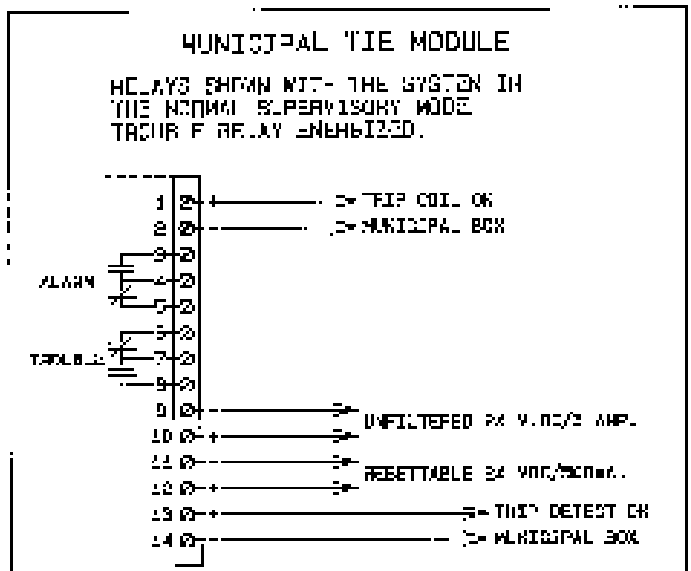


FIG. 10A

3.10.3 REVERSE POLARITY MODULE
(c/w 24VDC Auxiliary Power)

The Catalogue 6616-B713 Reverse Polarity Module provides one set of "C" Alarm contacts, one set of "C" Trouble contacts, a Class B Reverse Polarity output and two 24VDC sources. (See 3.11 for 24VDC Auxiliary Power description.) Contacts are rated at 5.0 Amp resistive/2.5 Amp inductive at 28VDC/120VAC.

Under normal supervisory conditions, a current limited between 2.55mA and 9.9mA DC is supplied at output terminals 1 and 2. An alarm on the fire alarm system will cause the output polarity to reverse. The current remains limited between 2.55mA and 9.9mA DC under an alarm condition. (Nema Standard ICS-1969).

The transmission of an alarm may be inhibited by the Ancillary Disconnect switch located on the Common Control Bin Assembly cover.

After testing the wiring, make connections to the designated terminals as shown in Figure 10B.

6616-B713 modules may be inserted into either Bin Assembly as indicated in Chart A.
Detailed circuit operation is shown on Drawing C46000-0778 supplied with the module and in Appendix B.

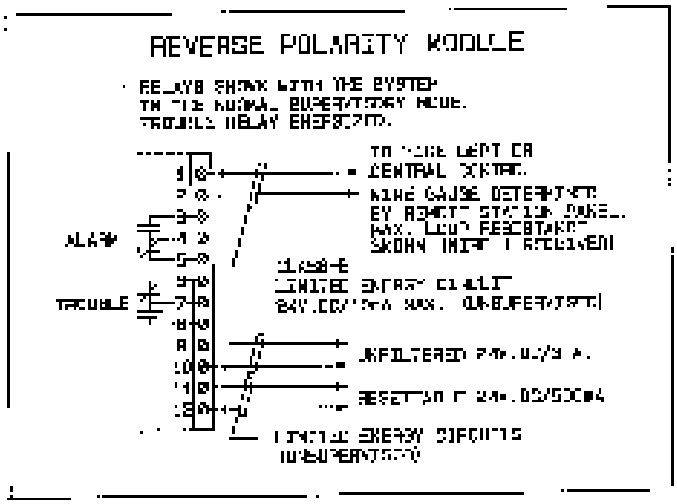


FIG. 9B

3.11 AUXILIARY POWER MODULE

The Catalogue #6616-B714 Auxiliary Power Module provides terminals for two D.C. sources. Resettable 24VDC/500mA, filtered and battery backed with no break on transfer, is available from terminals 11 and 12. Non resettable 24VDC/3.0A, unfiltered and battery backed with break on transfer, is available from terminals 13 and 14.

Each Bin Assembly will support a maximum of 4.0 Amps of combined Signal and Unfiltered Auxiliary current.

The 6616-B714 may be installed in either Bin Assembly as indicated in Chart A. Connect field wiring to the terminals as shown in Figure 11.

Detailed circuit operation is shown on Drawing C46000-0899 supplied with the module and in Appendix B.

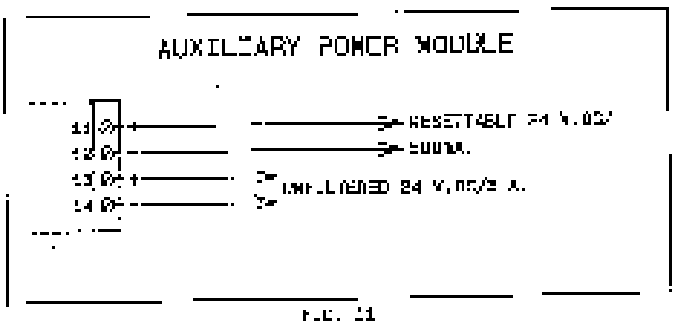


FIG. 11

3.12 ANNUNCIATOR DRIVER MODULE

The Catalogue 6616-B402 Annunciator Driver Module provides a supervised connection for one remote, 16 zone, LED annunciator. Two 6616-B402 modules may be used when two 16 zone annunciators or one 32 zone annunciator is required. Four 6616-B402 modules may be used when two 32 zone annunciators are required.
Note: 1) When two annunciators are required with common controls, a 6616-B403 Expanded Features module is required.

2) Only capable of one remote annunciator when an I/O programming module is required.

The 6616-B402 module is generally inserted into bin location 6. If this location is required for another module, remove the display driver cable from bin location 7 and reconnect to the matching connector socket on the 6616-B402 module. The zero ohm resistor (beige with black ring) must also be removed from the module. See Note "A" on Drawing C46000-0776 supplied with the module or in Appendix B.

After testing the wiring, connect the circuitry to the designated terminals as shown in Figure 12.
Note: All unused circuits on the annunciator driver module must be jumpered to common to complete Annunciator supervision.

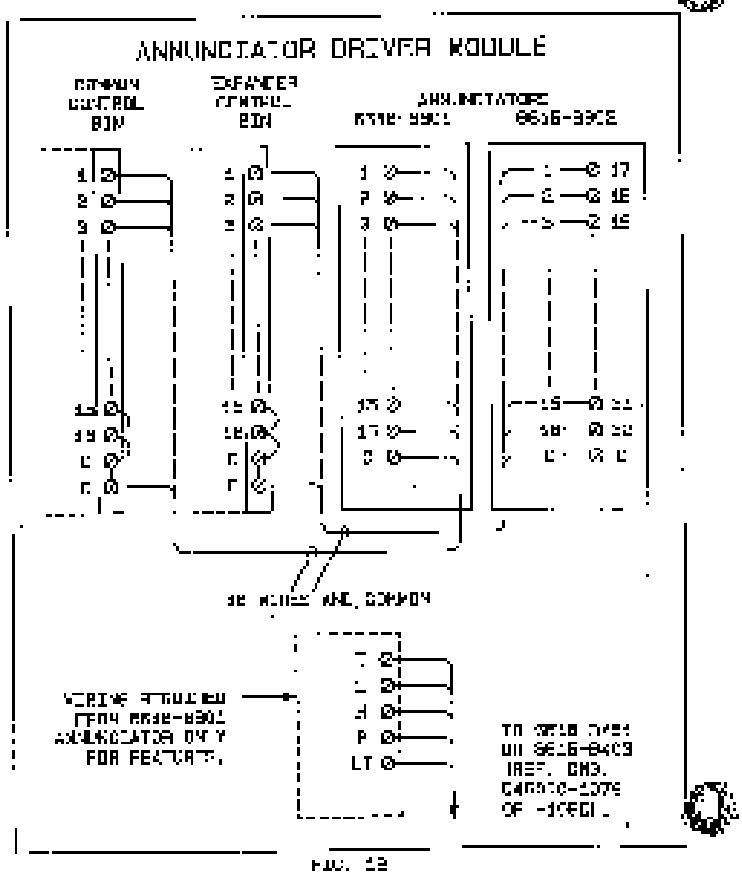


FIG. 12

8.13 EXPANDED FEATURES MODULE

Catalogue 6616-B403 Expanded Features Module provides terminals for a second Remote Trouble Unit or system common controls located in a Remote Annunciator.

The 6616-B403 may be inserted into module location 8 of the common control bin assembly. Connect field wiring as shown in Figure 13.

See Drawing C46000-1055 supplied with the module and in Appendix B for wiring information.

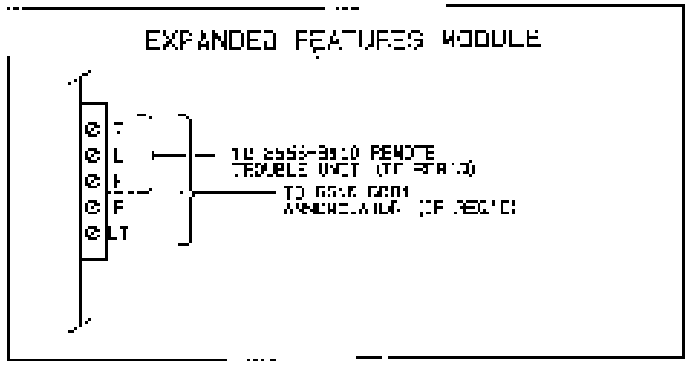


FIG. 13

MODULE LOCATION CHART

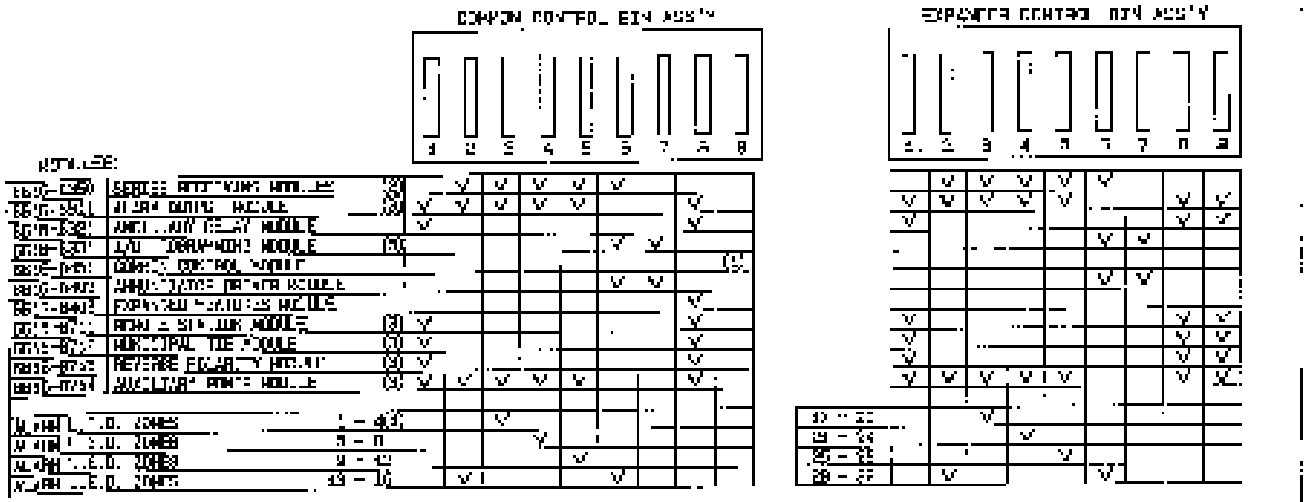


CHART A.

8.14 FIELD SELECTABLE FEATURES

An eight position dip switch is provided on the front of the 6616-B451 Common Control module to set the following system features.

8.14.1 ONE MINUTE MANUAL ALARM SILENCE AND RESET INHIBIT

The control panel is supplied from the factory with the one minute inhibit feature disabled. To enable the one minute alarm silence feature place switch 1 to the ON position.

8.14.2 ALARM SIGNAL RATE

The control panel is supplied with the signal rate set for continuous output.

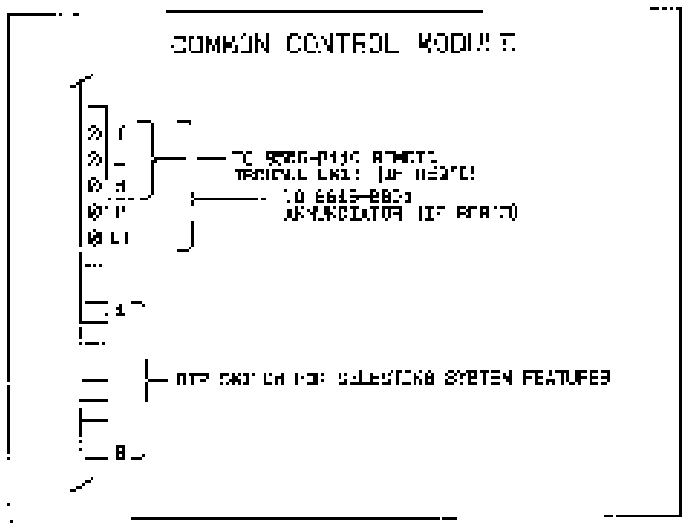
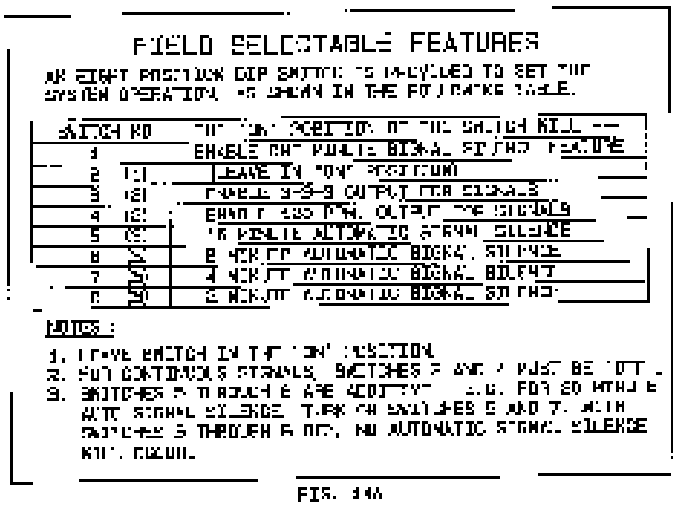


FIG. 14

To set the signal rate to 120 ppm, set switch 2 to the ON position. Switch 4 must be in the OFF position.

To set the signal rate to 3-3-3, set switch 4 to the ON position. Switch 2 must be in the OFF position.


FIELD SELECTABLE FEATURES

AN EIGHT POSITION DIP SWITCH IS PROVIDED TO SET THE SYSTEM OPERATION, AS SHOWN IN THE FOLLOWING TABLE.

SWITCH NO	THE "ON" POSITION OF THE SWITCH WILL —
1	ENABLE ONE PUBLIC SIGNAL SILENCE FEATURE
2	LEAVE IN "ON" POSITION!
3	PROVIDE 3-3-3 OUTPUT FOR SIGNALS
4	ENABLE 120 PPM. OUTPUT FOR SIGNALS
5	ENABLE AUTOMATIC SIGNAL SILENCE
6	SWITCH 6 THROUGH 8 ARE ADDITIVE
7	SWITCH 6 THROUGH 8 ARE ADDITIVE
8	SWITCH 6 THROUGH 8 ARE ADDITIVE

NOTES:
1. LEAVE SWITCH IN THE "ON" POSITION.
2. FOR CONTINUOUS SIGNALS, SWITCHES 5 AND 7 MUST BE "OFF".
3. SWITCHES 6 THROUGH 8 ARE ADDITIVE, i.e. FOR 20 MINUTE AUTO SIGNAL SILENCE, TURN ON SWITCHES 5 AND 7. WITH SWITCHES 5 THROUGH 8 OFF, NO AUTOMATIC SIGNAL SILENCE WILL OCCUR.

FIG. 14A

3.14.3 AUTOMATIC SIGNAL SILENCE TIMER

The control panel is supplied with the automatic signal silence timer disable.

The required signal silence timer period may be selected by operating any combination of switch 6 to switch 8. The timers are additive, i.e. for 20 minute auto signal silence, turn on switch 6 (16 minutes) and switch 7 (4 minutes).

For details refer to Figure 14A and Drawing C48000-1079 in Appendix B.

3.15 PRIMARY, SECONDARY AND SYSTEM POWER

The primary power circuit must be a separate circuit protected by an over current device in accordance with NFPA 72A and the National Electrical Code. No other equipment can be connected to this circuit. The panels primary source requirement is 120V, 60 Hz 15 amp. max.

3.15.1 CONNECTIONS FOR THE 6616 CONTROL PANEL

The 6616 Control panel will consist of Common Control Bin Assembly, a Power Supply and Battery.

Connect the Power Supply to the Bin Assembly with the interconnect cable provided. Connect the Battery to the Power Supply with the leads provided, red (+) and black (-).

Connect 120VAC Primary Power to terminals L, N and G as shown in Figure 15. Connect the ground lead from the Power Supply to the stud in the wallbox. Turn on AC Power.

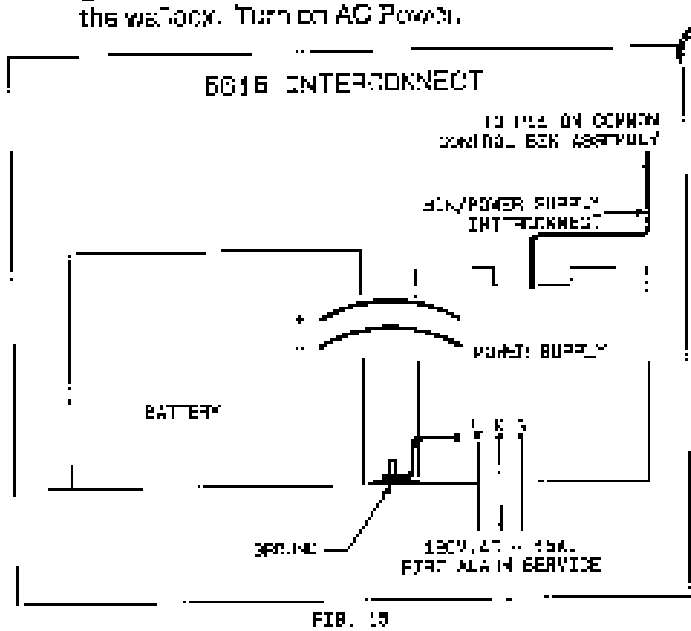
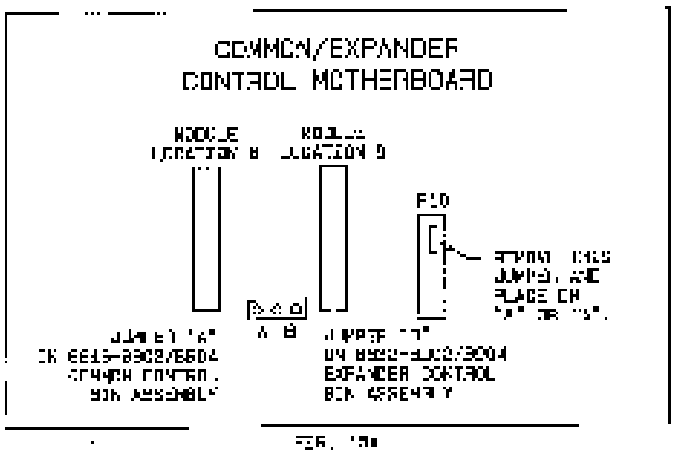


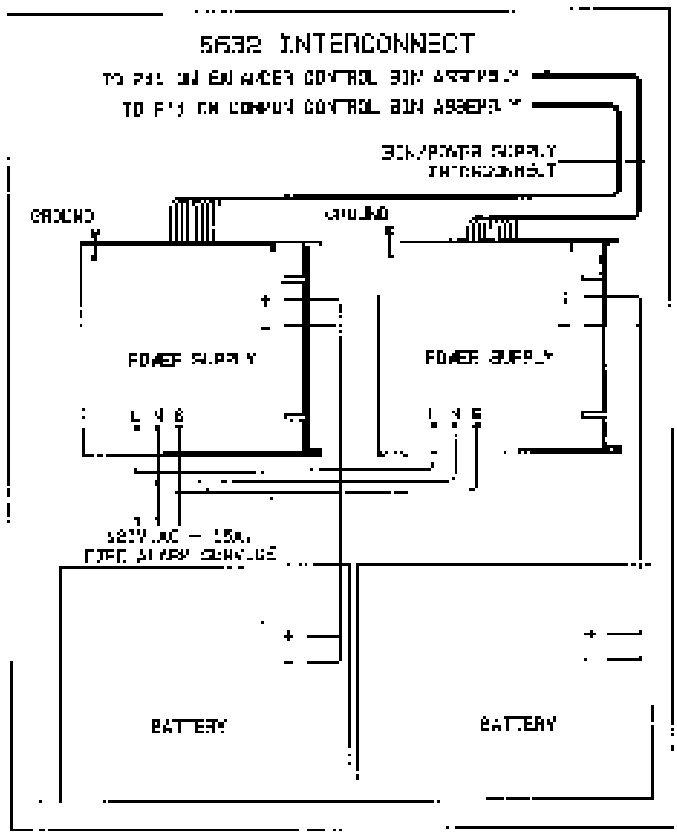
FIG. 15

3.15.2 CONNECTIONS FOR THE 6632 CONTROL PANEL

The 7532 Control Panel will consist of a Common Control Bin Assembly, Expander Control Bin Assembly, two Power Supplies and two Batteries.

Connect each Power supply to each Bin Assembly with the interconnect cables provided. Use the interconnect cable supplied with the 6632-B902/B904 Expander Control Bin Assembly to connect P11 of the Common Control Bin to the lower left power supply. The interconnect cable supplied with the 6616-B902/B904 Common Control Bin Assembly, is used to connect P11 of the Expander Bin to the lower right power supply. Remove the jumper from P10 of the Common Control motherboard and place it in position "A", between module locations 8 and 9 of the same board. Remove the jumper from P10 of the Expander Control motherboard and insert it into position "3", between module locations 8 and 9 of the same board as shown in Figure 15A. Interconnect the two Bin assemblies with the ribbon cable provided. When configuring a 6616-B904 with a 6632-B904, a single wire is required to interconnect the terminals on the back of the Common and Expander Control Front Panels. Connect each Battery to each Power Supply with the leads provided, red (+) and black (-). Connect the 120VAC primary power to terminals L, N and G as shown in Figure 15B. Interconnect the two supplies. Connect the ground lead from each Power Supply to the studs in the wallbox. Turn on the AC power.





4.0 SYSTEM CHECK-OUT PROCEDURES

4.1 GENERAL INFORMATION

The system check-out procedure consists of basic alarm and trouble tests to check for proper operation of the panel and signalling devices after installation has been completed. These tests should be conducted only by MIRTONE SERVICE PERSONNEL or qualified fire alarm system service personnel. Notify fire headquarters and building occupants before and after tests are conducted.

4.2 PRELIMINARY TEST

With AC and battery power to the system on, verify that only the POWER ON LED is on. If there are any trouble indications correct faults before proceeding.

The POWER ON indicator remains on while the main AC power is supplied.

4.3 INDICATOR TEST

With the system in the normal mode (only POWER ON LED illuminated) operating the Smart Switch, will cause a three second lamp test to be performed. All zone indicators, (light emitting diodes, LED's) illuminate and the common trouble buzzer will pulse.

4.4 INSTALLATION VERIFICATION

(Available on 6516-B904 Common Control Assembly only) Placing the Installation Verification switch in the Verification position will, illuminate the indicating LED, initiate the common trouble sequence and allow the service man to verify the continuity of the field wiring. In the verification mode, activation of a resettable initiating device will:

a) illuminate the corresponding zone alarm LED.
b) sound a distinct code (two pulses) on the alarm signals to inform the Service personnel that the device is properly installed.

The control panel will automatically reset after the initiating device has been restored to allow the testing of another device.

Returning the Installation Verification switch to the normal position will return the system to the normal supervisory mode. These tests should only be conducted by an Authorized Fire Alarm System Representative.

4.5 ALARM TEST

Initiate an Alarm-Operate a restorable device on Zone 1 and verify that:

a) all signals sound and operate at the selected rate (continuous or 120 ppm or 3/3/3 code).
b) the applicable zone alarm LED and common alarm LED illuminate steady.
c) the Silence Alarm Operator Prompt LED will illuminate to indicate the Smart Switch may be used to silence the signals. Press and release the Smart Switch. Verify that:
1) The signals silence and the alarm silenced LED illuminates.
2) The initiating zone LED remains ON.
3) The Common Trouble LED and trouble horn flash.

If the system is configured with 1 minute reset inhibit the signals cannot be silenced for 1 minute after initiation of the first alarm.

For systems with Ancillary Alarm Relays - verify that the relay contacts transfer for the control of ancillary functions.

For systems with a Remote Station Module connected - verify that the headquarters or the remote station have received the alarm.

When the alarm signals have been silenced, the Silence Trouble, Operator Prompt LED will flash to indicate the Smart Switch may be used to silence the trouble horn. Press and release the Smart Switch. The trouble horn will silence but the Zone LED, Common Alarm LED and Alarm Silenced LED will remain ON and the Common Trouble LED will continue to flash.

The Reset, Operator Prompt LED will illuminate to indicate the panel may be RESET by the Smart Switch after the initiating device has been restored. The system will perform a three second lamp test cycle of all indicators during the RESET cycle. The ALARM TEST procedure should be repeated for all receiving circuits.

4.6 DISCONNECT TEST

The Ancillary Disconnect Switch will disconnect the 6816-B321 Ancillary Relay module contacts, the 6816-B321 I/C programming module contacts and the 6816-B700 Series Fire Dept. module if provided.

Place the Ancillary Disconnect switch in the disconnect position and verify that:
a) the trouble buzzer pulses and the common TROUBLE LED flashes at the control panel and remote trouble unit (if installed). The OPERATOR PROMPT LED will flash to indicate the trouble buzzer may be silenced.
b) operation of the Smart Switch will silence the trouble buzzer and illuminate the OPERATOR PROMPT LED to indicate the system may be reset.
c) a system trouble has been received by the Fire Department or Remote Station if a trouble signal transmission is required.

Initiate an alarm and verify that:
a) the Fire Department or remote station did not receive the alarm if a 6816-B700 series module is provided.
b) the Ancillary Relay module contacts did not transfer if a 6816-B321 or 6816-B301 is provided.

Return the Disconnect switch to the normal position. Reset initiating device and operate the system Smart Switch. Verify that:
a) the system resets
b) the trouble transmission to the Fire Department or Remote Station has cleared.

4.7 OPEN CIRCUIT TEST

Remove one wire of an alarm receiving circuit from the control panel. Verify that:
a) the Common Trouble buzzer and TROUBLE LED flash.
b) the ZONE FAULT LED illuminates.
c) the individual ZONE TROUBLE LED (located on the zone module) illuminates.

The OPERATOR PROMPT LED will flash to indicate the SMART SWITCH may be used to silence the trouble buzzer. Press and release the SMART SWITCH. The trouble buzzer will silence but the ZONE TROUBLE LED will remain on and the common TROUBLE LED will continue to flash. The OPERATOR PROMPT LED will transfer to the reset position.

Reconnect the alarm receiving circuit wire to the control panel. Verify the ZONE FAULT LED, individual ZONE TROUBLE LED and OPERATOR PROMPT LED turn off and the common trouble circuit restores.

This should be repeated for all receiving and signal circuits.

4.8 BATTERY POWER TEST

Place the system on battery power by turning off the AC primary power. Verify that:
a) the POWER ON LED turns off
b) the trouble sequence activates

Reconnect the primary power.

4.9 BATTERY SUPERVISION TEST

Caution: The battery contains sufficient stored energy to cause personnel injury if shorted. Remove all metal objects from hands and arms such as rings, watches, bracelets and other metallic objects.

Disconnect one of the battery leads. Verify that:
a) the BATTERY FAULT LED turns on
b) the trouble sequence activates.

Reconnect the battery.

5.0 OPERATIONS

5.1 FUNCTIONS OF CONTROL SWITCHES AND INDICATORS

All operator controls and function indicators are conveniently located on the Common Control Bin Assembly front panel. Operations are simplified by the multifunction Smart Switch with Operator prompt LED's for RESET, SILENCE ALARM, and SILENCE TROUBLE functions.

In the alarm mode the Silence Alarm prompt LED will illuminate indicating that the operation of the Smart Switch will silence the trouble signal.

In the trouble mode the Trouble Silence prompt LED will flash indicating that the operation of the Smart Switch will silence the trouble signal.

Illumination of the Reset prompt LED will indicate that the operation of the Smart Switch will reset the system. Resetting the control panel when there is an alarm present will immediately reinitiate the alarm sequence. Similarly, attempting to Reset the control panel while a fault condition exists will initiate the common trouble sequence.

In addition to the Smart Switch the panel provides the following switches, SILENT TEST, DRILL, ANCILLARY DISCONNECT and the following common indicators, POWER ON, ALARM, ALARM SILENCED, ZONE FAULT, GROUND FAULT, BATTERY FAULT, SILENT TEST ON, and INDIVIDUAL ZONE ALARM LEDS.

The 6816/6832-3904 assembly provides INSTALLATION VERIFICATION, ALARM VERIFICATION, and INDIVIDUAL ZONE BYPASS in addition to the above features.

5.2 SILENT TEST SWITCH

Placing the Silent Test Switch in the Silent Test position will illuminate the silent test LED, initiate the common trouble sequence and inhibit operation of the alarm output circuits. Operating an initiating device will cause the respective zone LED to illuminate, the ancillary relay and the Fire Dept. module to operate. Subsequent operation of the Silent Test Switch and the Smart Switch will return the Control panel to the normal supervisory mode. The control panel will automatically return to the normal supervisory mode if no alarm is initiated within a thirty minute time period.

5.3 DRILL SWITCH

Operating the Drill switch will cause the signals to sound at the selected rate. The ancillary alarm relay will remain de-energized and the signal silence function will be operative for the duration of the drill. Returning the Drill switch to the normal position will silence the signals and return the system to the normal supervisory mode. If during an alarm, the signals have been silenced, they may be reactivated by operating the Drill switch.

5.4 ANCILLARY DISCONNECT SWITCH

Operating the Ancillary Disconnect switch will illuminate the Ancillary Disconnected LED, initiate the common trouble sequence, inhibit the operation of the 6816-3821 and 6816-3941 ancillary relays and Fire Dept. modules. Returning the Ancillary Disconnect switch to the normal position will return the system to the normal supervisory mode.

5.5 ALARM VERIFICATION

(Available on the 6816/6832-3904 assemblies only)

Selecting a zone for Alarm Verification will delay the processing of a change in status from the zone selected for 20 seconds. If the alarm is still present at the end of the 20 second retard/reset period, or if the alarm re-occurs within the following 90 seconds, then the alarm will be processed immediately.

If the change in status is the result of an electrical transient or migratory products of combustion, the panel will return to the normal supervisory mode. Only smoke detectors should be connected to a zone selected for Alarm Verification.

5.6 INDIVIDUAL ZONE BYPASS

(Available on the 6816/6832-3904 assemblies only)

Placing a Zone Bypass switch in the bypass position will disable the transmission of an alarm pulse from the corresponding receiving zone, initiate the common trouble sequence and illuminate the zone trouble LED. If an initiating device is activated on a bypassed zone, the signal circuits and relays will not be activated. The Reset Operator Prompt LED will illuminate to indicate the panel may be RESET by the Smart Switch after the initiating device has been restored. Returning the switch to the Normal position will return the system to the normal supervisory mode.

5.7 AC POWER ON LED

The GREEN LED indicates when AC Power is supplied to the control panel. Degradation of AC power will cause the Power On LED to extinguish and the panel to transfer to standby battery power.

5.9 ALARM ZONE LED
The RED common alarm LED will illuminate upon the receipt of an alarm and remains illuminated until system RESET.

5.9 ALARM SILENCED LED
The AMBER ALARM SILENCED LED will illuminate following the silence alarm function of the smart switch and will remain illuminated until system RESET or the receipt of a subsequent alarm.

5.10 ZONE FAULT LED
The AMBER ZONE FAULT LED will illuminate following the receipt of a zone fault in the supervised field wiring of the alarm receiving or alarm output circuits.

5.11 GROUND FAULT LED
The AMBER GROUND FAULT LED will illuminate when a ground fault of 10 to 50K Ohms is detected and remains illuminated while the fault is present.

5.12 BATTERY FAULT LED
The AMBER BATTERY FAULT LED will illuminate if the battery is low or disconnected during normal operations.

5.13 SILENT TEST ON
The AMBER SILENT TEST ON LED will illuminate when the silent test switch is operated and will remain illuminated for the duration of the silent test.

5.14 ANCILLARY DISCONNECT LED
The AMBER ANCILLARY DISCONNECT CONFIRMATION LED will illuminate to confirm the operation of the ancillary disconnect switch. It will remain illuminated until the ancillary disconnect switch is returned to the normal position.

5.15 COMMON TROUBLE LED
The AMBER COMMON TROUBLE LED will flash during the common trouble sequence. It will remain flashing until the fault is corrected and the system is reset.

6.0 OPERATION MODES

6.1 GENERAL INFORMATION
The Fire Alarm Control Panel has three modes of operation, the supervisory mode, the alarm mode and the trouble mode.

6.2 SUPERVISORY
The fire alarm system is in the supervisory mode when the GREEN, AC Power On LED is illuminated and all other LED's are extinguished.

6.3 ALARM
Activation of an automatic detector or manual pull station will cause the signals to sound at the selected rate, the alarm zone LED, the common alarm LED and the silence alarm operator prompt LED to illuminate. The optional Fire Department and Ancillary Alarm Contacts, if provided, will activate.

After investigation of the alarm, the signals may be silenced by confirming the silence alarm prompt LED is illuminated and operating the Smart Switch. Operating the switch in this mode will silence the alarm signals, illuminate the alarm silenced LED and activate the common trouble sequence. The signals cannot be silenced for one minute if the one minute inhibit feature has been selected. The signals will automatically silence after a selected period if the 2 to 30 minute auto silence feature has been selected. Operation of the Smart Switch to silence the alarm signals will not affect the state of the ancillary contacts.

If the alarm has been silenced, a subsequent alarm from another alarm receiving zone will cause the signals to resound. The signals may be silenced immediately by operating the Smart Switch or by the automatic signal silence feature, if selected. The ancillary alarm contact and the Remote Station Module will remain energized. The alarm will continue until the initiating device is returned to its normal condition and the system is reset. The control panel may be reset by confirming the reset prompt LED is illuminated and operating the Smart Switch. Operation of the Smart Switch after the initiating device has been restored, will return the system to the normal supervisory mode.
Activation of a supervisory device connected to a supervisory receiving module will cause the individual zone alarm LED and the zone fault LED to illuminate, the common trouble sequence to be initiated and the trouble silence prompt LED to illuminate.

After investigation of the supervisory alert the trouble signal may be silenced by operating the Smart Switch. Operating the switch in this mode will silence the trouble signal and illuminate the reset prompt LED. Restoring the supervisory device and activating the Smart Switch will return the system to the normal supervisory mode.

6.4 RESPONDING TO AN ALARM

WHEN AN ALARM SOUNDS:

1. Notify the municipal fire department.
2. Evacuate all occupants from the building in an orderly manner. Avoid panic.
3. To reset the system after an alarm:
   a) Reset or replace as applicable the alarm initiating device(s).
   b) Open the panel door and operate the Smart Switch.

6.5 TROUBLE

A fault on any supervised circuit, the off normal condition of a control switch, the removal of any interconnect cable or module from its position or loss of stand-by battery power will cause the common trouble LED to flash, the ancillary trouble relay to de-energize the remote trouble unit to operate (if provided) and the zone trouble LED to illuminate (if the fault is on the field wiring). The trouble mode will be suppressed during alarm.

After investigation of the fault the trouble signal may be silenced by confirming the silence trouble prompt LED is illuminated and operating the Smart Switch. Operating the switch in this mode will silence the trouble signal, and illuminate the reset prompt LED. Operation of the Smart Switch to silence the trouble signal will not affect the state of the ancillary trouble relay.

A subsequent trouble on any other supervised circuit will cause the associated trouble LED to turn on.

The control panel will return to the supervisory mode after the fault or off normal condition has been restored.

The degradation of AC power will cause the control panel to transfer to standby battery power, initiate the common trouble sequence and extinguish the green Power ON LED.

6.6 RESPONDING TO A TROUBLE

WHEN THE TROUBLE SIGNAL SOUNDS:

1. Open the panel door and operate the SMART SWITCH. This:
   (a) Silences the trouble tone.
   (b) Leaves the system COMMON TROUBLE LED flashing.
2. Notify the responsible system maintenance personnel that there is a system trouble.
3. If any manual station will be out of service for an extended period of time, place an "OUT OF ORDER" sign on the affected station and indicate the location of the nearest operating station.

7.0 PERIODIC SYSTEM OPERATIONAL TEST OR DRILL

7.1 GENERAL INFORMATION

A system operational test and/or drill must be made according to and at the intervals required by local fire authorities. Where there are no conflicting local regulations, a monthly test or drill is recommended. Should a trouble condition occur during a test or drill, the system must be serviced by a qualified fire alarm service technician.

When the panel includes an optional Remote Station module and a test or drill is to be performed, notify the fire department or remote station of scheduled test and disconnect the circuit by placing the Ancillary Disconnect Switch in the DISCONNECT position. This causes the audible tone to pulse and the TROUBLE LED to flash. The audible tone can be silenced by operating the SMART SWITCH with the SILENCE TROUBLE LED illuminated.

7.2 INITIATING A TEST OR DRILL

A test or drill can be initiated from any manual station.

1. Open the station and place the switch in the ALARM TEST (up) position and check that:
   (a) Audible signals sound at the selected rate.
   (b) Respective Zone Alarm LED illuminates.
   (c) The Fire Department or Remote Station did not receive the alarm.

A different station should be used for each test or drill to ensure that each station will be checked periodically. A record should be maintained of all tests and drills and the station from which they were originated.

CAUTION

Never attempt to initiate a test or drill by holding a flame beneath an automatic heat detector. This will destroy its fixed temperature element and require replacement of the entire unit.

2. When the test or drill has been completed:
   (a) Return the manual station switch to the NORMAL (down) position and close the station.
   (b) Place the Ancillary Disconnect switch in the NORMAL position.
   (c) Operate the SMART SWITCH with the RESET PROMPT LED illuminated. Verify that the applicable zone alarm LED has extinguished and the Trouble transmission to the Fire Department or Remote Station has cleared.

Edwards products are designed and specified to provide optimal battery performance when installed in ambient room temperatures of 20° - 25°C (68° - 77°F). While testing agencies such as ULC and ULI perform operational tests over the range of 0° - 49°C (32° - 120°F), continued operation above the optimal range will result in reduced battery life expectancy.

APPENDIX A
BATTERY SELECTION

THE AMPERE-HOUR RATING OF EACH BATTERY REQUIRED WILL DEPEND ON ITS BIN ASSEMBLY LOAD.

1. When *Auxiliary DC* is not required from a bin/power supply assembly:
   - The 6.5 Ah battery will support a loaded bin for 24 hour supervision and 5 minutes alarm.
   - The 10.0 AH battery will support a loaded bin for 24 hour supervision and 60 minutes alarm.

2. When *Auxiliary DC* is required from a bin/power supply assembly, calculate the minimum size of battery needed to support the bin incorporating the auxiliary power as follows:

A. CALCULATE TOTAL BIN/POWER SUPPLY LOAD:

MODULES	QTY		SUP/ALM (mA)		SUP/ALM (mA)
Number of 6616- 351 modules	___	x	45 / 156	=	___ /
Number of 6616- 352 modules	___	x	20 / 70	=	___ / ___
Number of 6616- 353 modules	___	x	40 / 155	=	___ / ___
Number of 6616- 354 modules	___	x	45 / 160	=	___ / ___
Number of 6616- 311 modules	___	x	15 / 72	=	___ / ___
Number of 6616- 321 modules	___	x	7 / 43	=	___ / ___
Number of 6616- 331 modules	___	x	7 / 60	=	___ / ___
Number of 6616- 402 modules	___	x	3.5 / 85	=	___ / ___
Number of 6616- 403 modules	___	x	22 / 22	=	___ /
Number of 6616- 701 modules	___	x	7.5 / 25	=	___ /
Number of 6616- 711 modules	___	x	10 / 279	=	___ / ___
Number of 6616- 712 modules	___	x	18 / 358	=	___ / ___
Number of 6616- 713 modules	___	x	20 / 33	=	___ / ___
Number of 6616- 714 modules	___	x	6.5 / 6.5	=	___ / ___
Bin/Power supply adder				+	65 / 165

	Supervisory	Alarm
Sub-Total current in mA	___mA	___mA
Divide Sub-Total by 1000 to convert to Amps		
Total Bin/Power Supply Current:	___ AMPS	___ AMPS

B. CALCULATE TOTAL LOAD ON BATTERY (IN AMPS):

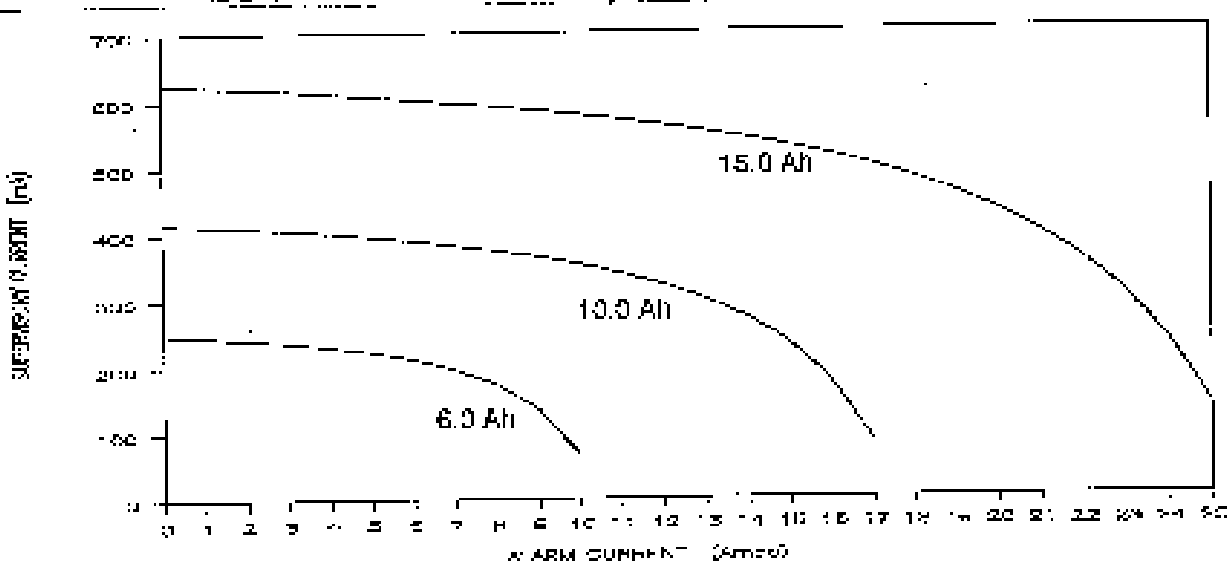
		SUP. (amps)	ALARM (amps)
a.	Total alarm output current (Signal Load)	0	___*
b.	Auxiliary DC Unfiltered	___	___*
c.	Resettable Auxiliary DC	___	___
d.	Total Bin/Power Supply current (From A)	___	___
	Total Supervisory and Alarm Load	___ AMPS	___ AMPS

* (a+b) must not exceed 4.0 Amps.

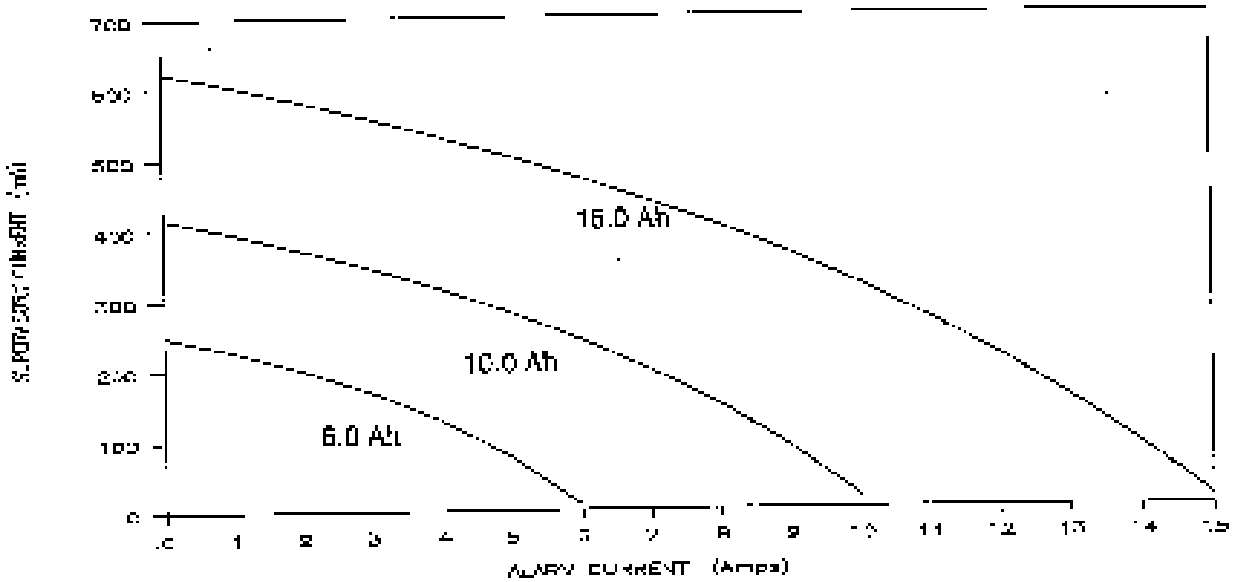
C. DETERMINE AMPERE HOUR OF BATTERY FROM APPROPRIATE CURVE

NOTE : Due to charger restrictions, battery cannot exceed 15Ah

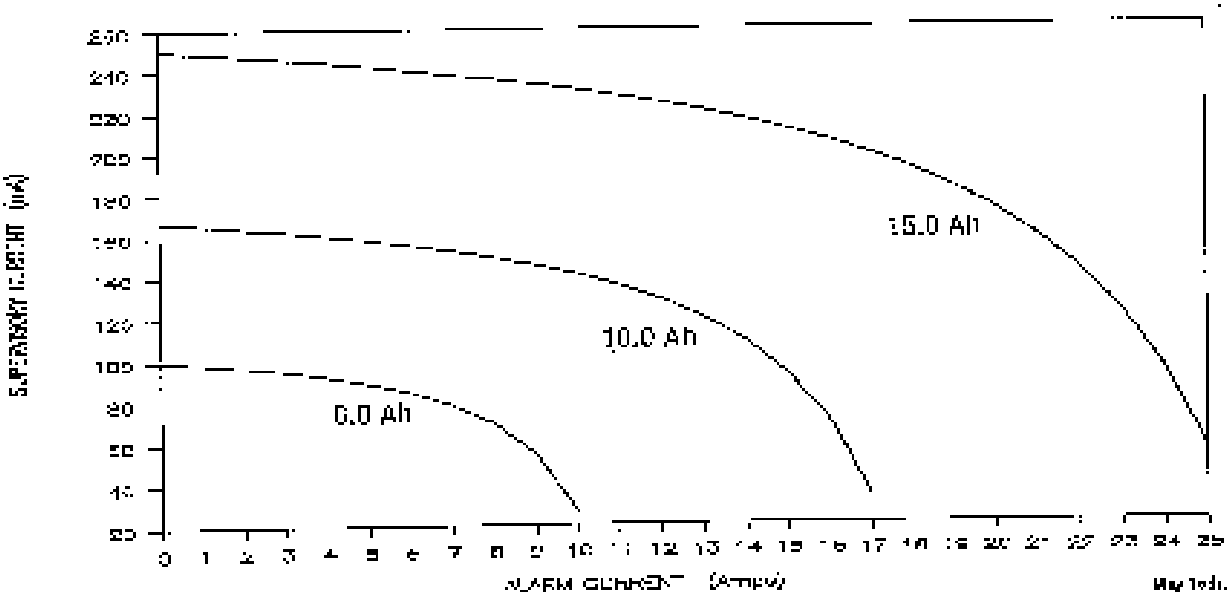
24 HOURS SUPERVISION & 5 MINUTES ALARM



24 HOURS SUPERVISION & 30 MINUTES ALARM



60 HOURS SUPERVISION & 5 MINUTES ALARM



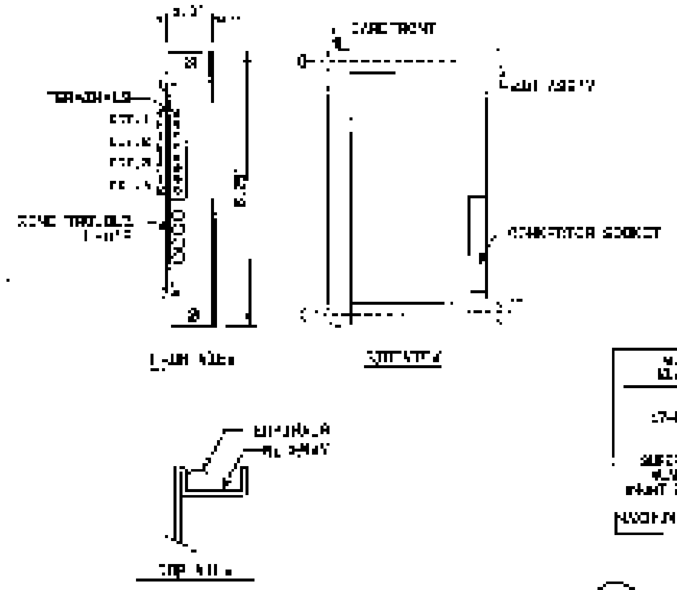
May 1st, 1991

APPENDIX B

CUSTOMER DRAWINGS

Cat. No.	Description	Dwg. No.	Page
6816-B951	Class B Alarm Receiving Module	46000-1075	B1
6816-B952	Supervisory Receiving Module	46000-1073	B2
6816-B953	Alarm/Supervisory Receiving Module	46000-1071	B3
6816-B954	Class A Alarm Receiving Module	46000-1077	B4
6816-B311	Alarm Output Module	46000-0773	B5
6816-B321	Ancillary Relay Module	46000-0774	B6
6816-B331	I/O Programming Module	46000-0813	B7
6816-B451	Common Control Module	46000-1079	B8
6816-B402	Annunciator Driver Module	46000-0776	B9
6816-B403	Expanded Features Module	46000-1085	B10
6816-B711	Remote Station Module	46000-0777	B11
6816-B712	Municipal Tie Module	46000-0832	B12
6816-B713	Reverse Polarity Module	46000-0778	B13
6816-B714	Auxiliary Power Module	46000-0833	B14
6816-B901	16 LED Annunciator c/w features	46000-0634	B15
6816-B902	16 LED Annunciator less features	46000-0634	B15
6816-B901	7516 Wallbox / Door Assembly	46000-0779	B16
6816-B902	Common Control Assembly	46000-0827	B17
6816-B904	Common Control Assembly	46000-1081	B18
6816	Control Panel Assembly	46000-0781	B19
6832-B901	7532 Wallbox / Door Assembly	46000-0750	B20
6832-B902	Expander Control Assembly	46000-0839	B21
6832-B904	Expander Control Assembly	46000-1083	B22
6832	Control Panel Assembly	46000-0782	B23
	Device Compatability Chart	46000-0852	B24
	Operating Instructions	46000-0044	B25

45000-1075



ALARM RECEIVING CIRCUIT ELECTRICAL SPECIFICATION

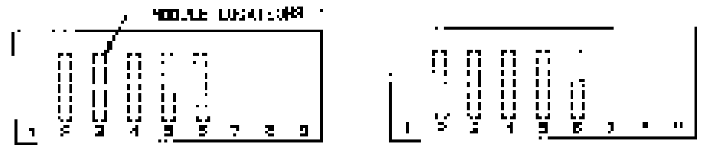
CIRCUIT VOLTAGE

CIRCUIT CURRENTS

PARALLEL BRANCHING OF A CIRCUIT IS NOT PERMITTED

MOUNTING

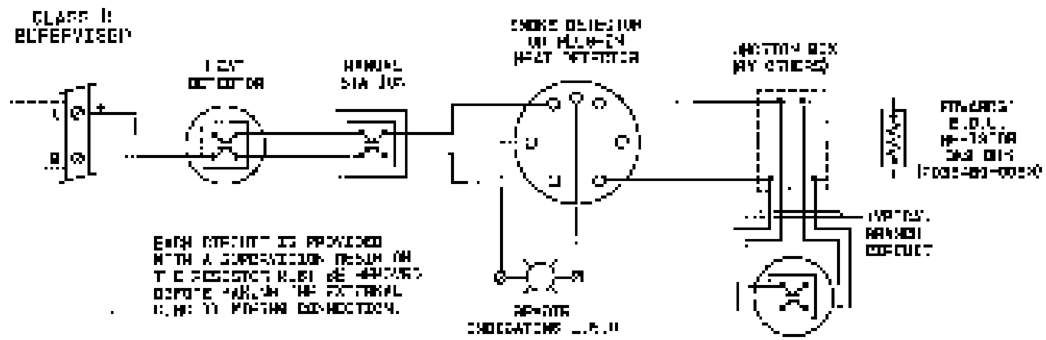
CAT.# 6515-8361 ALARM RECEIVING MODULES PLUG INTO THE COMMON CONTROL AND EXPANDER CONTROL BIN ASSEMBLIES AS SHOWN BELOW. EACH BIN ASSEMBLY WILL SUPPORT UP TO 4 RECEIVING MODULES. THE ZERO OHM RESISTOR LOCATED BEHIND THE CONNECTOR PINS ON THE BIN CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN.
SECURE EACH MODULE IN THE BIN ASSEMBLY WITH THE 2 SCREWS PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR 4 CLASS B CIRCUITS AND 4 AMBER ZONE TROUBLE LED'S. THE MODULE WILL OPERATE WITH N.O. DEVICES AND EDWARDS LISTED SMOKE DETECTORS.

COMPATIBILITY INFORMATION: REFER TO DEVICE COMPATIBILITY CHART (45000-0888), PROVIDED IN THE APPENDIX OF THE MANUAL, FOR A COMPLETE LIST OF EDWARDS' COMPATIBLE PRODUCTS.



EACH CIRCUIT IS PROVIDED WITH A SUPERVISION RESISTOR. THE RESISTOR MUST BE REMOVED BEFORE MAKING THE EXTERNAL WIRING CONNECTION.

REFER TO INDIVIDUAL DEVICE DRAWINGS FOR APPLICATION DATA AND TERMINAL DESIGNATIONS.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL 45000-0755.

INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760. IF LOCAL REGULATIONS PERMIT, CIRCUIT CONNECTIONS MAY BE INSTALLED, USING LIMITED ENERGY CABLE PER ART. 760, POWER LIMITED CIRCUITS (N.F.P.A.-70).

WIRE GAUGE	MAXIMUM WIRE RUN TO E.O.L. RESISTOR
14	10,000FT
16	5,000FT
18	4,000FT
20	2,000FT

	MODULE LOCATION	CORRESPONDING ZONES
COMMON CONTROL BIN ASSEMBLY	1 2 3 4	1 - 4 5 - 8 9 - 12 13 - 16
EXPANDER CONTROL BIN ASSEMBLY	1 2 3 4	17 - 20 21 - 24 25 - 28 29 - 32

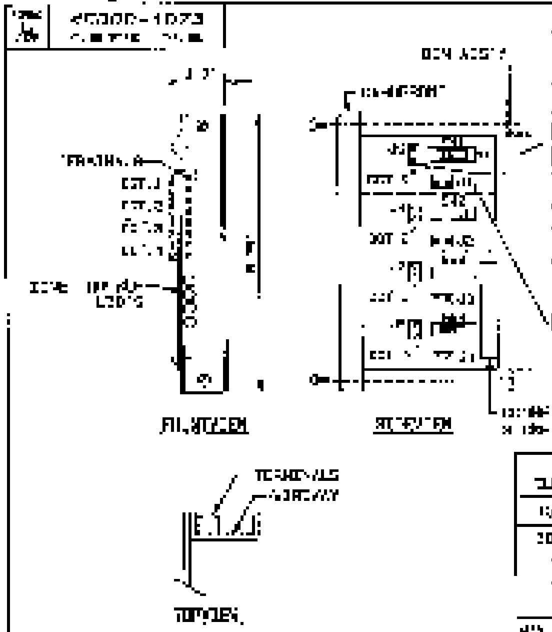
EDWARDS

CUSTOMER DRAWING

CAT. 6515-8361

ALARM RECEIVING MODULE

45000-1075



SET SWITCH TO N.O. FOR EACH CIRCUIT WITH NORMALLY OPEN DEVICES

SET SWITCH TO N.C. FOR EACH CIRCUIT WITH NORMALLY CLOSED DEVICES

POSITION FOR OPEN CIRCUIT SUPERVISION OF N.O. DEVICES (4 DEVICE MAXIMUM)

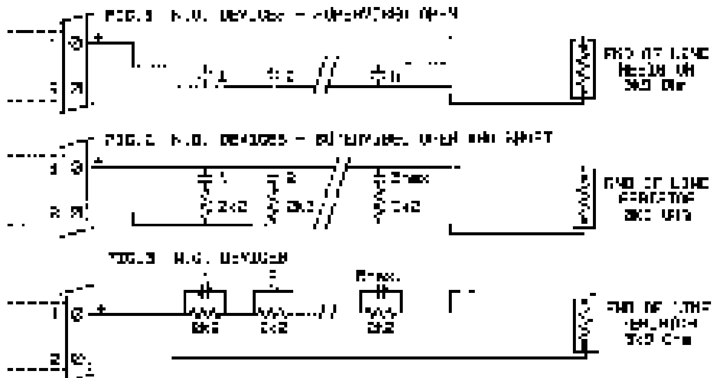
POSITION FOR OPEN AND SHORT CIRCUIT SUPERVISION OF N.O. DEVICES (MAX. 5 DEVICES)

NOTE: POSITION OF JUMPER HAS NO EFFECT IF CIRCUIT SELECTED FOR N.C. DEVICES

CIRCUIT LATCHING WITH JUMPER IN PLACE

NON-LATCHING CIRCUIT WITH JUMPER REMOVED

ELECTRICAL SPEC.	N.O. SUPV. CIRCUIT	N.C. SUPV. CIRCUIT
OPERATING VOLTAGE	19-27V (20DMA-1A)	19-27V (20DMA-1A)
CURRENT CURRENTS		
NORMAL	3.7mA MAX.	3.4mA MAX.
ALARM	7.5mA & 32.8mA	3.3mA & 15mA
SHORT CIRCUIT	10.5mA MAX.	8.4mA MAX.
MAX. LOOP RESISTANCE	50 OHM	50 OHM



EOL END OF LINE RESISTOR PT 035400-0053
SR SUPERVISORY RESISTOR PT 46004-0131

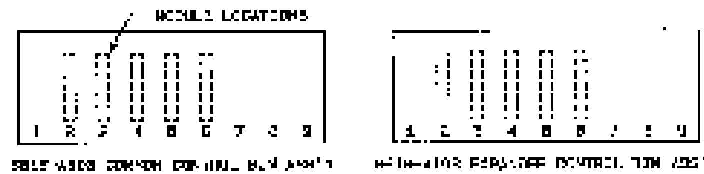
EACH DEVICE TO BE PROVIDED WITH A SUPERVISORY RESISTOR. THE RESISTOR MUST BE REMOVED BEFORE MAKING THE EXTERNAL CIRCUIT.

REFER TO INDIVIDUAL DEVICE DRAWINGS FOR APPLICATION DATA AND TERMINAL DESIGNATIONS

MAXIMUM WIRE RUN	
WIRE GAUGE	TO E.O.L. RESISTOR
14	10,000FT
16	6,000FT
18	4,000FT
20	2,500FT

MOUNTING

CAT. 6 6052/6352 SUPERVISORY RECEIVING MODULES PLUG INTO THE COMMON CONTROL AND EXPANDER CONTROL BIN ASSEMBLIES AS SHOWN BELOW. EACH BIN ASSEMBLY WILL SUPPORT UP TO 5 RECEIVING MODULES. THE ZERO OHM RESISTOR (WITH BLACK BAND) LOCATED BESIDE THE CONNECTOR PINS ON THE BIN CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN. SECURE EACH MODULE IN THE BIN ASSEMBLY WITH THE 2 SCREWS PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR 4 CLASS B SUPERVISORY CIRCUITS AND 4 AMBER ZONE LAMPS. EACH CIRCUIT MAY BE CONFIGURED FOR N.O. OR N.C. INITIATING DEVICES AND FOR LATCHING OR NON-LATCHING OPERATION. FOR N.O. DEVICES, EACH CIRCUIT MAY BE SELECTED FOR OPEN AND SHORT SUPERVISION OR OPEN SUPERVISION ONLY. THE MAXIMUM NUMBER OF DEVICES IS LIMITED TO FIVE IF OPEN AND SHORT SUPERVISION IS REQUIRED AND FOR N.C. DEVICE OPERATION. EACH MODULE IS FACTORY SET FOR N.O. DEVICES WITH OPEN CIRCUIT SUPERVISION AND LATCHING OPERATION. CHECK TO ENSURE EACH MODULE IS CONFIGURED FOR THE PROPER OPERATION BEFORE CONNECTING FIELD WIRING.

COMPATIBILITY INFORMATION: REFER TO "DEVICE COMPATIBILITY CHART" (45000-0808), PROVIDED IN THE APPENDIX OF THE MANUAL, FOR A COMPLETE LIST OF EDWARDS' COMPATIBLE PRODUCTS.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL PP 45000-0759.

INSTALLATION

FIRE ALARM SYSTEM CONNECTIONS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760. IF LOCAL REGULATIONS PERMIT, CIRCUIT CONNECTIONS MAY BE INSTALLED USING POWER LIMITED CABLE PER ART. 760, POWER LIMITED CIRCUITS (N.F.P.A.-70).

	MODULE LOCATION	CORRESPONDING ZONES
COMMON CONTROL BIN ASSEMBLY	2	1 - 4
	3	5 - 8
	4	9 - 12
	5 OR 6	13 - 16
EXPANDER CONTROL BIN ASSEMBLY	3	17 - 20
	4	21 - 24
	5	25 - 28
	6 OR 6	29 - 32

EDWARDS

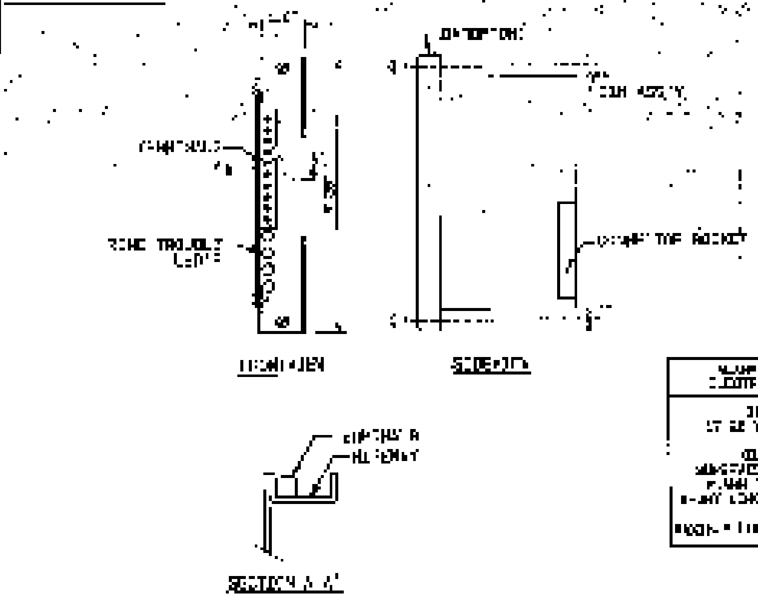
CUSTOMER DRAWING

CAT. 6052-6352

SUPV. RECEIVING MODULE

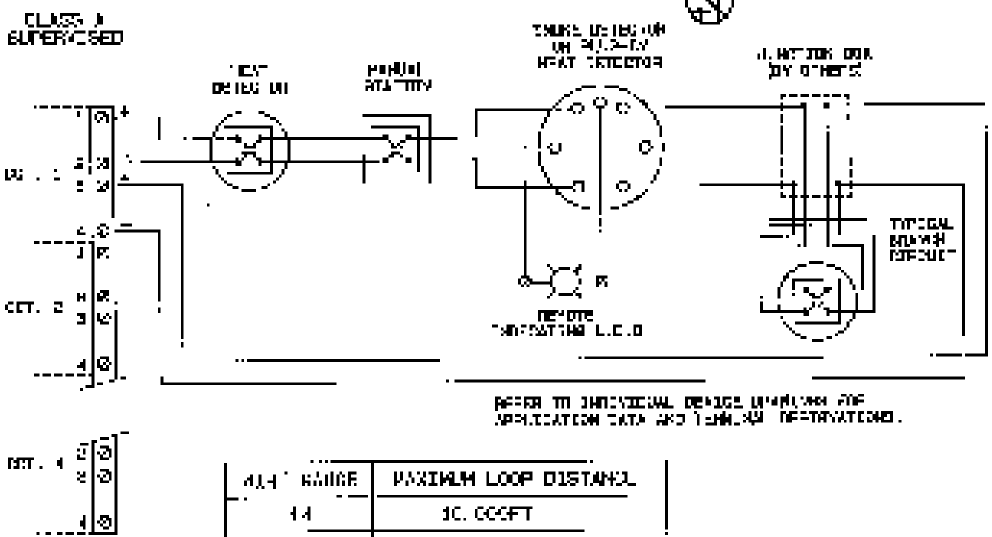
40000-1073

REV. D 46000-1077



ALARM RECEIVING CIRCUIT ELECTRICAL SPECIFICATIONS
CONTACT VOLTAGE: 17-28 V.DC. (RIPPLE FREE)
CIRCUIT CURRENT: SUPERVISORY: [illegible] ALARM: [illegible] 4-WIRE DEVICES: [illegible]
MAXIMUM LINE RESISTANCE 50 OHM.

PARALLEL BRANCHING FROM CIRCUIT IS NOT PERMITTED



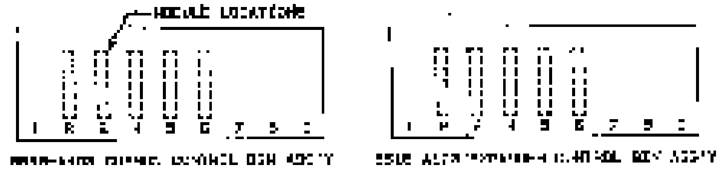
REFER TO INDIVIDUAL DEVICE DRAWINGS FOR APPLICATION DATA AND TERMINAL DESIGNATIONS.

AWG GAUGE	MAXIMUM LOOP DISTANCE
14	10,000FT
16	6,000FT
18	4,000FT
20	2,500FT

MOUNTING

THE CAT.# 6616-8254 CLASS A ALARM RECEIVING MODULE PLUGS INTO THE COMMON CONTROL AND EXPANDER CONTROL PIN ASS'Y 1&2 AS SHOWN BELOW. EACH PIN ASSEMBLY WILL SUPPORT UP TO 4 THREE MODULES. THE ZERO OFF [illegible] WITH BLACK RING LOCKOUT PLUG. THE CONNECTOR RING ON THE PIN CIRCUIT BOARD MUST BE ALIGNED BEFORE THE MODULE IS PLUGGED IN.

SECURE EACH MODULE IN THE PIN ASSEMBLY WITH THE 2 SCREWS PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR 4 CLASS A CIRCUITS AND 4 ALARM AND TROUBLE LED'S. THE MODULE WILL OPERATE WITH N.O. DEVICES AND EDWARDS LISTED SMOKE DETECTORS.

COMPATIBILITY INFORMATION: REFER TO "DEVICE COMPATIBILITY CHART (46000-0655) SHOWN IN THE APPENDIX OF THE MANUAL FOR A COMPLETE LIST OF EDWARDS' COMPATIBLE PRODUCTS.

ALARM AND SYSTEM COMMON INDICATORS AND CONTROL FEATURES ARE LOCATED IN THE COMMON CONTROL PIN ASSEMBLY COVER.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL OF 46000-0755.

INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760. IF LOCAL REGULATIONS PERMIT, CIRCUIT CONDUCTORS MAY BE INSTALLED USING LIMITED ENERGY CABLE FOR ALARM, AND POWER LIMITED CIRCUITS (N.F.P.A.-70).

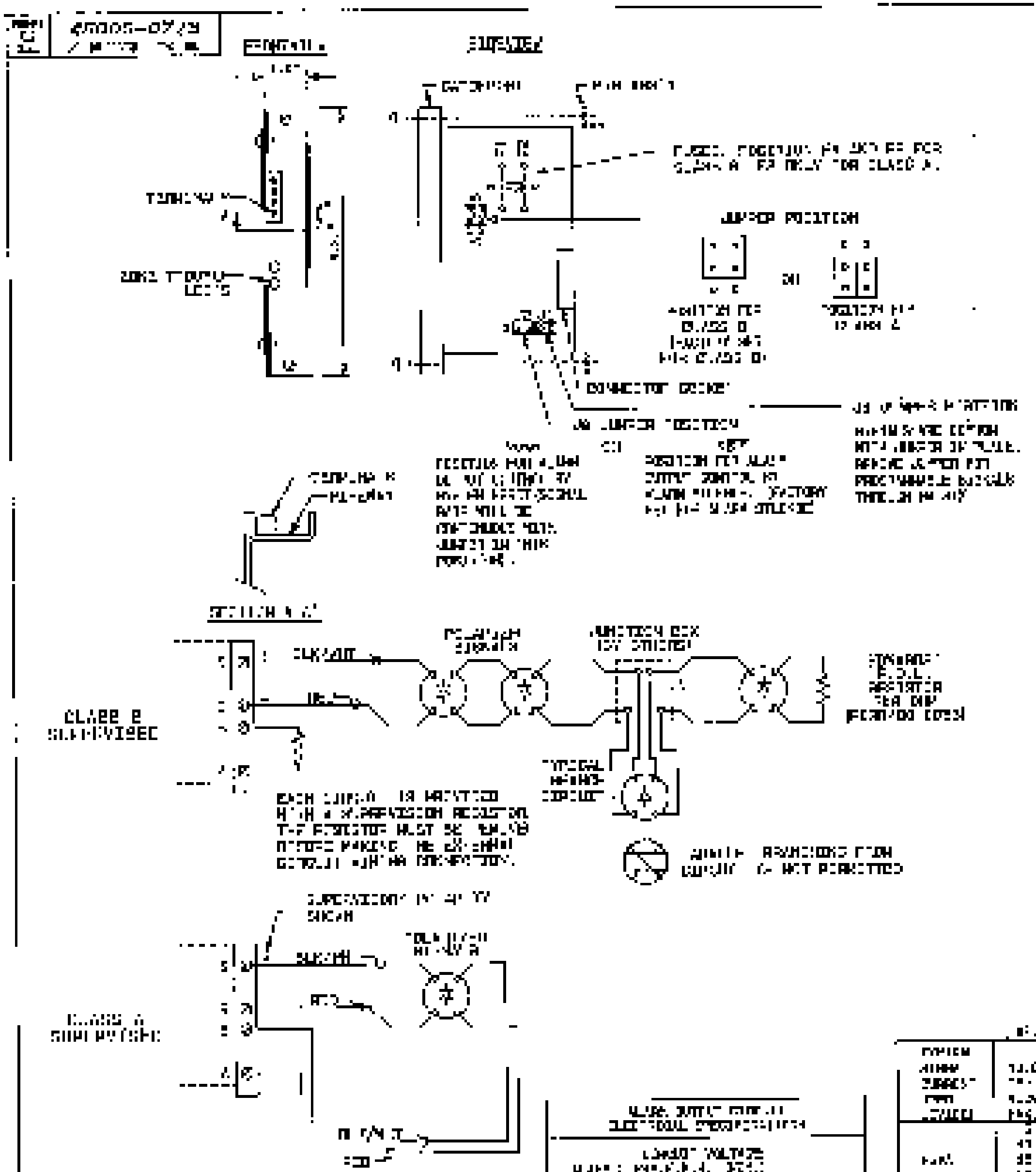
	MODULE LOCATION	CORRESPONDING ZONES
COMMON CONTROL PIN ASSEMBLY	3	1 - 4
	4	5 - 8
	5	9 - 12
	2 OR 6	13 - 16
EXPANDER CONTROL PIN ASSEMBLY	3	17 - 20
	4	21 - 24
	5	25 - 28
	2 OR 6	29 - 32

EDWARDS

CUSTOMER DRAWING

CAT. 6616-8254 CLASS "A" ALARM RECEIVING MODULE

46000-1077



MOUNTING

THE CAT. # [illegible] ALARM OUTPUT MODULE FITS INTO THE COMMON CONTROL AND EXPANDED CONTROL [illegible] ASSEMBLIES AS SHOWN [illegible]. [illegible] BIN ASSEMBLY WILL SUPPORT A MAXIMUM OF 4 AMPS OF CONTINUOUS SIGNAL AND [illegible] AUXILIARY SUPPORT. THE ZERO OHM RESISTOR (WHITE WITH BLACK RING) LOCATED BESIDE THE CONNECTOR PINS ON THE [illegible] CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN. SECURE EACH MODULE IN THE BIN ASSEMBLY WITH THE 2 SCREWS PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.

MODULE LOCATIONS

[illegible] COMMON CONTROL BIN ASSY [illegible] EXPANDED BIN ASSY

DESCRIPTION

[illegible] MODULE PROVIDES TERMINALS FOR 2 CLASS B STYLE [illegible] SIGNAL CIRCUITS RATED AT 2.0 AMP EACH OR 1 [illegible] SIGNAL CIRCUIT RATED AT 2.0 AMP. [illegible] OUTPUT CONFIGURATION IS [illegible] SELECTABLE. THE MODULE [illegible] AMBER CIRCUIT TROUBLE [illegible], ONE FOR EACH CIRCUIT. [illegible] THE ILLUMINATION OF EITHER [illegible] WILL INDICATE A CIRCUIT [illegible]. THE ALARM OUTPUT MODULE MAY BE SELECTED COMMON TO ALL ALARM [illegible] ZONES OR PROGRAMMED THROUGH A 6615-3331 MATRIX MODULE.

COMPATIBILITY INFORMATION: REFER TO [illegible] DEVICE COMPATIBILITY CHART ([illegible]-3331), PROVIDED IN THE APPENDIX OF THE MANUAL, FOR A COMPLETE LIST OF EDWARDS' COMPATIBLE PRODUCTS.

SYSTEM COMMON INDICATORS AND CONTROL [illegible] ARE LOCATED ON THE COMMON CONTROL [illegible] ASSEMBLY COVER.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL, [illegible] 45000-0765.

INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST [illegible] OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760, OR LOCAL REGULATIONS [illegible]. CIRCUIT CONDUCTORS MAY BE INSTALLED USING LIMITED ENERGY CABLE PER ART. 760, POWER LIMITED [illegible] (N.F.P.A.-70).

ALARM OUTPUT MODULE ELECTRICAL SPECIFICATIONS

CURRENT VOLTAGE [illegible]

CIRCUIT CURRENT [illegible]

ALARM OUTPUT CIRCUIT [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

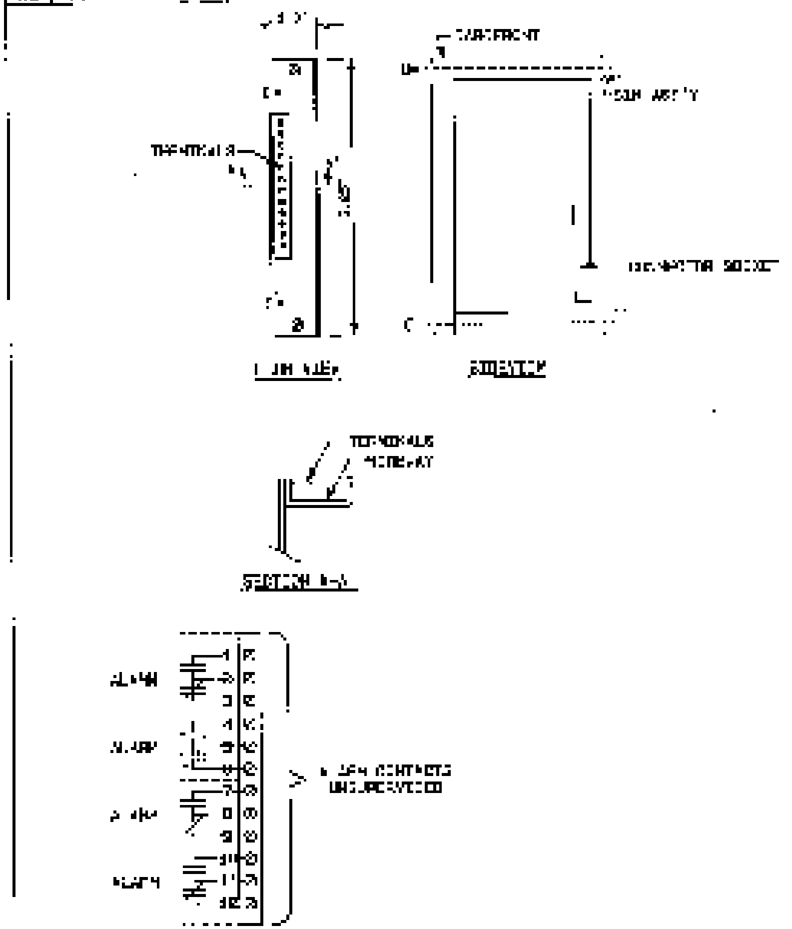
EDWARDS

CUSTOMER DRAWING

CAT. 6615-5711

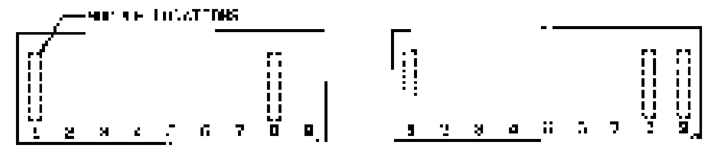
ALARM OUTPUT MODULE

45000-0773



MOUNTING

THE CAT. # 6616-B331 ANCILLARY RELAY MODULE PLUGS INTO THE COMMON CONTROL AND EXPANSION CONTROL BIN ASSEMBLIES AS SHOWN BELOW. THE ZERO OHM RESISTOR (NOTICE WITH BLACK RING) LOCATED INSIDE THE CONNECTOR PINS ON THE BIN CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN. SECURE EACH MODULE IN THE BIN ASSEMBLY WITH THE 2 SCREWS PROVIDED BEFORE POWER IS SUPPLIED TO THE PANEL.



6616 4401 COMMON CONTROL BIN ASS'Y — 6616 4402 EXPANSION CONTROL BIN ASS'Y

DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR 4 "C" ALARM CONTACTS. ALL CONTACTS ARE SHOWN WITH THE SYSTEM IN THE NORMAL SUPERVISORY MODE (RELAY DE-ENERGIZED). CONTACTS ARE RATED AT 5A, RESISTIVE AND 2.5 A. INDUCTIVE AT 30 VDC, OR 120 VAC. THE ACTIVATION OF THE ALARM RELAY MAY BE INHIBITED BY THE ANCILLARY DISCONNECT SWITCH LOCATED ON THE COMMON CONTROL BIN ASS'Y LEVEL. THE ANCILLARY RELAY MODULE IS PROGRAMMED COMMON TO ALL ALARM INITIATING ZONES.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FUNCTIONS AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL PN 46000 [illegible].

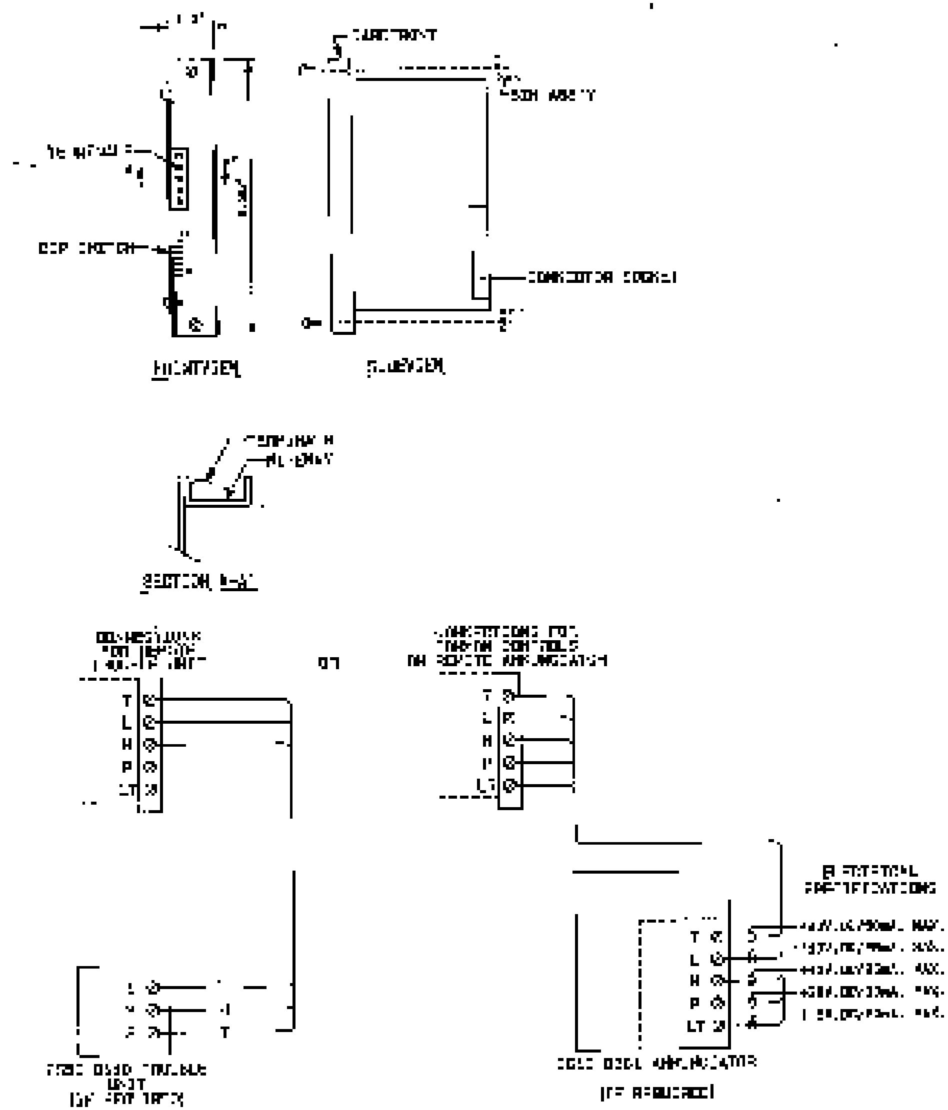
INSTALLATION

FIRE ALARM SYSTEM CONNECTIONS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

EDWARDS

CUSTOMER DRAWING
CAT. 6616 B331
ANCILLARY RELAY MODULE

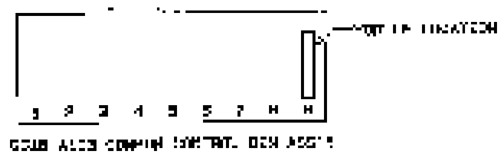
46000-0774



WIRE GAUGE	MAXIMUM WIRE RUN
14	10,000FT
16	6,300FT
18	4,000FT
20	2,500FT

MOUNTING

THE CAT. # 6616-D451 COMMON CONTROL MODULE IS FACTORY INSTALLED IN THE 6616-A103 COMMON CONTROL BIN ASSEMBLY.



DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR A REMOTE TROUBLE UNIT OR SYSTEM COMMON CONTROLS LOCATED IN A REMOTE ANNUNCIATOR.

AN EIGHT POSITION DIP SWITCH IS PROVIDED TO SET THE SYSTEM OPERATION, AS SHOWN IN THE FOLLOWING TABLE.

SWITCH NO.	THE "ON" POSITION OF THE SWITCH WILL:
1	ENABLE ONE MINUTE SIGNAL SILENCE FEATURE
2 (1)	LEAVE IN ON POSITION
3 (2)	ENABLE 2 S-S OUTPUT FOR SIGNALS
4 (2)	ENABLE 120 PPM OUTPUT FOR SIGNALS
5 (3)	16 MINUTE AUTOMATIC SIGNAL SILENCE
6 (3)	8 MINUTE AUTOMATIC SIGNAL SILENCE
7 (3)	4 MINUTE AUTOMATIC SIGNAL SILENCE
8 (3)	2 MINUTE AUTOMATIC SIGNAL SILENCE

NOTES - (1) LEAVE SWITCH 2 IN THE "ON" POSITION
(2) FOR CONTINUOUS SIGNALS SWITCHES 3 AND 4 MUST BE "OFF"
(3) SWITCHES 5 THRU 8 ARE ADDITIVE. FOR EXAMPLE, FOR 20 MINUTE AUTO SIGNAL SILENCE TURN ON SWITCHES 5 AND 7. WITH SWITCHES 5 THRU 8 OFF, NO AUTOMATIC SIGNAL SILENCE WILL OCCUR.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT, REFER TO THE INSTALLATION AND OPERATION MANUAL PP 45000-075A.

INSTALLATION

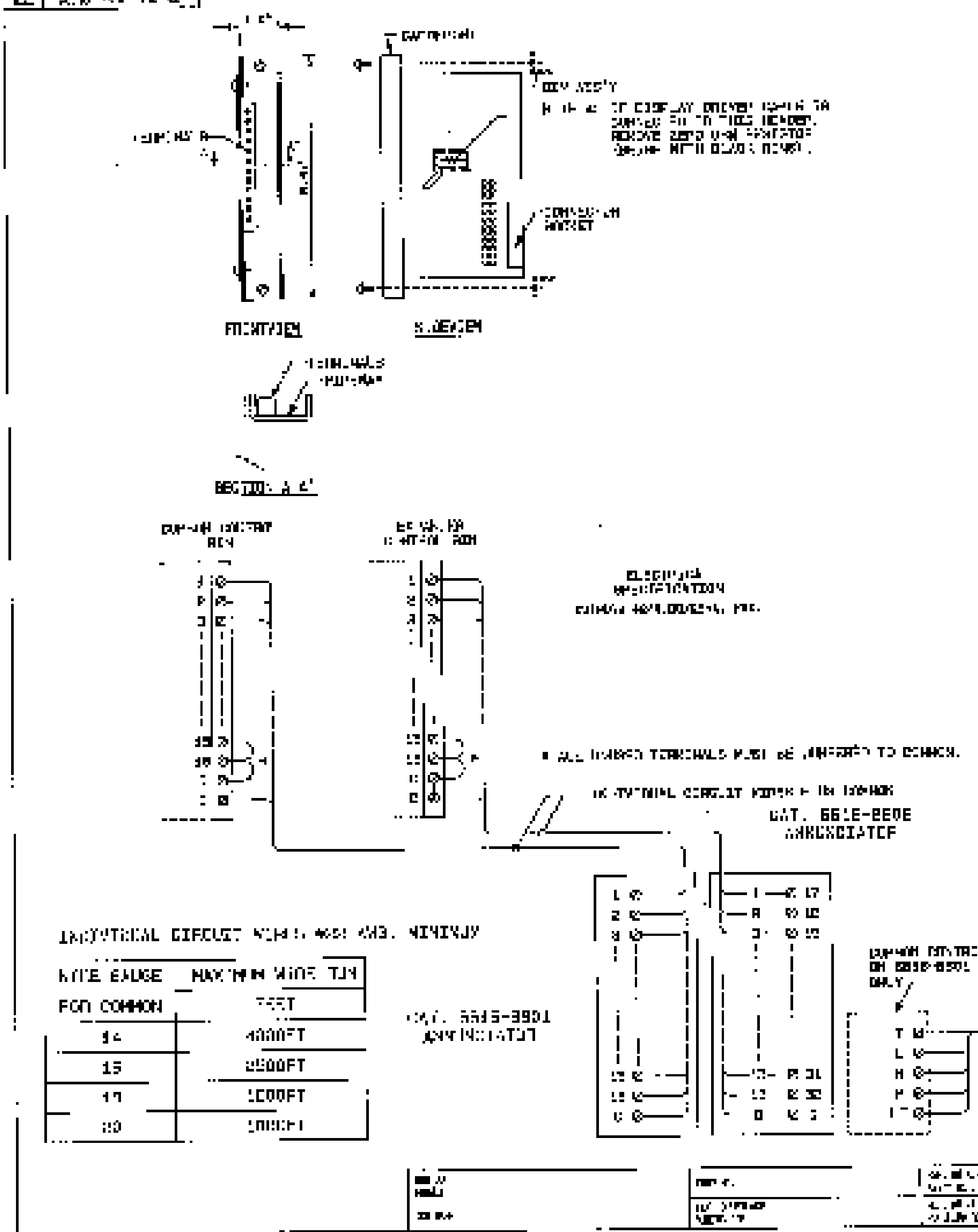
FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

EDWARDS

CUSTOMER DRAWING
CAT. 6616-D451
COMMON CONTROL MODULE

4A050-5079

Common (-) (+) to Leds

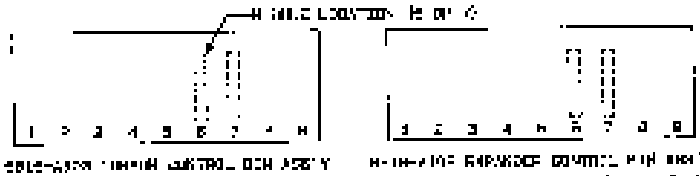


INDUSTRIAL CIRCUIT WIRING [illegible] AWG. MINIMUM

WIRE GAUGE FOR COMMON	MAXIMUM WIRE RUN FEET
14	4000FT
16	2500FT
18	1600FT
20	1000FT

MOUNTING

THE OPTIONAL CAT.# 6615-840S ANNUNCIATOR DRIVER MODULE PLUGS INTO THE COMMON CONTROL PIN ASSEMBLY (FOR CIRCUITS 1 TO 16) AND THE EXPANDER CONTROL PIN ASSEMBLY (FOR CIRCUITS 17 TO 32) AS SHOWN BELOW. EACH MODULE SUPPORTS ONE 16 ZONE REMOTE ANNUNCIATOR.
THE ZERO OHM RESISTOR (BEIGE WITH BLACK BAND) LOCATED [illegible] THE CONNECTOR PINS ON THE PIN CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN.
SECURE EACH MODULE IN THE PIN ASSEMBLY WITH THE TWO SCREWS PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.



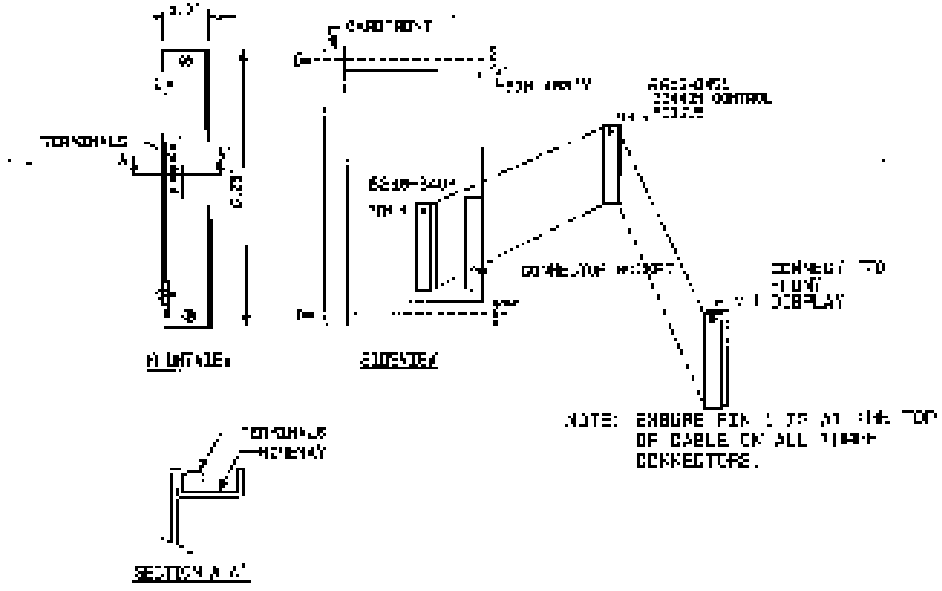
IF LOCATION 6 IS USED FOR ANOTHER FUNCTION, REMOVE THE DISPLAY DRIVER CARD FROM LOCATION 7. CONNECT THE DISPLAY CABLE TO THE MATCHING HEADER ON THE 6616-840P (SEE NOTE A).
SECURE THE [illegible] IN MODULE LOCATION 6 OR 7 WITH THE POWER OFF.

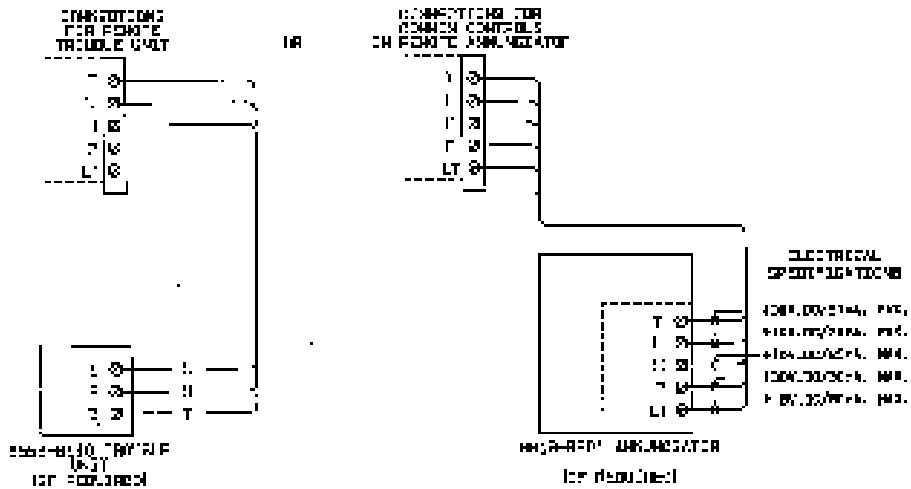
DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR 16 REMOTE ZONE INDICATORS (L.E.D.'S), A COMMON FOR ONE-WIRE CHECK TERMINALS AND A COMMON WIRE RETURN. LIMIT ONE ANNUNCIATOR PER MODULE.
FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL P/N 46CCC-C709.

INSTALLATION

THE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE ARTICLE 760.

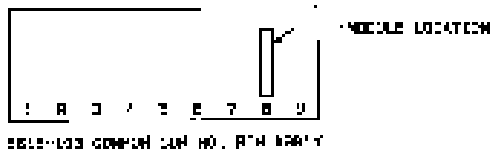




WIRE GAUGE	MAXIMUM WIRE RUN
12	30,000FT
14	8,000FT
16	4,000FT
18	2,500FT

MOUNTING

THE EDWARDS 5815-8403 EXPANDED FEATURES MODULE PLUGS INTO THE COMMON CONTROL BUS ASSEMBLY AS SHOWN ABOVE. THE 10PC OHM RESISTOR (STRIP WITH BLACK RING) LOCATED ACROSS THE CONNECTOR PINS ON THE TOP CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN. A CABLE IS SUPPLIED WITH THE MODULE TO INTERCONNECT THE COMMON CONTROLS. WITH THE POWER DISCONNECTED, REMOVE THE EXISTING CABLE CONNECTING THE COMMON CONTROL MODULE TO THE FRONT DISPLAY. USE THE CABLE SUPPLIED TO RECONNECT THE FRONT DISPLAY TO THE COMMON CONTROL AND TO CONNECT THE EXPANDED FEATURES MODULE AS SHOWN. ENSURE THE CABLE DOES NOT TWIST IN ORDER TO PIN 1 IS ALWAYS AT THE TOP OF EACH CONNECTOR. SECURE PANEL MODULE IN THE BIN ASSEMBLY WITH THE 2 SCREWS PROVIDED. BEFORE POWER IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES TERMINALS FOR A REMOTE TROUBLE UNIT OF SYSTEM COMMON CONTROLS LOCATED IN A REMOTE ANNUNCIATOR.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT, REFER TO THE INSTALLATION AND OPERATION MANUAL PP 45000-0788.

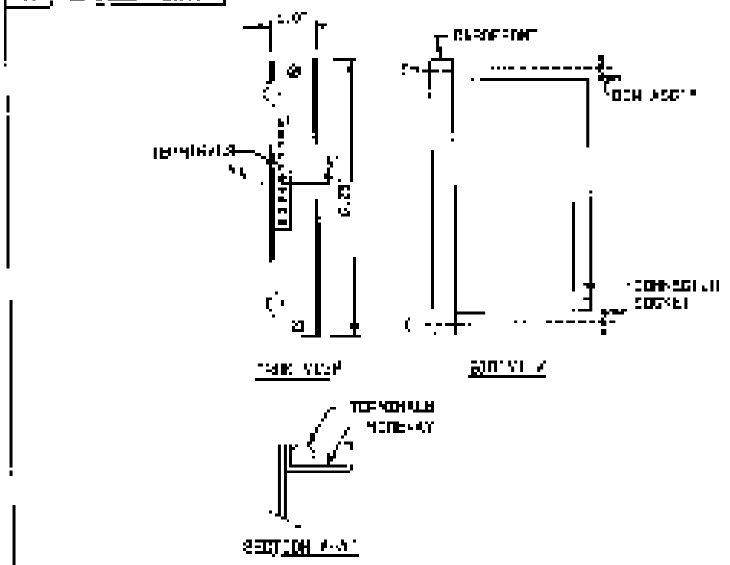
INSTALLATION

ALL ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

EDWARDS

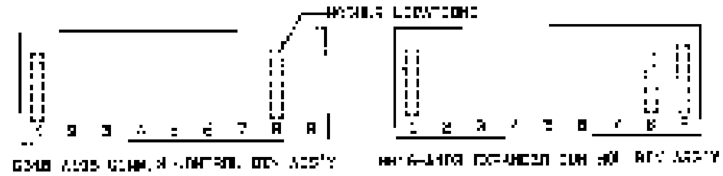
CUSTOMER DWG.
CAT. 5815-8403
EXPANDED FEATURES MOD.

46900-0777



MOUNTING

THE CAT. # 6616-0711 REMOTE STATION MODULE PLUGS INTO THE COMMON CONTROL OR EXPANDER CONTROL BIN ASSEMBLIES AS SHOWN BELOW. THE [illegible] (BEIGE WITH BLACK RING) LOCATED [illegible] THE CONNECTING PINS ON THE [illegible] CIRCUIT BOARD MUST BE REMOVED [illegible] THE MODULE IS PLUGGED IN. SECURE EACH MODULE IN [illegible] ASSEMBLY WITH THE TWO SCREWS PROVIDED [illegible] IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES [illegible] ALARM CONTACTS, A SET OF [illegible] TROUBLE CONTACTS AND A REMOTE STATION [illegible]. CONTACTS ARE RATED AT [illegible] RESISTIVE OR 2.0 A. INDUCTIVE [illegible] V.DC OR 120 V.AC.

UNDER NORMAL SUPERVISORY CONDITIONS, A CURRENT LIMITED TO 2.5MA IS SUPPLIED [illegible] OUTPUT TERMINALS 1 AND 2. AN ALARM ON THE FIRE ALARM SYSTEM WILL CAUSE THE ALARM CONTACTS TO TRANSFER AND THE OUTPUT CURRENT TO INCREASE TO MAXIMUM OF 250MA, SENDING AN ALARM TO THE REMOTE STATION. A TROUBLE ON THE FIRE ALARM SYSTEM WILL CAUSE THE TROUBLE CONTACTS TO TRANSFER AND SEND A TROUBLE SIGNAL TO THE REMOTE STATION OR CONNECTOR ACCORDINGLY.

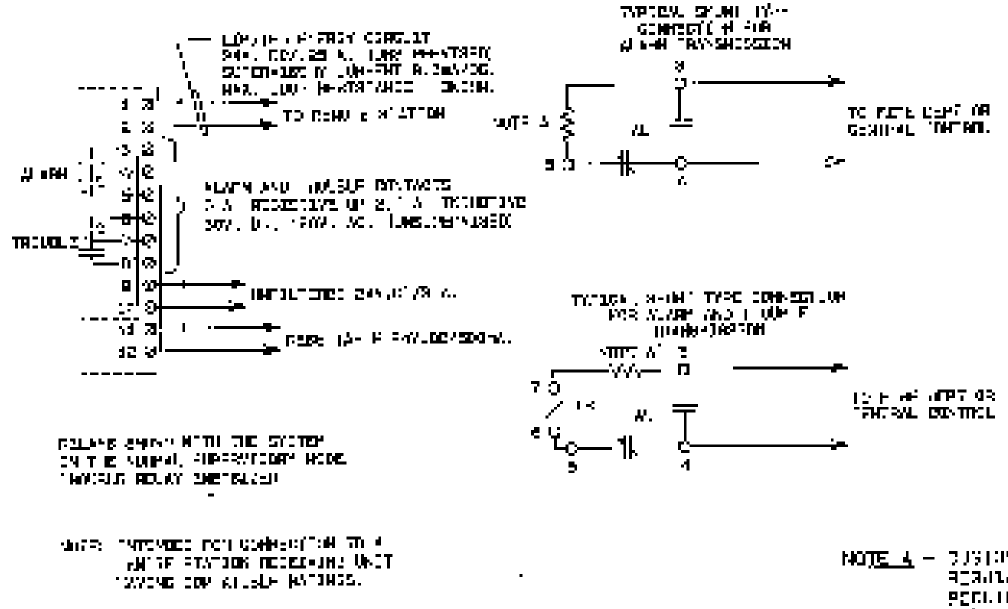
THE TRANSMISSION OF AN ALARM MAY BE INHIBITED BY THE ANCILLARY DISCONNECT SWITCH LOCATED ON THE COMMON CONTROL BIN ASSEMBLY COVER.

TWO D.C. SOURCES ARE PROVIDED FROM TERMINALS ON THE MODULE. RESETTABLE 24V.DC/[illegible] [illegible] THAT IS BATTERY BACKED WITH NO BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS [illegible] AND [illegible]. NON-RESETTABLE 24V.DC/3.0 A. [illegible], THAT IS [illegible] BACKED WITH BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS 13 AND 14. EACH BIN ASSEMBLY WILL SUPPORT A MAXIMUM OF 4.0 A. OF COMBINED SIGNAL AND [illegible] AUXILIARY CURRENT.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL P/N 46000-0709.

INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

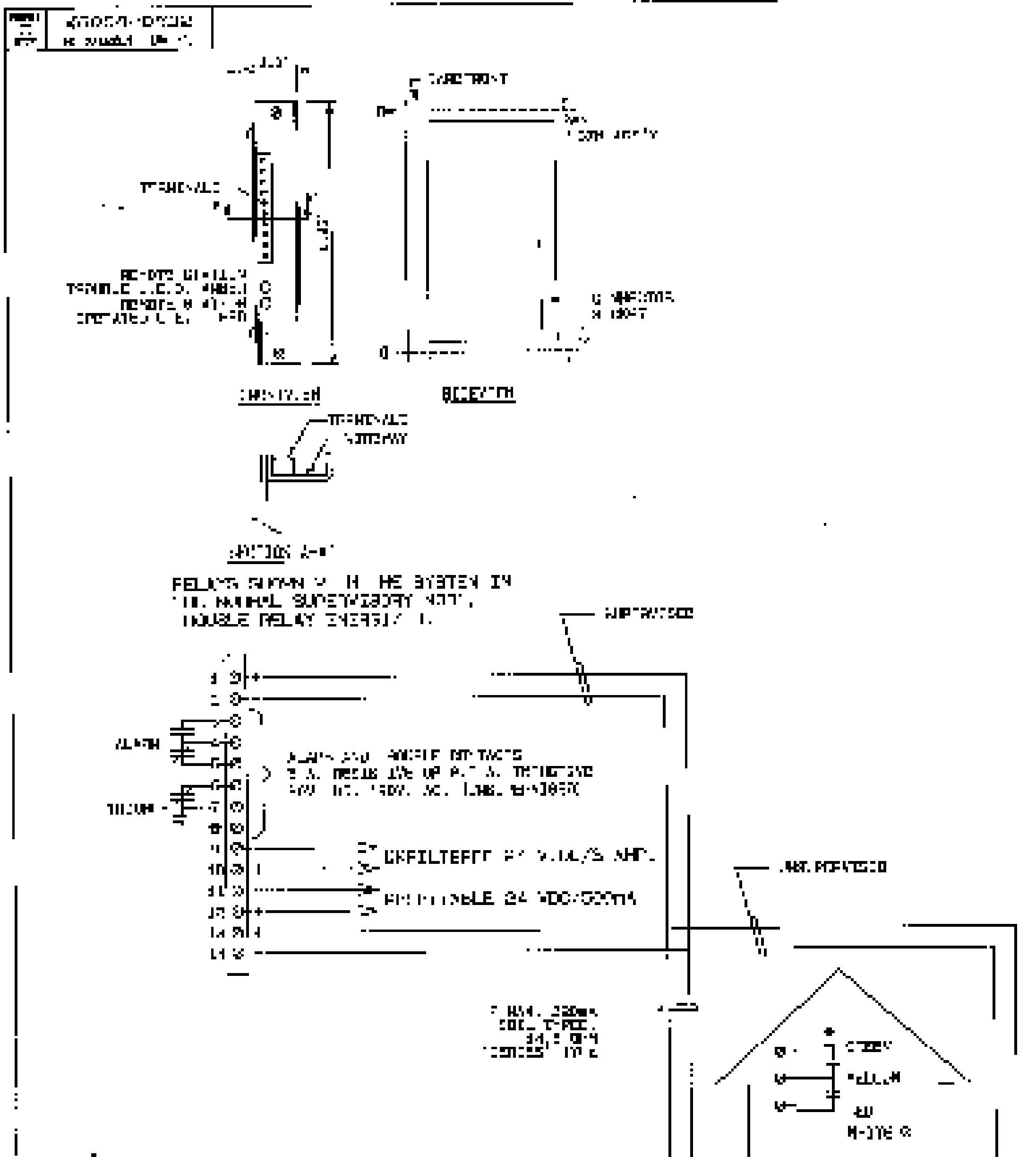


NOTE A – CUSTOMER TO DETERMINE TYPE OF CONNECTION REQUIRED, END OF LINE RESISTOR VALUE (IF REQUIRED), AND WIRE GAUGE TO BE USED. THIS INFORMATION SHOULD BE OBTAINED FROM THE MANUFACTURER OF THE REMOTE STATION OR MUNICIPAL SYSTEM.

EDWARDS

CUSTOMER DRAWING
CAT. 6616-0711
REMOTE STATION MODULE

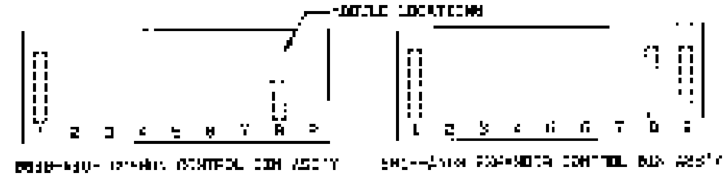
46900-0777



*THE MUNICIPAL BOX HAS AUXILIARY CONTACTS WHICH OPERATE [illegible] THE DURATION OF THE [illegible]. THESE CAN BE WIRED INTO A [illegible] ALARM RECEIVING CIRCUIT [illegible] TO A MANUAL STATION WHEN IT IS REQUIRED THAT OPERATION OF THE MUNICIPAL BOX SHOULD CAUSE THE LOCAL FIRE ALARM SIGNALS TO SOUND.

MOUNTING

THE CAT. # [illegible] MUNICIPAL TIE MODULE PLUGS INTO THE COMMON CONTROL OR EXPANDER CONTROL BIN ASSEMBLIES AS SHOWN BELOW. THE ZERO OHM RESISTOR [illegible] WITH BLACK RINGS LOCATED ACROSS THE CONNECTOR PINS ON THE BIN CIRCUIT BOARD MUST BE REMOVED [illegible] THE MODULE IS PLUGGED IN. SECURE EACH MODULE IN THE BIN ASSEMBLY WITH THE [illegible] PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES 1 SET OF "C" ALARM CONTACTS, 1 SET OF "C" TROUBLE CONTACTS AND MUNICIPAL BOX CONNECTIONS. [illegible] ARE RATED AT [illegible] A. RESISTIVE OR 2.5 A. INDUCTIVE AT 30 V.DC. OR [illegible] VAC.

AN ALARM ON THE FIRE ALARM SYSTEM WILL CAUSE THE ALARM CONTACTS ON THIS MODULE TO TRANSFER. THIS WILL SEND AN ALARM SIGNAL TO THE MUNICIPAL BOX CAUSING IT TO SEND ITS CODE TO THE [illegible] STATION.

THE REMOTE [illegible] OPERATED RED L.E.D. [illegible] LIGHT WHEN THE MUNICIPAL BOX HAS TRIPPED. WHEN THE FIRE ALARM SYSTEM IS BEING RESET, ALSO RESET THE MUNICIPAL BOX. THE REMOTE [illegible] OPERATED RED L.E.D. WILL THEN EXTINGUISH.

AN OPEN IN THE TRIP CIRCUIT WIRING BETWEEN THE LOCAL [illegible] AND THE MUNICIPAL BOX (TERMINALS 1 AND 2) WILL CAUSE THE [illegible] TROUBLE L.E.D. TO LIGHT, A COMMON TROUBLE SIGNAL ON THE [illegible] FIRE ALARM SYSTEM WILL ALSO SOUND AND THE TROUBLE CONTACTS ON THIS MODULE WILL TRANSFER.

THE TRANSMISSION OF AN ALARM MAY BE INHIBITED BY THE AUXILIARY DISCONNECT SWITCH LOCATED ON THE COMMON CONTROL BIN ASSEMBLY COVER.

[illegible] D.C. SOURCES ARE PROVIDED [illegible] TERMINALS ON THE MODULE. RESETTABLE 24V [illegible] FILTERED, THAT IS BATTERY BACKED WITH NO BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS 11 AND 12. NON-RESETTABLE 24V.DC/3.0 A. [illegible], THAT IS BATTERY BACKED WITH BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS 9 AND 10. EACH BIN ASSEMBLY WILL SUPPLY A MAXIMUM OF 4.0 A. OF COMBINED SIGNAL AND [illegible] CURRENT.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL [illegible] AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL [illegible].

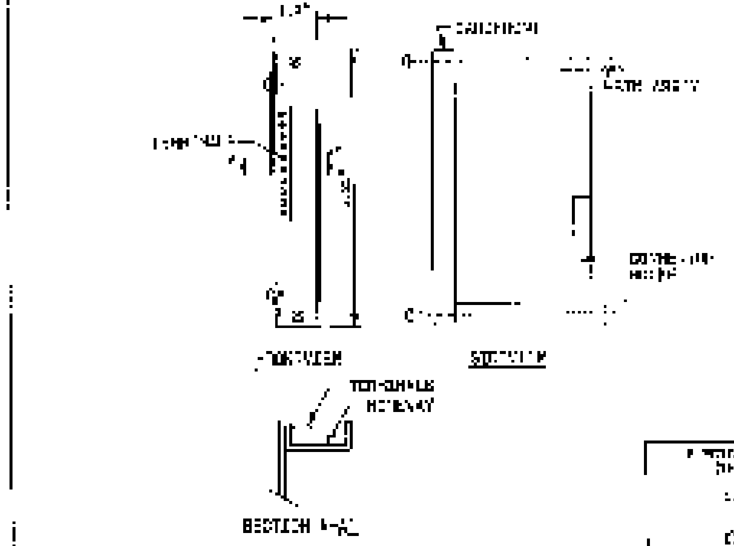
INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUE OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

EDWARDS

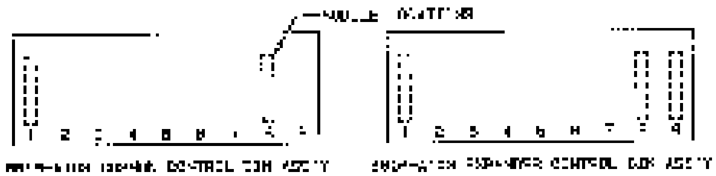
CUSTOMER DRAWING
CAT. 6615 0712
MUNICIPAL TIE MODULE

45005-0778



MOUNTING

THE CAT. [illegible] REVERSE POLARITY MODULE PLUGS INTO THE [illegible] CONTROL [illegible] CONTROL DIN ASSEMBLIES AS SHOWN BELOW. THE [illegible] DIN [illegible] (BEIGE WITH BLACK [illegible]) LOCATED BESIDE THE [illegible] ON THE DIN CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN. [illegible] MODULE IN THE DIN ASSEMBLY WITH THE TWO SCREWS [illegible] BEFORE POWER IS APPLIED TO THE PANEL.



DESCRIPTION

EACH MODULE PROVIDES [illegible] "C" ALARM CONTACTS, [illegible] "C" TROUBLE CONTACTS AND A [illegible] REVERSE POLARITY OUTPUT. [illegible] ARE RATED AT 5 A. RESISTIVE OR [illegible] A. INDUCTIVE AT 30 V.DC. OR 120 V.AC..

UNDER NORMAL [illegible] CONDITIONS, A CURRENT [illegible] BETWEEN 2.5mA. AND [illegible] DC. IS SUPPLIED AT [illegible] TERMINALS 1 AND 2. AN ALARM ON THE FIRE ALARM SYSTEM WILL CAUSE THE OUTPUT POLARITY TO REVERSE. THE CURRENT REMAINS LIMITED [illegible] AND [illegible] DC. UNTIL AN ALARM CONDITION. [illegible] STANDARD [illegible].

THE TRANSMISSION OF AN ALARM MAY BE INHIBITED BY THE [illegible] DISCONNECT SWITCH LOCATED ON THE COMMON CONTROL DIN ASSEMBLY [illegible].

TWO D.C. SOURCES ARE AVAILABLE FROM TERMINALS ON [illegible]. RESETTABLE 24V.DC/[illegible] THAT IS BATTERY BACKED [illegible] ON TRANSFER, IS AVAILABLE FROM TERMINALS 11 AND 12. [illegible] 24V.DC/5.0 A. UNFILTERED THAT IS BATTERY BACKED WITH BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS 9 AND 10. EACH DIN ASSEMBLY WILL SUPPORT A MAXIMUM OF 4.0 A. OF [illegible] SIGNAL AND UNFILTERED AUXILIARY CURRENT.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL [illegible] AND MODULE PLACEMENT [illegible], REFER TO THE INSTALLATION AND OPERATION MANUAL [illegible] 45005-0750.

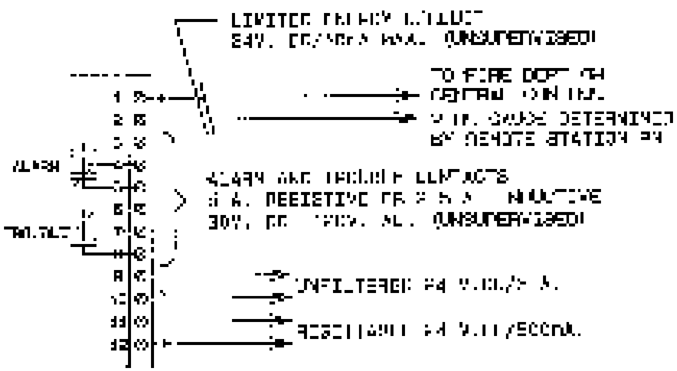
INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE [illegible] LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

[illegible] POLARITY REVERSING
[illegible]
[illegible] VOLTAGE 24 V.DC.
CIRCUIT CURRENT [illegible]
[illegible] 24 [illegible]

NOTE: [illegible] CONNECTION TO A POLARITY REVERSING CIRCUIT OF A REMOTE STATION RECEIVING UNIT, [illegible] RATINGS.

NOT SUITABLE FOR REMOTE STATION [illegible] SEPARATE CIRCUITS ARE [illegible] FOR FIRE AND TROUBLE SIGNALS.

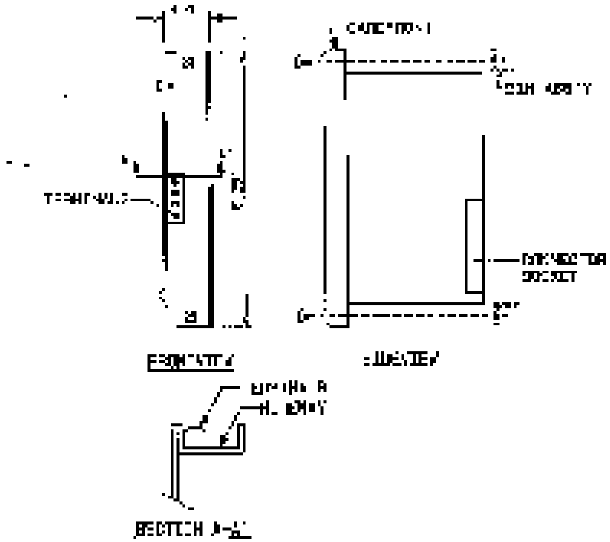


RELAYS SHOWN WITH [illegible] IN THE NORMAL SUPERVISORY MODE. TROUBLE RELAY ENERGIZED

EDWARDS

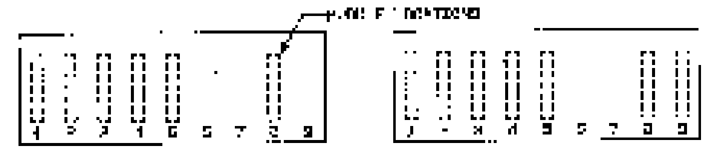
CUSTOMER DRAWING
CAT. 5516-R717
REVERSE POLARITY MODULE

45005-0778



MOUNTING

THE CAT.# [illegible] AUXILIARY POWER MODULE PLUGS [illegible] THE COMMON CONTROL OR EXPANSION [illegible]. PIN ASSEMBLIES AS SHOWN [illegible]. THE ZERO OHM RESISTOR (BEIGE WITH 1 BLK BAND) LOCATED BESIDE THE CONNECTOR PINS ON THE PIN CIRCUIT BOARD MUST BE REMOVED BEFORE THE MODULE IS PLUGGED IN. SECURE EACH MODULE TO THE PIN ASSEMBLY WITH THE TWO SCREWS PROVIDED BEFORE POWER IS APPLIED TO THE PANEL.



6616 6503 COMMON CONTROL PIN ASSY   6616 6503 EXPANDER CONTROL PIN ASSY

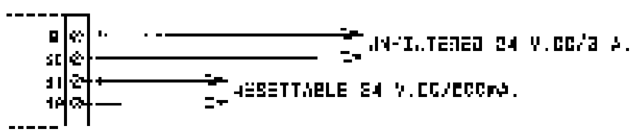
DESCRIPTION

EACH MODULE PROVIDES [illegible] FOR TWO D.C. SOURCES. RESETTABLE 24 V.DC/500mA FILTERED, THAT IS BATTERY BACKED WITH NO BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS 11 AND 12. NON-RESETTABLE 24 V.DC/3.0 A. UNFILTERED, [illegible] IS BATTERY BACKED WITH BREAK ON TRANSFER, IS AVAILABLE FROM TERMINALS 13 AND 14. [illegible] ASSEMBLY [illegible] SUPPORT A MAXIMUM OF 4.0 A. OF COMBINED SIGNAL AND UNFILTERED AUXILIARY CURRENT.

FOR [illegible] SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL PP [illegible].

INSTALLATION

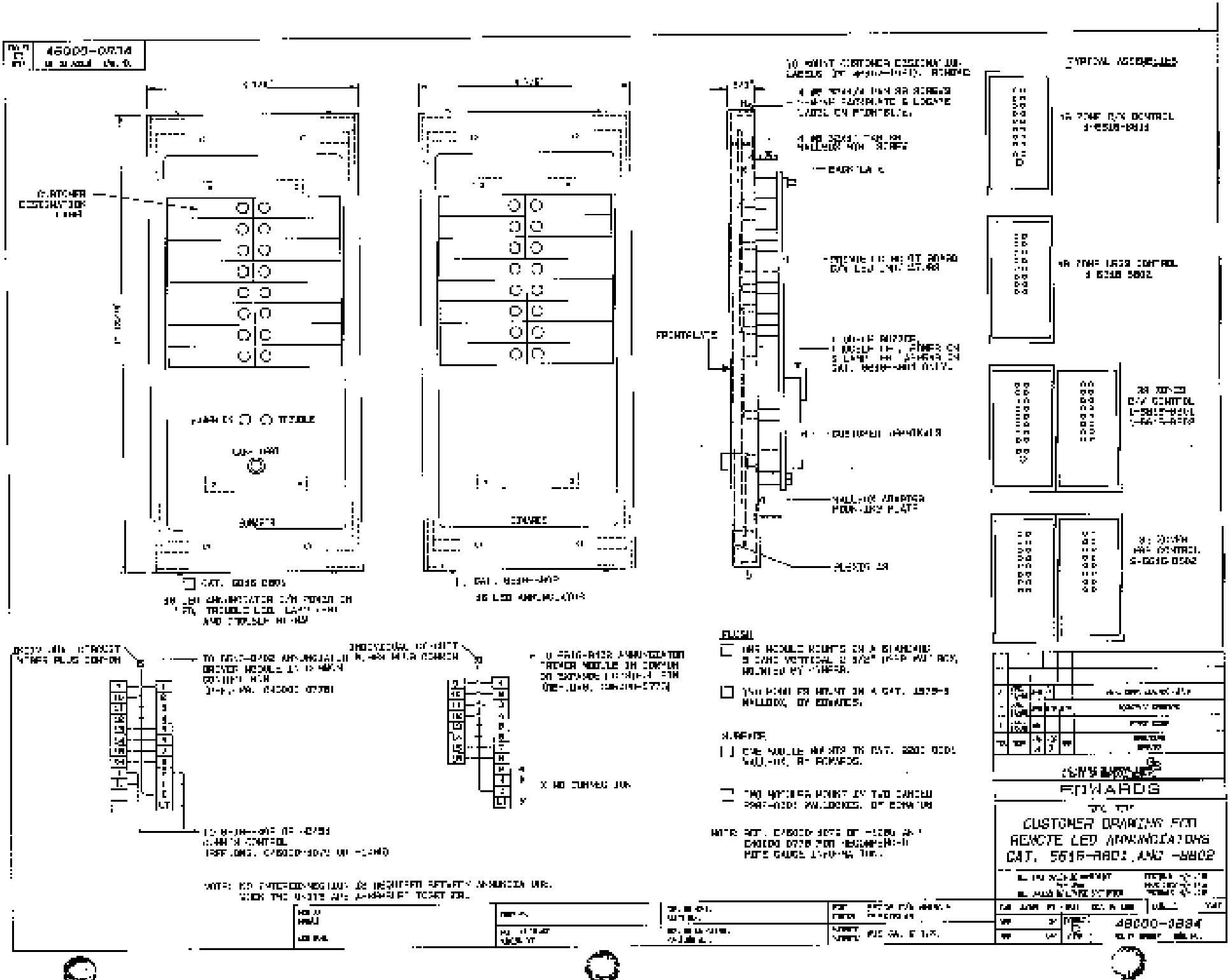
FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760.

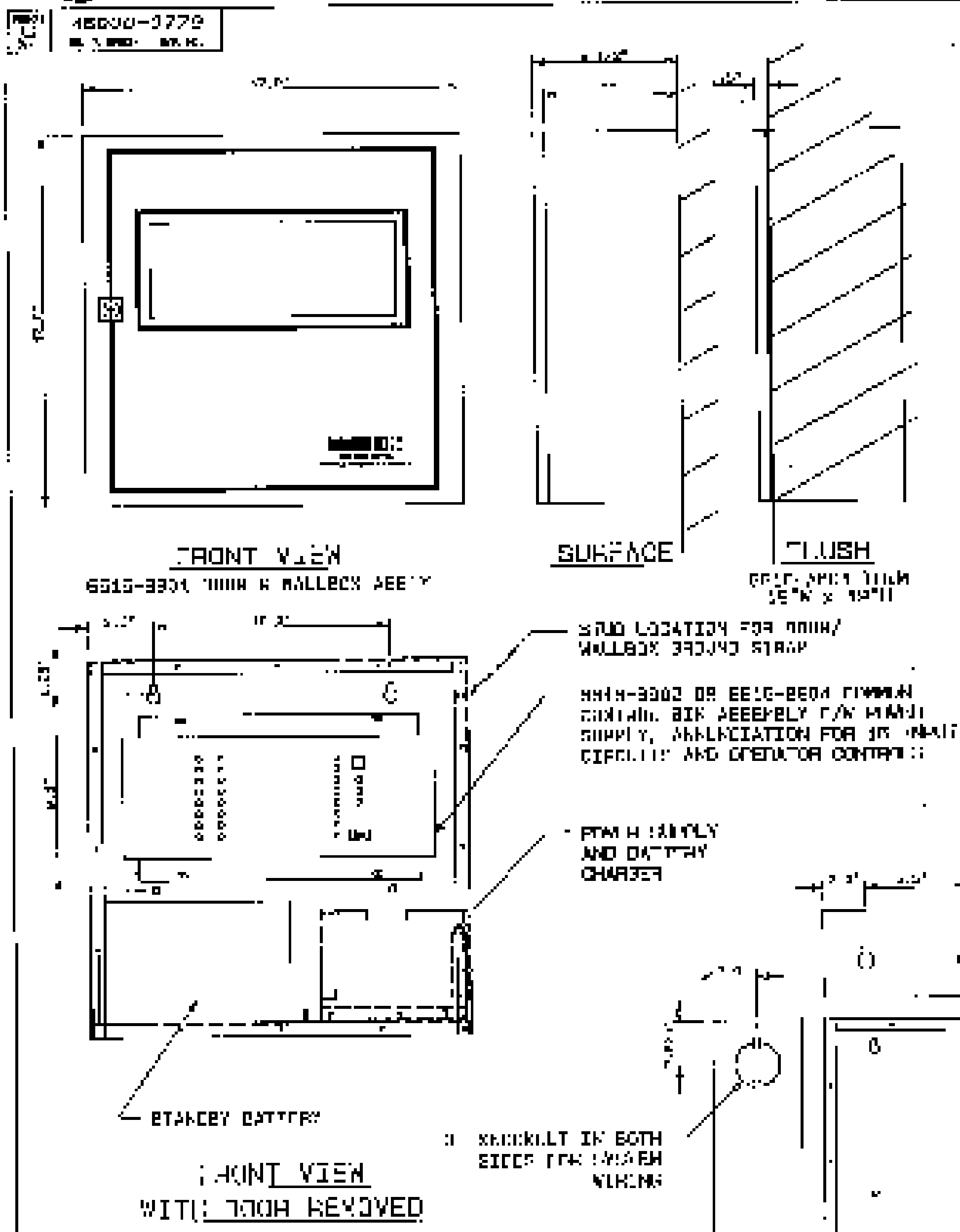


EDWARDS

CUSTOMER DRAWING
CAT. 6516-8714
AUXILIARY POWER MODULE

48000-0583





DESCRIPTION

THE CAT. # 6616-8501 DOOR AND WALLBOX ASSEMBLY PROVIDES SPACE FOR A 6616 6603/6604 COMMON CONTROL/POWER SUPPLY ASSEMBLY AND A 6 AMP-HR BATTERY.
THE 6" DEEP WALLBOX MAY BE SURFACE OR FLUSH MOUNTED.
WHEN FLUSH MOUNTING IS SPECIFIED, OPTIONAL CAT. [illegible] TRIM IS REQUIRED.
THE HINGE ASSEMBLY FOR MOUNTING THE DOOR TO THE WALLBOX IS SUPPLIED WITH THE CAT. 6616-6603/6604 COMMON CONTROL/POWER SUPPLY ASSEMBLY.
MOUNT DOOR AFTER THE BOX ASSEMBLY HAS BEEN INSTALLED. CONNECT GROUND STRAP FROM DOOR TO WALLBOX WITH CABLE PROVIDED IN BAG ASSEMBLY.

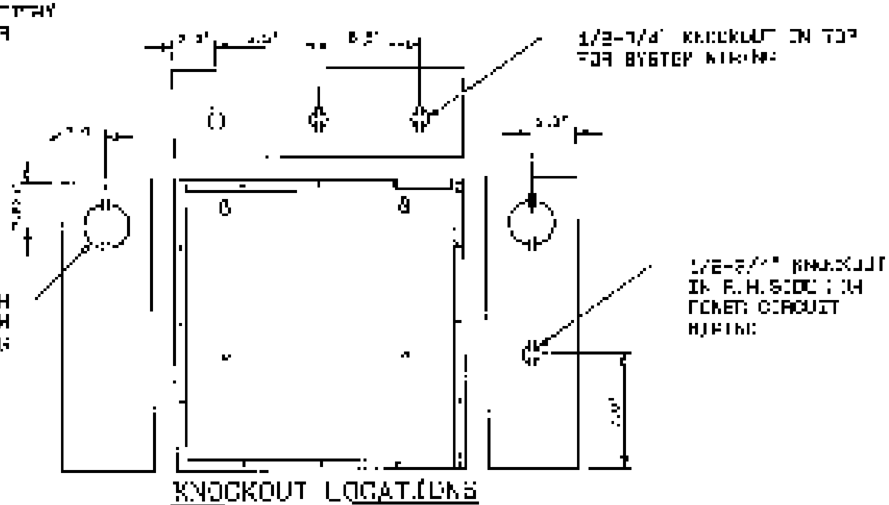
FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACING INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL [illegible] 45000-0750.

MATERIAL : COLD ROLLED STEEL

FINISH - WALLBOX AND FLUSH TRIM : SADDLE TAN
- DOOR : BEIGE C/W [illegible] PLEXIGLAS WINDOW
- MARKINGS : DARK BROWN

INSTALLATION

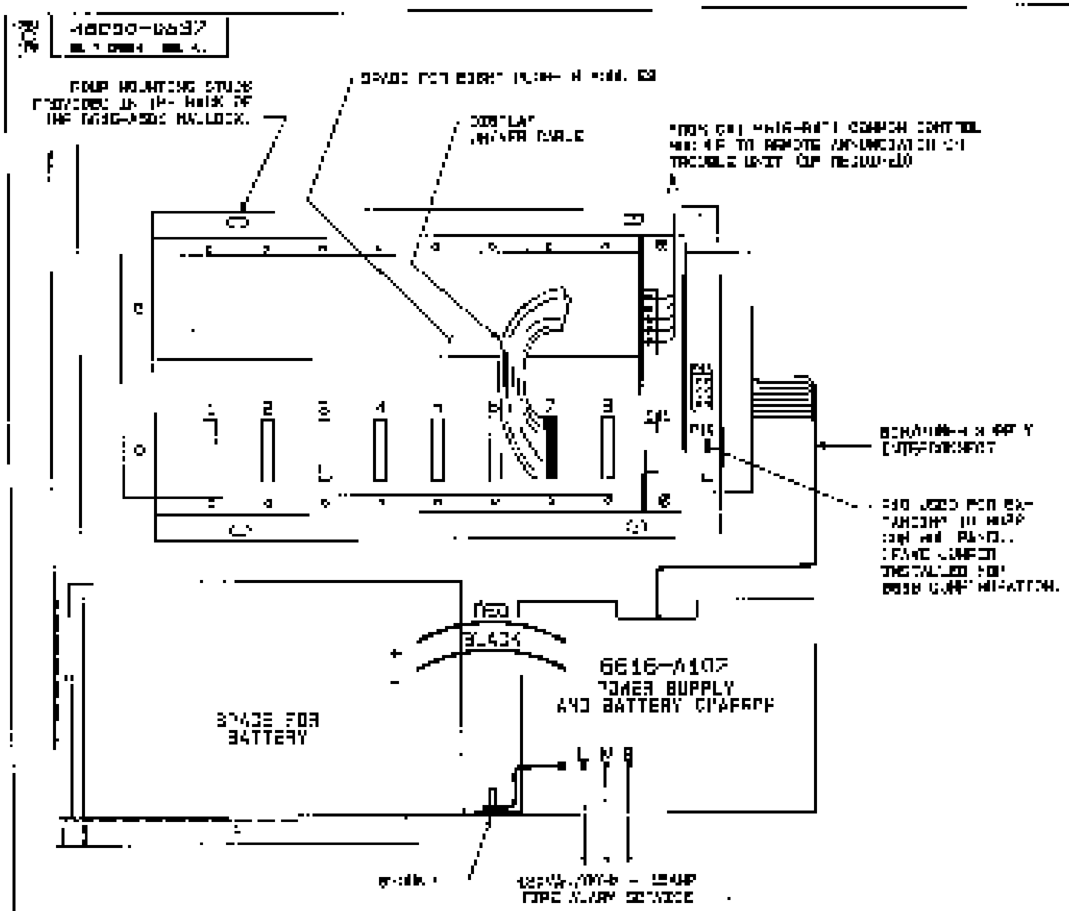
FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE [illegible].



EDWARDS

CUSTOMER DRAWING
CAT. 6616-8501
DOOR AND WALLBOX ASSEMBLY

45000-0779



DESCRIPTION

THE CAT. 6616-5902 COMMON CONTROL AND POWER SUPPLY PROVIDES THE CONTROL POINT AND POWER SUPPLY FOR THE [illegible] AS SPACE FOR ANY ADDITIONAL [illegible] MODULES. THESE SPACES MAY BE USED FOR:

ALARM OR SUPERVISORY RECEIVING MODULES [illegible]
- ALARM OUTPUT MODULES [illegible]
- FIRE DEPARTMENT CONNECTION MODULE
ANNUNCIATOR DRIVER MODULE(S)
- AUXILIARY RELAY MODULE(S)
- I/O [illegible] MODULE

[illegible] CUSTOMER DRAWINGS [illegible] FOR DESCRIPTIONS.

THE CAT. 6616 [illegible] COMMON CONTROL MODULE PROVIDES TERMINALS FOR A REMOTE TROUBLE [illegible] CONTROLS LOCATED AT A REMOTE ANNUNCIATOR. AN [illegible] POSITION DIP SWITCH IS PROVIDED TO SET THE SYSTEMS OPERATION. (SEE DWG. 46090-[illegible] FOR COMMON CONTROL WIRING AND SWITCH SELECTION.)

THE 6616-A107 POWER SUPPLY [illegible] THE BATTERY CHARGER AND [illegible] AUTOMATIC TRANSFER TO THE SECONDARY POWER SOURCE, SHOULD THE PRIMARY POWER FAIL OR UNDER BROWN-OUT CONDITIONS. [illegible] THE POWER SUPPLY TO [illegible] WITH THE INTERCONNECT CABLE [illegible]. WHEN CONFIGURING A 6616 CONTROL PANEL, SEE DRAWING 46090-[illegible] AND 46090-0732 FOR DETAILED INTERCONNECTION.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL PN 46090 0732.

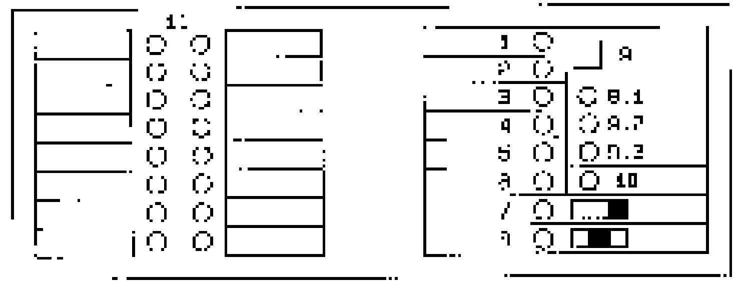
INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST ISSUES OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760, AND LOCAL REGULATIONS [illegible] MAY BE INSTALLED [illegible] POWER LIMITED CIRCUITS [illegible].

CAUTION

DO NOT INSERT MODULES WITH THE POWER ON !

COMMON CONTROL FRONT PANEL 6616-0902

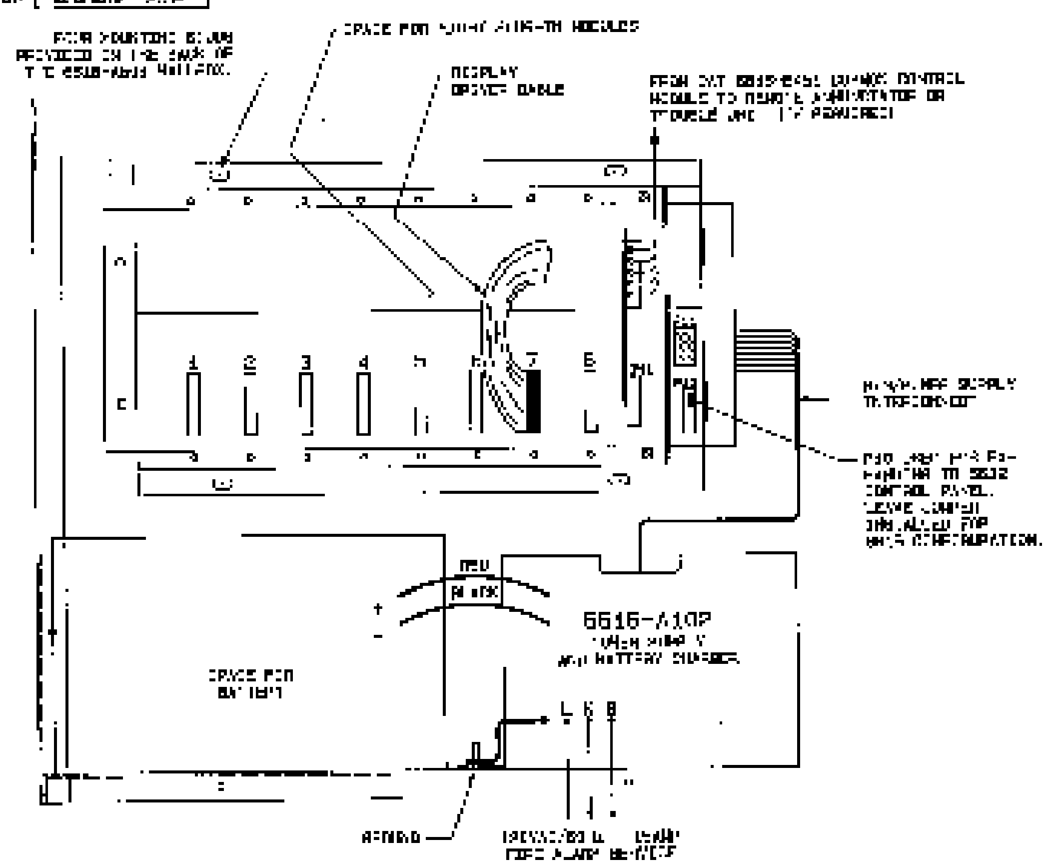


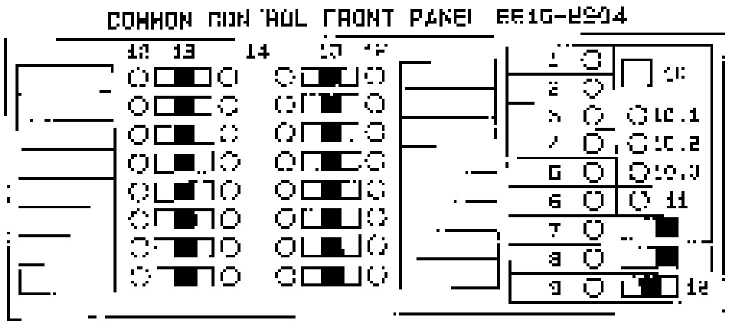
1. POWER ON
2. COMMON ALARM
3. ALARM SILENCED
4. [illegible]
5. GROUND FAULT
6. BATTERY FAULT
7. SILENT ALARM [illegible] AND INDICATOR
8. DRILL AND ANCILLARY [illegible]
9. SMART SWITCH AND [illegible] FOR
   9.1 SYSTEM RESET
   9.2 ALARM SIGNAL [illegible]
   9.3 TROUBLE SIGNAL [illegible]
10. COMMON TROUBLE
11. INDIVIDUAL ZONE INDICATIONS

EDWARDS

CUSTOMER DRAWING
CAT. 6616-5902
COMMON CONTROL/PWR SUPPLY

46090-0637





1. POWER ON
2. COMMON ALARM
3. ALARM SILENCED
4. ZONE FAULT
5. GROUND FAULT
6. BATTERY FAULT
7. SUPPLY ALARM TEST SWITCH AND INDICATOR
8. ALARM VERIFICATION SWITCH AND INDICATOR
9. [illegible] AND ANCILLARY DISCONNECT SWITCH
10. [illegible] SWITCH AND OPERATOR TROUBLE LED'S FOR:
 10.1 SYSTEM RESET
 10.2 ALARM SIGNAL SILENCE
 10.3 TROUBLE SIGNAL SILENCE
11. COMMON TROUBLE
12. INDIVIDUAL DRIVER [illegible]
13. INDIVIDUAL ALARM VERIFICATION/BYPASS SWITCHES
14. INDIVIDUAL ZONE INDICATORS

DESCRIPTION

THE CAT. 6516-6504 COMMON CONTROL AND POWER SUPPLY PROVIDES THE CONTROL PANEL AND POWER SUPPLY FOR THE PANEL AS WELL AS SPACE FOR [illegible] ADDITIONAL PLUG-IN MODULES. THESE SPACES MAY BE USED FOR:
- ALARM OR SUPERVISORY RECEIVING MODULES (MAXIMUM OF 4 PER ZONE)
- ALARM OUTPUT MODULES (MAXIMUM [illegible] SIGNAL/AUXILIARY [illegible] PER ZONE)
- [illegible] CONNECTION MODULE
- ANNUNCIATOR DRIVER MODULES
- ANCILLARY RELAY MODULE
- [illegible] INTERCONNECTING MODULE
SEE INDIVIDUAL CUSTOMER DRAWINGS FOR OTHER DESCRIPTIONS.

THE CAT. 6616 6504 COMMON CONTROL MODULE PROVIDES [illegible] FOR A REMOTE TROUBLE UNIT OF SYSTEM COMMON CONTROLS LOCATED AT A REMOTE ANNUNCIATOR. AN EIGHT POSITION DIP SWITCH IS PROVIDED TO SET THE SYSTEM OPERATION. SEE DWG. [illegible] FOR COMMON CONTROL WIRING AND SWITCH SELECTION.

THE 6616-A10P POWER SUPPLY INCORPORATES THE BATTERY CHARGER AND ALLOWS A [illegible] TRANSFER TO THE SECONDARY POWER SOURCE SHOULD THE PRIMARY POWER FAIL OR IN A BROWN-OUT CONDITION. CONNECT THE POWER SUPPLY TO P11 OF THIS CCM ASSEMBLY WITH THE INTERCONNECT CABLE PROVIDED. WHEN USING A [illegible] CONTROL PANEL SEE DRAWING [illegible] AND [illegible] FOR INTERCONNECTION.

FOR DETAILED SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL [illegible].

INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, ARTICLE 760, OR LOCAL REGULATIONS. [illegible], CIRCUIT CONDUCTORS MAY BE INSTALLED USING LIMITED ENERGY CABLE FOR ARTICLE 760, POWER LIMITED CIRCUITS (N.F.P.A.-70).

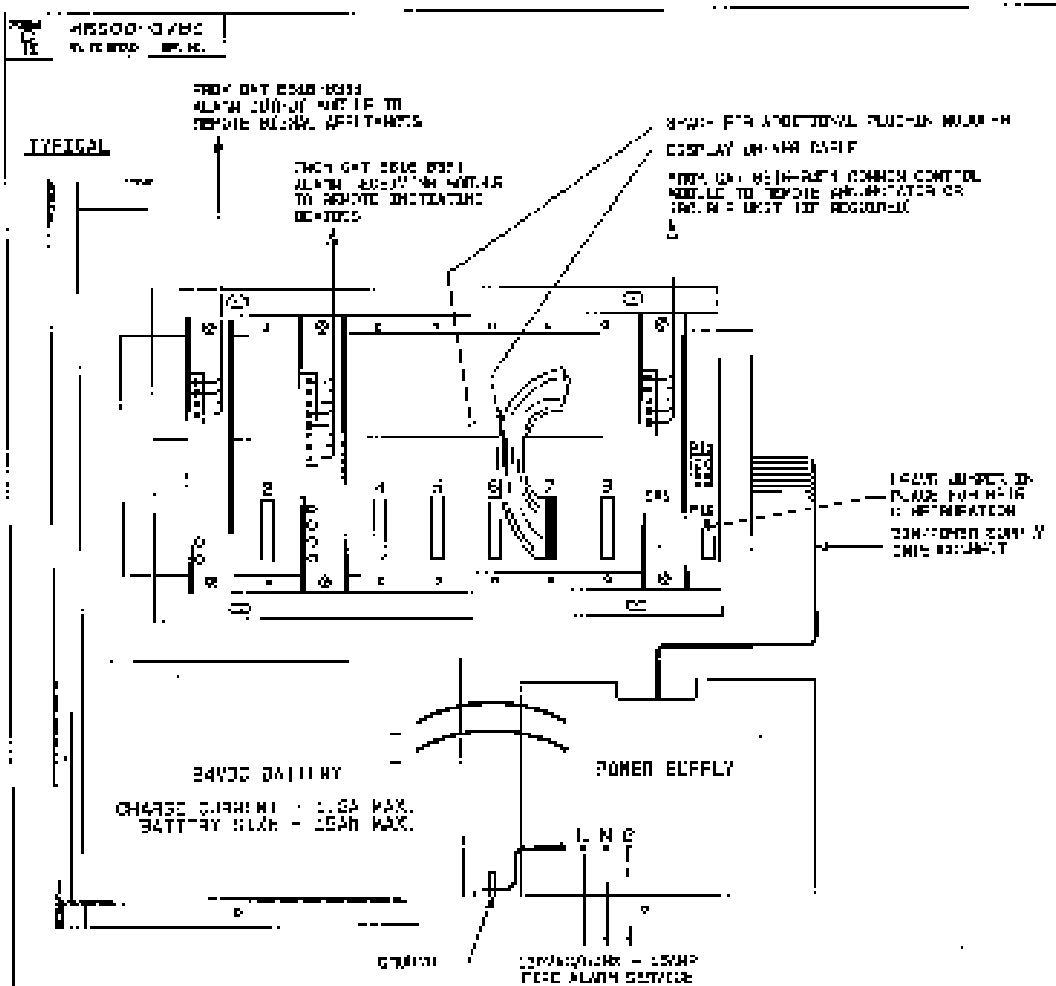
CAUTION

DO NOT INSERT MODULES WITH THE POWER ON !

WARNING

THIS UNIT INCORPORATES AN ALARM VERIFICATION FEATURE THAT WILL RESULT IN A DELAY OF THE SYSTEM ALARM SIGNAL FROM ANY OF ITS INITIATING CIRCUITS. THE TOTAL DELAY (CONTROL UNIT PLUS SMOKE DETECTOR) SHALL NOT EXCEED 60 SECONDS. NO OTHER INITIATING DEVICES SHALL BE CONNECTED TO THESE CIRCUITS UNLESS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.

EDWARDS
CUSTOMER DRAWING
CAT. 6616-6504
COMMON CONTROL/PWR SUPPLY
46000-1091



DESCRIPTION

THE CAT. 6615 FIRE ALARM CONTROL PANEL IS A MODULAR SYSTEM FOR SINGLE STAGE GENERAL ALARM [illegible] APPLICATIONS. IT MAY BE [illegible] TO SUPPORT [illegible] ALARM RECEIVING CIRCUITS [illegible]

A 6615 [illegible] CONTROL PANEL CONSISTS OF [illegible] COMMON CONTROL/POWER SUPPLY ASSEMBLY [illegible] BATTERY. THE COMMON CONTROL [illegible] ASSEMBLY INCLUDES ONE [illegible] CONTROL MODULE AND SPACE FOR [illegible] MODULES. [illegible] USED FOR:

- ALARM [illegible] RECEIVING MODULES [illegible]
- ALARM OUTPUT MODULES [illegible]
- FIRE DEPARTMENT CONNECTION [illegible]
- ANNUNCIATOR DRIVER [illegible]
- ANCILLARY RELAY MODULE(S)
- I/O PROGRAMMING MODULE

[illegible] COMMON CONTROL ASSEMBLY CONTAINS L.E.D. INDICATORS FOR: [illegible] POWER ON, COMMON ALARM, ZONE FAULT, GROUND FAULT, BATTERY [illegible] ALARM SILENCED AND COMMON TROUBLE WITH TROUBLE SIGNAL. [illegible] L.E.D.'S ARE LOCATED ON THE MODULE [illegible] FRONTS. THE PANEL [illegible] FUNCTION PUSH [illegible] L.E.D.'S FOR ALARM [illegible] TROUBLE SILENCE AND SYSTEM RESET. [illegible] SWITCHES ARE PROVIDED FOR [illegible] DISCONNECT, DRILL AND SILENT TEST. [illegible] FEATURES: [illegible] SIGNAL OUTPUT AND [illegible] INPUT CIRCUITS. [illegible] ONLY.

THE [illegible] COMMON CONTROL ASSEMBLY PROVIDES [illegible] ADDITIONAL FEATURES [illegible] ZONE BYPASS, INDIVIDUAL ZONE ALARM VERIFICATION AND INSTALLATION VERIFICATION.

FOR [illegible] SYSTEM OPERATION, COMMON CONTROL FEATURES AND MODULE PLACEMENT INFORMATION, REFER TO THE INSTALLATION AND OPERATION MANUAL [illegible]

INSTALLATION

FIRE ALARM SYSTEM COMPONENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE LATEST [illegible] OF THE NATIONAL ELECTRICAL CODE, [illegible] LOCAL REGULATIONS [illegible] CIRCUIT CONDUCTORS MAY BE [illegible] LIMITED ENERGY CABLE PER ARTICLE 760, [illegible]

[illegible] REFER TO [illegible] PROVIDED IN THE APPENDIX OF THE MANUAL, FOR A COMPLETE LIST OF [illegible] PRODUCTS.

CAUTION

DO NOT INSERT MODULES WITH THE POWER ON!

MODULE LOCATION CHART

COMMON CONTROL ASSEMBLY SLOT LOCATIONS [illegible]

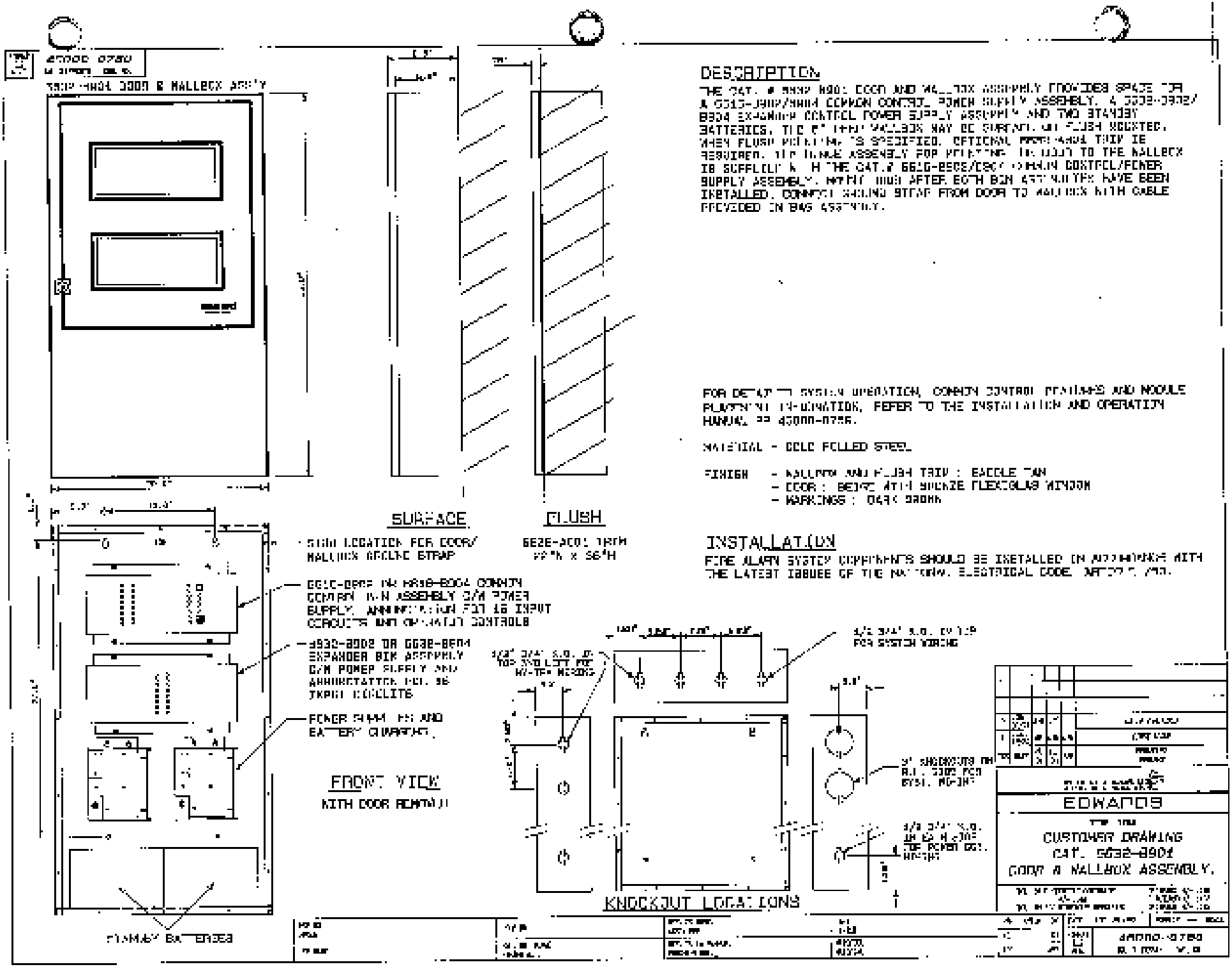
NOTES:

[illegible]

EDWARDS

CUSTOMER INSTALLATION DWG.
CAT. 6615
FIRE ALARM CONTROL PANEL

[illegible]



DESCRIPTION

THE CAT. [illegible] EXPANDER CONTROL AND POWER SUPPLY [illegible] SPACE FOR [illegible] MODULES. THESE SPACES MAY BE USED FOR:
- [illegible]
- [illegible] OUTPUT MODULES [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible] PROGRAMMING MODULE

[illegible]

[illegible]

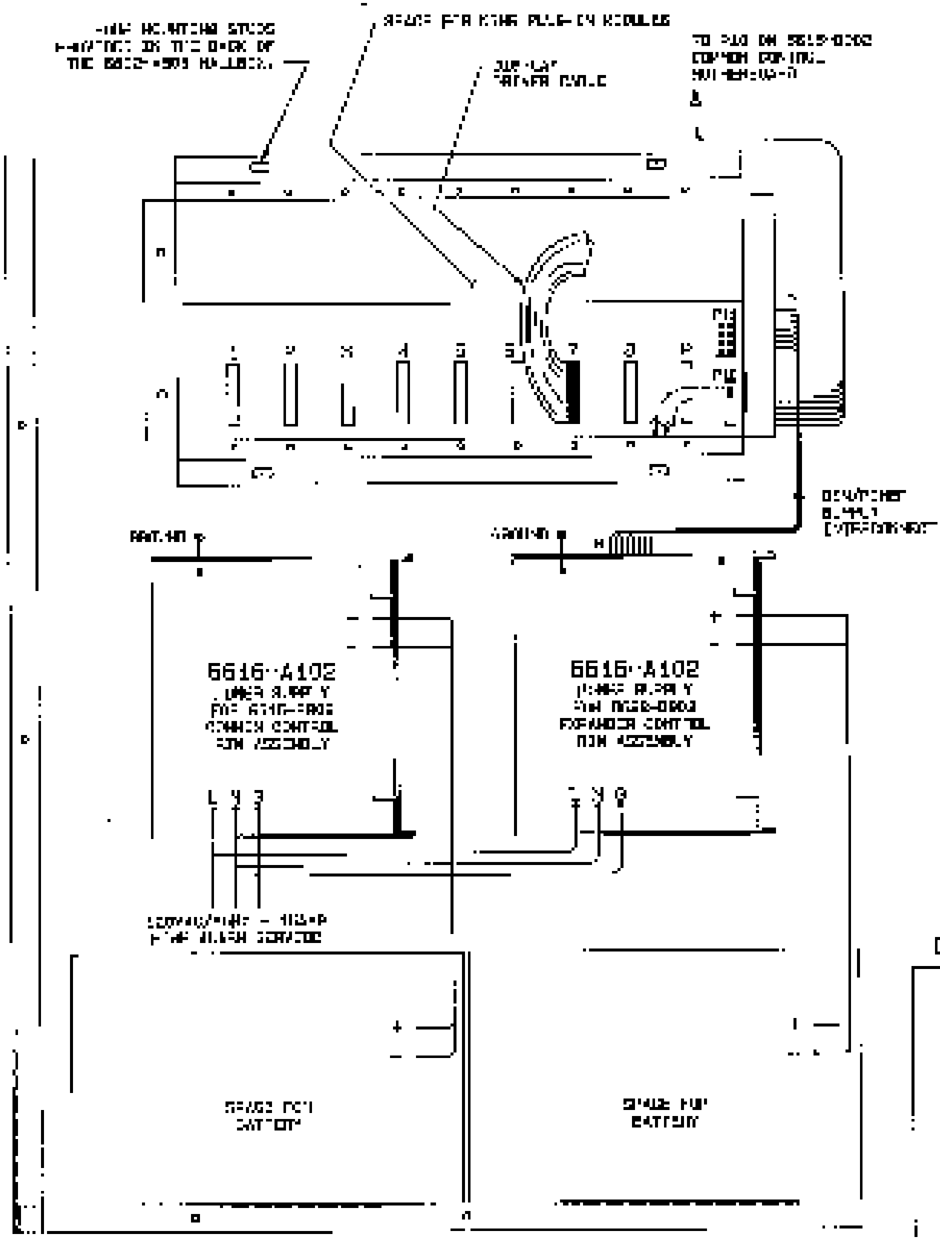
[illegible]

INSTALLATION

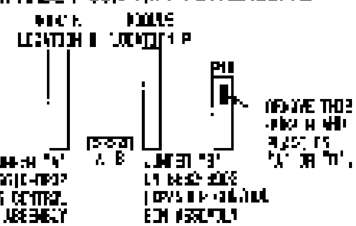
[illegible]

CAUTION

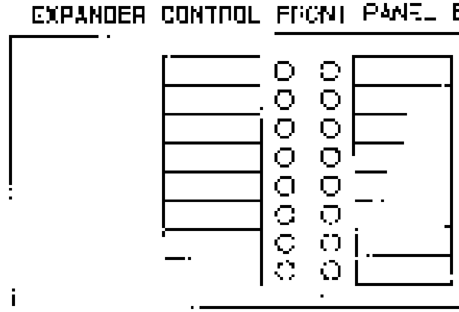
DO NOT INSER[illegible] MODULES WITH THE POWER ON !



COMMON/EXPANDER CONTROL MOTHERBOARD



EXPANDER CONTROL FRONT PANEL 5632 8902



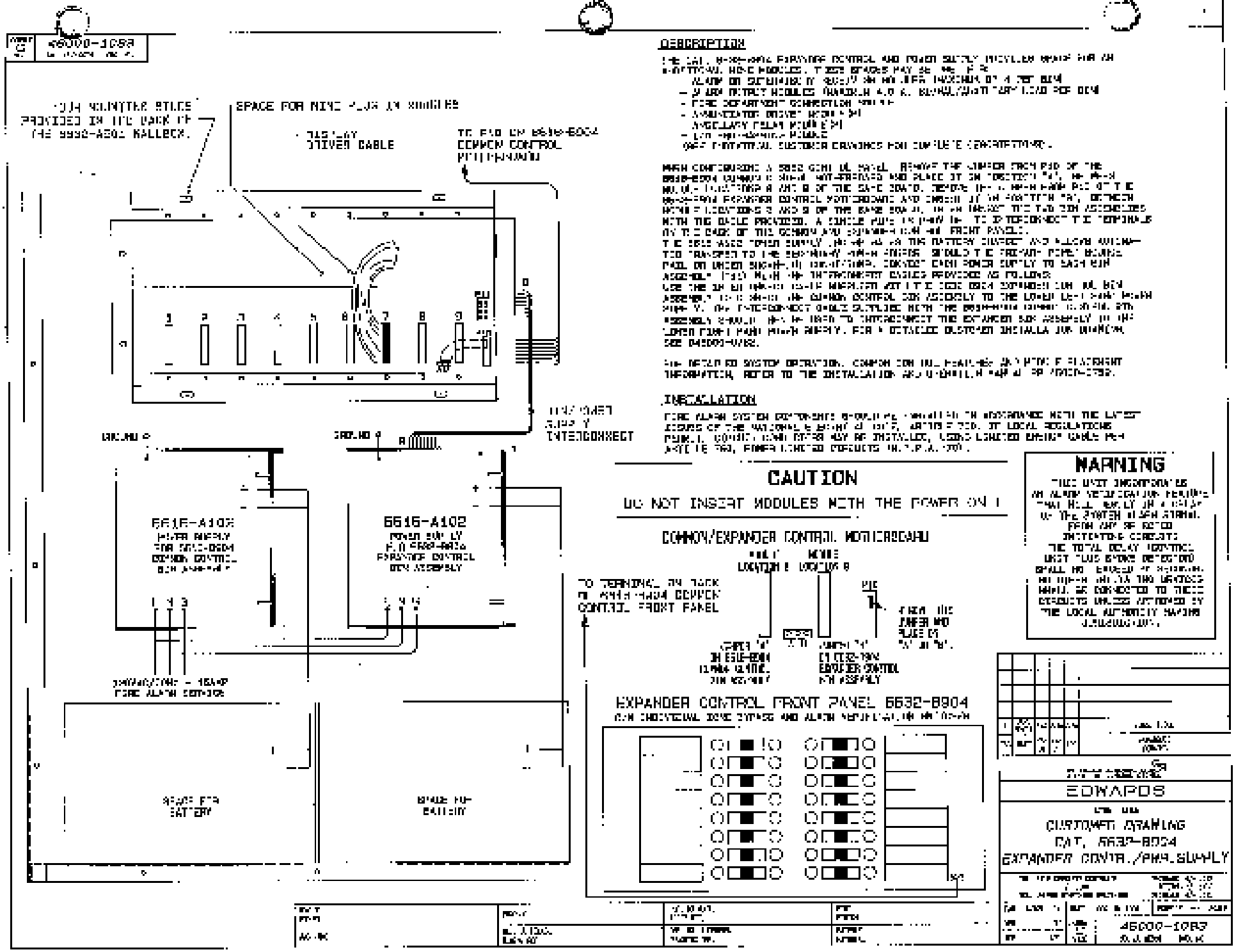
EDWARDS

CUSTOMER DRAWING

CAT. 5632-8902

EXPANDER CONTR./PWR.SUPPLY

46000-0892



DEVICE COMPATIBILITY CHART

COMPATIBILITY INFORMATION FOR EDWARDS
6616 AND 6632
FIRE ALARM CONTROL PANELS
C.I.# 661602

NOTE: All catalog numbers are Edwards unless otherwise indicated

INITIATING DEVICES

Non-Coded Manual Stations
Cat. No. 270-SPC, 270-DPC, 270A-SPC, 270A-DPC, 276B, 277B, 278B, 279B

Waterflow Alarm Switches
WFS Series (Potter Electric)

Heat Detectors
Fixed Temperature / Rate-of-Rise - Cat. No. 291B, 292B, 291B*, 292B*
Fixed Temperature - Cat. No. 283B, 284B, 445, 446, 293B*, 294B*

Open Area Smoke Detectors (Two Wire Configurations) C.I. # 001
Ionization - Cat. No. 6249B, 6250B*
Photoelectric - Cat. No. 6269B, 6269B-003, 6270B*, 6270B-003*

*For use with following bases: Cat. No. 6251B-001 (6250B remote LED capability).
6251B-003 (auxiliary relay).

Duct Type Smoke Detectors (Two Wire Configurations) C.I. # 001
Ionization - Cat. No. 6264B **
Photoelectric - Cat. No. 6268B **

**For use with following duct detector housings: Cat. No. 6260B, 6265B-001 (includes 6262B-001 test station), 6265B-002 (includes 6262B-001 test station and 6254B-003 relay unit)

Notes: (1) Maximum number of ionization detectors is 50.
(2) Maximum number of photo electric detectors is 30.
(3) If detectors with relay bases are required, only one detector with a relay base should be installed on a circuit, to ensure the activation of the ancillary device connected to the base relay.

SIGNALING DEVICES

	Bells	Horns	
Cat. No.	439D-(*)AW	892-1B, 892-2B	
	Horn/Strobe Units	Other	Strobes
Cat. No.	892-1B	SS30D-AW Ductronic Horn/Siren	202-2B
	892-2B	SS30D-AW Adaptatone Electronic Signal	202-6B
	892-6B	125D-024 Signal (Piezoelectric Type)	894B-001
		892-1B Signal (Piezoelectric Type)	902-2B
		892-2B,892-6B Signal/Strobe	902-6B

* Bells available with 6, 8 or 10 inch gongs.