

X400 MANUAL

Model X4004V4C & X4004V46C

Important: This document should be read carefully before commencing installation

This manual applies to the units with a serial number ending in XXXX/XXX/16 or greater.

Rev. 6.3 – April 2016

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Dear 4B Customer:

Congratulations on your purchase. 4B appreciates your business and is pleased you have chosen our products to meet your needs.

Please read in its entirety and understand the literature accompanying the product before you place the product into service. Please read the safety precautions carefully before operating the product. With each product you purchase from 4B, there are some basic but important safety considerations you must follow to be sure your purchase is permitted to perform its design function and operate properly and safely, giving you many years of reliable service. Please read and understand the Customer Safety Responsibilities listed below. Failure to follow this safety directive and the Operation Manuals and other material furnished or referenced, may result in serious injury or death.

SAFETY NOTICE TO OUR CUSTOMERS

- A. In order to maximize efficiency and safety, selecting the right equipment for each operation is vital. The proper installation of the equipment, and regular maintenance and inspection is equally important in continuing the proper operation and safety of the product. The proper installation and maintenance of all our products is the responsibility of the user unless you have asked 4B to perform these tasks.
- B. All installation and wiring must be in accordance with Local and National Electrical Codes and other standards applicable to your industry. (Please see the article "Hazard Monitoring Equipment Selection, Installation and Maintenance" at www.go4b.com.) The installation of the wiring should be undertaken by an experienced and qualified professional electrician. Failure to correctly wire any product and/or machinery can result in the product or machine failing to operate as intended, and can defeat its design function.
- C. Periodic inspection by a qualified person will help assure your 4B product is performing properly. 4B recommends a documented inspection at least annually and more frequently under high use conditions.
- D. Please see the last page of this manual for all warranty information regarding this product.

CUSTOMER SAFETY RESPONSIBILITIES

1. READ ALL LITERATURE PROVIDED WITH YOUR PRODUCT

Please read all user, instruction and safety manuals to ensure that you understand your product operation and are able to safely and effectively use this product.

2. YOU BEST UNDERSTAND YOUR NEEDS

Every customer and operation is unique, and only you best know the specific needs and capabilities of your operation. Please call the 24-hour hotline at 309-698-5611 for assistance with any questions about the performance of products purchased from 4B. 4B is happy to discuss product performance with you at any time.

3. SELECT A QUALIFIED AND COMPETENT INSTALLER

Correct installation of the product is important for safety and performance. If you have not asked 4B to perform the installation of the unit on your behalf, it is critical for the safety of your operation and those who may perform work on your operation that you select a qualified and competent electrical installer to undertake the installation. The product must be installed properly to perform its designed functions. The installer should be qualified, trained, and competent to perform the installation in accordance with Local and National Electrical Codes, all relevant OSHA Regulations, as well as any of your own standards and preventive maintenance requirements, and other product installation information supplied with the product. You should be prepared to provide the installer with all necessary installation information to assist in the installation.

4. ESTABLISH AND FOLLOW A REGULAR MAINTENANCE AND INSPECTION SCHEDULE FOR YOUR 4B PRODUCTS

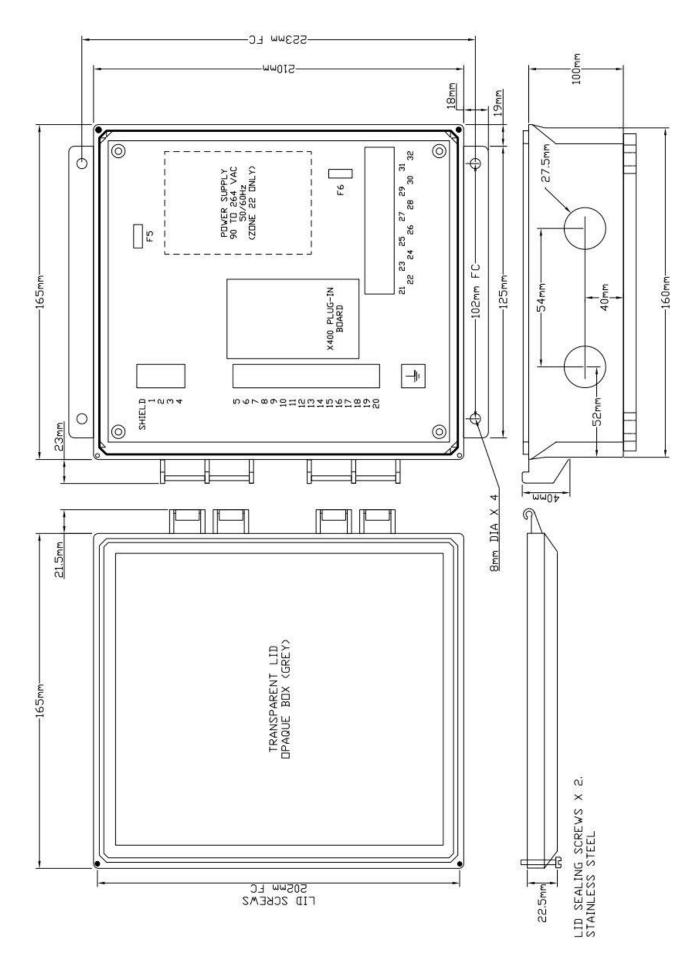
You should develop a proper maintenance and inspection program to confirm that your system is in good working order at all times. You will be in the best position to determine the appropriate frequency for inspection. Many different factors known to the user will assist you in deciding the frequency of inspection. These factors may include but are not limited to weather conditions; construction work at the facility; hours of operation; animal or insect infestation; and the real-world experience of knowing how your employees perform their jobs. The personnel or person you select to install, operate, maintain, inspect or perform any work whatsoever, should be trained and qualified to perform these important functions. Complete and accurate records of the maintenance and inspection process should be created and retained by you at all times.

5. RETAIN AND REFER TO THE OPERATION MANUAL FOR 4B'S SUGGESTED MAINTENANCE AND INSPECTION RECOMMENDATIONS

As all operations are different, please understand that your specific operation may require additional adjustments in the maintenance and inspection process essential to permit the monitoring device to perform its intended function. Retain the Operation Manual and other important maintenance and service documents provided by 4B and have them readily available for people servicing your 4B equipment. Should you have any questions, please call the 4B location who supplied the product or the 24-hour hotline number in the USA -309-698-5611.

6. SERVICE REQUEST AND ONLINE PRODUCT REGISTRATION

If you have questions or comments about the operation of your unit or require the unit to be serviced please contact the 4B location who supplied the product or send your request via fax (309-698-5615), email (4b-usa@go4b.com), or call us via our 24-hour hotline number in the USA - 309-698-5611. Please have available product part numbers, serial numbers, and approximate date of installation. In order to assist you, after the product has been placed into service, complete the Online Product Registration section which is accessed via our website www.go4b.com



Approvals

Certification Markings: Model X4004V4C/X4004V46C

CSA Class II, Div. 2 - Groups F, G T125°C (X4004V46C) Ex tc IIIC T125°C Dc IP66 Tamb -20°C to +45°C Zone 22 AEx tc IIIC T125°C Dc IP66 Tamb -20°C to +45°C

CSA Class II, Div. 1 - Groups E, F, G T125°C (X4004V4C) (When Powered with a Class 2 Power Supply) Ex tb IIIC T125°C Db IP66 Tamb -20°C to +50°C Zone 21 AEx tb IIIC T125°C Db IP66 Tamb -20°C to +50°C

Power dissipation in Watts CSA Division 1 : 12 Watts Max CSA Division 2 : 12 Watts Max

To Open the Lid:

- 1. Disconnect power (isolate ALL circuits)
- 2. Untighten the lid securing screws
- 3. Carefully open the lid ensuring that the gasket is not damaged and remains in place

To Close the Lid:

- 1. Check that the gasket is correctly fitted into the box groove and is undamaged.
- 2. Tighten the lid screws.
- 3. Check that the lid and box are correctly mated.

Conditions of use:

- **1.** The equipment shall be suitably earth bonded via the PCB mounted earth terminal inside the equipment enclosure.
- 2. Warning: The equipment is a potential static hazard, clean only with a damp cloth.
- 3. Do not allow dust layers to build up on the equipment.

X400 ELITE ALARM MONITOR

INTRODUCTION

The X400 ELITE is a microprocessor controlled unit which is able to accept signals from different sources in 8 zones and is able to cause alarm and shutdown of the machine when alarm conditions are detected. The control unit is housed in a self-contained wall-mounting enclosure. The X4004V4C ELITE is designed to work in a Zone 21/22 environment and will operate from 24v DC. The X4004V46C ELITE is designed to work in a Zone 22 environment and will operate from 100-240 VAC.

1. SPECIFICATIONS

1.1 The Control Unit

A plastic enclosure houses the electronics and terminal connectors. The unit contains a printed circuit board to accommodate power supply circuitry, output relays, microprocessor and terminals. A short ribbon cable is connected to the lid of the enclosure where the indicator lamps are mounted. A 'press button' is mounted on the lid to allow the unit to be tested during operation. A second button allows the alarm signal to be muted.

Electrical Supply X4004V4C	_	24VDC +/- 10%
X4004V46C	-	100-240 VAC +/- 10%
Power Consumption	-	12 WATTS
Alarm Relay Contacts	-	1 Pole normally open 8A@ 250VAC
Stop Relay Contacts	-	1 Pole normally open 8A@ 250VAC
Alarm Inputs	-	10-30 VDC+/-10%
Remote Alarm Mute	-	24VDC or 100-240 VAC
Terminals	-	Power 4mm ² 14 AWG max
	-	Signals 2.5mm ² 16 AWG max Plug In
Protection	-	Class II Division 1 Groups E, F & G (V4)*
		Tamb -20°C to +50°C IP66
		*When Powered with a Class 2 Power Supply
		Class II Division 2 Groups F & G (V46)
		Tamb -20°C to +45°C IP66
Height	-	9.7", 246mm
Width	-	7.4", 188mm
Depth	-	4", 102mm
Fixing Centres	-	8.75" high x 4" wide, 222mm x 102mm
Cable Entry	-	2 Holes 11/8" DIA, 28mm, ³ / ₄ " CONDUIT
Weight	-	3lbs, 1.3Kg

Status Indicator Lamps	-	Viewed through front panel POWER	
	-	1	(Input 1)
	-	2	(Input 2)
	-	3	(Input 3)
	-	4	(Input 4)
	-	5	(Input 5)
	-	6	(Input 6)
	-	7	(Input 7)
	-	8	(Input 8)
	-	ALARM	
Press Buttons	-	MUTE	
	-	TEST	

1.2 Switch settings.

The X400 is equipped with a switch block containing 8 small switches. The switches are numbered 1-8 inclusive and used to select options for the way the X400 works. Switch 1-4 are used as described below. Switch 5-8 are not used on this version of the X400. When a switch is in the left hand position it is considered to be OFF, when the switch is in the right hand position it is considered to be ON.

Switch position 1 controls the way that the inputs work.

When Switch 1 is OFF the <u>normal input state</u> is high (+24VDC) and an alarm will be generated when any one or more inputs go low (0VDC) or power fails. **This is a FAIL-SAFE mode.**

When Switch 1 is ON the normal input state is low (0VDC) and an alarm will be generated when any one or more inputs go high (+24VDC).

Switch position 2 controls the way the alarm relay works.

When Switch 2 is OFF the alarm relay is normally de-energised and will energise when an alarm is detected.

When Switch 2 is ON the alarm relay is normally energised and will de-energise when an alarm is detected.

Switch position 3 controls the way the relays on the XT400 relay option board work. When Switch 3 is OFF the XT400 alarm relays are normally energised and will deenergise when an alarm is detected or power fails. This is a FAIL-SAFE mode.

When Switch 3 is ON the XT400 alarm relays are normally de-energised and will energise when an alarm is detected.

Switch position 4 controls the stop relay delay.

When Switch 4 is OFF the XT400 stop relay is normally energised and will de-energise 60 seconds after an alarm is detected or immediately if power fails. **This is a FAIL-SAFE mode.**

When Switch 4 is ON the XT400 stop relay is normally energised and will de-energise 180 seconds after an alarm is detected or immediately if power fails. **This is a FAIL-SAFE mode.**

When shipped, switch 1-4 are all set to the OFF position.

1.3 Alarm Inputs

There are eight separate Alarm Inputs on the control unit arranged in four pairs. Each input needs the presence or absence of a DC voltage in the specified range to be in the NORMAL state.

Refer to section 1.2 for clarification of how the switch settings effect these inputs.

The inputs are designed to function between 10 and 30 VDC. Terminal 17 can provide a 24VDC supply for use as a voltage source for any remote sensors used. The 24 VDC supply has a limit applied to it and will cause a fuse to blow (F5) if the current is exceeded. The current limit for model X4004V4C is 200mA (Zone 21) and the current limit for model X4004V4C is 200mA (Zone 21) and the current limit for model X4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 21) and the current limit for model x4004V4C is 200mA (Zone 22). Usually, the same voltage source is used for all alarm inputs but it is permitted to use different DC voltages (10 – 30 VDC) as all inputs are opto-isolated. As the inputs are arranged in pairs with one common terminal for each pair, it is necessary to use the same voltage source for each pair of inputs.

2 INSTALLATION INSTRUCTIONS

Warning:

Always lock-out and tag-out the machine prior to installation and set-up.

Wiring: All Wiring Must Be In Accordance With Local and National Electrical Codes and Should Be Undertaken By an Experienced and Professional, Qualified Electrician.

2.1 The Control Unit

The Control Unit box should be installed in a suitable control or starter switch room and mounted at an eye level position so that the warning lights can be readily seen. The box should have sufficient space to open the lid for wiring and adjustment. An audible alarm, sounder or visual indicator lamp can be installed in or outside of the control room.



The Control Unit is susceptible to static voltage. Connection of a clean ground to terminal 31 is essential for optimum performance. Prior to this connection, static handling precautions should be taken.

Enclosure Installation:

- a. The IP66 rating of the enclosure must be maintained when used Zone 21 dust environment. You must use the correct cable, glands and sealing arrangement and in accordance with the national installation codes.
- b. Where other certified components are used as part of the assembly or installation procedure, the user must take in to account any limitations which might be listed on the relevant certificates.
- c. The box is supplied with 2 x 27.5mm (1¹/₈") pre drilled holes in the bottom face. All unused entry apertures must be sealed using certified stopping. The end user must install certified stopping plugs and cable glands in strict accordance with the manufacturer's instructions. Further holes must not be added to the enclosure as this will invalidate any warranty and the product certification.
- d. All wiring must be carried out in accordance with relevant codes of practice and / or instructions.
- e. The voltage and current and maximum power dissipation shown on the box label must not be exceeded.
- f. All leads must be insulated for the appropriate voltage.
- g. A parallel shaft screwdriver of the correct size should always be used when tightening terminals.

2.2 Alarm Sensors

Many types of sensors can be used with the X4004 ELITE control unit. If the sensor provides a voltage signal within the specified range, it can be connected directly to the input. If the sensor uses a relay contact, it must be connected to a voltage source as shown on the wiring Drawing D.

3 ELECTRICAL WIRING

Refer to Drawings A to D

Mount a conduit junction box within 6ft (2 metres) of each sensor – generally one junction box can be used for a pair of sensors. Connect the sensor cable to the junction box using sealing glands and protect the cable from damage. Connect the junction box back to the control unit. We strongly recommend the use of shielded wires when wiring the sensors to the control unit. When terminating conduits at the control unit, ensure ground continuity by using a suitable bushing such as Allen Bradley 1490-N19.

When installing the equipment in an area which is likely to be hazardous from Ignitable Dusts, use liquid tight conduit and fittings and follow all local codes.

Fuses:

It is very important to observe the fuse ratings used on the X400 elite. The following fuse ratings MUST apply. See page 5 for the position of the fuses. Fuse 1 (F1) is located on the underside of the plug in circuit board to provide mechanical protection.

F1 and F5 must have a maximum rating of 200ma when used in a Zone 21 installation. F1 has a recommended maximum rating of 200ma when used in a Zone 22 installation. F5 can be 2 amp maximum.

F1 is used to limit the current available to the sensor inputs. F5 is used to limit the current available to the internal electronics and terminals 3 and 4.

F6 is used to protect the AC power supply and should have a 2 Amp rating. This fuse is only required when used in Zone 22 installations.

In order to maintain the product certification, these fuses MUST be replaced with equivalent fuses at the same rating. Failure to do so will invalidate the certification and any warranties which may exist.

4 **OPERATING INSTRUCTIONS**

4.1 The TEST function

4.1.1 Normal Test

The X4004 ELITE is equipped with a self-test function, initiated by the TEST button on the lid of the control unit. When the Test button is pressed, the Alarm lamp flashes and then the following automatic test is initiated as the Test button is released.

- 1. All lamps illuminate the ALARM lamp continues to flash
- 2. After 5 seconds all lamps return to their normal conditions

This test can be performed when the machine is running or stopped and tests the correct function of the microprocessor and of all lamps.

4.1.2 Extended Test

If the Normal Test is initiated as in 4.1.1 and if the Test button is pressed again, while the ALARM lamp is flashing, the extended test operates as follows:

- 1. All lamps illuminate the ALARM lamp continues to flash
- 2. The Test button is pressed a second time
- 3. The ALARM and INPUT 8 lamps flash for a further 5 seconds (8 seconds total time)
- 4. The ALARM RELAY and STOP RELAY are inverted. INPUT 7 lamp flashes
- 5. After 3 seconds all lamps and relays return to their normal conditions

If this test is performed when the machine is not running, the Alarm will sound but the STOP RELAY will have no effect on the machine. If this test is performed when the machine is running, the Alarm will sound and the STOP RELAY will stop the machine! This test should be performed on a regular basis to check the safety of the installation.

4.2 Normal Operation (see switch 1 & 2 settings section 1.2)

If all Inputs are NORMAL, all eight INPUT indicator lamps will be off. The ALARM indicator lamps will be OFF and the alarm relay will be in the NON ALARM state. The STOP relay will be energised.

4.3 Alarm Warning

If an INPUT is in the ALARM state, the associated INPUT indicator lamp and ALARM lamp will illuminate. After approximately 1 seconds, the ALARM relay will change to the ALARM DETECTED state. If the INPUT then changes to NORMAL, the Input indicator lamp will also go off. If no other alarms are present then the ALARM lamp will turn off, the ALARM relay returns back to the NO ALARM state.

If more than one Input is in the ALARM state all associated Input indicator lamps will illuminate. Only when all Inputs are acknowledged (MUTED) will the ALARM relay return to the NO ALARM state. The alarm indicators will remain until the alarm condition is removed.

4.4 Alarm Mute

If the ALARM lamp and ALARM relay are in the alarm state because of an Input, the ALARM may be muted (turned off) by the following methods. When the Mute button is pressed, the ALARM lamp flashes, the ALARM relay changes to the NO ALARM state and all Input indicator lamps which were illuminated will flash. Alternatively, if a voltage is applied to the MUTE input terminals, the same MUTE action will occur. If the Inputs return to NORMAL the alarm indicator will also turn to off.

If, during a MUTE condition, another Input changes to the ALARM state, the associated Input indicator lamp will illuminate, the ALARM lamp and relay will enter the ALARM DETECTED state leaving the original muted Input indicator lamps flashing. A further MUTE operation would flash the previous and new Input indicator lamps.

Terminals 19 & 20 are used to remotely mute the alarm by applying 24VDC or 100-240VAC. When using a DC source there is no need to observe polarity. 0VDC/0VAC is the normal condition and 24VDC or 100-240VAC is the remote reset condition. This input mutes the alarm relay in exactly the same way as the mute push button described above.

4.5 Alarm Stop (Shut Down) [Refer to 1.2 **Switch position 4** for the **set period**]

If an Input ALARM condition is detected, and if the ALARM indicator lamp is on (whether muted or not) for more than the **set period**, the STOP relay will de-energise. If the ALARM condition is cleared in less than the **set period**, the STOP relay will not deenergise but the amount of alarm time will be 'remembered'. If the ALARM condition occurs again immediately, the 'shut down timer' will continue from where it last stopped until the **set period** is completed. If the ALARM condition does not occur again immediately, the 'shut down timer' will time backwards, reducing the amount of time 'remembered' until the timer reaches zero. Consequently, if the alarm condition is intermittent, but no single interval of alarm exceeds the **set period**, the persistence of alarms can eventually result in a STOP condition.

4.6 Restarting

If the machine has stopped because of an ALARM condition as in 4.5 the lamps described above will remain flashing. As soon as the Inputs return to NORMAL, the flashing lamps will be cancelled, and the ALARM and STOP relays will reset.

Liability and Indemnity:

- 1) In respect of installation or applications of the goods as parts or components of other goods or machinery the buyer shall be solely responsible for the compliance and the installation with safety regulations issued by competent authorities and in force at the place of operation and/or for its compliance with any terms of insurance notified by the Buyer's insurance for personal injury or damage to property or loss of profit though fire, explosion, gas, or otherwise.
- 2) Neither the company nor its suppliers shall in any circumstances whatsoever be liable for any loss or damage suffered by the Buyer or by any third party howsoever caused involving any person, property, or interest, suffered by the Buyer or any third party directly or indirectly in connection with the use, functioning or state of the goods, unless the same shall arise out of the Company's negligence.
- 3) The buyer shall indemnify the Company against all actions, claims, or demands by third parties, whether in tort or otherwise, howsoever arising, directly or indirectly, in connection with the use, functioning or state of the goods or in connection with the performance of service.

Limitation of Liability

Without prejudice to the foregoing, the Company shall in no circumstances be liable:

- 1) For any incidental or consequential loss or damage suffer by the buyer, including without limitation, delay, detention, loss of production, loss of profit, or liability to third parties except liability for personal injury or death arising out of negligence by the Company.
- 2) For any loss or damage covered by the insurance or which would ordinarily be covered by the insurance.

Warranty

The equipment is covered by 12 months warranty from the date of dispatch. Any faults arising due to faulty materials or workmanship in the original equipment within the warranty period will be corrected free of charge providing the equipment is returned to us freight paid.

CHECKLIST For problems after initial start-up

- 1. Is there excessive interference on the electrical power supply? Power conditioners and surge (spike) suppressor may have to be fitted.
- 2. Has the wiring for the Sensors been routed away from power cables? See paragraph 3.
- 3. Is the X4004 Elite circuit properly grounded?
- 4. Is the Micro-processor control unit overheating, if so mount in temperaturecontrolled environment of maximum temperature $104^{\circ}F(40^{\circ}C)$.
- 5. Check that high powered 'Walkie Talkie' radios are not operated immediately near the X4004 Elite control unit or Sensors as this will affect the performance.

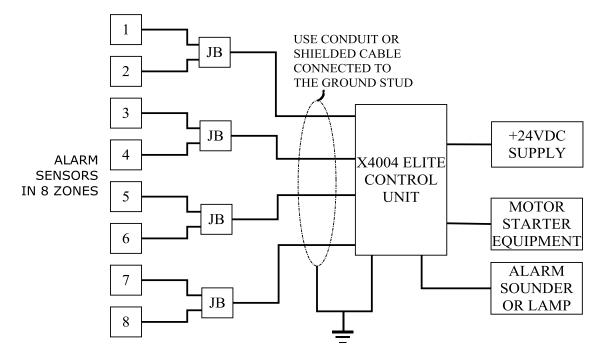
5. FAULT FINDING CHART

SYMPTOM	CAUSE	REMEDIAL ACTION
Input LED on Control Unit does not illuminate	Sensor not operating Wiring Fault Sensor connected to wrong terminals	Replace Sensor Check wiring
Input LED on Control Unit on continuously	Wiring fault Sensor fault	Check wiring Check sensor
Wrong input LED on unit illuminates	Sensor connected to wrong input	See Drawing D
Alarm LED on	Input in alarm state (See 1.2 Switch settings)	Check Sensors/Switch settings
Relay off	Stop condition occurred	Alarm condition for more than the set period (stop delay)
Machine fails to start	Wiring fault	Check wiring

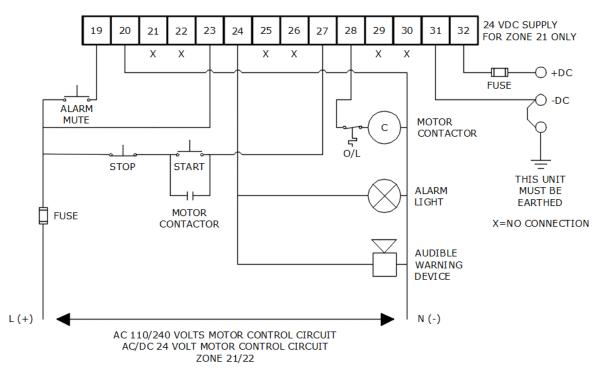


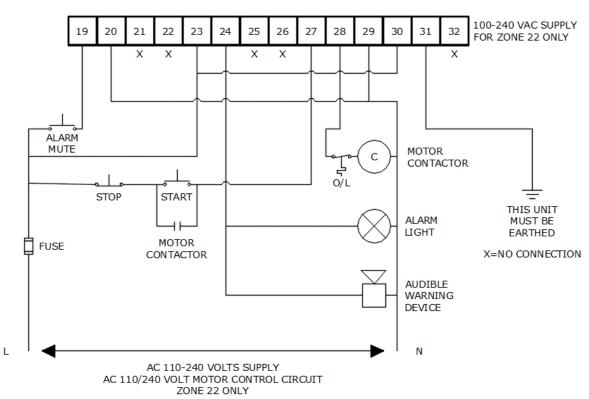
For further information relating to this and other products go to www.go4b.com

Drawing A: Block Diagram

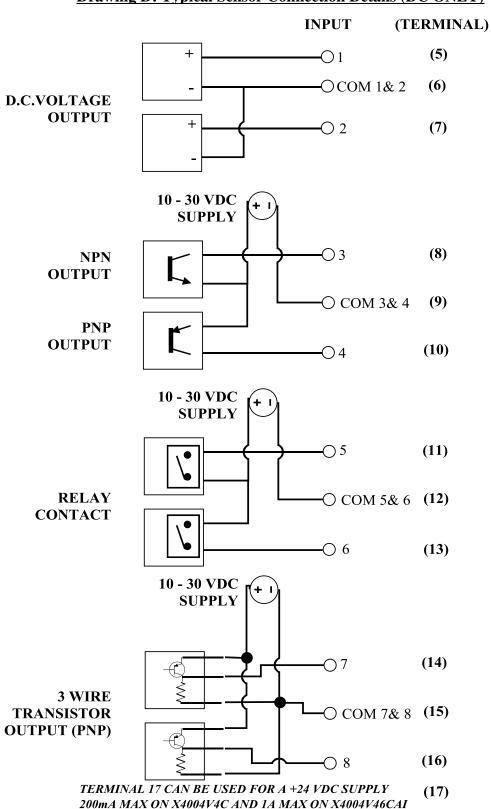


Drawing B: DC Supply Connections with AC/DC Motor Circuit





Drawing C: AC Supply Connections with AC Motor Circuit



Drawing D: Typical Sensor Connection Details (DC ONLY)

WARRANTY INFORMATION

1. EXCLUSIVE WRITTEN LIMITED WARRANTY

ALL PRODUCTS SOLD ARE WARRANTED BY THE COMPANY (4B COMPONENTS LIMITED, (4B) BRAIME ELEVATOR COMPONENTS LIMITED, AND (4B) S.E.T.E.M. Sarl) HEREIN AFTER REFERRED TO AS 4B TO THE ORIGINAL PURCHASER AGAINST DEFECTS IN WORKMANSHIP OR MATERIALS UNDER NORMAL USE FOR ONE (1) YEAR AFTER DATE OF PURCHASE FROM 4B. ANY PRODUCT DETERMINED BY 4B AT ITS SOLE DISCRETION TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP AND RETURNED TO A 4B BRANCH OR AUTHORIZED SERVICE LOCATION, AS 4B DESIGNATES, SHIPPING COSTS PREPAID, WILL BE, AS THE EXCLUSIVE REMEDY, REPAIRED OR REPLACED AT 4B'S OPTION.

2. DISCLAIMER OF IMPLIED WARRANTY

NO WARRANTY OR AFFIRMATION OF FACT, EXPRESSED OR IMPLIED, OTHER THAN AS SET FORTH IN THE EXCLUSIVE WRITTEN LIMITED WARRANTY STATEMENT ABOVE IS MADE OR AUTHORIZED BY 4B. 4B SPECIFICALLY DISCLAIMS ANY LIABILITY FOR PRODUCT DEFECT CLAIMS THAT ARE DUE TO PRODUCT MISUSE, ABUSE OR MISAPPLICATIONS, AS AUTHORIZED BY LAW, 4B SPECIFICALLY DISCLAIMS ALL WARRANTIES THAT THE PRODUCT IS FIT OR MERCHANTABLE FOR A PARTICULAR PURPOSE.

3. NO WARRANTY "BY SAMPLE OR EXAMPLE"

ALTHOUGH 4B HAS USED REASONABLE EFFORTS TO ACCURATELY ILLUSTRATE AND DESCRIBE THE PRODUCTS IN ITS CATALOGS, LITERATURE, AND WEBSITES, SUCH ILLUSTRATIONS AND DESCRIPTIONS ARE FOR THE SOLE PURPOSE OF PRODUCT IDENTIFICATION AND DO NOT EXPRESS OR IMPLY A WARRANTY AFFIRMATION OF FACT, OF ANY KIND OR A WARRANTY OR AFFIRMATION OF FACT THAT THE PRODUCTS WILL CONFORM TO THEIR RESPECTIVE ILLUSTRATIONS OR DESCRIPTIONS. 4B EXPRESSLY DISCLAIMS ANY WARRANTY OR AFFIRMATION OF FACT, EXPRESSED OR IMPLIED, OTHER THAN AS SET FORTH IN THE EXCLUSIVE WRITTEN LIMITED WARRANTY STATEMENT ABOVE, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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