

RELAY SPECIFICATIONS

ALL DRY CONTACT RELAYS RATED AT 5 AMPS(RESISTIVE) AT 250 VAC OR 30 VDC

FAULT, CAUTION, WARNING, AND ALARM RELAYS HAVE FORM 'C' CONTACTS . CAUTION, WARNING, ALARM RELAYS ARE ENERGIZED UPON AN ALARM CONDITION. N/O, N/C REFER TO NON-ALARM(DE-ENERGIZED) STATE OF CONTACT.

FAULT RELAY IS ENERGIZED UNDER NORMAL OPERATING CONDITIONS. N/O, N/C REFER TO DE-ENERGIZED, POWER-OFF, OR FAULT CONDITION.

HORN RELAY HAS FORM 'A' CONTACTS (NORMALLY OPEN AND COMMON).

TYPICAL WIRING CONNECTION FOR FAULT, CAUTION, WARNING, ALARM.

N/O COM N/C N/O – NORMALLY OPEN COM - COMMON

N/C - NORMALLY CLOSED

POWER CONNECTIONS

AC-L = AC POWER LINE CONNECTION.

DC+ = POSITIVE DC VOLTAGE TO MAIN PCB DC- = NEGATIVE DC VOLTAGE TO MAIN PCB

AC-N = AC POWER NEUTRAL CONNECTION. AC-GND = AC POWER EARTH GROUND CONNECTION. BAT+, DC- = LEAD ACID BATTERY CONNECTIONS

AC INPUT VOLTAGE CAN BE 110 -240VAC, 50/60HZ. NO SWITCH SELECTION IS NECESSARY. AC POWER FEEDS A 40WATT POWER SUPPLY THAT PRODUCES DC POWER FOR DEVICE OPERATION.

A POWER CORD OF AT LEAST 16AWG IS RECOMMENDED.

SIGNAL OUTPUT WIRING

-----UNDER LINE POWER-----22AWG 9000 FEET 250 OHM MAX. LOAD

22AWG 2500 FEET 500 OHM MAX. LOAD

-----UNDER BATTERY POWER-----2750 FEET 250 OHM MAX. LOAD 18AWG 7250 FEET 250 OHM MAX. LOAD

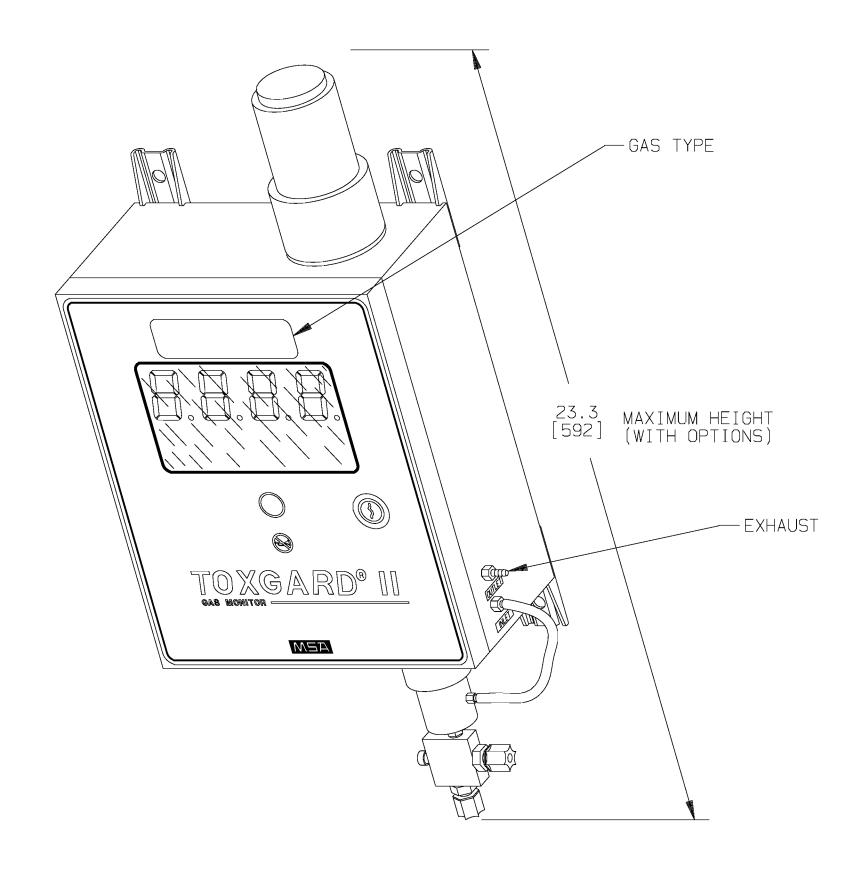
○ | 4-20mA SOURCING OUTPUT O SIGNAL RETURN(REFERENCE)

SEE MANUAL FOR ISOLATED OUTPUT DETAILS

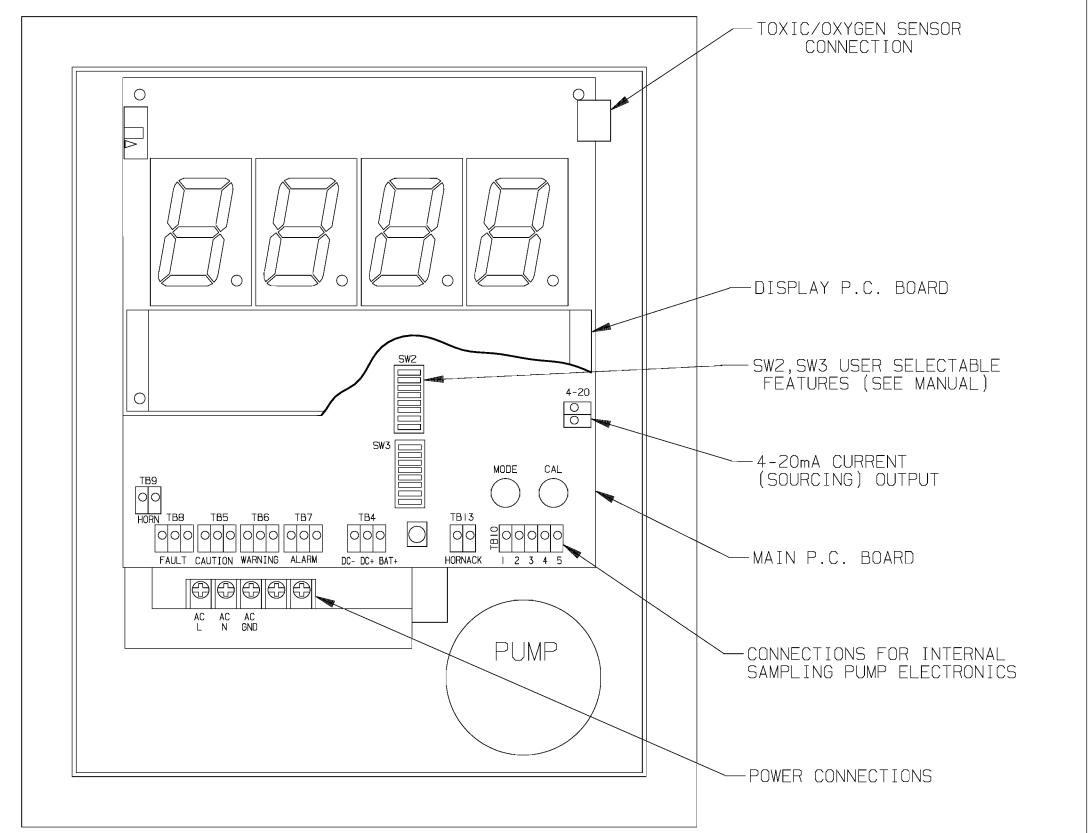
GENERAL WIRING

ALL AC WIRING SHOULD BE LOCATED TO THE LEFT SIDE OF THE ENCLOSURE TO MINIMIZE THE INTRODUCTION OF NOISE TO THE INSTRUMENT. THIS INCLUDES INPUT POWER, RELAY CONNECTIONS.

ALL DC AND LOW POWER WIRING SHOULD BE KEPT AWAY FROM THE AC WIRING. THIS INCLUDES THE CURRENT OUTPUT SIGNAL WHICH SHOULD BE ROUTED OUT THE OPENING OF THE UNUSED SENSOR MOUNTING LOCATION ON EITHER THE RIGHT SIDE OR THE BOTTOM OF THE ENCLOSURE.



CUSTOMER _____ MSA # _____ LOCATION _____ TAG # _____ TOTAL NO. OF UNITS _____



INSIDE OF TOXGARD II (SHOWN WITH DOOR AND MOUNTING LUGS REMOVED)

NOTE:

- I. DIMENSIONS IN INCHES(MILLIMETERS).
- 2. FOR MORE INFORMATION REFER TO MANUAL #711266 AND ADDENDUM #10085211
- 3. ENCLOSURE 14 GAUGE STEEL, PAINTED STEEL DESIGNED FOR NEMA 4X.
- 4. WEIGHT (NO OPTIONS) 13 LBS.(5.9KG).
- 5. TOXGARD II MRI PART NUMBER IS 10076408.

DOCUMENT CON		ED BY	FILE REF. NO. JOO!	-007 "THIS DRAWI PANY, PITTS	NG IS THE PROPERTY OF MINE SAFET' BURGH, PENNSYLVANIA, AND IS MADE	Y APPLIANCES COM- AVAILABLE TO YOU NO DEPMISSION IS
	AUTHORIZED COUNTRY		MINE SAFETY APPLIANCES	COMPANY GRANTED TO	IN CÓNFIDENCE AND SUBJECT TO THE FOLLOWING: NO PERMISSION IS GRANTED TO PUBLISH, USE, REPRODUCE, TRANSMIT OR DISCLOSE THIS DRAWING, OR ANY INFORMATION OR IDEA CONTAINED THEREIN TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF MINE SAFETY APPLIANCES COMPANY EXCEPT FOR THE MANUFACTURE OF ARTICLES FOR MINE SAFETY APPLIANCES COMPANY."	
			PITTSBURGH, PA. MSA STANDARD SHOP PRACTI	OTHERS WITH		
	AUER AUSTRALIA	M. EAST MSA EUROPE	CODE SYMBOLS DRAWN	BY DATE	JOB NO. 30000016 PH0723	SCALE NTS
COLOR CODE BLACK = K GREEN = G BROWN = N BLUE = B RED = R VIOLET = V	BRAZIL	NETHERLANDS	MAJOR B A MINOR(NO MARK) LRB TOLERANCES UNLESS CHECKE	10-19-2007	AGENCY CONTROL	YES NO
	CANADA CHILE	PERU S.E. ASIA	FDACTIONAL + //6/"	<i>RUHWALD 10-24-2007</i> Ct engineer		
	CHINA FRANCE	SPAIN SWEDEN	2 DL DEC + 0/	RUHWALD 10-24-2007	INSTALLATION - TOXGARD I	•
	INDIA ITALY	MSA BRITAIN	\perp ANGULAR $\pm 1/2^{\circ}$ \downarrow	ty assurance A <i>NNHARDT 10-24-2007</i>		
ORANGE = O GRAY = A YELLOW = Y WHITE = W PINK = P TAN = T	JAPAN		SEE MSA STANDARD SHOP PRACTICES FOR MANUFA	ACTURING	D SK3015	-1022
FINN - F IAN - I	MEXICO		HOLE TOLERANCES. H. TA	RACHSEL 10-24-2007		

REVISIONS NOV 19 2007