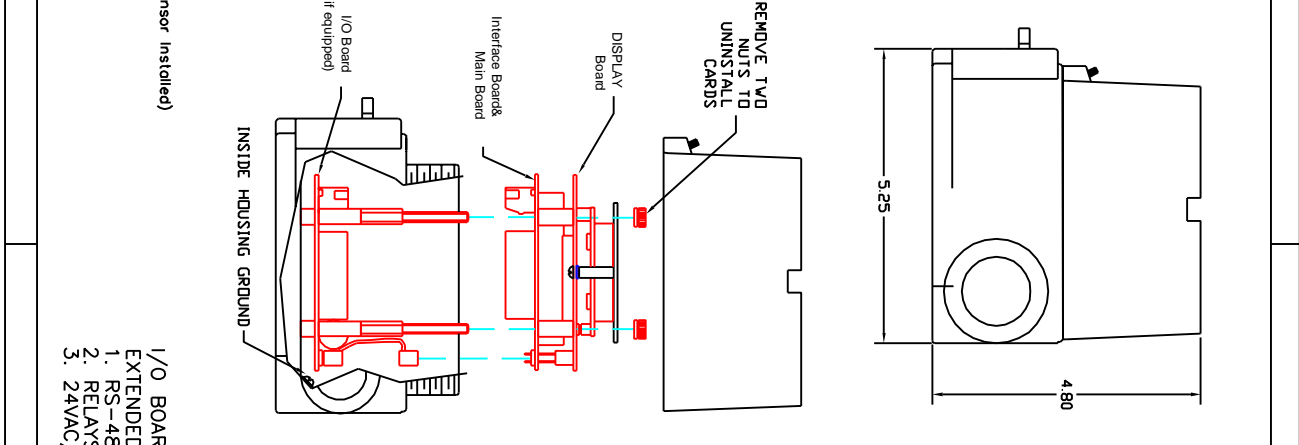
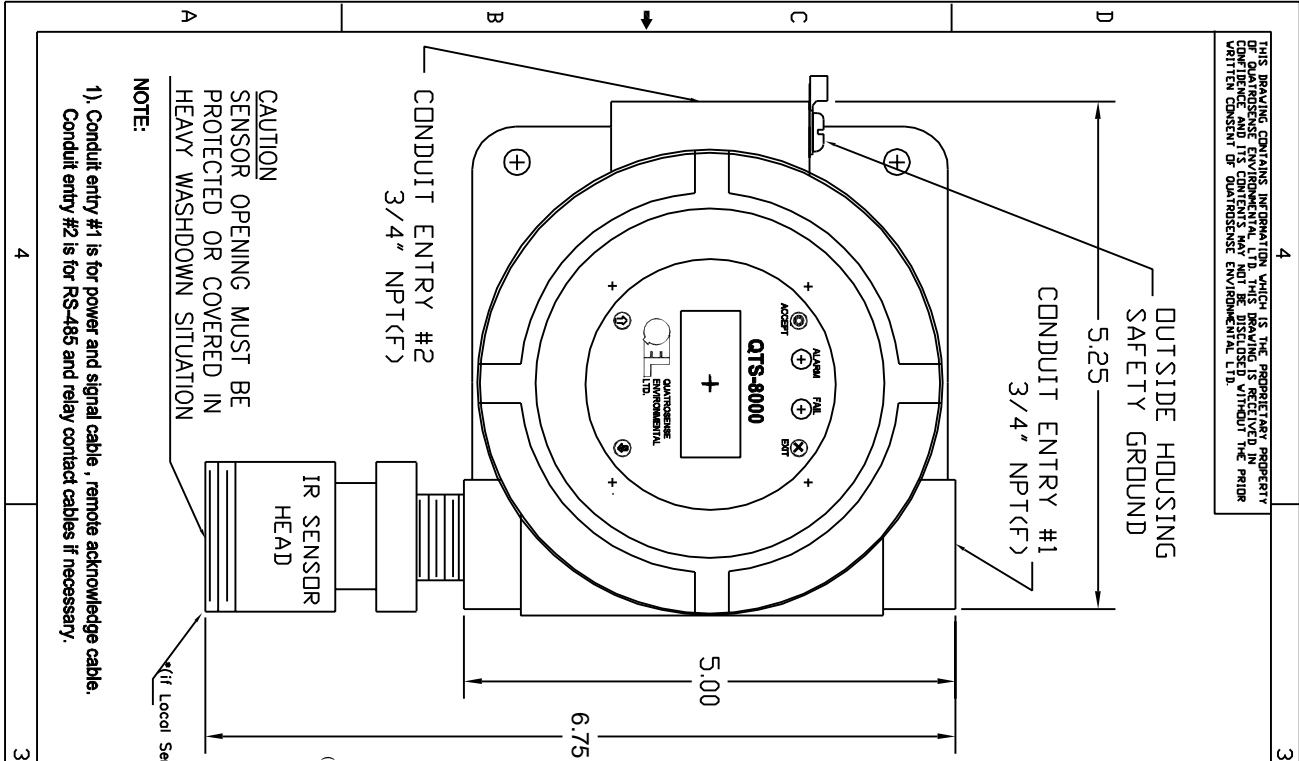


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NOTE:
 1). Conduit entry #1 is for power and signal cable, remote acknowledge cable.
 Conduit entry #2 is for RS-485 and relay contact cables if necessary.

CAUTION
 SENSOR OPENING MUST BE PROTECTED OR COVERED IN HEAVY WASHDOWN SITUATION

NOTE:

REVISIONS

REV	ECO	DESCRIPTION	DATE	DRN	CHK	APV'D
A	643	FIRST RELEASE	2004/09	XY		XY
B	790	UPDATE GAS TABLE	06-11-'09	CLG	FB	FB

TABLE FOR GAS

Gas	Mounting	Operating Temperature	
		MIN. C (°F)	MAX. C (°F)
Methane	HIGH	-40 (-40)	+75 (167)
Ethylene	MID	-40 (-40)	+75 (167)
Methanol	HIGH	-40 (-40)	+75 (167)
Propane	LOW	-40 (-40)	+75 (167)
Bulone	LOW	-40 (-40)	+75 (167)
n-Perlene	LOW	-40 (-40)	+75 (167)
Benzene	HIGH	-40 (-40)	+75 (167)
Acetone	HIGH	-40 (-40)	+75 (167)
Bulone	LOW	-40 (-40)	+75 (167)

Sensor Location:

Several factors should be considered when selecting locations to install sensors. The following general suggestions should be considered to assure the detection of the target gas. Select the most suitable location for each sensor.

- Air Currents:** If there are fans, winds, or others sources of air movement, gases may tend to rise to collect in certain areas of a facility. The local air currents should be assessed to aid in selecting the sensor location. In outdoor situations considerations such as prevailing winds should be accounted for. Air convection can often be more important in determining gas concentrated areas than factors of Vapor Density.
- Vapor Density:** See table above.
- Gas Emission Sources:** As a rule, at least one sensor should be located in close proximity to each point where a leak is likely to occur. This is particularly important when a liquid having a low volatility is monitored.
- Environmental Factors:** Designed to rugged outdoor use consider the following in selecting locations. Install sensors where they will be protected from wind, dust, snow, water, vibration and shock.

I/O BOARD EXTENDED FEATURE OPTION

- RS-485 PORT
- RELAYS (2)
- 24VAC/DC POWER

QUATROSENSE ENVIRONMENTAL LTD
 RICHMOND, ONTARIO, CANADA

QIR-8000 TRANSMITTER ENCLOSURE

QIR-8000 INSTALLATION DRAWING

DRN: Xiangyang 2004/09
 CHK: XY 2004/09
 DESN: Xiangyang 2004/09
 APV'D: XY

INDUSTRIAL APPLICATION

DIMENSIONS ARE IN INCHES
 DIMENSIONS IN PARENTHESES
 SHOWN IN THE REFERENCE DIM. Y SCALE

SIZE: B ID 92050-064-000
 FILENAME: S1

SHEET 1 OF 7

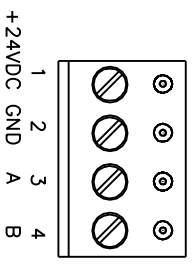
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REV		ECO		DESCRIPTION		DATE		DRN		CHK		APVD	
ALL				SET SHEET 1									

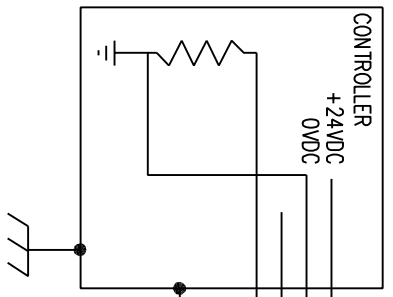
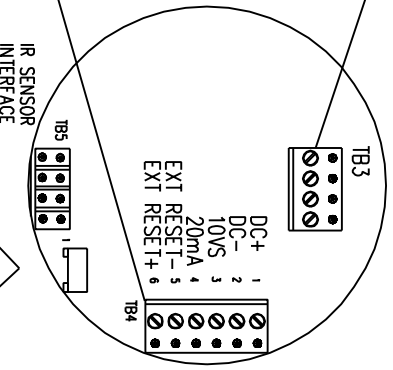
REV		ECO		DESCRIPTION		DATE		DRN		CHK		APVD	
ALL				SET SHEET 1									

NOTE:
KEEP TB3 DISCONNECTED WHEN QIR-8000 WITH LOCAL SENSOR

TB3: TO REMOVE INTELLIGENT SENSOR (IF EQUIPPED SEE PAGE 5)



INTERFACE BOARD BOTTOM VIEW



+24VAC 0VDC
+24VDC SW

Remote Acknowledgement with +24VDC/24VAC

NOTE:
* IF I/O BOARD EQUIPPED, SEE PAGE 4.
* SW - REMOTE ACKNOWLEDGEMENT BUTTON
* REMOTE ACKNOWLEDGEMENT LOOP IS ISOLATED FROM POWER SUPPLY INSIDE OF THE TRANSMITTER.

(IF NO I/O BOARD EQUIPPED)
QIR-8000 CONNECTING CONTROLLER AND POWER SUPPLY

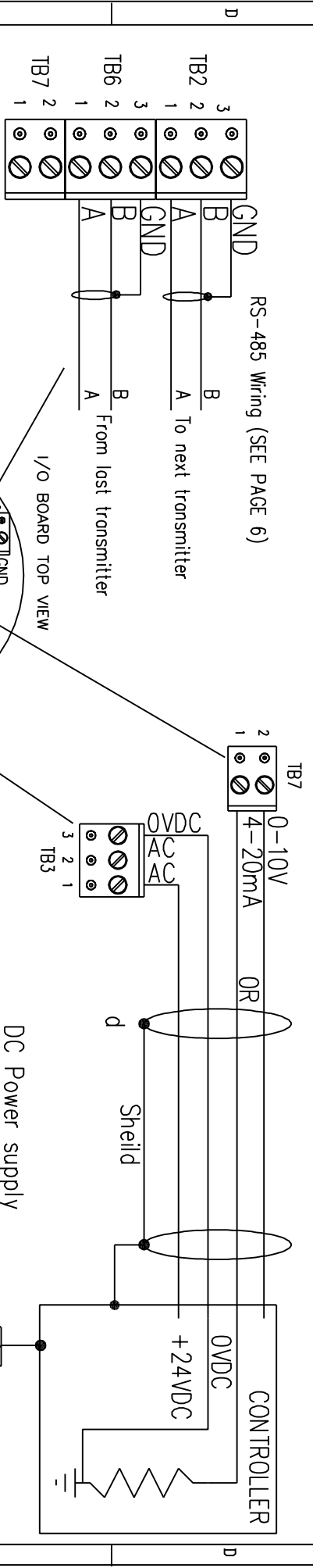
DRN	XIANGYANG	2004/09	QUATROSENSE ENVIRONMENTAL LTD
CHK			RICHMOND, ONTARIO, CANADA
ISSN	XI	2004/09	
APVD			
QA			
APPLICATION			
DIMENSIONS ARE IN INCHES			
DIMENSIONS IN PARENTHESES			
ARE IN THE REFERENCE DIM. SCALE			
SIZE	B	DWG NO	82050-064-000
TYPE	B	REV	B
ID		SCALE	1" = 1"
FILENAME		SHEET	3 OF 7

QIR-8000
INSTALLATION DRAWING

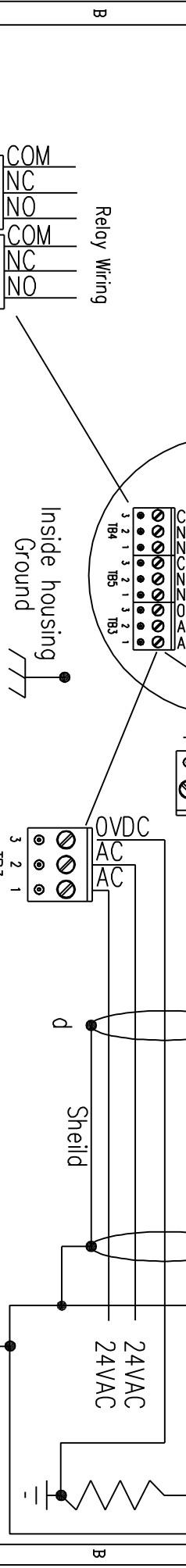
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REVISIONS			
REV	ECO	DESCRIPTION	DATE
ALL		SET SHEET 1	



1. RS-485 PORT
2. RELAYS (2)
3. 24VAC/DC POWER



LEGEND
 NC - Normally Closed
 COM - Common
 NO - Normally Open

* If I/O Board equipped, Do not connect Power Supply to INTERFACE BOARD, Connect Power Supply to I/O Board TB3.
 * If I/O Board equipped, Do not connect 10VDC or 4-20mA to INTERFACE BOARD, Connect them to I/O Board TB7.

(IF I/O BOARD EQUIPPED)

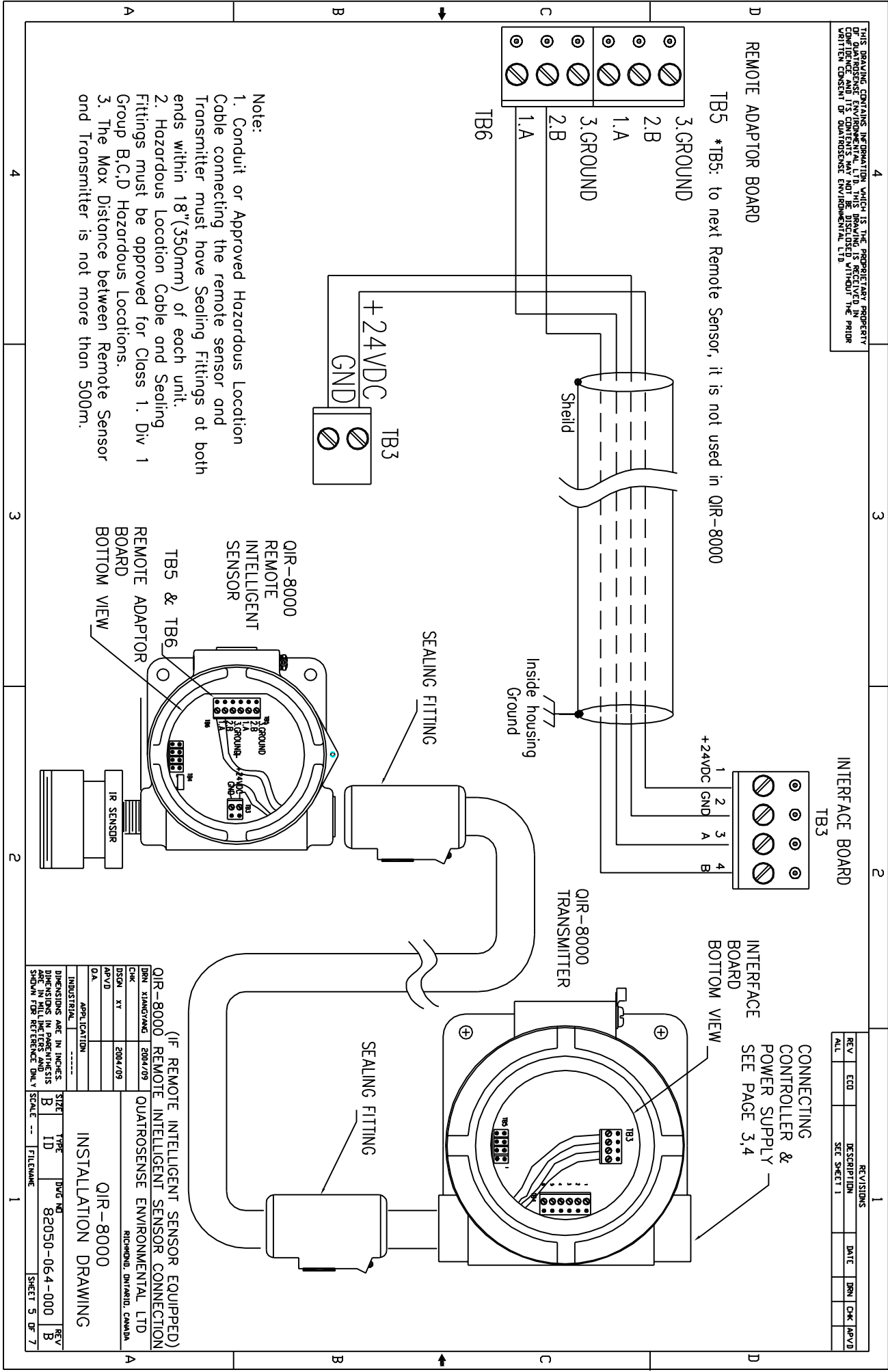
DRN	XIANGWANG	EB04/09
CHK		
ISSN	XY	EB04/09
APVD		
QA		
APPLICATION	-----	

QIR-8000 CONNECTING CONTROLLER AND POWER SUPPLY
 QUATROSENSE ENVIRONMENTAL LTD
 RICHMOND, ONTARIO, CANADA

QIR-8000	INSTALLATION DRAWING
DIMENSIONS ARE IN INCHES	TYPE
DIMENSIONS IN PARENTHESES	ID
SCALE	SCALE
FILENAME	FILENAME

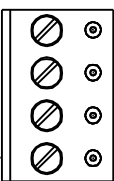
REV B
 82050-064-000
 SHEET 4 OF 7

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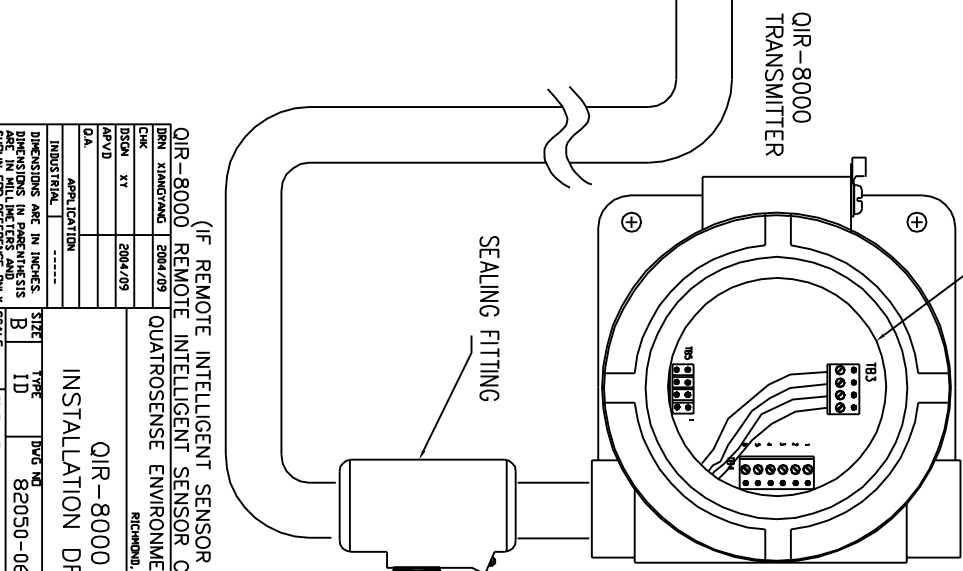
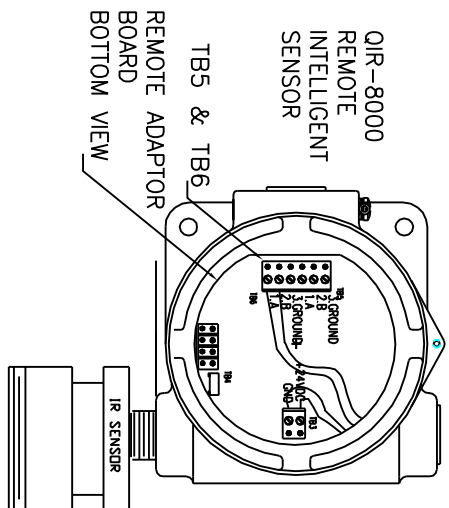


- Note:
1. Conduit or Approved Hazardous Location Cable connecting the remote sensor and Transmitter must have Sealing Fittings at both ends within 18"(350mm) of each unit.
 2. Hazardous Location Cable and Sealing Fittings must be approved for Class 1, Div 1 Group B,C,D Hazardous Locations.
 3. The Max Distance between Remote Sensor and Transmitter is not more than 500m.

INTERFACE BOARD



CONNECTING CONTROLLER & POWER SUPPLY SEE PAGE 3,4



(IF REMOTE INTELLIGENT SENSOR EQUIPPED)

QIR-8000 REMOTE INTELLIGENT SENSOR CONNECTION

QUATROSENSE ENVIRONMENTAL LTD

RICHMOND, ONTARIO, CANADA

REV	ECO	DESCRIPTION	DATE	DRN	CHK	AP'VD
ALL		SEE SHEET 1				

DRN	CHK	AP'VD
DRN XIANGYANG	DRN4/09	
ISSN XY	DRN4/09	
AP'VD		
QA		
APPLICATION		
INDUSTRIAL		

INSTALLATION DRAWING

QIR-8000

DIMENSIONS ARE IN INCHES	TYPE	DWG NO	REV
B	ID	82050-064-000	B
SCALE ---		FILENAME	SHEET 5 OF 7

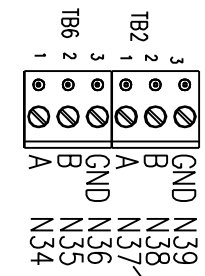
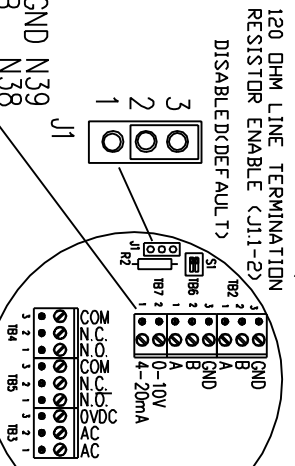
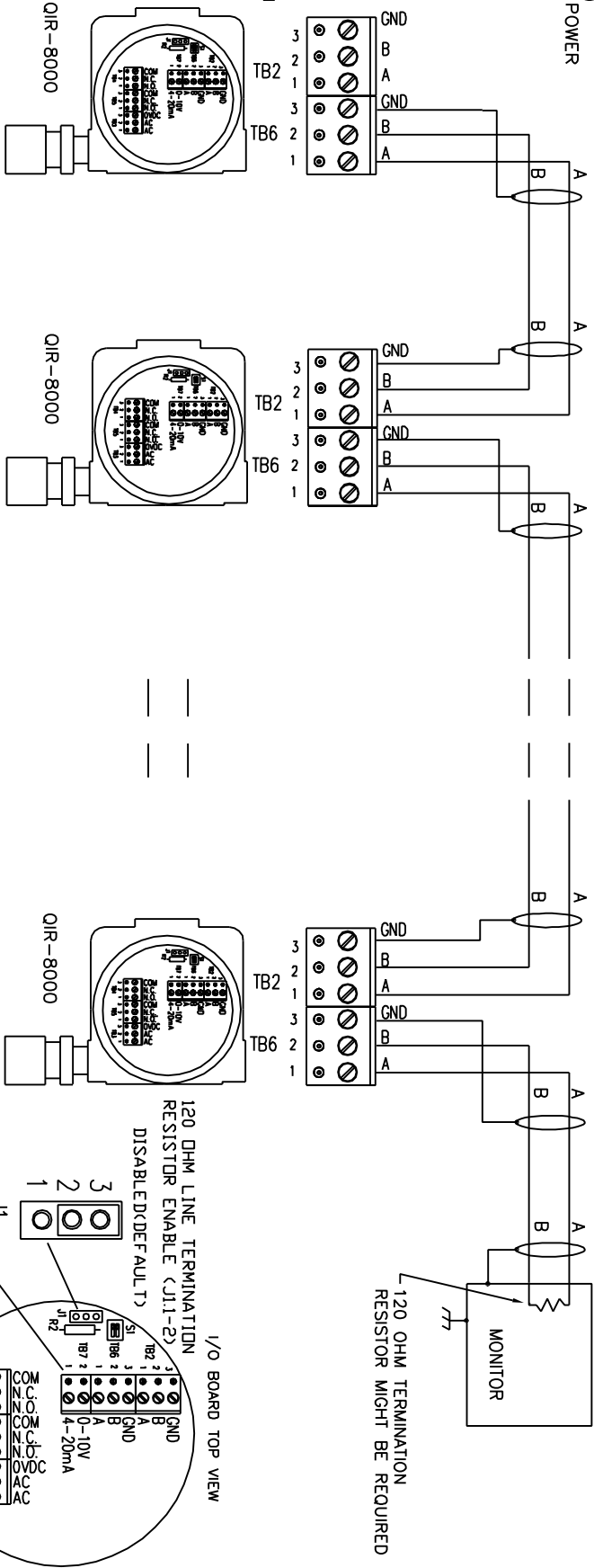
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REV		ECO		DESCRIPTION		DATE		DWN		CHK		APVD	
ALL				SEE SHEET 1									

REV		ECO		DESCRIPTION		DATE		DWN		CHK		APVD	
ALL				SEE SHEET 1									

I/O BOARD EXTENDED FEATURE OPTION
 1. RS-485 PORT
 2. RELAYS (2)
 3. 24VAC/DC POWER

ENDPOINT: TERMINATION RESISTOR ENABLED



(IF I/O BOARD EQUIPPED)
 QIR-8000 RS-485 NETWORK

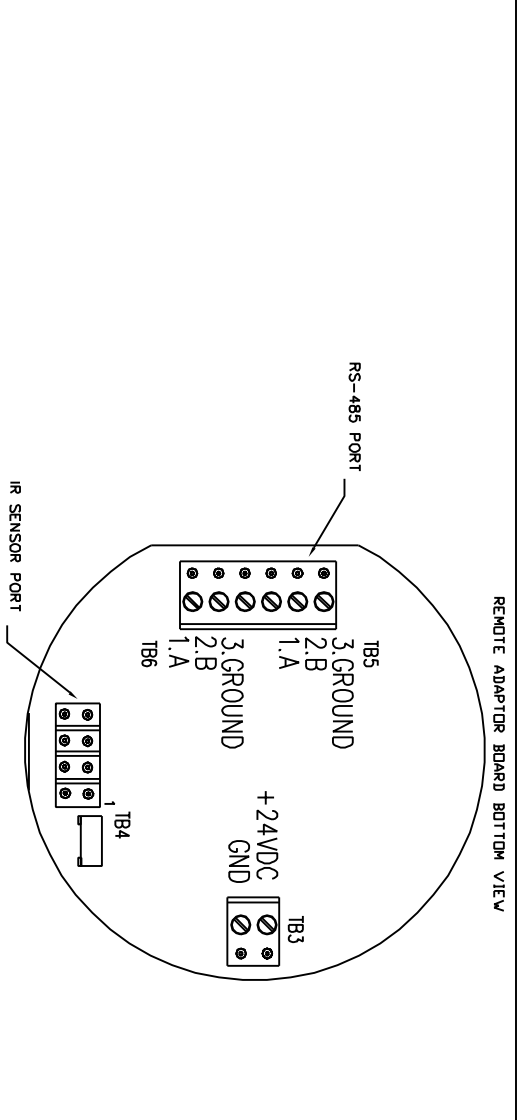
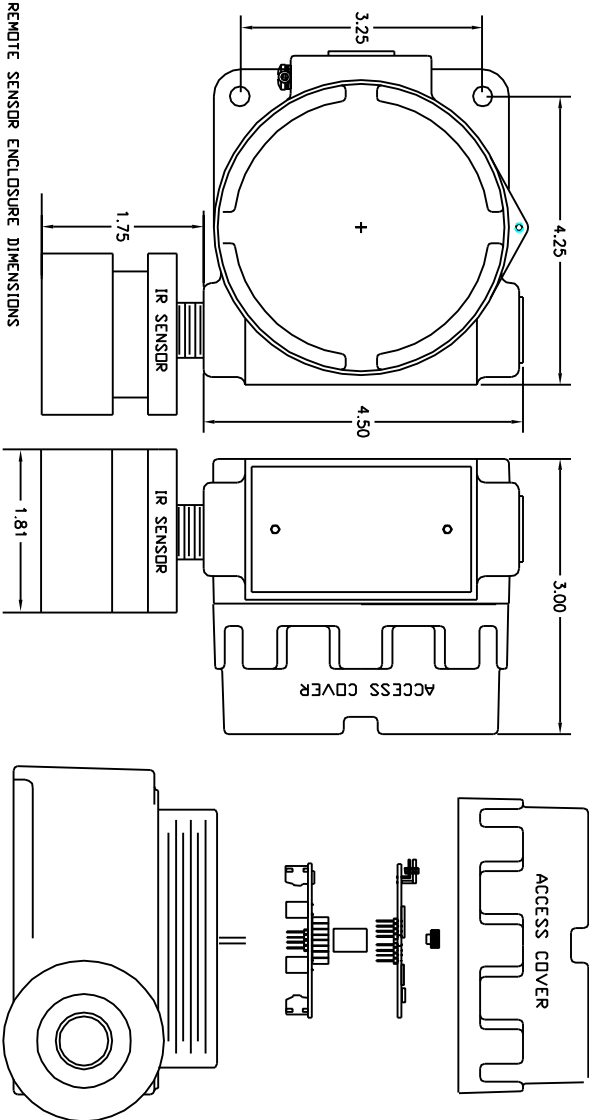
- NOTE:
- 1- Ground the shield inside monitor (metal) case.
 - 2- If conduit grounds at monitor case then set dipswitch S1 (see I/O card for physical position of S1) ON to ground shield to lost transmitter case.
 - 3- If conduit is not a good ground, then some other method, depending upon installation is necessary, consult factory.
 - 4- Grounding on one end protects against electrical fields only. Grounding inside the enclosures at both ends protects against electrical and magnetic fields.

Terminal resistor configuration in RS-485 network:
 The terminal resistor (R2 on I/O card) of the transmitter at two endpoints of the RS-485 network should be connected by connecting J1 jumper to 1-2 position (see I/O card for physical position of R2 and J1.)

4 2 1 3 2 1 4

QIR-8000		QUATROSENSE ENVIRONMENTAL LTD	
RICHMOND, ONTARIO, CANADA			
INDUSTRIAL		APPLICATION	
DIMENSIONS ARE IN INCHES		DIMENSIONS IN METERS	
SIZE	TYPE	DWG NO	REV
B	ID	92050-064-000	B
SCALE ---		FILENAME	
		SHEET 6 OF 7	

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REVISIONS			
REV	ECO	DESCRIPTION	DATE
ALL		FIRST RELEASE	

Gas	Mounting	Operating Temperature	
		MIN °C (°F)	MAX °C (°F)
Methane	HIGH	-40 (-40)	+75 (167)
Ethylene	MID	-40 (-40)	+75 (167)
Methanol	HIGH	-40 (-40)	+75 (167)
Propane	LDW	-40 (-40)	+75 (167)
Butane	LDW	-40 (-40)	+75 (167)
n-Pentane	LDW	-40 (-40)	+75 (167)
Benzene	HIGH	-40 (-40)	+75 (167)
Acetone	HIGH	-40 (-40)	+75 (167)
Butanol	LDW	-40 (-40)	+75 (167)

* Note:
 HIGH = 9 to 18" (0.23 to 0.46m) below ceiling.
 MID = 4 to 6 ft. (1.2 to 1.8m) above floor.
 LOW = 9 to 18" (0.23 to 0.46m) above floor.

Sensor Location:

- Several factors should be considered when selecting locations to install sensors. The following general suggestions should be considered to assure the detection of the target gas. Select the most suitable location for each sensor.
1. Air Currents: If there are fans, winds, or other sources of air movement, gasses may tend to rise to collect in certain areas of a facility. The local air currents should be assessed to aid in selecting the sensor location. In outdoor situations considerations such as prevailing winds should be accounted for. Air convection can often be more important in determining gas concentrated areas than factors of Vapor Density.
 2. Vapor Density: See table above.
 3. Gas Emission Sources: As a rule, at least one sensor should be located in close proximity to each point where a leak is likely to occur. This is particularly important when a liquid having a low volatility is monitored.
 4. Environmental Factors: Designed to rugged outdoor use consider the following in selecting locations. Install sensors where they will be protected from wind, dust, snow, water, vibration and shock.

(IF REMOTE INTELLIGENT SENSOR EQUIPPED)
 QIR-8000 REMOTE INTELLIGENT SENSOR ENCLOSURE
 QUATROSENSE ENVIRONMENTAL LTD
 RICHMOND, ONTARIO, CANADA

DRN: Xiangyang 2004/09
 CHK: XY 2004/09
 DSN: Xiangyang 2004/09
 PVD: _____
 QA: _____

APPLICATION: _____

INDUSTRIAL: _____

INSTALLATION DRAWING

QIR-8000

SIZE: TYPE: DWG NO: 82050-064-000
 ID: _____

DIMENSIONS ARE IN INCHES
 DIMENSIONS IN PARENTHESES
 GIVEN IN THE REFERENCE DIM. SCALE --- FILENAME: SHEET 7 OF 7