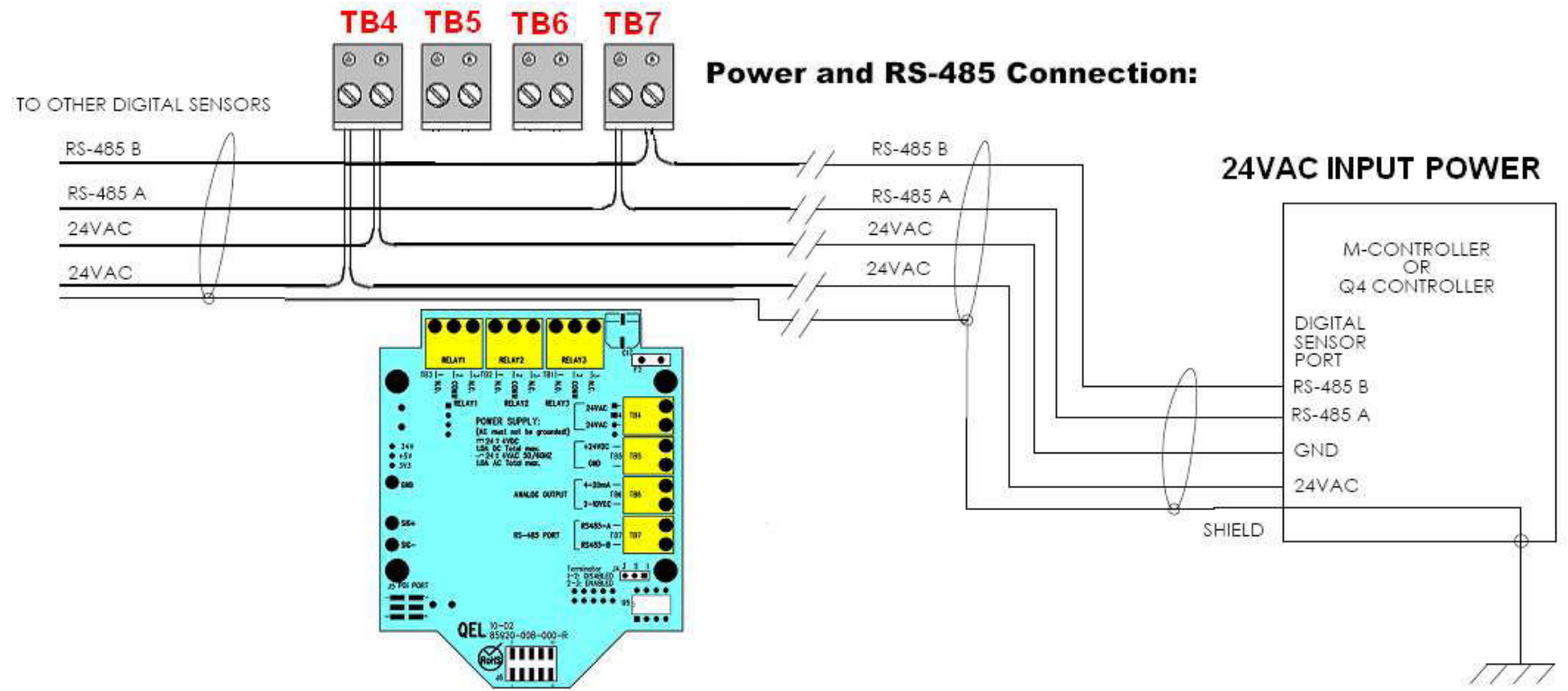


8 7 6 5 4 3 2 1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-

Power and RS-485 Connection:

Q5 MAIN BOARD



- NOTE:
- GROUND THE SHIELD IN CONTROLLER SIDE
 - GROUND ON ONE END ONLY

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		TWO PLACE DECIMAL ±		Q.A.					
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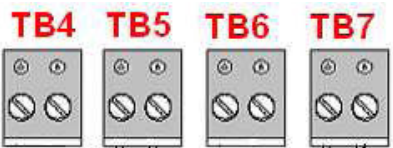
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8 7 6 5 4 3 2 1

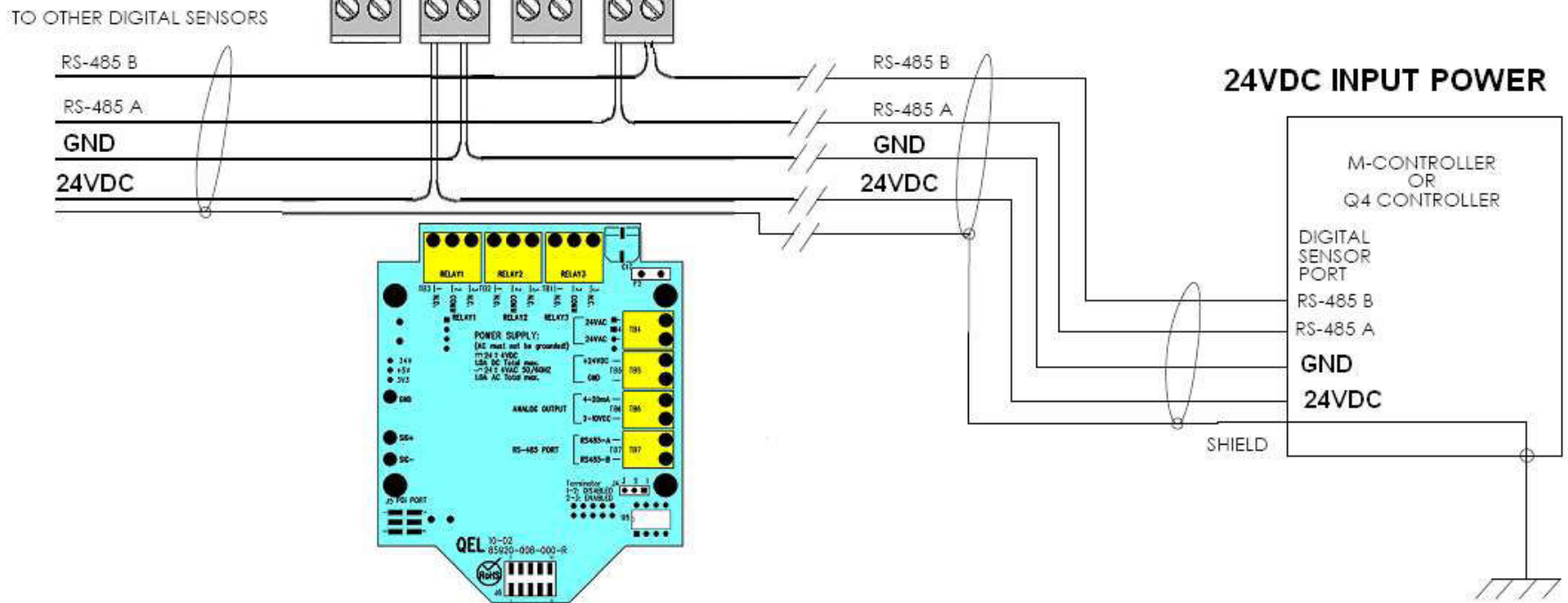
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-

Power and RS-485 Connection:

Q5 MAIN BOARD



Power and RS-485 Connection:



NOTE:
 1. GROUND THE SHIELD IN CONTROLLER SIDE
 2. GROUND ON ONE END ONLY

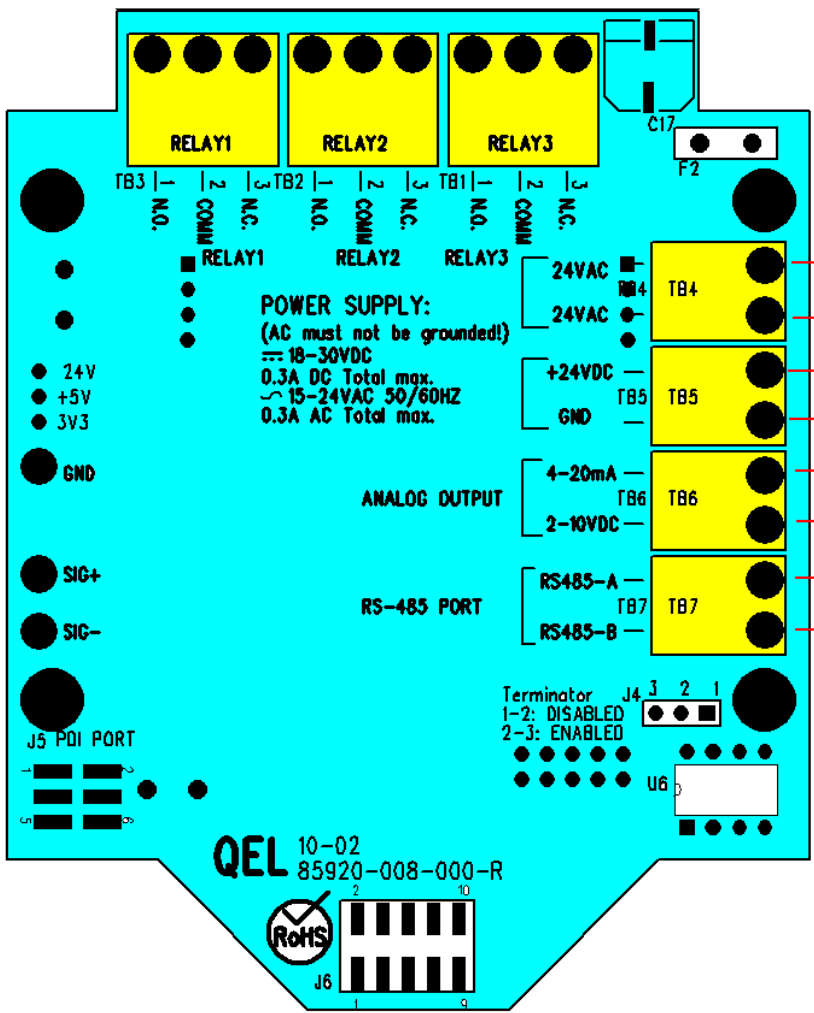
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		INTERPRET GEOMETRIC TOLERANCING PER:				
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NEXT ASSY	USED ON					
APPLICATION		DO NOT SCALE DRAWING				
SIZE	DWG. NO.	REV				
B	85950-002-000	B				
SCALE: 1:2		WEIGHT:	SHEET 3 OF 5			

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-



VAC Power In
 VDC Power In
 Analog Output
 RS-485 Port

Terminator Enable/Disable?

The terminator on each end of the RS485 loop is designed to match the electrical impedance characteristic of the twisted pair loop, and will prevent signal echoes from corrupting the data on the line. The terminator should be enabled on BOTH ends of the RS485 loop. Short and medium length modbus/485 loops can operate without the terminating resistor. Longer runs may require the terminating resistors. But adding terminator dramatically increases power consumption.

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 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.
2. Vapor Density: For the target gas heavier than air. Detecting location should be 9 - 18 inch (0.23m to 0.46m) above the floor.
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.

Twisted Pair?

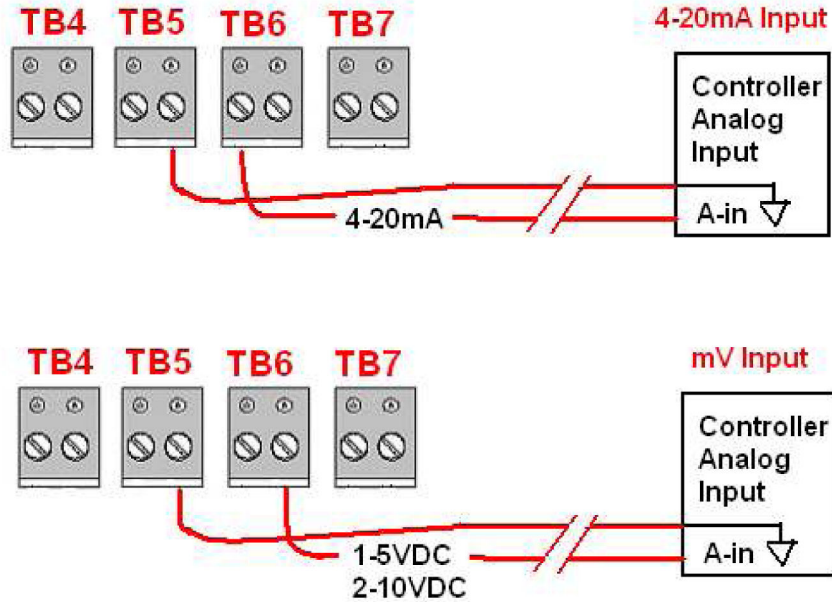
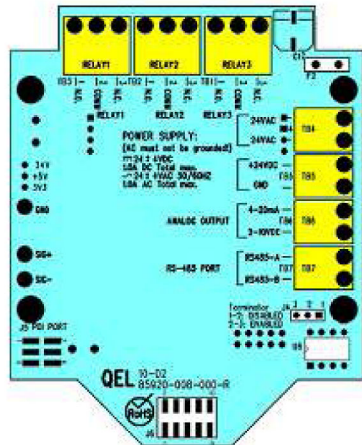
RS-485 is designed to be a balanced system. The signal on one wire is ideally the exact opposite of the signal on the second wire. In other words, if one wire is transmitting a high, the other wire will be transmitting a low, and vice versa. Although RS-485 can be successfully transmitted using multiple types of media, it should be used with wiring commonly called "twisted pair."

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TWO PLACE DECIMAL ±		Q.A.			
THREE PLACE DECIMAL ±		COMMENTS:			
INTERPRET GEOMETRIC TOLERANCING PER:				SIZE	
MATERIAL				DWG. NO.	
FINISH				REV	
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				SCALE: 1:2	
				SHEET 4 OF 5	

8 7 6 5 4 3 2 1

4-20mA and VDC Output:



Q5 provides one channel 4-20 milliamp analog output and 1-5VDC or 2-10VDC analog output. The maximum output impedance is 600 ohms for 4-20mA output. The maximum current is 10 mA for VDC output.

Test point SIG+ and SIG- are used to measure the current online when the Q5 is working in the field.

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B		85950-002-000		B					
SCALE: 1:2				SHEET 5 OF 5					

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