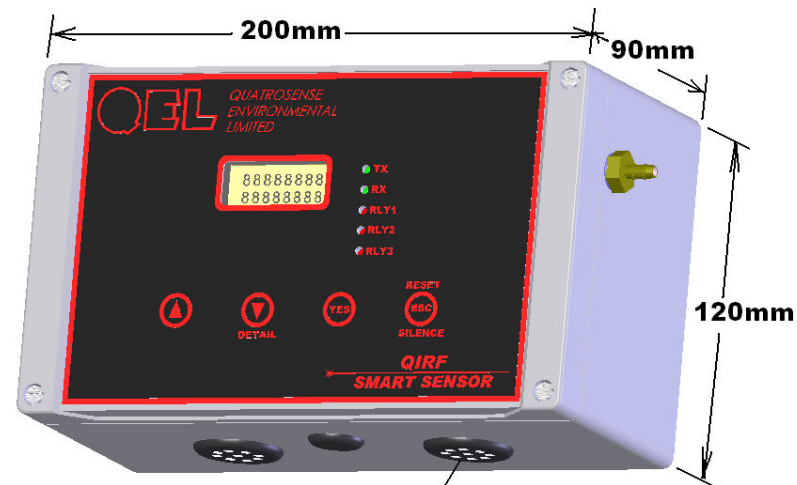
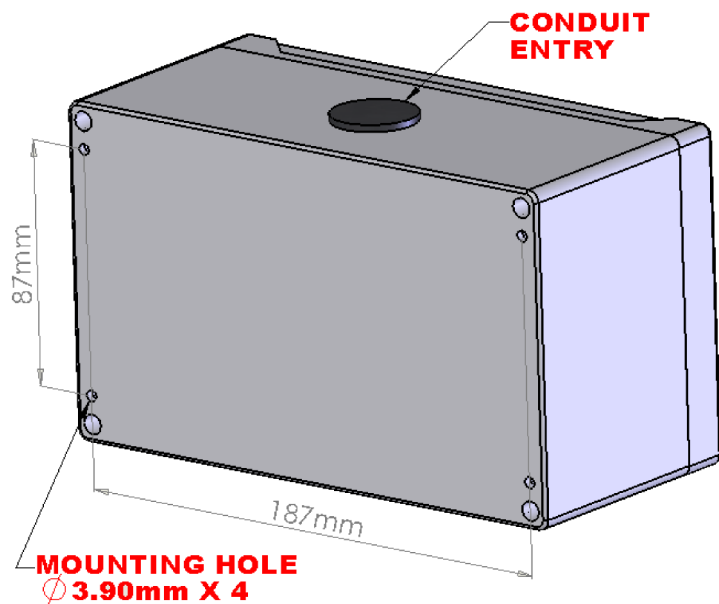


REVISIONS						
ECN	REV.	DESCRIPTION	DATE	DRAW	CHECK	APPROVED
	A	Initial Release	2011/03/09	XY	XY	XY



CAUTION:
SENSOR OPENING MUST BE PROTECTED
IN HEAVY WASHDOWN SITUATION



SPECIFICATION

INPUT POWER:

+24VDC nominal, range: 18 to 30VDC 1.0A DC Total Max.
~24VAC nominal, range: 15 to 24VAC 50/60HZ 1.0A AC Total Max.
(AC must not be grounded)

FUSE:

F1 on Display Board: Polyswitch 1.6A
F2 on Display Board: Polyswitch 50mA
Polyswitch device resets after the fault is cleared and power to the circuit is removed

SENSOR:

INFRARED REFRIGERANT

OUTPUT SIGNAL:

RS-485 with OPTIMUX PROTOCOL AND MODBUS PROTOCOL
AVAILABLE CONTROLLER: M-CONTROLLER or Q4 CONTROLLER
4-20mA Analog Output
3X SPDT RELAYS: 1.0A MAX. @30VDC (RESISTIVE LOAD)
0.3A MAX. @125VAC (RESISTIVE LOAD)

ENCLOSURE:

IP 66 & NEMA 4, 4X, 12 & 13
COVER SCREWS SHOULD BE TORQUED TO 2.5 lbs-in (30 cN-m)

OPERATING TEMPERATURE:

-45 °C TO 65 °C

AMBIENT HUMIDITY:

5% TO 95% RH (NON- CONDENSING)

STORAGE TEMPERATURE:

-45 °C TO 70 °C

SIZE:

200mm X 120mm X 90mm

WEIGHT:

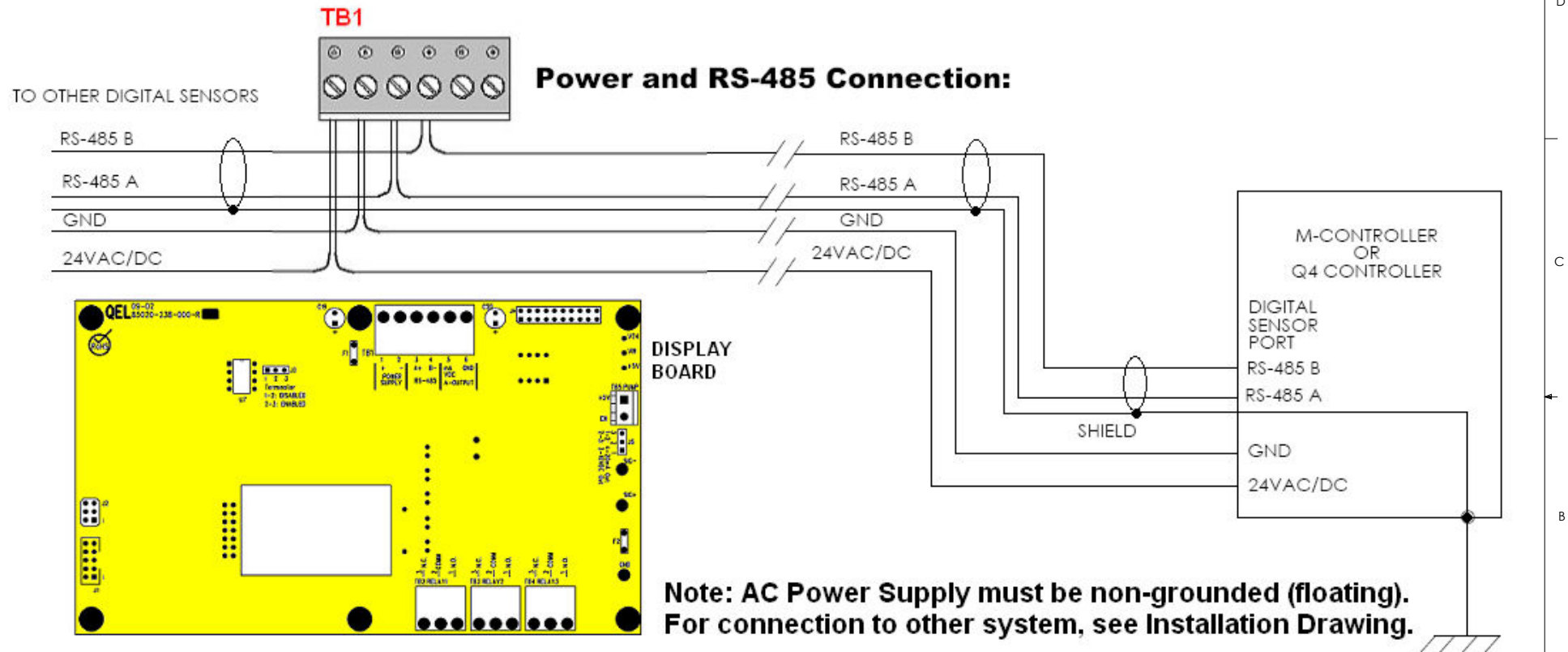
LESS THAN 1.5lbs (0.680 kg)

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				MFG APPR.												
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		FINISH														
NEXT ASSY		USED ON								SCALE: 1:2			WEIGHT:		SHEET 1 OF 5	
APPLICATION				DO NOT SCALE DRAWING												

Power and RS-485 Connection:

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

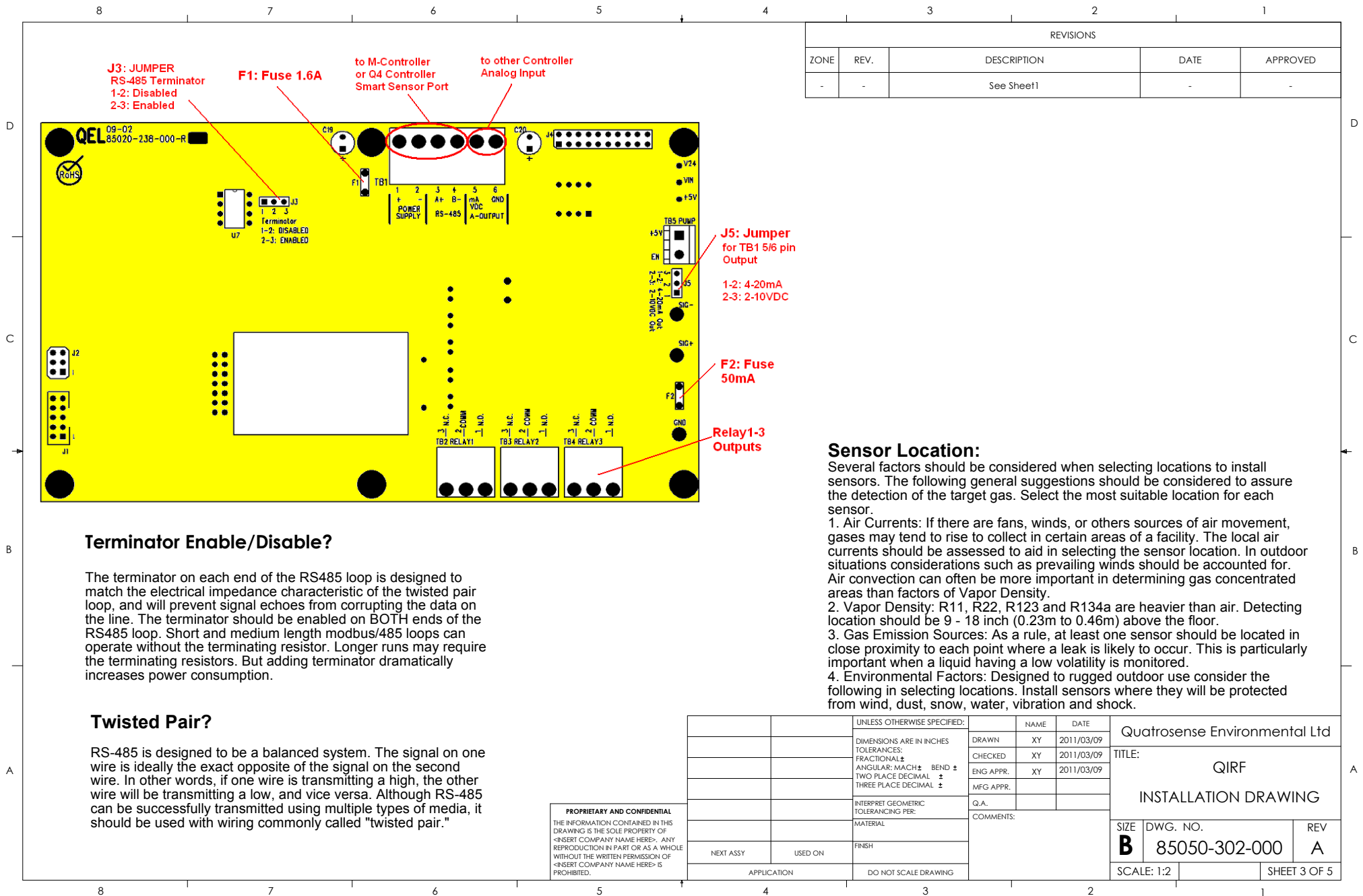


- NOTE:
- GROUND THE SHIELD IN CONTROLLER SIDE
 - GROUND ON ONE END ONLY

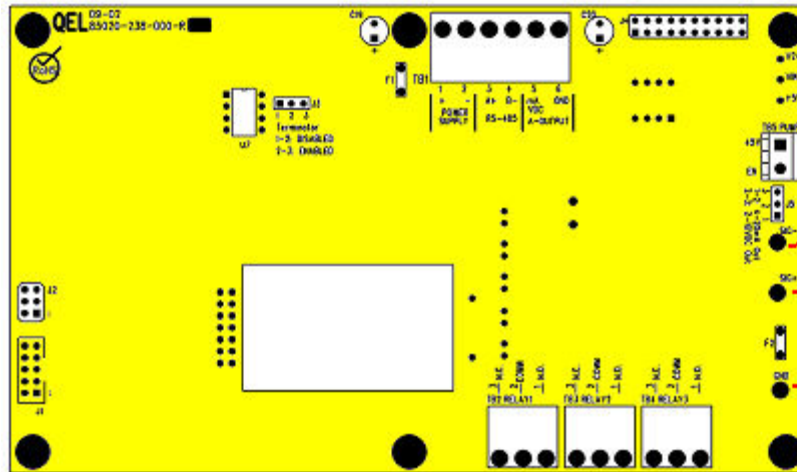
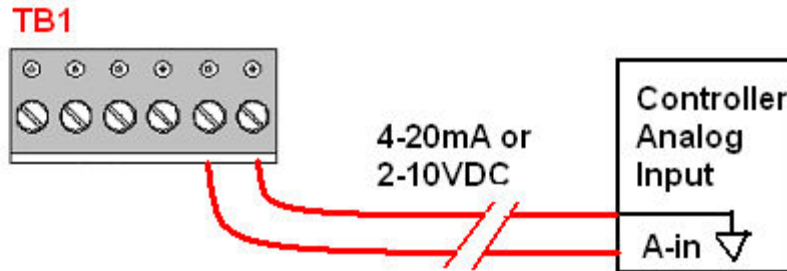
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		TOLERANCES:	CHECKED	XY	2011/03/09			
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		ANGULAR: MACH ± BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±	Q.A.			TITLE: QIRF INSTALLATION DRAWING		
		THREE PLACE DECIMAL ±	COMMENTS:					
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL				SIZE	DWG. NO.	REV
		FINISH				B	85050-302-000	A
	NEXT ASSY	USED ON				SCALE: 1:2		SHEET 2 OF 5
	APPLICATION					DO NOT SCALE DRAWING		



4-20mA Output:



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

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

- Jump J5 2-3 : 2-10VDC Output
- Jump J5 1-2 : 4-20mA Output (Default)

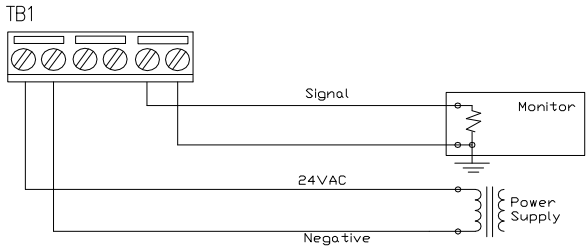
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ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-

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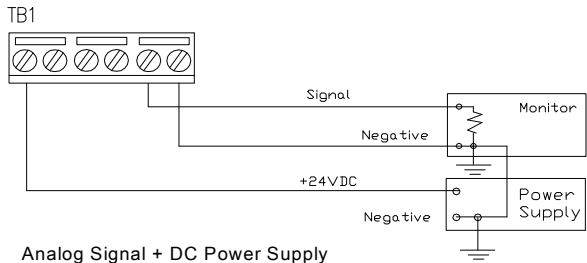
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			ENG APPR.	XY	2011/03/09						
			MFG APPR.								
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		MATERIAL	COMMENTS:								
	NEXT ASSY	USED ON	FINISH				SCALE: 1:2				
APPLICATION		DO NOT SCALE DRAWING					SHEET 4 OF 5				

CONNECTION TO DCS

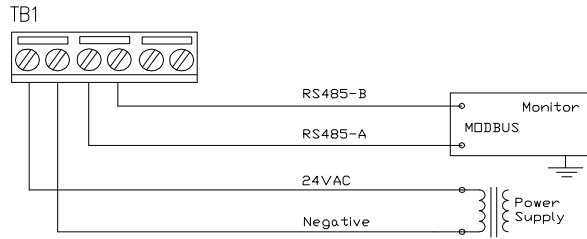
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-



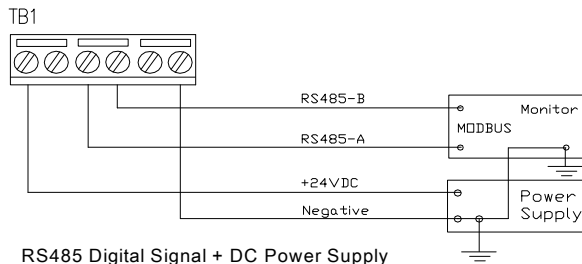
Analog Signal + Floating AC Power Supply



Analog Signal + DC Power Supply



RS485 Digital Signal + Floating AC Power Supply



RS485 Digital Signal + DC Power Supply

Application Note:

1. If the device is connected to M-Controller or Q4 Controller, and the power supply is 24VAC, the 24VAC must be a floating AC Power Supply, which means the Negative post of the 24VAC must not be connected to a wire ground referenced to earth. Failure to comply can result in the device damage or other damage.
2. For long distance wiring, choose proper cable to ensure the voltage on each device in nominal range. Lower voltage will expect longer warmup process, and longer time to stabilize.

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		MATERIAL				B	85050-302-000	A
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	APPLICATION		DO NOT SCALE DRAWING					