

**SPECIFICATIONS:**

(SPECIFICATIONS AT 25°C (77°F) AND NOMINAL VOLTAGE UNLESS OTHERWISE NOTED).

**MECHANICAL:**

WETTED MATERIALS: 316 STAINLESS STEEL  
ENCLOSURE: TYPE 360 ALUMINUM; EPOXY POWDER COATED

**ELECTRICAL:**

**ELECTRICAL CONNECTIONS:**

POWER SUPPLY: 3 POSITION TERMINAL BLOCK, 22-14 AWG WIRE  
4-20 mA LOOP: 6 POSITION TERMINAL BLOCK, 26-16 AWG WIRE  
SWITCH OUTPUTS: 4 POSITION TERMINAL BLOCK, 20-10 AWG WIRE

**SWITCH SPECS:**

POWER INPUT: 8 WIRE 24 VDC EXTERNAL POWER SUPPLY (10-30 VDC) @ 30mA  
SWITCH OUTPUT RATINGS:

- 8X2D42 SW1: 75-250 VAC, 1.5 A MAX. CONT., DERATE 10% PER 10°C ABOVE 21°C  
SW2: 75-250 VAC, 1.5 A MAX. CONT., DERATE 10% PER 10°C ABOVE 21°C
- 8X2D44 SW1: 75-250 VAC, 1.5 A MAX. CONT., DERATE 10% PER 10°C ABOVE 21°C  
SW2: 140 VAC/DC, 0.6 A MAX. CONT., DERATE 8% PER 10°C ABOVE 21°C
- 8X2D45 SW1: 140 VAC/DC, 0.6 A MAX. CONT., DERATE 8% PER 10°C ABOVE 21°C  
SW2: 140 VAC/DC, 0.6 A MAX. CONT., DERATE 8% PER 10°C ABOVE 21°C

**APPROVALS:**

**cULus listed**

CLASS I, DIVISION 1, GROUPS A, B, C & D;  
CLASS II, DIVISION 1, GROUPS E, F & G; CLASS III  
CLASS I, ZONE 1, AEx d IIC T5; CLASS 1, ZONE 1, Ex d IIC T5  
Tamb = -40°C TO +80°C (-40°F TO 176°F)  
ENCLOSURE TYPE 4X; IP66

**ATEX approved**

II 2 G Ex d IIC T5  
II 2 D Ex Id A21 IP66 T+90C  
DEMKO 09 ATEX 0813748X  
Tamb = -40°C TO +80°C (-40°F TO 176°F)

**IECEx approved**

IECEx UL 08.0017  
Ex d IIC T5  
Ex Id A21 IP66 T+90C  
Tamb = -40°C TO +80°C (-40°F TO 176°F)

MODEL	TEMPERATURE RANGE	EXTENSION LENGTH	
		ft	[meter]
TR1	-40 TO 450°F/ -40 TO 232°C	6'	[1.8]
TRC	-40 TO 450°F/ -40 TO 232°C	UP TO 30' max. IN 1' INCREMENTS	[9.1] MAX
TH1	-40 TO 1000°F/ -40 TO 538°C	6'	[1.8]
THC	-40 TO 1000°F/ -40 TO 538°C	UP TO 30' max. IN 1' INCREMENTS	[9.1] MAX
TC1	-300 TO 200°F/ -184 TO 93°C	6'	[1.8]
TCC	-300 TO 200°F/ -184 TO 93°C	UP TO 30' max. IN 1' INCREMENTS	[9.1] MAX

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REV.	DESCRIPTION	DATE	DRWN	APPD
B	ADDED MODELS TC1 & TCC TO TABLE. DELETED "TRX" FROM MODEL TITLE. ECN#E3750	9-15-10	SR	RAM
A	FIRST ISSUE. ECN#E3133	4-7-09	RAM	RAM

ORIGINAL DATE	4-7-09
DRWN	RAM
CHKD	PLW
APPD	R. McCAREY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON FRACTIONS ±1/64	
2 PLACE DEC	3 PLACE DEC
±0.010	±0.005
ANGLES ±1/2°	
DO NOT SCALE THIS DRAWING	

TITLE  
**8X2D  
REMOTE  
TEMP.  
SWITCH**

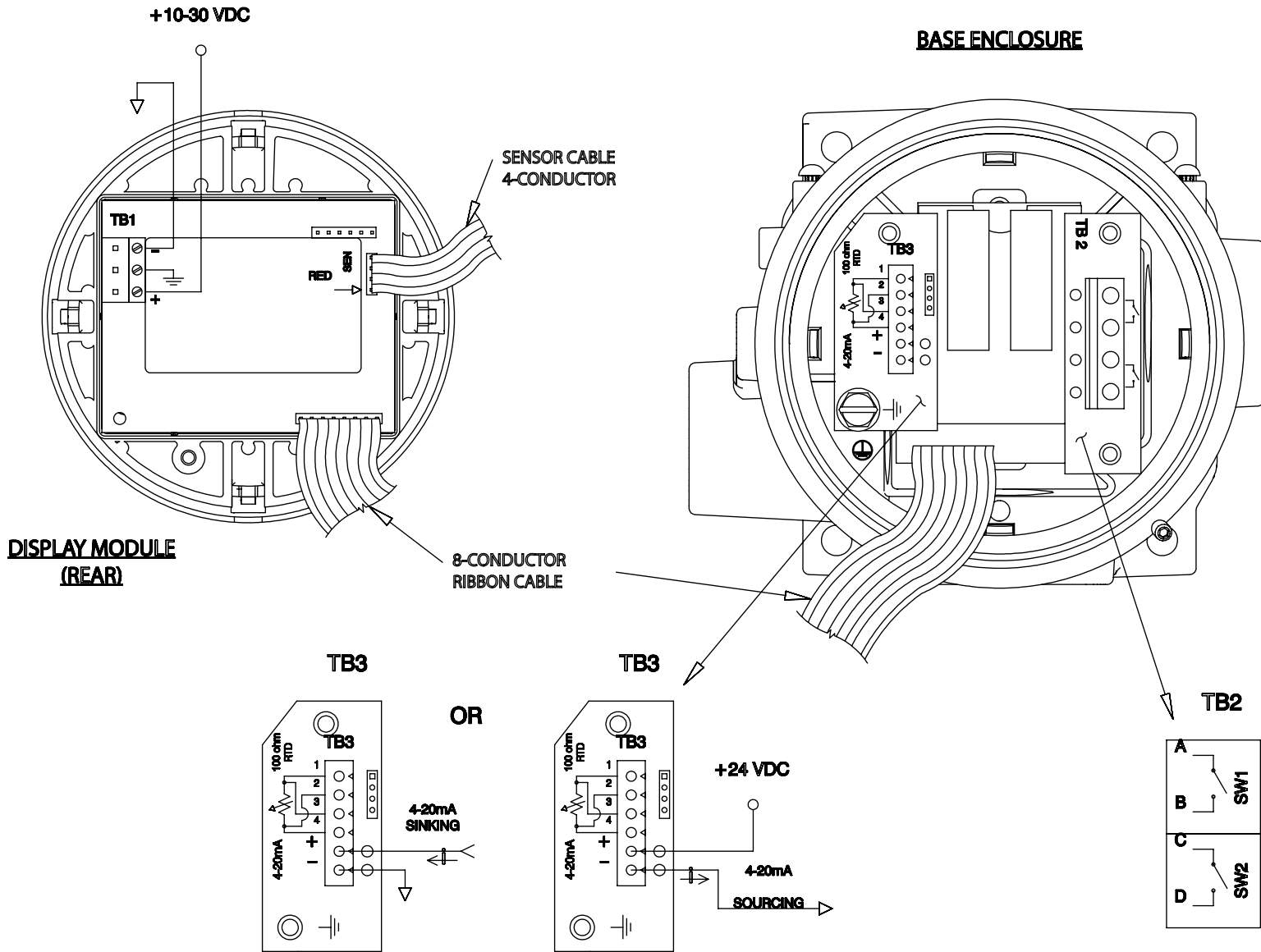
USED ON:  
SCALE 1:1

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CONTROLS COMPANY  
WATERTOWN \* MASSACHUSETTS

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**A-13946**

# RECOMMENDED WIRING SCHEME

A-13946



ORIGINAL DATE	4-7-09
DRWN	RAM
CHKD	PLW
APPD	R. McCAREY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON FRACTIONS ±1/64	
2 PLACE DEC ±0.010	3 PLACE DEC ±0.005
ANGLES ±1/2"	
DO NOT SCALE THIS DRAWING	

TITLE	8X2D REMOTE TEMP. SWITCH
USED ON:	SCALE 1:1

**UE**  
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 WATERTOWN \* MASSACHUSETTS  
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REV.	DESCRIPTION	DATE	DRWN	APPD
B	SEE PG. 1 OF 2. ECN#E3750	9-15-10	SR	RAM
A	FIRST ISSUE. ECN#E3133	4-7-09	RAM	RAM

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