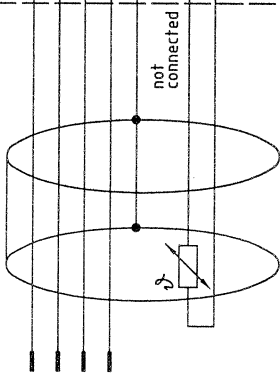


### Measurement Loop

Hazardous Area Location  
 IS Class I, Division 1, Groups A, B, C, D  
 IS Class II, Division 1, Groups E, F, G  
 IS Class III, Division 1  
 IS Class I, Zone 0, Group IIC



#### Entity Parameters:

Terminals 1, 2, 3, 4, 5, 6, 7 and 8

$V_i, U_o = 10\text{ V}; I_i, I_o = 146\text{ mA}; P_i, P_o = 365\text{ mW}$   
 Class I, Division 1, Groups A & B  
 $C_a, C_o = 3\text{ }\mu\text{F}; L_a, L_o = 1.6\text{ mH}$   
 Class I & II, Division 1, Group C  
 $C_a, C_o = 9\text{ }\mu\text{F}; L_a, L_o = 7\text{ mH}$   
 Class I, II, III Division 1, Group D  
 $C_a, C_o = 24\text{ }\mu\text{F}; L_a, L_o = 13\text{ mH}$

#### Conductivity-Measuring Loop

Entity Parameters:  
Terminals 1, 2, 3, 4, 5 and 6

$V_i, U_o = 10\text{ V}; I_i, I_o = 143\text{ mA}; P_{max}, P_o = 357\text{ mW}$   
 Class I, Division 1, Groups A & B  
 $C_a, C_o = 3\text{ }\mu\text{F}; L_a, L_o = 1.6\text{ mH}$   
 Class I & II, Division 1, Groups C & E  
 $C_a, C_o = 9\text{ }\mu\text{F}; L_a, L_o = 7\text{ mH}$   
 Class I, II, III Division 1, Groups D, F & G  
 $C_a, C_o = 24\text{ }\mu\text{F}; L_a, L_o = 13\text{ mH}$

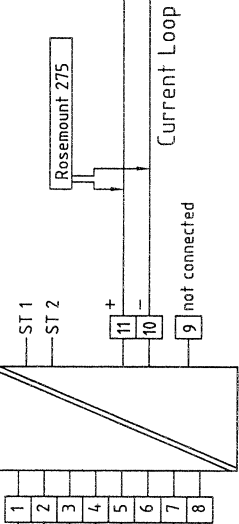
#### Temp-Measuring Loop

Entity Parameters: Terminals 7 and 8

$V_{oc}, U_o = 5\text{ V}; I_{sc}, I_o = 3\text{ mA}; P_{max}, P_o = 4\text{ mW}$   
 Class I, Division 1, Groups A & B  
 $C_a, C_o = 2000\text{ }\mu\text{F}; L_a, L_o = 1\text{ H}$   
 Class I & II, Division 1, Groups C & E  
 $C_a, C_o = 6000\text{ }\mu\text{F}; L_a, L_o = 1\text{ H}$   
 Class I, II, III Division 1, Groups D, F & G  
 $C_a, C_o = 16000\text{ }\mu\text{F}; L_a, L_o = 1\text{ H}$

### Hazardous Location Class I, Div 1

2-Wire Transmitter  
 (intrinsically safe apparatus)  
 IS AIS Class I, Division 1, Groups A, B, C, D, T4, Entity, Type 2  
 AIS Class I, II, III, Division 1, Groups A, B, C, D, E, F, G  
 Class I, Zone 1, AEx ia [ia], Group IIC, T6, Entity, Type 2  
 $T_{amb} = -20\text{ to }+55\text{ }^\circ\text{C}$



#### Entity Parameters:

Terminals 10 and 11

$V_{max}, U_i = 30\text{ V}; C_i = 32.4\text{ nF}$   
 $I_{max}, I_i = 100\text{ mA}; L_i = 24.0\text{ }\mu\text{H}$   
 $P_{max}, P_i = 0.8\text{ W}$

#### HAZARDOUS LOCATION

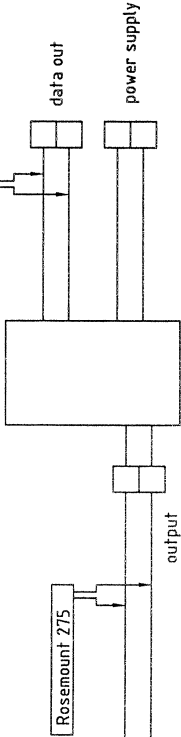
Suitable for CLASS I, DIV 2, GRP A, B, C, D, T4, Type 2  
when powered by  $V_{oc}, V_i = 30\text{ V}, I_{sc}, I_i = 100\text{ mA}$

Substitution of components may impair intrinsic safety and the suitability for Class I, DIV 2

Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous

### Non-Hazardous Location

Transmitter Power Supply  
 (associated apparatus)  
 Factory Mutual approved apparatus  
 HART®-HHT  
 Rosemount 275



#### NOTES:

- $V_{max}, U_i > V_{oc}, V_i$ , or  $U_o$   
 $C_i + C_{cable} < C_a$  or  $C_o$   
 $I_{max}, I_i = I_{sc}, I_i$ , or  $I_o$   
 $L_i + L_{cable} < L_a$  or  $L_o$   
 $P_{max} > P_o$
- Installation must be in accordance with the National Electrical Code
- Associated apparatus must be FMRC Approved and must be used in an FMRC Approved configuration. Use of the Rosemount Model 275 Communicator in Zones is not an FMRC Approved configuration. The control drawing for the associated apparatus must be followed when installing this equipment.
- Control equipment connected to the associated apparatus must not use or generate more than 250 V.
- The intrinsically safe equipment connecting to 1, 2, 3, 4, 5, 6 and 7, 8 must be FMRC Approved or be simple apparatus (a device which will neither generate nor store more than 12 V, 0.1 A, 25 mW or 20 mJ).
- No revisions to drawing without prior FMRC Approval.
- Use of the Rosemount Model 275 Communicator is for Division use only, see note 3. When using the Rosemount Model 275 Communicator in the loop between the associated apparatus and the SI 792X C 2-Wire Transmitter, the maximum loop inductance must be less than the marked  $L_a$  of the associated apparatus to account for the  $I_{sc}$  from the Model 275 Communicator. Refer to the Rosemount Installation Drawing 00275-0081 to determine the allowable loop inductance.

HACH

Verleiher: FUL (Zx)		Zul. Abweichungen für Maße ohne Toleranzangabe ISO 2768 - m		Oberfläche Halbzeug		Malsstab	
		Name Datum		Name Datum		Bezeichnung	
		Bearb. 05.12.06 d.d.M.		Bearb. 05.12.06 d.d.M.		control drawing FM	
		Depr.(KON)		Depr.(KON)		SI 792X C	
		Freigebe(FGL)		Freigebe(FGL)		Zeichnungsnummer	
		Schlüssel nach ISO 1018 beachten		Schlüssel nach ISO 1018 beachten		194.220-220	
Nr.	AE	Datum	Bereitner	FUL	KON	Ungültig ab:	Ersetzt durch: