



Measurement Loop
Hazardous Area Location

IS Class I, Division 1, Groups A, B, C, D
 IS Class I, Zone 0, Group IIC

Hazardous Location Class I, Div 1/Zone 1
SI 792X P

2-Wire Transmitter
 (intrinsically safe apparatus)
 Class I, Division 1, Groups A, B, C and D
 Ex ib [ia] IIC
 Class I, Division 2, Groups A, B, C and D
 Ex nAL [L] IIC
 Tamb - 20 to +55 °C
 Temperature code T4, Type 2

Non-Hazardous Location
Transmitter Power Supply
 (associated apparatus)

HART®-HHT
 Rosemount 275

HACH pHTM Differential pH and ORP Sensors
 Model Number PD *** and RD ***
 Encapsulated Differential pH and ORP Sensors
 Model Number 20 **** and 60 ****

Entity Parameters: Terminals 10/15 and 11/14
 with HART® Communication: Terminals 10/15 and 11/14 and
 Interface inputs ST1, ST2
 $V_{max}, U_0 = 30\text{ V}$ $I_{max}, I_1 = 100\text{ mA}$ $P_{max}, P_1 = 800\text{ mW}$
 $C_1 = 32.4\text{ nF}$ $L_1 = 24.0\text{ }\mu\text{H}$
 with HART® Communication
 $C_1 = 0.103\text{ }\mu\text{F}$

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HAZARDOUS LOCATION

Suitable for CLASS I, DIV 2, GRP A, B, C, D, T4, when powered by $V_{sc}, U_0 = 30\text{ V}$, $I_{sc}, I_0 = 100\text{ mA}$.
 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

pH-Measuring Loop

Terminals	U_0, V_{oc}	I_0, I_{sc}	P_0	C_0, C_a	L_0, L_a
1/2, 4, 5, 6	12V	16mA	29mW	1.41µF	150mH
IIC (GRP A, B)	12V	16mA	29mW	9µF	600mH
IIB (GRP C)	12V	16mA	29mW	36µF	1 H
IIA (GRP D)	12V	16mA	29mW	36µF	1 H

Temperature Measuring Loop

Terminals	U_0, V_{oc}	I_0, I_{sc}	P_0	C_0, C_a	L_0, L_a
7, 8	7.14V	4mA	8mW	13.5µF	1H
IIC (GRP A, B)	7.14V	4mA	8mW	240µF	1H
IIB (GRP C)	7.14V	4mA	8mW	1000µF	1H
IIA (GRP D)	7.14V	4mA	8mW	1000µF	1H

pH/Temperature Measuring Loop and Sensor Supply

Terminals	U_0, V_{oc}	I_0, I_{sc}	P_0	C_0, C_a	L_0, L_a
1/2, 4, 5, 6, 7, 8	12V	20mA	36mW	1.1µF	100mH
IIC (GRP A, B)	12V	20mA	36mW	9µF	350mH
IIB (GRP C)	12V	20mA	36mW	36µF	850mH
IIA (GRP D)	12V	20mA	36mW	36µF	850mH

NOTES:

- $V_{max}, U_0 > V_{oc}, U_0$
 $C_1 + C_{cable} < C_0$ or C_0
 $I_{max}, I_1 > I_{sc}, I_0$
 $L_1 + L_{cable} < L_0$ or L_0
 $P_{max}, P_1 > P_0$
- Installation must be in accordance with the Canadian Electric Code - Part 1
- Associated apparatus must be CSA Approved and must be used in an CSA 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, 4, 5, 6 and 7, 8 must be CSA Approved or be simple apparatus (a device which will neither generate nor store more than 1.2 V, 0.1 A, 25 mW or 20 mJ).
 The intrinsically safe equipment connecting to 17, 18, 19 must be CSA approved
- No revisions to drawing without prior CSA Approval.
- The Rosemount Model 275 Communicator must only be used on the non-hazardous side of the barrier/transmitter power supply

HACH

Verfasser:
 FUL (2x)

Zut. Abweichungen für Maße ohne Toleranzangabe
 ISO 2768 - m

Oberfläche
 Maßstab 1:1
 Halbzeug

Name
 Datum 29.01.07
 Name ddm

Gepr. (KON)
 4

Freigebeffgl. 26.10.16

Schulzweig nach ISO 9000 beibehalten

control drawing
 SI 792X P
 Zeichnungsnummer
 194.120-300

Ersetzt durch:

Nr. AE Datum Bearbeiter FUL KON

Ungültig ab: