



CONFIDENTIAL AND PROPRIETARY INFORMATION IS CONTAINED HEREIN AND MUST BE HANDLED ACCORDINGLY	REVISIONS				
	REV	DESCRIPTION	CHG. NO.	APP'D	DATE
	AE	UPDATE FOR HART 7	RTC1052064	D.R.S.	10/5/11
	AF	ADD 3051G	RTC1058799	J.H.	1/9/14
AG	UPDATE	RTC1067215	M.K.B.	1/26/17	

**3051 C/CA/T/L/G
PRESSURE TRANSMITTERS**

TO ASSURE AN INTRINSICALLY SAFE SYSTEM, THE TRANSMITTER AND BARRIER MUST BE WIRED IN ACCORDANCE WITH THE BARRIER MANUFACTURER'S FIELD WIRING INSTRUCTIONS AND THE APPLICABLE CIRCUIT DIAGRAM.

WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

AVERTISSEMENT - RISQUE D'EXPLOSION - LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATERIEL INACCEPTABLE POUR LES EMBLEMES DE CLASSE I, DIVISION 2.

CAD MAINTAINED (MicroStation)



EMERSON

UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES [mm]. REMOVE ALL BURRS AND SHARP EDGES. MACHINE SURFACE FINISH 125

CONTRACT NO.

Emerson Automation Solutions
6021 Innovation Dr. • Shakopee, MN 55372 USA

DR. **Mike Dobe** 08/27/90

TITLE
**INDEX OF I.S. CSA, US & C
FOR 3051**

CHK'D

APP'D. **GLEN MONZO** 8/31/90

SIZE A FSCM NO. DWG NO. **03031-1024**

APP'D. GOV'T.

SCALE N/A WT. SHEET 1 OF 6

-TOLERANCE-
.X ± .1 [2,5]
.XX ± .02 [0,5]
.XXX ± .010 [0,25]

FRACTIONS ANGLES
± 1/32 ± 2°

DO NOT SCALE PRINT

Form Rev AC



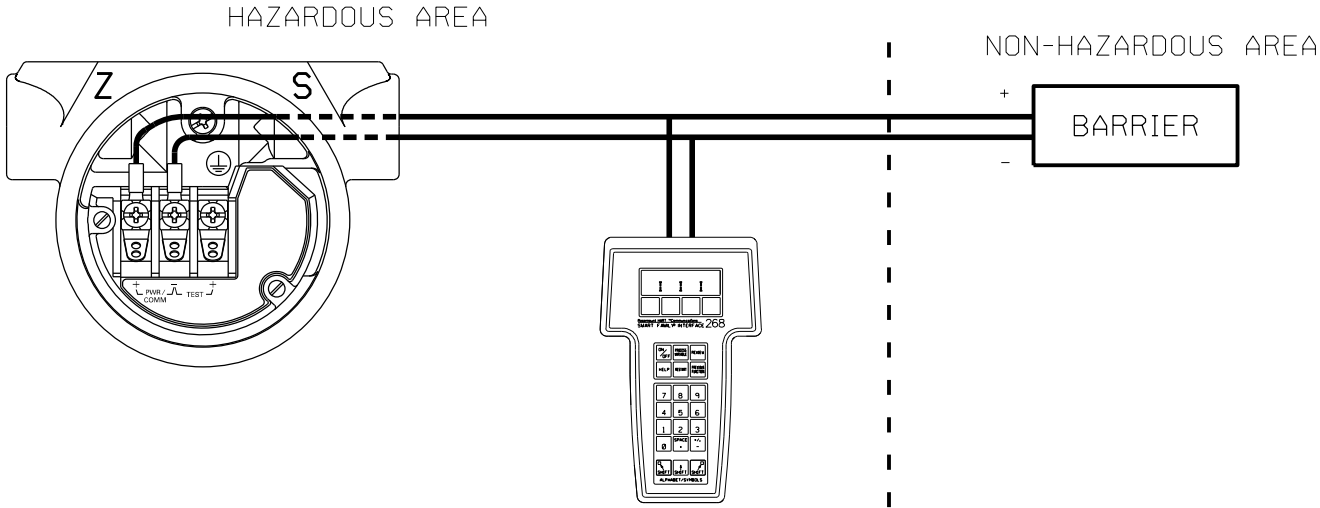
REVISIONS				
REV	DESCRIPTION	CHG. NO.	APP'D	DATE
AG				

INTRINSIC SAFETY APPROVALS

CIRCUIT CONNECTION WITH BARRIER

Ex ia

INTRINSICALLY SAFE/SECURITE INTRINSEQUE



OPTIONAL ROSEMOUNT
MODEL 275/375/475 SMART
FAMILY INTERFACE

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DR.	Mike Dobe 08/27/90
ISSUED	

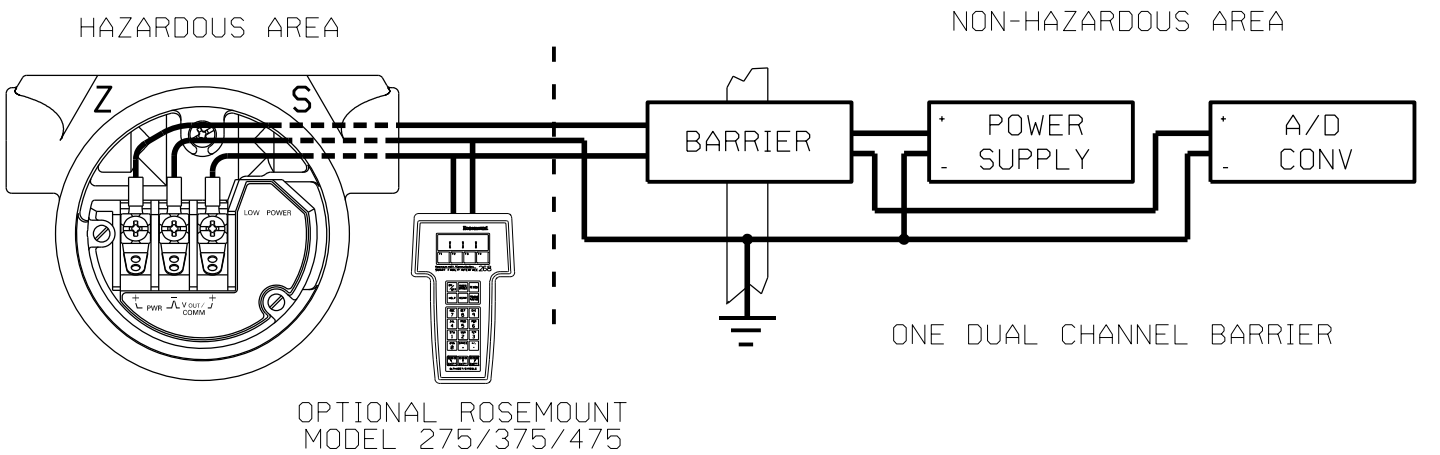
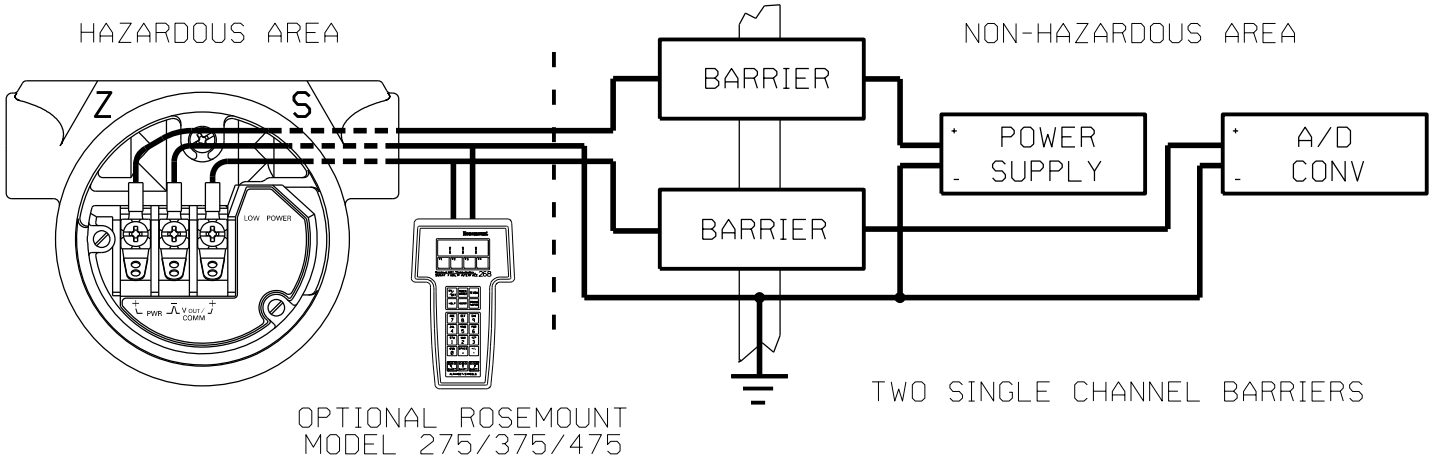
SIZE	FSCM NO	DWG NO.	CAD MAINTAINED (MicroStation)	
A		03031-1024		
SCALE	N/A	WT.	SHEET	2 OF 6

REVISIONS				
REV	DESCRIPTION	CHG. NO.	APP'D	DATE
AG				

INTRINSIC SAFETY APPROVALS

3Ø51C LOW POWER CIRCUIT CONNECTION WITH INTRINSIC SAFETY BARRIERS

Ex ia
INTRINSICALLY SAFE/SECURITE INTRINSEQUE
LOWPOWER, ("M" OUTPUT CODE)



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Shakopee, MN 55372 USA

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DR. SANDI MANSON

SIZE A FSCM NO

DWG NO. 03031-1024

ISSUED

SCALE N/A WT. _____

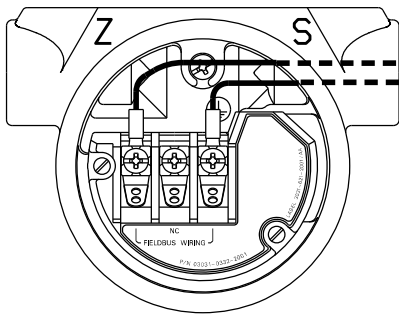
SHEET 3 OF 6

Form Rev AC

REVISIONS				
REV	DESCRIPTION	CHG. NO.	APP'D	DATE
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HAZARDOUS (CLASSIFIED) LOCATION
 CLASS I, DIVISION 1, GROUPS A,B,C,D
 CLASS II, DIVISION 1, GROUPS E,F,G
 CLASS III, DIVISION 1

NON-HAZARDOUS AREA

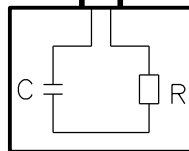


OUTPUT CODE F or W

ANY APPROVED
 ASSOCIATED
 APPARATUS SUITABLE
 FOR FISCO CONCEPT

ANY APPROVED
 INTRINSICALLY SAFE
 APPARATUS SUITABLE
 FOR FISCO CONCEPT

ANY APPROVED
 TERMINATION WITH
 $R=90...100 \text{ Ohms}$
 $C=0...2.2 \text{ uF}$



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 6021 Innovation Dr.
 Shakopee, MN 55372 USA

DR. **Myles Lee Miller**

ISSUED

SIZE	FSCM NO	DWG NO.	CAD MAINTAINED (MicroStation)	
A		03031-1024		
SCALE	N/A	WT.	SHEET	4 OF 6

Form Rev AC



REVISIONS				
REV	DESCRIPTION	CHG. NO.	APP'D	DATE
AG				

3051 I.S. ENTITY PARAMETERS. (OUTPUT CODE A,F,M or W)

FOR OUTPUT CODE A

CLASS I, DIV 1, GROUPS A, B, C AND D

$V_{MAX} = 30V$	V_{OC} IS LESS THAN OR EQUAL TO 30V
$I_{MAX} = 200mA$	I_{SC} IS LESS THAN OR EQUAL TO 200mA
$P_{MAX} = 1 \text{ WATT}$	$(\frac{V_{oc} \times I_{sc}}{4})$ IS LESS THAN OR EQUAL TO 1 WATT
$C_I = .01\mu f$	C_A IS GREATER THAN $.01\mu f + C$ CABLE
$L_I = 10\mu H$	L_A IS GREATER THAN $10\mu H + L$ CABLE

FOR OUTPUT CODE F or W

CLASS I, DIV 1, GROUPS A, B, C AND D

$V_{MAX} = 30V$	V_{OC} IS LESS THAN OR EQUAL TO 30V
$I_{MAX} = 300mA$	I_{SC} IS LESS THAN OR EQUAL TO 300mA
$P_{MAX} = 1.3 \text{ WATT}$	$(\frac{V_{oc} \times I_{sc}}{4})$ IS LESS THAN OR EQUAL TO 1.3 WATT
$C_I = 0\mu f$	C_A IS GREATER THAN $0\mu f + C$ CABLE
$L_I = 0\mu H$	L_A IS GREATER THAN $0\mu H + L$ CABLE

FOR OUTPUT CODE F, with FISCO

CLASS I, DIV 1, GROUPS A, B, C AND D

$V_{MAX} = 17.5V$	
$I_{MAX} = 380mA$	
$P_{MAX} = 5.32 \text{ WATT}$	
$C_I \leq 5nF$	
$L_I \leq 10\mu H$	

NOTE: ENTITY PARAMETERS LISTED APPLY ONLY TO ASSOCIATED APPARATUS WITH LINEAR OUTPUT.

Emerson Automation Solutions 6021 Innovation Dr. Shakopee, MN 55372 USA		CAD MAINTAINED (MicroStation)		
DR. JON STEFFENS	SIZE A	FSCM NO.	DWG NO.	03031-1024
ISSUED	SCALE N/A	WT. _____	SHEET 5 OF	6



REVISIONS				
REV	DESCRIPTION	CHG. NO.	APP'D	DATE
AG				

FOR OUTPUT CODE M

CLASS I, DIV 1, GROUPS A AND B

$V_{MAX} = 30V$	V_T OR V_{OC} IS LESS THAN OR EQUAL TO 30V
$I_{MAX} = 165mA$	I_T OR I_{SC} IS LESS THAN OR EQUAL TO 165mA
$P_{MAX} = 1 \text{ WATT}$	$(\frac{V_T \times I_T}{4})$ OR $(\frac{V_{OC} \times I_{SC}}{4})$ IS LESS THAN OR EQUAL TO 1 WATT
$C_I = .042\mu f$	C_A IS GREATER THAN $.042\mu f$
$L_I = 10\mu H$	L_A IS GREATER THAN $10\mu H$

* FOR T1 OPTION:

$L_I = 0.75mH$	L_A IS GREATER THAN $0.75mH$
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CLASS I, DIV 1, GROUPS C AND D

$V_{MAX} = 30V$	V_T OR V_{OC} IS LESS THAN OR EQUAL TO 30V
$I_{MAX} = 225mA$	I_T OR I_{SC} IS LESS THAN OR EQUAL TO 225mA
$P_{MAX} = 1 \text{ WATT}$	$(\frac{V_T \times I_T}{4})$ OR $(\frac{V_{OC} \times I_{SC}}{4})$ IS LESS THAN OR EQUAL TO 1 WATT
$C_I = .042\mu f$	C_A IS GREATER THAN $.042\mu f$
$L_I = 10\mu H$	L_A IS GREATER THAN $10\mu H$

* FOR T1 OPTION:

$L_I = 0.75mH$	L_A IS GREATER THAN $0.75mH$
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Emerson Automation Solutions 6021 Innovation Dr. Shakopee, MN 55372 USA	
DR.	MIKE DOBE
ISSUED	

SIZE	A	FSCM NO		DWG NO.	03031-1024
SCALE	N/A	WT.	_____	SHEET	6 OF 6

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