CONTROL DOCUMENT NO 901064

Hazardous area
Class I, Div. I, Groups A, B, C, D
Class II, Div. I, Groups E, F, G
Class III, Div. I (Note 2)

Associated Apparatus

TZID-C
V18345-X02X2X0X0X

Terminals
+11
-12

(Control Equipment

Int. Safe Gnd

Entity Parameters:
Vmax = 30 Vdc  Imax = 104 mA
Ci = 6.6 nF  Li = 0 pF
Pi = 1 W

Notes:
1. Voc or Vi <= Vmax, 1sc or i1 <= Imax, Ca = Ci+Cable, La = Li+Lcable; Po <= Pi
2. Dust-tight conduit seal must be used when installed in Class II and Class III environments.
3. Control equipment connected to barrier must not use or generate more than 250 Vrms or Vdc
4. Installation should be in accordance with ANSI/ISA R81.56 "Installation of Intrinsically Safe System for Hazardous (Classified) Locations" and the National Electrical Code (ANSI/NFPA 70).
5. The configuration of associated apparatus must be FMRC Approved/CSA Approved as required.
6. Associated apparatus manufacturers installation drawing must be followed when installing this equipment.
7. When connecting conduit to the enclosure use conduit hubs that have the same environmental rating as the enclosure.
8. No revision to drawing without prior FMRC Approval/CSA Approval.
9. OUTPUT CURRENT MUST BE LIMITED BY A RESISTOR SUCH THAT THE OUTPUT VOLTAGE CURRENT PLOT IS A STRAIGHT LINE DRAWN BETWEEN OPEN CIRCUIT VOLTAGE AND SHORT CIRCUIT CURRENT.
10. Tampering and replacement with non-manufacturer components may adversely affect the safe use of the system. Substitution of components may impair suitability for hazardous locations.
11. FOR FM DIV. 2 USE: Do not connect or disconnect unless the power was switched off and the area is known to be non-hazardous.
12. Local communication interface LKS shall not be used in hazardous locations.
13. To maintain intrinsic safety, wiring associated with each channel must be run in separate cable shields connected to intrinsically safe (associated apparatus) ground.
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Hazardous area

Class I, Div. 1, Groups A, B, C, D
Class II, Div. 1, Groups E, F, G
Class III, Div. 1
(Note 2)

TZ1D-C
V18345-X0X2X2X0X

Associated
Apparatus

Control
Equipment

+81
Terminals
-82

(Switching Input)

Entity Parameters:
$V_{\text{max}} = 30 \, \text{Vdc} \quad I_{\text{max}} = 110 \, \text{mA}$
$C_i = 4.2 \, \text{nF} \quad L_i = 0 \, \mu\text{H}$
$P_i = 1 \, \text{W}$

+83
Terminals
-84

(Switching Output)

Entity Parameters:
$V_{\text{max}} = 30 \, \text{Vdc} \quad I_{\text{max}} = 96 \, \text{mA}$
$C_i = 4.2 \, \text{nF} \quad L_i = 0 \, \mu\text{H}$
$P_i = 1 \, \text{W}$

Int. Safe Gnd

(Wiring Instructions)

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Hazardous area

Class I, Div. 1, Groups A, B, C, D
Class II, Div. 1, Groups E, F, G
Class III, Div. 1
(Note 2)

TZID-C
V18345-X0X2X2X10X
or V18345-X0X2X2X30X

Associated Apparatus

Control Equipment

Terminals Limit 1
+51
-52

Terminals Limit 2
+41
-42

(Note 5)
(Note 6)

Int. Safe Gnd

(Mechanical Digital Feedback)

Entity Parameters:
Vmax = 15.5 V
Imax = 52 mA
C1 = 20 nF
L1 = 30 µH
P1 = 1 W

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