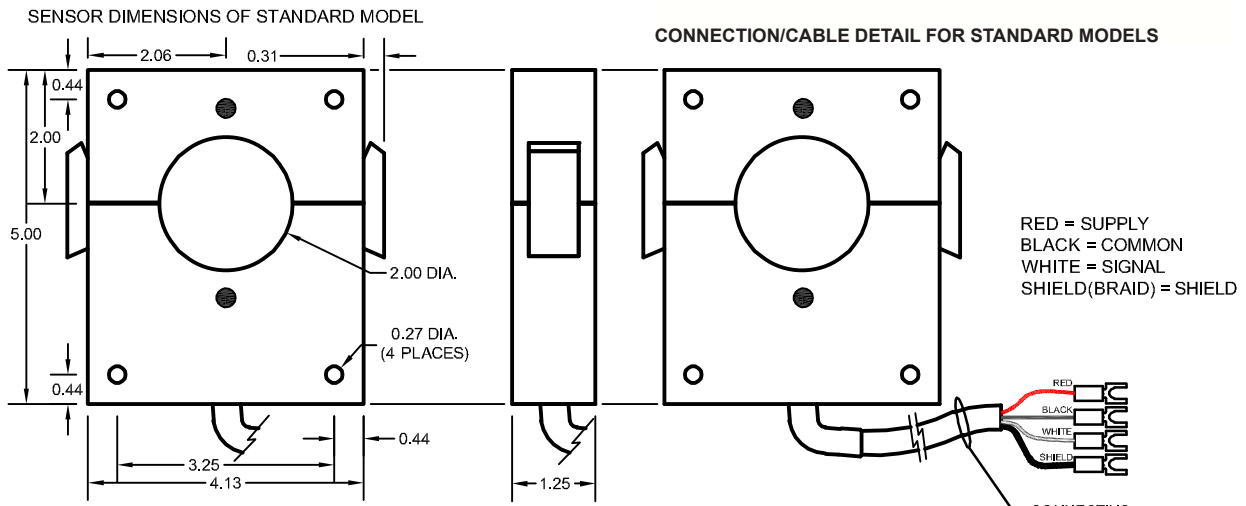


DIMENSIONS



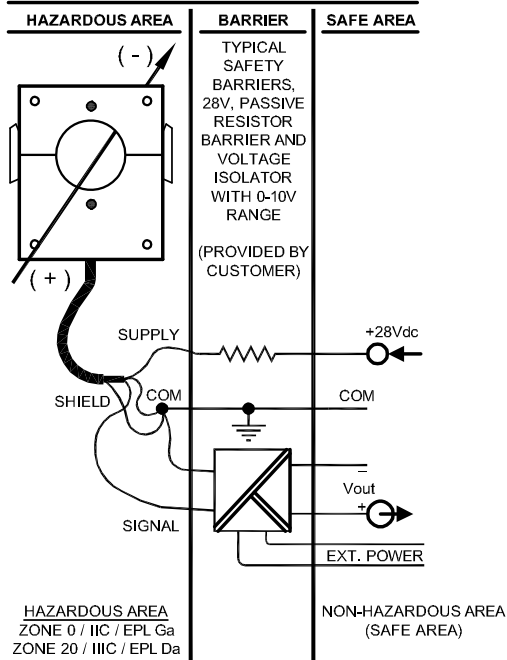
NOTE: ALL DIMENSIONS ARE IN INCHES.
TOLERANCE - ± 0.03
(EXCEPT OTHERWISE NOTED)

RED = SUPPLY
BLACK = COMMON
WHITE = SIGNAL
SHIELD(BRAID) = SHIELD

CONNECTING CABLE 8FT.
#8 TERMINAL SPADES
Dwg# 0907-00001-A Rev--

CONNECTION DIAGRAMS

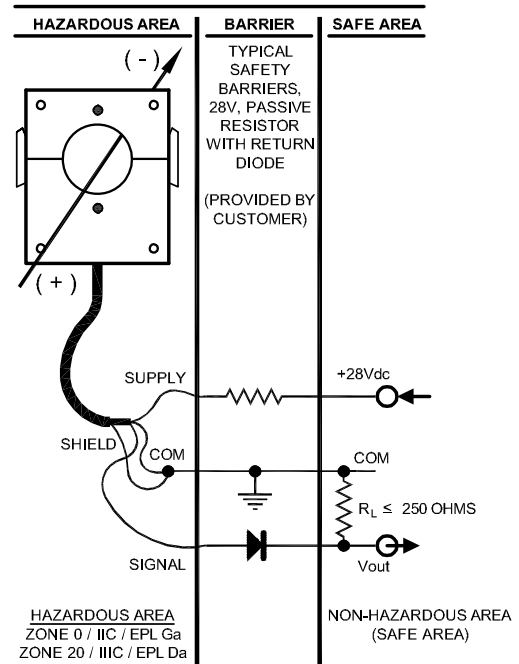
TYPICAL CONNECTION WITH
0 - (2.9V/5.0V/10.0V) VOLTAGE OUTPUT



HAZARDOUS AREA
ZONE 0 / IIC / EPL Ga
ZONE 20 / IIIC / EPL Da

NON-HAZARDOUS AREA
(SAFE AREA)

TYPICAL CONNECTION WITH
4 - 20mA CURRENT OUTPUT



HAZARDOUS AREA
ZONE 0 / IIC / EPL Ga
ZONE 20 / IIIC / EPL Da

NON-HAZARDOUS AREA
(SAFE AREA)

SUPPLY	SIGNAL	COMMON	SHIELD
RED	WHITE	BLACK	SHIELD

WARNING:

1. Do not use in environments where ETHERS are present.
2. Clean only with a damp cloth to prevent the possibility of electric discharge.
3. Potential electrostatic charging hazard. See certificate IECEx/ATEX CoC.

Reference UL/CUL Control Drawing 0901-00226-B Rev-C.

Reference IECEx/ATEX notes on next page.

Dwg# 0907-00001-A Rev--

ISC- STANDARD MODELS - IECEx/ATEX

CONNECTION INFORMATION

NOTE: Presafe 18 ATEX 12263X / IECEx PRE 18.0022X
Ex ia IIC T4 Ga / Ex ia IIIC T135°C Da / $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

1. ENTITY PARAMETERS FOR SUPPLY(SUPPLY/COM): ENTITY PARAMETERS FOR SIGNAL(SIGNAL/COM):

$U_i = 28 \text{ Vdc}$
 $I_i = 110 \text{ mA}$
 $P_i = 825 \text{ mW}$
 $C_i = 0 \text{ nF}$
 $L_i = 0 \text{ mH}$

$U_i = 28 \text{ Vdc}$
 $I_i = 29 \text{ mA}$
 $P_i = 210 \text{ mW}$
 $C_i = 40 \text{ nF}$
 $L_i = 0 \text{ mH}$

2. SELECTED BARRIERS MUST BE THIRD PARTY APPROVED AS INTRINSICALLY SAFE FOR THE APPLICATION AND HAVE U_o NOT EXCEEDING U_i . SEE NOTE 4.

3. IF THE ELECTRICAL PARAMETERS OF THE CABLE ARE UNKNOWN, THE FOLLOWING VALUES MAY BE USED:

CAPACITANCE (C_c) 200 pF/m
INDUCTANCE (L_c) 1.0 uH/m

4. INTRINSICALLY SAFE EQUIPMENT:

$U_i \geq U_o$
 $I_i \geq I_o$
 $C_i + C_c \leq C_o$
 $L_i + L_c \leq L_o$

5. BARRIERS MUST BE INSTALLED IN ACCORDANCE WITH BARRIER MANUFACTURE'S CONTROL DRAWING AND THE APPLICABLE REQUIREMENTS OF EN/IEC 60079-14.

6. THE MAXIMUM NONHAZARDOUS LOCATION VOLTAGE MUST BE NO GREATER THAN 250V RMS.

SPECIFIC CONDITIONS OF USE (X)

- The non-metallic enclosure material has a surface resistance $>10\text{G}\Omega$. Care shall be taken to avoid the generation of a potentially dangerous electrostatic charge. Clean only with a water damp cloth.
- Units supplied with an integral cable: The integral capacitance / inductance of the cable shall be considered during installation. The maximum cable length is 4 meters, as defined by the manufacturer.

Dwg# 0907-00001-A Rev--

ISC- STANDARD MODELS - UL/CUL

NOTE:

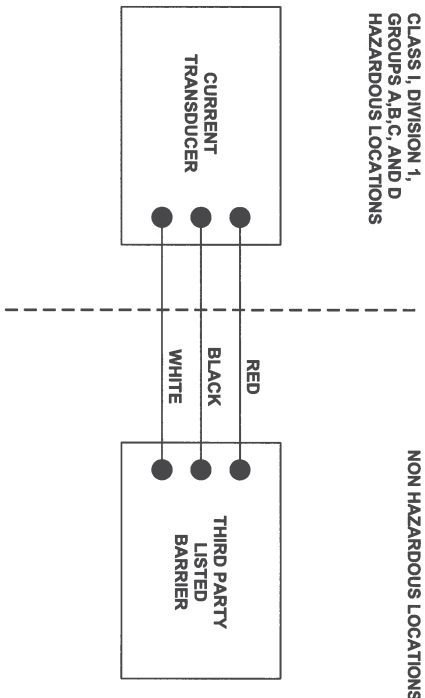
1. ENTITY PARAMETERS FOR SUPPLY: ENTITY PARAMETERS FOR SIGNAL:

$U_i, V_{max} = 30 \text{ Vdc}$ $I_i, I_{max} = 110 \text{ mA}$ $P_i, P_{max} = 1.1 \text{ W}$ $C_i = 0 \text{ uF}$ $L_i = 0 \text{ mH}$	$U_i, V_{max} = 10 \text{ Vdc}$ $I_i, I_{max} = 29 \text{ mA}$ $P_i, P_{max} = 0.21 \text{ W}$ $C_i = 60 \text{ nF}$ $L_i = 0 \text{ mH}$
--	---
2. SELECTED BARRIERS MUST BE THIRD PARTY APPROVED AS INTRINSICALLY SAFE FOR THE APPLICATION AND HAVE V_{oc} NOT EXCEEDING V_{max} . SEE NOTE 5.
3. CABLE CAPACITANCE (C_c) PLUS INTRINSICALLY SAFE EQUIPMENT CAPACITANCE (C_i) MUST BE LESS THAN THE MARKED CAPACITANCE (C_a). CABLE INDUCTANCE (L_c) PLUS INTRINSICALLY SAFE EQUIPMENT INDUCTANCE (L_i) MUST BE LESS THAN THE MARKED INDUCTANCE (L_a) SHOWN ON THE BARRIER. SEE NOTE 5.
4. IF THE ELECTRICAL PARAMETERS OF THE CABLE ARE UNKNOWN, THE FOLLOWING VALUES MAY BE USED:

CAPACITANCE (C_c)	60 pF/FT
INDUCTANCE (L_c)	0.20 uH/FT
5. INTRINSICALLY SAFE EQUIPMENT:

$V_{max} \geq V_{oc}$	V_{oc}
$I_{max} \geq I_{sc}$	I_{sc}
$C_i + C_c \leq C_a$	C_a
$L_i + L_c \leq L_a$	L_a
6. WHERE MULTIPLE CIRCUITS EXTEND FROM THE SAME PIECE OF INTRINSICALLY SAFE EQUIPMENT TO ASSOCIATED APPARATUS, THEY MUST BE INSTALLED IN SEPARATE CABLES OR IN ONE CABLE WHICH HAS SUITABLE INSULATION.
7. BARRIERS MUST BE INSTALLED IN ACCORDANCE WITH BARRIER MANUFACTURERS CONTROL DRAWING AND ARTICLE 504 OF THE NATIONAL ELECTRIC CODE (ANSI/NFPA 70).
8. THE MAXIMUM NONHAZARDOUS LOCATION VOLTAGE MUST BE NO GREATER THAN 250V RMS.

LT#	DESCRIPTION	DATE	APPROVED
A	CHANGE NOTE 1, ADD "U", "I", AND "P" SPEC	09/03/04	BAF/LJM
B	EEN 001937 - CHANGE I_{max} FROM 30mA	10/07/11	AGB/LJM
C	EEN 001937 - CHANGE DRAWING SIZE IN TITLE BLOCK	11/07/11	BAF



CLASS 1, DIVISION 1,
GROUPS A,B,C, AND D
HAZARDOUS LOCATIONS

NON HAZARDOUS LOCATIONS

UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS OTHERWISE SPECIFIED):		CONTRACT NO.	
FRACTIONS DECIMALS ANGLES	APPROVAL	DATE	
1/16 1/32 3/32 1/8 1/4 3/8 1/2 5/8 3/4 7/8 1 1 1/4 1 1/2 1 3/4 2 2 1/4 2 1/2 2 3/4 3 3 1/4 3 1/2 3 3/4 4 4 1/4 4 1/2 4 3/4 5 5 1/4 5 1/2 5 3/4 6 6 1/4 6 1/2 6 3/4 7 7 1/4 7 1/2 7 3/4 8 8 1/4 8 1/2 8 3/4 9 9 1/4 9 1/2 9 3/4 10	DESIGNED BY: BAF	08/30/04	
MATERIAL:	CHECKED BY: LJM	09/02/04	
FINISH:	APPROVED BY:		
PART NUMBER:		SIZE	CODE IDENT. NO.
DO NOT SCALE		B	0901-00226-B
SCALE 1"=1'		SHEET	1 of 1

OSI OHIO SEMITRONICS, INC.
4242 REYNOLDS DRIVE
HILLIARD, OHIO 43026



OhioSemitronics, Inc.
What Can We Measure for You?

ISO 9001 CERTIFIED

EU DECLARATION OF CONFORMITY

DATE: March 19, 2019
MANUFACTURER: Ohio Semitronics, Inc.
 4242 Reynolds Dr.
 Hilliard, OH 43026
EQUIPMENT: Intrinsically Safe Current Transducers
MODEL(s): ISC-xxx (D, E, X5) (Y03, Y04, Y23)

The above referenced equipment complies with the European Directive for operation in potentially explosive atmospheres. This is proven through compliance with all relevant sections of the specified Standards.

A Technical Construction File is available for review by designated bodies. An EU-Type Examination Certificate Presafe 18 ATEX 12263X, registration number 2460, has been issued by DNV GL Presafe AS (Presafe), Veritasveien 1, 1363 Høvik, Norway.

DIRECTIVE: 2014/34/EU, Equipment and protective systems intended for use in potentially explosive atmospheres (ATEX)
STANDARDS: EN 60079-0 : 2012/A11:2013, Explosive atmospheres, Equipment - general requirements
EN 60079-11 : 2012, Explosive atmospheres, Equipment - protection by intrinsic safety ("i")

MARKING: CE 2460 Ex II 1 G Ex ia IIC T4 Ga II 1 D Ex ia IIIC T135°C Da

I hereby authorize the above defined marking to be applied to the referenced equipment.

SIGNATURE: *Lewis J Miller* 3/19/2019
 Lewis J Miller, Vice President of Engineering Date

A-7003-108-ISC
 Rev-C
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