

ENTITY PARAMETERS

$U_i: 28\text{ V}$
 $I_i: 93\text{ mA}$
 $C_i: 12\text{ nF}$
 $L_i: 56\text{ }\mu\text{H}$
 $P_i: 0.651\text{ W}$

**ZONE 0 & 1
HAZARDOUS LOCATION**

II 1 G EEx ia IIC T5
 II 1 D T+85°C
 $-40^\circ\text{C} \leq T_{amb} \leq 85^\circ\text{C}$, IP66
 CERTIFICATE# DEMKO 03 ATEX 0322281X

**ZONE 2 OR
NON HAZARDOUS LOCATION**

I.S. BARRIER MUST BE INSTALLED IN ACCORDANCE WITH BARRIER MANUFACTURER'S CONTROL DRAWINGS. THE WIRING OF THE INTRINSICALLY SAFE CIRCUIT MAY BE INSTALLED IN ACCORDANCE WITH EN 60079-14 OR ACCORDING TO NATIONAL INSTALLATION REQUIREMENTS.

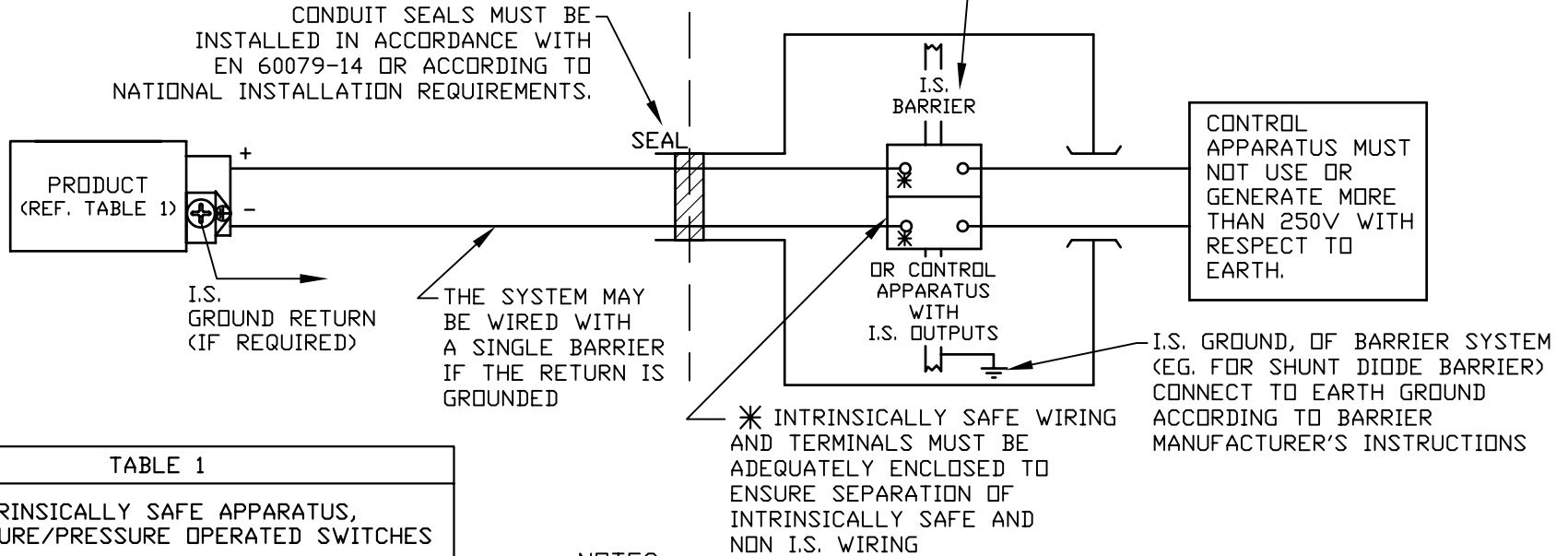


TABLE 1	
INTRINSICALLY SAFE APPARATUS, TEMPERATURE/PRESSURE OPERATED SWITCHES	
HAZ. LOC. PRODUCT(S)	EN 50014, EN 50020, EN50281, EN50284, IEC 60079-0, EN60529
ONE SERIES 2-WIRE SWITCH SERIES	

**AGENCY CRITICAL COMPONENT,
NO SUBSTITUTIONS ALLOWED
WITHOUT UEC ENGINEERING APPROVAL.**

NOTES:

- A. SELECTED BARRIERS MUST HAVE ENTITY PARAMETERS SUCH THAT:
 $U_o \leq U_i$, $I_o \leq I_i$
 $C_o \geq C_i + C_{cable}$, $L_o \geq L_i + L_{cable}$
 $P_o \leq P_i$, IF P_o OF THE BARRIER IS NOT KNOWN, IT MAY BE CALCULATED USING THE FORMULA, $P_o = (U_o * I_o)/4$.
- B. FOR C_{cable} AND L_{cable} , IF THE CAPACITANCE PER FOOT OR THE INDUCTANCE PER FOOT IS NOT KNOWN, THEN THE FOLLOWING VALUES SHALL BE USED:
 $C_{cable} = 200\text{ }\mu\text{F/METER}$
 $L_{cable} = 0.66\text{ }\mu\text{H/METER}$
- C. THE PRESSURE SWITCH SERIES PROVIDES 500 V ISOLATION WITH RESPECT TO EARTH.
- D. SELECTED ASSOCIATED APPARATUS MUST BE THIRD PARTY APPROVED AS PROVIDING INTRINSICALLY SAFE CIRCUITS FOR THE APPLICATION.

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SYM	DESCRIPTION	DATE	PLW	H.N.	APPD
E	REDRAWN; ENTITY PARAMETERS, "i" WAS "=". NOTE B, MAX CABLE LGTH. WAS 1524mm. ECN# E0731	4/8/04	PLW	H.N.	
REVISIONS					

ORIGINAL DATE	1-30-02
DRWN	S.R.
CHKD	AB
APPD	G. WALKEAPAA
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ±1/64 2 PLACE DEC 3 PLACE DEC ANGLES ±0.010 ±0.005 ±1/2° DO NOT SCALE THIS DRAWING	

TITLE	INTRINSICALLY SAFE (I.S.) CONTROL (DEMKO)
USED ON:	2-WIRE
SCALE	N.T.S.

DF001 REV. C	
UNITED ELECTRIC CONTROLS COMPANY WATERTOWN * MASSACHUSETTS	
DWG NO	A-62174-20