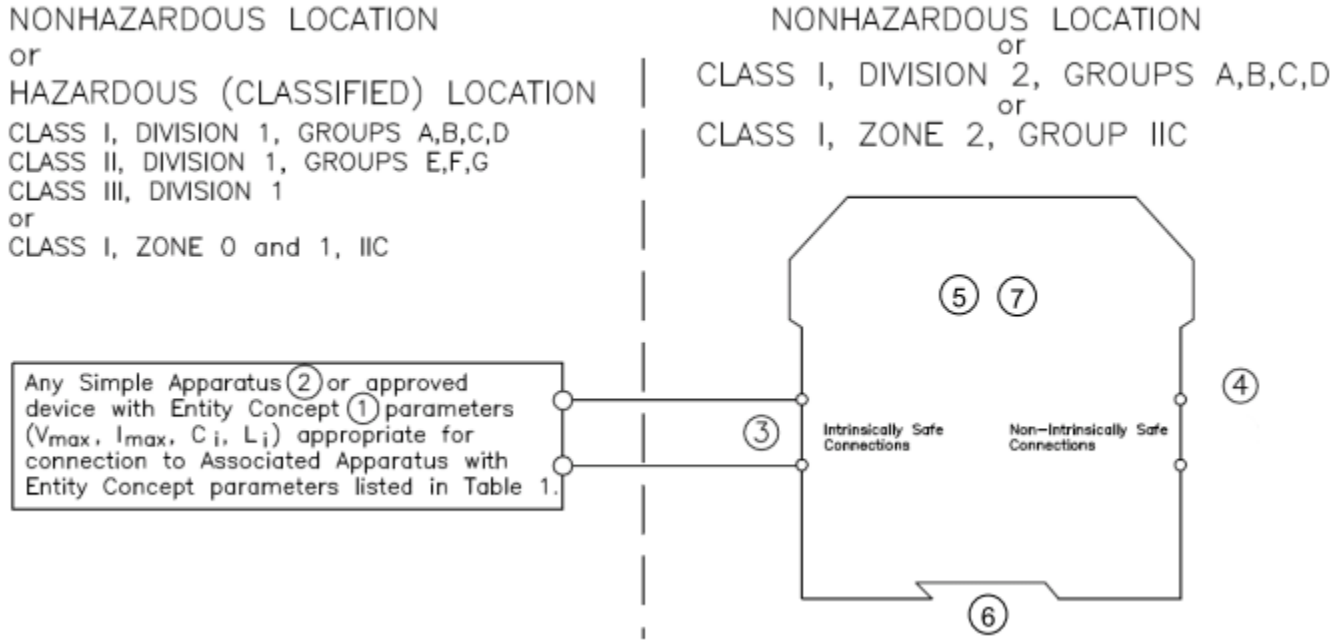


Connections



Notes

- The output current of this associated apparatus is limited by a resistor such that the output voltage-current plot is a straight line drawn between open-circuit voltage and short-circuit current. The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus not specifically examined in combination as a system when the approved values of V_{oc} (or U_o) and I_{sc} (or I_o) for the associated apparatus are less than or equal to V_{max} (U_i) and I_{max} (I_i) for the intrinsically safe apparatus and the approved values of C_a (C_o) and L_a (L_o) for the associated apparatus are greater than $C_i + C_{cable}$ and $L_i + L_{cable}$, respectively, for the intrinsically safe apparatus,
Where $C_{cable} = 60\text{pF/ft}$ if unknown
Where $L_{cable} = 0.20\text{uH/ft}$ if unknown
- Simple apparatus: an electrical component or combination of components of simple construction with well-defined electrical parameters that does not generate more than 1.5 V, 100mA, 25mW, or is a passive component that does not dissipate more than 1.3W and is compatible with the intrinsic safety of the circuit in which it is used.
- Wiring methods must be in accordance with all applicable installation requirements of the county in use. For US, this is NFPA 70 (NEC) article 504 with additional information in ANSI-ISA –RP12.06.01. For Canada this is CSA 22.1-12 (CEC) section 18 and appendix F.
- Barriers shall not be connected to any device which uses or generates internally any voltage in excess of 250V r.m.s. or DC unless the device has been determined to adequately isolate the voltage from the barrier.
- All devices excepting KFU8-***-Ex* version:** these barriers are rated “Nonincendive”. If the barriers are intended to be mounted in a Division 2 / Zone 2 location, they must be mounted in an enclosure with a minimum ingress protection of IP 2X that can accept the Division 2 / Zone 2 wiring methods. A temperature rating of T4 applies to all non-incendive rated barriers.
- Power feed modules KFD2-EB2* maybe used in conjunction with power rail to energize P+F isolated barriers (KFD2 Series) when installed in accordance with Control Drawing 116-0160.
- Warning: Substitution of components may impair intrinsic safety and suitability for hazardous (classified) locations.

ADVERTISEMENT: le remplacement des composants peut altérer la sécurité intrinsèque et l'adéquation à une utilisation dans des zones dangereuses (classées).

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Entity Parameters

MODEL NUMBER	TERMINALS	V _{oc} (V ₀) [V]	I _{sc} (I ₀) [mA]	V _t [V]	I _t [mA]	GROUPS	C _a (C ₀) [uF]	L _a (L ₀) [mH]
KFD2-DU-Ex1.D KFU8-DU-Ex1.D KFA5-DU-Ex1.D KFA6-DU-Ex1.D	1,3	10.1	13.5	-	-	A,B IIC	2.87	195
						C,E,F,G IIB	19.4	730
						D IIA	93	1000
KFD2-DWB-Ex1 KFU8-DWB-Ex1 KFA5-DWB-Ex1 KFA6-DWB-Ex1 KFD2-DWB-Ex1.D KFU8-DWB-Ex1.D KFA5-DWB-Ex1.D KFA6-DWB-Ex1.D	1,3	10.1	13.5	-	-	A,B IIC	2.87	195
						C,E,F,G IIB	19.4	730
						D IIA	93	1000
KFD2-UFC-Ex1 KFU8-UFC-Ex1 KFD2-UFC-Ex1.D KFU8-UFC-Ex1.D	1,3	10.1	13.5	-	-	A,B IIC	2.87	195
						C,E,F,G IIB	19.4	730
						D IIA	93	1000
KFD2-UFT-Ex1 KFU8-UFT-Ex1 KFD2-UFT-Ex1.D KFU8-UFT-Ex1.D	1,3; 4,6	10.1	13.5	-	-	A,B IIC	2.87	195
						C,E,F,G IIB	19.4	730
						D IIA	93	1000
	1,3,4,6	-	-	10.1	27.0	A,B IIC	2.87	46
						C,E,F,G IIB	19.4	170
						D IIA	93	350


The values of L₀ and C₀ listed in the table above are allowed if one of the following conditions is met:

- The total L_i of the external circuit (excluding the cable) is < 1% of the L₀ value or
- The total C_i of the external circuit (excluding the cable) is < 1% of the C₀ value.

The values of L₀ and C₀ listed in the table above shall be reduced to 50% when both of the following conditions are met:

- the total L_i of the external circuit (excluding the cable) is > 1% of the L₀ value and
- the total C_i of the external circuit (excluding the cable) is > 1% of the C₀ value.

Note: the reduced capacitance of the external circuit (including cable) shall not be greater than 1uF for IIA, IIB and 600nF for IIC.

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