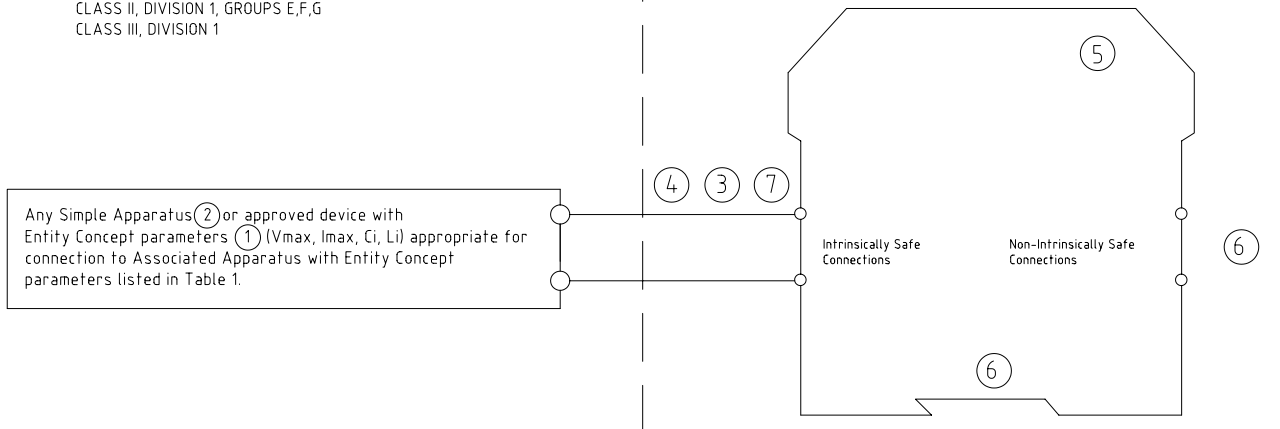


NONHAZARDOUS LOCATION
or
HAZARDOUS (CLASSIFIED) LOCATION
CLASS I, ZONE 0, GROUPS IIC, IIB, IIA
CLASS I, DIVISION 1, GROUPS A,B,C,D
CLASS II, DIVISION 1, GROUPS E,F,G
CLASS III, DIVISION 1

NONHAZARDOUS LOCATION
or
HAZARDOUS (CLASSIFIED) LOCATION
CLASS I, ZONE 2, GROUPS IIC, IIB, IIA
CLASS I, DIVISION 2, GROUPS A,B,C,D



Notes:

- ① The entity concept allows interconnection of intrinsically safe and associated apparatus not specifically examined in combination as a system when the approved values of U_o (or V_{oc}) and I_o (or I_{sc}) for the associated apparatus are less than or equal to U_i (or V_{max}) and I_i (or I_{max}) for the intrinsically safe apparatus and the approved values of C_o (or C_a) and L_o (or L_a) for the associated apparatus are greater than $C_i + C_{cable}$ and $L_i + L_{cable}$, respectively for the intrinsically safe apparatus.
- ② This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with Article 504.10 (B) of National Electrical Code (ANSI/NFPA 70) or other local codes, as applicable.
- ③ Where multiple circuits extend from the same piece of associated apparatus, they must be installed in separate cables or in one cable having suitable insulation. Refer to Article 504.30 (B) of the National Electrical Code (ANSI/NFPA 70) and Instrument Society of America Recommended Practice ISA RP12.6 for installing intrinsically safe equipment.
- ④ Intrinsically safe circuits must be wired and separated in accordance with Article 504.20 of National Electrical Code (ANSI/NFPA 70) or other local codes as applicable.
- ⑤ Associated apparatus must be installed in enclosure suitable for the application in accordance with the National Electrical Code (ANSI/NFPA 70) or other local codes as applicable.
- ⑥ Barriers shall not be connected to any device that uses or generates in excess of 250 Vrms or DC unless it has been determined that the voltage is adequately isolated from the barrier.
- ⑦ Single channel models use either input terminals 1, 2, & 3 or 4, 5, & 6.

Table 1: Entity Parameters

Model Numbers	Terminals	Load Parameters							
		V_{oc} (V)	I_{sc} (mA)	C_o (uF)			L_o (mH)		
				A,B IIC	C,E,F,G IIB	D IIA	A,B IIC	C,E,F,G IIB	D IIA
KFA5-SR2-Ex1x, KFA5-SR2-Ex2x KFA6-SR2-Ex1x, KFA6-SR2-Ex2x KFD2-SR2-Ex1x, KFD2-SR2-Ex2x KFD2-SR-Ex1x, KFD2-SR-Ex2x, KFD2-SRT-Ex1x KFD2-SOT2-Ex1x, KFD2-SOT2-Ex2x KFD2-ST2-Ex1x, KFD2-ST2-Ex2x KFD2-SOT-Ex1x, KFD2-SOT-Ex2x, KFD2-ST-Ex1x, KFD2-ST-Ex2x	⑦ 1, 2, 3 4, 5, 6	12.9	19.8	1.273	3.820	10.18	84.8	254.4	678.4

The values of L_o and C_o 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 L_o value or
- the total C_i of the external circuit (excluding the cable) is $< 1\%$ of the C_o value.

The values of L_o and C_o 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 $\geq 1\%$ of the L_o value and
- the total C_i of the external circuit (excluding the cable) is $\geq 1\%$ of the C_o value.

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

Dieses Dokument enthält sicherheitstechnische Angaben. Es darf nicht ohne Absprache mit dem Normenfachmann geändert werden!

This document contains safety-relevant information. It must not be altered without the authorization of the norm expert!

Confidential according to ISO 16016	Only valid as long as released in EDM or with a valid production documentation!	scale: none	date: 2011-Aug-11
 Twinsburg	CONTROL DRAWING	change notice	respons.
	FM APPROVED		approved
	Transformer Isolated Barriers		norm
		116-0035x	
		sheet 1 of 1	