HAZARDOUS (CLASSIFIED) LOCATION
CLASS I, DIVISION 1, GROUPS A,B,C,D
CLASS II, DIVISION 1, GROUPS E,F,G
CLASS III, DIVISION 1

NON—HAZARDOUS LOCATION
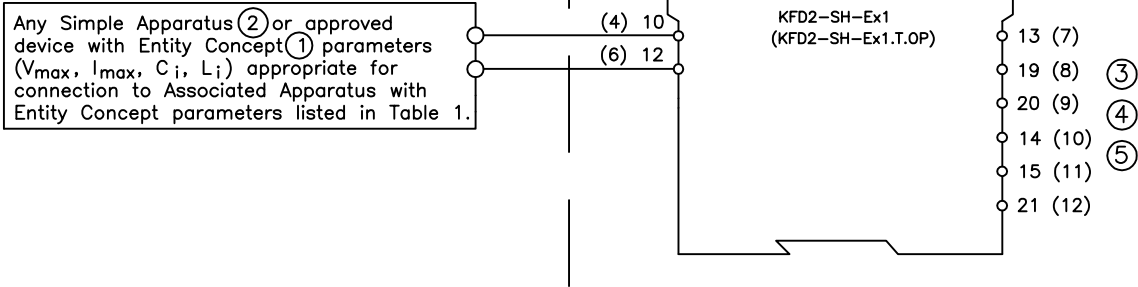
Any Simple Apparatus ② or approved device with Entity Concept ① parameters (V_{max}, I_{max}, C_i, L_i) appropriate for connection to Associated Apparatus with Entity Concept parameters listed in Table 1.

(4) 10
(6) 12

KFD2-SH-Ex1
(KFD2-SH-Ex1.T.OP)

13 (7)
19 (8)   ③
20 (9)   ④
14 (10)   ⑤
15 (11)
21 (12)

TABLE 1 — ENTITY PARAMETERS

MODEL NUMBER	TERMINALS	V_{oc} (V)	I_{sc} (mA)	V_t (V)	I_t (mA)	GROUPS	C_a (uF)	L_a (mH)
KFD2-SH-Ex1	10-12	9.78	15.7	—	—	A,B	3.5	133.3
						C,E	10.5	399.9
						D,F,G	28	1066.4
KFD2-SH-Ex1.T.OP	4-6	9.78	17.2	—	—	A,B	3.5	111.9
						C,E	10.5	335.7
						D,F,G	28	895.2

NOTES:

① 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 V_t) and I_{sc} (or I_t) for the associated apparatus are less than or equal to V_{max} and I_{max} for the intrinsically safe apparatus and the approved values of C_a and 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 "Simple Apparatus" is defined as a device which will neither generate nor store more tnan 1.2V, 0.1A, 20uJ, or 25mW.

③ Wiring methods must be in accordance with the National Electrical Code, ANSI/NFPA 70, Article 504. Additional installation information can be found in ANSI/ISA-RP 12.6.

④ Barriers shall not be connected to any device which uses or generates internally any voltage in excess of 250V Rms or DC unless the device has been determined to adequately isolate the voltage from the barrier.

⑤ Connection of the barriers to ground is not required.

Certification Status		
Agency	Pending	Final
FM X		X
CSA		
UL		

Product Part No.

Title INSTALLATION DRAWING FOR CONTROL SAFE ISOLATED BARRIERS — FM

Revisions

ECO No.

| 0 | 3-20-98 | W.B. | | | | Pepperl+Fuchs® Inc. | Repl.No. | Draw. No. 116-0158 | Sh. 1 of 1 |
| In. | Date | Cons. | Resp. | Appr. | FP | Twinsburg, OH 44087-2202 | — | | |