

725Ex Multifunction Process Calibrator

CSA: IS Class I; Div 1;
Groups B-D T = 171 °C
AEx ia IIB, T = 171 °C
Ta = -10 °C... +55 °C

Entity Parameters:

Input Entity Parameters:

All Inputs: J1-J2, J3-J4, J5-J6, J7-J8:
U_i = 30 V, I_i = 100 mA
P_i = 750 mW, L_i = 0 mH

J1-J2: C_i = 0.01 uF

J3-J4: C_i = 0 uF

J5-J6: C_i = 0.01 uF

J7-J8: C_i = 0 uF

Entity Parameters:

J1-J2: U_o = 13.7 V, I_o = 96.5 mA, P_o = 331 mW

J3-J4: U_o = 13.6 V, I_o = 25.2 mA, P_o = 86 mW

J5-J6: U_o = 13.7 V, I_o = 26 mA, P_o = 90 mW

J7-J8: U_o = 13.7 V, I_o = 76 mA, P_o = 261 mW

Terminals	Co (uF)			Lo (mH)		
	Grp B	IIB, Grp C	IIA, Grp D	Grp B	IIB, Grp C	IIA, Grp D
J1-J2	1.0	5.0	18.1	4.0	16.0	32.0
J3-J4	1.0	5.2	18.6	50.0	200.0	400.0
J5-J6	1.0	5.0	18.1	50.0	200.0	400.0
J7-J8	1.0	5.0	18.1	6.1	22.0	45.0

NOTES:

- Connections to an Intrinsically Safe Apparatus/Associated Apparatus/Loop must be in accordance with notes 2 thru 5.
- Intrinsic Safety Entity Concept: The Intrinsic Safety Entity Concept allows the interconnection of two or more Approved Intrinsically Safe devices or Associated Apparatus with entity parameters not specifically examined in combination as a system when:
U_o or V_{oc} or V_t ≤ V_{max} or U_i
I_o or I_{sc} or I_t ≤ I_{max} or I_i
C_a or C_o ≥ C_i + C_{cable}
L_a or L_o ≥ L_i + L_{cable}
P_o ≤ P_i
- Installation must be in accordance with Article 500 or Article 505 of the NEC (ANSI/NFPA70) and ANSI/ISA RP12.6 or equivalent. Installation in Canada should be in accordance with the Canadian Electrical Code, CSA C22.1, Part I.
- The Fluke 725Ex Multifunction Process Calibrator may only be connected to terminals with compatible entity parameters except as indicated in Note 2 and must not be connected to internal circuitry of Associated Apparatus or Intrinsically Safe Apparatus. Failure to comply with this rule violates approval.
- Applying more than 30 V or 100 mA to the input terminals invalidates the Calibrator's Ex Approval and may damage the unit. Immediately remove the unit from the Ex hazardous area and contact a Fluke Service Center. Control equipment connected to the Associated Apparatus must not use or generate more than 250 Vrms or V dc.
- Examples of a simple apparatus are switch, TC, RTD and connector.
- Refer to the 725Ex Users Manual for additional safety information.
- No revision to this drawing is permitted without approval from CSA and SIRA.

UNCLASSIFIED AREA OR AREAS
CLASSIFIED AS ZONE 0 OR CLASS I,
DIV 1, GROUPS B, C, D

THE CONNECTIONS SHOWN FOR J1-J6
JACKS CAN BE USED SIMULTANEOUSLY
WITH ANY CONNECTION SHOWN FOR J7-J8
JACKS

**ONLY CONNECTIONS SPECIFIED ON
THIS DRAWING ARE ALLOWED. OTHER
CONNECTIONS MAY INVALIDATE INTRINSIC
SAFETY**

