

# CSA Hazardous Area Approvals Fisher™ 646 Electro-Pneumatic Transducer

## Hazardous Area Classifications and Special Instructions for “Safe Use” and Installation in Hazardous Locations

Certain nameplates may carry more than one approval, and each approval may have unique installation/wiring requirements and/or conditions of “safe use”. These special instructions for “safe use” are in addition to, and may override, the standard installation procedures. Special instructions are listed by approval.

### Note

This information supplements the nameplate markings affixed to the product and the 646 instruction manual ([D101351X012](#)), available from your Emerson sales office or Local Business Partner, or at [Fisher.com](#).

Always refer to the nameplate itself to identify the appropriate certification.

### **⚠ WARNING**

**Failure to follow these conditions of “safe use” could result in personal injury or property damage from fire or explosion and area re-classification.**

### Intrinsically Safe, Explosion proof, Type n Dust-Ignition proof, DIV 2

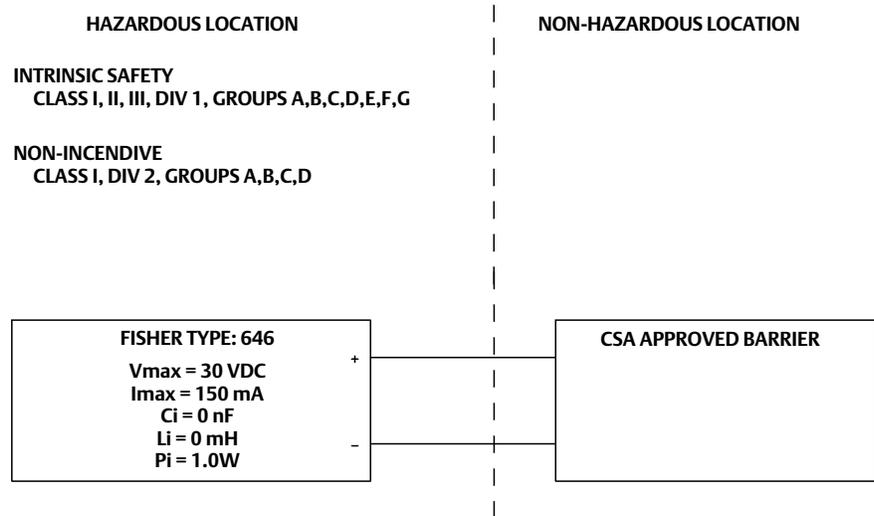
No special conditions for safe use.

Refer to table 1 for additional information.

Table 1. Approval Information

Certification Body	Certification Obtained	Entity Rating	Temperature Code
CSA	Intrinsically Safe Ex ia IIC T4/T5 per drawing GE28591 (see figure 1) Ex ia Intrinsically Safe Class I, II, Division 1 GP A,B,C,D,E,F,G T4/T5 per drawing GE28591 (see figure 1)	Vmax = 30 VDC Imax = 150 mA Pi = 1.0 W Ci = 0 nF Li = 0 mH	T4 (Tamb ≤ 71°C) T5 (Tamb ≤ 40°C)
	Explosion-proof Ex d IIC T6 Class I, Division I, GP A,B,C,D T6	---	T6 (Tamb ≤ 71°C)
	Type n Ex nA IIC T6	---	T6 (Tamb ≤ 71°C)
	Class I, Division 2, GP A,B,C,D T6 Class II, Division 1, Groups E,F,G T6 Class II, Division 2, GP F,G T6	---	T6 (Tamb ≤ 71°C)

Figure 1. CSA Loop Schematic (Installation Drawing GE28591)



**NOTES:**

1. BARRIERS MUST BE CSA CERTIFIED WITH ENTITY PARAMETERS AND ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S I.S. INSTALLATION INSTRUCTIONS.
2. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE, PART I.
3. FOR ENTITY INSTALLATION (I.S. AND N.I.):  $V_{max} > V_{oc}$ ,  $I_{max} > I_{sc}$ ,  $C_i + C_{cable} < C_a$ ,  $L_i + L_{cable} < L_a$ .

GE28591  
ET088

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