

# ATEX Hazardous Area Approvals Fisher™ 582i Electro-Pneumatic Converter

## Hazardous Area Classifications and Special Instructions for “Safe Use” and Installations 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.

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### Note

This information supplements the nameplate markings affixed to the product and the 3582 and 3582i Positioners, 582i Electro-Pneumatic Converter, and 3583 Valve Stem Position Transmitter instruction manual ([D200138X012](#)), available from your [Emerson sales office](#) or Local Business Partner, or at [www.Fisher.com](#).

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

These Special Instructions for “Safe Use” and Installation in Hazardous Locations also apply to 3582i positioners.

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### **⚠ WARNING**

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

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### Standards Used for Certification

EN 60079-0: 2012	EN 60079-31: 2009
EN 60079-1: 2007	EN 61241-0: 2006
EN 60079-11: 2012	EN 61241-1: 2004
EN 60079-15: 2010	EN 61241-11: 2006

## Special Conditions for Safe Use

### Intrinsically Safe

This equipment is intrinsically safe and can be used in potentially explosive atmospheres.

The electrical parameters of certified equipment which can be connected to the device must not exceed one of these following values:

$U_o \leq 30 \text{ Vdc}$  ;  $I_o \leq 150 \text{ mA}$  ;  $P_o \leq 1.25 \text{ W}$

Ambient temperature:

T6, at  $T_{amb} = 47^\circ\text{C}$  ; T5, at  $T_{amb} = 62^\circ\text{C}$  ; T4, at  $T_{amb} = 71^\circ\text{C}$

### Flameproof

The flame path is other than required by EN 60079-1. Contact the manufacturer for information on the dimensions of the flameproof joints.

Electrical connections are typically made using either cable or conduit.

- If using a cable connection, the cable entry device shall be certified in type of explosion protection flameproof enclosure “d”, suitable for the conditions of use and correctly installed.

For ambient temperatures over  $70^\circ\text{C}$ , cables and cable glands suitable for at least  $90^\circ\text{C}$  shall be used.

- If using a rigid conduit connection, an Ex d certified sealing device such as a conduit seal with setting compound shall be provided immediately to the entrance of the enclosure.

For ambient temperatures over  $70^\circ\text{C}$ , the wiring and setting compound in the conduit seal shall be suitable for at least  $90^\circ\text{C}$ .

### Type n

No special conditions for safe use.

Refer to table 1 for additional information.

Table 1. Hazardous Area Classifications<sup>(1)</sup>

Certificate	Certification Obtained	Entity Rating	Temperature Code
ATEX	⊕ II 1 G & D		
	Intrinsically Safe Gas Ex ia IIC T4/T5/T6 Ga	U <sub>i</sub> = 30 VDC I <sub>i</sub> = 150 mA P <sub>i</sub> = 1.25 W C <sub>i</sub> = 0 nF L <sub>i</sub> = 0 mH	T4 (T <sub>amb</sub> ≤ 71°C) T5 (T <sub>amb</sub> ≤ 62°C) T6 (T <sub>amb</sub> ≤ 47°C)
	Dust Ex ia IIIC Da T109 °C (T <sub>amb</sub> ≤ 71°C) / T100 °C (T <sub>amb</sub> ≤ 62°C) / T85 °C (T <sub>amb</sub> ≤ 47°C)		---
	⊕ II 2 G & D		
	Flameproof Gas Ex d IIC T6 Gb	---	T6 (T <sub>amb</sub> ≤ 71°C)
	Dust Ex tb IIIC T74 °C Db (T <sub>amb</sub> ≤ 71°C)		---
	⊕ II 3 G & D		
	Type n Gas Ex nA IIC T6 Gc	---	T6 (T <sub>amb</sub> ≤ 71°C)
Dust Ex tc IIIC Dc T85°C (T <sub>amb</sub> ≤ 71°C)	---		

1. These hazardous area classification also apply to 3582i positioners.

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