

# NEPSI Hazardous Area Approvals Fisher™ FIELDVUE™ DVC2000 Digital Valve Controller

## 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 DVC2000 quick start guide ([D103203X012](#)) and instruction manual ([D103176X012](#)), available from your [Emerson sales office](#), Local Business Partner, or [www.Fisher.com](#).

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

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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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#### Intrinsically Safe

Certificate Number GYJ16.1384X

Ex ia II C T4/T5 Ga

#### Special Conditions for Safe Use

The suffix “X” placed after the certificate number indicates that this product is subject to special conditions for safe use, that is:

1. For EPL Ga applications, at the metallic parts of the products made of light metal there is a danger of ignition by impact or friction.
2. At the plastic parts of the products, there is a danger of ignition by electrostatic discharge. Observe manual of the manufacturer and warning label.

### Conditions for Safe Use

1. The external earth connection facility should be connected reliably.
2. The relationship between temperature class and the ambient temperature is shown as following:

Temperature class	Ambient temperature range
T5	-40°C ~ +40°C
T4	-40°C ~ +80°C

3. This product should be used in explosive gas atmospheres together with approved associated apparatus, follow the instruction manual of this product and associated apparatus when connecting the wiring. Connect the wiring terminals correctly.
4. Intrinsically safe parameters:

Circuit	Ui (V)	Li (mA)	Pi (W)	Ci (nF)	Li (mH)
Main 4-20 mA	30	130	1	10.5	0.55
XMTR circuit	28	100	1	5	0
Limit switch 1 (LS1)	16	76	1	5	0
Limit switch 1 (LS2)	16	76	1	5	0

5. Connecting cable between this product and associated apparatus should be insulated screen cable; connect the cable screen functionally to earth ground.
6. The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.
7. For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:
  - GB50257-2014 “Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”.
  - GB3836.13-2013 “Explosive atmospheres-Part 13: Equipment repair, overhaul and reclamation”.
  - GB3836.15-2000 “Electrical apparatus for explosive gas atmospheres-Part 15: Electrical installations in hazardous area (other than mines)”
  - GB3836.16-2006 area “Electrical apparatus for explosive gas atmospheres-Part 16: Inspection and maintenance of electrical installation (other than mines)”.
  - GB3836.18-2010 “Explosive atmospheres-Part 18: Intrinsically safe system”.

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