

# NEPSI Hazardous Area Approvals for Fisher® FIELDVUE™ DLC3010 Digital Level Controller

This supplement provides NESPI Hazardous Area Approval information for the DLC3010 digital level controller.

NEPSI—National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation. NEPSI approval is accepted in China.

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

Refer to the [DLC3010 quick start guide, D103214X012](#) or [instruction manual, D102748X012](#) for all other information regarding the DLC3020f digital level controller. If additional information regarding these products is required, please contact your [Emerson Process Management sales office](#).



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## Note

This information supplements the nameplate markings affixed to the product.

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, and area re-classification.**

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### Intrinsically Safe

Certificate Number GYJ15.1098X

Ex ia IIC T5 Ga

Ex iaD 20 T83

### 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:

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.

### Conditions for Safe Use

1. The external earth connection facility shall be connected reliably.
2. Ambient temperature range: -40°C ~ +80°C.
3. This product should be used in explosive gas atmospheres/combustible dust 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. The intrinsically safe parameters are shown as follows:

Ui (V)	Ii (mA)	Pi (W)	Ci (nF)	Li (mH)
30	226	1.4	5.5	0.4

5. Connecting cable between this product and associated apparatus should be insulated screen cable; connect the cable screen functionally to earth ground.
6. Clean the surface of this product termly when using in combustibile dust atmosphere.
7. After installation, degree of protection of enclosure is at least IP66 according to GB4208-2008.
8. The cable glands and blanking plugs to be used shall be suitable for the product working conditions.
9. The user shall not change the configuration in order to maintain/ensure the explosion protection performance of the equipment. Any change may impair safety.
10. For installation, use and maintenance of this product, the end user shall observe the instruction manual and the following standards:  
 GB50257-1996 “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 “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”.  
 GB15577-2007 “Safety regulations for dust explosion prevention and protection”. (Only if installed in dust hazardous areas).  
 GB12476.2-2010 “Electrical apparatus for use in the presence of combustibile dust- Part 2: Selection and installation”. (Only if installed in dust hazardous areas)

### Flameproof

Certificate Number GYJ15.1096X

Ex d IIC T5 Gb;

Ex tD A21 IP66 T83°C

### 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:

For information on the dimensions of the flameproof joints contact the manufacturer.

### Conditions for Safe Use

1. The external earth connection facility should be connected reliably.
2. Ambient temperature range: -40°C ~ +80°C.
3. Electrical data:  $U \leq 30V$ ,  $I \leq 226mA$ ,  $P \leq 1.4W$ .
4. As the flameproof product, suitable certified cable glands or blanking plugs for unused holes approved by ExTL according to GB3836.1-2010 and GB3836.2-2010 with Ex marking “Ex d IIC Gb” shall be used and correctly installed; as the dust product, suitable certified cable glands or blanking plugs for unused holes approved by ExTL according to GB12476.1-2013 and GB12476.5-2013 with Ex marking “Ex tD A21 IP66” shall be used and correctly installed, after installation, degree of protection of enclosure is at least IP66 according to GB4208-2008. The cable glands and blanking plugs to be used shall be suitable for the product working conditions.
5. Any maintenance shall be performed only when the warning of “Do not open when energized” is observed.
6. Clean the surface of this product termly when using in combustibile dust atmosphere.

7. Use the connection cable which is at least endurance to 83°C when wiring.
8. The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.
9. For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:
  - GB50257-1996 “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 “Electrical apparatus for explosive gas atmospheres- Part 16: Inspection and maintenance of electrical installation (other than mines)”.
  - GB15577-2007 “Safety regulations for dust explosion prevention and protection”. (Only if installed in dust hazardous areas)
  - GB12476.2-2010 “Electrical apparatus for use in the presence of combustible dust- Part 2: Selection and installation”. (Only if installed in dust hazardous areas)

**Type n**

Certificate Number GYJ15.1097

Ex nA IIC T5 Gc;

Ex tD A22 IP66 T83°C

**Conditions for Safe Use**

1. The external earth connection facility should be connected reliably.
2. Ambient temperature range: -40°C ~ +80°C.
3. Electrical data:  $U \leq 30V$ ,  $I \leq 226mA$ ,  $P \leq 1.4W$ .
4. As “nA” product, suitable certified cable glands or blanking plugs for unused holes approved by ExTL according to GB3836 shall be used and correctly installed; as the dust product, suitable certified cable glands or blanking plugs for unused holes approved by ExTL according to GB12476.1-2013 and GB12476.5-2013 with Ex marking “Ex tD A21 IP66” shall be used and correctly installed, after installation, degree of protection of enclosure is at least IP66 according to GB4208-2008. The cable glands and blanking plugs to be used shall suitable for the product working conditions.
5. Any maintenance shall be performed only when the warning of “Do not open when energized” is observed.
6. Clean the surface of this product termly when using in combustible dust atmosphere.
7. Use the connection cable which is at least endurance to 83°C when wiring.
8. The user shall not change the configuration in order to maintain/ensure the explosion protection performance of this product. Any change may impair safety.
9. For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:
  - GB50257-1996 “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 “Electrical apparatus for explosive gas atmospheres- Part 16: Inspection and maintenance of electrical installation (other than mines)”.
  - GB15577-2007 “Safety regulations for dust explosion prevention and protection”. (Only if installed in dust hazardous areas)
  - GB12476.2-2010 “Electrical apparatus for use in the presence of combustible dust- Part 2: Selection and installation”. (Only if installed in dust hazardous areas)

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