ATEX and IECEx Hazardous Area Approvals Fisher™ FIELDVUE™ DLC3100 Digital Level 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.

Note

This information supplements the nameplate markings affixed to the product and the DLC3100 quick start guide (D104214X012), available from your Emerson sales office or 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, or area re-classification.

1. Two 1/2-14 NPT entries available for conduit connection.
2. Cable gland must be Ex certified in accordance with the intended use of the apparatus (Ex db or Ex tb)
3. Blanking elements shall be used if an entry to this apparatus is not used. The blanking element must be Ex certified in accordance with the intended use of the apparatus (Ex db or Ex tb).
4. Thread adapters must be Ex certified in accordance with the intended use of the apparatus (Ex db or Ex tb).
5. A thread adapter cannot be used with an Ex db blanking element.
6. Only one thread adaptor can be used with an Ex db cable gland.
7. Manufacturer must be contacted for any repairs involving flameproof joints.
8. Coating instrument with paint or powder-coat finish is not permitted.
9. Lubribond 320 must be used as lubricant when needed to maintain the terminal box flameproof joint.
10. In Ex tb applications, the front cover shall not be removed to gain access to the field wiring connections or in-service adjusting facilities.
11. Temperature at wiring entry point may exceed 80°C, appropriate conductors and adaptors for this temperature must be used. For Ex nA and Ex tc, see Specific Conditions of Use below.
12. External terminal ground cabling must be 4 mm^2 minimum for ATEX and IECEx.
13. 16-26 AWG size is recommended for installation per terminal block supplier.

Specific Conditions Of Use

For Ex ia Ga + Ex ia Da

1. Repairs of flameproof joints should not be undertaken by the end user. In the event that a flameproof joint must be repaired, contact the manufacturer.
2. The special fasteners can be replaced only by the identical fasteners - contact the manufacturer.

For Ex db + Ex tb

3. The equipment should be equipped with suitably certified entry accessories with a compatible mode of protection for the intended use.
4. At Tamb ≤ 75°C, the cable used shall have an operating temperature greater than 80°C.

Table 1. Approval Information, ATEX

Certificate	Approval	Standards Applied	Certification Obtained
ATEX	Flameproof and Dust	EU Directive 2014/34/EU EN 60079-0:2012 + A11:2013 EN 60079-1:2014 EN 60079-31:2014	Ex db IIC T5(Ta≤75°C)/T6(Ta≤55°C) Gb Ex tb IIIC T78°C Db
	Intrinsic Safety and Dust	EU Directive 2014/34/EU EN 60079-0:2012 + A11:2013 EN 60079-11:2012	Ex ia IIC T5(Tamb ≤ 80°C)/T6(Tamb ≤ 55°C) Ga Ex ia IIIC T100°C(Tamb ≤ 80°C)/T85(Tamb ≤ 55°C) Da Per Drawing GG57089 (see figure 3)

Table 2. Approval Information, IECEx

Certificate	Approval	Standards Applied	Certification Obtained
IECEx	Flameproof and Dust	IEC 60079-0:2011 IEC 60079-1:2014 IEC 60079-31:2013	Ex db IIC Gb T5(Ta≤75°C)/T6(Ta≤55°C) Ex tb IIIC Db T78°C
	Intrinsic Safety and Dust	IEC 60079-0:2011 IEC 60079-11:2011	Ex ia IIC T5(Tamb ≤ 80°C)/T6(Tamb ≤ 55°C) Ga Ex ia IIIC T100°C(Tamb ≤ 80°C)/T85(Tamb ≤ 55°C) Da Per Drawing GG57089 (see figure 3)

Figure 1. DLC3100—ATEX/IECEx Flameproof and Dust Nameplate

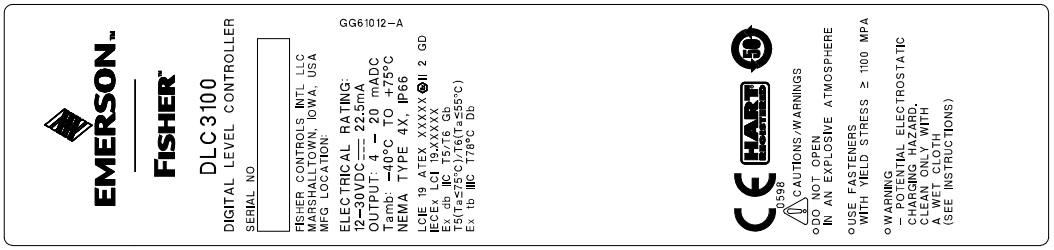


Figure 2. DLC3100—ATEX/IECEx Intrinsically Safe and Dust Nameplate

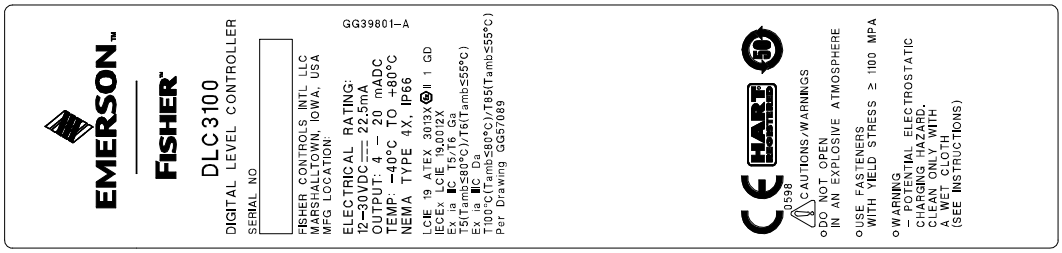
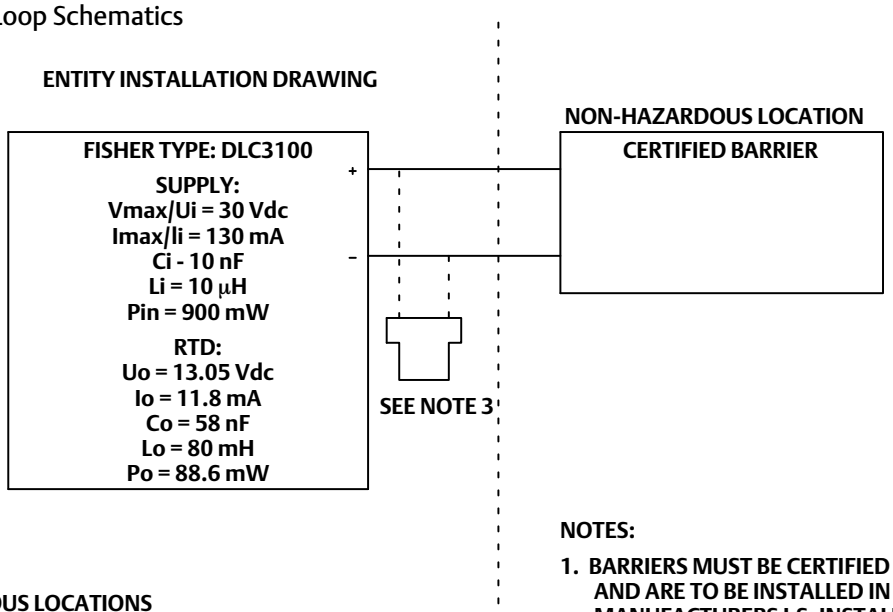


Figure 3. Loop Schematics



HAZARDOUS LOCATIONS
ATEX AND IECEx:
Ex ia IIC T5 (Tamb ≤ 80°C) / T6 (Tamb ≤ 55°C) Ga
Ex ia IIIC T100 (Tamb ≤ 80°C) / T85 (Tamb ≤ 55°C) Da

NOTES:

1. **BARRIERS MUST BE CERTIFIED WITH ENTITY PARAMETERS AND ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS I.S. INSTALLATION INSTRUCTIONS.**
2. **IF HAND-HELD COMMUNICATOR OR MULTIPLEXER IS USED, IT MUST BE CERTIFIED AND INSTALLED PER THE MANUFACTURE'S CONTROL DRAWING.**
3. **FOR ENTITY INSTALLATION: Vmax > Voc, Imax > Isc Ci + Ccable < Ca, Li + Lcable < La**

GG57089

Emerson Automation Solutions
Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Cernay, 68700 France
Dubai, United Arab Emirates
Singapore 128461 Singapore

www.Fisher.com