



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

### Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX FMG 11.0029U** Page 1 of 5 [Certificate history:](#)  
Issue 0 (2012-03-26)

Status: **Current** Issue No: 1

Date of Issue: 2020-07-14

Applicant: **Pushna International**  
4151 Bluebonnet Dr.,  
Stafford, TX 77477.  
**United States of America**

Ex Component: 1010, 1110, 1014, 1114, 1016, 1116 Series Housings

*This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).*

Type of Protection: **Flameproof, "d"; Enclosure, "t"**

Marking: IECEx FMG 11.0029U

Ex db IIC Gb

Ex tb IIIC Db

Refer to the certificate attachment for product temperature range and ingress protection ratings.

Approved for issue on behalf of the IECEx  
Certification Body:

**J. E. Marquedant**

Position:

**VP, Manager - Electrical Systems**

Signature:  
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**FM Approvals LLC**  
1151 Boston-Providence Turnpike  
Norwood, MA 02062  
United States of America





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Manufacturer: **Pushna International**  
4151 Bluebonnet Dr.,  
Stafford, TX 77477.  
**United States of America**

Additional  
manufacturing  
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-1:2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

**IEC 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[US/FMG/ExTR11.0035/00](#)

[US/FMG/ExTR11.0035/01](#)

Quality Assessment Report:

[GB/FME/QAR12.0006/09](#)



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**Ex Component(s) covered by this certificate is described below:**

***1010PAEa-b Housing.***

***1010PATa-b Housing.***

a = Certifications I, M, T or BLANK.

b = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

***1110PAEa-b Housing.***

***1110PATa-b Housing.***

a = Certifications I, M, T or BLANK.

b = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

***1010PWEa-b Housing.***

***1010PWTa-b Housing.***

a = Certifications I, M, T or BLANK.

b = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

***1110PWEa-b Housing.***

***1110PWTa-b Housing.***

a = Certifications I, M, T or BLANK.

b = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

***101aPSEb-c Housing.***

***101aPSTb-c Housing.***

a = Material grade 4 or 6.

b = Certifications I, M, T or BLANK.

c = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

***111aPSEb-c Housing.***

***111aPSTb-c Housing.***

a = Material grade 4 or 6.

b = Certifications I, M, T or BLANK.

c = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.



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## **SCHEDULE OF LIMITATIONS:**

Refer to the certificate attachment.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Add M24 threaded entry option, add Viton as an alternate cover o-ring material (models denoted as 1110, 1114, 1116), evaluate the enclosure for a lower ambient temperature for Ex tb, add IP66 rating and update the product examination to the latest versions of the standards.

**Annex:**

[Annex to Certificate IECEx FMG 11.0029U - Issue 1\\_1.pdf](#)

## IECEX FMG 11.0029U, Issue 1

### Product Ratings:

Ex db IIC Gb

Ta = -20°C to +125°C, IP66/68 (1010, 1014, 1016 Series; except 1010PW)

Ta = -20°C to +80°C, IP66/68 (1010PW)

Ta = -16°C to +125°C, IP66 (1110, 1114, 1116 Series; except 1110PW)

Ta = -16°C to +80°C, IP66 (1110PW)

Ex tb IIC Db

Ta = -50°C to +125°C, IP66/68 (1010, 1014, 1016 Series; except 1010PW)

Ta = -50°C to +80°C, IP66/68 (1010PW)

Ta = -16°C to +125°C, IP66 (1110, 1114, 1116 Series; except 1110PW)

Ta = -16°C to +80°C, IP66 (1110PW)

### Schedule of Limitations:

1. The enclosure service temperature range is according to the following table. The user/installer shall take the necessary precautions to ensure that the enclosure service temperature limits are not exceeded in the end use application.

Atmosphere	Service Temperature Range	Seal	Notes
Gas (Ex db)	-20°C to +80°C	EPDM	1010PW models only
Gas (Ex db)	-20°C to +125°C	EPDM	
Gas (Ex db)	-16°C to +80°C	Viton	1110PW models only
Gas (Ex db)	-16°C to +125°C	Viton	
Dust (Ex tb)	-50°C to +80°C	EPDM	1010PW models only
Dust (Ex tb)	-50°C to +125°C	EPDM	
Dust (Ex tb)	-16°C to +80°C	Viton	1110PW models only
Dust (Ex tb)	-16°C to +125°C	Viton	

2. Follow the manufacturer's instructions to reduce the potential of an electrostatic charging hazard on the surface of the enclosure.
3. The flameproof joints are not intended to be repaired.
4. The enclosure is supplied with two entries located on the base and oriented 90° from one another. The entries are available as 1/2 inch NPT, 3/4 inch NPT, 1/2 inch BSPP, M20 or M24.
5. Oil-filled circuit-breakers and/or contactors are not permitted to be used within the enclosure.
6. Rotating machines, or other devices which create turbulence, are not permitted to be used within the enclosure.
7. The contents of the enclosure may be placed in any arrangement provided that an area of at least 40% of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5 mm.