1 EU-TYPE EXAMINATION CERTIFICATE

2 **Component intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**

3 **EU-Type Examination Certificate No:** **FM08ATEX0010U**

4 **Component: (Type Reference and Name)** **1010, 1110, 1014, 1114, 1016 and 1116 Series Housings**

5 **Name of Applicant:** **Pushna International Inc.**

6 **Address of Applicant:** **4151 Bluebonnet Drive**
Stafford, TX 77477
United States of America

7 This component and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February, 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3031933EC dated 23rd June 2008

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014 and
EN 60529:1991+1:2000 +A2:2013

10 The sign 'U' placed after the certificate number indicates that this certificate must not be mistaken for a certificate for equipment or a protective system. This certificate may only be used as the basis for the certification of equipment or a protective system.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified component in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

Digitally signed by Richard Zammitt
DN: cn=Richard Zammitt, o, ou=FM Approvals Europe Limited, email=richard.zammitt@fmapprovals.com, c=IE

Richard Zammit
Certification Manager, FM Approvals Europe Ltd.

Issue date: 16th July 2020

SCHEDULE

to EU-Type Examination Certificate No. FM08ATEX0010U

12 The marking of the component shall include:

1010PWE/PWT Series:
II 2 G Ex db IIC Gb Ta = -20°C to +80°C IP66/68
II 2 D Ex tb IIIC Db Ta = -50°C to +80°C IP66/68

1110PWE/PWT Series:
II 2 G Ex db IIC Gb Ta = -16°C to +80°C IP66
II 2 D Ex tb IIIC Db Ta = -16°C to +80°C IP66

1010PAE/PAT, 1014PSE/PST, 1016PSE/PST Series:
II 2 G Ex db IIC Gb Ta = -20°C to +125°C IP66/68
II 2 D Ex tb IIIC Db Ta = -50°C to +125°C IP66/68

1110PAE/PAT, 1114PSE/PST, 1116PSE/PST Series:
II 2 G Ex db IIC Gb Ta = -16°C to +125°C IP66
II 2 D Ex tb IIIC Db Ta = -16°C to +125°C IP66

13 **Description of Component:**

The 1010, 1110, 1014, 1114, 1016 and 1116 Series Housings consist of an assembly of a threaded blank cover and base. The base contains two openings that are available as either ½ inch-14 NPT, ¾ inch-14 NPT M20 x 1.5 mm or M24 x 1.5 mm. One opening is located in the side of the body while the other is located in the bottom of the body. The 1010 Series Housings are constructed of ADC-12 Aluminum Alloy that is either silver painted or blue epoxy-painted. The 1014 Series Housings are constructed of 304 Stainless Steel while the 1016 Series Housings are constructed of 316 Stainless Steel. The housing is provided with internal and external grounding facilities. An o-ring is provided between the cover and base for environmental protection. The installed o-ring material dictates the service temperature range of the enclosure. The housings have an approximate free internal volume of 140 cm^3.

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.

14 **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 ½ inch NPT, ¾ inch NPT, ½ 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.

15 **Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

SCHEDULE

to EU-Type Examination Certificate No. FM08ATEX0010U

16 **Test and Assessment Procedure and Conditions:**

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim, FM Approvals Europe Ltd accepts no responsibility for the compliance of the component against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

17 **Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
12th August 2008	Original Issue.
21st April 2012	Supplement 1: Report Reference: Supplement 1 to Report No. 3031933EC dated 26th March 2012. Description of the Change: Added alternate housing cover. Updated examination against EN 60079-0:2009. Added examination against EN 60079-31. Added IPx8 ingress protection rating. Minor model code and schedule of limitations revisions.
03rd June 2016	Supplement 2: Report Reference: 3058534 dated 11th May 2016. Description of the Change: An updated examination against EN 60079-0:2012 + A11:2013, EN 60079-1:2014 and EN 60079-31:2014 was performed. The products were found to comply with the latest versions of these standards. The examination includes an updated EHSR questionnaire. As the manufacturer chooses to leave their markings unchanged, the standards listed on this certificate are also unchanged.
16th July 2020	Supplement 3: Report Reference: PR451554 dated 14th July 2020. Description of the Change: Addition of alternate Viton o-ring material, M24 thread and reintroduction of IP66 rating. EN 60079-0, EN 60079-1 and EN 60079-31 have been updated to the latest editions. Added A2 to EN 60529. Certificate transferred from FM Approvals Ltd., notified body no. 1725, to FM Approvals Europe Ltd., notified body no. 2809.

Blueprint Report

Pushna International Inc (1000010533)

Class No 3615

Original Project I.D. 3031933

Certificate I.D. FM08ATEX0010U

Drawing No.	Revision Level	Drawing Title	Last Report
1010-MUL1-A	06/11/2020	ASSEMBLING-1010/1110 PAEM, PAET, PAEI, PAEH	PR451554
1010-MUL2-A	06/11/2020	ASSEMBLING-1010/1110 PWEM, PWET, PWEI, PWEH	PR451554
1010-T-A	06/11/2020	ASSEMBLING-1010/1110A-W-T	PR451554
1014-MUL-A	06/11/2020	ASSEMBLING-1014/1114 PSEM, PSET, PSEI, PSEH	PR451554
1016-4-T-A	06/11/2020	ASSEMBLING-1016/1116/4-T	PR451554
1016-MUL-A	06/11/2020	ASSEMBLING-1016/1116 PSEM, PSET, PSEI, PSEH	PR451554
BODY-M-AL	06/11/2020	BODY-AL (MACHINING)	PR451554
BODY-M-SS	06/11/2020	BODY-SS (MACHINING)	PR451554
CAP2-C-AL	06/11/2020	CAP2-AL (CASTING)	PR451554
CAP2-M-AL	06/11/2020	CAP2-AL (MACHINING)	PR451554
CAP3-C-AL-MUL	02/21/2012	CAP3-AL-MUL (CASTING)	3044782
CAP3-C-SS	06/11/2020	CAP3-SS (CASTING)	PR451554
CAP3-M-SS	1	CAP3-SS (MACHINING)	PR451554
CAP3.M-M-AL-MUL	1	CAP3.M-AL-MUL (MACHINING)	PR451554
CAP4-C-SS-MUL	02/21/2012	CAP4-SS-MUL (CASTING)	3044782
CAP4.M-M-SS-MUL	1	CAP4.M-SS-MUL (MACHINING)	PR451554
GROUND CLAMP	05/22/2008	GROUND CLAMP	3031933
NP-1	06/11/2020	NAME PLATE-1	PR451554
O-RING-V	1	O-RING	PR451554
O-RING	02/21/2012	O-RING	3044782
PUM-001	4	END USER'S MANUAL	PR451554

CERTIFICATE OF CONFORMITY

1. **HAZARDOUS (CLASSIFIED) LOCATION COMPONENT PER US REQUIREMENTS**
2. **Certificate No:** **FM19US0201U**
3. **Component:** **1010, 1110, 1014, 1114, 1016 and 1116 Series Housings**
   (Type Reference and Name)
4. **Name of Listing Company:** **Pushna International Inc.**
5. **Address of Listing Company:** **4151 Bluebonnet Drive**
   Stafford, TX 77477
6. The examination and test results are recorded in confidential report number:

   3031933 dated 23rd June 2008

7. FM Approvals LLC, certifies that the component described has been found to comply with the following Approval standards and other documents:

   FM Class 3600:2018, FM Class 3615:2018, FM Class 3616:2011, FM Class 3810:2005, ANSI/NEMA 250:2014, ANSI/IEC 60529:2004

8. The sign 'U' placed after the certificate number indicates that this certificate must not be mistaken for a certificate for equipment or a protective system. This certificate may only be used as the basis for the certification of equipment or a protective system. This certificate is issued to the manufacturer also intended to be the holder of the equipment certificate which includes this component.

9. This certificate relates to the design, examination and testing of the component specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the component as examined, tested and Approved.

Certificate issued by:

J. E. Marquedant
VP, Manager - Electrical Systems

14 July 2020
Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE

US Certificate Of Conformity No: FM19US0201U

10. Component Ratings:

Explosionproof for Class I, Division 1, Groups B, C and D; Dust-ignitionproof for Class II/III, Division 1, Groups E, F and G hazardous (classified) locations, indoors and outdoors (Type 4X, IP66/68) with an ambient temperature rating of -50°C (or -16°C) to +80°C (or +125°C). As permitted by the NEC, the product is also marked Class I Zone 1, IIB+H2 and Zone 21, Group IIIC.

11. The marking of the component shall include:

1010PWE Series:
Class I, Division 1, Groups B, C, D Ta = -50°C to +80°C, Type 4X, IP66/68
Class II/III, Division 1, Groups E, F, G Ta = -50°C to +80°C, Type 4X, IP66/68
Class I, Zone 1, IIB+H2 Ta = -50°C to +80°C, Type 4X, IP66/68
Zone 21, Group IIIC Ta = -50°C to +80°C, Type 4X, IP66/68

1110PWE Series:
Class I Division 1, Groups B, C, D Ta = -16°C to +80°C, IP66
Class II/III, Division 1, Groups E, F, G Ta = -16°C to +80°C, IP66
Class I, Zone 1, IIB+H2 Ta = -16°C to +80°C, IP66
Zone 21, Group IIIC Ta = -16°C to +80°C, IP66

1010PAE, 1014PSE, 1016PSE Series:
Class I Division 1, Groups B, C, D Ta = -50°C to +125°C, Type 4X, IP66/68
Class II/III,, Division 1, Groups E, F, G Ta = -50°C to +125°C, Type 4X, IP66/68
Class I, Zone 1, IIB+H2 Ta = -50°C to +125°C, Type 4X, IP66/68
Zone 21, Group IIIC Ta = -50°C to +125°C, Type 4X, IP66/68

1110PAE, 1114PSE, 1116PSE Series:
Class I, Division 1, Groups B, C, D Ta = -16°C to +125°C, IP66
Class II/III, Division 1, Groups E, F, G Ta = -16°C to +125°C, IP66
Class I, Zone 1, IIB+H2 Ta = -16°C to +125°C, IP66
Zone 21, Group IIIC Ta = -16°C to +125°C, IP66

12. **Description of Equipment:**

The 1010, 1110, 1014, 1114, 1016 and 1116 Series Housings consist of an assembly of a threaded blank cover and base. The base contains two openings that are available as either ½ inch-14 NPT, ¾ inch-14 NPT M20 x 1.5 mm or M24 x 1.5 mm. One opening is located in the side of the body while the other is located in the bottom of the body. The 1010 Series Housings are constructed of ADC-12 Aluminum Alloy that is either silver painted or blue epoxy-painted. The 1014 Series Housings are constructed of 304 Stainless Steel while the 1016 Series Housings are constructed of 316 Stainless Steel. The housing is provided with internal and external grounding facilities. An o-ring is provided between the cover and base for environmental protection. The installed o-ring material dictates the service temperature range of the enclosure. The housings have an approximate free internal volume of 140 cm^3.

1010PAEa-b Housing.
a = Certifications H, M or BLANK.
b = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

SCHEDULE

US Certificate Of Conformity No: FM19US0201U

1110PAEa-b Housing.
a = Certifications H, M 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.
a = Certifications H, M 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.
a = Certifications H, M 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.
a = Material grade 4 or 6.
b = Certifications H, M 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.
a = Material grade 4 or 6.
b = Certifications H, M or BLANK.
c = Threaded entries 01, 02, 03, 04, 05, 06, 07, 08, 11, 12, 13, 14, 15, 16, 17 or 18.

13. **Schedule of Limitations:**

1. The flameproof joints are not intended to be repaired.
2. Oil-filled circuit-breakers and/or contactors are not permitted to be used within the enclosure.
3. Rotating machines, or other devices which create turbulence, are not permitted to be used within the enclosure.

4. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

5. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

6. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
23rd June 2008	Original Issue.

SCHEDULE

US Certificate Of Conformity No: FM19US0201U

14th July 2020	Supplement 2: Report Reference: PR451554 dated 14th July 2020. Description of the Change: Addition of alternate Viton o-ring material, M24 thread and reintroduction of IP66 rating. Updated examination against FM 3616. Standards updated to the latest edition, where applicable. Certificate updated to the new format.

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx FMG 11.0029U**

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 or use of this QR Code.

Certificate issued by:

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

FM Approvals
Member of the FM Global Group

IECEx Certificate of Conformity

Certificate No.: **IECEx FMG 11.0029U**

Date of issue: 2020-07-14 Issue No: 1

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

IECEx Certificate of Conformity

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.

IECEx Certificate of Conformity

SCHEDULE OF LIMITATIONS:

Refer to the certificate attachment.

IECEx Certificate of Conformity

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 IIIC 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 unimpended 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.

Certificate of Compliance

Certificate: 80052245 **Master Contract:** 238720

Project: 80052245 **Date Issued:** 2020-09-08

Issued To: **Pushna International Inc.**
4151 Bluebonnet Dr
Stafford, Texas, 77477
United States
Attention: Sunil Karamchandani

The products listed below are eligible to bear the CSA Mark shown

Issued by: *Khushboo Patel*
Khushboo Patel

PRODUCTS

4418 02 - OUTLET BOXES AND FITTINGS Boxes - For Hazardous Locations

Class I, Division 1, Groups B, C, D; Class II, Division 1, Groups E, F, G; Class III

Explosion-Proof Housings 1010PAEa-b, 1010PWEa-b, 1014PSEa-b, and 1016PSEa-b; Type 4X and IP 66/IP68 (1m/1hr) -50° C to 125°C (model 1010PWE a-b rated for -50°C to 80°)
Explosion proof Housing 1110PAE a-b,1110PWE a-b,1114PSE a-b,1116PSE a-b IP66 -16°C to 125°C (Except model 1110 PWE a-b- Tamb: -16 °C to 80°C)

Model Nomenclature as below:
a=Label shape & Listed certification bodies: blank, H, M
b=Threaded entries: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18
Models 1010 series with EPDM O-ring controls lower Tamb of -50°C or with Viton O-ring controls Tamb of -16°C
Model 1110 series controls lower Tamb of -16°C for assembly with Viton O-ring
Assembly with Aluminum/Stainless steel construction controls higher Tamb of 125°C
Models with PWE designation are epoxy coated which controls higher Tamb of 80 °C

Conditions of Acceptaility:
1. The flameproof joints are not intended to be repaired.
2. Oil-filled circuit-breakers and/or contactors are not permitted to be used within the enclosure.
3. Rotating machines, or other devices which create turbulence, are not permitted to be used within the enclosure.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 25-2017	Enclosures for Use in Class II Groups E, F, and G Hazardous Locations
CSA C22.2 No. 30-M1986 (R2016)	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CSA C22.2 No. 94.2-2015	Enclosures for Electrical Equipment, Environmental Considerations
CSA C22.2 No. 60529:2016	Degrees of Protection Provided Enclosure (IP Code)

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark, without any adjacent indicators, indicating that products have been manufactured to the requirements of Canadian Standards.

All markings shall be in accordance with the requirements of the local regulatory authorities and related standards.

- Hazardous Location designation: As specified in the PRODUCTS section, above (may be abbreviated).
- Cautions on use in hazardous locations “OPEN CIRCUIT BEFORE REMOVING COVER and OUVRIR LE CIRCUIT AVANT D'ENLEVER LE COUVERCLE”.
- Manufacturer’s name: "PUSHNA", or CSA Master Contract Number “238720”, adjacent to the CSA Mark in lieu of manufacturers name.
- Model number: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMYY format, or serial number, traceable to month of manufacture.
- Enclosure ratings: As specified in the PRODUCTS section, above.
- The CSA Mark, as shown on the Certificate of Compliance.

Note:

- The manufacturers name and the cautionary statement are embossed on the cover.
- *Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".*

Method of marking: The manufacturer’s etched stainless steel nameplates are permanently secured with stainless steel rivets onto the surface of the housing cover. Depending on which style housing cover is used, the nameplates can be full-moon or half-moon shape.

Supplement to Certificate of Compliance

Certificate: 80052245 **Master Contract:** 238720

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80052245	2020-09-08	Update to report 2061370 has been done to add model 1110 which uses viton O-ring, M20x 1.5P/M24x1.5P entries, add IP rating, update manufacturers address and update standards.
2524038	06-18-2012	Update to report 2061370 to include new drawings for an alternate Housing and nameplates for series 1010, 1014 and 1016. Update Housings ingress rating from IP66 to IP68 using FM Test Report
2158615	05-28-2009	Update to report 2061370 to change drawings 1010-E-A and 1016-E-A dates from 05/22/2008 to 06/20/2008. They had the incorrect dates in the original report and no drawings were changed under this project.
2061370	09-12-2008	Original Certification - Explosion-Proof Housings 1010PAE-a, 1010PWE-a, 1014PSE-a, and 1016PSE-a; Class I, Division 1, Groups BCD;Class II, Div. 1, Grps EFG;Class III, Type 4X, IP66.