EU-TYPE EXAMINATION CERTIFICATE



Component intended for use on/in Equipment or Protective System [2] Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- EU-Type Examination Certificate Number: DEMKO 05 ATEX 0419382U Rev. 2 [3]
- Component: Empty Flameproof Enclosures, Type CXJ Series [4]
- Manufacturer: Akron Electric. Inc. [5]
- Address: 1025 Eagon Street, Barberton, OH 44203 USA [6]
- [7] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of the European Parliament and the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 3353658.929926

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013

EN 60079-1:2014

- The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an [10] equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- [11] This EU-Type Examination Certificate relates only to the design and construction of the specified component. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- [12] The marking of the component shall include the following:



 $\langle \mathcal{E} \mathsf{x} \rangle$ II 2 G Ex db IIB + H₂ Gb

Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Component described herein ("Certified Component") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the component sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured component. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all products to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2005-05-17 Re-issued: 2017-02-17

Notified Body

UL International Demko A/S, Ballerup 5A, 2750 Ballerup, Denmark Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

[13]

[14]

Schedule **EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 05 ATEX 0419382U Rev. 2**

[15] Description of Component:

The rectangular shaped, bolted flanged, empty, flameproof CXJ 4164, 664, 684, 685, 686, 6104, 6115, 6124, 6126, 6135, 6164, 6186, 6485, 7104, 7106, 7185, 884, 886, 888, 8104, 8106, 8108, 8124, 8126, 8128, 9115, 10104, 10106, 10108, 10144, 10146, 10148, 12124, 12126, 12128, 12126LW, 12184, 12186, 12188, 12205, 12244, 12246, 12248, 122410, 12306, 12364, 12366, 12368, 12468, 14144, 14146, 14148, 14286, 16164, 16166, 16168, 161812, 16246, 16248, 162410, 16306, 16366, 16426, 164610, 18184, 18186, 18188, 18246, 18248, 182410, 182412, 18308, 18368, 183610, 24248, 242410, 24308, 24368, 243610, and 243612 series enclosures are constructed of 357 Aluminum Alloy for sizes 4164 to 12128 and 357-T6 Aluminum Alloy for all the rest with internal volumes ranging from 144 in³ (2,360 cm³) for the CXJ 664 to 11,491 in³ (188,304 cm³) for the CXJ 243612. May be provided with or without outside or inside paint. The cover may be provided with round window options and plug assemblies to close the 3/4-14 NPSM (suffix designation "R3") or 3/8-16 UNC (suffix designation "XMPBP") operator openings provided in the cover as depicted in the drawings noted under the "Drawing" section. The devices may be also be provided with NPT conduit openings on the body sidewall and configured also as depicted in the drawings noted under the "Drawing" section.

These enclosures may also be provided with operators certified in DEMKO certificate 06 ATEX 0605697U.

Only types with suffix -N4 designation have in addition passed the tests for ingress protection to IP 66 in accordance with EN 60529 Type variants Covered By The Approval:

CXJ	<u>6</u>	<u>8</u>	<u>4</u>	<u>H3</u>	CEN
	Ш	III	IV	V	VI

I - Series Designation

CXJ - Common to all

- II Enclosure Internal Width
- 4 4 inches (102 mm)
- 6 6 inches (152 mm) 7 7 inches (177 mm)
- 8 8 inches (203 mm)
- 9 9 inches (228 mm)
- 10 10 inches (254 mm)
- 12 12 inches (304.8 mm)
- 14 14 inches (356 mm)
- 16 14 inches (406 mm)
- 18 18 inches (457 mm) 24 - 24 inches (609.6 mm)
- III Enclosure Internal Length 6 - 6 inches (152 mm)
- 8 8 inches (203 mm)
- 10 10 inches (254 mm)
- 11 11 inches (279 mm)
- 12 12 inches (305 mm)
- 13 13 inches (330 mm) 14 – 14 inches (356 mm)
- 16 16 inches (406 mm)
- 18 18 inches (457 mm) 20 - 20 inches (508 mm)
- 24 24 inches (609.6 mm)
- 28 28 inches (711.2 mm)
- 30 30 inches (762 mm) 36 36 inches (914.4 mm)
- IV Enclosure Base Depth
- 4 4 inches (102 mm)
- 5 5 inches (127 mm)
- 6 6 inches (152 mm)
- 8 8 inches (203 mm)
- 10 10 inches (254 mm)

[13]

[14]

Schedule **EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 05 ATEX 0419382U Rev. 2**

V - Optional Features For the Above Series

H1 - Light Duty Stainless Steel Hinges

HC1 - Light Duty Cast Hinges

H2 - Medium Duty Cast Hinges

H3 - Heavy Duty Cast Hinges

N1 - Aluminum Mounting Pan

N3 - Phenolic Mounting Pan

N4 – O-Ring For IP 66 Application

N5 - Corrosion Resistance Stainless Steel Cover Bolts

N6 - Metallic Legend Plates

N7 - Phenolic Legend Plates

E1 - Corrosion Resistance Coating Outside Only

E2 - Corrosion Resistance Coating Inside and Outside

G1 - 1 in. (25 mm) dia. Viewing Window (Cat. No. GC1)

G2 - 2 in. (50 mm) dia. Viewing Window (Cat. No. GC1) G3 – 3 in. (76 mm) dia. Viewing window (Cat. No. GC3)

G5 - 5-1/4 in. (133 mm) dia. Viewing Window (Cat. No. GC5)

G6 - 6-3/4 in. (171 mm) dia. Viewing Window (Cat. No. GC6)

G7 - 7-5/8 in. (194 mm) dia. Viewing Window (Cat. No. GC7)

R3 - Close Up Plug (3/4-14 NPSM) XMPBP - Close Up Plug (3/8-16 UNC)

VI - CEN designation

CEN - Common to all

Temperature range -40 to +70°C ambient

[16] **Descriptive Documents**

The scheduled documents are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

[17] Schedule of limitations:

- Where the enclosure is installed, a minimum of 40 mm separation between the flameproof flanged joint and any solid object not part of the enclosure shall be maintained.
- For conduit/cable, cover drilling, tapping, and layout instructions refer to Drawing No. 1065.
- At least 40% of the cross-sectional area must remain free to permit unimpeded gas flow and therefore unrestricted development of an explosion.
- All unused openings must be fitted with certified flameproof blanking elements and have a minimum gas, dust, and IP marking equal to the marking on the enclosure.
- The enclosure certification applies to equipment without cable glands. When installing cable glands they must be certified as flameproof and have a minimum gas, dust, and IP marking equal to the marking on the enclosure.
- The enclosure certification applies to equipment without conduit sealing fittings (stopping boxes). When installing conduit sealing fittings they must be certified as flameproof and have a minimum gas, dust, and IP marking equal to the marking on
- All conduit entries shall have a sealing fitting (stopping box) at the enclosure wall.
- The end user shall provide the earthing/bonding means as necessary.
- The flanged joint has parameters as shown in drawing 2159.
- Cemented glass to metal joint has only been investigated for service temperatures up to 100°C. Further evaluation is necessary if the service temperature exceeds 100°C.
- For ambient temperatures below –10 °C and above +60 °C use field wiring suitable for both minimum and maximum ambient temperatures.
- Cover bolts must be metric with tolerance class of 6g/6H, grade 8.8 or 70 with yield strength of 580MPa and 450 MPa, respectively.
- Oil-filled circuit-breakers and contactors shall not be used.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The CXJ series of enclosures have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.