# **EC-TYPE EXAMINATION CERTIFICATE**



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

- EC-Type Examination Certificate Number: DEMKO 14 ATEX 1318X Rev. 2 [3]
- Equipment or Protective System: Increased Safety AJB Series Junction Boxes [4]
- Manufacturer: Raychem Rpg. Ltd. [5]

[2]

- Address: Ceat Mahal Annexe 463 Dr Annie Besant Road Mumbai, 400030, India [6]
- This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the [7] documents therein referred to.
- UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, [8] certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems 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. 4786897985

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

EN 60079-0:2012+A11:2013

EN 60079-7:2007

EN 60079-31:2009

- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system.

These are not covered by the certificate.

[12] The marking of the equipment or protective system shall include the following:

II 2 G Ex e IIC T6 Gb

II 2 G Ex e IIC T5 Gb

Ex tb IIIC T85°C Db

**Certification Manager** 

Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment 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 equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment 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

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**Notified Body** 

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## Schedule

# **EC-TYPE EXAMINATION CERTIFICATE No.**

### DEMKO 14 ATEX 1318X Rev.2

Report: 4786897985

[15] <u>Description of Equipment or protective system</u>

Raychem Ex-E-AJB Series Junction Boxes utilize Ex component terminal blocks and Ex component empty enclosures. The enclosures consist of covers and bodies without gland plates.

#### Nomenclature:

Ex - E - AJB 330 230 110 01 II III IV V VI VII

I- Type of Enclosure Application -

Ex - Enclosure applicable in hazardous location. Ex e

II- Enclosure ATEX Certification Level -

E - Enclosure Assembly with Terminal Installed

III - Enclosure Material and Type -

AJB - Powder Coated Aluminium and aluminium alloys Castings (ALS112) Terminal Enclosure

IV - Enclosure Length

XXX - Any two or three digit number that indicates the outside box length (in mm)

V – Enclosure Width

XXX - Any two or three digit number that indicates the outside box width (in mm)

VI - Enclosure Depth

XXX – two or three digit number that indicates outside box depth (in mm)

VII - Revision in combination of terminals

XX – any two or three digit number that indicates the new terminal combination (optional)

#### Temperature range

The relation between ambient temperature and the assigned temperature class is as follows:

For model numbers Ex-E-AJB-16016091-01 and Ex-E-AJB-26016090-01 ambient temperature and the assigned temperature class is as follows

Ambient temperature range	Temperature class
-45 °C to +50 °C	T6
-45 °C to +65 °C	T5
-45 °C to +65 °C	T85°C

For rest of the models ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature class
-50 °C to +50 °C	T6
-50 °C to +40 °C	T6
-50 °C to +65 °C	T5
-50 °C to +50 °C	T5
-50 °C to +65 °C	T85°C

#### Electrical data

690V ac, 35A max. (depending on type of terminals installed)

#### Installation instructions

All cable entry devices and blanking elements shall be certified for type 'e', 'tb' and minimum IP66 rating.

Unused apertures shall be closed with suitable ATEX certified blanking elements.

#### Mounting instructions

Refer to "Instructions" AEA/RRPL/01/02.

#### Routine tests

None Required.



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[14]

# Schedule EC-TYPE EXAMINATION CERTIFICATE No.

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[16] <u>Descriptive Documents.</u>

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

#### [17] Specific conditions of use:

- All conductors/cables shall be certified copper wire.
- When installing cable or conduit entries, the cable/conduit entries must be ATEX certified as increased safety 'e' and protection by enclosure 'tb' and have a minimum IP66 rating equal to the marking on the enclosure.
- All unused conduit/cable openings must be fitted with an ATEX certified close up plug equivalent of the apparatus and must be marked with an IP66 rating.
- After installation, all creepage distances and clearances shall be according to Table 1 in EN 60079-7:2007.
- Each terminal shall not be specified to accommodate more than one individual conductor in a clamping point.
- For screwless connections intended for Class 5 or Class 6 fine stranded conductors according to IEC 60228, the fine stranded wire shall be equipped with a ferrule or the termination shall have a method to open the clamping mechanism so that the conductors are not damaged during installation of the conductor.
- The end user shall provide bonding means as necessary.

#### [18] <u>Essential Health and Safety Requirements</u>

Concerning ESRs this Schedule verifies compliance with the Annex III of ATEX directive only. By placing the product on the market, the manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II of this Directive.

#### Additional information

The AJB series enclosures have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529: 1991/A1 2001.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

