UK-TYPE EXAMINATION
CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

1. **UK-Type Examination Certificate Number:** **ITS21UKEX0051X** **Issue 00**

2. **Product:** Type AR Male/Male and types AU / AX Female/ Female Union Adaptors. Types AB and AJ Gland Adaptors, Types BB and BJ Gland Reducers and DG / DN Earthlead Adaptors and Reducers

3. **Manufacturer:** Eaton Electrical Systems Ltd – trading as Redapt or Raxton

4. **Address:** Unit 1, 1 Kingsway South, Westgate, Aldridge, West Midlands, WS9 8FS, United Kingdom.

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

6. Intertek Testing and Certification Limited, Approved Body number 0359, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

   The examination and test results are recorded in the confidential report G102174344B Issue 1 dated September 2016 and Report 10439337LHD-001b dated August 2019.

7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-7:2015+A1:2018 and EN 60079-31:2014 except in respect of those requirements referred to within item 14 of the Schedule.

8. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.

9. This UK-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

10. The marking of the product shall include the following:

I M2 Ex db I Mb II 2 G Ex db IIC Gb II 2 D Ex tb IIIC Db IP66/IP6X

I M2 Ex eb I Mb II 2 G Ex eb IIC Gb

See schedule for full details.

Certification Officer: P Moss **Date:** 22 June 2021

SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0051X Issue 00

11. Description of Product or Protective System

The Types AR, BJ, AB, AU, AX, AJ Adaptors, Types BB & BJ Reducers and Types DG and DN Earthlead Adaptors are designed to convert an existing cable entry aperture, in the associated apparatus, to a different thread form and/or size. Each device comprises a hollow body with a male thread at one end and a female thread at the other. Entry threads are between M12 and M120 (M16 to M75 for Glass Filled Nylon and M20 to M32 for DG/DN).

The Type AR and BJ Male/Male Adaptor and Types AU and AX Female/Female Adaptors have thread forms of between M12 and M120. Thread combinations are such that a maximum of two 'standard' size differences is maintained for Increase in thread and no restriction on reduction. Type designations determine thread combinations and body profiles.

Material Options:

Brass to BS 2874
Brass BS 2872
Stainless Steel
Mild Steel
Aluminium
Bronze
30 % Glass Filled Nylon
40% Glass Filled Nylon
Surface Coating: Nickel, Zinc, Electroless Nickel

Thread Options:

Metric to BS 3643
ET Conduit to BS 31
PG to DIN 40430
BSPP to BS 2779
BSPT to BS 21
NPT to ANSI/ASME B1.20.1
In addition any other thread form that also complies with the requirements of IEC 60079-1 tables 3 or 4 and clause C2.2 (as applicable) are also permitted.

Coding:

Types AR and BJ Male/Male and type AU and AX Female/Female Union Adaptors, Types AB and AJ Gland Adaptors, Types BB and BJ Gland Reducers and DG and DN Earthlead Adaptors and Reducers
I M2 Ex db I Mb, II 2 G Ex db IIC Gb
I M2 Ex eb I Mb, II 2 G Ex eb IIC Gb
II 2 D Ex tb IIIC Db IP6X
Type AB & AJ Adapters, Type BB & BJ Reducers (nylon version)
II 2 G Ex eb IIC Gb, II 2 D Ex tb IIIC Db IP 66 Ta = see schedule

SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0051X Issue 00

12. Report Number

Intertek Report: G102174344B Issue 1 dated September 2016 and Report 10439337LHD-001b dated August 2019.

13. Special Conditions of Certification

(a). Special Conditions of Use

- When used for Increased Safety ('Ex e') or Protection by enclosure (Ex tb) applications, a suitable method of sealing to the associated enclosure shall be provided.
- Products constructed from Aluminium are to be positioned where they are subject to low risk of mechanical impact only and shall not be marked as suitable for Group I.

Type AB & AJ Adapters, Type BB & BJ Reducers:

- All entry devices shall only be installed where there is a low risk from mechanical impact.
- Only one adaptor or reducer is to be used with any single cable entry on the associated equipment.
- The interfaces between these devices and the associated enclosure cannot be defined; therefore, it is the user's responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.
- When manufactured in 30% Glass Filled Nylon material, the entry devices are suitable for a service temperature range of -30°C to +90°C.
- When manufactured in 40% Glass Filed Nylon material, the entry devices are suitable for a service temperature range of -20°C to +45°C.
- When the entry devices are manufactured in 40% Glass Filled Nylon material, they shall be protected from exposure to light; items made from this material are marked with '40% Glass Filled Nylon'.
- Service temperature ranges have been applied as follows:

O-ring Service temperature

Material	Service Temperature
None fitted	-60°C to 200°C*
EPDM	-50°C to +100°C
Nitrile	-20°C to +80°C
Neoprene	-40°C to +80°C
Viton	-20°C to +180°C*
Silicone	-60°C to +180°C *

Note: The limiting temperatures specified above are de-rated by 20K according to Clause 7.2.2 'Material Selection' of EN 60079-0.

Note: The maximum temperature is limited to 150°C in Group I application (Coal dust, Mining) O-ring materials affect marked with '*' above.

SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0051X Issue 00

Note: Unless fitted with an interface sealing O-ring with lower properties, temperatures shall then be limited as per the manufacturer's instructions.

(b). Conditions of Manufacture - Routine Tests

- None.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104601581CHE-004 Dated: 24 March 2021.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
AB & AJ SERIES ADAPTORS	AB-AJ	1	05-04-2016
AB-AJ & BB-BJ SERIES ADAPTORS & REDUCERS	AB-AJ- BB-BJ	2	08-07-2018
AR-AU-AX SERIES ADAPTORS	AR-AU-AX	1	05-04-2016
BB-BJ SERIES REDUCERS	BB-BJ	1	05-04-2016
DG SERIES	DG	2	01-02-2012
Accessories marking specification AR, AU/AX, AB, AJ, BB, BJ, DG/DN	DF 2210034 A	A	19/03/21
Ex accessories Regulatory Instructions	CAP184267	-	As stamped