

# EU TYPE-EXAMINATION CERTIFICATE

1. **EU type-examination Certificate (Module B)**

2. **Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)**



3. **EU type examination certificate Nr**      **ITS16ATEX101336X**

4. **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

5. **Manufacturer:**        EATON ELECTRICAL SYSTEMS Ltd Trading as Redapt or Raxton

6. **Address:**                Kingsway South  
Westgate, Aldridge  
West Midlands  
WS9 8FS

7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.

8. INTERTEK ITALIA S.p.A., Notified Body n° 2575 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and Council of the 26 February 2014, certifies that the equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. G102174344B Issue 1 dated September 2016 and Report 10439337LHD-001b dated August 2019.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards 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 at item 16 of the Schedule.

10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe Use specified in the schedule to this certificate.

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

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



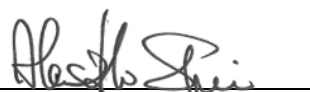
**Types AR and BJ Male/Male and type AU and AX Female/Female Union Adaptors, Types AB and AJ Gland Adaptors, Types BB and BJ Gland Reducers and DG and DN Earthlead Adaptors and Reducers**

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 2D Ex tb IIIC Db IP6X    Ta = see schedule

**Type AB & AJ Adaptors, Type BB & BJ Reducers**

II 2G Ex eb IIC Gb  
II 2D Ex t IIIC Db IP 66    Ta = see schedule

September 1, 2020  
**Certificate issue date**



**Alessandro Savio**  
Certification Officer  
Intertek Italia S.p.A. (NB 2575)



PDR N° 277B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This certificate has been issued by Intertek Italia S.p.A. NB 2575 on transfer from Intertek Testing & Certification Ltd. (NB 0359) using the same issued original certificate number.



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

**Intertek Italia S.p.A.** Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy



## SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS16ATEX101336X

### 13. DESCRIPTION OF THE EQUIPMENT 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.

CE Marking shall be accompanied by the identification number of the Notified Body responsible for surveillance of production.

### 14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	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
MARKING DRAWING	IECExITS16.0011X ITS16ATEX101336X	1	15-11-2016

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.



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### 15. SPECIAL CONDITIONS FOR SAFE USE

1. 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.
2. 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

- 1 All entry devices shall only be installed where there is a low risk from mechanical impact.
- 2 Only one adaptor or reducer is to be used with any single cable entry on the associated equipment.
- 3 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.
- 4 When manufactured in 30% Glass Filled Nylon material, the entry devices are suitable for a service temperature range of -30°C to +90°C.
- 5 When manufactured in 40% Glass Filled Nylon material, the entry devices are suitable for a service temperature range of -20°C to +45°C.
- 6 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'.
- 7 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 *
Fluorosilicone	-60°C to +130°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.

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

### 16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. G102174344B Issue 1 dated September 2016 and Report 10439337LHD-001b dated August 2019.



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**17. ROUTINE (FACTORY) TESTS**

None.

**18. DETAIL OF CERTIFICATE CHANGES**

None.