

# EU TYPE-EXAMINATION CERTIFICATE

1. EU type-examination Certificate (Module B)
2. Component intended for use with Equipment or Protective System in potentially explosive atmospheres (Directive 2014/34/EU)



3. EU type examination certificate Nr **ITS16ATEX101340U**

4. **Component:** Right angle 90° AR-D and AR-U Series of Adaptors / Reducers, Swivel Adaptor/ Reducers. Male-Female TPU and TAU, Female-Female TQU and TCU, Male to Male TRU and TDU, Twin or Single Inlet Fixed or Swivel Adaptor / Reducer types AYU, ATU, ASU

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

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

7. This component 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 component has been found to comply with the essential Health and Safety Requirements relating to the design and construction of components 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. G102174344F dated November 2016 and report Nr. 103717291fLHD-001 dated April 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 and EN 60079-31:2014 except in respect of those requirements referred to at item 18 of the Schedule.

10. If the sign U placed after the certificate number indicates that this certificate must not be mistaken relative to 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.

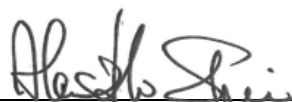
12. The marking of the component shall include the following:



I M2 Ex db I Mb (**Not aluminium, AR-U or AR-D products**)  
I M2 Ex eb I Mb (**Not aluminium, AR-U or AR-D products**)  
II 2G Ex db IIC Gb  
II 2G Ex eb IIC Gb  
II 2D Ex tb IIIC Db IP 66

24-02-2020

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: ITS16ATEX101340U

### 13. DESCRIPTION OF COMPONENT

Adaptors and Reducers

The **AR-D, AR-U** series range of 90 ° thread adaptors and reducers each comprise a body with either male/ female or female/ female threads machined into the body at 90°C to the male thread. The components are designed to provide cable entry options where space is limited to avoid cable damage. Additionally, they may be used to convert an existing cable entry aperture thread to a different thread form and/ or size. Thread forms are between M16 and M75 inclusive. Coded Ex d IIC Gb, Ex e IIC Gb, Ex tb III C Db.

The **TAU, TCU, TDU, TPU, TQU, TRU, AYU, ATU, and ASU** range Twin or Single Inlet Fixed or Swivel adaptors and reducers are designed to convert existing cable entries to different thread forms and/or sizes where space may be limited as to avoid cable damage. Threads available are between M16 to M75.

Each device comprises of two or three threaded entry parts and a 'spinning' internal component. The components are assembled such that flamepaths are formed at both entry threads and around the spinning components (this flamepath is not required for Exe applications only) and such that connection at both ends is achieved without twisting the cable.

The range of 90° swivel adaptors can be fitted within an Ex d IIC Gb, Ex e IIC Gb, Ex tb III C Db enclosure or any combination provided the applicable Code of Practice is complied with.

Material options:

Brass to BS 2874:1985

Brass to BS 2872:1989

Stainless steel to BS 970: part 4:1970

Mild steel to BS 970: Part 1: 1983

Aluminium (**Not for Group I options**)

Entry thread options:

Metric to BS 3643:1981

ET Conduit to BS 31:1940

PG to DIN 40430:1971

BSPP to BS 2779:1985

BSPT to BS 21:1985

NPT to ANSI/ASME B1.20.1-1983

Or alternative thread forms complying with IEC 60079-1.

The following special points for noting apply:

Service Temperature -60°C to +200°C unless fitted with an interface sealing O-ring with lower properties, temperatures shall then be limited as per the manufacturer's instructions.

The Manufacturer shall comply with the following:

These products shall be marked in accordance with the information as specified in this certificate and related reports.

The adaptors, when installed in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP 66.



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### 14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
Exd/Exe IIC 90° ADAPTOR/REDUCER	AR-D, AR-U	2	11-01-18
TWIN INLET SWIVEL/INTEGRAL ADAPTOR	SWIVEL & TWIN INLET	1	10-11-16
MALE – MALE/ FEMALE – FEMALE ADAPTORS	AR-AU-AX SERIES	1	05-04-16
SWIVEL 90 DEG	TYPE TP-TQ-TR	1	29-03-16
MARKING DRAWING	ITS16ATEX101340U IECEx ITS16.0015U	1	15-11-16

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

### 15. LIMIT CONDITIONS FOR USE

- The flame non-transmission tests of the cylindrical flame path provided by the swivel adaptors have not been conducted. This shall be considered by the issuing body of the apparatus certificate. (Swivel type only).
- In flameproof applications, only one adaptor or reducer shall 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
- At their point of mounting, these devices are suitable for use at -50°C to +150°C for devices which rely on a non-metallic sealing material such as the swivel adaptors or -60°C to +200°C for solid metallic adaptors.

### 16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. G102174344F dated November 2016 and report Nr. 103717291fLHD-001 dated April 2019.

### 17. ROUTINE (FACTORY) TESTS

None.

### 18. DETAIL OF CERTIFICATE CHANGES

None.