



[1] **EC-TYPE EXAMINATION CERTIFICATE**

[2] Equipment and Protective System intended for use  
in Potentially explosive atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU02ATEX1096**

[4] Equipment or Protective System: Rotary Drive  
Type TA 130/ and type TA 140/.

[5] Manufacturer: TA ROLOFF  
Technischer Apparatebau GmbH

[6] Address: Adlerhorst 5  
D-22459 Hamburg

[7] This equipment or protective system and any acceptable variation thereto are specified in the Annex to this EC-TYPE EXAMINATION CERTIFICATE.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY No. 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or 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 test report IB-01-138 of 09.07.2002.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 50014:1997 + A1 + A2, EN 50018:2000 and EN 50019:2000.

[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 under [17] in the schedule to this EC-Type Examination Certificate.


[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment or protective system.

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

 II 2G EEx de IIC T6

**IBExU** Institut für Sicherheitstechnik GmbH  
Fuchsmühlenweg 7 - D-09599 Freiberg  
Tel.: 00493731 3805-0 - Fax: 00493731 23650

Authorised for certifications Explosionsschutz  
By order

  
(Dr. L. Lösch)

Annex



- Seal-  
(ID-No. 0637)

Freiberg, 09.07.2002

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

[13] **Annex**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096**

[15] **Description of equipment or protective system**

The TA-Rotary Drives as control unit serve for the operation of armatures, e. g. dampers, ball valves and valves. The flameproof case consists of a cover and a bottom plate, which is attached on a gear case. The electrical units, as well as drive motors, microswitches, transformer, are placed in the flameproof case. They are mounted on the bottom plate. The electrical connection occurs via a terminal compartment, type of protection Increased Safety, which is integrated in the case.

Parameters

- |  |      |  |          |
|--|------|--|----------|
| - Primary voltage:   |      | 230 V / 50 Hz or<br>400 V / 50 Hz<br>110 V / 50 Hz<br>48 V / 50 Hz |          |
| - Secondary voltage:   |      | 12 V ... 48 V / 50 Hz  |          |
| - Drive motor :  |      | TA 130..   | TA 140.. |
| Nominal voltage:   | max. | 48 V DC  | 48 V DC  |
| Nominal current:   | max. | 5 A  | 5 A      |
| Nominal power:   | max. | 120 W  | 120 W    |
| Torsion moment:  | max. | 280 Nm   | 1500 Nm  |
| Run time for 90°   | max. | 26 s   | 100 s    |
| - type of protection according to DIN EN 60529:2000 (Terminal compartment) |      | min. IP 54   |          |
| - Ambient temperature range:   |      | -20 °C to +40 °C   |          |

[16] **Test report**

The examination and test results are recorded in confidential test report IB-01-138 of 09.07.2002.

**Summary of the test results:**

The Rotary Drives type TA 130/. and type TA 140/. fulfils the requirements of explosion protection for equipment group II and equipment category 2G, type of protection Flameproof Enclosure in connection with Increased Safety for explosive atmospheres with gases and vapours of explosion group IIC and temperature class T6.

**Test documents**

The test documents are listed in the annex to this certificate.

**Safety instructions**

- With every Rotary Drive type TA 130/. and type TA 140/. the manufacturer is obliged for carrying out routine verifications and tests necessary for maintenance the explosion proofness regulations in accordance with EN 50014:1997, section 24.
- Before the affixing of the CE marking, the manufacturer is obliged for carrying out the required tests of the conformity assessment procedures according to the directive 94/9/EC.

- In coherence with the routine verifications every flameproof case of the Rotary Drives type TA 130/. und type TA 140/. has to pass a static overpressure test of min. 10 bar according to EN 50018:2000, section 16.

**[17] Special conditions for safe use**

None.

**[18] Essential Health and Safety Requirements**

Confirmed by norms (see [9]).

By order

Freiberg, 09.07.2002

(Dr. Lösch)

**Annex**

**Annex**

**to the EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096**

Test documents

- Description of the constructive design of the Rotary Drives type TA 130/ and TA 140/ consisting of
  - Technical description (1 page) signed and changed on 06.05.2002
  - Technical description - annex 8 - (3 pages) signed on 06.05.2002
  - TA- Rotary Drive with transformer - annex 2 - (1 page) signed on 27.02.2002
  - Attachment for protective conductor - annex 1 -, S. 10 - (1 page) signed on 27.03.2002
  - Locking device of the cover - annex 1, S. 9 - (1 page) signed on 27.03.2002
  - Engraving of the cover - annex 5, S. 1 und S. 2 - (2 x 1 page) signed on 06.05.2002
- Sectional drawing - annex 1, S. 1 - signed on 06.05.2002
- Legend - annex 1, S. 2 - (2 pages) signed on 27.03.2002
- Bottom plate - annex 1, S. 6 - signed on 27.05.2002
- Shaft penetration for driving shaft - annex 1, S. 4 - signed on 27.05.2002
- Driving shaft penetration - annex 1, S. 5 - signed on 27.03.2002
- Camshaft - annex 1, S. 8 - signed on 27.03.2002
- Camshaft penetration - annex 1, S. 7 - signed on 27.03.2002
- Test item

[1]

**2<sup>nd</sup> Addition to**

**EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096**  
(Translation)



[2]

Equipment: Rotary Drive  
Type TA 130/. and type TA 140/.

[3]

Manufacturer: TA ROLOFF  
Technischer Apparatebau GmbH

[4]

Address: Adlerhorst 5  
22459 Hamburg, Germany

[5]

**Additions/Modifications**

The flameproof enclosure of the Rotary Drives can be manufactured alternatively also of Stainless steel. All other electrical and mechanical parameters are unchanged.

[6]

**Test result**

The proof of explosion protection of the aforementioned modification at the Rotary Drives is recorded in the test report IB-04-3-052 of 13 April 2004. The test documents are part of the test report and listed there.

The Rotary Drives type TA 130/. and type TA 140/. fulfil also in future the requirements of explosion protection for Equipment Group II and Category 2G.

The specifications and safety instructions contained in the Schedule to the EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096 are valid in future.

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(Dr. Lösch)



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(ID no. 0637)

Freiberg, 13 April 2004

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[1]

3<sup>rd</sup> Addition to

**EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096**  
(Translation)



- [2] Equipment: Rotary Drive  
Type TA 130/. and type TA 140/.
- [3] Manufacturer: TA Roloff  
Technischer Apparatebau GmbH
- [4] Address: Adlerhorst 5  
22459 Hamburg, Germany

[5] **Additions/Modifications**

The Rotary Drives type TA 130/. and TA 140/. shall be operated alternatively also with a driving motor 220 V DC.

Parameters:

- Driving motor:	TA 130..	TA 140..
- Nominal voltage:	max. 220 V DC	max. 220 V DC
- Nominal current:	max. 0.33 A	max. 0.33 A
- Torque:	max. 280 Nm	max. 1500 Nm
- Run time for 90 °C:	max. 26 s	max. 100 s

All other parameters remain unchanged.

[6] **Test result**

The proof of explosion protection of the aforementioned modification at the Rotary Drives is recorded in the test report IB-05-3-089 of 07 June 2005. The test documents are part of the test report and listed there.

The Rotary Drives type TA 130/. and type TA 140/. fulfil also in future the requirements of explosion protection for Equipment Group II and Category 2G.

The specifications and safety instructions contained in the Schedule to the EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096 are valid in future.

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Freiberg, 07 June 2005

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**IBExU Institut für Sicherheitstechnik GmbH**  
An-Institut der TU Bergakademie Freiberg

[1] **4<sup>th</sup> Addition to**  
**EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096**  
according to Directive 94/9/EC, Annex III  
(Translation)



[2] Equipment: **Rotary Drive**  
Type TA 130 and TA 140

[3] Manufacturer: TA ROLOFF  
Technischer Apparatebau GmbH

[4] Address: Adlerhorst 5  
22459 Hamburg  
GERMANY

[5] **Additions/Modifications**

The Rotary Drive TA 130 and TA 140 mentioned under [2] are corresponded to also the requirements of standards series EN 60079.

[6] **Test report**

The proof of explosion protection of the Addition mentioned under [5] is recorded in the test report IB-09-3-071 of 16 February 2010. The test documents are part of the test report.

[7] **Test result**

IBExU certifies that the equipment mentioned under [2] fulfill the Essential Health and Safety Requirements given in Annex II to the Directive 94/9/EC by compliance with EN 60079-0:2006, EN 60079-1:2007 and EN 60079-7:2007.

The Rotary Drive type TA 130 and TA 140 mentioned under [2] fulfill the requirements of explosion protection for equipment of Group II, Category 2G, type of protection flameproof enclosure in connection with increased Safety.

The marking of the equipment mentioned under [2] shall include the following:

II 2G Ex d e IIC T6

**Safety instructions**

The safety instructions contained in the Schedule to the EC-Type Examination Certificate IBExU02ATEX1096 are completed as follows:

The exist gap dimensions are smaller than pretended in the standard, repairs are exclusive permitted from the manufacturer in accordance with the specifications in the approval drawing.

**This Addition is only valid in combination with the EC-Type Examination Certificate IBExU02ATEX1096 of 9 July 2002 and whose 1<sup>st</sup> to 3<sup>rd</sup> addition.**

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Freiberg, 16 February 2010

Authorised for certifications  
-Explosion protection-

By order

(Dr. Wagner)



- Seal -  
(ID no. 0637)

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- [1] **5<sup>th</sup> Addition to**  
**EC-TYPE EXAMINATION CERTIFICATE IBExU02ATEX1096**  
according to Directive 94/9/EC, Annex III  
(Translation)



- [2] Equipment: **Rotary Drive**  
Type TA 130/. and type TA 140/.
- [3] Manufacturer: TA Roloff GmbH
- [4] Address: Adlerhorst 5  
22459 Hamburg  
GERMANY

[5] **Additions/Modifications**

The Rotary Drives type TA 130/. and type TA 140/. may be operated also in an increased ambient temperature range from -40 °C up to +40 °C. They fulfil the requirements of the equipment protection level Gb. All technical parameters remain unchanged.

[6] **Test report**

The proof of explosion protection of the additions mentioned under [5] is recorded in the test report IB-11-3-244 of 15 November 2012. The test documents are part of the test report and listed there.

[7] **Test result**

IBExU certifies that the equipment mentioned under [2] fulfils the Essential Health and Safety Requirements given in Annex II to the Directive 94/9/EC by compliance with EN 60079-0:2009, EN 60079-1:2007 and EN 60079-7:2007.

The Rotary Drives type TA 130/. and type TA 140/. fulfil the requirements of explosion protection for equipment of Group II, Category 2G, type of protection flameproof enclosure „d“ in combination with increased safety „e“ also in future.

The marking of the equipment mentioned under [2] shall include the following:

⊕ II 2G Ex d e IIC T6 Gb  
T<sub>a</sub> -40 °C ... +40 °C

Safety instructions

The safety instructions in the EC-Type Examination Certificate IBExU02ATEX1096 are completed as follows:

- The flameproof cable entry and the connection cable must be suitable for the corresponding operating temperature for use of the Rotary Drives in a temperature range below -20 °C (max. -40 °C).

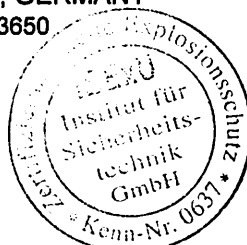
**This Addition is only valid in combination with the EC-Type Examination Certificate IBExU02ATEX1096 of 09 July 2002 and 1<sup>st</sup> to 4<sup>th</sup> Addition.**

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(ID no. 0637)

Freiberg, 15 November 2012

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