



EC-Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0328X

(4) Equipment or protective system: **Model ex (r) AB** rotary actuator**

(5) Manufacturer: **SCHIEBEL Antriebstechnik GmbH**

(6) Address: **Josef Benc Gasse 4, A-1230, Wien, Austria**

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 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 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 N°
03/0328 dated April 2004

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 13463-1:2001; EN 50014:1997+A1+A2; EN 50018:2000;
EN 50019:2000; EN 50020:2002

(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 testing 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 this certificate.

(12) The marking of the equipment or protective system shall include following:



II 2G EEx de IIC T4



II 2G EEx de ib IIB T4

(with optoelectronic sensor)



II 2G EEx de ib IIC T4

This EC-Type Examination Certificate is valid till: **30 April 2009**

Responsible person:

Mr. Jaroslav Šindler
Head of certification body



Date of issue: 5 of April 2004

Number of pages: 1/3

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X**

(15) Description of Equipment or Protective System:

The electric rotary actuator size ex (r) AB** (size 3, 5, 8, 18 and 40) consist of the gear housing made from cast iron. The electrical components are mounted on this housing. This is:

- flameproof motor EEx d IIC T4, separately certified
- terminal box in EEx e II increased safety protection. Inside in this box are installed terminals for connection to the supply network. The cover of the box, made from Al alloy, is fastened by screws. The tightness on IP65 is ensured through "O" ring.
- the compartment in EEx e II increased safety protection. The position-feedback and position and torque switches (both in EEx d IIC T6) are installed inside. The position feedback may be a potentiometer (flameproof EEx d IIC) or an optoelectronic sensor (intrinsic safety EEx ib IIB). Eventually is installed also heating resistor (in EEx d IIC). The housing of the actuator can be equipped with push button.

This components are certified separately.

The cover of this compartment, made from Al alloy, is fastened by screws. The tightness on IP 65 is ensured through "O" ring. This cover is alternatively made with a inspection glass.

The actuator is operated through operating box V1 or V2, certified separately.

This operating box may be mounted separately from the actuator or direct on the housing of the actuators type ex (r) AB8, 18, 40.

(16) Report No. : 03/0328

(17) Special conditions for safe use: none

17.1 The optoelectronic sensor has to be connected by a certified intrinsic safety circuit according EN 50020.

17.2 The cleaning of inspection glass has to be done with moist rag.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9) of this certificate.

Responsible person:

Mr. Jaroslav Šindler
Head of certification body



Date of issue: 5 of April 2004

Number of pages: 2/3

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Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X**

(19)

LIST OF DOCUMENTATION

Documents:

Dated:

- | | | |
|--|-----------------|------------|
| • Technical description | | 29.09.2003 |
| • Supplement to Technical description | | 10.03.2004 |
| • Instruction manual No. BA 0798c | | 26.11.2003 |
| • Drawings No. for: ex (r) AB5 | No. issue 80/24 | 05.05.2003 |
| ex (r) AB8 | No. issue 82zd1 | 08.09.1971 |
| ex (r) AB18 | No. issue 83zd1 | undated |
| ex (r) AB40 | No. issue 84zd1 | undated |
| • Material list for LEXAN 9030 (E 103380) – (inspection glass) | | |
| • Material list for sealing components NBR 70 | | |

Responsible person:



Date of issue: 5 of April 2004


Mr. Jaroslav Šindler
Head of certification body

Number of pages: 3/3

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Supplement No. 1 to EC-Type Examination Certificate

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0328X

(4) Equipment or protective system: **Model ex (r) AB** rotary actuator**

(5) Manufacturer: **SCHIEBEL Antriebstechnik GmbH**

(6) Address: **Josef Benc Gasse 4, A-1230, Wien, Austria**

(7) This supplement of certificate is valid for: - new model (variant) – extension of series





(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

**EN 13463-1:2001; EN 50014:1997+A1+A2; EN 50018:2000;
EN 50019:2000; EN 50020:2002**

(11) Marking of equipment shall contain symbols:

 **II 2G EEx de IIC T4, T6 (for size ex(r)AB 8**
 **II 2G EEx de ib IIB T4 (with optoelectronic sensor)**
 **II 2G EEx de ib IIC T4**
 **II 2G EEx deq IIC T4 (for 1-phase motor application)**

(12) This type examination certificate is valid till: **30th April 2009**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 12.10.2004

Number of pages: 3
Page: 1/3

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Ostrava-Radvanice**

(13)





Schedule

(14)

**Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X**

(15) Description of Equipment or Protective System:

Changes in construction of the actuator size ex (r) AB** (size 3, 5, 8, 18 and 40) are as follow:

- **The three-phase motors type 4KTC** *** delivered by THIEN E-Motoren GmbH will be now delivered directly from the Bartec-Varnost (certified as PTB 99 ATEX 1005 for size 4KTC 80 to 132 and PTB 9 ATEX 1138 for size 71 to 160).
- **Model ex(r)AB 8**, operating mode S2/15min. including only motor type 4KTC 71B-2, microswitches type d515U and terminals size UK will be classified as  **II 2G EEx de IIC T6** according the 2. Supplement to the certificate PTB 99 ATEX 1138.
- **Additional motor capacitor**, type 24 *** **, manufactured by SUCO and certified by PTB 01 ATEX 1084X as  **II 2G EEx q II T6** is used in the special version of actuator with one phase motor 230 V and without V2 housing. This capacitor is mounted in additional housing (type as terminal box AK40 which is standart on actuators ex(r)AB..). This housing is directly mounted to the actuator. The mechanical degree of protection IP65 as well as degree of protection **EEx e** of the complete actuator is not affected.
In this case marking of equipment shall contain symbols:  **II 2G EEx deq II T6**
- **The control box type CSCex**, (certified by TÜV-A 04 ATEX 0009 as degree of protection  **II 2G EEx de IIC T4 or T6**) is alternatively used in substitution to type V2. The mechanical degree of protection IP65 as well as degree of protection **EEx e** of the complete actuator is not affected.
- **Induction motor type D(.).(.)FUY 63 and 80**-there is in their certificates FTZU 03 ATEX 0330X and FTZU 03 ATEX 0333X noticed in their Supplements No. 2:
Nominal current for different voltages results in reciprocal ratio of the voltage related to 400 V.
The relation is valid for the scope of 190 to 750 V.

(16) Report No. : 03/0328, changes on the page-List of documentation

(17) Special conditions for safe use: valid the condition attached in the main certificate.

(18) Essential Health and Safety Requirements: valid the condition attached in the main certificate.

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 12.10.2004

Number of pages: 3

Page: 2/3

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(13)

Schedule

(14)

**Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X**

(19)

LIST OF DOCUMENTATION

- Technical description-Supplement No.2
- Certificate No: PTB 99 ATEX 1005 (archivated by certificate FTZU 03 ATEX 0330X)
- Certificate No: PTB 99 ATEX 1138 (archivated by certificate FTZU 03 ATEX 0333X)
- Certificate No: PTB 01 ATEX 1084X (capacitor)
- Drawing to the certificate No. 82/12z dated 07.09.2004
- Certificate No: TUV-A 04 ATEX 0009 (control box CSCex)
- Drawings of the rotary actuator assembly, No.: 80/z4-1 dated 23.09.2004





Supplement No. 2 to EC-Type Examination Certificate

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0328X

(4) Equipment or protective system: **Model ex (r) AB** rotary actuator**

(5) Manufacturer: **SCHIEBEL Antriebstechnik GmbH**

(6) Address: **Josef Benc Gasse 4, A-1230, Wien, Austria**

(7) This supplement of certificate is valid for: - variation for temperature range from -50°C to +40°C

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirement, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 50014:1997+A1+A2

EN 50018:2000

EN 50019:2000

EN 50020:2002

(11) Marking of equipment shall contain symbols:



II 2G EEx de [ia] IIC T4

II 2G EEx de [ia] IIB T4 (variation with the capacitor dK*)

(12) This type examination certificate is valid till: **30. 04.2009**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 03.05.2007

Number of pages: 4
Page: 1/4

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PHYSICAL TECHNICAL TESTING INSTITUTE
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(13)


Schedule

(14)

Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X

(15) Description of Equipment or Protective System:

15.1 The components of the actuator size ex (r) AB** (size 3, 5, 8, 18 and 40) regarding to using in temperature range from -40°C to +40°C are as follow:

- **The three-phase motors type 4KTC ***** delivered from the Bartec-Varnost (certified as PTB 99 ATEX 1005 for size 4KTC 80 to 132 and PTB 9 ATEX 1138 for size 71 to 160 with T_{amb} : -50°C to +60°C).
- **The position transmitter KINAX 3W2 708-...., manufactured by fa Camille Bauer AG** and certified by PTB 97 ATEX 2271 as degree of protection  II 2G EEx dia IIC T6 for T_{amb} : -40°C to +75°C.
- **The microswitch type d 515U**, certified by FTZÚ 03 ATEX 0332U for T_{amb} : -40°C to +60°C.
- **The potentiometer type dP1 or dP2** certified by FTZÚ 03 ATEX 0387U for T_{amb} : -40°C to +60°C.
- **The miniheater type 27-2301-3806**, manufactured by BARTEC and certified by PTB 00 ATEX 1124U for T_{amb} : -50°C to +40°C.
- **The flameproof capacitor type dK****, manufactured by Schiebel GmbH and certified by FTZÚ 07 ATEX 0009U for T_{amb} : -50°C to +60°C.
- **The terminals type UK 1,5 ...**, manufactured by PHOENIX and certified by KEMA 98 ATEX 1651U for T_{amb} : -40°C to +80°C.
- **The terminals type WDU 2,5 ...**, manufactured by Weidmüller and certified by KEMA 98 ATEX 1683U for T_{amb} : -50°C to +100°C.
- **The cable gland type Sprint ATEX EMSKE.....**, manufactured by Wiska Hoppmann&Mulsow GmbH and certified by PTB 04 ATEX 1112X for T_{amb} : -40°C to +70°C.
- **The cable gland type GHG 960 923 P...**, manufactured by CEAG GmbH and certified by PTB 99 ATEX 3101U for T_{amb} : -55°C to +70°C.

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 03.05.2007

Page: 2/4

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(13)

Schedule

(14)

Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X

15.2 The components of the actuator size ex (r) AB** (size 3, 5, 8, 18 and 40) regarding to using in temperature range from -50°C to +40°C are as follow:

- **The three-phase motors type 4KTC ***** delivered from the Bartec-Varnost (certified as PTB 99 ATEX 1005 for size 4KTC 80 to 132 and PTB 9 ATEX 1138 for size 71 to 160 with T_{amb} : -50°C to +60°C).
- **The microswitch type 07-1511**, manufactured by BARTEC and certified by PTB 98 ATEX 1032U for T_{amb} : -55°C to +100°C.
- **The potentiometer type 07-6613-5111** manufactured by BARTEC and certified by PTB 03 ATEX 1025U for T_{amb} :-55°C to +80°C
- **The miniheater type 27-2301-3806**, manufactured by BARTEC and certified by PTB 00 ATEX 1124U for T_{amb} : -50°C to +40°C
- **The flameproof capacitor type dK****, manufactured by Schiebel GmbH and certified by FTZÚ 07 ATEX 0009U for T_{amb} :-50°C to +60°C
- **The terminals type WDU 2,5 ...**, manufactured by Weidmüller and certified by KEMA 98 ATEX 1683U for T_{amb} : -50°C to +100°C
- **The cable gland type GHG 960 923 P...**, manufactured by CEAG GmbH and certified by PTB 99 ATEX 3101U for T_{amb} : -55°C to +70°C

The cover of the actuator should be alternatively equipped with a sight glass made from polycarbonate. The degree of protection IP65 as well as degree of protection EEx e II of the complete actuator is not affected.

(16) Report No. : 03/0328, changes on the page - List of documentation

(17) Special conditions for safe use:

T_{amb} : -40°C to +40°C or

T_{amb} : -50°C to +40°C

The conditions attached in the main certificate are valid in the full range.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this supplement.

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 03.05.2007

Page: 3/4

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PHYSICAL TECHNICAL TESTING INSTITUTE
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(13)

Schedule

(14)

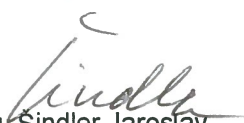
Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X

(19)

LIST OF DOCUMENTATION

- Technical description-Supplement No.3 (for deep temperature range)
- Certificate No: FTZÚ 03 ATEX 0332U (microswitch)
- Certificate No: FTZÚ 03 ATEX 0387U (potentiometer)
- Certificate No: FTZÚ 07 ATEX 0007U (capacitor)
- Certificate No: PTB 99 ATEX 1138 (electric motor)
- Certificate No: KEMA 98 ATEX 1651U (terminals)
- Certificate No: KEMA 98 ATEX 1683U (terminals)
- Certificate No: PTB 00 ATEX 1124U (miniheater)
- Certificate No: PTB 97 ATEX 2271 (position transmitter)
- Certificate No: PTB 04 ATEX 1112X (cable gland)
- Certificate No: PTB 98 ATEX 1032U (microswitch)
- Certificate No: PTB 03 ATEX 1025U (potentiometer)
- Certificate No: PTB 99 ATEX 3101X (cable gland)

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: 03.05.2007

Page: 4/4

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Supplement No. 3 to EC-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0328X

(4) Equipment or protective system: **Model ex (r) AB** rotary actuator**

(5) Manufacturer: **SCHIEBEL Antriebstechnik GmbH**

(6) Address: **Josef Benc Gasse 4, A-1230, Wien, Austria**

(7) This supplement of certificate is valid for: - recertification according to the new standards
- new variation of actuator, model **ex(r) AB80**

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirement, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0:2006; EN 60079-1:2004; EN 60079-7:2007; EN 60079-11:2007

(11) Marking of equipment shall contain symbols:



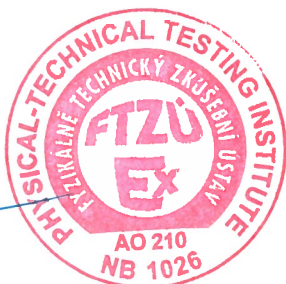
II 2G Ex de [ia] IIC T4

II 2G Ex de [ia] IIB T4 (variation with the capacitor dK*)

(12) This type examination certificate is valid till: **31. 05.2012**

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 15.12.2009

Number of pages: 2
Page: 1/2

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14)

**Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X**

(15) Description of Equipment or Protective System:

15.1 The components of the actuator size ex (r) AB** (size 3, 5, 8, 18, 40 and 80) regarding to their new Supplements are as follow:

- **Flameproof motor**, certified by FTZÚ 03 ATEX 0330X + Supplement No.3,
- **Flameproof motor**, certified by FTZÚ 03 ATEX 0333X + Supplement No.3,
- **Operating box V1 and V2**, certified by FTZÚ 03 ATEX 0329 + Supplement No.1,
- **The microswitch type d 515U**, certified by FTZÚ 03 ATEX 0332U + Supplement No.1, for $T_{amb} : -40^{\circ}\text{C}$ to $+60^{\circ}\text{C}$.
- **The potentiometer type dP1 or dP2** certified by FTZÚ 03 ATEX 0387U + Supplement No.1, for $T_{amb} : -40^{\circ}\text{C}$ to $+60^{\circ}\text{C}$
- **The terminals type UT ...**, manufactured by PHOENIX and certified by KEMA 04 ATEX 2048U.

15.2 Further the new model ex(r) AB80 is provided. The enclosure and gear are identical as by ex(r)AB40. The changes is only that now the max. moment is 800Nm (previously 500Nm) and the average moment is now 400Nm(previously 250 Nm). The temperature rise is not greater.

15.3 The model exAB80 for S2 - has max power to 7.5 kW, the model ex(r)AB80 for S4 - has max power to 4.0 kW.

(16) Report No. : 03/0328-D3

(17) Special conditions for safe use:

The conditions attached in the main certificate are valid in the full range.

The conditions mentioned in the Supplements No.1 and No.2 are valid in whole range.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this supplement.

(19) LIST OF DOCUMENTATION

- Technical description - Supplement No.5

dated 06.11.2009

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 15.12.2009

Page: 2/2

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Supplement No. 4 to EC-Type Examination Certificate

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0328X

(4) Equipment or protective system: **Model ex (r) AB * rotary actuator**

(5) Manufacturer: **SCHIEBEL Antriebstechnik GmbH**

(6) Address: **Josef Benc – Gasse 4, A-1230 Wien, Austria**

(7) This supplement of certificate is valid for: - recertification according to the new standards
- prolongation of certificate validity

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, a list of which is mentioned in the schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains other requirement which the manufacturer shall fulfil before products are placed on the market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0:2009; EN 60079-1:2007; EN 60079-7:2007; EN 60079-11:2007

(11) Marking of equipment shall contain symbols:

 **II 2G Ex de [ia] IIC T4 Gb**

 **II 2G Ex de [ia] IIB T4 Gb** (variation with the capacitor dK*)

(12) This type examination certificate is valid till: **31.08.2017**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of certification body



Date of issue: 15.08.2012

Number of pages: 2
Page: 1/2

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14)

**Supplement No. 4 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X**

(15) Description of Equipment or Protective System:

Model ex (r) AB * rotary actuator is recertified according standards EN 60079-0:2009;
EN 60079-1:2007; EN 60079-7:2007; EN 60079-11:2007.

No changes in the construction were made.

(16) Report No. : 03/0328-D4

(17) Special conditions for safe use:

17.1 The conditions attached in the main document are valid in the full range.

17.2 The conditions mentioned in the Supplements No. 1, No. 2 and No. 3 are valid in whole range.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this certificate.

(19) List of documentation

- Drawing No. 82/0114-1 dated 17.07.2012
- Technical description – Supplement No.4 dated 17.07.2012

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of certification body



Date of issue: 15.08.2012

Page: 2/2

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**Supplement No. 5 to
EC-Type Examination Certificate**

(2) **Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)**

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0328X

(4) Equipment or protective system: **Model ex (r) AB** rotary actuator**

(5) Manufacturer: **SCHIEBEL Antriebstechnik GmbH**

(6) Address: **Josef Benc Gasse 4, A-1230, Wien, Austria**

(7) This supplement of certificate is valid for: - new model (variant) – extension of series

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, a list of which is mentioned in the schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains other requirements, which manufacturer shall fulfil before products are placed on the market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0: 2009; EN 60079-1:2007;

EN 60079-7:2007; EN 60079-11:2012;

(11) Marking of equipment shall contain symbols:

 **II 2G Ex de IIC T4 Gb**

 **II 2G Ex de ia IIC T4 Gb** (variation with angle sensor)

(12) This type examination certificate is valid till: **31.10.2019**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 15.10.2014

Page: 1/3
Annex: No. 1 (1 sheet)

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Physical Technical Testing Institute
Ostrava – Radvanice

Schedule

(13)

(14)

Supplement No. 5 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X

(15) Description of Equipment or Protective System:

- Series actuators extend the model ex(r)AB100, ex(r)AB200 and ex(r)AB500.
- Standard version with connection boxes (up to 36 terminals).
- Alternative version with control unit type CSCex.

The housing of the actuator is divided into two rooms - the Gear box and the Signalling and Connection area.

The gear housing contains the main worm gear. The gear box is either oil or grease filled.

The signalling and connection area is closed by two covers and one flange (with motor). This area contains terminals for connecting internal links, external control and power cables and can have different electrical devices such as switches, signal generator, heating, etc. in the appropriate type of protection.

Specifications for individual components - see Annex No. 1.

exAB100 actuator	for S2 operating:	max. engine power to 11,0 kW,	max. output torque 1000Nm
exrAB100 actuator	for S4 operating:	max. engine power to 5,5 kW,	max. output torque 1000Nm
exAB200 actuator	for S2 operating:	max. engine power to 22,0 kW,	max. output torque 2000Nm
exrAB200 actuator	for S4 operating:	max. engine power to 11,0 kW,	max. output torque 2000Nm
exAB500 actuator	for S2 operating:	max. engine power to 22,0 kW,	max. output torque 5000Nm
exrAB500 actuator	for S4 operating:	max. engine power to 11,0 kW,	max. output torque 5000Nm

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 15.10.2014

Page: 2/3

Annex: No. 1 (1 sheet)

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(13)

Schedule

(14)

Supplement No. 5 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X

(16) Report No.: 03/0328-5

dated 14.10.2014

(17) Special conditions for safe use:

17.1 Ambient temperature:	Standard version	-20°C to +40°C
	Low- temperature (TT40)	-40°C to +40°C
	Low- temperature (TT50)	-50°C to +40°C
	High temperature (HT60)	-20°C to +60°C

17.2 Cable glands have to be certified according to the standards mentioned in (9) of this certificate.

(18) Essential Health and Safety Requirements:

18.1 Covered by standards mentioned in (10) of this certificate.

(19) List of Documentation:

➤ Instruction manual	AB 100-500 (15 pages)	dated 03.07.2014
➤ Operating instructions for actuators type AB	(19 pages)	dated 15.11.2013
➤ Drawings :	86/z1 ex en rev. B	dated 14.10.2014
	88/z1 ex en rev. B	dated 14.10.2014

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Head of Certification Body



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Page: 3/3
Annex: No. 1 (1 sheet)

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Physical Technical Testing Institute
Ostrava – Radvanice

Annex No. 1

to Supplement No. 5 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0328X

List of components

Component		Motor				Switch		Potentiometer		Heater	Angle sensor		Terminal		Control unit
Temperature range	Short symbol	exDKF 56-90	exDKF 112	4KTC	AC63-AC160	07-1511	d515U	07-6613	dp	27-2301	OPF/EX	3W2	UK, UT	W-Series	CSCex
-50°C...+40°C	TT50		X	X	X	X		X		X			X	X	X
-40°C...+40°C	TT40		X	X	X	X	X	X	X	X	X		X	X	X
-20°C...+40°C	--	X	X	X	X	X	X	X	X	X	X	X	X	X	X
-20°C...+60°C	HT60		X	X	X	X	X	X	X			X	X	X	X

Responsible person:

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Page: 1/1

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