



(1) **EU-TYPE EXAMINATION CERTIFICATE**

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres –  
**Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

**SIQ 14 ATEX 039 X**

**Issue: 2**



- (4) Product: Electric motor, types 4 KTS 90 L4, 4 KTS 90 S4, 4 KTS 100 LB4, 4 KTS 132 S4, 4 KTS 160 M4, 4 KTS 180 M4 and 4 KTS 180 L4
- (5) Manufacturer: Bartec Varnost, d.o.o.
- (6) Address: Cesta 9. avgusta 59, 1410 Zagorje ob Savi, Slovenia
- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) SIQ Ljubljana, Notified body number 1304 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.
- The examination and test results are recorded in the confidential test report TEx040/16.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0 : 2012                      EN 60079-1 : 2014                      EN 60079-7 : 2007**
- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of 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 in accordance to the Directive 2014/34/EU. 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:

**II 2 G Ex db e IIB T4 Gb** (4 KTS 90 L4, 4 KTS 90 S4, 4 KTS 100 LB4,  
4 KTS 132 S4, 4 KTS 160 M4, 4 KTS 180 M4)

**II 2 G Ex db e IIB T3 Gb** (4 KTS 180 L4)

Certification body

Ljubljana, 30 May 2016

Igor Likar



(13)

## SCHEDULE

(14) **EU-Type Examination Certificate Number SIQ 14 ATEX 039 X, Issue: 2**

(15) Description of Product

The three phase four poles electric motors types 4 KTS 90 L4, 4 KTS 90 S4, 4 KTS 100 LB4, 4 KTS 132 S4, 4 KTS 160 M4, 4 KTS 180 M4 and 4 KTS 180 L4 are designed in the type of protection flameproof enclosure with terminal box in the type of protection increased safety. They are enclosed and without fan. Their enclosure is made of cast-iron (EN-GJL-200). Between flameproof enclosure and terminal box line bushings are installed. The squirrel-cage rotor is made of aluminium. The shaft is made of steel C45 or C60. The shaft seal is made of NBR 70. Stator windings are equipped with three temperature sensors (PTC) connected in series. Optionally stator windings can be equipped with three bimetal switches (PTO). External surface of the electric motor is painted. In the wall of the terminal box holes for external connections are provided.

### Technical data

All types:

Rated voltage	From 220 V a.c. up to 690 V a.c.
Frequency	50 Hz/60 Hz
Duty type	From S1 to S9
Ingress protection (standard IEC 60529 : 2001)	IP68

Type	Ambient temperature range	Temperature class	Rated power (50 Hz)	Rated speed (50 Hz)
4 KTS 90 S4	From -20°C to +40°C	T4	0.64 kW	1420 rev/min
4 KTS 90 L4	From -20°C to +40°C	T4	0.86 kW	1430 rev/min
4 KTS 100 LB4	From -20°C to +40°C	T4	1.82 kW	1425 rev/min
4 KTS 132 S4	From -20°C to +40°C	T4	2.66 kW	1448 rev/min
4 KTS 160 M4	From -20°C to +40°C	T4	4.28 kW	1470 rev/min
4 KTS 180 M4	From -20°C to +60°C	T4	7.5 kW	1465 rev/min
4 KTS 180 L4	From -20°C to +40°C	T3	11 kW	1465 rev/min

(16) Test Report TEx040/16 dated 18 May 2016.

(17) Specific conditions of use

- Repair on flameproof joints may only be performed in accordance with the manufacturer's design specifications. Repair on the basis of the values in Tables 1 and 2 of EN 60079-1 : 2014 is not permitted.
- Temperature sensors (PTC) and/or bimetal switches (PTO) shall be connected to a suitable certified disconnecting device.

(18) Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance with the requirements of the standards listed under item (9).



(19) Drawings and Documents

Description	Number	Issue	Date
Recertification-comment's letter, electromotor 4 KTS 90, 100, 132 and 160	022063	B	20. 6. 2013
Technical description, 4 KTS 90, 100, 132, 160	019551	D	17. 6. 2013
Technical description for flameproof electric motors 4 KTS 180	024973	A	7. 3. 2016
Installation guidelines for Ex de IP68 motors	022075	D	7. 4. 2015
Drawing, Marking plate 4 KTS	024088	/	20. 6. 2013
Reference list, Drehstrommotor 4 KTS 90 L, S	019655	C	20. 6. 2013
Drawing, Drehstrommotor 4 KTS 90	019656	B	29. 5. 2013
Drawing, Spalttabelle 4 KTS 90	019659	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 90	019660	A	5. 1. 2009
Reference list, Drehstrommotor 4 KTS 100	019205	C	20. 6. 2013
Drawing, Drehstrommotor 4 KTS 100	019370	B	29. 5. 2013
Drawing, Spalttabelle 4 KTS 100	019371	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 100	019388	A	5. 1. 2009
Reference list, Drehstrommo. 4 KTS 132	019206	C	20. 6. 2013
Drawing, Drehstrommotor 4 KTS 132	019362	C	18. 6. 2013
Drawing, Spalttabelle 4 KTS 132	019363	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 132	019387	A	5. 1. 2009
Reference list, Drehstrommotor 4 KTS 160	019207	C	20. 6. 2013
Drawing, Drehstrommotor 4 KTS 160	019378	C	18. 6. 2013
Drawing, Spalttabelle 4 KTS 160	019386	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 160	019389	A	5. 1. 2009
Reference list, El. motor 4 KTS 180	022008	/	8. 2. 2015
Drawing, El. motor 4 KTS 180	022009	/	13. 2. 2015
Table of flanged, cylindrical and spigot joints (constructional dimensions), type 4 KTS 180	024978	/	18. 2. 2015
Table of flanged, cylindrical and spigot joints (measured dimensions), type 4 KTC 180	024860	/	24. 11. 2014
k-m Berechnung, 4 KTC 180	20377, 20378	/	/

(20) Consolidated certificates

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following:

- 1. Supplement: New type 4 KTS 180 M4 was added and conformity with new edition of standard EN 60079-1 : 2014 for all types was assessed.
- Issue 2: New type 4 KTS 180 L4 was added.



(21) EC-Type Examination Certificates issued under Directive 94/9/EC

In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to Directive 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. By agreement of the European Commission, Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.