



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

(2) Product Intended for use in Potentially Explosive Atmospheres – Directive 2014/34/EU

(3) EU-Type Examination Certificate Number:

SIQ 14 ATEX 039 X

Issue: 3



- (4) Product: Electric motor, types 4 KTS 90 S4, 4 KTS 90 L4, 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 and Article 21 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 TEx092/20.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:


EN IEC 60079-0 : 2018

EN IEC 60079-1 : 2014 / AC : 2018

EN IEC 60079-7 : 2015 / A1 : 2018

Where additional criteria beyond those given here have been used, they are listed at item (18) in the schedule to this certificate.

- (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 with 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 eb IIB T4 Gb** (4 KTS 90 S4, 4 KTS 90 L4, 4 KTS 100 LB4,
4 KTS 132 S4, 4 KTS 160 M4, 4 KTS 180 M4)

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

Certification body

Ljubljana, 20 April 2020


Bojan Pečavar



(13)

SCHEDULE

(14) **EU-Type Examination Certificate Number SIQ 14 ATEX 039 X, Issue: 3**

(15) Description of Product

The three phase four poles electric motors types 4 KTS 90 S4, 4 KTS 90 L4, 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. Between flameproof enclosure and terminal box line bushings are installed. The squirrel-cage rotor is made of aluminium. The shaft is made of steel. 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	S1
Ingress protection (standard IEC 60529 : 2001)	IP68
Ambient temperature range	From -20°C to +40°C

Type	Temperature class	Rated power (50 Hz)	Rated speed (50 Hz)
4 KTS 90 S4	T4	0.64 kW	1420 rev/min
4 KTS 90 L4	T4	0.86 kW	1430 rev/min
4 KTS 100 LB4	T4	1.82 kW	1425 rev/min
4 KTS 132 S4	T4	2.66 kW	1448 rev/min
4 KTS 160 M4	T4	4.28 kW	1470 rev/min
4 KTS 180 M4	T4	7.5 kW	1465 rev/min
4 KTS 180 L4	T3	11 kW	1465 rev/min

(16) Test Report

TEx092/20 dated 20 April 2020.

(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 at item (9).



According to Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (20 April 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-Type Examination Certificates and new issues of such certificates may continue to hold the original certificate number issued before 20 April 2016.

(19) Drawings and Documents

Description	Number	Issue	Date
Recertification-comment's letter, electromotor 4 KTS 90, 100, 132 and 160, Bartec Varnost, d.o.o.	022063	B	20. 6. 2013
* Design changes, document and data changes, Bartec Varnost, d.o.o.	019/2020	/	15. 4. 2020
* Technical description for flameproof electric motors, 4 KTS 90, 100, 132, 160, 180, Bartec Varnost, d.o.o.	028191	/	15. 4. 2020
* Installation guidelines for Ex de IP68 motors, Bartec Varnost, d.o.o.	022075	E	15. 4. 2020
Drawing, Marking plate 4 KTS, Bartec Varnost, d.o.o.	024088	/	20. 6. 2013
* Reference list, Electromotor 4 KTS 90, Bartec Varnost, d.o.o.	019655	D	15. 4. 2020
* Drawing, Drehstrommotor 4 KTS 90 Bartec Varnost, d.o.o.	019656	C	15. 4. 2020
Drawing, Spalftabelle 4 KTS 90, Bartec Varnost, d.o.o.	019659	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 90, Bartec Varnost, d.o.o.	019660	A	5. 1. 2009
* Reference list, Electromotor 4 KTS 100, Bartec Varnost, d.o.o.	019205	D	15. 4. 2020
* Drawing, Electromotor 4 KTS 100, Bartec Varnost, d.o.o.	019370	C	15. 4. 2020
Drawing, Spalftabelle 4 KTS 100, Bartec Varnost, d.o.o.	019371	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 100, Bartec Varnost, d.o.o.	019388	A	5. 1. 2009
* Reference list, Electromotor 4 KTS 132, Bartec Varnost, d.o.o.	019206	D	15. 4. 2020
* Drawing, Electromotor 4 KTS 132, Bartec Varnost, d.o.o.	019362	D	15. 4. 2020
Drawing, Spalftabelle 4 KTS 132, Bartec Varnost, d.o.o.	019363	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 132, Bartec Varnost, d.o.o.	019387	A	5. 1. 2009
* Reference list, Electromotor 4 KTS 160, Bartec Varnost, d.o.o.	019207	D	15. 4. 2020
* Drawing, Electromotor 4 KTS 160, Bartec Varnost, d.o.o.	019378	D	15. 4. 2020
Drawing, Spalftabelle 4 KTS 160, Bartec Varnost, d.o.o.	019386	A	5. 1. 2009
Drawing, Berechnung des "k" und "m" 4 KTS 160, Bartec Varnost, d.o.o.	019389	A	5. 1. 2009
* Reference list, El. motor 4 KTS 180, Bartec Varnost, d.o.o.	022008	A	15. 4. 2020



Description	Number	Issue	Date
* Drawing, Electromotor 4 KTS 180, Bartec Varnost, d.o.o.	022009	B	15. 4. 2020
Table of flanged, cylindrical and spigot joints (constructional dimensions), type 4 KTS 180, Bartec Varnost, d.o.o.	024978	/	18. 2. 2015
Table of flanged, cylindrical and spigot joints (measured dimensions), type 4 KTC 180, Bartec Varnost, d.o.o.	024860	/	24. 11. 2014
k-m Berechnung, 4 KTC 180, Bartec Varnost, d.o.o.	20377, 20378	/	/

*Note: An * is included before the title of documents that are new or revised.*

(20) Consolidated Certificates

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

- Original EC-Type Examination Certificate No. SIQ 14 ATEX 039 X.
- 1. Supplement: Addition of new type 4 KTS 180 M4 and conformity assessment according to new edition of standard EN 60079-1 : 2014 for all types.
- Issue 2: Addition of new type 4 KTS 180 L4.
- Issue 3: Change of installed components and conformity assessment according to new editions of standards EN IEC 60079-0 : 2018, EN IEC 60079-1 : 2014 + AC : 2018 and EN IEC 60079-7 : 2015 + A1 : 2018.