EU TYPE-EXAMINATION CERTIFICATE

1. **EU type-examination Certificate (Module B)**
2. **Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)**
3. **EU type examination certificate Nr** **ITS12ATEX17702X R.1**
4. **Product:** BM6 DC Motor
5. **Manufacturer:** STS Motors Ltd **Applicant:** STS Motors Ltd
6. **Address:** Doulton Road, Cradley Heath, West Midlands, B64 5QB **Address:** Doulton Road, Cradley Heath, West Midlands, B64 5QB
7. This product 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 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 system 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. 100845813MAN-001 dated January 2013, 103572484CHE-001 dated 29th January 2019 and 104394973CHE-001 dated 3rd August 2020.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 and EN 60079-1:2014 except in respect of those requirements referred to at item 16 of the Schedule.
10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe 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. 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 IIB T4/T3* Gb
-20°C ≤ Ta ≤ +58°C/+60°C/+70°C*
* see product description for full details.

Certificate issue date

25th August 2020

Fabrizio Massei
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

SCHEDULE

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13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The BM6 DC Motor is a permanent magnet motor suitable for use in potentially explosive atmospheres.

The motor comprises a fabricated rolled steel body having optional feet welded on, with cast iron end brackets secured by four-threaded tie rods. The body contains a four-pole rotor with four-pole brushgear mounted to the non-drive-end end bracket. The non-drive-end end bracket has a detachable access cover. The motor has a body length of 181.0mm, and a length including the non-drive end section of 244.0mm. The drive end flange is not included in these measurements as it is interchangeable dependent on the end users requirements.

The motor has three flat faces on the non-drive end of the motor, two of which can have up to two entries for connections, the third remaining free for the nameplate which is to be riveted on.

The equipment has four flamepaths in total, one flanged flamepath at the non-drive end for the terminal plate cover, one cylindrical flamepath along the shaft and two spigot flamepaths at either end of the rolled steel body.

Internal and external earth points are provided.

Ambient range/T-Class is dependent on output and duty cycle and is as follows:

Motor Type	Voltage	Output (kW)	Duty	T-Class	Ambient Temperature Range
BM6	24	0.75	S1	T4	-20°C to +58°C
BM6	24	1.2	S2 15 mins	T4	-20°C to +60°C
BM6	24	1.0	S2 30 mins	T4	-20°C to +60°C
BM6	24	0.9	S2 60 mins	T4	-20°C to +60°C
BM6	24	0.75	S1	T3	-20°C to +70°C

CE Marking shall be accompanied by the identification number of the Notified Body responsible for surveillance of production.

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
*BM Series ATEX Certification Drawings	A7663A	3	24/07/20
BM Type ATEX Certification Drawings	A7663B	1	15/8/12
BM Series ATEX Certification Drawings	A7663C	1	15/8/12
*BM Series ATEX Certification Drawings	C7668	2	24/07/20
*Installation & maintenance instructions for BM type flameproof motors	D7716	2	24/07/2020

Note: An * is included before the title of documents that are new or revised.
Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

SCHEDULE

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15. **SPECIAL CONDITIONS FOR SAFE USE**

- Temperature at the cable branching point can reach 140°C for motors rated up to T_{amb} +60°C or 150°C for motors rated T_{amb} +70°C – suitably rated cable must be utilized.
- No modifications must be made to the flamepaths of the unit without consultation of the manufacturers drawing.
- Use only hex socket head fasteners with property class of 8.8 (carbon steel) for securing end cover.

16. **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS**

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 100845813MAN-001 dated January 2013 and 103572484CHE-001 dated 29th January 2019.

17. **ROUTINE (FACTORY) TESTS**

None.

18. **DETAIL OF CERTIFICATE CHANGES**

Issue R.1 (25th August 2020)

- Update of certificate to allow a T3/Tamb +70°C rating for the Continuous Run S1 motor.