

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 | ITS12ATEX17548X R.1

4. **Product:** Brushless Motors

5. **Manufacturer:** Kollmorgen Corporation **Applicant:** Kollmorgen Corporation

6. Address: 201 West Rock Road Address: 201 West Rock Road

Radford, VA 24141 Radford, VA 24141

JSA USA

- 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. IECEx Test Report Cover G104923800CRT, IECEx Test Report Addendum G104923800CRT,
- 9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards 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 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. 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:

 $\langle \epsilon_x \rangle$

II 2 G Ex d IIB T3 Gb

-40°C ≤ Ta ≤ 60°C (EB-10X, EB 20/EBE-20X/EBEX-20x, EB-40X, EB-60X, EB-80X, EBH-12X, EBH-22X, EBHE-22X, EBH-42X, EBH-62X, EBH-82X)

 $-40^{\circ}\text{C} \le \text{Ta} \le 105^{\circ}\text{C} \text{ (ABMR-1004 \& EB-244-A-91-006)}$

-40°C ≤Ta ≤ 70°C (ABMR 1007)

09 May 2024

Certificate issue date

Todd L. Relyea Certification Officer Intertek Italia S.p.A. (NB 2575)



PDR Nº 277B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC Mutual Recognition Agreements



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.





SCHEDULE

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13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

General product information:

The equipment under test is the Kollmorgen Brushless motors models ABMR and EB. These are three-phase AC powered motors housed inside an aluminum enclosure. The Motors are meant to be driven by external electronic servo controllers. All models have a 3/4-NPT entry with flying leads. All models are to be installed with a type Ex d IIB certified barrier gland. Internal and external grounding facilities are provided. The ABMR has a 90 degree bend at the cable entry, while the EB is straight. The EB models have the same basic design as the ABMR models, but with varying frame sizes and rating and can also include an additional brake compartment. The EB models are electrically identical to the ABMR models .

The size and rating of the models are as follows:

- ABMR 1004 rated 120 V RMS 3 Phase Line to Line, 5.25 A, dimensions 285.8mm long 77mm square cross section.
- ABMR 1007 rated 120 V RMS 3 Phase Line to Line, 5.25 A, dimensions 311.2.8mm long 77mm square cross section.
- EB-244-A-91-006 rated 230V RMS, 3-phase line to line, 9A, Dimensions 295.4mm long with a 98.55mm square cross section.
- EB-10x, 230 VRMS and EBH-12x, 480 VRMS, 3 Phase Line to Line, to 6.78A, Dimensions 223.4mm to 336.1mm 77mm square cross section.
- EB-20x, EBEx-20x, 230 VRMS and EBH-22x, EBHEx-22x, 480 VRMS, 3 Phase Line to Line, to 10.0A, Dimensions 254.7mm to 488.8mm 97mm square cross section.
- EB-40x, 230 VRMS and EBH-42x, 480 VRMS, 3 Phase Line to Line, to 27.2A, Dimensions 285.0mm to 459.9mm 126.8mm square cross section.
- EB-60x, 230 VRMS and EBH-62x, 480 VRMS, 3 Phase Line to Line, to 40.0A, Dimensions 324.7mm to 555.0mm 154mm square cross section.
- EB-80X rated 230VRMS, 3 Phase Line to line, 55Amps, 197.1mm square cross sectional enclosure with max length of 646.6mm
- EBH-82X rated 480VRMS, 3 Phase Line to line, 55Amps, 197.1mm square cross sectional enclosure with max length of 646.6mm

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 |
|--|----------------|-------|------------|
| HAZLOC CERTIFICATION DRAWING, ABMR-1004 | 955832 | J | 3/19/2015 |
| HAZLOC CERTIFICATION DRAWING, EB-244-91-A-006 | 955858 | G | 3/18/2015 |
| HAZLOC CERTIFICATION DRAWING, ABMR-1007 | 956759 | В | 1/8/2014 |
| HAZLOC CERTIFICATION DRAWING, EB-10X & EBH-12X | 955893 (3 PGS) | E | 02/24/2022 |





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| TITLE | DOCUMENT Nr | LEVEL | DATE |
|---|----------------|-------|------------|
| HAZLOC CERTIFICATION DRAWING, EB-20X & EBEX-20X & EBH-22X & EBHEX-22X | 955913 (6 PGS) | E | 02/24/2022 |
| HAZLOC CERTIFICATION DRAWING, EB-40X & EBH-42X | 956029 (4 PGS) | E | 02/24/2022 |
| HAZLOC CERTIFICATION DRAWING, EB-60X & EBH-62X | 956284 (6 PGS) | E | 02/24/2022 |
| Haz Loc Certification Control Drawing EB-80X & EBH-82X | 977220 | - | 1/29/2024 |

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

15. SPECIFIC CONDITIONS OF USE

- a) Fasteners used must be stainless steel grade A2 (AISI 304) or A4 (AISI 316) property class 70 (450 MPa min yield stress).
- b) Flamepaths specified for this device are greater than the minimums specified in IEC 60079-1:2007 and are not to be altered.
- c) Thermostat leads shall be connected to a latched power-down circuit per installation instructions.
- d) An Ex d IIB certified conduit seal must be installed at the cable entry.

16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant Essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 104923800CRT-001a Revision 0 dated 06.07.2022

17. ROUTINE (FACTORY) TESTS

None

18. DETAIL OF CERTIFICATE CHANGES

R.0

- Initial release by Intertek Italia S.p.A. NB 2575 based on the assessment performed on MMM 202X and on the certificate legal ownership transferred from Intertek Testing & Certification Ltd. (NB 0359); the same issued original certificate number is used,
- This change was to add 480V EBH models -40°C ≤ Ta ≤ 40°C.

R.1

- Corrected address from 201 Rock Road to 201 West Rock Road
- Added EB-80X and EBH-82X models
- Added EB 480 volt -40°C ≤Ta ≤ 60°C options