



Certificate of Compliance

Certificate: 2475987 **Master Contract:** 164820 (010159_0_000)
Project: 70144919 **Date Issued:** 2018-03-14
Issued to: ATB Tamel Spółka Akcyjna
UL Elektryczna 6
Tarnow, 33-100
POLAND
Attention: Alicja Wrona-Surga

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Zafar Iqbal*
Zafar Iqbal

PRODUCTS

CLASS - C422801 - MOTORS AND GENERATORS-For Hazardous Locations
CLASS - C422881 - MOTORS AND GENERATORS-For Hazardous Locations - Certified to US Standards

Ex d IIB T3/T4

Class I, Zone 1, AEx d IIB T3/T4

Squirrel cage induction motors types EF132S and 132M, rated 7.5 kW max (10HP), 750 V max, 50/60 Hz, 1 or 3 phase, 2 to 8 pole, S1 duty, Class F insulation, for use with or without inverter drivers. Ambient temperature range: -55 °C to 40°C.

Ex d IIB T4

Class I, Zone 1, AEx d IIB T4
Class I, Gps. C and D; T4

Squirrel cage induction motor type EF132S/M, frame W-EF132MS-H, rated 3.0 kW (4 HP), 750 V max, 7.0 A max, 60Hz, 3 phase, 1800 rpm, SF 1.0, TENV (IC410 –without fan and fan cover) for use with inverter driver, constant power, frequency range 50 to 70 Hz, certified as Ex d IIB, T4. Ambient temperature range: -55°C to 40°C.



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Class I, Gps. C and D; T4/T3

Squirrel cage induction motors types W-EF112MK, rated max 4.6 kW (6.2HP), max 600V 60Hz, 3 phase, S1 duty, Class F insulation, TEFC, for use without inverter drivers.
Ambient temperature range: - 25°C to 55°C.

Notes:

- Motors for 50 Hz Power should be de-rated accordingly.
- T3 Motor max power can be up to 5,15kW (7.0HP) for ambient range: - 25°C to 40°C.

APPLICABLE REQUIREMENTS

| | |
|--------------------------------------|---|
| CAN/CSA C22.2 No. 0-10 | - General Requirements - Canadian Electrical Code Part II. |
| CAN/CSA-C22.2 No. 100-04 | - Motors and Generators |
| CAN/CSA-C22.2 No. 145-11 | - Motors and Generators – Electric motor and generators for use in hazardous (classified) locations |
| CAN/CSA-C22.2 60079-0:07 | - Electrical apparatus for explosive gas atmospheres. PART 0: General requirements |
| CAN/CSA-C22.2 60079-1:07 | - Electrical Apparatus for Explosive Gas Atmospheres Part 1: Flameproof Enclosures “d” |
| NFPA 70 | - US National Electric Code |
| ANSI/UL 1004-1 | - Rotating Electric Machinery – General Requirements (Classified) Locations. (Guidance) |
| ANSI/UL 674, 5 th Ed. | - Standard for Safety - Electric motor and generators for use in hazardous (classified) locations |
| ANSI/UL 60079-0, 5 th Ed. | - Electrical apparatus for explosive gas atmospheres PART 0: General requirements |
| ANSI/UL60079-1, 5 th Ed. | - Electrical Apparatus for Explosive Gas Atmospheres Part 1: Flameproof Enclosures “d” |

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.



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The marking shall be permanent, such as a 0.5 mm thick metal nameplate secured by drive pins or screws in bottomed holes, cast, etched, or engraved.

- Manufacturers name;
- Model or type designation or equivalent;
- Rated voltage;
- Frequency in Hertz;
- Rated amperes;
- Number of phases;
- Service factor (if different than unity);
- Rated speed;
- Insulation system code;
- Horsepower rating;
- Maximum ambient temperature;
- Hazardous locations designation;
- Temperature Code Rating
- Space heater nameplate (when applicable) shall be marked with voltage and watts ratings;
- Enclosure Type designation;
- The warning "CAUTION: USE SUPPLY WIRES SUITABLE FOR 110 °C"
- The warning "A SEAL SHALL BE INSTALLED WITHIN 50MM OF THE ENCLOSURE".
- Date code or equivalent;
- Temperature limiting device Type and associated connection (Where applicable);
- CSA monogram with the c us designator, followed with year of certification and certificate number;
- Machine application (e.g. inverter-duty motor), (where applicable);
- Speed range over which the machine is designed to operate, or if marked with a nominal speed at a nominal frequency, the frequency range for which the machine is designed to operate; (where applicable);
- Type(s) of torque application for which the machine is designed (e.g. VT (variable torque), CT (constant torque), CHP (constant horsepower); (where applicable);
- Types of inverter with which the machine is intended to be used, if any (e.g. VPWM (voltage source pulse width modulated) (where applicable)



Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

| Project | Date | Description |
|----------------|-------------|--|
| 70144919 | 2018-03-14 | Explosion Proof Motor Type EF Frame 112MK for Class I, Div. 1 Group C and D. |
| 2620980 | 2014-01-24 | Evaluation for certification of EF132S/M for use in Class I, Div. 1, Group C and D. |
| 2475987 | 2012-07-24 | Induction motors type EF132S/M rated 7.5 kW max, 750 V max, 50/60 Hz, 1 or 3 phase, 2 to 8 pole, Class F insulation for use with/without inverter drive, certified as Ex d IIB T3/T4, Class I, Zone 1, Exd IIB TT3/4. Original certification |