



Certificate of Compliance

Certificate: 70009930 (112560_0_000)

Master Contract: 189340

Project: 70212625

Date Issued: 2019-02-26

Issued to: Nord Motoriduttori Srl
Via Newton 22
S Giovanni in Persiceto, Bologna 40017
ITALY
Attention: Gian Luca Muzzi

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: Ioan Goga
Ioan Goga, P. Eng.

PRODUCTS

CLASS - C422801 - MOTORS AND GENERATORS-For Hazardous Locations

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

Class I, Div. 2, Groups A, B, C and D,

Class I, Zone 2

Class II, Div. 2, Groups F and G

Temperature Code “**T3B**” (165°C)

Three-phase, asynchronous, squirrel-cage, induction motors, **Series CUS**, Insulation System Class F (155°C), 600V max, 50 or 60 Hz, frame sizes 63 to 180, 22kW (30hp) max, 4 poles, TEFC or TEBC, with or without brake, with or without servo-ventilation, Service factor 1.0 or 1.15, horizontal or vertical, foot or flange mounting, continuous duty service S1, rated ambient temperature 40°C, for use in Hazardous Locations Class I, Division 2, Groups A, B, C and D / Class I, Zone 2 / Class II, Division 2, Groups F and G, Temperature Code “**T3B**” (165°C), in the following configurations:

- Type 63S/4, 0.16 hp, frame size 63;
- Type 63L/4, 0.25 hp, frame size 63;
- Type 71S/4, 0.33 hp, frame size 71;
- Type 71L/4, 0.50 hp, frame size 71;
- Type 80S/4, 0.75 hp, frame size 80;
- Type 80L/4, 1.0 hp, frame size 80;



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- Type 80LP/4, 1,0 hp, frame size 80;
- Type 80LH/4, 1,0 hp, frame size 80;
- Type 90S/4, 1.5 hp, frame size 90;
- Type 90L/4, 2.0 hp, frame size 90;
- Type 90SH/4, 1,5 hp, frame size 90;
- Type 90LH/4, 2,0 hp, frame size 90;
- Type 90SP/4, 1,5 hp, frame size 90;
- Type 90LP/4, 2,0 hp, frame size 90;
- Type 100L/4, 3.0 hp, frame size 100;
- Type 100LA/4, 5,0 hp, frame size 100 ;
- Type 100LH/4, 3,0 hp, frame size 100;
- Type 100LP/4, 3,0 hp, frame size 100;
- Type 112M/4, 5,0 hp, frame size 112;
- Type 112MH/4, 5,0 hp, frame size 112;
- Type 112MP/4, 5,0 hp, frame size 112;
- Type 132S/4, 7,5 hp, frame size 132;
- Type 132M/4, 10,0 hp, frame size 132;
- Type 132SH/4, 7,5 hp, frame size 132;
- Type 132MH/4, 10,0 hp, frame size 132;
- Type 132SP/4, 7,5 hp, frame size 132;
- Type 132MP/4, 10,0 hp, frame size 132;
- Type 160MH/4, 15 hp, frame size 160;
- Type 160LH/4, 20 hp, frame size 160;
- Type 160MP/4, 15 hp, frame size 160;
- Type 160LP/4, 20 hp, frame size 160;
- Type 180MH/4, 25 hp, frame size 180;
- Type 180LH/4, 30 hp, frame size 180;
- Type 180MP/4, 25 hp, frame size 180;
- Type 180LP/4, 30 hp, frame size 180.

Notes:

1. Motors may be marked “Inverter-duty”, CT or VPWM.
2. Motors may be overframed to meet temperature limitations. The total external surface temperature (rise plus ambient) shall not exceed the limits of the temperature code on the nameplate.
3. Motors could also be marked for intermittent duty service, S2 or S3, provided that the input rated current is less than or equal to the value indicated for the continuous duty service S1.
4. Motors may be provided with temperature detectors responsive to motor temperature only, for connection to separate auxiliary circuits, not replacing normal overload protection as required by the .Canadian Electrical Code, Part 1.
5. The supply connection is subject to further investigation by the local inspection authorities.
6. The certification does not take into consideration thermal effects that may appear on the brake disc during stopping or the motor and connected mechanical load (brake evaluated for electrical components only, not covering the mechanical parts).
7. Winding leads are either terminated on a terminal block inside the terminal box or alternatively open leads of approx. 9” length (without terminal block) is provided to facilitate supply connection. Motors terminated with open leads without terminal block are subject to installation and use in



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accordance with the requirements of the Canadian Electrical Code (CEC) Part I (for Canada) and National Electrical Code (NEC) (for US).

8. Motors may include optional devices (such as PTC thermistors, RTDs, etc.) embedded in winding, bearing temperature sensing devices fitted on bearing housing, Terminals of such auxiliaries are brought to terminal block inside the main terminal box or separate auxiliary terminal box fitted on the motor.

APPLICABLE REQUIREMENTS

- | | |
|--------------------------------------|--|
| CSA Std. C22.2 No. 100-14 | - Motors and Generators |
| CSA Std. C22.2 No. 213-M1987 (R2013) | - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations |
| CSA Std. C22.2 No. 25-1966 (R2014) | - Enclosures for Use in Class II Groups E, F, and G Hazardous |
| UL Subject 1836 (Sept. 3, 2014) | - Electric Motors and Generators for Use in Class I, Division 2 and Class II, Division 2 Hazardous (Classified) Locations. |
| UL 1004-1, 2 nd Edition | - Rotating Electrical Machines – General Requirements |
| UL 1004-8, 2 nd Edition | - Inverter Duty Motors |



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
		Original Certification.
70212625	2019-02-26	Update of report 70009930 for the addition of alternate "Zone 2" Hazardous Location designation.
70168679	2018-01-22	Update of report 70009930 for addition of alternate motor fan made of polymeric material (Polyamide 6 (PA6). Includes Static Electricity testing (Method B).
70047032	2016-03-24	Update of report for addition of Hazardous Locations Class II, Division 2, Groups F and G, Temperature Code "T3B" (165°C) for Motor Series CUS.
70009930	2015-02-16	Three-phase, asynchronous, squirrel-cage, induction motors, Series CUS, Insulation System Class F (155°C), 600V max, 50 or 60 Hz, frame sizes 63 to 180, 22kW (30hp) max, 4 poles, TEFC or TEBC, with or without brake, with or without servo-ventilation, Service factor 1.0 or 1.15, horizontal or vertical, foot or flange mounting, continuous duty service S1, rated ambient temperature 40°C, for use in Hazardous Locations Class I, Division 2, Groups A, B, C and D, Temperature Code #T3B# (165°C).