

Certificate of Compliance

Certificate: 80021589

Master Contract: 600794

Project: 80021589

Date Issued: November 13, 2019

Issued to: Van Houcke NV
Vlamingveld 32
Jabbeke, BE-8490
Belgium

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: *Lizon Deschamps*
Lizon Deschamps

PRODUCTS

CLASS 4211 01 - MOTORS AND GENERATORS

CLASS 4211 81 - MOTORS AND GENERATORS - Certified to US Standards

- Three-phase, asynchronous, squirrel-cage, induction motors, 690V ac max, 50 or 60 Hz; 2, 4, 6 or 8 poles (except otherwise specified), totally enclosed, Insulation System Class F or H, foot or flange mounted, continuous operation mode, Types:

Part A

1TZ9.01...+D40, IEC Frame sizes 80 - 315, 0.75 – 362 kW, fan cooled / air over.

Part B

1TZ9.03...+D40, IEC Frame sizes 80 - 315, 0.75 – 362 kW, fan cooled / air over.

Notes:

1. Motors may be provided with temperature detectors/inherent thermal protectors responsive to motor temperature only, for connection to separate extra-low voltage auxiliary circuits, not replacing normal overload protection as required by the Canadian Electrical Code, Part 1.

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2. The supply connection is subject to further investigation by the local inspection authorities.
 3. The motor mounting means, motor leads and lead terminations must be evaluated for each end use application.
 4. Motor types of Air Over construction are intended to be operated in an airstream (air-over) of a fan or blower load in order to meet the temperature limits for normal operation. These motors are certified as components for use in equipment / applications where the suitability of the combination is to be determined by Canadian Standards Association.
 5. Motor types of Air Over construction are not certified with a mechanical output power rating.
 6. Motors delivered without a terminal box (but supplied with a suitable length of leads) are certified as components only, to be part of other equipment, where the acceptability of the final assembly is to be determined by the Canadian Standards Association.
 7. The motors covered in the scope of this report are provided with axial flow cooling fans (except for the non-ventilated and air-over motors). The suitability of cooling systems with other characteristics is to be determined in the final assembly.
 8. Suffixes may be added to the type/designation indicating construction details.
 9. The « y » in the motor designation may be:
 - 0 (Aluminum housing),
 - 5 or 6 (cast iron housings).
 10. Motors in Part A are high-efficiency/energy efficient and motors in Part B are premium efficiency motors (energy efficiency verification not covered by the present certification report).
- **Parts A to D:** Three-phase, asynchronous, squirrel-cage, induction motors, 690V ac max, 50, 60 Hz or inverter duty up to 200Hz; 2, 4, 6 or 8 poles (except as otherwise specified), totally enclosed, Insulation System Class F or H, foot or flange mounted, continuous operation mode:

Part A: IE2 – NEE NEMA Energy Efficient

- 1) 1LA9080-2K – 1LA9169-6K, IEC Frame sizes 80 – 160, 0.06 - 28.8 kW, fan-cooled, 2, 4 or 6 poles;
- 2) 1LA9180-2W – 1LA 9209-6W, IEC Frame sizes 180 – 200, 15 – 56 kW, fan-cooled, 2, 4 or 6 poles;
- 3) 1LG6180-2 – 1LG6319-8 + option D42), IEC Frame sizes 180 – 315, 11 – 362 kW, fan-cooled;
- 4) 1LA7 IEC Frame Size 80 – 225, 0.75 kW – 56 kW, fan-cooled, 2, 4 or 6 poles
- 5) 1.V2:
 - a. Section 1 (motors < 0.75 kW): IEC Frame size 63 - 71, 0.09 kW – 0.63kW, fan cooled
 - b. Section 2 (motors ≥ 0.75 kW): IEC Frame sizes 71 - 315, 0.75 – 362 kW, fan cooled

Part B: IE3 – NPE NEMA Premium Efficient

- 1) 1LA9080pX – 1LA9229pX, IEC Frame sizes 80 – 225, 0.75 kW – 56 kW, fan-cooled, 2, 4 or 6 poles
- 2) 1LG6180-2 – 1LG6319-6 + option D41, Frame sizes 180 kW– 315, 11 – 362 kW, fan-cooled;
- 3) 1.V3:
 - a. Section 1 (motors < 0.75 kW): IEC Frame size 71, 0.09 kW – 0.63kW, fan cooled
 - b. Section 2 (motors ≥ 0.75 kW): IEC Frame sizes 80 - 315, 0.75 – 362 kW, fan cooled
- 4) 1CV3:
 - a. Section 1 (motors ≥ 160 kW): IEC Frame size 315 - 450, 160kW – 1000kW, fan cooled



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Part C: IE4 – SPE IEC Super Premium Efficient

- 1) 1.V4:
 - a. Section 1 (motors < 0.75 kW): IEC Frame size 71, 0.09 kW – 0.63kW, fan cooled
 - b. Section 2 (motors ≥ 0.75 kW): IEC Frame sizes 80 - 315, 0.75 – 362 kW, fan cooled
- 2) 1CV4:
 - a. Section 1 (motors ≥ 160 kW): IEC Frame size 315 - 450, 160kW – 1000kW, fan cooled

Part D: without efficiency category

- 1) V1 IEC Frame size 63-315 0,09 – 362 kW in IE-Class IE1
- 2) N1, 1.N2, 1.N3, 1.N4: IEC Frame Size 63 – 315, 0.09 kW– 362 kW non-ventilated or air over
- 3) V1, 1.V2, 1.V3, 1.V4 IEC-Frame Size 71-315, 10poles or higher or pole switching
- 4) 1RV4, 1TV4 IEC Frame Size 71-315, Reluctance Motors (VSD)
- 5) 1DN. IEC Frame Size 71-315
- 6) 1LA7 IEC Frame Size 56 – 225, 0.75 kW – 56 kW, fan-cooled, 2, 4, 6 or 8 poles

Part E: Single-phase motors, Types 1.V0.

Note: Same as described in Parts A – D except for attached capacitor and different winding design. Single phase, asynchronous, squirrel-cage, induction motors, 250V ac max, 50, 60 Hz; 2 or 4 poles, totally enclosed, Insulation System Class F or H, foot or flange mounted, continuous operation mode, working with run capacitors.

Without Energy Efficiency:

- 1) V0 IEC Frame Size 63 – 100, 0,25 – 3kW, fan cooled, 2 or 4 poles

Notes:

1. Motors may be provided with temperature detectors/inherent thermal protectors responsive to motor temperature only, for connection to separate extra-low voltage auxiliary circuits, not replacing normal overload protection as required by the Canadian Electrical Code, Part 1.
2. The supply connection is subject to further investigation by the local inspection authorities.
3. The motor mounting means, motor leads and lead terminations must be evaluated for each end use application.
4. Motor types of Air Over construction are intended to be operated in an airstream (air-over) of a fan or blower load in order to meet the temperature limits for normal operation. These motors are certified as components for use in equipment / applications where the suitability of the combination is to be determined by Canadian Standards Association.
5. Motor types of Air Over construction are not certified with a mechanical output power rating.
6. Motors delivered without a terminal box (but supplied with a suitable length of leads) are certified as components only, to be part of other equipment, where the acceptability of the final assembly is to be determined by the Canadian Standards Association.
7. The motors covered in the scope of this report are provided with axial flow cooling fans (except for the non-ventilated and air-over motors). The suitability of cooling systems with other characteristics is to be determined in the final assembly.
8. Suffixes may be added to the type/designation indicating construction details.
9. Motors ≥ 0.75kW are in the following Energy Efficiency Categories (Energy Efficiency Verification not covered/evaluated by the present certification report):



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- Part A, Section 2: Energy Efficient;
 - Part B, Section 2: Premium Efficient;
 - Part C, Section 2: Super Premium Efficient;
 - Part D: not categorized as Energy Efficient motors.
 - Part E: not categorized as Energy Efficient motors.
10. Motors with capacitors attached to the enclosure need to comply with the requirements of the latest Ed. of UL 1004-1 sec. 9 – Frame and Enclosure as required by Sec. 26.

CLASS 4211 01 - MOTORS AND GENERATORS

- Three-phase, asynchronous squirrel-cage induction motor for continuous mode of operation, insulation Class F or H, totally enclosed, 690V ac max, 50 or 60 Hz, foot or flange mounting, Types:

1TZ9.02...+D40, (0.75 – 30kW), fan cooled / air over, 2, 4 or 6 poles

Notes:

1. Motor types of Air Over construction are intended to be operated in an airstream to meet the temperature limitations for normal operation. These motors are certified as components for use in equipment / applications where the suitability of the combination is to be determined by Canadian Standards Association.
2. Motor types of Air Over construction are not certified with a mechanical output power rating;
3. Type designations may have suffix figures and letters indicating construction details.
4. Motors may be provided with protectors responsive to motor temperature only to be connected to extra-low voltage auxiliary circuits.
5. Motors which are delivered without terminal box and supplied with a suitable length of leads are Certified only as a component part of other equipment where the acceptability of the final assembly is to be determined by CSA International.
6. The motors covered in the scope of this report are provided with axial flow cooling fans. The suitability of cooling systems with other characteristics is to be determined in the final assembly.

APPLICABLE REQUIREMENTS

CSA/CSA C22.2 No. 0-10	- General Requirements - Canadian Electrical Code, Electrical Code, Part II
CSA C22.2 No. 100-14	- Motors and Generators
UL 1004-1, 2 nd Ed.	- Rotating Electrical Machines – General Requirements
UL 1004-8 2 nd Ed.	- Inverter Duty Motors

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.



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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.

Company's name, and/or CSA file number 600794, type designation, electrical ratings, serial number or date coding, the CSA Mark appear in a permanent manner on each unit, and any other information as specified in the Certification Report.



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		
80021589	November 13, 2019	<u>Submitter Report</u> 170216-2413196	<u>Submitter Model</u> 1CV3, 1CV4 1.V1, 1.V2, 1.V3, 1.V4 1.N1, 1.N2, 1.N3, 1.N4	<u>Listee Model</u> 1CV3, 1CV4 1.V1, 1.V2, 1.V3, 1.V4 1.N1, 1.N2, 1.N3, 1.N4