



Certificate: 2413196

Master Contract: 170216

Project: 80148324

Date Issued: 01/17/2023

2	1.N1, 1.N2, 1.N3, 1.N4	IEC Frame Size 63 – 315, 0.04 kW– 362 kW non-ventilated or air over
3	1.V1, 1.V2, 1.V3, 1.V4	IEC-Frame Size 71-315, 10poles or higher or pole switching
4	1.V2	IEC Frame size 63 - 315, 0.04 kW – 362kW, fan cooled
5	1.V3	IEC Frame size 71 - 315, 0.04 kW – 362kW, fan cooled
6	1CV3	IEC Frame size 315 - 450, 55kW 1000kW, fan cooled
7	1.V4	IEC Frame size 71 - 315, 0.04 kW – 362kW, fan cooled
8	1CV4	IEC Frame size 280 - 450, 37kW – 1000kW, fan cooled
9	1RV4, 1TV4, 1RV5, 1TV5	IEC Frame Size 71-315, Reluctance Motors (VSD)
10	1DN	IEC Frame Size 71-400
11	1SV, 1UV, 1SN, 1UN	IEC Frame Size 132 – 280, Synchronous Motors (VSD)

Part B: 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.

Models
1.V0

1	1. 1.V0	IEC Frame Size 63 – 100, 0,25 – 3kW, fan cooled, 2 or 4 poles
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Notes:



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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. See attachment 0.2
 9. Motors $\geq 0.75\text{kW}$ are in the following Energy Efficiency Categories (Energy Efficiency Verification not covered/evaluated by the present certification report).
 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.



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APPLICABLE REQUIREMENTS

CSA C22.2 No. 100-14 (R2019) - Motors and generators

UL 1004-1 (Second Edition) - UL Standard for Safety Rotating Electrical Machines – General Requirements - Second Edition; Reprint with Revisions Through and Including November 5, 2020

UL 1004-8 (Second Edition) - UL Standard for Safety for Inverter Duty Motors, UL 1004-8, Second Edition, Dated November 13, 2013



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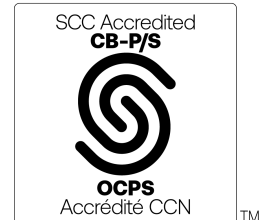
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Notes:

Products certified under Class C421101 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





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
80148324	January 17, 2023	Update to Report 2413196 for addition of Frame size 280 with 37kW in Part C, section 2 of series 1CV4. Editorial changes in report content and also in Att2_Illustration and Att3_Table attachments.
80103507	January 19, 2022	Update to Report 2413196 to cover the addition of c type 1SV, 1UV, 1SN, 1UN, IEC Frame Size 132 - 280. Editorial changes in report content and Att2_Illustration and Att3_Table attachments.
80081436	September 17, 2021	Update to Report 2413196 for extension of engine series 1DN with motor frame size 400.
80037231	June 09, 2020	Update to Report 2413196 to cover changes in motor type description. Add 1RV5 and 1TV5 in Part D, add in nomenclature for Motor types Digit d (IE5 Class), digit e/f (31 - 315, 35 - 350), add new supplier for anti-condensating heater, adapt description chapter 20.4 of optional plastic shells for bearing insulation, correct reference list for attachments and adapt stator and rotor overall dimensions.
70220964	May 22, 2019	Update to Report 2413196 to cover the changes in ratings(1LE5), dimensions of stator(1LE1), rotor(1LE1), fans(1LE1), terminal box(1LE1) and end bells(1LE1) according to CSA C22.2 No.100-14 and UL1004-1 2nd Edition, UL1004-8 2nd Edition.
70203558	November 22, 2018	Update to Report 2413196 to add additional drawings to cover new motor ratings (Motortype 1CV3/1CV4 (1LE5))
70193288	August 30, 2018	Update to Report 2413196 for addition of alternate rating configurations within accepted ranges for motor type 1LE1.
70175428	March 23, 2018	Update to Report 2413196 for addition of alternate constructions (addition of Frame Size/Shaft Height 63 for 3-ph motors and other small changes).
70174101	March 22, 2018	Update to Report 2413196 to increase the maximum framesize and power of motors type 1LE5 to framesize 450 / 1000kW



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70115121	August 23, 2017	Update to Report 2413196 to add new models 1LE5 and 1LA7.
70131554	August 23, 2017	Update to Report 2413196 to add new models 1PC1.
70078355	August 02, 2016	Update to Report 2413196 to cover the change in the description for the Fan and changes in the description of the stator cores.
70048093	October 05, 2015	Update to Report 2413196 to cover additional Motors with new EEV ratings; Update to cover the extension from 50/60 Hz to Inverter Duty.
2666481	January 24, 2014	Update to Report 2413196 for addition of motor type 1PC3 in Part B of the report and alternate components. To the requirements of CSA Std C22.2 No. 100-04 and UL 1004-1, 2nd Ed.
2413196	July 29, 2011	Original Certification of Three-phase, induction motors, 690V ac max, 50 or 60 Hz; 2, 4, 6 or 8 poles, TEFC, Ins. System Class F or H, Series 1LA9, 1LG6, 1LE1 and 1PC (including premium efficiency motor types) according to CSA C2.2 No. 100-04 and UL1004-1.