



Certificate of Compliance

Certificate: 80088846

Master Contract: 256222

Project: 80088846

Date Issued: 2021-09-27

Issued To: Orange 1 Electric Motors S.p.a.
Piazza della Repubblica 28
., Milano, 20124
Italy

Attention: Roberto Benacchio

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: Alessandro Raspatelli

Alessandro Raspatelli

PRODUCTS

CLASS - C421101 - MOTORS AND GENERATORS Motors and Generators

CLASS - C421181 - MOTORS AND GENERATORS Certified to US Standards

PART A

Series U, UM squirrel-cage induction motors, component type, permanently connected, tefc, horizontal or vertical, foot and/or flange mounted, max. 600V or less, three phase and single phase, 50/60Hz, ambient 40 °C, Insulation Class F; 2, 4, 6, 8, 4/2 and 8/4 poles, power from 0.06kW to 22 kW, frame size 56 to 160.

PART B

Series US, UMS squirrel-cage induction motors, component type, permanently connected, tefc, horizontal or vertical, foot and/or flange mounted, max. 600V or less, three phase and single phase, 50/60Hz, ambient 40 °C, Insulation Class F; 2, 4, 6, 8, 4/2, 8/4 poles, with time rating 120 sec. ON and 480 sec. OFF, power from 0.06kW to 22 Kw, frame size 63 to 160.

PART C

Series UV, UMV squirrel-cage induction motors, component type, permanently connected, tefc, horizontal or vertical, foot and/or flange mounted, max. 600V or less, three phase and single phase, 50/60Hz, ambient 40 °C, Insulation Class F; 2, 4, 6, 8, 4/2, 8/4 poles, frame sizes from 56 to 160, without fan ventilation, with time rating 120 sec. ON and 480 sec. OFF, power from 0.06kW to 22 Kw.



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PART D

Series USV, UMSV squirrel-cage induction motors, component type, permanently connected, tefc, horizontal or vertical, foot and/or flange mounted, max. 600V or less, three phase and single phase, 50/60Hz, ambient 40 °C, Insulation Class F; 2, 4, 6, 8, 4/2, 8/4 poles, with out fan ventilation and with time rating 120 sec. ON and 480 sec. OFF, power from 0.06kW to 22 Kw, frame size 63 to 160.

Notes

Note: Intended for use as a component part in other equipment where the acceptability is determined by the CSA Group.

Note: 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.

Note: Motors may be provided with inherent thermistors or thermal protectors to be connected to an external control circuit. These devices do not replace the motor overload protection.

Note: Motors may be delivered without terminal block and/or without terminal box and/or with supply entry openings other than NPT conduit openings, optionally provided cable glands, and are then Certified as component parts of other equipment where the acceptability of the final assembly is to be determined by CSA Group

Additional Notes

1. The series U, UM, US UMS, UV, UMSV can be assembled with AFM, DFM and RC, ac or dc motor brakes approved CSA and UR. In present of the ac or dc motor breaker the motor will be identified with following type reference: serie follow by size, follow by type of the brake. When used together the brakes shall be evaluated at the end use.
2. In the series UM, UMS, UMSV a start capacitor can be connected by means a electronic device identified with following code: EL and EH 12A 450Vac. The motor protection should be evaluated at the end use.
3. Enclosure and cooling: Totally enclosed fan cooled (closed system TEFC) and not fan cooled TENV (totally enclosed non ventilated).
4. All type of the motors can be assembled to CSA and UR approved brakes FM series input voltage varies from 24Vdc to 224Vdc and input current – varies from 0.07A to 5.9A according to brake size, winding wire size and input voltage. MS/FM series input voltage – varies from 110/190Vac to 3.99/2.31Aac according to brake size, winding wire size and input voltage. MLCC series and PCC series input voltage varies from 24Vdc to 244Vdc input current varies from 0.068A to 2.24A according to brake size, winding wire size and input voltage. The type reference of the motors, when are present the brakes will be: motor type reference follow by the code of the brake AFM (MF/FM series), DFM (FM series) and follow by two digit, identifying size and RC (MLCC and PCC series).

APPLICABLE REQUIREMENTS

CSA C22.2 No.100-14	-	Motors and Generators
UL 1004-1(2 nd ed. rev 05 Nov, 2020)	-	Rotating Electrical Machines- General Requirements



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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.

- Submitter's name and/or File number "256222" adjacent to the CSA marking
- cCSAus monogram or CSAus monogram or CSA monogram
- Model designation or equivalent;
- Date code or equivalent
- Complete electrical ratings:
 - Rated voltage (V);
 - Rated full-load current (A);
 - Rated frequency (Hz);
 - Rated output in kW or hp
 - Speed (rated full load speed in revolutions per minute)
- Number of phases (3-ph or 1-ph);
- The service factor if greater than unity;
- The service factor amperes for motors having a service factor greater than 1.15
- Appropriate letter code for the rated Insulation System: "Class F" or "Ins.Class F"
- Max ambient temperature : "40° C"
- "TEFC" for a totally enclosed fan cooled motor;
- "TENV" for a totally enclosed non ventilated motor;
- Time rating: "**Continuous**" or "**CONT**" for continuous duty motors;
- A motor rated for short time or intermittent duty shall be marked on the nameplate with the words "intermittent duty" or "int. duty" and with the time rating in minutes or hours, or a combination of minutes and hours. The rating may be for "On" time only or include specifications for both "On" and "Off" periods.

WARNING

- Motors equipped with electrically powered condensation prevention heaters shall be marked with the rated heater voltage, number of phases, and the rated power in watts.
- Motors having lifting supports for lifting only a subassembly of the motor are clearly marked as follows or with equivalent wording:



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“CAUTION: THIS LIFTING SUPPORT IS NOT TO BE USED TO LIFT THE ENTIRE MACHINE. ONLY THE COMPONENT ATTACHED DIRECTLY TO THIS SUPPORT MAY BE SAFELY LIFTED BY THE SUPPORT”; and

“ATTENTION : CE SUPPORT DE LEVAGE NE DOIT PAS ÊTRE UTILISÉ POUR SOULEVER LE POIDS TOTAL DE LA MACHINE. SEUL L'ÉLÉMENT QUI REPOSE DIRECTEMENT SUR LE SUPPORT PEUT ÊTRE SOULEVÉ EN TOUTE SÉCURITÉ.”.

- The direction of rotation, when this information is necessary for proper operation
- The winding (e.g., series, shunt, or compound) when necessary for safe operation;

FIELD-INSTALLED MOTORS ONLY (Applicable only for US, Std.UL1004-1(2nd ed.))-

Note: Motors with diameter of 7 inch or less can be provided with warnings on smallest package.

- “CAUTION: USE SUPPLY WIRES SUITABLE FOR 90 °C/ATTENTION: EMPLOYER DES FILS D'ALIMENTATION POUR 90 °C”
- “ACCEPTABLE FOR FIELD WIRING”
- For field installed motors, an alternating-current motor rated 1/2 horsepower (373 W output) or more shall be marked with a code letter to indicate the locked-rotor amperes in accordance with the National Electrical Code®, NFPA 70.

Installation instructions and additional information:

The following additional information and instructions are provided with each motor:

- (a) a suitable wiring diagram or marked terminals or both, unless the proper connections are plainly evident;
- (b) grounding terminal/ point of grounding is marked with the grounding symbol.
- (c) installation instructions necessary to comply with the construction requirements for mounting, bearing lubrication, drainage, etc., including operation of the machine or devices supplied, such as heaters, winding thermostats, etc;



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
80088846	2021-09-27	cCSAus Re-Certification and addition of alternate sensor Man. Miotti, type PT1000-R8/2DW-2F on models UV71, corrections to the report and update to latest standards editions. Report and Certificate re-issued due to transfer of ownership per project 2589705.