



CERTIFICATION RECORD

The company named below has been authorized by CSA International to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 256222

Class No: 4211 81 MOTORS AND GENERATORS Certified to US Standards

SUBMITTOR

4819406 Orange 1 Electric Motors S.p.a.
Piazza della Repubblica 28
Milano (MI), . 20124
Italy

FACTORIES

4815032 ELPROMtech s.r.l.
93 Via Mantova
Parma, Parma 43122
Italy

May 13, 2019 (Replace: January 5, 2018)

TO THE REQUIREMENTS UL 1004-1(2nd ed.)

- 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 22kW.
- 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 22kW.
- Series UV, UMV squirrel-cage induction motors, component type, permanently connected, tenv, 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 ventilation, with time rating 120 sec. ON and 480 sec. OFF, power from 0.06kW to 22kW.
- Series USV, UMSV squirrel-cage induction motors, component type, permanently connected, tenv, 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 ventilation, with time rating 120 sec. ON and 480 sec. OFF, power from 0.06kW to 22kW.

- The Series U, UM US UMS, UV, UMSV can be assembled with AFM, DFM and RC, ac or dc motor brakes. In present of the ac or dc motor brake the motors will be identified with following type reference: series follow by size, follow by type of the break. The motors, when used together with the brakes shall be evaluated at the end use.
- Series UO, squirrel-cage induction motors, component type, permanently connected, onv, horizontal or vertical, foot and/or flange mounted, max. 600 V or less, three phase, 50/60 Hz, with time rating 180 sec. ON and 420 sec. OFF Insulation Class F; 2, 4, 6 poles, power from 0.55 kW to 15 kW . Oil immersed. Max oil temp 60°C
- Series UOM squirrel-cage induction motors, component type, permanently connected, onv, horizontal or vertical, foot and/or flange mounted, max. 600 V or less, single phase, 50/60 Hz, Insulation Class F; 2, 4 poles, with time rating 180 sec. ON and 420 sec. OFF, power from 0.55 kW to 2.60 kW . Oil immersed. Max oil temp 60°C

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 – 400Vac. The motor protection should be evaluated at the end use.

Certified to the requirements of CSA Standard UL 1004-1(2nd edition) Rotating Electrical Machines – General Requirements

Component type motors, types U100L6/12-DH SC2, U112M6/12--DH SC2, U132M6/12-DH SC2 , U132L8/4- DH SC2, U132M8/4- DH SC2, U132S8/4- DH SC2, 1 ph and 3 ph, 240/400/600V/690V, 50/60Hz , ambient temperature 40 °C, 4/8/6/12 poles, squirrel-cage induction motors, tefc, foot and/or flange mounted to enclosure with changeable position, see Note 2 , Insulation Class F; frame sizes 100-112-132 , refer to table below for complete electrical ratings.

| Size | Ph | Model | 6 poles | | | | | 12 poles | | | | | |
|------|----|------------------|-------------------|----------------------|-------------------|-------------------|------|-------------------|----------------------|-------------------|-------------------|-----|-----|
| | | | Input Voltage (V) | Input Frequency (Hz) | Input Current (A) | Output power (Kw) | RPM | Input Voltage (V) | Input Frequency (Hz) | Input Current (A) | Output power (Kw) | RPM | |
| 100 | 1 | U100L12/6-DH SC2 | 240 | 50 | 7.4 | 1.5 | 950 | U100L12/6-DH SC2 | 240 | 50 | 2.9 | 0.3 | 450 |
| | | | 240 | 60 | 6.6 | 1.5 | 1150 | | 240 | 60 | 2.5 | 0.3 | 550 |
| | | | 400 | 50 | 4.3 | 1.5 | 940 | | 400 | 50 | 1.6 | 0.3 | 450 |
| | | | 400 | 60 | 3.8 | 1.5 | 1140 | | 400 | 60 | 1.4 | 0.3 | 540 |
| | | | 600 | 50 | 2.9 | 1.5 | 945 | | 600 | 50 | 1.1 | 0.3 | 450 |
| | | | 600 | 60 | 2.6 | 1.5 | 1150 | | 600 | 60 | 1 | 0.3 | 550 |
| 112 | 1 | U112M12/6-DH SC2 | 240 | 50 | 10 | 2.2 | 960 | U112M12/6-DH SC2 | 240 | 50 | 4 | 0.5 | 450 |
| | | | 240 | 60 | 9.2 | 2.2 | 1150 | | 240 | 60 | 3.8 | 0.5 | 550 |
| | | | 400 | 50 | 5.8 | 2.2 | 960 | | 400 | 50 | 2.3 | 0.5 | 450 |
| | | | 400 | 60 | 5.3 | 2.2 | 1150 | | 400 | 60 | 2.2 | 0.5 | 550 |
| | | | 600 | 50 | 3.8 | 2.2 | 960 | | 600 | 50 | 1.5 | 0.5 | 450 |
| | | | 600 | 60 | 3.5 | 2.2 | 1150 | | 600 | 60 | 1.4 | 0.5 | 550 |
| 132 | 3 | U132L12/6-DH SC2 | 240 | 50 | 13.4 | 3 | 975 | U132L12/6-DH SC2 | 240 | 50 | 5.9 | 0.8 | 475 |
| | | | 240 | 60 | 12.2 | 3 | 1185 | | 240 | 60 | 5.2 | 0.8 | 570 |
| | | | 400 | 50 | 7.8 | 3 | 975 | | 400 | 50 | 3.4 | 0.8 | 475 |
| | | | 400 | 60 | 7.1 | 3 | 1185 | | 400 | 60 | 3 | 0.8 | 570 |
| | | | 600 | 50 | 5.1 | 3 | 975 | | 600 | 50 | 2.2 | 0.8 | 475 |
| | | | 600 | 60 | 4.7 | 3 | 1185 | | 600 | 60 | 2.1 | 0.8 | 570 |

| | | | | | | | | | | | | | |
|---|---|------------|-----|-------|-------------|----------|-------------------|--|-----|----|-----|-----|-----|
| | | | 600 | 60 | 4.7 | 3 | 1175 | | 600 | 60 | 1.9 | 0.8 | 570 |
| 13 | 3 | U132L | 690 | 60 | 2.0/5.7 | 1.1/4.4 | 800/1660 | | | | | | |
| 2 | | 8/4-DHSC2 | 400 | 50/60 | 6.5/15.8/14 | 1.7/7 | 720/860-1460/1750 | | | | | | |
| ** | | | 400 | 60 | 6.2/15.2 | 1.85/7.5 | 860/1740 | | | | | | |
| | | U132M | 400 | 60 | 1.18/5.9 | 4.8/12.7 | 870/1750 | | | | | | |
| | | 8/4-DHSC2* | | | | | | | | | | | |
| | | U132S | 400 | 60 | 4.6/10 | 1.1/4.4 | 875/1760 | | | | | | |
| | | 8/4-DHSC2* | | | | | | | | | | | |
| *Can be provided at 690 Vac input voltage | | | | | | | | | | | | | |
| ** See note3 | | | | | | | | | | | | | |

Note: Motors may be provided with a thermal protector, not replacing normal overload protection as required by the Canadian Electrical Code, PART I to be checked and to be verified in the end-use application

Note 2: Installation provides that the removable motor feed shall be positioned in such a way, that the terminal box is not oriented on top to avoid temperatures exceeding 75°C in the terminal box and on supply wiring.

Note3: Models rated 690 V input voltage are provided without terminal block. Certified coils leads are factory stored in field wiring compartment and partially prepared to be field connected by authorized personnel, where the acceptability of the final assembly is to be determined by CSA Group.

Inverters duty motor, component type, types MIX120 provided with a built-in adjustable speed drive mod.1007-1, 1 ph, 100-120 V , 50/60Hz ,duty cycle 2 minutes ON time, 8 minutes OFF time, and MIX230 provided with a built-in adjustable speed drive mod.1018-1 , 1ph, 200-240 V, 50/60Hz , duty cycle 3 minutes ON time, 7 minutes OFF time, to drive squirrel-cage induction motor mod.UO080I401306A, 3 phases, 1.1 KW max, 4 poles, ambient temperature 40 °C, TEFC , foot and/or flange mounted to enclosure with changeable position, insulation class F; frame size 80, refer to table below for complete electrical ratings.

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

| Model | Adjustable speed drive | Duty cycle On/Off | Motor model | Input Voltage (V) | Input Frequency | Point *(See | Input Current (A) | Output power | RP M |
|-------|------------------------|-------------------|-------------|-------------------|-----------------|-------------|-------------------|--------------|------|
|-------|------------------------|-------------------|-------------|-------------------|-----------------|-------------|-------------------|--------------|------|

| | (Mod.) | (Minutes) | | | (Hz) | note | | (Kw) | |
|------------|--------|---|-----------------------|-----|------|------|------|------|----------|
| MIX2 30 | 1018-1 | On :3 Minutes Off :7 Minutes | UO080I4013 06A | 200 | 50 | 1 | 3.6 | 0.17 | 563 |
| | | | | | | 2 | 5.2 | 0.44 | 114 8 |
| | | | | | | 3 | 11.1 | 1.12 | 290 8 |
| | | | | | | 4 | 3.4 | - | 594 2 |
| | | | | 200 | 60 | 1 | 3.2 | 0.18 | 564 |
| | | | | | | 2 | 4.8 | 0.44 | 114 9 |
| | | | | | | 3 | 9.5 | 1.11 | 291 0 |
| | | | | | | 4 | 3 | - | 593 2 |
| | | | | 240 | 50 | 1 | 3.1 | 0.18 | 562 |
| | | | | | | 2 | 4.7 | 0.44 | 114 9 |
| | | | | | | 3 | 9.9 | 1.14 | 296 5 |
| | | | | | | 4 | 3.6 | - | 595 6 |
| | | | | 240 | 60 | 1 | 2.7 | 0.18 | 563 |
| | | | | | | 2 | 4.1 | 0.44 | 114 7 |
| | | | | | | 3 | 8.3 | 1.14 | 296 0 |
| | | | | | | 4 | 3.1 | - | 594 6 |
| MIX1 20 | 1007-1 | On :2 Minutes Off :8 Minutes | | 100 | 50 | 1 | 6.3 | 0.17 | 551 |
| | | | | | | 2 | 9.5 | 0.43 | 112 1 |
| | | | | | | 3 | 20.0 | 1.1 | 285 1 |
| | | | | | | 4 | 5.2 | - | 593 9 |
| | | | | 100 | 60 | 1 | 6.0 | 0.17 | 550 |
| | | | | | | 2 | 8.9 | 0.43 | 112 0 |

| | | | | | | | | | |
|--|--|--|--|-----|----|---|------|------|------|
| | | | | | | 3 | 19.7 | 1.07 | 2809 |
| | | | | | | 4 | 5.0 | - | 5933 |
| | | | | 120 | 50 | 1 | 5.2 | 0.17 | 5499 |
| | | | | | | 2 | 7.9 | 0.43 | 1119 |
| | | | | | | 3 | 17.3 | 1.11 | 2890 |
| | | | | | | 4 | 4.9 | - | 5953 |
| | | | | 120 | 60 | 1 | 5.0 | 0.17 | 5499 |
| | | | | | | 2 | 7.7 | 0.43 | 1118 |
| | | | | | | 3 | 16.7 | 1.1 | 2884 |
| | | | | | | 4 | 4.7 | - | 5951 |

*Note: Point 1- Torque at minimum declare speed

Point 2- Lowest speed of the constant torque range

Point 3- Highest speed of the constant torque range

Point 4- Maximum declared speed based on constant horsepower and any mechanical limitation on rotational speed

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