

60M

50 Hz - 60 Hz



**6" REWINDABLE OIL FILLED
SUBMERSIBLE MOTORS**



Made in Italy

TECHNICAL SPECIFICATIONS

REWINDABLE MOTORS

MOTOR/PUMP FLANGE
6" NEMA STANDARD

POWERS

Three-phase: from 5,5 to 50 Hp

VOLTAGE

Three-phase: 380;400;415 V / 50 Hz - 220;380;460 V / 60 Hz

THRUST LOAD

From 5,5 to 20 Hp: 10000 N
From 25 to 50 Hp: 20000 N

CONNECTION

D.O.L.
 λ/Δ

CONSTRUCTION FEATURES

PARTS IN CONTACT WITH WATER all made in AISI 304 stainless steel.

EXTERNAL SLEEVE AND BOTTOM made in AISI 304 stainless steel. More specifically, the sleeve is in 304L (Low Carbon) to avoid possible corrosions on the welding.

UPPER BRACKET made in cast iron with cataphoresis treatment in the standard version; 316 stainless steel available upon request. Sleeve clamping is ensured for the whole series by 8 inserts.

DOUBLE OIL CHAMBER interposed between the mechanical seal and motor's sand protection system thanks the bracket specifically designed on two levels. In this way a special mechanical seal protection is guaranteed.

MECHANICAL SEAL made in graphite/ceramic in the standard version; SIC-SIC version available upon request.

BALL BEARINGS duly oversized to ensure a long lasting motor.

STATOR specifically developed to achieve maximum electrical yield. Airtight sealed and immersed in selected mineral white and highly refined oil, suitable to be used in drinking water (F.D.A., Food and Drug Administration, approved).

REMOVABLE POWER CABLE-CONNECTOR to ensure a perfect sealing, also in the most critical conditions, and to aid maintenance operations. More specifically, the connector prevents oil from rising in the conductors up to the joint, thus enabling immersion at greater depths. The power cable complies with all major standards on the use in drinking water (KTW, ACS, WRAS).

SHAFT made in carbon-steel alloys in the rotor area, to foster electrical features. DUPLEX stainless steel projection. This steel combines excellent resistance to corrosion and high mechanical resistance, which is necessary where static torque becomes really important.

100% TESTED, all motors are tested at the end of the line. An extremely effective seal check is also carried out on all motors.

APPLICATIONS

Civil use
Industrial use
Agricultural use

OPERATING LIMITS

DEGREE OF PROTECTION
IP 68

INSULATION CLASS
F

VOLTAGE TOLERANCE
-10% / +10%

PUMPED LIQUID TEMPERATURE
0°C – 35°C

MIN. COOLING FLOW
0,1 m/s

MAX. STARTS / HOUR
30

MOUNTING
Vertical (Horizontal up to 20 Hp)

MAX. IMMERSION DEPTH
200 m

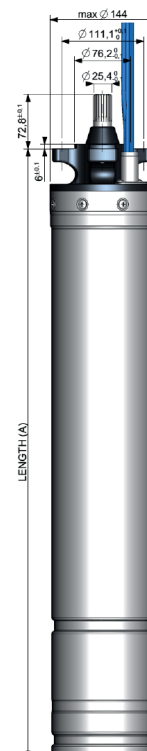
VERSIONS UPON REQUEST

Different thrust loads
Different voltage
Sic-Sic mechanical seal
Upper bracket made in 316 stainless steel

ACCESSORIES *refer to accessories catalogue*

Different cable lengths
Control panels *E.S.P.* (up to 15 Hp)

DIMENSIONS



ELECTRICAL DATA 60M - 50Hz

| Type | Voltage [V] | P ₂ [HP] | P ₂ [kW] | Ph | I _n [A] | I _{avv} [A] | rpm | cos φ | η [%] | Thrust Load [N] | Length A [mm] | Weight [kg] | Cable Length [m] | Cable Section [mm ²] |
|-----------|-------------|---------------------|---------------------|----|--------------------|----------------------|------|-------|-------|-----------------|---------------|-------------|------------------|----------------------------------|
| 60M-T0550 | 380 | 5,5 | 4 | 3 | 8,9 | 47 | 2830 | 0,85 | 76 | 10000 | 595 | 33 | 3 | 4 x 4 |
| | 400 | | | | 9,1 | | 2840 | 0,86 | 74 | | | | | |
| | 415 | | | | 9,3 | | 2850 | 0,86 | 72 | | | | | |
| 60M-T0750 | 380 | 7,5 | 5,5 | 3 | 12,9 | 66 | 2830 | 0,82 | 75 | 20000 | 625 | 35 | 4 | 4 x 8 |
| | 400 | | | | 12,8 | | 2840 | 0,84 | 74 | | | | | |
| | 415 | | | | 12,7 | | 2850 | 0,83 | 75 | | | | | |
| 60M-T1000 | 380 | 10 | 7,5 | 3 | 17,1 | 81 | 2840 | 0,80 | 79 | 30000 | 660 | 38 | 5 | 4 x 8 |
| | 400 | | | | 16,8 | | 2850 | 0,83 | 78 | | | | | |
| | 415 | | | | 16,4 | | 2860 | 0,85 | 78 | | | | | |
| 60M-T1250 | 380 | 12,5 | 9,2 | 3 | 21,8 | 98 | 2860 | 0,76 | 80 | 40000 | 700 | 40 | 6 | 4 x 8 |
| | 400 | | | | 21,2 | | 2880 | 0,77 | 81 | | | | | |
| | 415 | | | | 19,7 | | 2890 | 0,85 | 79 | | | | | |
| 60M-T1500 | 380 | 15 | 11 | 3 | 23,8 | 123 | 2840 | 0,79 | 84 | 50000 | 765 | 44 | 7 | 4 x 8 |
| | 400 | | | | 22,9 | | 2850 | 0,82 | 85 | | | | | |
| | 415 | | | | 23,2 | | 2870 | 0,83 | 82 | | | | | |
| 60M-T1750 | 380 | 17,5 | 13 | 3 | 27,8 | 141 | 2850 | 0,80 | 83 | 60000 | 820 | 51 | 8 | 4 x 8 |
| | 400 | | | | 27,6 | | 2860 | 0,80 | 84 | | | | | |
| | 415 | | | | 27,3 | | 2870 | 0,83 | 82 | | | | | |
| 60M-T2000 | 380 | 20 | 15 | 3 | 31,6 | 158 | 2830 | 0,85 | 81 | 70000 | 820 | 52 | 9 | 4 x 8 |
| | 400 | | | | 30,7 | | 2840 | 0,86 | 82 | | | | | |
| | 415 | | | | 29,9 | | 2860 | 0,89 | 80 | | | | | |
| 60M-T2500 | 380 | 25 | 18,5 | 3 | 39,0 | 231 | 2840 | 0,82 | 83 | 80000 | 883 | 62 | 10 | 4 x 8 |
| | 400 | | | | 38,0 | | 2850 | 0,84 | 84 | | | | | |
| | 415 | | | | 38,5 | | 2860 | 0,84 | 83 | | | | | |
| 60M-T3000 | 380 | 30 | 22 | 3 | 44,0 | 258 | 2830 | 0,88 | 82 | 90000 | 953 | 67 | 11 | 4 x 8 |
| | 400 | | | | 45,5 | | 2850 | 0,83 | 84 | | | | | |
| | 415 | | | | 46,5 | | 2860 | 0,82 | 83 | | | | | |
| 60M-T3500 | 380 | 35 | 26 | 3 | 53,5 | 296 | 2830 | 0,84 | 84 | 100000 | 1018 | 74 | 12 | 4 x 8 |
| | 400 | | | | 52,0 | | 2850 | 0,85 | 85 | | | | | |
| | 415 | | | | 51,5 | | 2860 | 0,86 | 85 | | | | | |
| 60M-T4000 | 380 | 40 | 30 | 3 | 63,5 | 348 | 2850 | 0,81 | 84 | 110000 | 1098 | 83 | 13 | 4 x 8 |
| | 400 | | | | 61,5 | | 2860 | 0,83 | 85 | | | | | |
| | 415 | | | | 63,0 | | 2870 | 0,83 | 83 | | | | | |
| 60M-T5000 | 380 | 50 | 37 | 3 | 78,0 | 396 | 2810 | 0,82 | 83 | 120000 | 1233 | 92 | 14 | 4 x 8 |
| | 400 | | | | 76,0 | | 2840 | 0,84 | 84 | | | | | |
| | 415 | | | | 77,0 | | 2850 | 0,85 | 82 | | | | | |

ELECTRICAL DATA 60M - 60Hz

| Type | Voltage [V] | P ₂ [HP] | P ₂ [kW] | Ph | I _n [A] | I _{max} [A] | rpm | cos φ | η [%] | Thrust Load [N] | Length A [mm] | Weight [kg] | Cable Length [m] | Cable Section [mm ²] |
|-----------|-------------|---------------------|---------------------|----|--------------------|----------------------|------|-------|-------|-----------------|---------------|-------------|------------------|----------------------------------|
| 60M-T0550 | 220 | 5,5 | 4 | 3 | 16,1 | 16,9 | 3435 | 0,79 | 74 | 10000 | 595 | 33 | 3 | 4 x 4 |
| | 380 | | | | 9,7 | | 3435 | 0,81 | 75 | | | | | |
| | 460 | | | | 7,9 | | 3435 | 0,79 | 76 | | | | | |
| 60M-T0750 | 220 | 7,5 | 5,5 | 3 | 23,7 | 26,4 | 3440 | 0,81 | 77 | 20000 | 625 | 35 | 4 | 4 x 8 |
| | 380 | | | | 13,2 | | 3440 | 0,78 | 78 | | | | | |
| | 460 | | | | 11,3 | | 3440 | 0,79 | 79 | | | | | |
| 60M-T1000 | 220 | 10 | 7,5 | 3 | 28,4 | 32,9 | 3435 | 0,81 | 79 | 30000 | 660 | 38 | 5 | 4 x 8 |
| | 380 | | | | 17,3 | | 3435 | 0,84 | 79 | | | | | |
| | 460 | | | | 14,7 | | 3435 | 0,85 | 80 | | | | | |
| 60M-T1250 | 220 | 12,5 | 9,2 | 3 | 34,6 | 36,2 | 3455 | 0,80 | 80 | 40000 | 700 | 40 | 6 | 4 x 8 |
| | 380 | | | | 19,9 | | 3455 | 0,79 | 81 | | | | | |
| | 460 | | | | 19,7 | | 3455 | 0,79 | 82 | | | | | |
| 60M-T1500 | 220 | 15 | 11 | 3 | 38,4 | 46,7 | 3450 | 0,79 | 79 | 50000 | 765 | 44 | 7 | 4 x 8 |
| | 380 | | | | 25,8 | | 3450 | 0,81 | 80 | | | | | |
| | 460 | | | | 21,2 | | 3450 | 0,83 | 81 | | | | | |
| 60M-T2000 | 220 | 20 | 15 | 3 | 54,1 | 60,8 | 3435 | 0,77 | 80 | 60000 | 820 | 52 | 8 | 4 x 8 |
| | 380 | | | | 33,8 | | 3435 | 0,81 | 81 | | | | | |
| | 460 | | | | 27,8 | | 3435 | 0,80 | 82 | | | | | |
| 60M-T2500 | 220 | 25 | 18,5 | 3 | 66,5 | 75,5 | 3445 | 0,81 | 81 | 70000 | 883 | 62 | 9 | 4 x 8 |
| | 380 | | | | 40,1 | | 3445 | 0,78 | 82 | | | | | |
| | 460 | | | | 35,7 | | 3445 | 0,8 | 83 | | | | | |
| 60M-T3000 | 220 | 30 | 22 | 3 | 79,1 | 89,0 | 3450 | 0,76 | 81 | 80000 | 953 | 67 | 10 | 4 x 8 |
| | 380 | | | | 46,2 | | 3450 | 0,81 | 83 | | | | | |
| | 460 | | | | 43,1 | | 3450 | 0,82 | 84 | | | | | |
| 60M-T4000 | 380 | 40 | 30 | 3 | 65,1 | 74,2 | 3445 | 0,82 | 84 | 90000 | 1098 | 83 | 11 | 4 x 8 |
| | 460 | | | | 55,2 | | 3445 | 0,80 | 85 | | | | | |
| | 380 | | | | 82,2 | | 3440 | 0,83 | 83 | | | | | |
| 60M-T5000 | 460 | 50 | 37 | 3 | 74,3 | 77,0 | 3440 | 0,84 | 84 | 100000 | 1233 | 92 | 12 | 4 x 8 |

VERSIONS AVAILABLE



D.O.L. VERSION



λ/Δ VERSION



**UPPER BRACKET MADE IN
CAST IRON WITH CATHODOLYSIS
TREATMENT**



**UPPER BRACKET MADE IN
316 STAINLESS STEEL**

PM S.r.l.

Via A. Volta, 8
36040 Brendola (VI) - Italy
T. +39 0444 673043
F. +39 0444 677273
info@pmtechnology.eu
www.pmtechnology.eu



ISO 9001:2015 Certified Company

© COPYRIGHT PM S.r.l.

All rights reserved.
All information shown in this catalogue are purely indicative;
PM S.r.l. reserves the right to make any necessary variation without prior
notice.

EDIT: BROCHURE 60M EN/JAN/2019