



## TECHNICAL DATA

**Flanging:** NEMA 6".  
**Protection class:** IP68.  
**Cooling flow speed:** 0,5 m/s.  
**Power supply tolerance:** + 6 % / -10 %.  
**Max. starts:** 15/h.  
**Max operating depth:** 300 m.  
**Max operating temperature:** 60 bar.  
**Horizontal operation:** 7,5 HP - 50 HP.

## GENERAL DATA

Rewindable 6" submersible asynchronous two-pole electric motor available in standard version with casing in AISI 304 stainless steel and supports in cast iron. The thrust block and bushes are cooled and lubricated with a mixture of water and glycol. The rotor is mounted on a Mitchell self-centring thrust block designed to withstand significant axial loads. The motor is also available in a version entirely in AISI 316 stainless steel and a version in AISI 904. There is also a version suitable for use with variable frequency drive (30 Hz - 50/60 Hz). The motor is equipped with a single-core cable of 5 m or 8 m (depending on the power) connected directly to the winding and earth cable, and is available in DOL or STAR-DELTA configuration. ACS, WRAS and KTW certified cable. The electrical protection must be provided by the user.

On request: cables of a different length, different voltage supply, PT100 and PTC temperature probes and a special shaft terminal.

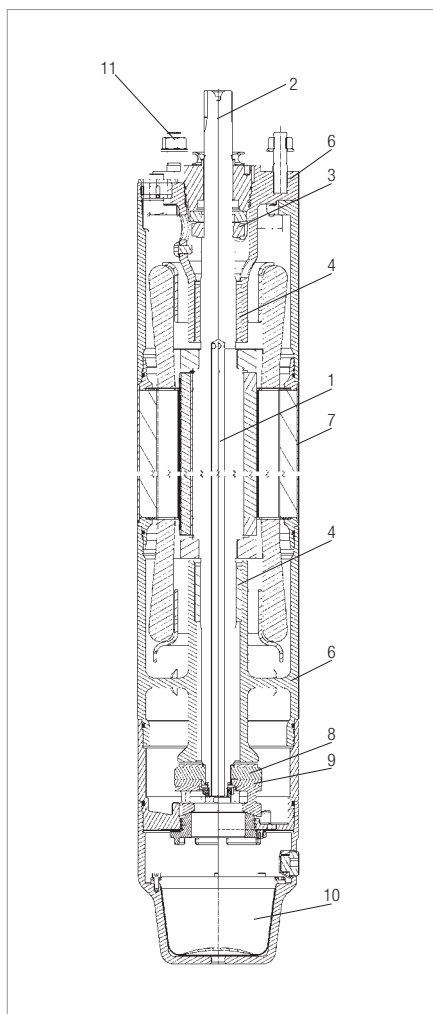
## CONSTRUCTION FEATURES



The rewindable stator is protected by an AISI 304 stainless steel jacket (AISI 316 or 904 on request). In the standard version the rotor is wound with PVC coated wire (60 HP in PE2+PA). On request, we can supply a version with a PE2+PA winding that makes the motor compatible with special applications and with the use of a variable frequency drive.

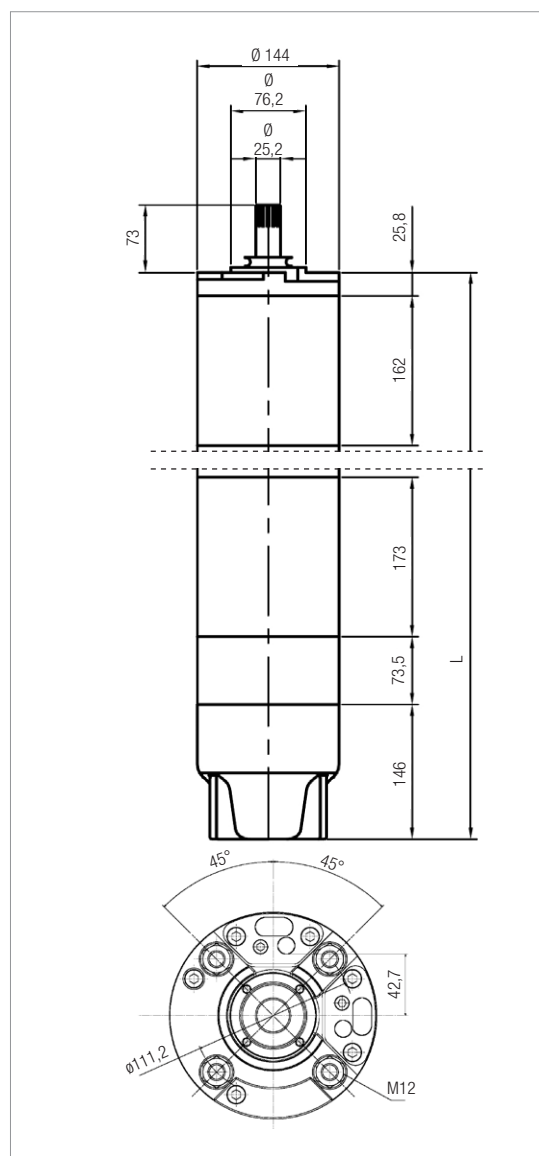
Mitchell type thrust bearings with lapped pads in stainless steel and graphite clearance ring.  
 from 5 HP to 20 HP: 15000 N  
 from 25 HP to 50 HP: 27500 N  
 Counter-thrust load: 6000 N

Rotor shaft in stainless steel with shaft extension to NEMA 6" standards. The rotor is made of die cast aluminium up to 20 HP and in copper for all other sizes. In the standard version the motor is supplied with a ceramic/carbon mechanical seal and is also equipped with a lip seal (IP 68). A silicon carbide (SiC/SiC) mechanical seal is available on request



### MATERIALS

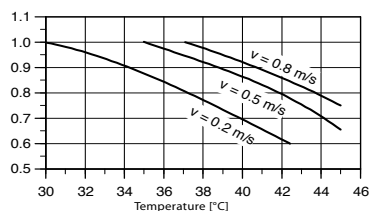
| N. | PARTS            | STD VERSION              | VERSION 316 SS           | VERSION 904 SS           |
|----|------------------|--------------------------|--------------------------|--------------------------|
| 1  | SHAFT            | STAINLESS STEEL          | STAINLESS STEEL          | STAINLESS STEEL          |
| 2  | SHAFT TERMINAL   | AISI 304 STAINLESS STEEL | AISI 316 STAINLESS STEEL | AISI 904 STAINLESS STEEL |
| 3  | MECHANICAL SEAL  | CERAMIC/CARBON           | SIC/SIC                  | SIC/SIC                  |
| 4  | BUSHES           | GRAPHITE                 | GRAPHITE                 | GRAPHITE                 |
| 5  | CABLE            | EPDM                     | EPDM                     | EPDM                     |
| 6  | STRUCTURAL PARTS | CAST IRON                | AISI 316 STAINLESS STEEL | AISI 904 STAINLESS STEEL |
| 7  | JACKET           | AISI 304 STAINLESS STEEL | AISI 316 STAINLESS STEEL | AISI 904 STAINLESS STEEL |
| 8  | CLEARANCE RING   | GRAPHITE                 | GRAPHITE                 | GRAPHITE                 |
| 9  | THRUST           | STAINLESS STEEL          | STAINLESS STEEL          | STAINLESS STEEL          |
| 10 | DIAPHRAGM        | EPDM                     | EPDM                     | EPDM                     |
| 11 | SCREWS           | AISI 304 STAINLESS STEEL | AISI 316 STAINLESS STEEL | AISI 904 STAINLESS STEEL |



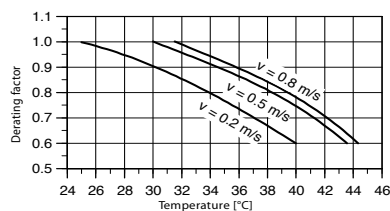
### DIMENSIONS - THREE-PHASE MOTORS

| TYPE  | P2   |      | LENGTH<br>mm | WEIGHT<br>kg | AXIAL THRUST<br>N |
|-------|------|------|--------------|--------------|-------------------|
|       | hp   | kW   |              |              |                   |
| 50 Hz | 7,5  | 5,5  | 807          | 50           | 15000             |
|       | 10   | 7,5  | 837          | 53           | 15000             |
|       | 12,5 | 9,2  | 867          | 55           | 15000             |
|       | 15   | 11   | 897          | 60           | 15000             |
|       | 17,5 | 13   | 927          | 65           | 15000             |
|       | 20   | 15   | 997          | 77           | 15000             |
|       | 25   | 18,5 | 1057         | 83           | 27500             |
|       | 30   | 22   | 1087         | 95           | 27500             |
|       | 35   | 26   | 1157         | 105          | 27500             |
|       | 40   | 30   | 1212         | 110          | 27500             |
|       | 50   | 37   | 1312         | 120          | 27500             |
|       | 60   | 45   | 1457         | 135          | 27500             |

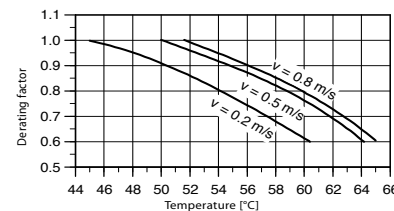
### DOWNGRADING



PVC windings of 5,5 to 30 kW



PVC windings of 37 kW



PE2/PA windings of 5,5 to 37 kW

### ELECTRICAL DATA - THREE-PHASE MOTORS - DOL

| MODEL                     | P2   |      | POWER INPUT<br>50 Hz | I <sub>n</sub><br>A | I <sub>s</sub> /I <sub>n</sub> | P1<br>W | N<br>min <sup>-1</sup> | Cos φ | η<br>% | CABLE                |         |
|---------------------------|------|------|----------------------|---------------------|--------------------------------|---------|------------------------|-------|--------|----------------------|---------|
|                           | hp   | kW   |                      |                     |                                |         |                        |       |        | Ø<br>mm <sup>2</sup> | LC<br>m |
| TR6 - 5,5 kW - 400 V - T  | 7,5  | 5,5  | 400                  | 13                  | 3,7                            | 7432    | 2870                   | 0,81  | 74     | 3x6 + 1x6            | 5       |
| TR6 - 7,5 kW - 400 V - T  | 10   | 7,5  | 400                  | 18                  | 3,7                            | 9740    | 2870                   | 0,80  | 77     | 3x6 + 1x6            | 5       |
| TR6 - 9,2 kW - 400 V - T  | 12,5 | 9,2  | 400                  | 21                  | 3,6                            | 11948   | 2860                   | 0,81  | 77     | 3x6 + 1x6            | 5       |
| TR6 - 11 kW - 400 V - T   | 15   | 11   | 400                  | 25                  | 3,7                            | 14103   | 2860                   | 0,82  | 78     | 3x6 + 1x6            | 5       |
| TR6 - 13 kW - 400 V - T   | 17,5 | 13   | 400                  | 29                  | 3,8                            | 16250   | 2870                   | 0,82  | 80     | 3x6 + 1x6            | 5       |
| TR6 - 15 kW - 400 V - T   | 20   | 15   | 400                  | 32                  | 3,8                            | 18519   | 2860                   | 0,83  | 81     | 3x6 + 1x6            | 5       |
| TR6 - 18,5 kW - 400 V - T | 25   | 18,5 | 400                  | 39                  | 5,3                            | 22024   | 2890                   | 0,83  | 84     | 3x6 + 1x6            | 5       |
| TR6 - 22 kW - 400 V - T   | 30   | 22   | 400                  | 49                  | 5,5                            | 26506   | 2880                   | 0,79  | 83     | 3x6 + 1x6            | 5       |
| TR6 - 26 kW - 400 V - T   | 35   | 26   | 400                  | 58                  | 5,7                            | 31325   | 2880                   | 0,79  | 83     | 3x10 + 1x10          | 5       |
| TR6 - 30 kW - 400 V - T   | 40   | 30   | 400                  | 65                  | 5,0                            | 35714   | 2870                   | 0,81  | 84     | 3x10 + 1x10          | 8       |
| TR6 - 37 kW - 400 V - T   | 50   | 37   | 400                  | 80                  | 5,0                            | 44578   | 2860                   | 0,81  | 83     | 3x10 + 1x10          | 8       |
| TR6 - 45 kW - 400 V - T   | 60   | 45   | 400                  | 93,1                | 5,1                            | 54127   | 2825                   | 0,85  | 83     | 3x10 + 1x10          | 8       |

**P2:** Nominal power  
**V:** Nominal voltage  
**I<sub>n</sub>:** Nominal current  
**I<sub>s</sub>/I<sub>n</sub>:** Starting current/Nominal current  
**P1:** Absorbed power

**N:** Rotations per minute - R.p.m  
**Cos φ:** Power factor  
**η:** Yield  
**Ø:** Cable cross section  
**LC:** Cable length