

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

STAINLESS STEEL
304

OPTIONAL
STAINLESS STEEL
316

FEATURES & BENEFITS

- 4" NEMA mounting design with metric studs
- Stainless steel splined shaft
- Stator shell in 316SS
- Factory filled with Franklin's non-toxic water soluble fill solution
- Max. storage temperature -15°C - + 50°C
- Liquid lubricated radial bearings and High capacity Kingsbury type thrust bearing for 100 % maintenance free operation
- Field replaceable lead using Franklin's exclusive Water Bloc technology with extended jam nut in Stainless steel
- High efficiency electrical design for low operation costs
- Drinking water approvals
- Suitable for use in water with increased salinity

SPECIFICATION

- Ratings: 0.25 - 3.0 kW
- Frequency: 50 Hz ; 60 Hz
- Thrust load: 4 kN
- Nominal ambient temperature: 30 °C with 0.08 m/s cooling flow
- Voltage tolerance: -10 % / +6 % (50 Hz), +/- 10% (60 Hz)
- Protection IP68, insulation class B
- Frequency of starts: 20 starts/ hour (with min. 3 minutes resting time)
- All motors with factory installed leads (1.50 m / 2.50 m)
- Installation orientation: Vertical / horizontal (shaft end heightened)
- Rotation counter clock wise facing shaft end (3 phase motors rotation reversible)

Pollution Recovery version:

- Fluorelastomere (Viton®) rubber parts
- Special Polyuretane (PUR) lead assemblies
- 304SS (316SS Stator) graded Stainless Steel as Standard



OPTIONS

- Built in lightning arrestors
- 316SS material design
- Special lead lengths



ISO 9001

All motors are manufactured in ISO 9001 certified plants and 100% tested



Hydrodynamic liquid lubricated radial bearings

100 % maintenance free operation

StatorSHIELD™ - Franklin encapsulation system

Franklin Electric encapsulated motors are equipped with hermetically-sealed windings. The Anti track stator resin mechanically supports the winding and provides fast heat dissipation.

Kingsbury type thrust bearing

High capacity 4 kN Kingsbury type thrust bearing for 100 % maintenance free operation

Pressure-equalizing diaphragm



4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR MODEL NUMBERS 50 HZ - 3-PHASE DESIGN

| P _N [kW] | U _N [V] | Digit 1 - 6 | Digit 7 - 10 | | | | | | | |
|------------------------|-----------------------|----------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|
| | | | Standard 304SS | | Pollution Recovery 304SS | | Standard 316SS | | Pollution Recovery 316SS | |
| | | | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit |
| 0,37 | 220, 230 | 234 751 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 761 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 791 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 0,55 | 220, 230 | 234 752 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 762 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 792 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 0,75 | 220, 230 | 234 753 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 763 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 793 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 1,10 | 220, 230 | 234 754 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 724 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 794 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 1,50 | 220, 230 | 234 755 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 725 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 795 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 2,20 | 220, 230 | 234 756 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 726 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 796 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 3,00 | 220, 230 | 234 766 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 380 - 415 | 234 764 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | 500 | 234 768 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |

* lead lengths motors: „L“: up to 1.5 kW with 1.50 m preassembled cable, starting at 2.2 kW with 2.50 m pre-mounted cable

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR MODEL NUMBERS 60 HZ - 3-PHASE DESIGN

| P _N [kW] | P _{MAX} [kW] | U _N [V] | Digit 1 - 6 | Digit 7 - 10 | | | | | | | |
|------------------------|--------------------------|-----------------------|----------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|
| | | | | Standard 304SS | | Pollution Recovery 304SS | | Standard 316SS | | Pollution Recovery 316SS | |
| | | | | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit |
| 0,37 | 0,59 | 220 | 234 711 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 741 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 761 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 0,55 | 0,83 | 220 | 234 712 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 742 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 762 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 0,75 | 1 | 220 | 234 713 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 743 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 763 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 1,10 | 1,4 | 220 | 234 714 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 744 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 724 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 1,50 | 1,8 | 220 | 234 715 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 745 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 725 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 2,20 | 2,5 | 220 | 234 716 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 746 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 726 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| 3,00 | 3,4 | 220 | 234 776 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 380 | 234 774 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |
| | | 460 | 234 764 | 6721L | 6721 | 6723L | 6723 | 6821L | 6821 | 6823L | 6823 |

* lead lengths motors: „L“: up to 1.5 kW with 1.50 m preassembled cable, starting at 2.2 kW with 2.50 m pre-mounted cable

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR PERFORMANCE DATA 50 HZ - 3-PHASE DESIGN

| P _N [kW] | Thrust F [N] | U _N [V] | n _N [min ⁻¹] | I _N [A] | I _A [A] | η (Eff.) [%] at % load | | | cos φ (Pf.) at % load | | | T _N [Nm] | T _A [Nm] |
|------------------------|-----------------|-----------------------|--|-----------------------|-----------------------|---------------------------|----|-----|--------------------------|------|------|------------------------|------------------------|
| | | | | | | 50 | 75 | 100 | 50 | 75 | 100 | | |
| 0,37 | 4000 | 220 | 2850 | 1,91 | 8,83 | 55 | 63 | 66 | 0,60 | 0,71 | 0,79 | 1,23 | 2,70 |
| | | 230 | 2870 | 1,90 | 9,36 | 54 | 63 | 66 | 0,55 | 0,66 | 0,74 | 1,22 | 3,00 |
| | | 380 | 2850 | 1,10 | 5,10 | 55 | 63 | 66 | 0,60 | 0,71 | 0,79 | 1,23 | 2,70 |
| | | 400 | 2870 | 1,10 | 5,41 | 54 | 63 | 66 | 0,55 | 0,66 | 0,74 | 1,22 | 3,00 |
| | | 415 | 2880 | 1,14 | 5,61 | 53 | 61 | 65 | 0,51 | 0,62 | 0,71 | 1,23 | 3,20 |
| | | 500 | 2830 | 0,84 | 3,88 | 55 | 63 | 68 | 0,60 | 0,71 | 0,79 | 1,23 | 2,70 |
| 0,55 | 4000 | 220 | 2855 | 2,7 | 12,2 | 57 | 64 | 68 | 0,60 | 0,71 | 0,79 | 1,84 | 3,80 |
| | | 230 | 2870 | 2,8 | 12,9 | 55 | 63 | 68 | 0,53 | 0,65 | 0,74 | 1,82 | 4,20 |
| | | 380 | 2855 | 1,6 | 7,0 | 57 | 64 | 68 | 0,60 | 0,71 | 0,79 | 1,84 | 3,80 |
| | | 400 | 2870 | 1,6 | 7,4 | 55 | 63 | 68 | 0,53 | 0,65 | 0,74 | 1,82 | 4,20 |
| | | 415 | 2880 | 1,7 | 7,7 | 50 | 60 | 65 | 0,50 | 0,61 | 0,70 | 1,82 | 4,60 |
| | | 500 | 2855 | 1,2 | 5,3 | 57 | 64 | 68 | 0,60 | 0,71 | 0,79 | 1,84 | 3,80 |
| 0,75 | 4000 | 220 | 2840 | 3,5 | 17,4 | 63 | 69 | 70 | 0,61 | 0,73 | 0,81 | 2,51 | 6,05 |
| | | 230 | 2865 | 3,5 | 18,3 | 61 | 68 | 70 | 0,55 | 0,68 | 0,77 | 2,49 | 6,70 |
| | | 380 | 2840 | 2,0 | 10,1 | 63 | 69 | 70 | 0,61 | 0,73 | 0,81 | 2,51 | 6,05 |
| | | 400 | 2865 | 2,0 | 10,6 | 61 | 68 | 70 | 0,55 | 0,68 | 0,77 | 2,49 | 6,70 |
| | | 415 | 2875 | 2,1 | 10,9 | 58 | 66 | 69 | 0,51 | 0,63 | 0,73 | 2,48 | 7,20 |
| | | 500 | 2840 | 1,5 | 7,6 | 63 | 69 | 70 | 0,61 | 0,73 | 0,81 | 2,51 | 6,05 |
| 1,1 | 4000 | 220 | 2830 | 4,9 | 26,4 | 68 | 73 | 74 | 0,63 | 0,75 | 0,82 | 3,71 | 10,23 |
| | | 230 | 2850 | 4,9 | 27,8 | 66 | 72 | 74 | 0,57 | 0,69 | 0,78 | 3,67 | 11,33 |
| | | 380 | 2830 | 2,8 | 15,3 | 68 | 73 | 74 | 0,63 | 0,75 | 0,82 | 3,71 | 10,23 |
| | | 400 | 2850 | 2,8 | 16,0 | 66 | 72 | 74 | 0,57 | 0,69 | 0,78 | 3,67 | 11,33 |
| | | 415 | 2865 | 2,9 | 16,7 | 64 | 70 | 73 | 0,52 | 0,65 | 0,74 | 3,64 | 12,20 |
| | | 500 | 2830 | 2,1 | 11,6 | 68 | 73 | 74 | 0,63 | 0,75 | 0,82 | 3,71 | 10,23 |
| 1,5 | 4000 | 220 | 2830 | 6,7 | 34,0 | 67 | 72 | 73 | 0,62 | 0,74 | 0,83 | 5,04 | 12,77 |
| | | 230 | 2855 | 6,7 | 35,9 | 65 | 71 | 73 | 0,55 | 0,68 | 0,78 | 5,00 | 14,10 |
| | | 380 | 2830 | 3,9 | 19,7 | 67 | 72 | 73 | 0,62 | 0,74 | 0,83 | 5,04 | 12,77 |
| | | 400 | 2855 | 3,9 | 20,7 | 65 | 71 | 73 | 0,55 | 0,68 | 0,78 | 5,00 | 14,10 |
| | | 415 | 2865 | 4,0 | 21,5 | 62 | 69 | 72 | 0,50 | 0,63 | 0,73 | 5,00 | 15,20 |
| | | 500 | 2830 | 2,9 | 14,9 | 67 | 72 | 73 | 0,62 | 0,74 | 0,83 | 5,04 | 12,77 |
| 2,2 | 4000 | 220 | 2820 | 9,3 | 49,0 | 71 | 75 | 75 | 0,6 | 0,74 | 0,82 | 7,42 | 19,87 |
| | | 230 | 2845 | 9,5 | 51,6 | 69 | 74 | 75 | 0,52 | 0,66 | 0,77 | 7,37 | 22 |
| | | 380 | 2820 | 5,4 | 28,3 | 71 | 75 | 75 | 0,6 | 0,74 | 0,82 | 7,42 | 19,87 |
| | | 400 | 2845 | 5,5 | 29,8 | 69 | 74 | 75 | 0,52 | 0,66 | 0,77 | 7,37 | 22 |
| | | 415 | 2855 | 5,8 | 30,9 | 65 | 72 | 74 | 0,47 | 0,61 | 0,72 | 7,33 | 23,67 |
| | | 500 | 2820 | 4,1 | 21,5 | 71 | 75 | 75 | 0,6 | 0,74 | 0,82 | 7,42 | 19,87 |
| 3 | 4000 | 220 | 2820 | 12,8 | 69,1 | 73 | 77 | 77 | 0,61 | 0,74 | 0,82 | 10,16 | 28,80 |
| | | 230 | 2845 | 13,0 | 72,8 | 70 | 76 | 76 | 0,53 | 0,67 | 0,77 | 10,06 | 31,93 |
| | | 380 | 2820 | 7,4 | 39,9 | 73 | 77 | 77 | 0,61 | 0,74 | 0,82 | 10,16 | 28,80 |
| | | 400 | 2845 | 7,5 | 42,0 | 70 | 76 | 76 | 0,53 | 0,67 | 0,77 | 10,06 | 31,93 |
| | | 415 | 2855 | 7,9 | 43,6 | 67 | 73 | 75 | 0,47 | 0,61 | 0,72 | 10,04 | 34,33 |
| | | 500 | 2820 | 5,6 | 30,3 | 73 | 77 | 77 | 0,61 | 0,74 | 0,82 | 10,16 | 28,80 |

MOTOR PERFORMANCE DATA 60 HZ - 3-PHASE DESIGN

| P _N [kW] | P _{MAX} [kW] | Thrust F [N] | U _N [V] | n _N [min ⁻¹] | I _N [A] | I _A [A] | η (Eff.) [%] at % load | | | cos φ (Pf.) at % load | | | T _N [Nm] | T _A [Nm] |
|------------------------|--------------------------|-----------------|-----------------------|--|-----------------------|-----------------------|---------------------------|----|-----|--------------------------|------|------|------------------------|------------------------|
| | | | | | | | 50 | 75 | 100 | 50 | 75 | 100 | | |
| 0,37 | 0,59 | 4000 | 230 | 3455 | 2,7 | 14,1 | 65 | 71 | 73 | 0,56 | 0,68 | 0,77 | 1,6 | 4,0 |
| | | | 380 | 3455 | 1,6 | 8,5 | 65 | 71 | 73 | 0,56 | 0,68 | 0,77 | 1,6 | 4,0 |
| | | | 460 | 3455 | 1,4 | 7,0 | 65 | 71 | 73 | 0,56 | 0,68 | 0,77 | 1,6 | 4,0 |
| 0,55 | 0,83 | 4000 | 230 | 3445 | 3,7 | 19,6 | 60 | 65 | 66 | 0,59 | 0,71 | 0,79 | 2,3 | 5,6 |
| | | | 380 | 3445 | 2,3 | 11,9 | 60 | 65 | 66 | 0,59 | 0,71 | 0,79 | 2,3 | 5,6 |
| | | | 460 | 3445 | 1,9 | 9,8 | 60 | 65 | 66 | 0,59 | 0,71 | 0,79 | 2,3 | 5,6 |
| 0,75 | 1 | 4000 | 230 | 3410 | 4,5 | 22,0 | 61 | 67 | 70 | 0,64 | 0,75 | 0,82 | 2,8 | 6,4 |
| | | | 380 | 3410 | 2,7 | 13,3 | 61 | 67 | 70 | 0,64 | 0,75 | 0,82 | 2,8 | 6,4 |
| | | | 460 | 3410 | 2,3 | 11,0 | 61 | 67 | 70 | 0,64 | 0,75 | 0,82 | 2,8 | 6,4 |
| 1,1 | 1,4 | 4000 | 230 | 3415 | 6,0 | 32,2 | 66 | 72 | 74 | 0,64 | 0,75 | 0,82 | 3,9 | 10,2 |
| | | | 380 | 3415 | 3,6 | 19,5 | 66 | 72 | 74 | 0,64 | 0,75 | 0,82 | 3,9 | 10,2 |
| | | | 460 | 3415 | 3,0 | 16,1 | 66 | 72 | 74 | 0,64 | 0,75 | 0,82 | 3,9 | 10,2 |
| 1,5 | 1,8 | 4000 | 230 | 3430 | 7,8 | 40,8 | 67 | 73 | 75 | 0,60 | 0,72 | 0,80 | 5,0 | 11,5 |
| | | | 380 | 3430 | 4,7 | 24,7 | 67 | 73 | 75 | 0,60 | 0,72 | 0,80 | 5,0 | 11,5 |
| | | | 460 | 3430 | 3,9 | 20,4 | 67 | 73 | 75 | 0,60 | 0,72 | 0,80 | 5,0 | 11,5 |
| 2,2 | 2,5 | 4000 | 230 | 3425 | 10,8 | 57,4 | 69 | 74 | 76 | 0,57 | 0,70 | 0,78 | 7,0 | 18,0 |
| | | | 380 | 3425 | 6,5 | 34,7 | 69 | 74 | 76 | 0,57 | 0,70 | 0,78 | 7,0 | 18,0 |
| | | | 460 | 3425 | 5,4 | 28,7 | 69 | 74 | 76 | 0,57 | 0,70 | 0,78 | 7,0 | 18,0 |
| 3 | 3,4 | 4000 | 230 | 3425 | 14,5 | 79,4 | 71 | 76 | 77 | 0,57 | 0,70 | 0,79 | 9,5 | 23,8 |
| | | | 380 | 3425 | 8,8 | 48,1 | 71 | 76 | 77 | 0,57 | 0,70 | 0,79 | 9,5 | 23,8 |
| | | | 460 | 3425 | 7,2 | 39,7 | 71 | 76 | 77 | 0,57 | 0,70 | 0,79 | 9,5 | 23,8 |

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

WINDING RESISTANCE DATA 50 HZ - 3-PHASE DESIGN

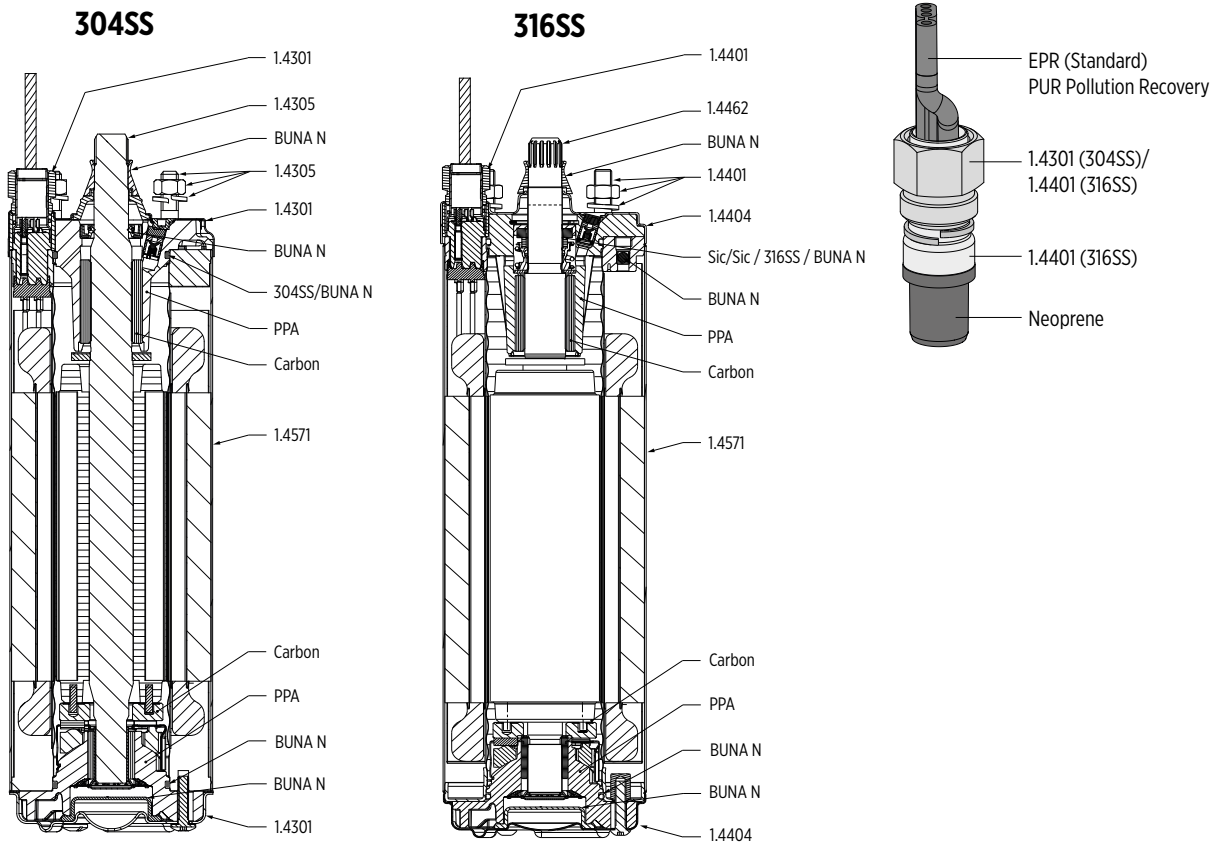
| P_N [kW] | U_N [V] | Stator-Ref. | Main phase [Ohm] |
|---------------|-----------------|-------------|---------------------|
| 0,37 | 220 - 230 | 326 775 *** | 14,6 - 17,8 |
| | 380 - 400 - 415 | 326 710 *** | 44,8 - 54,8 |
| | 500 | 326 787 *** | 90,8 - 111,0 |
| 0,55 | 220 - 230 | 326 776 *** | 11,3 - 13,8 |
| | 380 - 400 - 415 | 326 711 *** | 34,2 - 41,8 |
| | 500 | 326 788 *** | 57,3 - 70,0 |
| 0,75 | 220 - 230 | 326 777 *** | 7,6 - 9,2 |
| | 380 - 400 - 415 | 326 712 *** | 23,2 - 28,3 |
| | 500 | 326 789 *** | 38,7 - 47,3 |
| 1,1 | 220 - 230 | 326 778 *** | 4,5 - 5,4 |
| | 380 - 400 - 415 | 326 713 *** | 13,8 - 16,8 |
| | 500 | 326 790 *** | 23,1 - 28,3 |
| 1,5 | 220 - 230 | 326 779 *** | 3,6 - 4,3 |
| | 380 - 400 - 415 | 326 714 *** | 10,9 - 13,4 |
| | 500 | 326 791 *** | 20,7 - 25,3 |
| 2,2 | 220 - 230 | 326 780 *** | 2,5 - 3,0 |
| | 380 - 400 - 415 | 326 715 *** | 7,1 - 8,6 |
| | 500 | 326 792 *** | 11,9 - 14,5 |
| 3 | 220 - 230 | 326 781 *** | 1,5 - 1,9 |
| | 380 - 400 - 415 | 326 716 *** | 4,7 - 5,8 |
| | 500 | 326 793 *** | 8,4 - 10,2 |

WINDING RESISTANCE DATA 60 HZ - 3-PHASE DESIGN

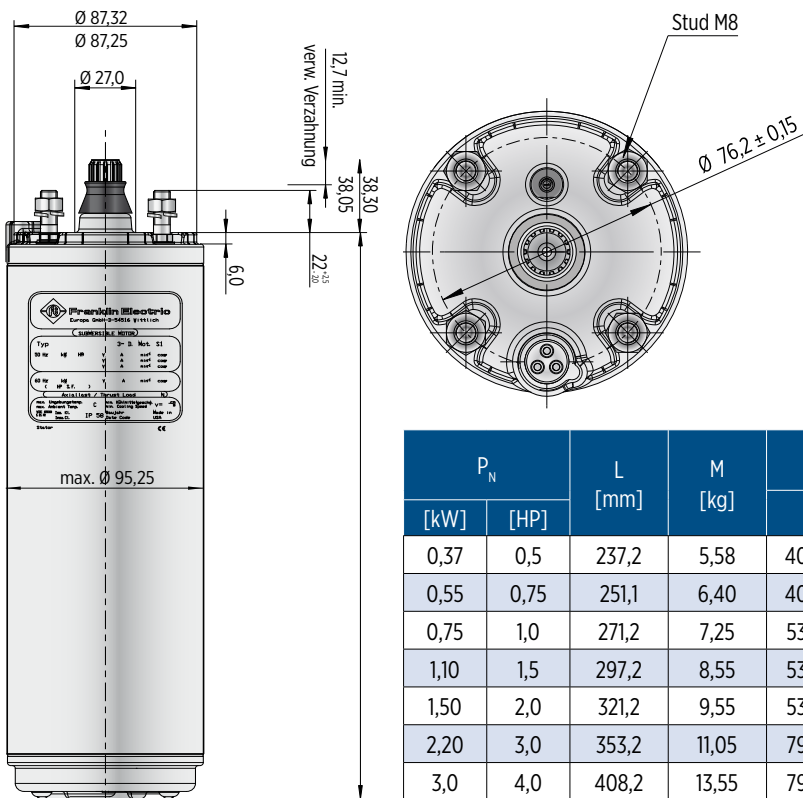
| P_N [kW] | P_{MAX} [kW] | U_N [V] | Stator-Ref. | Main phase [Ohm] |
|---------------|-------------------|--------------|-------------|---------------------|
| 0,37 | 0,59 | 230 | 326 828 | 9,4 - 11,5 |
| | | 380 | 326 838 | 24,1 - 29,5 |
| | | 460 | 326 710 | |
| 0,55 | 0,83 | 230 | 326 829 | 6,3 - 7,7 |
| | | 380 | 326 839 | 16,5 - 20,2 |
| | | 460 | 326 711 | |
| 0,75 | 1 | 230 | 326 830 | 5,7 - 6,9 |
| | | 380 | 326 840 | 15,5 - 19,0 |
| | | 460 | 326 712 | 23,2 - 28,3 |
| 1,1 | 1,4 | 230 | 326 831 | 3,4 - 4,1 |
| | | 380 | 326 841 | 9,3 - 11,4 |
| | | 460 | 326 713 | 13,8 - 16,8 |
| 1,5 | 1,8 | 230 | 326 832 | 2,7 - 3,3 |
| | | 380 | 326 842 | 7,6 - 9,2 |
| | | 460 | 326 714 | 10,9 - 13,4 |
| 2,2 | 2,5 | 230 | 326 833 | 1,8 - 2,2 |
| | | 380 | 326 843 | 4,9 - 6,0 |
| | | 460 | 326 715 | 7,1 - 8,6 |
| 3 | 3,4 | 230 | 326 834 | 1,2 - 1,4 |
| | | 380 | 326 844 | 3,2 - 4,0 |
| | | 460 | 326 716 | 4,7 - 5,8 |

MOTOR DESIGN AND DIMENSIONS

MOTOR DESIGN 304SS 4000N 0,37 - 3,0 KW

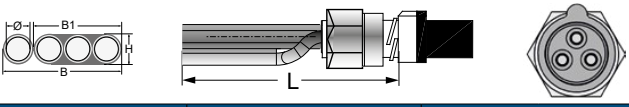


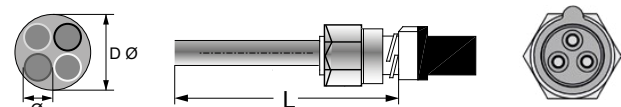
LENGTHS AND WEIGHTS - 3-PHASE DESIGN



Tolerances according to NEMA MG 1-18.388

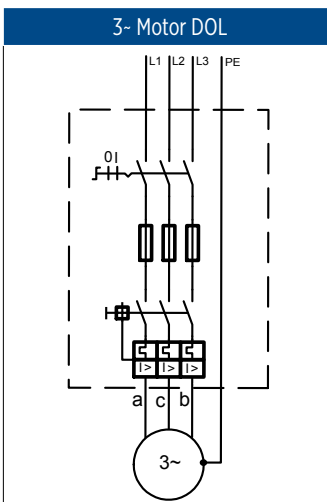
MOTOR LEADS 3-PHASE DESIGN

| 3 Phase motor leads | | | |
|---|---------------------|---------------------|--------|
| 0.25 - 3.0 kW | | | |
| Ø [mm ²] | B [mm] | B1 [mm] | H [mm] |
| 3X1,5 + 1G1,5 | 16,8 | 10,7 | 5,0 |
|  | | | |
| L [m] | Model numbers 304SS | Model numbers 316SS | |
| 1,5 | 310 113 401 | 310 113 501 | |
| 2,5 | 310 113 402 | 310 113 502 | |
| 5 | 310 113 405 | 310 113 505 | |
| 10 | 310 113 410 | 310 113 510 | |
| 15 | 310 113 415 | 310 113 515 | |
| 20 | 310 113 420 | 310 113 520 | |
| 30 | 310 113 430 | 310 113 530 | |
| 40 | 310 113 440 | 310 113 540 | |
| 50 | 310 113 450 | 310 113 550 | |

| 3-phase Pollution Recovery motor leads | |
|--|---------------------|
| 0.25 - 3.0 kW | |
| Ø [mm ²] | D Ø [mm] |
| 1,5 | 9,8 |
|  | |
| L [m] | Model numbers 316SS |
| 1,5 | 310 313 501 |
| 2,5 | 310 313 502 |
| 10 | 310 313 510 |
| 20 | 310 313 520 |
| 30 | 310 313 530 |
| 40 | 310 313 540 |
| 50 | 310 313 550 |

Cables are designed for submerged operation. For air operation, please consult Franklin Electric.

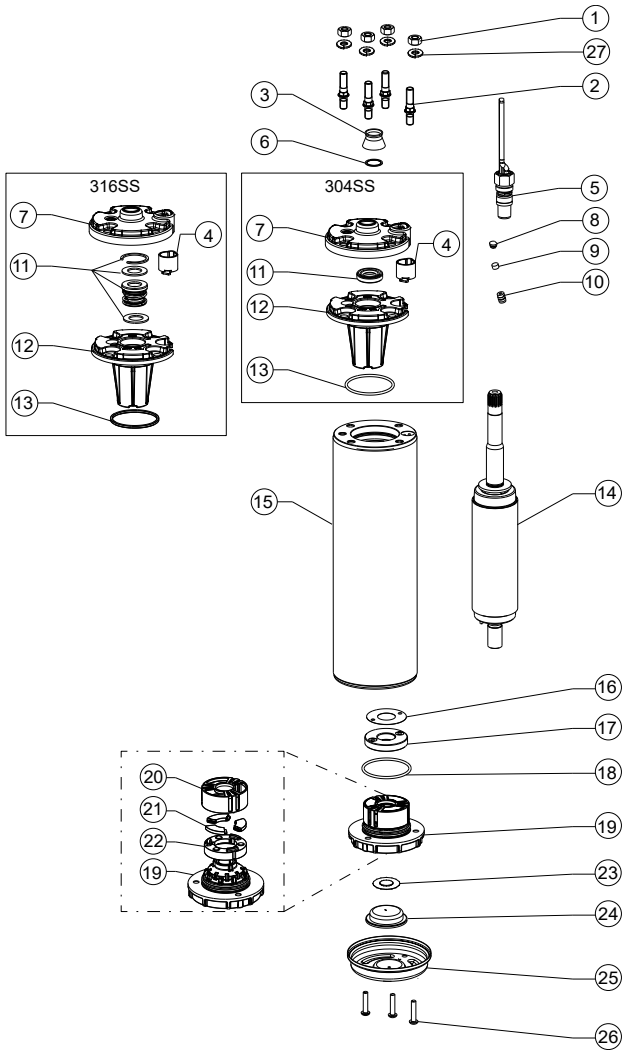
CONNECTION - 3-PHASE DESIGN



a = black | b = brown | c = grey | PE = yellow/green

MOTOR PART DESCRIPTION

MOTOR DESIGN 0.37 - 3.0 KW



| Pos. | Part Description | Qty. | Part No. |
|------|----------------------------|------|----------------------|
| 1 | Nut | 4 | Kit C |
| 2 | Stud | 4 | Kit C |
| 3 | Protector, Spline | 1 | Kit B |
| 4 | Connector boss | 1 | 151 820 103 |
| 5 | Motor Lead | 1 | Page 38 |
| 6 | Washer | 1 | Kit B |
| 7 | Top Endbell, Cover 304SS | 1 | 150 262 151 |
| | Top Endbell, Cover 316SS | 1 | 150 262 251 |
| 8 | Filter plug | 1 | Kit |
| 9 | Filter | 1 | Kit |
| 10 | Valve | 1 | Kit |
| 11 | Shaft Seal | 1 | Kit B |
| 12 | Top Endbell | 1 | Kit |
| 13 | O-Ring | 1 | Kit B |
| 14 | Rotor | 1 | Page 40/41 |
| 15 | Stator | 1 | Page 40/41 |
| 16 | Level washer | 1 | Kit A2 |
| 17 | Thrust disk assy | 1 | Kit A2 |
| 18 | O-Ring | 1 | Kit B / Kit A2 |
| 19 | Bottom Endbell | 1 | Kit A2 |
| 20 | Bearing cage | 1 | Kit A2 |
| 21 | Segments | 3 | Kit A2 |
| 22 | Gasket | 1 | Kit A2 |
| 23 | Diaphragm washer | 1 | 151 314 101 / Kit A2 |
| 24 | Diaphragm | 1 | Kit B / Kit A2 |
| 25 | Bottom Endbell Cover 304SS | 1 | 156 414 201 / Kit A2 |
| | Bottom Endbell Cover 316SS | 1 | 156 414 301 / Kit A2 |
| 26 | Screw, Cover | 3 | Kit C |
| 27 | Lock washer | 4 | Kit C |

MOTOR SPARE PARTS

SPARE PARTS KITS

| P_N [kW] | 0.25 - 3.0 kW | | |
|---------------|---|---|-------------|
| Kit A1 | Top Endbell 304SS | incl. pos. 4, 7, 8, 9, 10, 11, 12, 13 | 308 462 902 |
| | Top Endbell 316SS | | 308 462 952 |
| Kit A2 | Bottom Endbell 304SS incl. Thrust Bearing Kit 4000N | incl. pos. 16 - 22 | 308 464 911 |
| | Bottom Endbell 316SS incl. Thrust Bearing Kit 4000N | | 308 464 912 |
| Kit B | Seal Kit Standard 304SS | incl. pos. 3, 6, 8, 9, 11, 13, 18, 23, 24 | 308 650 201 |
| | Seal Kit Standard 316SS* | | 308 650 251 |
| | Seal Kit Pollution Recovery 304SS | | 308 650 202 |
| | Seal Kit Pollution Recovery 316SS | | 308 650 252 |
| Kit C | Fastener Kit 304SS | incl. pos. 1, 2, 26, 27 | 308 656 202 |
| | Fastener Kit 316SS | | 308 656 252 |

SPARE PARTS 3~ DESIGN 50 HZ - STATOR AND ROTOR 0.37 - 3.0 KW

| P_N [kW] | U_N [V] | Model no. stator 304SS / 316SS | Model no. rotor 304SS | Model no. rotor 316SS |
|---------------|--------------|-----------------------------------|--------------------------|--------------------------|
| 0,37 | 220, 230 | 305 491 851 | 178 164 901K | 178 164 921K |
| | 380 -415 | 305 491 861 | | |
| | 500 | 305 491 871 | | |
| 0,55 | 220, 230 | 305 491 852 | 178 164 902 K | 178 164 922K |
| | 380 -415 | 305 491 862 | | |
| | 500 | 305 491 872 | | |
| 0,75 | 220, 230 | 305 491 853 | 178 164 903 K | 178 164 923K |
| | 380 -415 | 305 491 863 | | |
| | 500 | 305 491 873 | | |
| 1,1 | 220, 230 | 305 491 854 | 178 164 905 K | 178 164 925K |
| | 380 -415 | 305 491 864 | | |
| | 500 | 305 491 874 | | |
| 1,5 | 220, 230 | 305 491 855 | 178 164 907K | 178 164 927K |
| | 380 -415 | 305 491 865 | | |
| | 500 | 305 491 875 | | |
| 2,2 | 220, 230 | 305 491 856 | 178 164 908K | 178 164 928K |
| | 380 -415 | 305 491 866 | | |
| | 500 | 305 491 876 | | |
| 3,0 | 220, 230 | 305 491 857 | 178 164 910K | 178 164 920K |
| | 380 -415 | 305 491 867 | | |
| | 500 | 305 491 877 | | |

SPARE PARTS 3~ DESIGN 60 HZ - STATOR AND ROTOR 0.37 - 3.0 KW

| P_N [kW] | $P_{Nmax.}$ [kW] | U_N [V] | Model no. stator 304SS / 316SS | Model no. rotor 304SS | Model no. rotor 316SS |
|---------------|---------------------|--------------|-----------------------------------|--------------------------|--------------------------|
| 0,37 | 0,59 | 230 | 305 491 901 | 178 164 901K | 178 164 921K |
| | | 380 | 305 491 911 | | |
| | | 460 | 305 491 921E | | |
| 0,55 | 0,83 | 230 | 305 491 902 | 178 164 902K | 178 164 922K |
| | | 380 | 305 491 912 | | |
| | | 460 | 305 491 922E | | |
| 0,75 | 1 | 230 | 305 491 903 | 178 164 903K | 178 164 923K |
| | | 380 | 305 491 913 | | |
| | | 460 | 305 491 923E | | |
| 1,10 | 1,4 | 230 | 305 491 904 | 178 164 905K | 178 164 925K |
| | | 380 | 305 491 914 | | |
| | | 460 | 305 491 924E | | |
| 1,50 | 1,8 | 230 | 305 491 905 | 178 164 907K | 178 164 927K |
| | | 380 | 305 491 915 | | |
| | | 460 | 305 491 925E | | |
| 2,20 | 2,5 | 230 | 305 491 906 | 178 164 908K | 178 164 928K |
| | | 380 | 305 491 916 | | |
| | | 460 | 305 491 926E | | |
| 3,00 | 3,4 | 230 | 305 491 907 | 178 164 910K | 178 164 930K |
| | | 380 | 305 491 917 | | |
| | | 460 | 305 491 927E | | |

4" 3-PHASE HIGH THRUST MOTORS

OPTIONAL



FEATURES & BENEFITS

- NEMA mounting design
- Stainless steel splined shaft
- StatorShield™ - Franklin encapsulation system
- Factory filled with Franklin's FES93 motor fill solution
- Max. storage temperature -15°C - + 50°C
- Liquid lubricated radial bearings and High capacity Kingsbury type thrust bearing for 100 % maintenance free operation
- Field replaceable lead using Franklin's exclusive Water Bloc technology
- Pressure-equalizing diaphragm
- High efficiency electrical design for low operation costs
- Drinking water approvals
- Suitable for use in water with increased salinity (Brackish water version optional)



Pollution Recovery version:

- Fluorelastomere (Viton®) rubber parts
- Special Polyuretane (PUR) lead assemblies
- 304SS (316SS Stator) graded stainless steel as standard

SPECIFICATION

- Rating: 2,2 - 9,3kW
- Voltage: 3- - 230/400/500 V / 50 Hz, 230/380/460 V / 60 Hz
- Thrust load: 6,5 kN
- Nominal ambient temperature: 30 °C with 0.08 m/s cooling flow
- Voltage tolerance: -10 % / +6 % (50 Hz), ±10 % (60 Hz)
- Protection IP68 and insulation class B
- Frequency of starts: 20 starts/ hour (with min. 3 minutes resting time)
- Motors with factory installed leads (optional)
- Installation orientation: Vertical / horizontal (shaft end heightened)
- Rotation counter clock wise facing shaft end (Rotation CW upon request)

OPTIONS

- Built in lightning arrestors
- Various cable lengths
- Motors with factory-installed lead in single packing
- Motor complete in 316SS with SiC seal
- Special voltages



ISO 9001

All motors are manufactured in ISO 9001 certified plants and 100% tested



Hydrodynamic liquid lubricated radial bearings

100 % maintenance free operation

StatorSHIELD™ - Franklin encapsulation system

Franklin Electric encapsulated motors are equipped with hermetically-sealed windings. The Anti track stator resin mechanically supports the winding and provides fast heat dissipation.

Kingsbury type thrust bearing

High capacity 4 kN Kingsbury type thrust bearing for 100 % maintenance free operation

Pressure-equalizing diaphragm



4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR MODEL NUMBERS 50 HZ - 3-PHASE DESIGN

| P _N [kW] | U _N [V] | Digit 1 - 6 | | Digit 7 - 10 | | | | | |
|------------------------|-----------------------|----------------|--------------------|----------------------------|---------------------------|----------------------------|---------------------------|-----------------------------|----------------------------|
| | | | | Standard 304SS | | Standard 316SS | | Pollution Recovery 304SS | Brackish water Motor |
| | | DOL | YΔ (only 316SS) | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* | Single pack, with lead* |
| 2,2 | 220, 230 | 234 756 | 234 780 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 380 - 415 | 234 726 | 234 770 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 500 | 234 796 | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| 3,0 | 220, 230 | 234 766 | 234 781 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 380 - 415 | 234 764 | 234 771 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 500 | 234 768 | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| 3,7 | 220, 230 | 234 757 | 234 782 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 380 - 415 | 234 727 | 234 772 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 500 | 234 797 | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| 4,0 | 220, 230 | 234 767 | 234 783 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 380 - 415 | 234 765 | 234 773 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 500 | 234 769 | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| 5,5 | 220, 230 | 234 758 | 234 784 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 380 - 415 | 234 728 | 234 778 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 500 | 234 798 | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| 7,5 | 220, 230 | - | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 380 - 415 | 234 729 | 234 779 | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| | 500 | 234 799 | - | 3421L | 3421 | 3521L | 3521 | 3422L | 3424L |
| 9,3 | 380 - 415 | 234 788 | - | 3429L | - | 3529L | - | - | - |

* lead lengths motors: „L“ with 2.50 m pre-mounted cable

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR MODEL NUMBERS 60 HZ - 3-PHASE DESIGN

| P _N [kW] | P _{N max.} [kW] | U _N [V] | Digit 1-6 | | Digit 7-10 | | | |
|------------------------|-----------------------------|-----------------------|-----------|--------------------|---------------------------|----------------------------|---------------------------|----------------------------|
| | | | | | Standard 304SS | | Standard 316SS | |
| | | | DOL | YΔ (only 316SS) | 40 motors packing unit | Single pack, with lead* | 40 motors packing unit | Single pack, with lead* |
| 2,2 | 2,5 | 230 | 234 716 | 234 780 | 3421 | 3421L | 3521 | 3521L |
| | | 380 | 234 746 | 234 770 | 3421 | 3421L | 3521 | 3521L |
| | | 460 | 234 726 | - | 3421E | 3421EL | 3521E | 3521EL |
| 3,0 | 3,4 | 230 | 234 776 | 234 781 | 3421 | 3421L | 3521 | 3521L |
| | | 380 | 234 774 | 234 771 | 3421 | 3421L | 3521 | 3521L |
| | | 460 | 234 764 | - | 3421E | 3421EL | 3521E | 3521EL |
| 3,7 | 4,2 | 230 | 234 717 | 234 782 | 3421 | 3421L | 3521 | 3521L |
| | | 380 | 234 747 | 234 772 | 3421 | 3421L | 3521 | 3521L |
| | | 460 | 234 727 | - | 3421E | 3421EL | 3521E | 3521EL |
| 4,0 | 4,7 | 230 | 234 777 | 234 783 | 3421 | 3421L | 3521 | 3521L |
| | | 380 | 234 775 | 234 773 | 3421 | 3421L | 3521 | 3521L |
| | | 460 | 234 765 | - | 3421E | 3421EL | 3521E | 3521EL |
| 5,5 | 6,4 | 230 | 234 718 | 234 784 | 3421 | 3421L | 3521 | 3521L |
| | | 380 | 234 748 | 234 778 | 3421 | 3421L | 3521 | 3521L |
| | | 460 | 234 728 | - | 3421E | 3421EL | 3521E | 3521EL |
| 7,5 | 8,6 | 230 | 234 719 | - | 3421 | 3421L | 3521 | 3521L |
| | | 380 | 234 749 | 234 780 | 3421 | 3421L | 3521 | 3521L |
| | | 460 | 234 729 | - | 3421E | 3421EL | 3521E | 3521EL |

* lead lengths motors: „L“ with 2.50 m pre-mounted cable

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR PERFORMANCE DATA 50 HZ - 3-PHASE DESIGN

| P _N [kW] | Thrust F [N] | U _N [V] | n _N [min ⁻¹] | I _N [A] | I _A [A] | η (Eff.) [%] at % load | | | cos φ (Pf.) at % load | | | T _N [Nm] | T _A [Nm] |
|------------------------|-----------------|-----------------------|--|-----------------------|-----------------------|---------------------------|----|-----|--------------------------|------|------|------------------------|------------------------|
| | | | | | | 50 | 75 | 100 | 50 | 75 | 100 | | |
| 2,2 | 6500 | 220 | 2820 | 9,3 | 49,0 | 71 | 75 | 75 | 0,6 | 0,74 | 0,82 | 7,42 | 19,87 |
| | | 230 | 2845 | 9,5 | 51,6 | 69 | 74 | 75 | 0,52 | 0,66 | 0,77 | 7,37 | 22 |
| | | 380 | 2820 | 5,4 | 28,3 | 71 | 75 | 75 | 0,6 | 0,74 | 0,82 | 7,42 | 19,87 |
| | | 400 | 2845 | 5,5 | 29,8 | 69 | 74 | 75 | 0,52 | 0,66 | 0,77 | 7,37 | 22 |
| | | 415 | 2855 | 5,8 | 30,9 | 65 | 72 | 74 | 0,47 | 0,61 | 0,72 | 7,33 | 23,67 |
| | | 500 | 2820 | 4,1 | 21,5 | 71 | 75 | 75 | 0,6 | 0,74 | 0,82 | 7,42 | 19,87 |
| 3 | 6500 | 220 | 2820 | 12,8 | 69,1 | 73 | 77 | 77 | 0,61 | 0,74 | 0,82 | 10,16 | 28,80 |
| | | 230 | 2845 | 13,0 | 72,8 | 70 | 76 | 76 | 0,53 | 0,67 | 0,77 | 10,06 | 31,93 |
| | | 380 | 2820 | 7,4 | 39,9 | 73 | 77 | 77 | 0,61 | 0,74 | 0,82 | 10,16 | 28,80 |
| | | 400 | 2845 | 7,5 | 42,0 | 70 | 76 | 76 | 0,53 | 0,67 | 0,77 | 10,06 | 31,93 |
| | | 415 | 2855 | 7,9 | 43,6 | 67 | 73 | 75 | 0,47 | 0,61 | 0,72 | 10,04 | 34,33 |
| | | 500 | 2820 | 5,6 | 30,3 | 73 | 77 | 77 | 0,61 | 0,74 | 0,82 | 10,16 | 28,80 |
| 3,7 | 6500 | 220 | 2815 | 15,3 | 86,1 | 75 | 79 | 78 | 0,62 | 0,75 | 0,83 | 12,6 | 37,5 |
| | | 230 | 2840 | 15,5 | 90,6 | 73 | 77 | 78 | 0,54 | 0,69 | 0,78 | 12,5 | 41,5 |
| | | 380 | 2815 | 8,8 | 49,7 | 75 | 79 | 78 | 0,62 | 0,75 | 0,83 | 12,6 | 37,5 |
| | | 400 | 2840 | 9,0 | 52,3 | 73 | 77 | 78 | 0,54 | 0,69 | 0,78 | 12,5 | 41,5 |
| | | 415 | 2850 | 9,3 | 54,3 | 70 | 76 | 77 | 0,49 | 0,63 | 0,73 | 12,4 | 44,7 |
| | | 500 | 2815 | 6,7 | 37,8 | 75 | 79 | 78 | 0,62 | 0,75 | 0,83 | 12,6 | 37,5 |
| 4 | 6500 | 220 | 2820 | 16,7 | 93,7 | 75 | 78 | 78 | 0,60 | 0,74 | 0,82 | 13,5 | 39,7 |
| | | 230 | 2840 | 17,2 | 98,7 | 72 | 77 | 78 | 0,52 | 0,67 | 0,77 | 13,4 | 44,0 |
| | | 380 | 2820 | 9,7 | 54,1 | 75 | 78 | 78 | 0,60 | 0,74 | 0,82 | 13,5 | 39,7 |
| | | 400 | 2840 | 9,9 | 57,0 | 72 | 77 | 78 | 0,52 | 0,67 | 0,77 | 13,4 | 44,0 |
| | | 415 | 2855 | 10,4 | 59,1 | 69 | 75 | 77 | 0,47 | 0,61 | 0,72 | 13,4 | 47,4 |
| | | 500 | 2820 | 7,3 | 41,1 | 75 | 78 | 78 | 0,60 | 0,74 | 0,82 | 13,5 | 39,7 |
| 5,5 | 6500 | 220 | 2845 | 21,9 | 127,0 | 77 | 80 | 79 | 0,66 | 0,79 | 0,85 | 18,5 | 51,0 |
| | | 230 | 2865 | 21,8 | 133,7 | 75 | 79 | 79 | 0,59 | 0,73 | 0,81 | 18,3 | 56,5 |
| | | 380 | 2845 | 12,6 | 73,3 | 77 | 80 | 79 | 0,66 | 0,79 | 0,85 | 18,5 | 51,0 |
| | | 400 | 2865 | 12,6 | 77,2 | 75 | 79 | 79 | 0,59 | 0,73 | 0,81 | 18,3 | 56,5 |
| | | 415 | 2875 | 12,8 | 80,1 | 73 | 77 | 79 | 0,54 | 0,68 | 0,77 | 18,2 | 60,9 |
| | | 500 | 2845 | 9,6 | 55,7 | 77 | 80 | 79 | 0,66 | 0,79 | 0,85 | 18,5 | 51,0 |
| 7,5 | 6500 | 380 | 2830 | 17,2 | 94,3 | 78 | 80 | 79 | 0,66 | 0,79 | 0,86 | 25,3 | 65,9 |
| | | 400 | 2855 | 17,1 | 99,3 | 75 | 79 | 79 | 0,58 | 0,72 | 0,81 | 25,1 | 73,1 |
| | | 415 | 2865 | 17,6 | 103,0 | 73 | 78 | 79 | 0,52 | 0,67 | 0,77 | 25,0 | 78,6 |
| | | 500 | 2830 | 13,1 | 71,7 | 78 | 80 | 79 | 0,66 | 0,79 | 0,86 | 25,3 | 65,9 |
| 9,3 | 6500 | 380 | 2825 | 21,2 | 108,0 | 77 | 80 | 79 | 0,65 | 0,78 | 0,86 | 31,4 | 73,8 |
| | | 400 | 2850 | 21,4 | 113,0 | 75 | 79 | 79 | 0,56 | 0,71 | 0,81 | 31,1 | 81,8 |
| | | 415 | 2860 | 22,1 | 118,0 | 72 | 77 | 78 | 0,47 | 0,58 | 0,76 | 31,0 | 88,0 |

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

MOTOR PERFORMANCE DATA 60 HZ - 3-PHASE DESIGN

| P _N [kW] | P _{MAX} [kW] | Thrust F [N] | U _N [V] | n _N [min ⁻¹] | I _N [A] | I _A [A] | η (Eff.) [%] at % load | | | cos φ (Pf.) at % load | | | T _N [Nm] | T _A [Nm] |
|------------------------|--------------------------|-----------------|-----------------------|--|-----------------------|-----------------------|---------------------------|----|-----|--------------------------|------|------|------------------------|------------------------|
| | | | | | | | 50 | 75 | 100 | 50 | 75 | 100 | | |
| 2,2 | 2,5 | 6500 | 230 | 3425 | 10,8 | 57,4 | 69 | 74 | 76 | 0,57 | 0,70 | 0,78 | 7,0 | 18,0 |
| | | | 380 | 3425 | 6,5 | 34,7 | 69 | 74 | 76 | 0,57 | 0,70 | 0,78 | 7,0 | 18,0 |
| | | | 460 | 3425 | 5,4 | 28,7 | 69 | 74 | 76 | 0,57 | 0,70 | 0,78 | 7,0 | 18,0 |
| 3 | 3,4 | 6500 | 230 | 3425 | 14,5 | 79,4 | 71 | 76 | 77 | 0,57 | 0,70 | 0,79 | 9,5 | 23,8 |
| | | | 380 | 3425 | 8,8 | 48,1 | 71 | 76 | 77 | 0,57 | 0,70 | 0,79 | 9,5 | 23,8 |
| | | | 460 | 3425 | 7,2 | 39,7 | 71 | 76 | 77 | 0,57 | 0,70 | 0,79 | 9,5 | 23,8 |
| 3,7 | 4,2 | 6500 | 230 | 3425 | 17,2 | 104 | 74 | 78 | 79 | 0,59 | 0,72 | 0,80 | 11,8 | 32,9 |
| | | | 380 | 3425 | 10,4 | 62,7 | 74 | 78 | 79 | 0,59 | 0,72 | 0,80 | 11,8 | 32,9 |
| | | | 460 | 3425 | 8,6 | 51,8 | 74 | 78 | 79 | 0,59 | 0,72 | 0,80 | 11,8 | 32,9 |
| 4 | 4,7 | 6500 | 230 | 3420 | 19,4 | 114 | 73 | 78 | 79 | 0,58 | 0,71 | 0,79 | 13,2 | 38,2 |
| | | | 380 | 3420 | 11,7 | 68,8 | 73 | 78 | 79 | 0,58 | 0,71 | 0,79 | 13,2 | 38,2 |
| | | | 460 | 3420 | 9,7 | 56,8 | 73 | 78 | 79 | 0,58 | 0,71 | 0,79 | 13,2 | 38,2 |
| 5,5 | 6,4 | 6500 | 230 | 3440 | 24,7 | 142 | 76 | 80 | 81 | 0,64 | 0,75 | 0,83 | 17,9 | 42,7 |
| | | | 380 | 3440 | 15,0 | 85,9 | 76 | 80 | 81 | 0,64 | 0,75 | 0,83 | 17,9 | 42,7 |
| | | | 460 | 3440 | 12,4 | 71,0 | 76 | 80 | 81 | 0,64 | 0,75 | 0,83 | 17,9 | 42,7 |
| 7,5 | 8,6 | 6500 | 380 | 3435 | 20,3 | 121 | 75 | 79 | 80 | 0,63 | 0,75 | 0,83 | 24,1 | 62,1 |
| | | | 460 | 3435 | 16,8 | 99,7 | 75 | 79 | 80 | 0,63 | 0,75 | 0,83 | 24,1 | 62,1 |

4" SUPER STAINLESS MOTOR - 3-PHASE DESIGN

WINDING RESISTANCE DATA 50 HZ - 3-PHASE DESIGN

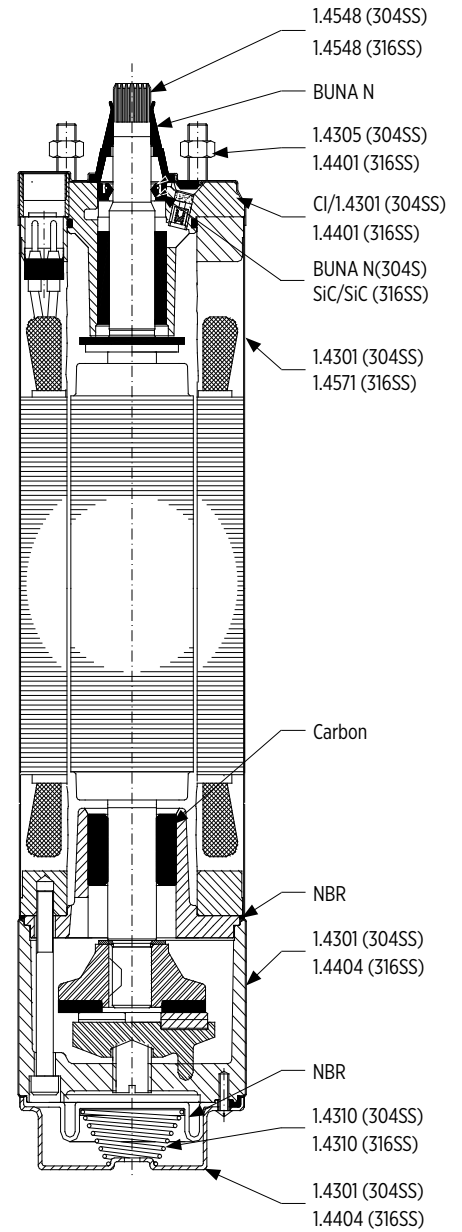
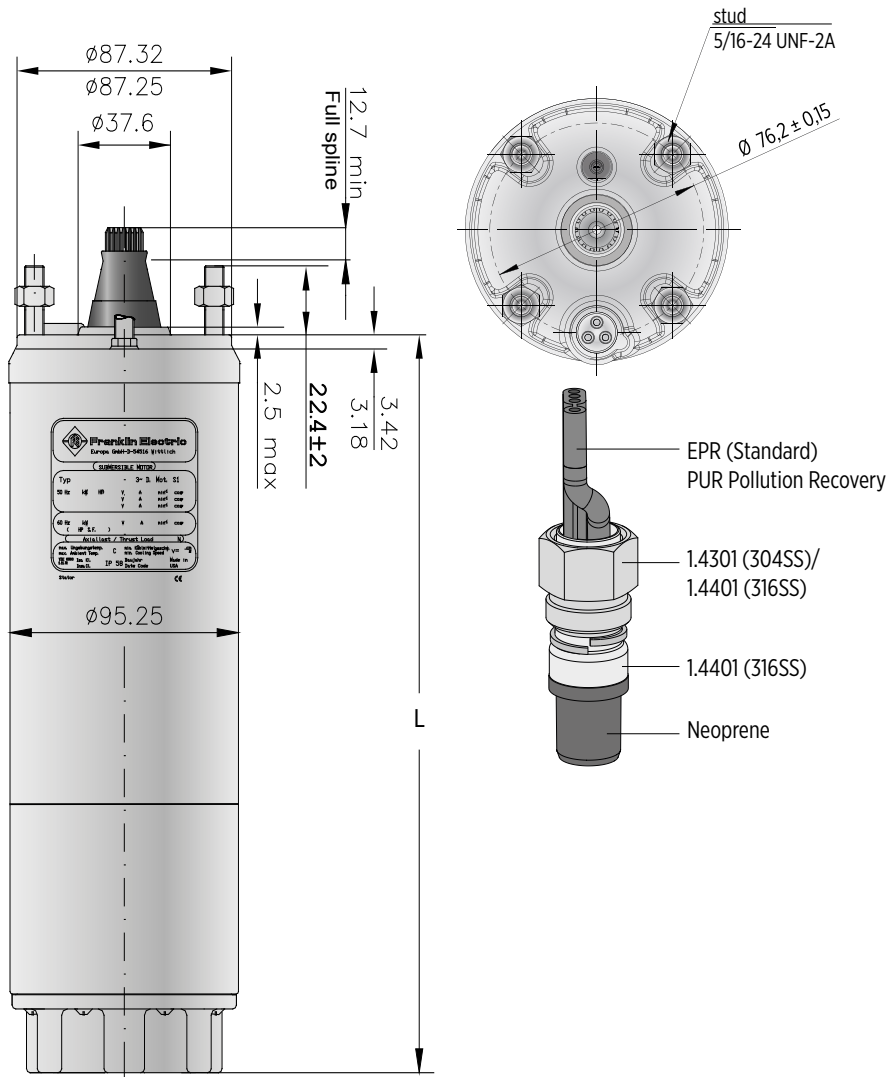
| P_N [kW] | U_N [V] | Stator-Ref. | U - V [Ohm] |
|---------------|-----------------|-------------|----------------|
| 2,2 | 220 - 230 | 326 780 902 | 2,5 - 3,0 |
| | 380 - 400 - 415 | 326 715 902 | 7,1 - 8,6 |
| | 500 | 326 792 902 | 11,9 - 14,5 |
| 3,0 | 220 - 230 | 326 781 902 | 1,5 - 1,9 |
| | 380 - 400 - 415 | 326 716 902 | 4,7 - 5,8 |
| | 500 | 326 793 902 | 8,4 - 10,2 |
| 3,7 | 220 - 230 | 326 784 902 | 1,2 - 1,5 |
| | 380 - 400 - 415 | 326 717 902 | 3,7 - 4,5 |
| | 500 | 326 796 902 | 6,5 - 7,9 |
| 4,0 | 220 - 230 | 326 785 902 | 1,1 - 1,3 |
| | 380 - 400 - 415 | 326 718 902 | 3,3 - 4,0 |
| | 500 | 326 797 902 | 5,8 - 7,1 |
| 5,5 | 220 - 230 | 326 786 902 | 0,9 - 1,1 |
| | 380 - 400 - 415 | 326 719 902 | 2,6 - 3,2 |
| | 500 | 326 798 902 | 4,6 - 5,7 |
| 7,5 | 380 - 400 - 415 | 326 720 902 | 1,9 - 2,3 |
| | 500 | 326 799 902 | 3,3 - 4,1 |
| 9,3 | 380 - 400 - 415 | 326 995 920 | 1,5 - 1,7 |

WINDING RESISTANCE DATA 60 HZ - 3-PHASE DESIGN

| P_N [kW] | P_{MAX} [kW] | U_N [V] | Stator-Ref. # | U - V [Ohm] |
|---------------|-------------------|--------------|---------------|----------------|
| 2,2 | 2,5 | 230 | 326 833 | 1,8 - 2,2 |
| | | 380 | 326 843 | 4,9 - 6,0 |
| | | 460 | 326 715 | 7,1 - 8,6 |
| 3 | 3,4 | 230 | 326 834 | 1,2 - 1,4 |
| | | 380 | 326 844 | 3,2 - 4,0 |
| | | 460 | 326 716 | 6,5 - 8,0 |
| 3,7 | 4,2 | 230 | 326 835 | 0,9 - 1,1 |
| | | 380 | 326 845 | 2,6 - 3,1 |
| | | 460 | 326 717 | 3,7 - 4,5 |
| 4 | 4,7 | 230 | 326 836 | 0,8 - 1,0 |
| | | 380 | 326 846 | 2,4 - 2,9 |
| | | 460 | 326 718 | 3,3 - 4,0 |
| 5,5 | 6,4 | 230 | 326 837 | 0,7 - 0,8 |
| | | 380 | 326 847 | 1,8 - 2,2 |
| | | 460 | 326 719 | 2,6 - 3,2 |
| 7,5 | 8,6 | 380 | 326 848 | 1,3 - 1,6 |
| | | 460 | 326 720 | 1,9 - 2,3 |

MOTOR DESIGN AND DIMENSIONS

MOTOR DESIGN HIGH THRUST 6500N 2,2 - 7,5 KW



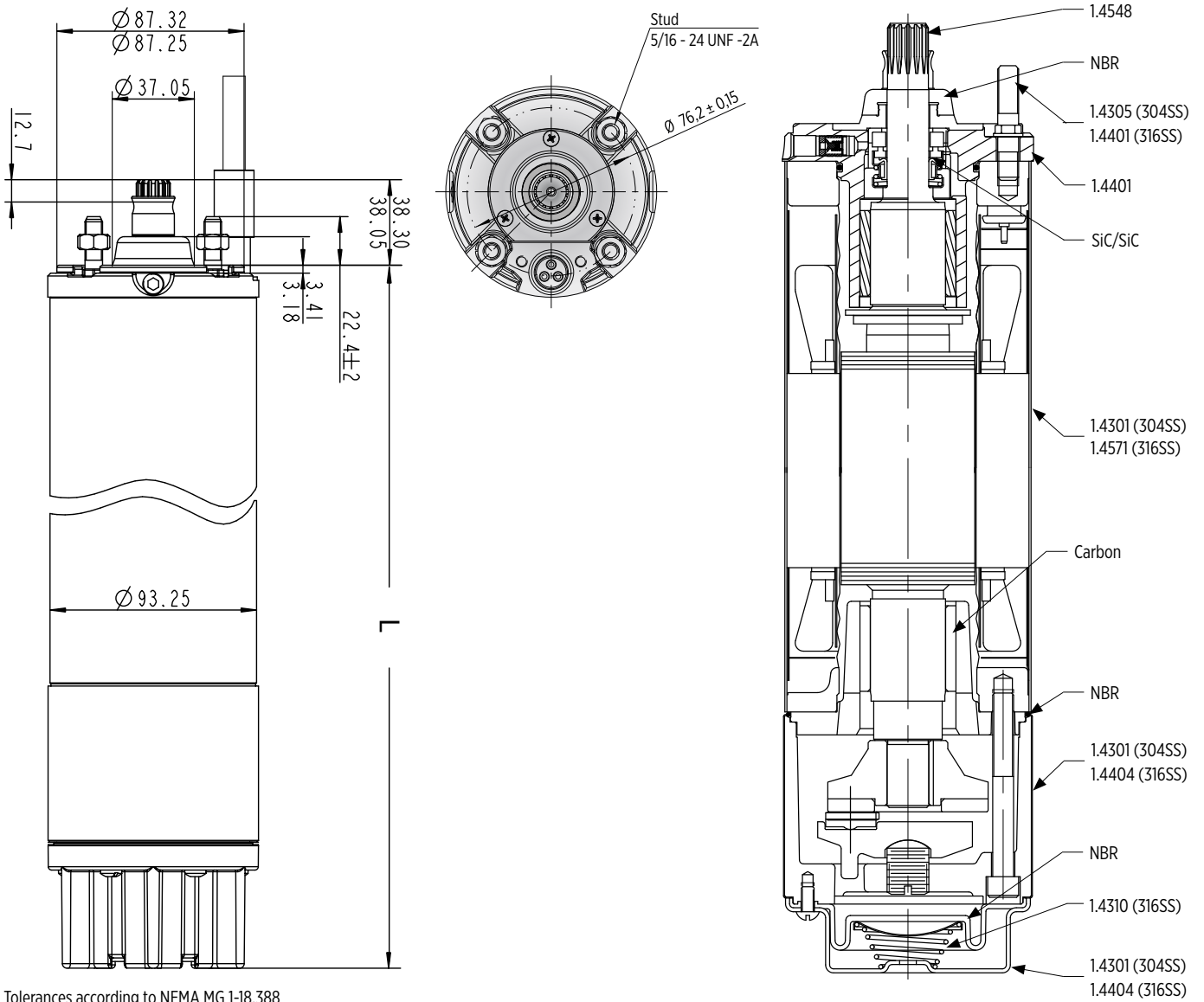
Tolerances according to NEMA MG 1-18.388

LENGTHS AND WEIGHTS - 3-PHASE DESIGN

| P_N | | 304SS | 316SS | 304SS | 316SS | motor with lead in single pack | |
|-------|------|--------|--------|--------|--------|--------------------------------|------------|
| [kW] | [HP] | L [mm] | L [mm] | M [kg] | M [kg] | [mm] | 304SS [kg] |
| 2,2 | 3 | 422,2 | 431,4 | 15,0 | 15,5 | 796 x 100 x 110 | 16,8 |
| 3,0 | 4 | 477,2 | 486,4 | 17,0 | 17,5 | 796 x 100 x 110 | 18,9 |
| 3,7 | 5 | 520,2 | 529,4 | 19,1 | 19,6 | 796 x 100 x 110 | 20,9 |
| 4,0 | 5,5 | 543,2 | 552,4 | 20,0 | 20,5 | 796 x 100 x 110 | 21,8 |
| 5,5 | 7,5 | 652,5 | 661,7 | 26,6 | 27,1 | 904 x 100 x 110 | 28,7 |
| 7,5 | 10 | 730,5 | 739,7 | 30,6 | 31,1 | 904 x 100 x 110 | 32,7 |

MOTOR DESIGN AND DIMENSION

MOTOR DESIGN HIGH THRUST 6500N 9,3 KW



Tolerances according to NEMA MG 1-18.388

LENGTHS AND WEIGHTS - 3-PHASE DESIGN

| P _N [kW] | L [mm] | M [kg] | Motor with Lead in single pack | |
|------------------------|-----------|-----------|-----------------------------------|------|
| | | | [mm] | [kg] |
| 9,3 | 855,1 | 37,9 | 904 x 100 x 110 | 41,3 |

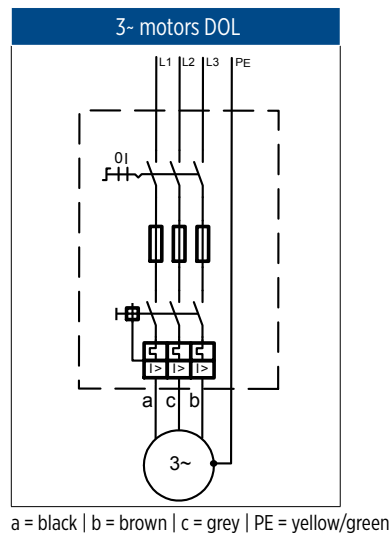
MOTOR LEADS

MOTOR LEADS 3~ DESIGN DOL

| 3 Phase motor leads | | | |
|----------------------|---------------------|---------------------|--------|
| 2,2 - 7,5 kW | | | |
| Ø [mm ²] | B [mm] | B1 [mm] | H [mm] |
| 3X1,5 + 1G1,5 | 16,8 | 10,7 | 5,0 |
| | | | |
| L [m] | Model numbers 304SS | Model numbers 316SS | |
| 1,5 | 310 113 401 | 310 113 501 | |
| 2,5 | 310 113 402 | 310 113 502 | |
| 5 | 310 113 405 | 310 113 505 | |
| 10 | 310 113 410 | 310 113 510 | |
| 15 | 310 113 415 | 310 113 515 | |
| 20 | 310 113 420 | 310 113 520 | |
| 30 | 310 113 430 | 310 113 530 | |
| 40 | 310 113 440 | 310 113 540 | |
| 50 | 310 113 450 | 310 113 550 | |

| 3 Phase motor leads | | | |
|----------------------|---------------|---------|--------|
| 9,3 kW | | | |
| Ø [mm ²] | B [mm] | B1 [mm] | H [mm] |
| 3X1,5 + 1G1,5 | 16,8 | 10,7 | 5,0 |
| | | | |
| L [m] | Model numbers | | |
| 2,5 | 310 116 502K | | |
| 5 | 310 116 505K | | |
| 10 | 310 116 510K | | |
| 20 | 310 116 520K | | |
| 30 | 310 116 530K | | |

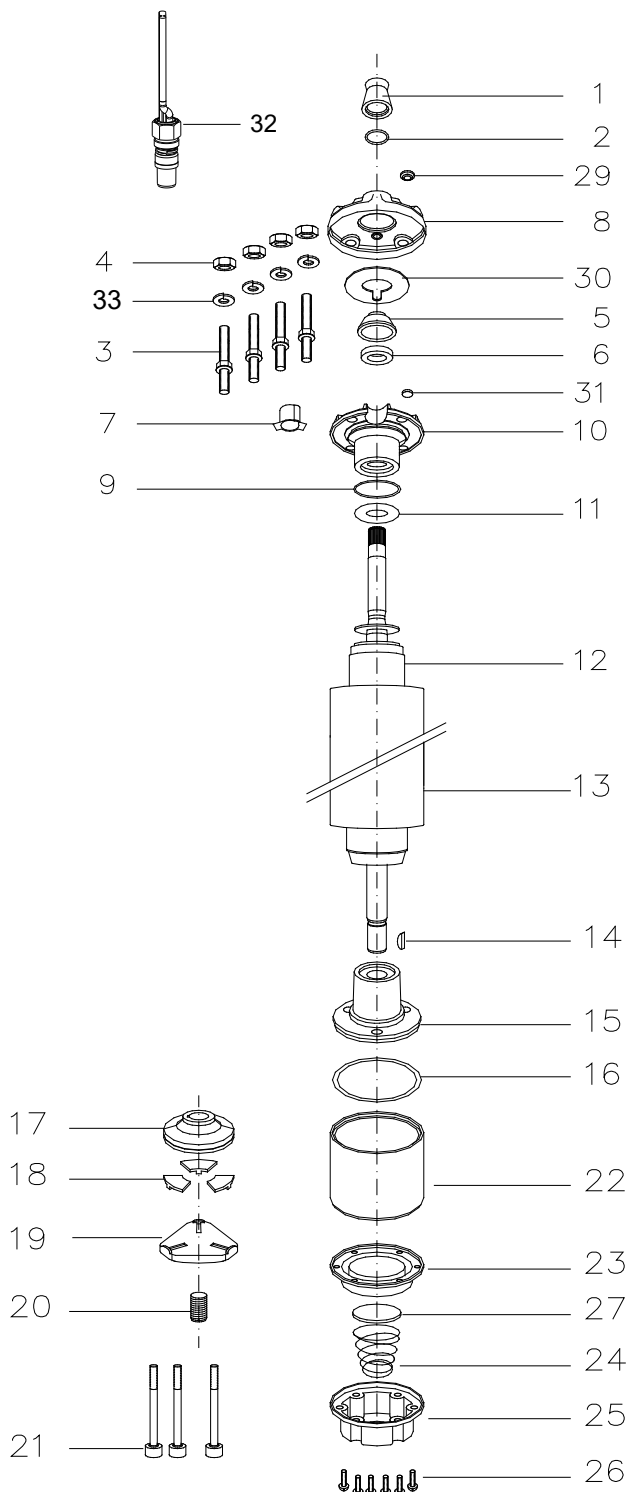
| 3-phase Pollution Recovery motor leads | |
|--|---------------------|
| 0.25 - 3.0 kW | |
| Ø [mm ²] | D Ø [mm] |
| 1,5 | 9,8 |
| | |
| L [m] | Model numbers 316SS |
| 1,5 | 310 313 501 |
| 2,5 | 310 313 502 |
| 10 | 310 113 510 |
| 20 | 310 313 520 |
| 30 | 310 313 530 |
| 40 | 310 313 540 |
| 50 | 310 313 550 |



Cables are designed for submerged operation. For air operation, please consult Franklin Electric.

MOTOR PART DESCRIPTION

MOTOR DESIGN 304SS 2,2 - 7,5 KW



| Pos. | Part Description | Qty. | Part No. |
|------|---------------------------|------|----------------|
| 1 | Protector, Spline | 1 | Kit B |
| 2 | Washer | 1 | Kit B |
| 3 | Stud | 4 | Kit C |
| 4 | Nut | 4 | Kit C |
| 5 | Seal cover | 1 | Kit D |
| 6 | Shaft Seal | 1 | Kit B+D |
| 7 | Connector boss | 1 | Kit D |
| 8 | Top Endbell, Cover | 1 | Kit D |
| 9 | O-Ring | 1 | Kit B+D |
| 10 | Top Endbell | 1 | Kit D |
| 11 | Upthrust washer 2,2 - 4,0 | 1 | 308 268 104 |
| | Upthrust washer 5,5 - 7,5 | 1 | 308 317 901 |
| 12 | Rotor | 1 | see page 52/53 |
| 13 | Stator | 1 | see page 52/53 |
| 14 | Woodruff key | 1 | 275 250 104 |
| 15 | Bottom Endbell | 1 | Kit |
| 16 | O-Ring | 1 | Kit B |
| 17 | Thrust disc | 1 | Kit A |
| 18 | Segment | 1 | Kit A |
| 19 | Leveling disc | 1 | 155 660 101 |
| 20 | Screw, adj. | 1 | 151 048 103 |
| 21 | Screw | 3 | Kit C |
| 22 | Thrust housing | 1 | 177 378 901 |
| 23 | Diaphragm | 1 | Kit B |
| 24 | Spring | 1 | 151 449 101 |
| 25 | Cover, Diaphragm | 1 | 164 100 50 |
| 26 | Screw | 6 | Kit C |
| 27 | Cup spring, Diaphragm | 1 | 151 448 201 |
| 29 | Sealing stopper | 1 | Kit B+D |
| 30 | Seal | 1 | Kit D |
| 31 | Filter | 1 | Kit B+D |
| 32 | Motor lead | 1 | see page 50 |
| 33 | Lock washer | 4 | Kit C |

MOTOR SPARE PARTS

SPARE PARTS KITS

| P_N [kW] | 2,2 - 7,5 kW | | |
|---------------|-----------------------------------|---|-------------|
| 2,2- 4,0kW | End bell, upper | incl. Pos.: 5, 6, 7, 8, 9, 10, 29, 30, 31 | 308 233 509 |
| | End bell, lower | incl. Pos.: 15 | 177 379 921 |
| 5,5 - 7,5kW | End bell, upper | incl. Pos.: 5, 6, 7, 8, 9, 10, 29, 30, 31 | 308 434 501 |
| | End bell, lower | incl. Pos.: 15 | 177 379 901 |
| Kit A | Thrust bearing Kit 6500N | incl. Pos. 17, 18 | 308 700 301 |
| Kit B | Seal Kit 304SS | incl. Pos.: 1, 2, 6, 9, 16, 23, 29, 31 | 308 900 351 |
| Kit B1 | Seal Kit Pollution Recovery 304SS | incl. Pos.: 1, 2, 6, 9, 16, 23, 29, 31 | 308 900 401 |
| Kit C | Screw Kit 304SS | incl. Pos.: 3, 4, 21, 26, 33 | 308 658 351 |

SPARE PARTS - STATOR AND ROTOR 304SS - 3-PHASE DESIGN 50HZ

| P_N [kW] | U_N [V] | Motor Model No. | Stator Model No. | Rotor |
|---------------|---------------|-------------------|------------------|--------------|
| 2,2 | 220, 230 | 234 756 3421/3422 | 305 491 361 | 178 163 903K |
| | 380, 400, 415 | 234 726 3421/3422 | 305 491 381 | |
| | 500 | 234 796 3421/3422 | 305 491 401 | |
| 3,0 | 220, 230 | 234 766 3421/3422 | 305 491 362 | 178 125 903K |
| | 380, 400, 415 | 234 764 3421/3422 | 305 491 382 | |
| | 500 | 234 768 3421/3422 | 305 491 402 | |
| 3,7 | 220, 230 | 234 757 3421/3422 | 305 491 363 | 178 126 903K |
| | 380, 400, 415 | 234 727 3421/3422 | 305 491 383 | |
| | 500 | 234 797 3421/3422 | 305 491 403 | |
| 4,0 | 220, 230 | 234 767 3421/3422 | 305 491 364 | 178 127 903K |
| | 380, 400, 415 | 234 765 3421/3422 | 305 491 384 | |
| | 500 | 234 769 3421/3422 | 305 491 404 | |
| 5,5 | 220, 230 | 234 758 3421/3422 | 305 491 365 | 178 133 903K |
| | 380, 400, 415 | 234 728 3421/3422 | 305 491 385 | |
| | 500 | 234 798 3421/3422 | 305 491 405 | |
| 7,5 | 380, 400, 415 | 234 729 3421/3422 | 305 491 386 | 178 134 903K |
| | 500 | 234 799 3421/3422 | 305 491 406 | |

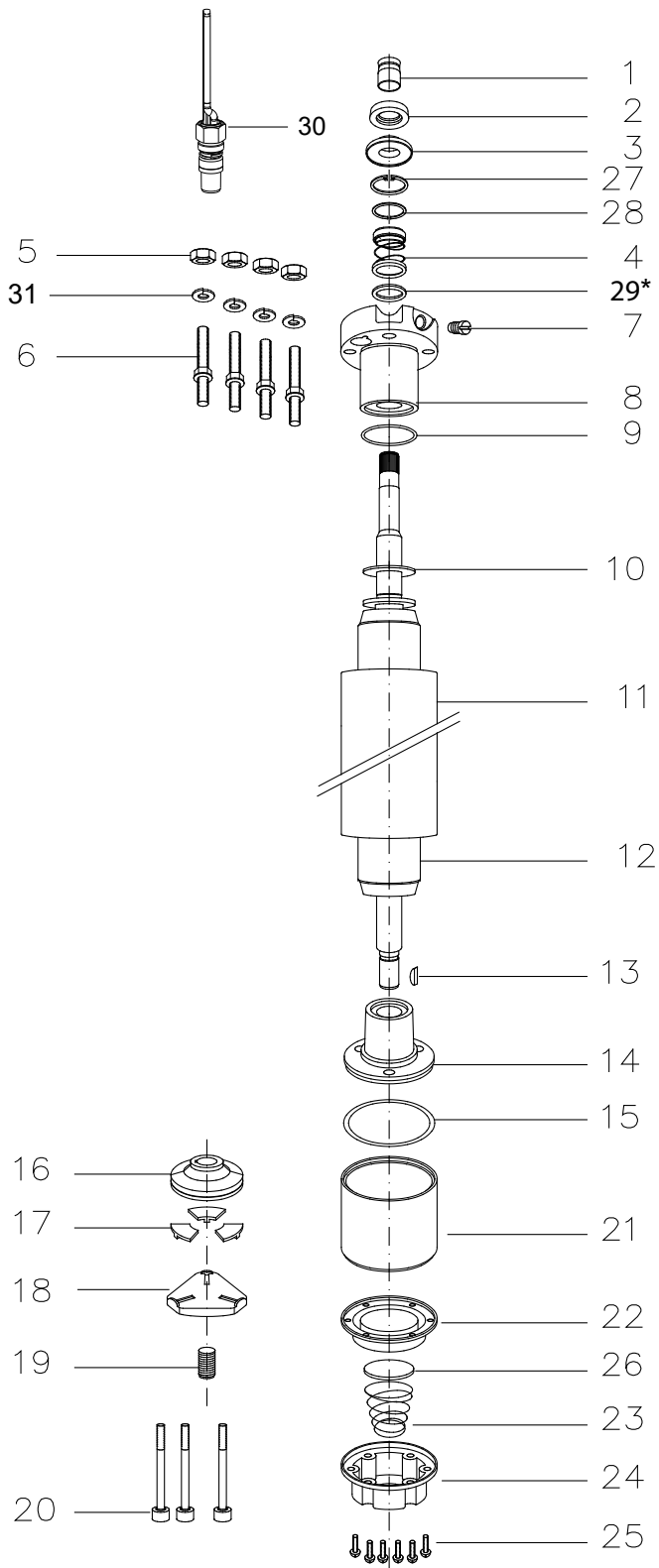
SPARE PARTS - STATOR AND ROTOR 304SS - 3-PHASE DESIGN 60HZ

| P_N [kW] | P_{MAX} [kW] | U_N [V] | Stator* | Rotor |
|---------------|-------------------|--------------|---------|--------------|
| 2,2 | 2,5 | 230 | | 178 163 903K |
| | | 380 | | |
| | | 460 | | |
| 3,0 | 3,4 | 230 | | 178 125 903K |
| | | 380 | | |
| | | 460 | | |
| 3,7 | 4,2 | 230 | | 178 126 903K |
| | | 380 | | |
| | | 460 | | |
| 4,0 | 4,7 | 230 | | 178 127 903K |
| | | 380 | | |
| | | 460 | | |
| 5,5 | 6,4 | 230 | | 178 133 903K |
| | | 380 | | |
| | | 460 | | |
| 7,5 | 8,6 | 380 | | 178 134 903K |
| | | 460 | | |

* 60 Hz Stators on request

MOTOR PART DESCRIPTION

MOTOR DESIGN 316SS 2,2 - 7,5 KW



| Pos. | Part Description | Qty. | Part No. |
|------|-----------------------|------|----------------|
| 1 | Protector, Spline | 1 | Kit C |
| 2 | Slinger | 1 | Kit C |
| 3 | Seal cover | 1 | Kit B + C |
| 4 | Shaft Seal | 1 | Kit B |
| 5 | Nut | 4 | Kit D |
| 6 | Stud | 4 | Kit D |
| 7 | Sealing Screw | 1 | 308 279 903 |
| 8 | Top Endbell | 1 | Kit |
| 9 | O-Ring | 1 | Kit B |
| 10 | Upthrust washer | 1 | Kit |
| 11 | Stator | 1 | see page 55/56 |
| 12 | Rotor | 1 | see page 55/56 |
| 13 | Woodruff key | 1 | 275 250 104 |
| 14 | Bottom Endbell | 1 | Kit |
| 15 | O-Ring | 1 | Kit B |
| 16 | Thrust disc | 1 | Kit A |
| 17 | Segments | 1 | Kit A |
| 18 | Leveling disc | 1 | 155 660 101 |
| 19 | Screw, adj. | 1 | 151 048 103 |
| 20 | Screw | 3 | Kit D |
| 21 | Thrust housing | 1 | 177 378 951 |
| 22 | Diaphragm | 1 | Kit B |
| 23 | Spring | 1 | 151 449 101 |
| 24 | Cover, Diaphragm | 1 | 364 100 50 |
| 25 | Screw | 6 | Kit D |
| 26 | Cup spring, Diaphragm | 1 | 151 448 201 |
| 27 | Ring | 1 | Kit B |
| 28 | Retain Ring | 1 | Kit B |
| 29* | Washer | 1 | 308 747 201 |
| 30 | Motor lead | 1 | see page 50 |
| 31 | Lock washer | 4 | Kit D |

* only for 2,2 - 3kW

MOTOR SPARE PARTS

SPARE PARTS KITS

| P_N [kW] | 2,2 - 7,5 kW | | |
|---------------|-----------------------------------|---|-------------|
| 2,2 - 4,0kW | End bell, upper 316SS - DOL | incl. Pos. 8 | 177 390 955 |
| | End bell, upper 316SS - YD | | 177 390 956 |
| 5,5 - 7,5kW | End bell, upper 316SS - DOL | incl. Pos. 8 | 177 390 951 |
| | End bell, upper 316SS - YD | | 177 390 953 |
| Kit A | Thrust bearing Kit 6500N | incl. Pos. 16, 17 | 308 700 301 |
| Kit B | Seal Kit 304SS | incl. Pos.: 4, 9, 15, 22 | 308 900 302 |
| Kit B1 | Seal Kit Pollution Recovery 304SS | incl. Pos.: 1, 2, 3, 4, 9, 15, 22, 27, 28 | 308 900 402 |
| Kit C | Sand slinger Kit 316SS Motors | incl. Pos.: 1, 2, 3 | 308 825 201 |
| Kit D | Screw Kit 316SS | incl. Pos.: 5, 6, 20, 25, 31 | 308 658 301 |

SPARE PARTS - STATOR AND ROTOR 316SS - 3-PHASE DESIGN 50HZ

| P_N [kW] | U_N [V] | Motor Model No. | Stator Model No. | Rotor |
|---------------|---------------|-------------------|------------------|--------------|
| 2,2 | 220, 230 | 234 756 3521/3522 | 305 491 641 | 178 163 913K |
| | 380, 400, 415 | 234 726 3521/3522 | 305 491 661 | |
| | 500 | 234 796 3521/3522 | 305 491 681 | |
| 3,0 | 220, 230 | 234 766 3521/3522 | 305 491 642 | 178 125 913K |
| | 380, 400, 415 | 234 764 3521/3522 | 305 491 662 | |
| | 500 | 234 768 3521/3522 | 305 491 682 | |
| 3,7 | 220, 230 | 234 757 3521/3522 | 305 491 643 | 178 126 913K |
| | 380, 400, 415 | 234 727 3521/3522 | 305 491 663 | |
| | 500 | 234 797 3521/3522 | 305 491 683 | |
| 4,0 | 220, 230 | 234 767 3521/3522 | 305 491 644 | 178 127 913K |
| | 380, 400, 415 | 234 765 3521/3522 | 305 491 664 | |
| | 500 | 234 769 3521/3522 | 305 491 684 | |
| 5,5 | 220, 230 | 234 758 3521/3522 | 305 491 645 | 178 133 913K |
| | 380, 400, 415 | 234 728 3521/3522 | 305 491 665 | |
| | 500 | 234 798 3521/3522 | 305 491 685 | |
| 7,5 | 380, 400, 415 | 234 729 3521/3522 | 305 491 666 | 178 134 913K |
| | 500 | 234 799 3521/3522 | 305 491 686 | |

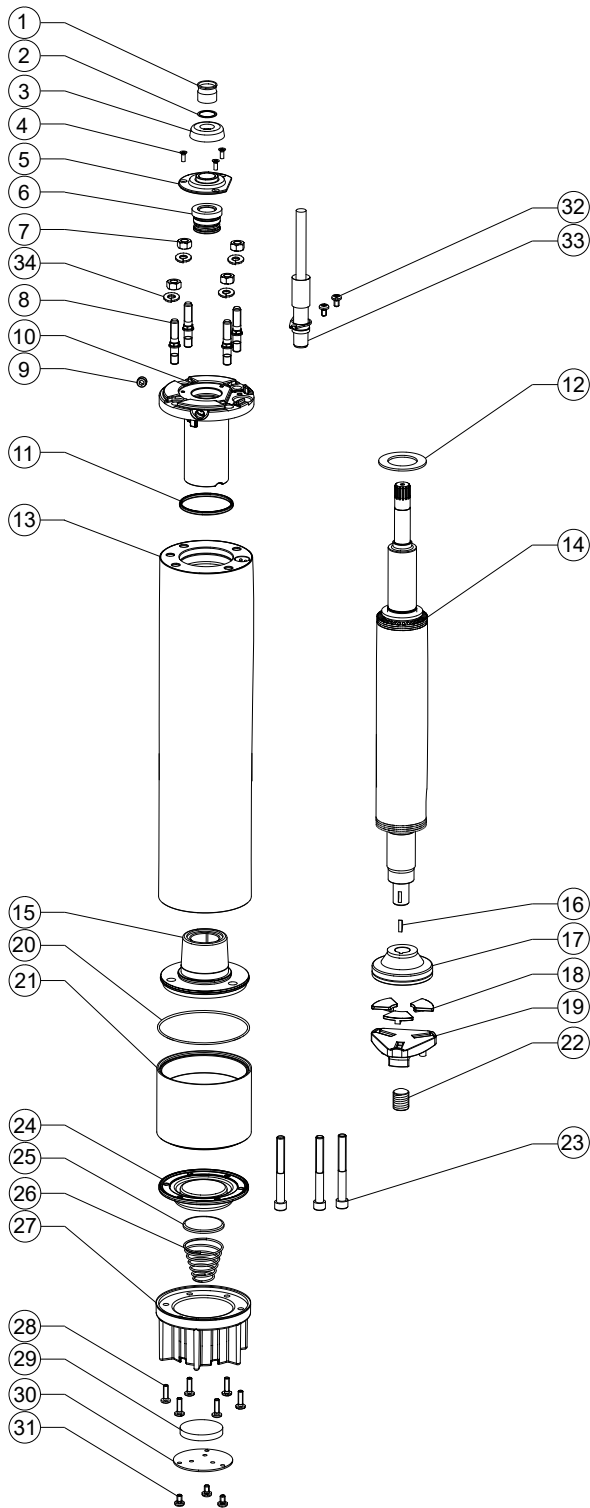
SPARE PARTS - STATOR AND ROTOR 316SS - 3-PHASE DESIGN 60HZ

| P_N [kW] | P_{MAX} [kW] | U_N [V] | Stator* | Rotor |
|---------------|-------------------|--------------|---------|--------------|
| 2,2 | 2,5 | 230 | | 178 163 913K |
| | | 380 | | |
| | | 460 | | |
| 3,0 | 3,4 | 230 | | 178 125 913K |
| | | 380 | | |
| | | 460 | | |
| 3,7 | 4,2 | 230 | | 178 126 913K |
| | | 380 | | |
| | | 460 | | |
| 4,0 | 4,7 | 230 | | 178 127 913K |
| | | 380 | | |
| | | 460 | | |
| 5,5 | 6,4 | 230 | | 178 133 913K |
| | | 380 | | |
| | | 460 | | |
| 7,5 | 8,6 | 380 | | 178 134 913K |
| | | 460 | | |

* 60 Hz Stators on request

MOTOR PART DESCRIPTION

MOTOR DESIGN 9,3 KW



| Pos. | Description | Qty. | Part Nb. |
|------|-----------------------|------|-------------|
| 1 | Protector, Spline | 1 | Kit B |
| 2 | Washer | 1 | 275 542 102 |
| 3 | Slinger | 1 | Kit B |
| 4 | Screw, Seal cover | 3 | Kit C |
| 5 | Seal cover | 1 | 156 275 102 |
| 6 | Shaft Seal | 1 | Kit B |
| 7 | Nut | 4 | Kit C |
| 8 | Stud | 4 | Kit C |
| 9 | Plug screw | 1 | 282 230 101 |
| 10 | Top Endbell | 1 | 177 553 901 |
| 11 | O-Ring | 1 | Kit B |
| 12 | Upthrust washer | 1 | 308 317 901 |
| 13 | Stator | 1 | see page 58 |
| 14 | Rotor | 1 | see page 58 |
| 15 | Bottom Endbell | 1 | 177 379 901 |
| 16 | Woodruff key | 1 | 275 250 104 |
| 17 | Thrust disc | 1 | Kit A |
| 18 | Segments | 3 | Kit A |
| 19 | Leveling disc | 1 | 155 660 101 |
| 20 | O- Ring | 1 | Kit B |
| 21 | Thrust housing | 1 | 177 378 901 |
| 22 | Screw, adj. | 1 | 151 048 103 |
| 23 | Screw | 3 | Kit C |
| 24 | Diaphragm | 1 | Kit B |
| 25 | Cup spring, Diaphragm | 1 | 151 448 201 |
| 26 | Spring | 1 | 151 449 101 |
| 27 | Diaphragm housing | 1 | 177 965 101 |
| 28 | Screw | 6 | Kit C |
| 29 | Filter | 1 | 156 276 101 |
| 30 | Cover, Diaphragm | 1 | 156 278 101 |
| 31 | Screw | 3 | Kit C |
| 32 | Screw | 2 | Kit C |
| 33 | Motor cable, 2,5m | 1 | see page 50 |
| 34 | Lock washer | 4 | Kit C |

MOTOR SPARE PARTS

SPARE PARTS KITS

| P_N [kW] | 9,3 kW | | |
|---------------|--------------------------|---|-------------|
| Kit A | Thrust bearing Kit 6500N | incl. Pos.17. 18 | 308 700 301 |
| Kit B | Seal Kit 304SS / 316SS | incl. Pos.: 1, 3, 6, 11, 20, 24 | 308 900 501 |
| Kit C | Screw Kit 304SS / 316SS | incl. Pos.: 4; 7; 8; 23; 28; 31; 32, 34 | 308 658 501 |

SPARE PARTS - STATOR AND ROTOR - 3-PHASE DESIGN 50HZ

| P_N [kW] | U_N [V] | Modellnr. Stator 304SS / 316SS | Modellnr. Rotor 304SS/316SS |
|---------------|--------------|-----------------------------------|--------------------------------|
| 9,3 | 380 - 415 | 326 995 920K | 178 139 915K |

* 60 Hz Stators on request