

6" ENCAPSULATED MOTOR

High-quality encapsulated motor with hermetically-sealed windings



FEATURES & BENEFITS

- Double-flange NEMA mounting design
- Stainless steel splined shaft
- StatorShield™ - Franklin encapsulation system
- Factory filled with Franklin's FES91 motor fill solution
- 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, spring pre-loaded
- SandFighter™ sealing system with SIC mechanical seal and sand slinger
- High efficiency electrical design for low operation costs
- Standard Motor: WW- Water well Design (Stator 304SS / Castings - CI Powder coated)
- Drinking water approvals

STANDARD SPECIFICATION

- Ratings: 4 - 45 kW
- 37 and 45 kW (up to 50 °C ambient temperature)
- Thrust load:

15.5 kN:	4 - 22 kW
27.5 kN:	30 kW
45 kN:	37 - 45 kW
- Max. storage temperature - 15 °C to + 60 °C
- Nominal ambient temperature (with 0.16 m/s cooling flow):
4 - 30 kW: 30 °C, 37 - 45 kW: 50 °C
- Standard Voltage:
50 Hz: - 10 % / + 6 % U_N [380 - 415 V = (380 - 10%) - (415 + 6 %)]
80-415 V; 60 Hz: ± 10 % U_N , 460 V
- Protection IP68 and insulation class F
- Motor protection: DIN 61947-4-1
- Frequency of starts: 20 starts/ hour (with min. 3 minutes resting time), equally distributed
- DOL / YΔ - start (pos. of cables 90 °)
- Motor lead length: 4 m
- Installation orientation: Vertical / horizontal (shaft end heightened)
- Rotation counter clock wise facing shaft end (Rotation reversible for 3 phase motors)
- Integrated SubMonitor™ sensor (37 and 45 kW)

OPTIONS

- Higher-graded materials: 316SS and 304SS
- Other voltages
- 45 kN High Thrust version (Standard in 37 kW and 45 kW)
- Retrofittable PT 100 temperature sensor
- Built-in PTC temperature sensor
- Integrated SubMonitor™ sensor (Standard for 37 and 45 kW)
- Special lead lengths up to 50 m



MOTOR MODEL NUMBERS 50 HZ - 3-PHASE DESIGN

P _N [kW]	U _N [V]	Model number Digit 1 - 6		Model number Digit 7 - 10									45 KN Motor Version
		DOL	YΔ	Standard			with SubMonitor Transmitter			with PTC			
				WW	304SS	316SS	WW	304SS	316SS	WW	304SS	316SS	
4	220, 230	236 680	236 670	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 610	236 710										
	500	236 700	236 790										
5,5	220, 230	236 681	236 671	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 611	236 711										
	500	236 701	236 791										
7,5	220, 230	236 682	236 672	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 612	236 712										
	500	236 702	236 792										
9,3	220, 230	236 015	236 005	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 001	236 011										
	500	236 008	236 018										
11	220, 230	236 683	236 673	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 613	236 713										
	500	236 703	236 793										
15	220, 230	236 684	236 674	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 614	236 714										
	500	236 704	236 794										
18,5	220, 230	236 685	236 675	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 615	236 715										
	500	236 705	236 795										
22	220, 230	236 686	236 676	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 616	236 716										
	500	236 706	236 796										
30	220, 230		236 677	9061	1061	3961	6061	1161	4061	2061	1261	3661	**63
	380 - 415	236 617	236 717										
	500	236 707	236 797										
37	380 - 415	276 618	276 718				6161		6361				Standard
45	380 - 415	276 619	276 719				6161		6361				Standard

* VFD operation is only allowed up to 400V supply voltage, for higher voltages please consult Franklin Electric Europa GmbH

** WW- Water well Design (Stator 304SS / Castings - CI Powder coated)

MOTOR MODEL NUMBERS 60 HZ - 3-PHASE DESIGN

P _N [kW]	P _N [HP]	U _N [V]	Model number Digit 1 - 6		Model number Digit 7 - 10						High Thrust 45 KN Motor Version
			DOL	YΔ	Standard			with SubMonitor Transmitter			
					WW	304SS	316SS	WW	304SS	316SS	
4	5,5	200	236 650	236 760	9061	1061	3961	6061	1161	4061	**63
		230	236 600	236 720	9061	1061	3961	6061	1161	4061	**63
		380	236 660	236 780	9061	1061	3961	6061	1161	4061	**63
		460	236 610	236 710	9061	1061	3961	6061	1161	4061	**63
		575	236 620	236 400	9061	1061	3961	6061	1161	4061	**63
5,5	7,5	200	236 651	236 761	9061	1061	3961	6061	1161	4061	**63
		230	236 601	236 721	9061	1061	3961	6061	1161	4061	**63
		380	236 661	236 781	9061	1061	3961	6061	1161	4061	**63
		460	236 611	236 711	9061	1061	3961	6061	1161	4061	**63
		575	236 621	236 401	9061	1061	3961	6061	1161	4061	**63
7,5	10,0	200	236 652	236 762	9061	1061	3961	6061	1161	4061	**63
		230	236 602	236 722	9061	1061	3961	6061	1161	4061	**63
		380	236 662	236 782	9061	1061	3961	6061	1161	4061	**63
		460	236 612	236 011	9061	1061	3961	6061	1161	4061	**63
		575	236 622	236 402	9061	1061	3961	6061	1161	4061	**63
9,3	12,5	200	236 061	236 ***	9061	1061	3961	6061	1161	4061	**63
		230	236 041	236 ***	9061	1061	3961	6061	1161	4061	**63
		380	236 031	236 032	9061	1061	3961	6061	1161	4061	**63
		460	236 001	236 011	9061	1061	3961	6061	1161	4061	**63
		575	236 ***	236 ***	9061	1061	3961	6061	1161	4061	**63
11	15,0	200	236 653	236 763	9061	1061	3961	6061	1161	4061	**63
		230	236 603	236 723	9061	1061	3961	6061	1161	4061	**63
		380	236 663	236 783	9061	1061	3961	6061	1161	4061	**63
		460	236 613	236 713	9061	1061	3961	6061	1161	4061	**63
		575	236 623	236 403	9061	1061	3961	6061	1161	4061	**63
15	20,0	200	236 654	236 764	9061	1061	3961	6061	1161	4061	**63
		230	236 604	236 724	9061	1061	3961	6061	1161	4061	**63
		380	236 664	236 784	9061	1061	3961	6061	1161	4061	**63
		460	236 614	236 714	9061	1061	3961	6061	1161	4061	**63
		575	236 624	236 404	9061	1061	3961	6061	1161	4061	**63
18,5	25,0	200	236 655	236 765	9061	1061	3961	6061	1161	4061	**63
		230	236 605	236 725	9061	1061	3961	6061	1161	4061	**63
		380	236 665	236 785	9061	1061	3961	6061	1161	4061	**63
		460	236 615	236 715	9061	1061	3961	6061	1161	4061	**63
		575	236 625	236 405	9061	1061	3961	6061	1161	4061	**63
22	30,0	200	236 656	236 766	9061	1061	3961	6061	1161	4061	**63
		230	236 606	236 726	9061	1061	3961	6061	1161	4061	**63
		380	236 666	236 786	9061	1061	3961	6061	1161	4061	**63
		460	236 616	236 716	9061	1061	3961	6061	1161	4061	**63
		575	236 626	236 406	9061	1061	3961	6061	1161	4061	**63
30	40	380	236 667	236 787	9061	1061	3961	6061	1161	4061	**63
		460	236 617	236 717	9061	1061	3961	6061	1161	4061	**63
		575	236 627	236 407	9061	1061	3961	6061	1161	4061	**63
37	50	380	276 668	276 788				6161		4061	Standard
		460	276 618	276 718				6161		4061	Standard
		575	276 628	276 **8				6161		4061	Standard
45	60	380	276 669	276 789				6161		4061	Standard
		460	276 619	276 719				6161		4061	Standard
		575	276 629	276 **9				6161		4061	Standard

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		
4,0	15.500	220	2840	16,4	73	76,0	78,5	77,0	0,70	0,80	0,85	12,5	17,9
		230	2860	16,1	75	74,0	77,5	78,0	0,62	0,74	0,82	12,3	20,2
		380	2840	9,5	42	76,0	78,5	77,0	0,70	0,80	0,85	12,5	17,9
		400	2860	9,3	43	74,0	77,5	78,0	0,62	0,74	0,82	12,3	20,2
		415	2880	9,3	46	74,5	78,0	78,5	0,57	0,70	0,78	12,3	20,8
5,5	15.500	220	2850	22,1	104	77,0	79,0	78,0	0,70	0,80	0,85	18,7	30,3
		230	2870	21,7	106	74,0	78,0	79,0	0,63	0,75	0,82	18,6	35,0
		380	2850	12,8	60	77,0	79,0	78,0	0,70	0,80	0,85	18,7	30,3
		400	2870	12,5	64	74,0	78,0	79,0	0,63	0,75	0,82	18,6	35,0
		415	2880	12,8	66	74,0	77,5	78,0	0,58	0,70	0,78	18,6	35,9
7,5	15.500	220	2850	28,2	143	77,5	79,5	79,0	0,74	0,83	0,87	25,0	43,0
		230	2860	27,7	144	75,0	78,5	79,0	0,70	0,81	0,86	25,0	47,7
		380	2850	16,3	83	77,5	79,5	79,0	0,74	0,83	0,87	25,0	43,0
		400	2860	16,0	83	75,0	78,5	79,0	0,70	0,81	0,86	25,0	47,7
		415	2880	16,2	91	75,0	78,5	79,0	0,61	0,74	0,81	24,7	51,3
9,3	15.500	220	2850	36,4	183	77,5	79,5	79,0	0,74	0,83	0,87	25,0	43,0
		230	2870	36,0	189	78,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
11,0	15.500	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
15,0	15.500	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
18,5	15.500	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
22	15.500	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
30	27.500	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
37	45.000	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1
45	45.000	220	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		230	2870	16,0	80	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		380	2870	21,0	106	79,0	81,0	81,0	0,71	0,81	0,86	31,1	61,6
		400	2870	20,7	112	78,0	81,0	81,0	0,58	0,72	0,80	31,1	68,2
		415	2890	21,0	116	74,0	79,0	80,0	0,55	0,70	0,78	30,8	74,1

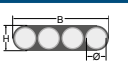
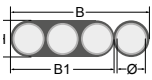
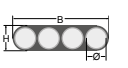
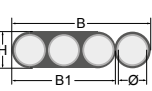
MOTOR PERFORMANCE DATA 60 HZ - 3-PHASE DESIGN

P_N [kW]	P_{max} [kW]	ThrustF [N]	U_N [V]	n_N [min ⁻¹]	I_{max} [A]	I_A [A]	η_{max} [%] at 100% load	LINE TO LINE RESIS- TANCE [Ω]
4,0	4,6	15500	200	3450	20.0	99	79	.77-.93
			230	3450	17.6	86	79	1.0-1.2
			380	3450	10.7	52	79	2.6-3.2
			460	3450	8.8	43	79	3.9-4.8
			575	3450	7.1	34	79	6.3-7.7
5.5	6,3	15500	200	3450	28.3	150	80	.43-.53
			230	3450	24.6	130	80	.64-.78
			380	3450	15	79	80	1.6-2.1
			460	3450	12.3	65	80	2.4-2.9
			575	3450	9.8	52	80	3.7-4.6
7.5	8,6	15500	200	3450	37	198	79	.37-.45
			230	3450	32.2	172	79	.47-.57
			380	3450	19.6	104	79	1.2-1.5
			460	3450	16.1	86	79	1.9-2.4
			575	3450	12.9	69	79	3.0-3.7
9,3	10,7	15500	200	3450				
			230	3450	38,0	236,0	82	
			380	3450	23,9	142,8	82	
			460	3450	19,5	118,0	82	
			575	3450				
11	12,7	15500	200	3450	54.4	306	81	.24-.29
			230	3450	47.4	266	81	.28-.35
			380	3450	28.9	161	81	.77-.95
			460	3450	23.7	133	81	1.1-1.4
			575	3450	19	106	81	1.8-2.3
15	17,3	15500	200	3450	69.7	416	82	.16-.20
			230	3450	60.6	362	82	.22-.26
			380	3450	37.3	219	82	.55-.68
			460	3450	30.3	181	82	.8-1.0
			575	3450	24.2	145	82	1.3-1.6
18.5	21,3	15500	200	3450	86.3	552	83	.12-.15
			230	3450	75	480	83	.15-.19
			380	3450	46	291	83	.46-.56
			460	3450	37.5	240	83	.63-.77
			575	3450	30	192	83	1.0-1.3
22	25,3	15500	200	3450	104	653	83	.09-.11
			230	3450	90.4	568	83	.14-.17
			380	3450	55.4	317	83	.35-.43
			460	3450	45.2	284	83	.52-.64
			575	3450	36.2	227	83	.78-.95
30	34,5	27500	380	3450	74.6	481	83	.26-.33
			460	3450	61.6	397	83	.34-.42
			575	3450	49.6	318	83	.52-.64
37	42,6	45000	230	3450	157		85	.10 - .11
			380	3450	94.5	501	83	.21 - .25
			460	3450	77,0	414	85	.25 - .32
			575	3450	62.5	331	83	.40 - .49
45	51,8	45000	380	3450	111.8	627	84	.15 - .18
			460	3460	91,0	518	85	.22 - .27
			575	3450	73.9	414	84	.35 - .39

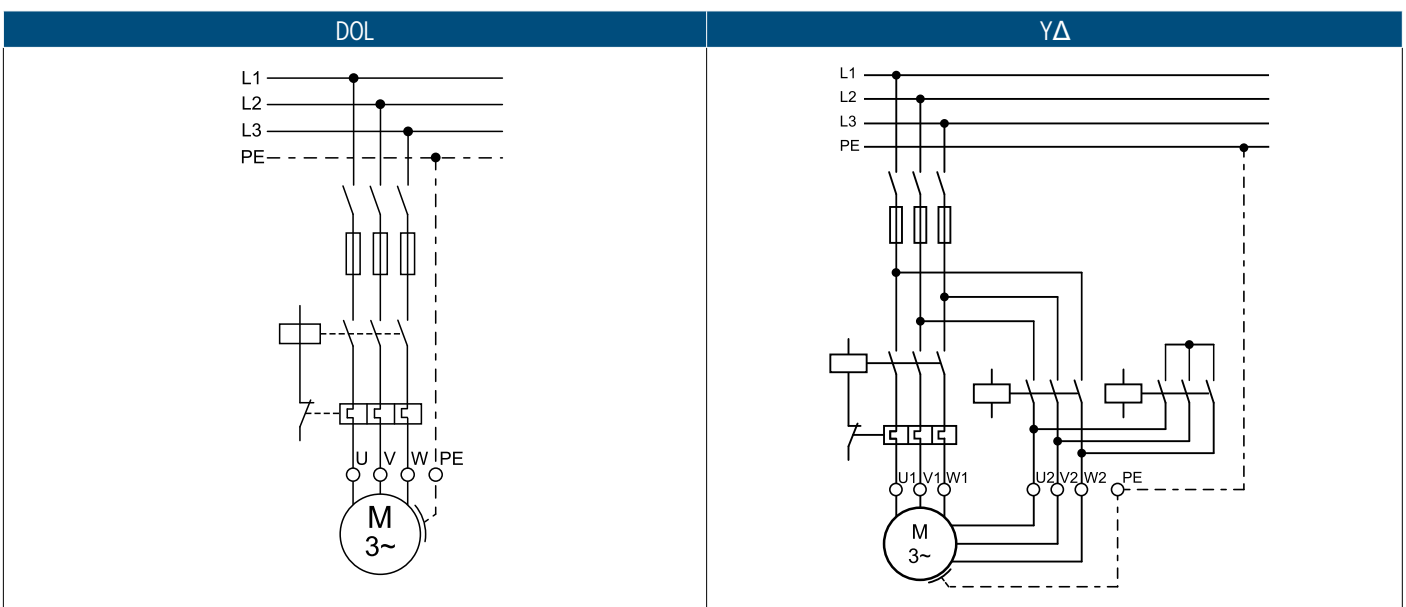
WINDING RESISTANCE DATA 50 HZ - 3-PHASE DESIGN

P _N kW	U _N [V]	3 ~ DOL		3 ~ YΔ	
		Stator Ref.	U - V / Ohm V - W / Ohm U - W / Ohm	Stator Ref.	U ₁ - U ₂ / Ohm V ₁ - V ₂ / Ohm W ₁ - W ₂ / Ohm
4.0	220, 230	336 694 ...	1.20 - 1.40	336 740 ...	1.75 - 2.15
	380 - 415	336 327 ...	3.40 - 4.20	336 747 ...	5.40 - 6.60
	500	336 787 ...	5.80 - 7.10	337 224 ...	9.00 - 11.0
5.5	220, 230	336 695 ...	0.72 - 0.90	336 741 ...	1.10 - 1.30
	380 - 415	336 328 ...	2.20 - 2.70	336 748 ...	3.70 - 4.50
	500	336 788 ...	4.00 - 4.90	337 225 ...	6.28 - 7.70
7.5	220, 230	336 696 ...	0.59 - 0.72	336 742 ...	0.87 - 1.08
	380 - 415	336 329 ...	1.70 - 2.20	336 749 ...	2.40 - 2.90
	500	336 789 ...	3.20 - 3.90	337 226 ...	4.53 - 5.54
9.3	220, 230	338 100 ...	0.42 - 0.50	338 103 ...	0.63 - 0.77
	380 - 415	337 915 ...	1.25 - 1.55	338 061 ...	1.94 - 2.38
	500	338 220 ...	2.60 - 3.10	338 223 ...	3.27 - 4.00
11.0	220, 230	336 697 ...	0.35 - 0.44	336 743 ...	0.53 - 0.65
	380 - 415	336 330 ...	1.05 - 1.30	336 750 ...	1.64 - 2.00
	500	336 790 ...	1.80 - 2.20	337 227 ...	2.73 - 3.35
15.0	220, 230	336 698 ...	0.25 - 0.30	336 744 ...	0.38 - 0.47
	380 - 415	336 331 ...	0.75 - 0.94	336 751 ...	1.22 - 1.50
	500	336 791 ...	1.30 - 1.60	337 228 ...	2.04 - 2.50
18.5	220, 230	336 699 ...	0.20 - 0.24	336 745 ...	0.29 - 0.36
	380 - 415	336 332 ...	0.59 - 0.73	336 752 ...	0.93 - 1.15
	500	336 792 ...	1.10 - 1.34	337 229 ...	1.70 - 2.10
22.0	220, 230	336 700 ...	0.16 - 0.20	336 746 ...	0.24 - 0.30
	380 - 415	336 333 ...	0.48 - 0.60	336 753 ...	0.74 - 0.92
	500	336 793 ...	0.83 - 1.00	337 230 ...	1.26 - 1.55
30.0	220, 230			337 353 ...	0.16 - 0.20
	380 - 415	336 334 ...	0.32 - 0.40	336 754 ...	0.50 - 0.61
	500	336 794 ...	0.60 - 0.73	337 231 ...	0.91 - 1.11
37.0	380 - 415	336 710 ...	0.25 - 0.32	336 755 ...	0.36 - 0.45
45.0	380 - 415	336 336 ...	0.22 - 0.27	336 756 ...	0.33 - 0.41

MOTOR LEADS DESIGN 3-PHASE MOTORS

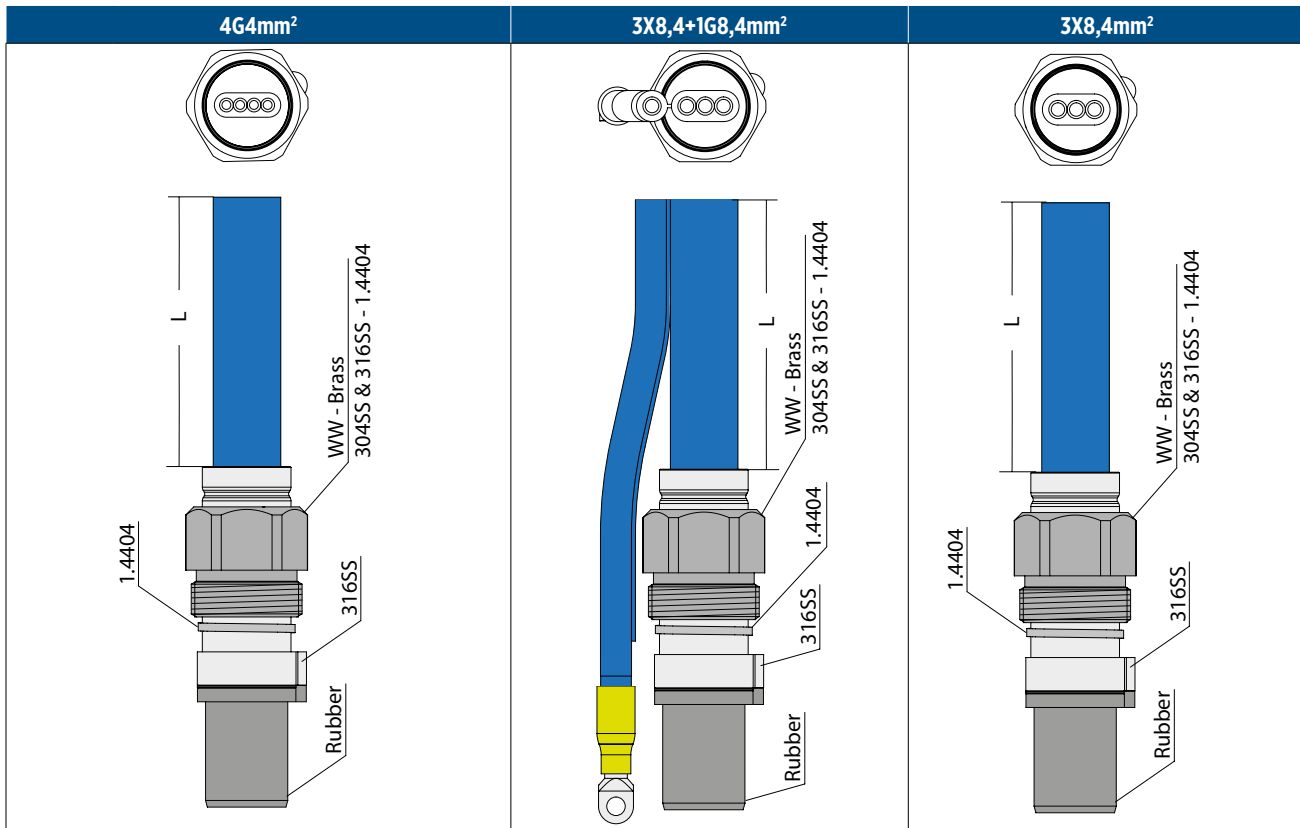
DOL	Ø mm ²	Lenght [m]	St.#	Motor			B [mm] (± 0,3)	B1 [mm] (±0,3)	H [mm] (± 0,3)
				220V	380 - 415V	500V			
	4G4	4	1	4-11kW	4-22 kW	4-30 kW	19,0	-	7,0
	3X8,4+1G8,4	4	1	15-22 kW	30-45 kW		29,5	19,5	8,9
YΔ	Ø mm ²	Lenght [m]	St.#	Motor			B [mm] (± 0,3)	B1 [mm] (±0,3)	H [mm] (± 0,3)
				220V	380 - 415V	500V			
	4G4 (L=4m)	4	2	4-22kW	4-30 kW		19,0	-	7,0
	3X8,4+1G8,4	4	1	30-37kW	37-45 kW		29,5	19,5	8,9
	3X8,4		1				19,6	-	8,9

ELECTRICAL CONNECTION - 3-PHASE DESIGN



U	V	W	PE
black	grey	brown	yellow/green

MOTOR LEADS 3-PHASE 6" CT STANDARD MOTORS



Lead Part Numbers WW Motors *

L [m]	4G4mm ²	3X8,4+1G8,4mm ²	3X8,4mm ²
4	310 125 004	310 145 004	310 155 004
8	310 125 008	310 145 008	310 155 008
10	310 125 010	310 145 010	310 155 010
15	310 125 015	310 145 015	310 155 015
20	310 125 020	310 145 020	310 155 020
25	310 125 025	310 145 025	310 155 025
30	310 125 030	310 145 030	310 155 030
35	310 125 035	310 145 035	310 155 035
40	310 125 040	310 145 040	310 155 040
45	310 125 045	310 145 045	310 155 045
50	310 125 050	310 145 050	310 155 050

Lead Part Numbers 304SS/316SS Motors *

L [m]	4G4mm ²	3X8,4+1G8,4mm ²	3X8,4mm ²
4	310 125 504	310 145 504	310 155 504
8	310 125 508	310 145 508	310 155 508
10	310 125 510	310 145 510	310 155 510
15	310 125 515	310 145 515	310 155 515
20	310 125 520	310 145 520	310 155 520
25	310 125 525	310 145 525	310 155 525
30	310 125 530	310 145 530	310 155 530
35	310 125 535	310 145 535	310 155 535
40	310 125 540	310 145 540	310 155 540
45	310 125 545	310 145 545	310 155 545
50	310 125 550	310 145 550	310 155 550

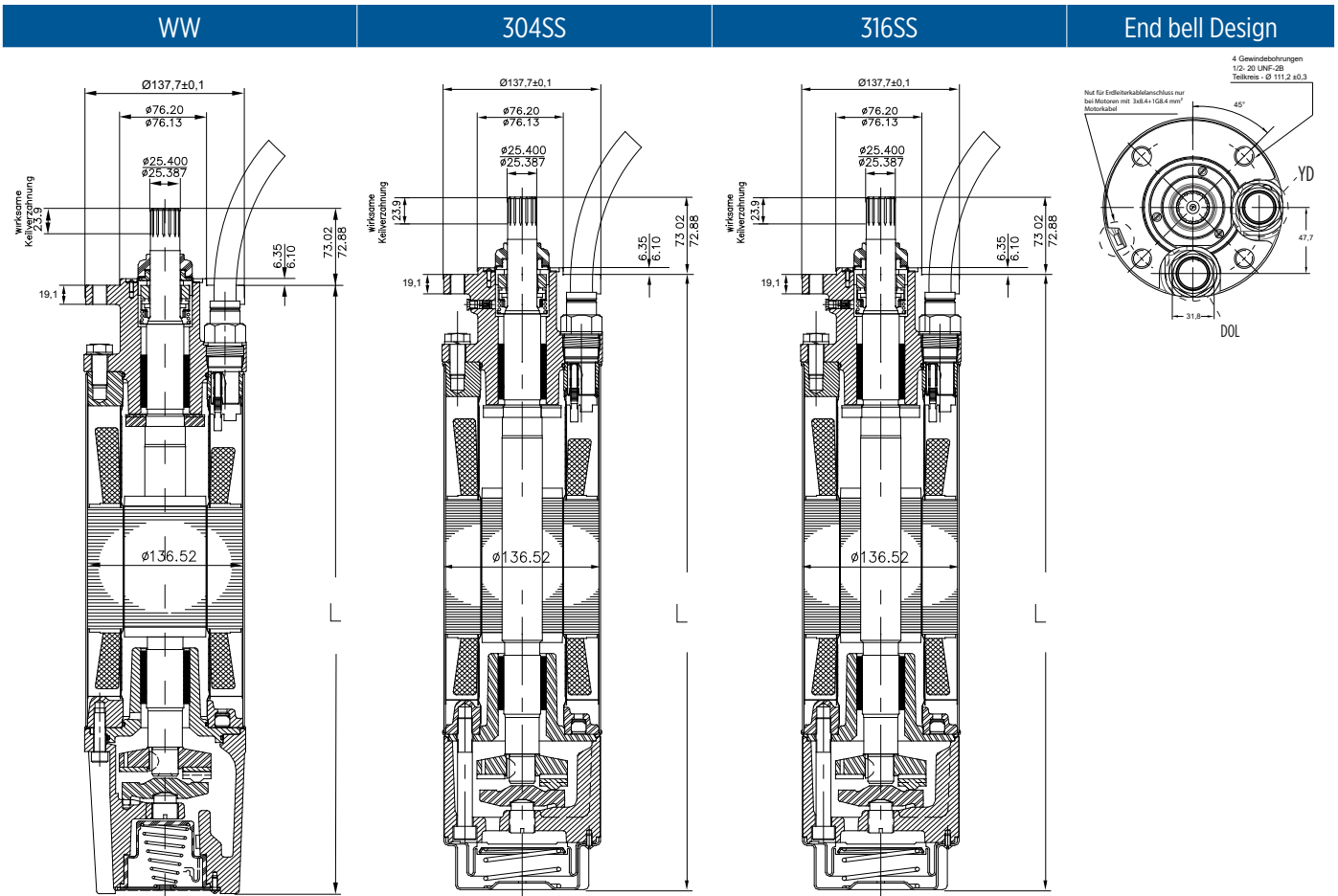
* Cables are designed for submerged operation. For air operation please consult Franklin Electric.

6" Motor Design 4- 30 kW
WW
304SS
316SS

MOTOR MATERIAL DESCRIPTION

Part	WW	304	316 SS
Shell	1.4301	1.4301	1.4571
Upper end bell	Cast iron powder coated	1.4301	1.4408
Thrust housing	Cast iron powder coated	1.4301	1.4408
Mechanical seal	SiC / SiC	SiC / SiC	SiC / SiC
Seal cover	1.4301	1.4301	1.4401
Slinger	EPDM	EPDM	EPDM
Shaft end	1.4305	1.4305	1.4462
Diaphragm	NBR	NBR	NBR
Lead	EPR	EPR	EPR

6" CT MOTOR DESIGN 4 - 30KW



6" CT MOTORS 4-30KW DIMENSION

P _N [kW]	WW L [mm]	304SS L [mm]	316SS L [mm]	Pack dimension B x H x L [mm]	Pack weight [kg]		Motor packing
					DOL	YΔ	
4	581,2	570,7	570,7	155 x 340 x 800	41,3	40,3	
5,5	614,4	604,0	604,0	155 x 340 x 800	44,9	43,9	
7,5	646,2	635,8	635,8	155 x 340 x 800	49,0	48,0	
9,3	678,7	668,3	668,3	155 x 340 x 1070	50,3	51,3	
11	711,2	700,8	700,8	155 x 340 x 1070	54,7	53,7	
15	776,2	765,8	765,8	155 x 340 x 1070	60,5	59,5	
18,5	841,5	831,1	831,1	155 x 340 x 1070	67,1	66,1	
22	906,5	896,1	896,1	155 x 340 x 1070	73,1	72,1	
30	1036,6	1026,2	1026,2	155 x 340 x 1200	87,7	87,7	

6" Motor Design 37- 45 kW

WW

316SS

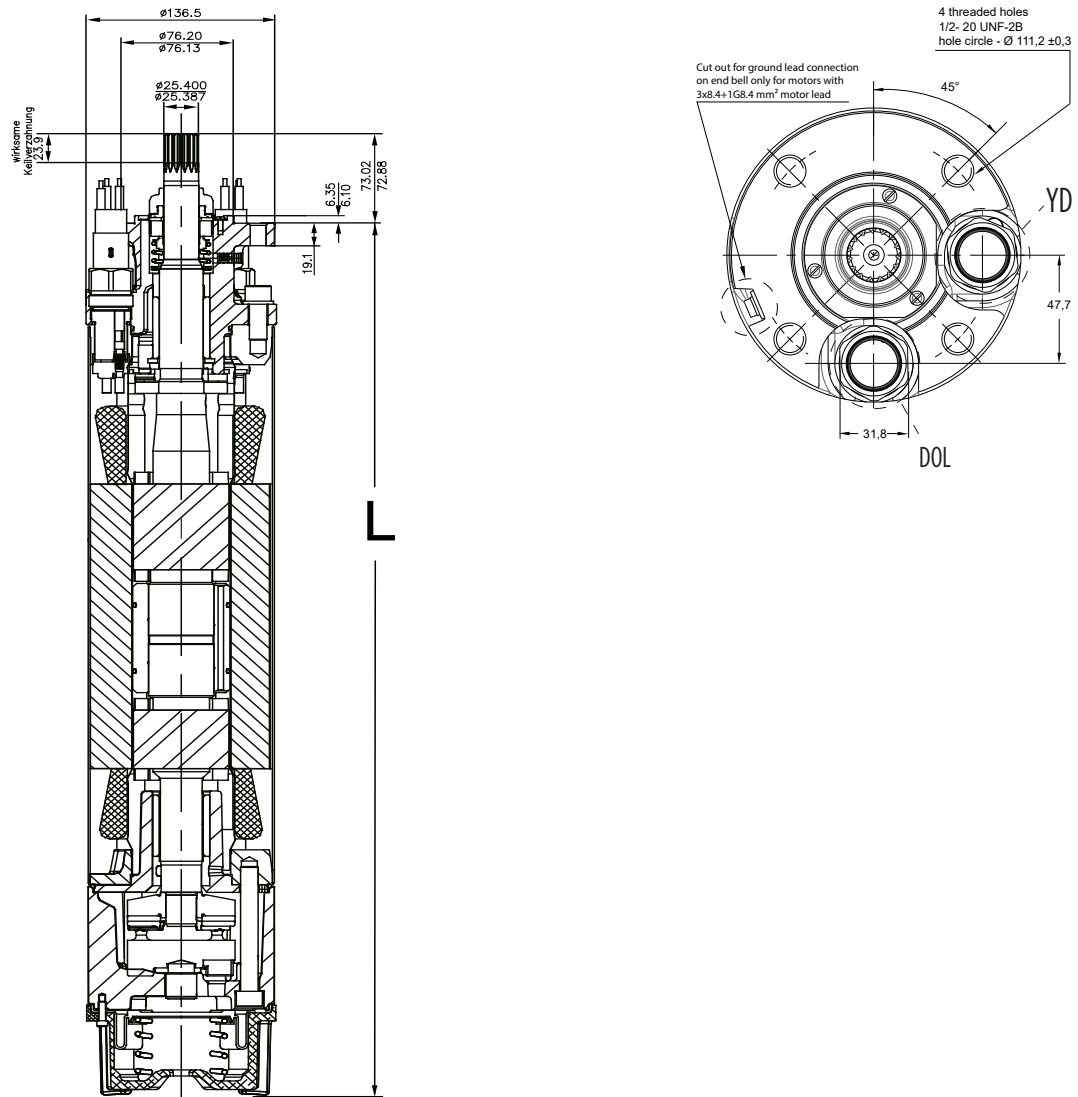


MOTOR MATERIAL DESCRIPTION

Part	WW	316 SS
Shell	1.4301	1.4571
Upper end bell	Cast iron powder coated	1.4408
Thrust housing	Cast iron powder coated	1.4408
Mechanical seal	SiC / SiC	SiC / SiC
Seal cover	1.4301	1.4401
Slinger	Viton	Viton
Shaft end	1.4305	1.4542
Diaphragm	Viton	Viton
Lead	EPR	EPR
Jam Nut (Lead)	Brass	1.4401
Lead bushing	Rubber	Rubber

6" Motor Design 37- 45 kW

WW / 316SS



MOTOR DIMENSION

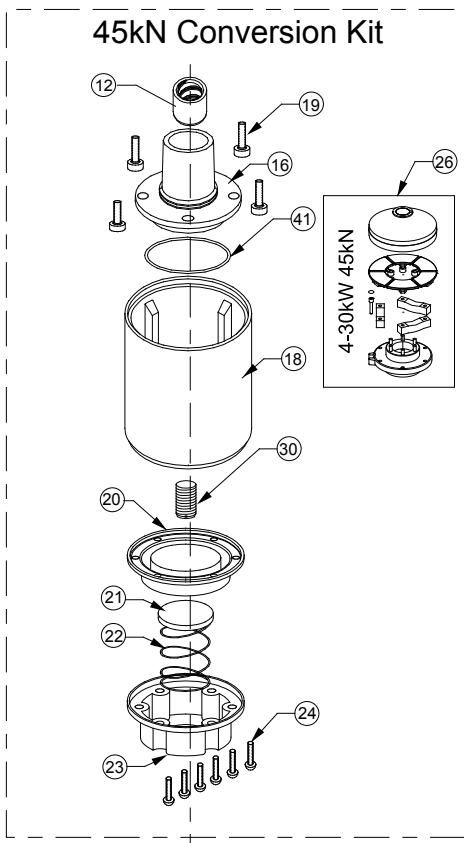
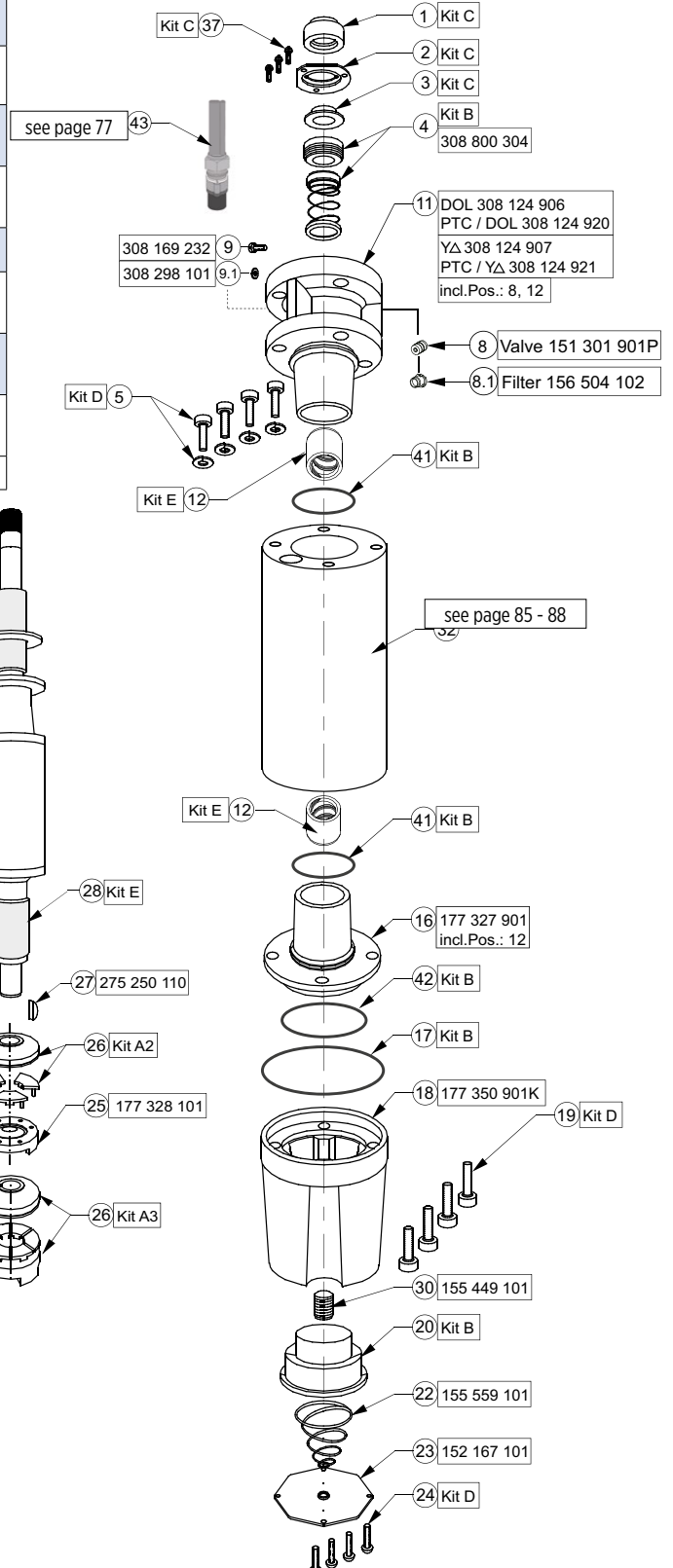
P_N [kW]	WW L [mm]	316SS L [mm]	Motor Package Size [mm]	Shipping Weight [kg]
37	1476,7	1476,7	223 x 267 x 1823	140
45	1629,2	1629,2	223 x 267 x 1823	156

6" Encapsulated Motors WW Version

4 - 30kW

Rotor Kit 6500N to 15.500N	4,0 kW	incl. Pos.: 25; 26, 29	305 330 901
	5,5 kW	incl. Pos.: 25; 26, 29	305 330 902
Kit A2 15.500N / 4-22kW	Thrust Bearing Kit	incl. Pos.: 26	308 750 120
Kit A3 27.500N / 30kW	Thrust Bearing Kit	incl. Pos.: 26	308 750 200
Kit A4	Thrust Bearing Kit 45.000N	incl. Pos.: 26	308 750 510
45kN Conversion Kit 4,0 - 30kW		incl. Pos.: 12; 16; 18; 19; 20; 21; 22; 23; 24; 26; 30; 41	308 750 500
Kit B1 4 - 30kW	Seal Kit	incl. Pos.: 4; 17; 20; 41; 42	308 800 125
Kit C1	Slinger Kit	incl. Pos.: 1; 2; 3; 37	308 725 101
Kit D3 up to 07.2002	Screw Kit	incl. Pos.: 5; 19; 24	308 659 120
Kit D4 starting 07.2002	Screw Kit	incl. Pos.: 5; 19; 24	308 659 121
Kit E* 4 - 30 kW	Radial Bearing Kit	incl. Pos.: 12; 28	308 678 101

* Radial Bearing Parts are unfinished

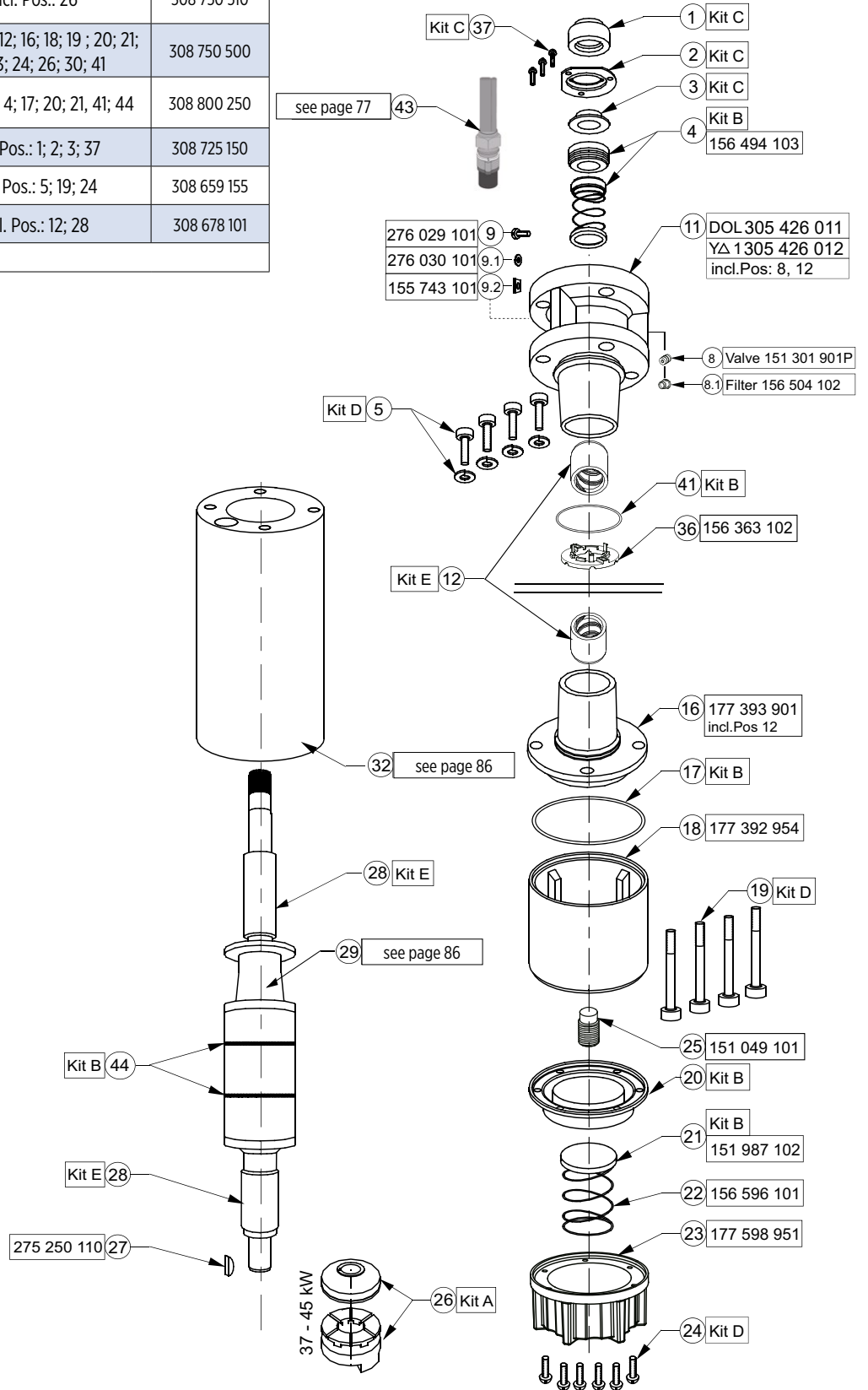


6" Encapsulated Motors WW Version

37- 45 Kw

Kit A3	Thrust Bearing Kit 27.500N	incl. Pos.: 26	308 750 200
Kit A4	Thrust Bearing Kit 45.000N	incl. Pos.: 26	308 750 510
45kN Conversion Kit 37 - 45kWkW		incl. Pos.: 12; 16; 18; 19 ; 20; 21; 22; 23; 24; 26; 30; 41	308 750 500
Kit B3	Seal Kit	incl. Pos.: 4; 17; 20; 21, 41; 44	308 800 250
Kit C3	Slinger Kit	incl. Pos.: 1; 2; 3; 37	308 725 150
Kit D5	Screw Kit	incl. Pos.: 5; 19; 24	308 659 155
Kit E*	Radial Bearing Kit	incl. Pos.: 12; 28	308 678 101

* Radial Bearing Parts are unfinished



Replacement Stators and Rotors WW Version / 50 Hz

3 - ohne SubMonitor Transmitter 3 - without SubMonitor Transmitter	3 - sans transm. SubMonitor senza trasmettitore SubMonitor	3 -	3 - sin transmissor SubMonitor 3 - sem transmissor SubMonitor
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P _N [kW]	U _N [V]	Thrust F [N]	DOL		YΔ (*)		Rotor Model No.
			Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4,0	220, 230	15.500	236 680 90**	305 478 927	236 670 90**	305 478 930	178 117 912K
	380, 400, 415		236 610 90**	305 478 928	236 710 90**	305 478 931	
	500		236 700 90**	305 478 929	236 790 90**	305 478 932	
5,5	220, 230	15.500	236 681 90**	305 479 930	236 671 90**	305 479 933	178 118 911K
	380, 400, 415		236 611 90**	305 479 931	236 711 90**	305 479 934	
	500		236 701 90**	305 479 932	236 791 90**	305 479 935	
7,5	220, 230	15.500	236 682 90**	305 480 932	236 672 90**	305 480 935	178 119 906K
	380, 400, 415		236 612 90**	305 480 933	236 712 90**	305 480 936	
	500		236 702 90**	305 480 934	236 792 90**	305 480 937	
9,3	220, 230	15.500	236 015 90**	305 481 921	236 005 90**	305 481 924	178 182 906K
	380, 400, 415		236 001 90**	305 481 922	236 011 90**	305 481 925	
	500		236 008 90**	305 481 923	236 018 90**	305 481 926	
11,0	220, 230	15.500	236 683 90**	305 482 933	236 673 90**	305 482 936	178 120 906K
	380, 400, 415		236 613 90**	305 482 934	236 713 90**	305 482 937	
	500		236 703 90**	305 482 935	236 793 90**	305 482 938	
15,0	220, 230	15.500	236 684 90**	305 484 933	236 674 90**	305 484 936	178 121 906K
	380, 400, 415		236 614 90**	305 484 934	236 714 90**	305 484 937	
	500		236 704 90**	305 484 935	236 794 90**	305 484 938	
18,5	220, 230	15.500	236 685 90**	305 485 930	236 675 90**	305 485 933	178 122 906K
	380, 400, 415		236 615 90**	305 485 931	236 715 90**	305 485 934	
	500		236 705 90**	305 485 932	236 795 90**	305 485 935	
22,0	220, 230	15.500	236 686 90**	305 486 934	236 676 90**	305 486 937	178 123 906K
	380, 400, 415		236 616 90**	305 486 935	236 716 90**	305 486 938	
	500		236 706 90**	305 486 936	236 796 90**	305 486 939	
30,0	220, 230	27.500			236 677 90**	305 488 923	178 115 906K
	380, 400, 415		236 617 90**	305 488 921	236 717 90**	305 488 924	
	500		236 707 90**	305 488 922	236 797 90**	305 488 925	

(*) : **Kabel 90° versetzt** **Pos. de cavi 90°**
Pos. of leads 90° **Pos. de los cables 90°**
Pos. des câbles 90° **Pos. dos cabos 90°**

Replacement Stators and Rotors WW Version / 50 Hz

3 - mit SubMonitor Transmitter 3 - with SubMonitor Transmitter	3 - avec transm. SubMonitor 3 - con trasmettitore SubMonitor	3 - con transmissor SubMonitor 3 - com transmissor SubMonitor
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P _N [kW]	U _N [V]	Thrust F [N]	DOL		YΔ (*)		Rotor Model No.
			Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4,0	220, 230	15.500	236 680 60**	305 478 907	236 670 60**	305 478 910	178 117 912K
	380, 400, 415		236 610 60**	305 478 908	236 710 60**	305 478 911	
	500		236 700 60**	305 478 909	236 790 60**	305 478 912	
5,5	220, 230	15.500	236 681 60**	305 479 910	236 671 60**	305 479 913	178 118 911K
	380, 400, 415		236 611 60**	305 479 911	236 711 60**	305 479 914	
	500		236 701 60**	305 479 912	236 791 60**	305 479 915	
7,5	220, 230	15.500	236 682 60**	305 480 912	236 672 60**	305 480 915	178 119 906K
	380, 400, 415		236 612 60**	305 480 913	236 712 60**	305 480 916	
	500		236 702 60**	305 480 914	236 792 60**	305 480 917	
9,3	220, 230	15.500	236 015 60**	305 481 901	236 005 60**	305 481 904	178 182 906K
	380, 400, 415		236 001 60**	305 481 902	236 011 60**	305 481 905	
	500		236 008 60**	305 481 903	236 018 60**	305 481 906	
11,0	220, 230	15.500	236 683 60**	305 482 913	236 673 60**	305 482 916	178 120 906K
	380, 400, 415		236 613 60**	305 482 914	236 713 60**	305 482 917	
	500		236 703 60**	305 482 915	236 793 60**	305 482 918	
15,0	220, 230	15.500	236 684 60**	305 484 913	236 674 60**	305 484 916	178 121 906K
	380, 400, 415		236 614 60**	305 484 914	236 714 60**	305 484 917	
	500		236 704 60**	305 484 915	236 794 60**	305 484 918	
18,5	220, 230	15.500	236 685 60**	305 482 910	236 675 60**	305 485 913	178 122 906K
	380, 400, 415		236 615 60**	305 485 911	236 715 60**	305 485 914	
	500		236 705 60**	305 482 912	236 795 60**	305 485 915	
22,0	220, 230	15.500	236 686 60**	305 486 914	236 676 60**	305 486 917	178 123 906K
	380, 400, 415		236 616 60**	305 486 915	236 716 60**	305 486 918	
	500		236 706 60**	305 486 916	236 796 60**	305 486 919	
30,0	220, 230	27.500			236 677 60**	305 488 907	178 115 906K
	380, 400, 415		236 617 60**	305 488 905	236 717 60**	305 488 908	
	500		236 707 60**	305 488 906	236 797 60**	305 488 909	
37,0	380, 400, 415	45.000	276 618 6161	305 489 920	276 718 6161	305 489 919	305 223 920
45,0	380, 400, 415	45.000	276 619 6161	305 490 920	276 719 6161	305 490 919	305 223 921

(*) : **Kabel 90° versetzt** **Pos. de cavi 90°**
Pos. of leads 90° **Pos. de los cables 90°**
Pos. des câbles 90° **Pos. dos cabos 90°**

Replacement Stators and Rotors WW Version / 60 Hz

3 - mit SubMonitor Transmitter 3 - with SubMonitor Transmitter	3 - avec transm. SubMonitor 3 - con trasmettitore SubMonitor	3 - con transmissor SubMonitor 3 - com transmissor SubMonitor
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P _N [kW]	P _N [HP]	Thrust F [N]	U _N [V]	DOL		YΔ*		Rotor Model No.
				Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4	5,5	15500	200	236 650 60**		236 760 60**		178 117 912K
			230	236 600 60**		236 720 60**		
			380	236 660 60**		236 780 60**		
			460	236 610 60**	305 478 908	236 710 60**	305 478 911	
			575	236 620 60**		236 400 60**		
5,5	7,5	15500	200	236 651 60**		236 761 60**		178 118 911K
			230	236 601 60**		236 721 60**		
			380	236 661 60**		236 781 60**		
			460	236 611 60**	305 479 911	236 711 60**	305 479 914	
			575	236 621 60**		236 401 60**		
7,5	10,0	15500	200	236 652 60**		236 762 60**		178 119 906K
			230	236 602 60**		236 722 60**		
			380	236 662 60**		236 782 60**		
			460	236 612 60**	305 480 913	236 011 60**	305 480 916	
			575	236 622 60**		236 402 60**		
9,3	12,5	15500	200	236 061 60**		236 *** 60**		178 182 906K
			230	236 041 60**		236 *** 60**		
			380	236 031 60**		236 032 60**		
			460	236 001 60**	305 481 902	236 011 60**	305 481 905	
			575	236 *** 60**		236 *** 60**		
11	15,0	15500	200	236 653 60**		236 763 60**		178 120 906K
			230	236 603 60**		236 723 60**		
			380	236 663 60**		236 783 60**		
			460	236 613 60**	305 482 914	236 713 60**	305 482 917	
			575	236 623 60**		236 403 60**		
15	20,0	15500	200	236 654 60**		236 764 60**		178 121 906K
			230	236 604 60**		236 724 60**		
			380	236 664 60**		236 784 60**		
			460	236 614 60**	305 484 914	236 714 60**	305 484 917	
			575	236 624 60**		236 404 60**		
18,5	25,0	15500	200	236 655 60**		236 765 60**		178 122 906K
			230	236 605 60**		236 725 60**		
			380	236 665 60**		236 785 60**		
			460	236 615 60**	305 485 911	236 715 60**	305 485 914	
			575	236 625 60**		236 405 60**		
22	30,0	15500	200	236 656 60**		236 766 60**		178 123 906K
			230	236 606 60**		236 726 60**		
			380	236 666 60**		236 786 60**		
			460	236 616 60**	305 486 915	236 716 60**	305 486 918	
			575	236 626 60**		236 406 60**		
30	40	27500	380	236 667 60**		236 787 60**		178 115 906K
			460	236 617 60**	305 488 905	236 717 60**	305 488 908	
			575	236 627 60**		236 407 60**		
37	50	45500	380	276 668 60**		276 788 60**		305 223 920
			460	276 618 60**	305 489 920	276 718 60**	305 489 919	
			575	276 628 60**		276 **8 60**		
45	60	45000	380	276 669 60**		276 789 60**		305 223 921
			460	276 619 60**	305 490 920	276 719 60**	305 490 919	
			575	276 629 60**		276 **9 60**		

Replacement Stators and Rotors WW Version / 50 Hz

3 - mit PTC 3 - with PTC	3 - avec PTC 3 - con PTC	3 - con PTC 3 - com PTC
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P _N [kW]	U _N [V]	Thrust F [N]	DOL		YΔ (*)		Rotor Modell Nr.
			Motor Modell Nr.	Stator Modell Nr.	Motor Modell Nr.	Stator Modell Nr.	
4,0	220, 230	15.500	236 680 20**	305478933	236 670 20**	305478936	178 117 912K
	380, 400, 415		236 610 20**	305478934	236 710 20**	305478937	
	500		236 700 20**	305478935	236 790 20**	305478938	
5,5	220, 230	15.500	236 681 20**	305479936	236 671 20**	305479939	178 118 911K
	380, 400, 415		236 611 20**	305479937	236 711 20**	305479940	
	500		236 701 20**	305479938	236 791 20**	305479941	
7,5	220, 230	15.500	236 682 20**	305480938	236 672 20**	305480941	178 119 906K
	380, 400, 415		236 612 20**	305480939	236 712 20**	305480942	
	500		236 702 20**	305480940	236 792 20**	305480943	
9,3	220, 230	15.500	236 015 20**	305481927	236 005 20**	305481930	178 182 906K
	380, 400, 415		236 001 20**	305481928	236 011 20**	305481931	
	500		236 008 20**	305481929	236 018 20**	305481932	
11,0	220, 230	15.500	236 683 20**	305482939	236 673 20**	305482942	178 120 906K
	380, 400, 415		236 613 20**	305482940	236 713 20**	305482943	
	500		236 703 20**	305482941	236 793 20**	305482944	
15,0	220, 230	15.500	236 684 20**	305484939	236 674 20**	305484942	178 121 906K
	380, 400, 415		236 614 20**	305484940	236 714 20**	305484943	
	500		236 704 20**	305484941	236 794 20**	305484944	
18,5	220, 230	15.500	236 685 20**	305485936	236 675 20**	305485939	178 122 906K
	380, 400, 415		236 615 20**	305485937	236 715 20**	305485940	
	500		236 705 20**	305485938	236 795 20**	305485941	
22,0	220, 230	15.500	236 686 20**	305486940	236 676 20**	305486943	178 123 906K
	380, 400, 415		236 616 20**	305486941	236 716 20**	305486944	
	500		236 706 20**	305486942	236 796 20**	305486945	
30,0	220, 230	27.500			236 677 20**	305488928	178 115 906K
	380, 400, 415		236 617 20**	305488926	236 717 20**	305488929	
	500		236 707 20**	305488927	236 797 20**	305488930	

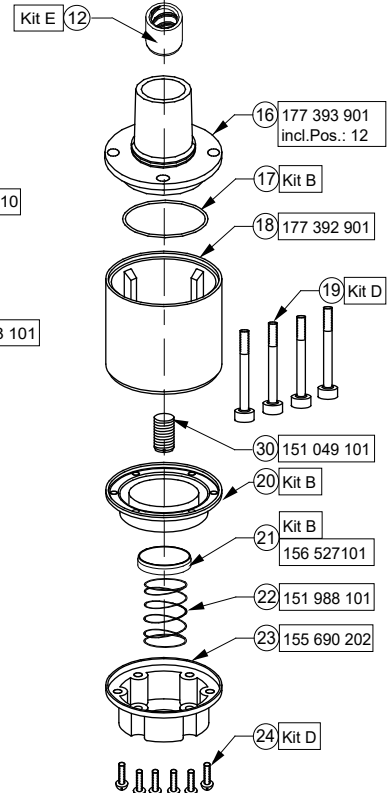
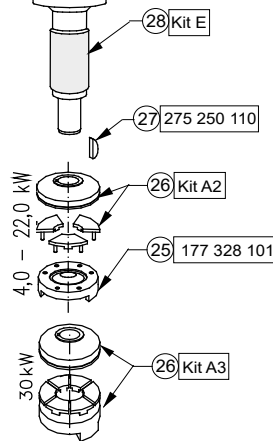
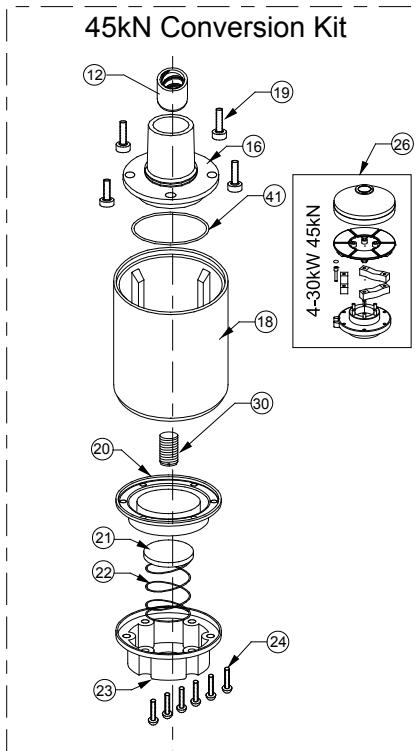
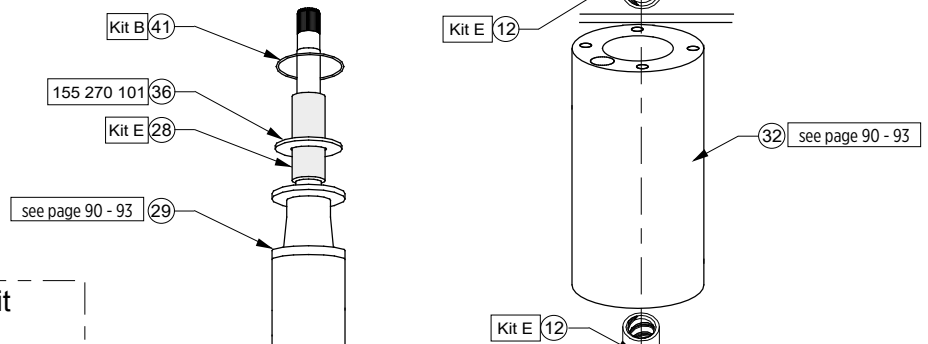
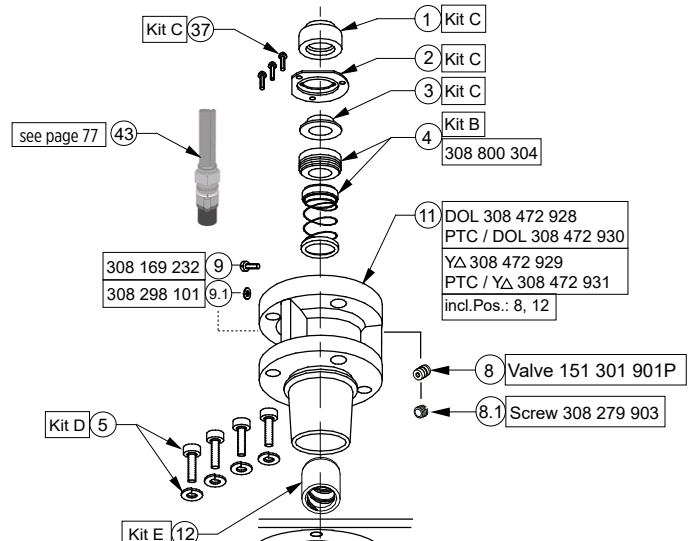
(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°

6" Encapsulated Motors 304SS

4 - 30 Kw

Kit A2 15.500N / 4-22kW	Thrust Bearing Kit	incl. Pos.: 26	308 750 120
Kit A3 27.500N / 30kW	Thrust Bearing Kit	incl. Pos.: 26	308 750 200
Kit A4 45.000N / 30kW	Thrust Bearing Kit	incl. Pos.: 26	308750 510
45kN Conversion Kit 4,0 - 30kW		incl. Pos.: 12; 16; 18; 19 ; 20; 21; 22; 23; 24; 26; 30; 41	308 750 500
Kit B2 4 - 30kW	Seal Kit	incl. Pos.: 4; 17; 20; 21, 22, 41	308 800 302
Kit C2	Slinger Kit	incl. Pos.: 1; 2; 3; 37	308 725 302
Kit D4	Screw Kit	incl. Pos.: 5; 19; 24	308 659 302
Kit E* 4 - 30 kW	Radial Bearing Kit	incl. Pos.: 12; 28	308 678 101

* Radial Bearing Parts are unfinished



Replacement Stators and Rotors 304SS / 50 Hz

3 ~ ohne SubMonitor Transmitter 3 ~ without SubMonitor Transmitter	3 ~ sans transm. SubMonitor senza trasmettitore SubMonitor	3 ~ 3 ~ sin transmissor SubMonitor 3 ~ sem transmissor SubMonitor
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P _N [kW]	Volts	Thrust F [N]	DOL		YΔ (*)		Rotor Model No.
			Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4,0	220, 230	15.500	236 680 10**	305 478 ***	236 670 10**	305 478 ***	178 117 912K
	380, 400, 415		236 610 10**	305 478 ***	236 710 10**	305 478 ***	
	500		236 700 10**	305 478 ***	236 790 10**	305 478 ***	
5,5	220, 230	15.500	236 681 10**	305 479 ***	236 671 10**	305 479 ***	178 118 911K
	380, 400, 415		236 611 10**	305 479 ***	236 711 10**	305 479 ***	
	500		236 701 10**	305 479 ***	236 791 10**	305 479 ***	
7,5	220, 230	15.500	236 682 10**	305 480 ***	236 672 10**	305 480 ***	178 119 906K
	380, 400, 415		236 612 10**	305 480 ***	236 712 10**	305 480 ***	
	500		236 702 10**	305 480 ***	236 792 10**	305 480 ***	
9,3	220, 230	15.500	236 015 10**	305 481 ***	236 005 10**	305 481 ***	178 182 906K
	380, 400, 415		236 001 10**	305 481 ***	236 011 10**	305 481 ***	
	500		236 008 10**	305 481 ***	236 018 10**	305 481 ***	
11,0	220, 230	15.500	236 683 10**	305 482 ***	236 673 10**	305 482 ***	178 120 906K
	380, 400, 415		236 613 10**	305 482 ***	236 713 10**	305 482 ***	
	500		236 703 10**	305 482 ***	236 793 10**	305 482 ***	
15,0	220, 230	15.500	236 684 10**	305 484 ***	236 674 10**	305 484 ***	178 121 906K
	380, 400, 415		236 614 10**	305 484 ***	236 714 10**	305 484 ***	
	500		236 704 10**	305 484 ***	236 794 10**	305 484 ***	
18,5	220, 230	15.500	236 685 10**	305 485 ***	236 675 10**	305 485 ***	178 122 906K
	380, 400, 415		236 615 10**	305 485 ***	236 715 10**	305 485 ***	
	500		236 705 10**	305 485 ***	236 795 10**	305 485 ***	
22,0	220, 230	15.500	236 686 10**	305 486 ***	236 676 10**	305 486 ***	178 123 906K
	380, 400, 415		236 616 10**	305 486 ***	236 716 10**	305 486 ***	
	500		236 706 10**	305 486 ***	236 796 10**	305 486 ***	
30,0	220, 230	27.500			236 677 10**	305 488 ***	178 115 906K
	380, 400, 415		236 617 10**	305 488 ***	236 717 10**	305 488 ***	
	500		236 707 10**	305 488 ***	236 797 10**	305 488 ***	

(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°

Replacement Stators and Rotors 304SS / 60 Hz

3 - ohne SubMonitor Transmitter 3 - without SubMonitor Transmitter	3 - sans transm. SubMonitor 3 - senza trasmettitore SubMonitor	3 - sin transmissor SubMonitor 3 - sem transmissor SubMonitor
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P_N [kW]	U_N [V]	Thrust F [N]	Stator Model Nr.*	Rotor Model Nr.
4,0	230	15.500		178 117 912K
	460			
	575			
5,5	230	15.500		178 118 911K
	460			
	575			
7,5	230	15.500		178 119 906K
	460			
	575			
9,3	230	15.500		178 182 906K
	460			
	575			
11,0	230	15.500		178 120 906K
	460			
	575			
15,0	230	15.500		178 121 906K
	460			
	575			
18,5	230	15.500		178 122 906K
	460			
	575			
22,0	230	15.500		178 123 906K
	460			
	575			
30,0	230	27.500		178 115 906K
	460			
	575			

(*) Spare part Stators on request

Replacement Stators and Rotors 304SS / 50 Hz

3 ~ mit SubMonitor Transmitter 3 ~ with SubMonitor Transmitter	3 ~ avec transm. SubMonitor 3 ~ con trasmettitore SubMonitor	3 ~ con transmissor SubMonitor 3 ~ com transmissor SubMonitor
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P _N [kW]	U _N [V]	Thrust F [N]	DOL		YΔ (*)		Rotor Model No.
			Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4,0	220, 230	15.500	236 680 11**	305 478 ***	236 670 11**	305 478 ***	178 117 912K
	380, 400, 415		236 610 11**	305 478 ***	236 710 11**	305 478 ***	
	500		236 700 11**	305 478 ***	236 790 11**	305 478 ***	
5,5	220, 230	15.500	236 681 11**	305 479 ***	236 671 11**	305 479 ***	178 118 911K
	380, 400, 415		236 611 11**	305 479 ***	236 711 11**	305 479 ***	
	500		236 701 11**	305 479 ***	236 791 11**	305 479 ***	
7,5	220, 230	15.500	236 682 11**	305 480 ***	236 672 11**	305 480 ***	178 119 906K
	380, 400, 415		236 612 11**	305 480 ***	236 712 11**	305 480 ***	
	500		236 702 11**	305 480 ***	236 792 11**	305 480 ***	
9,3	220, 230	15.500	236 015 11**	305 481 ***	236 005 11**	305 481 ***	178 182 906K
	380, 400, 415		236 001 11**	305 481 ***	236 011 11**	305 481 ***	
	500		236 008 11**	305 481 ***	236 018 11**	305 481 ***	
11,0	220, 230	15.500	236 683 11**	305 482 ***	236 673 11**	305 482 ***	178 120 906K
	380, 400, 415		236 613 11**	305 482 ***	236 713 11**	305 482 ***	
	500		236 703 11**	305 482 ***	236 793 11**	305 482 ***	
15,0	220, 230	15.500	236 684 11**	305 484 ***	236 674 11**	305 484 ***	178 121 906K
	380, 400, 415		236 614 11**	305 484 ***	236 714 11**	305 484 ***	
	500		236 704 11**	305 484 ***	236 794 11**	305 484 ***	
18,5	220, 230	15.500	236 685 11**	305 485 ***	236 675 11**	305 485 ***	178 122 906K
	380, 400, 415		236 615 11**	305 485 ***	236 715 11**	305 485 ***	
	500		236 705 11**	305 485 ***	236 795 11**	305 485 ***	
22,0	220, 230	15.500	236 686 11**	305 486 ***	236 676 11**	305 486 ***	178 123 906K
	380, 400, 415		236 616 11**	305 486 ***	236 716 11**	305 486 ***	
	500		236 706 11**	305 486 ***	236 796 11**	305 486 ***	
30,0	220, 230	27.500			236 677 11**	305 488 ***	178 115 906K
	380, 400, 415		236 617 11**	305 488 ***	236 717 11**	305 488 ***	
	500		236 707 11**	305 488 ***	236 797 11**	305 488 ***	

(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°

Replacement Stators and Rotors 304SS / 50 Hz

			3 ~ mit PTC 3 ~ with PTC		3 ~ avec PTC 3 ~ con PTC		3 ~ con PTC 3 ~ com PTC	
			DOL		Y (*)			
P_N [kW]	Volts	Thrust F [N]	Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	Rotor Model No.	
4,0	220, 230	15.500	236 680 12**	305 478 ***	236 670 12**	305 478 ***	178 117 912K	
	380, 400, 415		236 610 12**	305 478 ***	236 710 12**	305 478 ***		
	500		236 700 12**	305 478 ***	236 790 12**	305 478 ***		
5,5	220, 230	15.500	236 681 12**	305 479 ***	236 671 12**	305 479 ***	178 118 911K	
	380, 400, 415		236 611 12**	305 479 ***	236 711 12**	305 479 ***		
	500		236 701 12**	305 479 ***	236 791 12**	305 479 ***		
7,5	220, 230	15.500	236 682 12**	305 480 ***	236 672 12**	305 480 ***	178 119 906K	
	380, 400, 415		236 612 12**	305 480 ***	236 712 12**	305 480 ***		
	500		236 702 12**	305 480 ***	236 792 12**	305 480 ***		
9,3	220, 230	15.500	236 015 12**	305 481 ***	236 005 12**	305 481 ***	178 182 906K	
	380, 400, 415		236 001 12**	305 481 ***	236 011 12**	305 481 ***		
	500		236 008 12**	305 481 ***	236 018 12**	305 481 ***		
11,0	220, 230	15.500	236 683 12**	305 482 ***	236 673 12**	305 482 ***	178 120 906K	
	380, 400, 415		236 613 12**	305 482 ***	236 713 12**	305 482 ***		
	500		236 703 12**	305 482 ***	236 793 12**	305 482 ***		
15,0	220, 230	15.500	236 684 12**	305 484 ***	236 674 12**	305 484 ***	178 121 906K	
	380, 400, 415		236 614 12**	305 484 ***	236 714 12**	305 484 ***		
	500		236 704 12**	305 484 ***	236 794 12**	305 484 ***		
18,5	220, 230	15.500	236 685 12**	305 485 ***	236 675 12**	305 485 ***	178 122 906K	
	380, 400, 415		236 615 12**	305 485 ***	236 715 12**	305 485 ***		
	500		236 705 12**	305 485 ***	236 795 12**	305 485 ***		
22,0	220, 230	15.500	236 686 12**	305 486 ***	236 676 12**	305 486 ***	178 123 906K	
	380, 400, 415		236 616 12**	305 486 ***	236 716 12**	305 486 ***		
	500		236 706 12**	305 486 ***	236 796 12**	305 486 ***		
30,0	220, 230	27.500			236 677 12**	305 488 ***	178 115 906K	
	380, 400, 415		236 617 12**	305 488 ***	236 717 12**	305 488 ***		
	500		236 707 12**	305 488 ***	236 797 12**	305 488 ***		

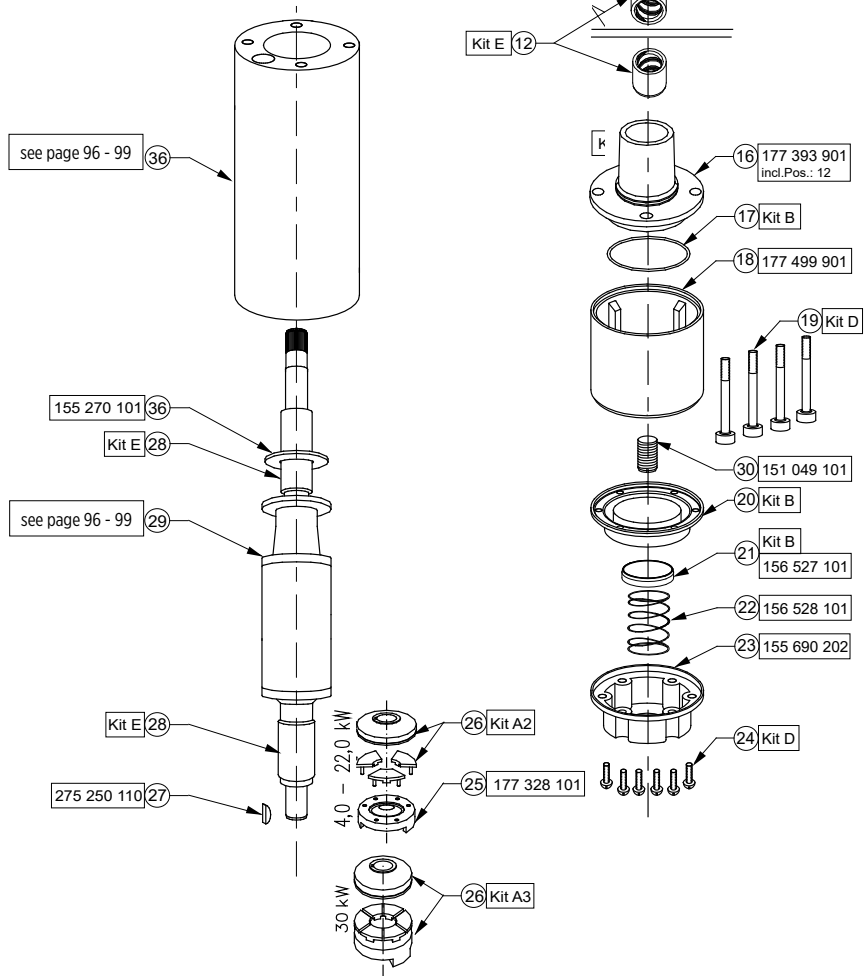
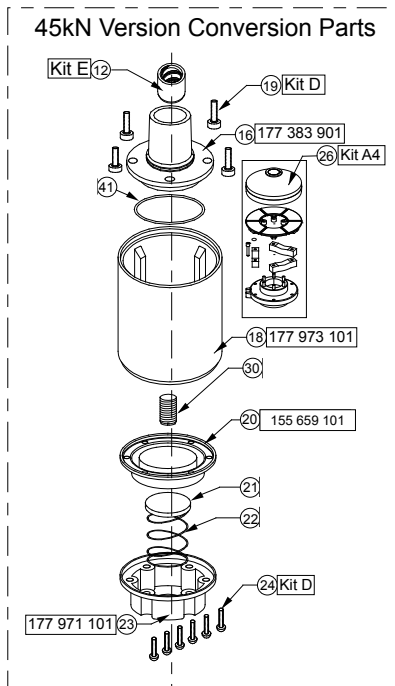
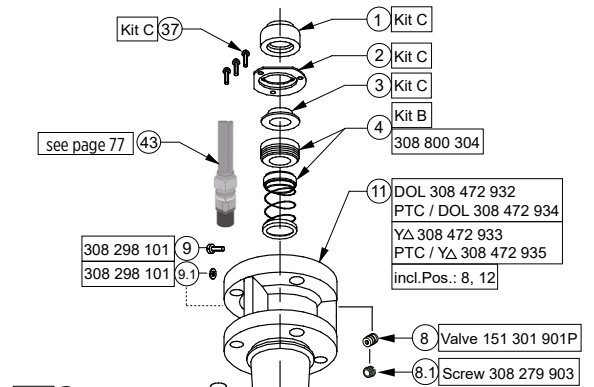
(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°

6" Encapsulated 316SS

4- 30 kW

Rotor Kit 6500N to 15.500N	4,0 kW	incl. Pos.: 25; 26, 29	305 330 911
	5,5 kW	incl. Pos.: 25; 26, 29	305 330 912
Kit A2 15.500N / 4-22kW	Thrust Bearing Kit	incl. Pos.: 26	308 750 120
Kit A3 27.500N / 30kW	Thrust Bearing Kit	incl. Pos.: 26	308 750 200
Kit A4 45.000N	Thrust Bearing Kit	incl. Pos.: 26	308 750 510
45kN Conversion Kit 4,0 - 30kW		incl. Pos.: 12; 16; 18; 19; 20; 21; 22; 23; 24; 26; 30; 41	308 750 550
Kit B2 4 - 30kW	Seal Kit	incl. Pos.: 4; 17; 20; 21, 22, 41	308 800 302
Kit C2	Slinger Kit	incl. Pos.: 1; 2; 3; 37	308 725 302
Kit D3 up to 07.2002	Screw Kit	incl. Pos.: 5; 19; 24	308 659 301
Kit D4 starting 07.2002	Screw Kit	incl. Pos.: 5; 19; 24	308 659 302
Kit E* 4 - 30 kW	Radial Bearing Kit	incl. Pos.: 12; 28	308 678 101

* Radial Bearing Parts are unfinished

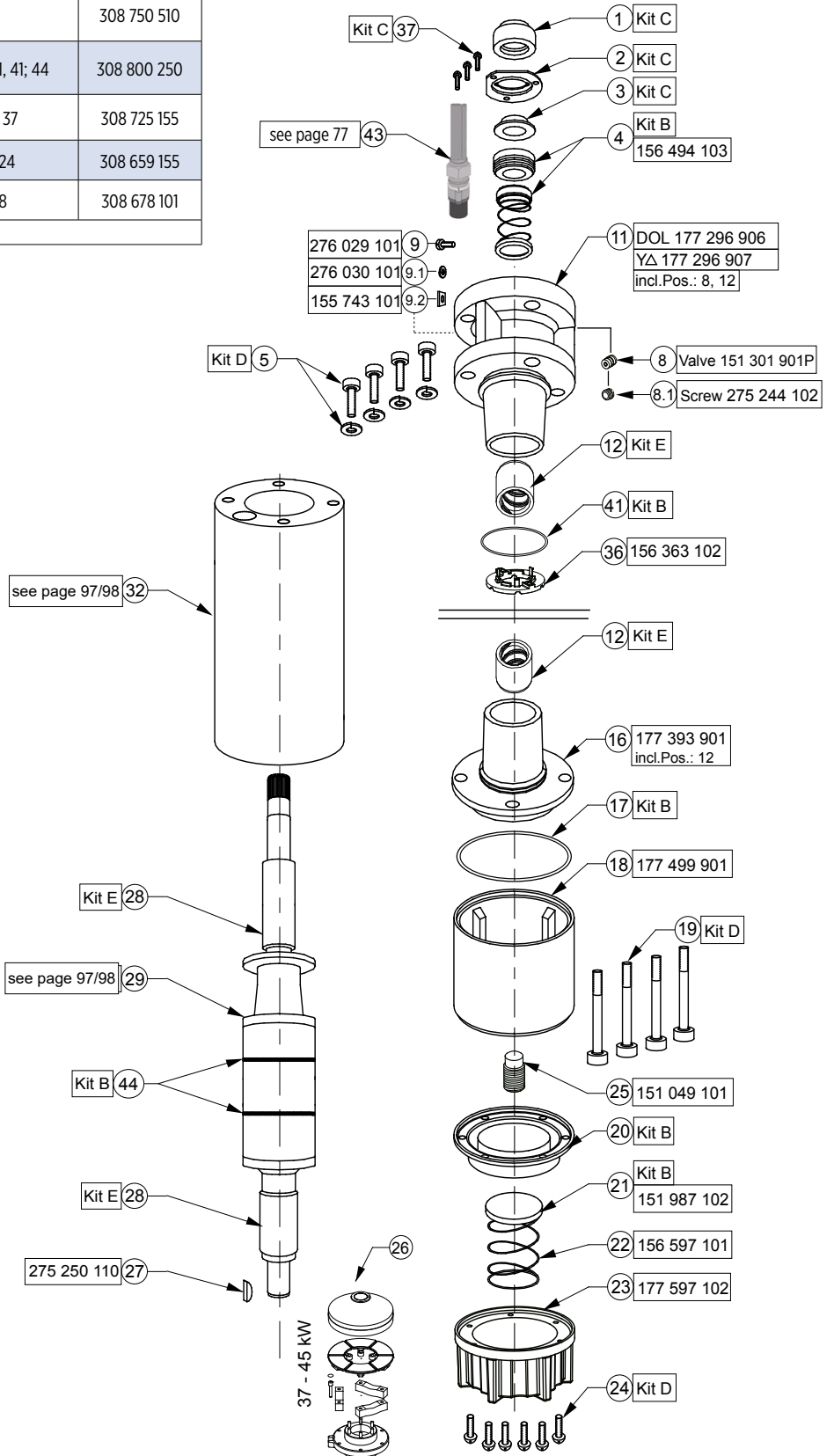
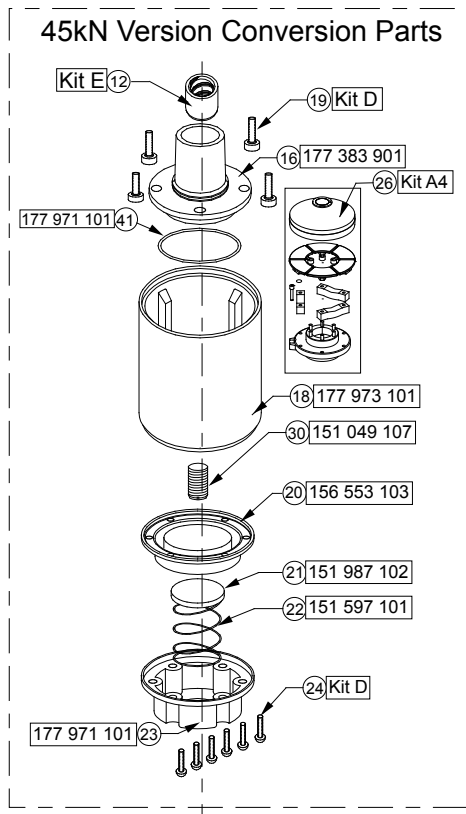


6" Encapsulated 316SS

37- 45 kW

Kit A3	Thrust Bearing Kit 27.500N	incl. Pos.: 26	308 750 200
Kit A4	Thrust Bearing Kit 45.000N	incl. Pos.: 26	308 750 510
Kit B3	Seal Kit	incl. Pos.: 4; 17; 20; 21, 41; 44	308 800 250
Kit C4	Slinger Kit	incl. Pos.: 1; 2; 3; 37	308 725 155
Kit D5	Screw Kit	incl. Pos.: 5; 19; 24	308 659 155
Kit E*	Radial Bearing Kit	incl. Pos.: 12; 28	308 678 101

* Radial Bearing Parts are unfinished



Replacement Stators and Rotors 316SS / 50 Hz

3 - ohne SubMonitor Transmitter 3 - without SubMonitor Transmitter	3 - sans transm. SubMonitor senza trasmettitore SubMonitor	3 - 3 - sin transmissor SubMonitor 3 - sem transmissor SubMonitor
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P _N [kW]	U _N [V]	Thrust (N)	DOL		YΔ (*)		Rotor Model No.
			Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4,0	220, 230	15.500	236 680 39**	305478917	236 670 39**	305478920	178 117 913K
	380 - 415		236 610 39**	305478918	236 710 39**	305478921	
	500		236 700 39**	305478919	236 790 39**	305478922	
5,5	220, 230	15.500	236 681 39**	305479920	236 671 39**	305479923	178 118 912K
	380 - 415		236 611 39**	305479921	236 711 39**	305479924	
	500		236 701 39**	305479922	236 791 39**	305479925	
7,5	220, 230	15.500	236 682 39**	305480922	236 672 39**	305480925	178 119 908K
	380 - 415		236 612 39**	305480923	236 712 39**	305480926	
	500		236 702 39**	305480924	236 792 39**	305480927	
9,3	220, 230	15.500	236 015 39**	305481911	236 005 39**	305481914	178 182 907K
	380 - 415		236 001 39**	305481912	236 011 39**	305481915	
	500		236 008 39**	305481913	236 018 39**	305481916	
11,0	220, 230	15.500	236 683 39**	305482923	236 673 39**	305482926	178 120 908K
	380 - 415		236 613 39**	305482924	236 713 39**	305482927	
	500		236 703 39**	305482925	236 793 39**	305482928	
15,0	220, 230	15.500	236 684 39**	305484923	236 674 39**	305484926	178 121 907K
	380 - 415		236 614 39**	305484924	236 714 39**	305484927	
	500		236 704 39**	305484925	236 794 39**	305484928	
18,5	220, 230	15.500	236 685 39**	305485920	236 675 39**	305485923	178 122 907K
	380 - 415		236 615 39**	305485921	236 715 39**	305485924	
	500		236 705 39**	305485922	236 795 39**	305485926	
22,0	220, 230	15.500	236 686 39**	305486924	236 676 39**	305486927	178 123 907K
	380 - 415		236 616 39**	305486925	236 716 39**	305486928	
	500		236 706 39**	305486926	236 796 39**	305486929	
30,0	220, 230	27.500	236 687 39**	305488912	236 677 39**	305488915	178 115 906K
	380 - 415		236 617 39**	305488913	236 717 39**	305488916	
	500		236 707 39**	305488914	236 797 39**	305488917	

(*) : **Kabel 90° versetzt** **Pos. de cavi 90°**
Pos. of leads 90° **Pos. de los cables 90°**
Pos. des câbles 90° **Pos. dos cabos 90°**

Replacement Stators and Rotors 316SS / 50 Hz

3 - mit SubMonitor Transmitter 3 - with SubMonitor Transmitter	3 - avec transm. SubMonitor 3 - con trasmettitore SubMonitor	3 - con transmissor SubMonitor 3 - com transmissor SubMonitor
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P _N [kW]	U _N [V]	Thrust F (N)	DOL		YΔ (*)		Rotor Model No.
			Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4,0	220, 230	15.500	236 680 40**	305 478 947	236 670 40**	305 478 950	178 117 913K
	380 - 415		236 610 40**	305 478 948	236 710 40**	305 478 951	
	500		236 700 40**	305 478 949	236 790 40**	305 478 952	
5,5	220, 230	15.500	236 681 40**	305 479 950	236 671 40**	305 479 953	178 118 912K
	380 - 415		236 611 40**	305 479 951	236 711 40**	305 479 954	
	500		236 701 40**	305 479 952	236 791 40**	305 479 955	
7,5	220, 230	15.500	236 682 40**	305 480 952	236 672 40**	305 480 955	178 119 908K
	380 - 415		236 612 40**	305 480 953	236 712 40**	305 480 956	
	500		236 702 40**	305 480 954	236 792 40**	305 480 957	
9,3	220, 230	15.500	236 015 40**	305 481 941	236 005 40**	305 481 944	178 182 907K
	380 - 415		236 001 40**	305 481 942	236 011 40**	305 481 945	
	500		236 008 40**	305 481 943	236 018 40**	305 481 946	
11,0	220, 230	15.500	236 683 40**	305 482 953	236 673 40**	305 482 956	178 120 908K
	380 - 415		236 613 40**	305 482 954	236 713 40**	305 482 957	
	500		236 703 40**	305 482 955	236 793 40**	305 482 958	
15,0	220, 230	15.500	236 684 40**	305 484 953	236 674 40**	305 484 956	178 121 907K
	380 - 415		236 614 40**	305 484 954	236 714 40**	305 484 957	
	500		236 704 40**	305 484 955	236 794 40**	305 484 958	
18,5	220, 230	15.500	236 685 40**	305 485 950	236 675 40**	305 485 953	178 122 907K
	380 - 415		236 615 40**	305 485 951	236 715 40**	305 485 954	
	500		236 705 40**	305 485 952	236 795 40**	305 485 955	
22,0	220, 230	15.500	236 686 40**	305 486 954	236 676 40**	305 486 957	178 123 907K
	380 - 415		236 616 40**	305 486 955	236 716 40**	305 486 958	
	500		236 706 40**	305 486 956	236 796 40**	305 486 959	
30,0	220, 230	27.500			236 677 40**	305 488 939	178 115 906K
	380 - 415		236 617 40**	305 488 937	236 717 40**	305 488 940	
	500		236 707 40**	305 488 938	236 797 40**	305 488 941	
37,0	380 - 415	45.000	276 618 6361X	338 710 908	276 718 6361X	336 755 906	305 223 920
45,0	380 - 415	45.000	276 619 6361X	305 490 921	276 719 6361X	336 756 103	305 223 921

(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°

Replacement Stators and Rotors 316SS / 60 Hz

3 - mit SubMonitor Transmitter 3 - with SubMonitor Transmitter	3 - avec transm. SubMonitor con trasmettitore SubMonitor	3 - 3 - con transmissor SubMonitor 3 - com transmissor SubMonitor
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P _N [kW]	P _N [HP]	Thrust F [N]	U _N [V]	DOL		YΔ*		Rotor Model No.
				Motor Model No.	Stator Model No.	Motor Model No.	Stator Model No.	
4	5,5	15500	200	236 650 40**		236 760 40**		178 117 913K
			230	236 600 40**		236 720 40**		
			380	236 660 40**		236 780 40**		
			460	236 610 40**	305 478 948	236 710 40**	305 478 951	
			575	236 620 40**		236 400 40**		
5,5	7,5	15500	200	236 651 40**		236 761 40**		178 118 912K
			230	236 601 40**		236 721 40**		
			380	236 661 40**		236 781 40**		
			460	236 611 40**	305 479 951	236 711 40**	305 479 954	
			575	236 621 40**		236 401 40**		
7,5	10,0	15500	200	236 652 40**		236 762 40**		178 119 908K
			230	236 602 40**		236 722 40**		
			380	236 662 40**		236 782 40**		
			460	236 612 40**	305 480 953	236 011 40**	305 480 956	
			575	236 622 40**		236 402 40**		
9,3	12,5	15500	200	236 061 40**		236 *** 40**		178 182 907K
			230	236 041 40**		236 *** 40**		
			380	236 031 40**		236 032 40**		
			460	236 001 40**	305 481 942	236 011 40**	305 481 945	
			575	236 *** 40**		236 *** 40**		
11	15,0	15500	200	236 653 40**		236 763 40**		178 120 908K
			230	236 603 40**		236 723 40**		
			380	236 663 40**		236 783 40**		
			460	236 613 40**	305 482 954	236 713 40**	305 482 957	
			575	236 623 40**		236 403 40**		
15	20,0	15500	200	236 654 40**		236 764 40**		178 121 907K
			230	236 604 40**		236 724 40**		
			380	236 664 40**		236 784 40**		
			460	236 614 40**	305 484 954	236 714 40**	305 484 957	
			575	236 624 40**		236 404 40**		
18,5	25,0	15500	200	236 655 40**		236 765 40**		178 122 907K
			230	236 605 40**		236 725 40**		
			380	236 665 40**		236 785 40**		
			460	236 615 40**	305 485 951	236 715 40**	305 485 954	
			575	236 625 40**		236 405 40**		
22	30,0	15500	200	236 656 40**		236 766 40**		178 123 907K
			230	236 606 40**		236 726 40**		
			380	236 666 40**		236 786 40**		
			460	236 616 40**	305 486 955	236 716 40**	305 486 958	
			575	236 626 40**		236 406 40**		
30	40	27500	380	236 667 40**		236 787 40**		178 115 906K
			460	236 617 40**	305 488 937	236 717 40**	305 488 940	
			575	236 627 40**		236 407 40**		
37	50	27500	380	276 668 40**		276 788 40**		305 223 920
			460	276 618 40**	338 710 909	276 718 40**	305 489 ***	
			575	276 628 40**		276 **8 40**		
45	60	27500	380	276 669 40**		276 789 40**		305 223 921
			460	276 619 40**	305 490 921	276 719 40**	305 490 ***	
			575	276 629 40**		276 **9 40**		

(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°

Replacement Stators and Rotors 316SS / 50 Hz

3 - mit PTC 3 - with PTC	3 - avec PTC 3 - con PTC	3 - con PTC 3 - com PTC
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P _N [kW]	U _N [V]	Drucklast F [N]	DOL		YΔ (*)		Rotor Model Nr.
			Motor Model Nr.	Stator Model Nr.	Motor Model Nr.	Stator Model Nr.	
4,0	220, 230	15.500	236 680 36**	305 478 953	236 670 36**	305 478 956	178 117 913K
	380 - 415		236 610 36**	305 478 954	236 710 36**	305 478 957	
	500		236 700 36**	305 478 955	236 790 36**	305 478 958	
5,5	220, 230	15.500	236 681 36**	305 479 956	236 671 36**	305 479 959	178 118 912K
	380 - 415		236 611 36**	305 479 957	236 711 36**	305 479 960	
	500		236 701 36**	305 479 958	236 791 36**	305 479 961	
7,5	220, 230	15.500	236 682 36**	305 480 958	236 672 36**	305 480 961	178 119 908K
	380 - 415		236 612 36**	305 480 959	236 712 36**	305 480 962	
	500		236 702 36**	305 480 960	236 792 36**	305 480 963	
9,3	220, 230	15.500	236 015 36**	305 481 947	236 005 36**	305 481 950	178 182 907K
	380 - 415		236 001 36**	305 481 948	236 011 36**	305 481 951	
	500		236 008 36**	305 481 949	236 018 36**	305 481 952	
11,0	220, 230	15.500	236 683 36**	305 482 959	236 673 36**	305 482 962	178 120 908K
	380 - 415		236 613 36**	305 482 960	236 713 36**	305 482 963	
	500		236 703 36**	305 482 961	236 793 36**	305 482 964	
15,0	220, 230	15.500	236 684 36**	305 484 959	236 674 36**	305 484 962	178 121 907K
	380 - 415		236 614 36**	305 484 960	236 714 36**	305 484 963	
	500		236 704 36**	305 484 961	236 794 36**	305 484 964	
18,5	220, 230	15.500	236 685 36**	305 485 956	236 675 36**	305 485 959	178 122 907K
	380 - 415		236 615 36**	305 485 957	236 715 36**	305 485 960	
	500		236 705 36**	305 485 958	236 795 36**	305 485 961	
22,0	220, 230	15.500	236 686 36**	305 486 960	236 676 36**	305 486 963	178 123 907K
	380 - 415		236 616 36**	305 486 961	236 716 36**	305 486 964	
	500		236 706 36**	305 486 962	236 796 36**	305 486 965	
30,0	220, 230	27.500			236 677 36**	305 488 944	178 115 906K
	380 - 415		236 617 36**	305 488 942	236 717 36**	305 488 945	
	500		236 707 36**	305 488 943	236 797 36**	305 488 946	

(*) : Kabel 90° versetzt Pos. de cavi 90°
 Pos. of leads 90° Pos. de los cables 90°
 Pos. des câbles 90° Pos. dos cabos 90°