10" REWINDABLE MOTOR

FEATURES & BENEFITS

- 10" Double-flange mounting design
- Stainless steel keyed shaft
- VFD operation up to a rated voltage of 460 V (in compliance with the application guidelines in the motor operating instructions and the VFD manufacturer). For VFD operation with higher voltages, please consult Franklin Electric.
- Factory filled with FES Franklin's non-toxic water soluble fill solution
- Hydrodynamic liquid lubricated radial bearings and High capacity Kingsbury type thrust bearing for 100 % maintenance free operation
- Pressure-equalizing diaphragm, spring pre-loaded
- SandFighter™ sealing system with SIC mechanical seal and sand slinger
- Standard motor: WW- Water well design (stator: 304SS / castings: CI powder coated)
- Drinking water approvals

STANDARD SPECIFICATION

- Ratings: 85-185 kW
- Thrust load: 60 kN
- Max. storage temperature: -15 °C - +60 °C
- Nominal ambient temperature: 45 °C (with 0.5 m/s cooling flow)
- Standard voltage: 380-415 V (50 Hz), 460 V (60 Hz)
- Voltage tolerance UN: 50 Hz: -10 % / +6 % UN [380-415 V = (380 - 10 %) – (415 + 6 %)] 60 Hz: ±10 % UN
- Standard motor with PPC winding insulation
- protection IP68
- Protection requirements: DIN/EN 61947-4-1
- Frequency of starts: 10 starts/ hour (with min. 3 minutes resting time), equally distributed
- DOL / YΔ-start (pos. of cables 90 °)
- Motor lead length: 6 m
- All motors with factory installed leads
- Vertical and horizontal operation, shaftend heightend
- Rotation counter clock wise facing shaft end (rotation reversible for 3 phase motors)

OPTIONS

- Higher-graded material: WW, 304SS, 316SS, 904L
- Special voltages
- Retrofitable PT 100 temperature sensor
- Special lead lengths
- PE2/PA winding insulation for max. ambient temperature of 50 °C (Standard cooling flows)

Best class winding wires in rewindable motors

The rewindable motors are equipped with best class winding wires.
The windings can easily be replaced.
The Franklin motors are factory filled with
Franklin's FES non-toxic water soluble fill solution.



SAND FIGHTER | WATER WELL WW CI PC / 304SS | STAINLESS STEEL 304 | STAINLESS STEEL 316 | STAINLESS STEEL 904L

10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - MOTOR MODEL NO. | WW | 304SS | 316SS | 904L

P_N [kW]	U_N / f [V] / [Hz]	Digit 1 – 6		Digit 7 – 10							
				PPC				PE2/PA			
		DOL	YΔ	WW	304SS	316SS	904L	WW	304SS	316SS	904L
85	380 - 415 / 50 460 / 60	264 131	264 231	5111	811	6111	7111	5311	8311	6311	7311
	380 / 60	264 661	264 761								
110	380 - 415 / 50 460 / 60	264 133	264 233	5111	811	6111	7111	5311	8311	6311	7311
	380 / 60	264 663	264 763								
130	380 - 415 / 50 460 / 60	264 134	264 234	5111	811	6111	7111	5311	8311	6311	7311
	380 / 60	264 664	264 764								
150	380 - 415 / 50 460 / 60	264 135	264 235	5111	811	6111	7111	5311	8311	6311	7311
	380 / 60	264 665	264 765								
185	380 - 415 / 50 460 / 60	264 136	264 236	5111	811	6111	7111	5311	8311	6311	7311
	380 / 60		264 766								

VFD operation is only allowed up to 460V supply voltage. For higher voltages, please consult Franklin Electric.
WW - Water well design (brackets CI powder coated)

YOUTUBE VIDEOS AND TUTORIALS



8"/10"/12" rewindable motors
Franklin Electric



Tutorial 8-10REW PT100 installation
(sensor design starting 08-2025)

10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - MOTOR PERFORMANCE DATA | 50 HZ

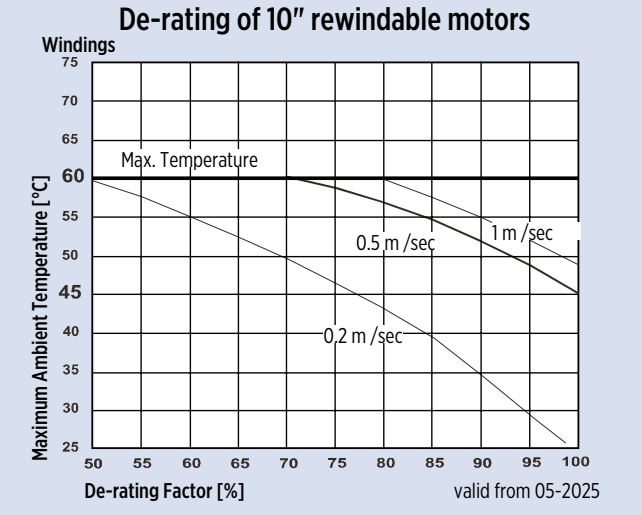
P_N [kW]	Thrust F [N]	U_N [V]	n_N [min^{-1}]	I_N [A]	I_A [A]	η (Eff.) at % load			cos φ (Pf.) at % load			T_N [Nm]	T_A [Nm]
						50	75	100	50	75	100		
85	60000	380	2890	179	783	85	86	85	0.78	0.85	0.87	281	282
		400	2900	174	828	83	85	85	0.72	0.81	0.85	280	316
		415	2910	171	863	83	85	85	0.68	0.78	0.83	279	342
		500	2890	136	595	84	85	84	0.78	0.84	0.87	281	282
		525	2900	133	631	83	85	85	0.72	0.81	0.85	280	316
		1000	2900	68	331	83	85	85	0.72	0.81	0.85	280	316
110	60000	380	2910	235	1095	86	87	86	0.72	0.81	0.85	361	418
		400	2920	232	1158	84	86	86	0.65	0.76	0.82	360	467
		415	2920	233	1206	83	85	86	0.59	0.71	0.79	360	507
		500	2910	180	875	86	87	86	0.69	0.79	0.83	360	432
		525	2920	179	923	85	86	86	0.62	0.73	0.8	359	482
		1000	2920	89	463	84	86	86	0.65	0.76	0.82	360	467
130	60000	380	2900	266	1271	88	88	87	0.79	0.85	0.87	428	487
		400	2920	256	1344	87	88	88	0.74	0.82	0.86	425	546
		415	2920	255	1400	87	88	87	0.69	0.78	0.83	425	592
		500	2900	202	966	87	88	87	0.79	0.85	0.87	428	487
		525	2920	195	1024	87	88	87	0.73	0.81	0.85	425	546
		1000	2910	104	523	87	88	87	0.76	0.83	0.86	426	516
150	60000	380	2910	307	1502	87	87	86	0.79	0.85	0.88	492	568
		400	2920	298	1590	86	88	87	0.73	0.81	0.85	491	635
		415	2930	296	1655	86	87	87	0.67	0.77	0.83	489	689
		500	2910	233	1142	87	87	86	0.79	0.85	0.88	492	568
		525	2920	227	1211	86	87	87	0.73	0.81	0.85	491	635
		1000	2920	117	636	86	88	87	0.73	0.81	0.85	491	635
185	60000	380	2900	390	2030	87	88	87	0.72	0.81	0.85	609	913
		400	2920	384	2148	86	88	88	0.64	0.75	0.81	605	1022
		415	2920	389	2237	84	86	86	0.57	0.7	0.79	605	1109
		500	2900	294	1500	87	88	87	0.72	0.81	0.85	610	888
		525	2910	289	1580	86	87	87	0.65	0.76	0.82	607	988
		1000	2900	148	859	87	88	87	0.72	0.81	0.85	609	913

10REW MOTOR - 3-PHASE - MOTOR PERFORMANCE DATA | 60 HZ

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		
85	98	60 000	460	3500	172	803	83	85	85	0.76	0.83	0.86	267	281
			380	3510	216	1120	82	84	85	0.69	0.78	0.83	267	325
110	127	60 000	460	3510	225	1160	84	86	86	0.71	0.8	0.84	345	375
			380	3510	273	1430	84	86	86	0.7	0.79	0.84	346	382
130	149	60 000	460	3510	254	1308	86	87	87	0.77	0.84	0.87	408	437
			380	3510	309	1710	85	87	86	0.73	0.82	0.86	408	474
150	173	60 000	460	3510	294	1557	85	87	87	0.77	0.84	0.87	469	508
			380	3510	362	1980	85	87	87	0.75	0.83	0.86	468	535
185	213	60 000	460	3510	377	2130	85	87	87	0.7	0.79	0.84	585	858
			380	3510	448	2690	84	87	87	0.66	0.77	0.87	583	896

10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - DERATING CURVES



If these conditions are not met please contact Franklin Electric.

10REW MOTOR - 3-PHASE - WINDING RESISTANCE DATA | 380 – 415 V | PPC

PPC insulation windings Standard 380 – 415V (50 Hz) | 460 V (60 Hz)									
P_N [kW]	model no. winding kit	turns per coil	wire diameter [mm]	type of isolation	group connection	total wire length [m]	resistance coil [Ω]	resistance YD (U1-U2) [Ω]	resistance DOL (U1-V1) [Ω]
85	326 150 999	11+11+11+11	2,5 / 3,6	PVC	Parallel	487,92	0,2825	0,141	0,094
110	326 158 999	8+9+8+9	2,8 / 4,0	PVC	Parallel	426,00	0,1955	0,1080	0,0680
130	326 168 999	7+8+7+8	2,2 / 3,1 2DR.II	PVC	Parallel	849,60	0,1579	0,0789	0,0570
150	326 177 999	6+7+6+7	2,3 / 3,3 2DR.II	PVC	Parallel	809,76	0,1374	0,0730	0,0458
185	326 360 999	5+5+6+5	2,5 / 3,6 2DR.II	PVC	Parallel	736,56	0,1050	0,0570	0,035

10REW MOTOR - 3-PHASE - WINDING RESISTANCE DATA | 380 – 415 V | PE2/PA

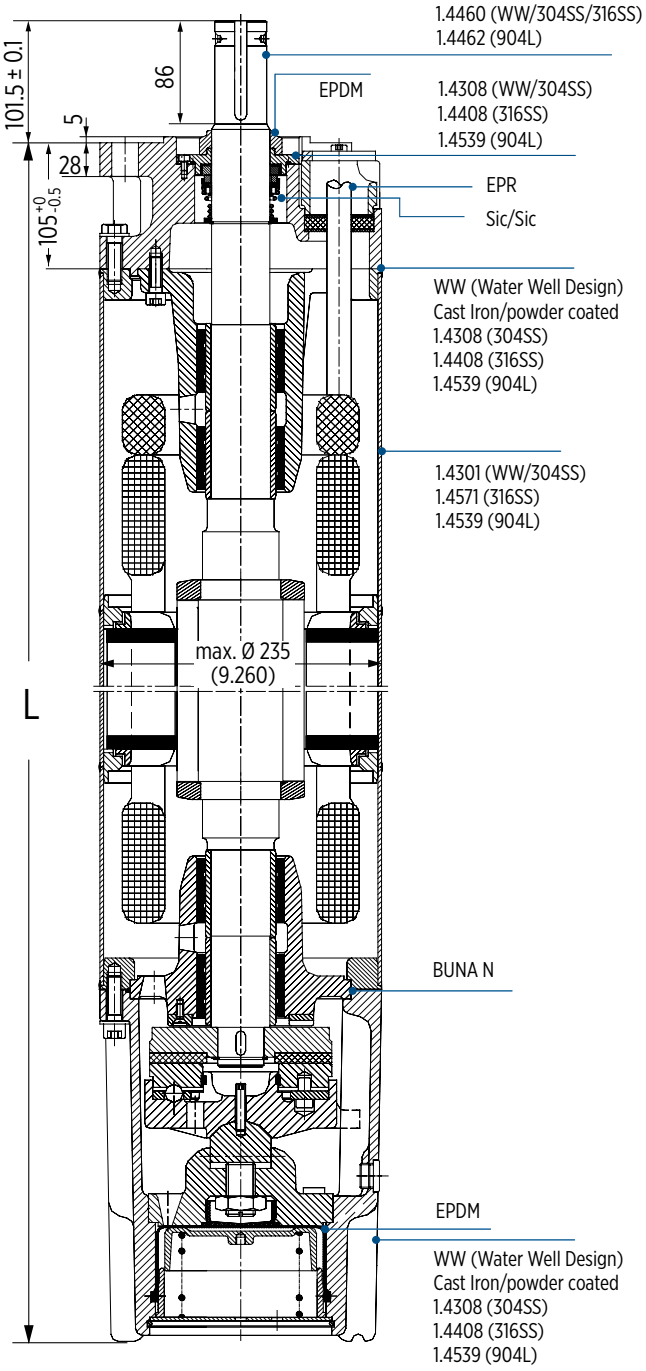
PE2/PA insulation windings Standard 380 – 415V (50 Hz) | 460 V (60 Hz)									
P_N [kW]	model no. winding kit	turns per coil	wire diameter [mm]	type of isolation	group connection	total wire length [m]	resistance coil [Ω]	resistance YD (U1-U2) [Ω]	resistance DOL (U1-V1) [Ω]
85	326 292 999	11+11+11+11	2,3 / 3,5	PE2/PA	Parallel	488	0,3337	0,1668	0,1112
110	326 302 999	8+9+8+9	2,6 / 3,9	PE2/PA	Parallel	426	0,2267	0,1133	0,0755
130	326 314 999	7+8+7+8	2,0 / 3,1 2DR.II	PE2/PA	Parallel	850	0,1910	0,0955	0,0636
150	326 325 999	6+7+6+7	2,1 / 3,3 2DR.II	PE2/PA	Parallel	810	0,1647	0,0823	0,0549
185	326 448 999	5+5+6+5	2,3 / 3,5 2DR.II	PE2/PA	Parallel	735	0,1240	0,0620	0,0413

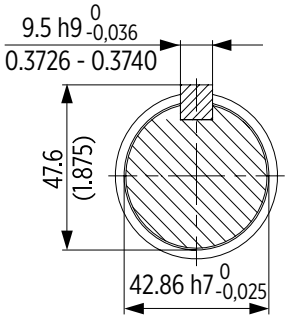
10REW MOTOR - 3-PHASE - INSULATION RESISTANCE DATA | 20 °C | 500 VDC

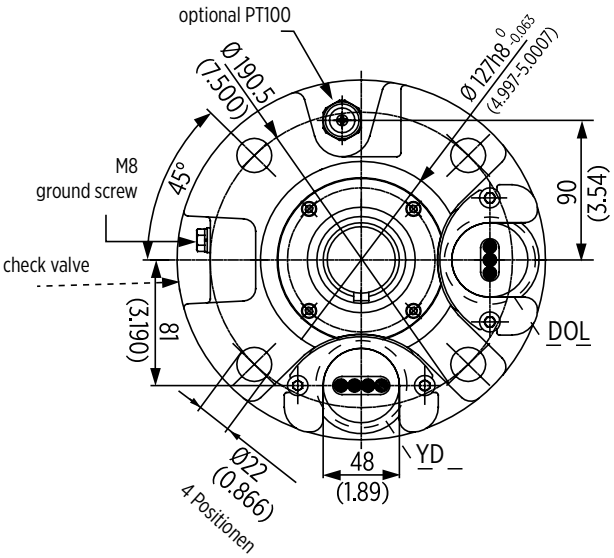
insulation resistance (20 °C | 500 VDC)		
new motor without drop cable	400 >	MΩ
used motor without drop cable	20 >	MΩ
new motor with drop cable	4 >	MΩ
used motor with drop cable	1	MΩ

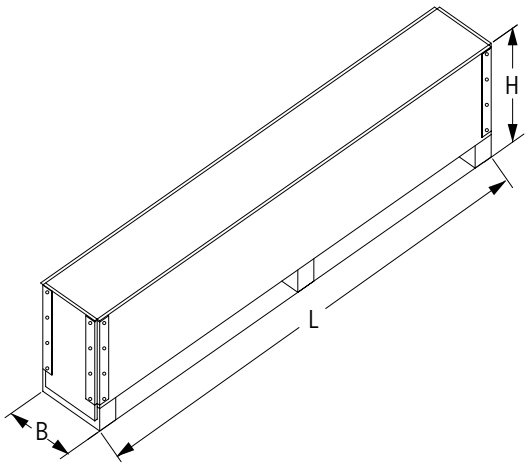
10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - DIMENSIONS AND WEIGHTS | WW | 304SS | 316SS | 904L





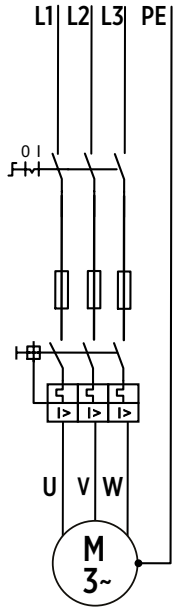
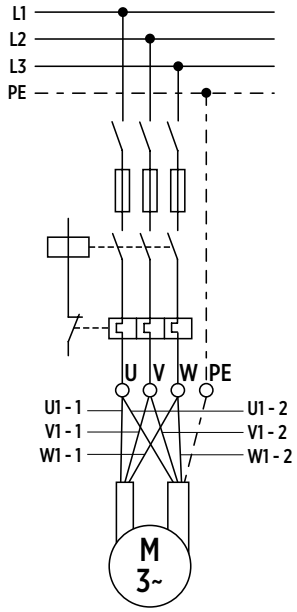
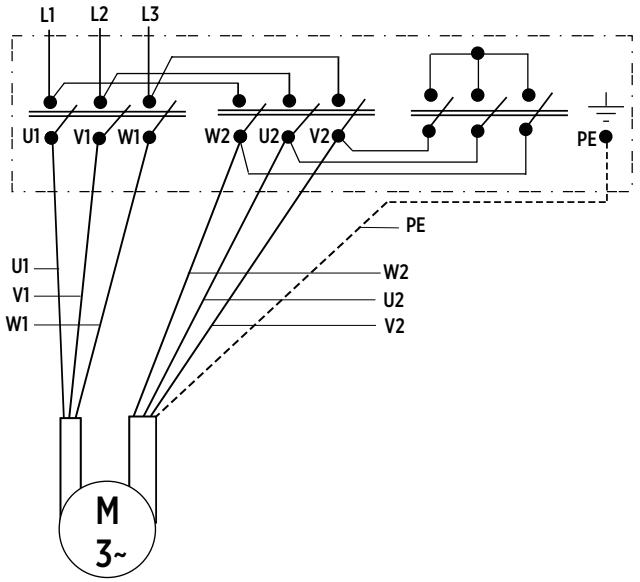




P_N [kW]	motor length L [mm]	weight [kg]		motor shipping size [mm]		
		motor [kg]	incl. motor box [kg]	B	H	L
85	1419	280	326	341	514	1896
110	1529	315	361			
130	1659	362	412	341	514	2246
150	1769	413	463			
185	1919	449	499			

10" REWINDABLE MOTOR

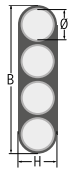
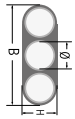
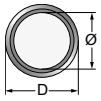
10REW MOTOR - 3-PHASE - CONNECTIONS

DOL	DOL II	YΔ
		

U = black (BK) | W = brown (BN) | V = grey (GY) | PE = yellow/green (YE/GN)

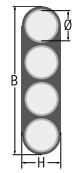
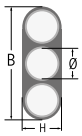
10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - MOTOR LEADS | WW | 304SS | 316SS | 904L | DOL

lead	P_N [kW]	Ø [mm²]	B / H [mm]		length [m]	qty.	lead model no.	model no. lead seal kit WW | 304SS | 316SS	model no. lead seal kit 904L
	85	4G25	B	44.3	6	1	308 710 116	308 660 720	308 660 724
			H	14.5					
	110 – 130	4G35	B	48.5	6	1	308 710 117	308 660 721	308 660 725
			H	16.5					
	130 - 150 (PE2/PA)	3X50	B	46.5	6	1	308 710 113	308 660 712	308 660 726
			H	19.5					
	185	1X70	D	20.7	6	3	308 711 100	308 660 732	308 660 733

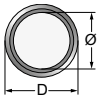
Ground cable (1G35 mm²) in separate order

10REW MOTOR - 3-PHASE - MOTOR LEADS | WW | 304SS | 316SS | 904L | YΔ

lead	P_N [kW]	Ø [mm²]	B / H [mm]		length [m]	qty.	lead model no.	model no. lead seal kit WW | 304SS |316SS	model no. lead seal kit 904L
	85	3X16	B	28.8	6	1	308 710 118	308 660 722	308 660 727
			H	12.2					
		4G16	B	38		1			
			H	12.8					
	110 - 150	3X25	B	37.5	6	1	308 710 114	308 660 713	308 660 728
			H	16					
		4G25	B	44.3		1			
			H	14.5					
	185	4G35	B	48.5	6	1	308 710 121	308 660 723	308 660 729
			H	16.5					
		3X35	B	38.5		1			
			H	16.5					

10REW MOTOR - 3-PHASE - GROUND LEADS | WW | 304SS | 316SS

For PE2/PA motors, the special tape 700 541 688 is essential.

ground lead (optional)*	Ø [mm²]	Size D [mm]	length [m]	qty.	model no.
	1G25	13,0	8	1	308 053 080
	1G35	15.3	6	1	308 056 060

*suitable for WW and 316SS motors

10REW MOTOR - 3-PHASE - LEAD OPENING SEAL KIT | DOL | YΔ

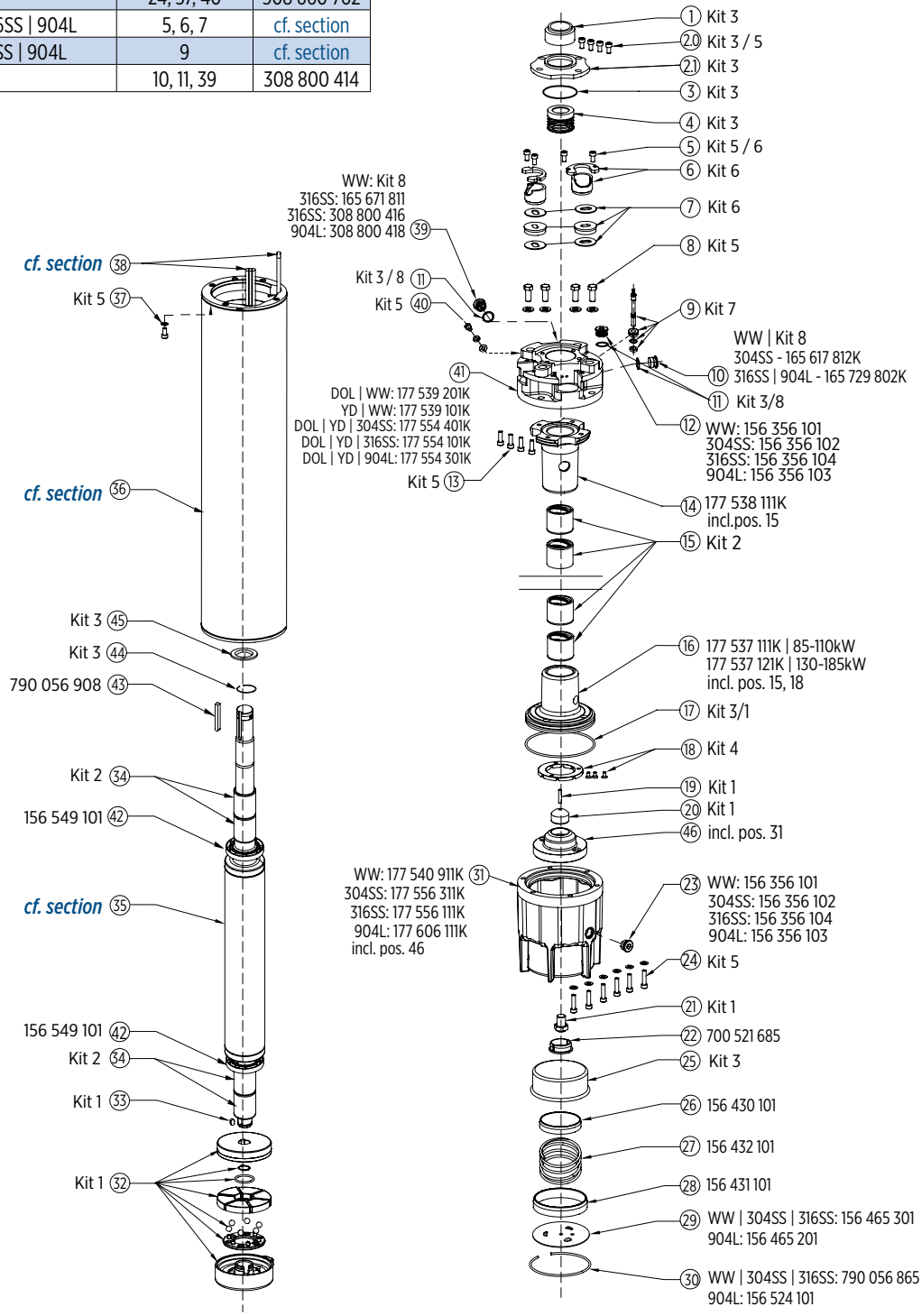
P_N [kW]	material	model no.
85 - 185 kW	WW | 304SS | 316SS	308 660 715
	904L	308 660 730

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

10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - MOTOR SPARE PARTS - KITS | WW | 304SS | 316SS | 904L

Kit	description	included positions	part no.
Kit 1	thrust bearing kit WW | 304SS | 316SS | 904L	17, 20, 21, 32, 33	308 750 701
Kit 2	radial bearing kit WW | 304SS | 316SS | 904L	15, 34	308 751 701
Kit 3	seal kit WW | 304SS | 316SS	1-4, 11, 17, 25	308 800 703
	seal kit 904L	1-4, 11, 17, 25	308 800 704
Kit 4	up-thrust bearing kit WW | 304SS | 316SS | 904L	18	308 751 702
Kit 5	screw kit WW | 304SS | 316SS	2.0, 5, 8, 13, 24, 37, 40	308 660 701
	screw kit 904L		308 660 702
Kit 6	lead seal kit WW | 304SS | 316SS | 904L	5, 6, 7	cf. section
Kit 7	PT100 kit WW | 304SS | 316SS | 904L	9	cf. section
Kit 8	valve kit WW	10, 11, 39	308 800 414



10" REWINDABLE MOTOR

10REW MOTOR - 3-PHASE - STATOR AND ROTOR | WW | 304SS | 316SS | 904L

P_N [kW]	U_N / f [V] / [Hz]	stator (incl. winding and 6 m motor lead)								Rotor
		DOL				YΔ				
		WW | 316SS		904L		WW | 304SS | 316SS		904L		
		PPC	PE2/PA	PPC	PE2/PA	PPC	PE2/PA	PPC	PE2/PA	
85	380 - 415/50 460/60	326 150 931	326 292 931	326 150 921	326 292 921	326 150 981	326 292 981	326 150 971	326 292 971	176 379 801K
110	380 - 415/50 460/60	326 158 931	326 302 931	326 158 921	326 302 921	326 158 981	326 302 981	326 158 971	326 302 971	176 379 802K
130	380 - 415/50 460/60	326 168 931	326 314 931	326 168 921	326 314 921	326 168 981	326 314 981	326 168 971	326 314 971	176 379 803K
150	380 - 415/50 460/60					326 177 981	326 325 981	326 177 971	326 325 971	176 379 804K
185	380 - 415/50 460/60		326 448 931			326 360 981	326 448 981	326 360 971	326 448 971	176 379 805K