

8" ENCAPSULATED HIGH TEMP 75°C MOTOR



High temperature version

Encapsulated motor for reliable operation at ambient temperatures up to 75 °C



StatorShield™ - Franklin encapsulation system

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

Hydrodynamic liquid lubricated radial bearings

100% maintenance free operation

Kingsbury type thrust bearing

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



Pressure-equalizing diaphragm
spring pre-loaded

8" ENCAPSULATED HIGH TEMP 75°C MOTOR

8CT HIGH TEMP 75°C - MOTOR MODEL NO. | 50 HZ | WW | 316SS

P _N [kW]	P _N [HP]	U _N [V]	Digit 1 - 6		Digit 7 - 10	
			DOL	YΔ	WW	316SS
30	40	380 - 415	279 100	279 120	9004X	9204X
37	50	380 - 415	279 101	279 121	9004X	9204X
45	60	380 - 415	279 102	279 122	9004X	9204X
55	75	380 - 415	279 103	279 123	9004X	9204X
75	100	380 - 415	279 104	279 124	9004X	9204X
93	125	380 - 415	279 105	279 125	9004X	9204X
110	150	380 - 415		279 126	9004X	9204X

8CT HIGH TEMP 75°C - MOTOR MODEL NO. | 60 HZ | WW | 316SS

P _N [kW]	P _N [HP]	U _N [V]	Digit 1 - 6		Digit 7 - 10	
			DOL	YΔ	WW	316SS
30	34.5	380	279 160	279 180	9004X	9204X
		460	279 100	279 120	9004X	9204X
		575	279 110	279 190	9004X	9204X
37	42.5	380	279 161	279 181	9004X	9204X
		460	279 101	279 121	9004X	9204X
		575	279 111	279 191	9004X	9204X
45	51.7	380	279 162	279 182	9004X	9204X
		460	279 102	279 122	9004X	9204X
		575	279 112	279 192	9004X	9204X
55	64	380	279 163	279 183	9004X	9204X
		460	279 103	279 123	9004X	9204X
		575	279 113	279 193	9004X	9204X
75	86.2	380	279 164	279 184	9004X	9204X
		460	279 104	279 124	9004X	9204X
		575	279 114	279 194	9004X	9204X
93	106.9	380	279 165	279 185	9004X	9204X
		460	279 105	279 125	9004X	9204X
		575	279 115	279 195	9004X	9204X
110	126.5	380		279 186	9004X	9204X
		460		279 126	9004X	9204X
		575		279 196	9004X	9204X

VFD operation is only allowed up to 400V supply voltage. For higher voltages, please consult Franklin Electric.

WW - Water well design (stator: 304SS | castings: CI powder coated)

8" ENCAPSULATED HIGH TEMP 75°C MOTOR

8CT HIGH TEMP 75°C - MOTOR PERFORMANCE DATA | 30-110 KW | 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		
30	45000	380	2920	66.8	474	72	78	80	0.76	0.82	0.86	98.1	265
		400	2930	65.5	499	72	78	80	0.7	0.78	0.83	97.8	298
		415	2935	65.8	518	71	77	80	0.65	0.74	0.8	97.6	324
37	45000	380	2930	80.7	654	75	80	83	0.76	0.83	0.87	121	354
		400	2940	79.6	692	74	80	82	0.7	0.79	0.84	120	398
		415	2945	80.1	720	73	79	82	0.65	0.75	0.81	120	429
45	45000	380	2935	94.3	835	78	83	85	0.75	0.82	0.87	146	413
		400	2945	93.1	884	77	82	84	0.69	0.78	0.84	146	465
		415	2950	93	920	76	82	84	0.64	0.74	0.81	146	501
55	45000	380	2920	118	876	78	82	84	0.77	0.84	0.87	183	467
		400	2930	115	927	78	82	84	0.72	0.81	0.85	182	526
		415	2935	113	965	77	82	84	0.69	0.78	0.83	182	566
75	45000	380	2925	155	1185	81	84	85	0.76	0.83	0.87	244	617
		400	2935	151	1254	80	84	86	0.71	0.8	0.85	244	695
		415	2940	150	1306	80	84	85	0.66	0.76	0.82	243	748
93	45000	380	2915	191	1404	81	85	86	0.78	0.85	0.88	304	843
		400	2925	186	1482	81	84	86	0.73	0.8	0.86	304	949
		415	2930	184	1544	80	84	86	0.69	0.76	0.84	303	1021
110	45000	380	2925	231	1596	81	84	85	0.77	0.84	0.88	359	890
		400	2935	224	1690	81	84	86	0.72	0.81	0.85	358	1002
		415	2940	222	1760	80	84	86	0.68	0.77	0.83	357	1078

8CT HIGH TEMP 75°C - MOTOR PERFORMANCE DATA | 30-110 KW | 60 HZ

P _N [kW]	P _{MAX} [kW]	Thrust F [N]	U _N [V]	n _N [min ⁻¹]	I _{MAX} [A]	I _N [A]	η _{MAX} [%] at 100% load	line to line resistance [Ω]
30	34.5	45000	380	3450	78.7	616	78	.11 - .14
			460	3450	65	509	78	.16 - .19
			575	3450	52	407	78	.25 - .31
37	42.5	45000	380	3450	95.4	832	80	.07 - .09
			460	3450	78.8	687	80	.11 - .14
			575	3450	63	550	80	.18 - .22
45	51.7	45000	380	3450	112	1081	82	.06 - .07
			460	3450	92.1	893	82	.09 - .11
			575	3450	73.7	715	82	.13 - .16
55	64	45000	380	3450	141	1175	82	.05 - .06
			460	3450	114	922	82	.07 - .09
			575	3450	92	738	82	.11 - .14
75	86.2	45000	380	3450	181	1508	85	.04 - .05
			460	3450	149	1246	85	.05 - .07
			575	3450	119	997	85	.08 - .10
93	106.9	45000	380	3450	223	1793	85	.03 - .04
			460	3450	184	1481	85	.04 - .06
			575	3450	148	1185	85	.07 - .09
110	126.5	45000	380	3450	269	2012	84	.02 - .03
			460	3450	222	1662	84	.03 - .05
			575	3450	178	1330	84	.05 - .07

VFD operation is only allowed up to 400V supply voltage. For higher voltages, please consult Franklin Electric.

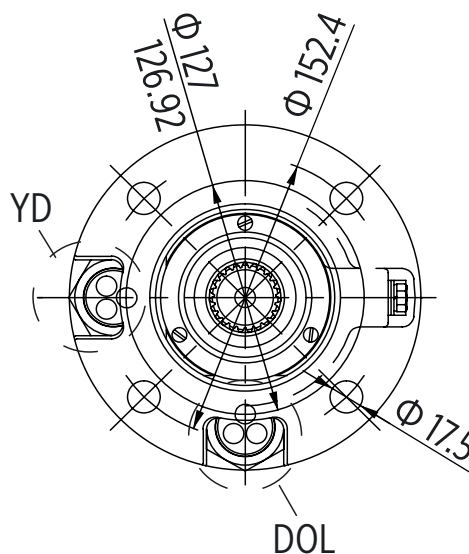
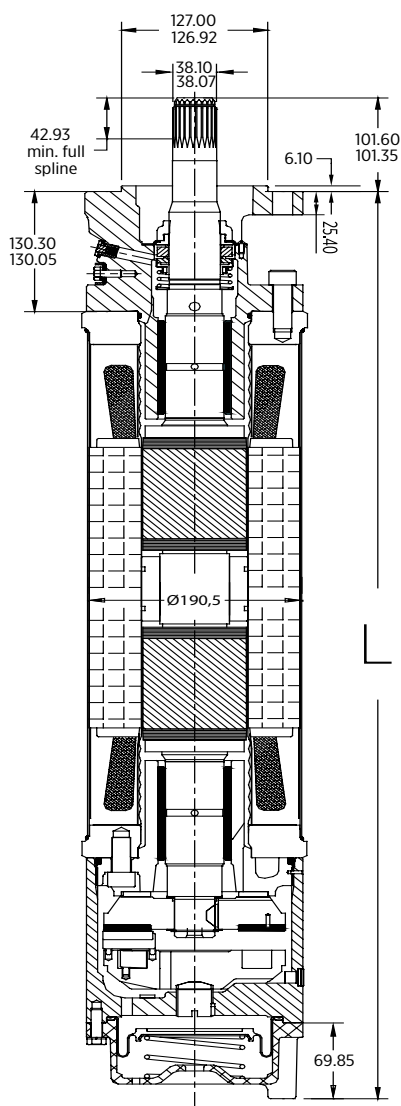
WW - Water well design (stator: 304SS | castings: CI powder coated)

8" ENCAPSULATED HIGH TEMP 75°C MOTOR

8CT HIGH TEMP 75°C - WINDING RESISTANCE DATA | 50 HZ | 20 °C

P_N [kW]	U_N [V]	stator reference no.	line to line Resistance [ohms]
30	380 - 415	331 659 ...	0,25 - 0,27
	500	0	0
37	380 - 415	331 677 ...	0,17 - 0,19
	500	326 558 ...	0,09 - 0,01
45	380 - 415	331 678 ...	0,13 - 0,15
	500	326 687 ...	0,20 - 0,22
55	380 - 415	331 679 ...	0,11 - 0,12
	500	0	0
75	380 - 415	331 680 ...	0,08 - 0,09
	500	326 512 ...	0,12 - 0,14
93	380 - 415	331 681 ...	0,14 - 0,15
	500	326 683 ...	0,10 - 0,12
110	380 - 415	331 660 ...	0,05 - 0,06
	500	326 598 ...	0,09 - 0,10

8CT HIGH TEMP 75°C - DIMENSIONS AND WEIGHTS | WW | 316SS



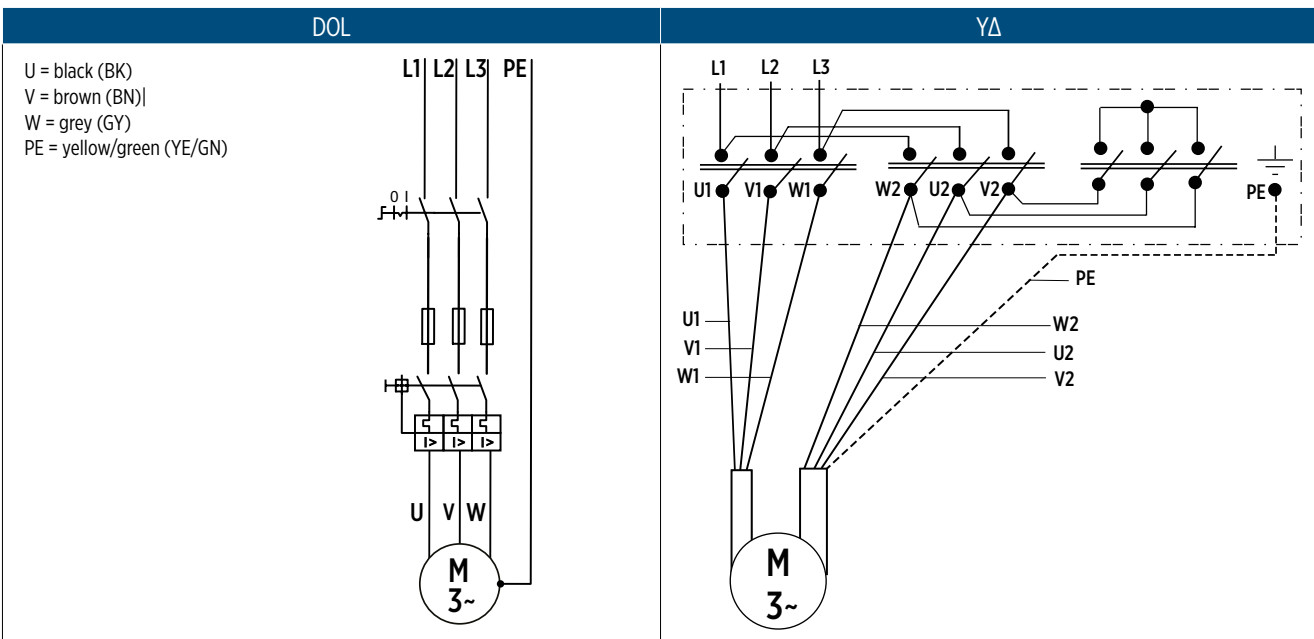
P_N [kW]	length [mm]	shipping weight [kg]	shipping size [mm]
30	1138	182	228 x 430 x 1632
37	1265	207	228 x 430 x 1632
45	1455	252	228 x 447 x 1981
55	1748	318	228 x 447 x 1981
75	1976	382	228 x 447 x 2438
93	2179	421	228 x 447 x 2438
110	2408	473	228 x 447 x 2438

8" ENCAPSULATED HIGH TEMP 75°C MOTOR

8CT HIGH TEMP 75°C - MATERIALS | WW | 316SS

Parts	WW	316SS
Castings	Cast Iron /powder coated	316 SS
Stator Shell	304 SS	316 SS
Stator Ends	Low Carbon Steel	316 SS
Shaft Extensions	17-4 SS	17-4 SS
Fasteners	300 & 400 Series SS	316 SS
Seal Cover	304SS & Sintered Bronze	316 SS
Seal	SiC/SiC	SiC/SiC
Diaphragm Spring	302 SS	316 SS & 25-6 MO SS
Slinger	FKM	FKM
Lead Wire (or Cable)	XLPO	XLPO
Lead Potting	Epoxy	Epoxy
Pipe Plug	316 SS	316 SS
Thrust Bearing	Carbon	Carbon
Other seals	BUNA N	BUNA N

8CT HIGH TEMP 75°C - CONNECTIONS

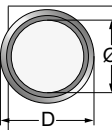


8CT HIGH TEMP 75°C - MOTOR LEADS | WW | 316SS | DOL

P _N [kW]	Jam Nut Material	L [m]	Ø [mm²]	Part numbers
all ratings	316SS	4	1 x (3 x 21 mm²)	10000018731
		8		10000018732

For YD motors please order 2 pieces.

8CT HIGH TEMP 75°C - MOTOR GROUND LEADS | WW | 316SS

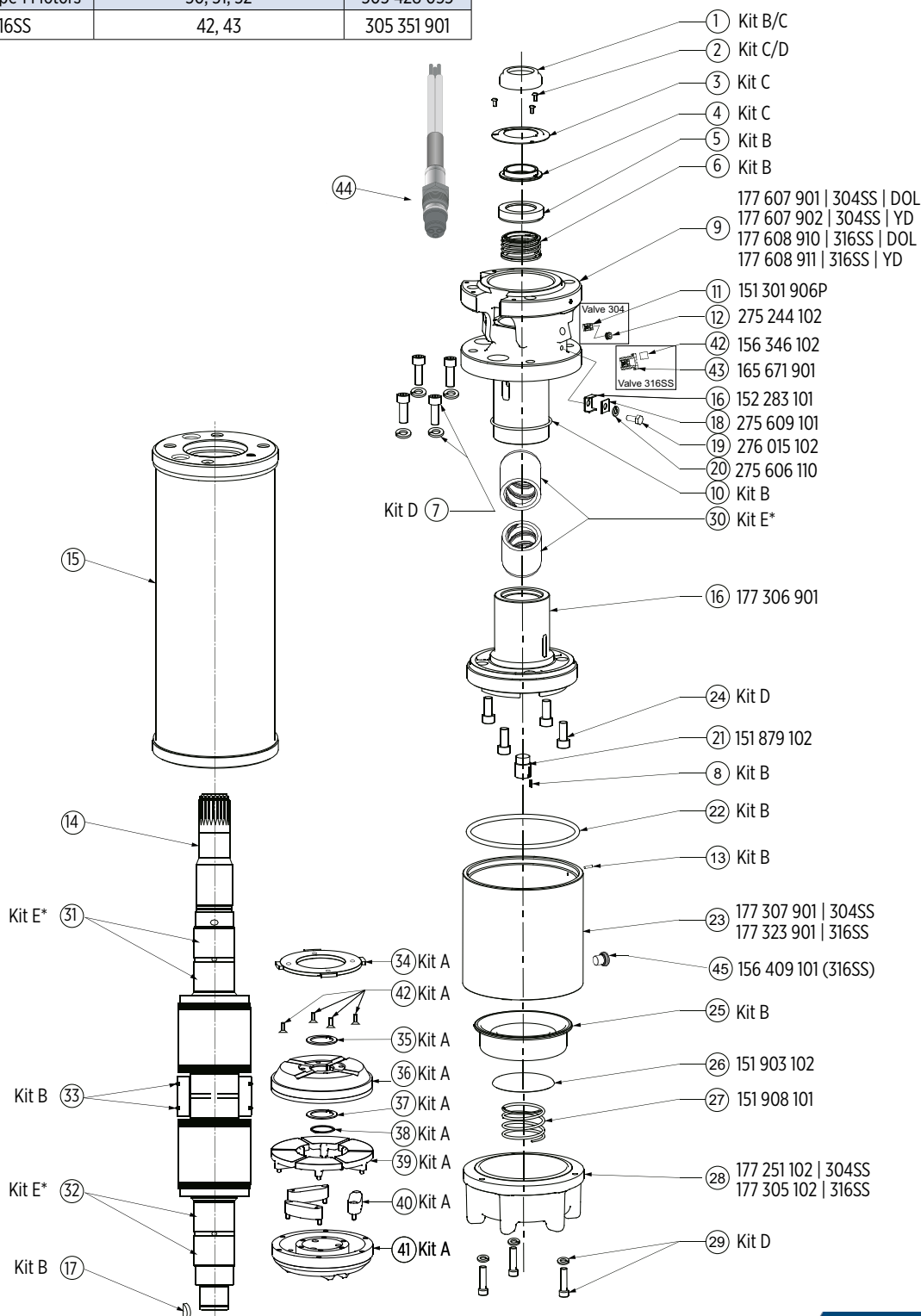
	P _N [kW]	L [m]	Ø [mm²]	D [mm]	part no.
	all ratings	8	1G25 mm²	13	308 053 080

8" ENCAPSULATED HIGH TEMP 75°C MOTOR

8CT HIGH TEMP 75°C - MOTOR SPARE PARTS - KITS | WW | 316SS

Kit	description	included positions	part no.
Kit A	Thrust Bearing	34, 35, 36, 37, 38, 39, 40, 41, 42	305 428 020
Kit B	Seal Kit	1, 5, 6, 8, 10, 13, 22, 25, 33	308 018 435
Kit C1	Slinger Kit WW	1, 2, 3, 4	308 018 436
Kit C2	Slinger kit 316SS	1, 2, 3, 4	308 018 437
Kit D	Screw Kit WW/316SS	2, 7, 24, 29	308 659 150
Kit E*	Radial Bearing Type 1 Motors	30, 31, 32	305 428 055
Kit F	Valve Kit 316SS	42, 43	305 351 901

*parts are semi-finished



8" ENCAPSULATED HIGH TEMP 75°C MOTOR

8CT HIGH TEMP 75°C - STATOR AND ROTOR | 316SS | WW | DOL

P _N [kW]	P _N [HP]	U _N [V] / f [Hz]	motor model no. WW	motor model no. 316SS	model no. rotor
30	40	380-415 / 50	2791009004X	2791009204X	575 122 919
		460 / 60			
		380 / 60	2791609004X	2791609204X	
37	50	380-415 / 50	2791019004X	2791019204X	575 122 920
		460 / 60			
		380 / 60	2791619004X	2791619204X	
45	60	380-415 / 50	2791029004X	2791029204X	575 122 921
		460 / 60			
		380 / 60	2791629004X	2791629204X	
55	75	380-415 / 50	2791039004X	2791039204X	575 122 922
		460 / 60			
		380 / 60	2791639004X	2791639204X	
75	100	380-415 / 50	2791049004X	2791049204X	575 122 923
		460 / 60			
		380 / 60	2791649004X	2791649204X	
93	125	380-415 / 50	2791059004X	2791059204X	575 122 924
		460 / 60			
		380 / 60	2791659004X	2791659204X	
110	150	380-415 / 50	2791069004X	2791069204X	575 122 918
		460 / 60			
		380 / 60	2791669004X	2791669204X	

8CT HIGH TEMP 75°C - STATOR AND ROTOR | 316SS | WW | YΔ

P _N [kW]	P _N [HP]	U _N [V] / f [Hz]	motor model no. WW	motor model no. 316SS	model no. rotor
30	34,5	380-415 / 50	2791209004X	2791209204X	575 122 919
		460 / 60			
		380 / 60	2791809004X	2791809204X	
37	42,5	380-415 / 50	2791219004X	2791219204X	575 122 920
		460 / 60			
		380 / 60	2791819004X	2791819204X	
45	51,7	380-415 / 50	2791229004X	2791229204X	575 122 921
		460 / 60			
		380 / 60	2791829004X	2791829204X	
55	64	380-415 / 50	2791239004X	2791239204X	575 122 922
		460 / 60			
		380 / 60	2791839004X	2791839204X	
75	86,2	380-415 / 50	2791249004X	2791249204X	575 122 923
		460 / 60			
		380 / 60	2791849004X	2791849204X	
93	106,9	380-415 / 50	2791259004X	2791259204X	575 122 924
		460 / 60			
		380 / 60	2791859004X	2791859204X	
110	126,5	380-415 / 50	2791269004X	2791269204X	575 122 918
		460 / 60			
		380 / 60	2791869004X	2791869204X	

spare part stators on request