

CAUTION

Motor must be phased to ensure proper rotation

PHASING THE MOTOR

- 3 Phase motors are capable of running in both forward and reverse, so the pump can pump water both directions.
- If wired incorrectly, the pump will run in the reverse direction, pumping little water.

Continuously running the pump in reverse will cause premature motor failure that <u>is not</u> covered by warranty.

- When wired correctly, there will be a measurable increase in the amount of water pumped.
- Swapping any two red, yellow, or black wire connections will reverse the direction the motor is running.
- When in doubt, reverse any two red, yellow, or black wire connections and compare the water flow to determine the correct wiring configuration.



6" FRANKLIN ELECTRIC 3 PHASE SUBMERSIBLE MOTOR SPECIFICATIONS & TESTING PARAMETERS

HORSEPOWER MOTOR DIA. MAKE & RPM	VOLTS	PHASE	Hz	SERVICE FACTOR	FULL LOAD AMPS	MAX LOAD AMPS	LINE to LINE RESISTANCE IN OHMS	LOCKED ROTOR AMPS
5 HP 6" franklin 3450 RPM	208V	3 PH	60 Hz	1.15	17.5	20.0	0.77 - 0.93	99.0
	230V				15.0	17.6	1.0 - 1.2	86.0
	460V				7.5	8.8	3.9 - 4.8	52.0
	575V				6.0	7.1	6.3 - 7.7	43.0
7.5 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	25.1	28.3	0.43 - 0.53	150.0
	230V				21.8	24.6	0.64 - 0.78	130.0
	460V				10.9	12.3	2.4 - 2.9	65.0
	575V				8.7	9.8	3.7 - 4.6	52.0
10 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	32.7	37.0	0.37 - 0.45	198.0
	230V				28.4	32.2	0.47 - 0.57	172.0
	460V				14.2	16.1	1.9 - 2.4	86.0
	575V				11.4	12.9	3.0 - 3.7	69.0
15 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	47.8	54.4	0.24 - 0.29	306.0
	230V				41.6	47.4	0.28 - 0.35	266.0
	460V				20.8	23.7	1.1 - 1.4	133.0
	575V				16.6	19.0	1.8 - 2.3	106.0



IMPORTANT

DO NOT test Winding resistance with the motor connected to the Control Box or Variable Frequency Drive (VFD).

Test the windings by using a Multimeter or Ohmmeter to measure Ohms (Resistance) between Yellow or White to Red, Yellow or White to Black, and Red to Black.



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Resistance measured between any combination of wires should be a similar value.

A bound pump will cause locked rotor amps and over-current fault/shut down. Check for obstructions in the pump and/or the amps on the Black wire at start-up.

Carry Pumps, Inc. · 1360 Prospect Ave. · Caro, MI 48723 www.carrypumps.com · 800-492-2779 · controls@carrypumps.com



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HORSEPOWER MOTOR DIA. MAKE & RPM	VOLTS	PHASE	Hz	SERVICE FACTOR	FULL LOAD AMPS	MAX LOAD AMPS	LINE to LINE RESISTANCE IN OHMS	LOCKED ROTOR AMPS
20 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	61.9	69.7	0.16 - 0.20	416.0
	230V				53.8	60.6	0.22 - 0.26	362.0
	460V				26.9	30.3	0.8 - 1.0	181.0
	575V				21.5	24.2	1.3 - 1.6	145.0
25 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	77.1	86.3	0.12 - 0.15	552.0
	230V				67.0	76.4	0.15 - 0.19	480.0
	460V				33.5	38.2	0.63 - 0.77	240.0
	575V				26.8	30.0	1.0 - 1.3	192.0
30 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	90.9	104.0	0.09 - 0.11	653.0
	230V				79.0	90.4	0.14 - 0.17	568.0
	460V				39.5	45.2	0.52 - 0.64	284.0
	575V				31.6	36.2	0.78 - 0.95	227.0
40 HP 6" FRANKLIN 3450 RPM	208V	3 PH	60 Hz	1.15	NOT AVAILABLE			
	230V				NOT AVAILABLE			
	460V				54.9	61.6	0.34 - 0.42	397.0
	575V				42.8	49.6	0.52 - 0.64	318.0



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6" FRANKLIN ELECTRIC SAND FIGHTER® SUBMERSIBLE MOTORS & LEADS



MOTOR FEATURES

- Exclusive Sand Fighter[®] Sealing System for sand and other abrasives
- Full 3450 RPM, 60 Hz design point
- Maximum temperature winding wire NEMA class 200
- Anti-track, self-healing resin system
- Hermetically-sealed windings
- StatorShield[™] resin system
- High-capacity, Kingsbury-type, water-lubricated thrust bearing
- Pressure-equalizing diaphragm
- Factory-filled with Franklin's non-toxic water soluble solution
- Removeable Water-Bloc[™] technology lead
- Over-molded lead for cable resilience
- Stainless steel splined shaft
- External sand slinger on shaft
- Mechanical face seal at shaft exit
- Copper bar rotor



SEOOW MOTOR LEAD

- S = Service
 - E = Thermoplastic Elastomer
 - OO = Oil Resistant Insulation & Oil Resistant Jacket
 - W = Water and Weather Resistance
- High-quality flexible cord with plastic characteristics and rubber jacketed material
- UL and CSA Certified
- Rated to: 600 volts, Temperature range: -58°F to 220°F (-50°C to 105° C), Wire Size: 14 to 4 AWG. Conductors: 4
- Standard lead length is 35 feet, additional length may be added and is priced per foot

COMPONENT	SAND FIGHTER®	CORROSION RESISTANT (316SS)		
UL Insulation Class Rating	Class F	Class F		
Motor Ambient Temp. Rating	86°F / 30°C	86°F / 30°C		
Stator Resin Type	Standard (5-40 hp) / Hi-Temp (50-60 hp)	Standard (5-40 hp) / Hi-Temp (50-60 hp)		
Motor Fill Solution (Water Soluble/Non-Toxic)	FES91	FES91		
Top End Bell & Thrust Housing	Epoxy-coated gray iron	316 SS		
On Winding SubTrol [™] heat sensor	No (5-40 hp) / Yes (50-60 hp)	Yes		
Stator Shell	300 series SS	316 SS		
Stator Ends	Carbon steel	316 SS		
Shaft Extension	300 series SS (5-30 hp) / 17-4 SS (40-60 hp)	17-4 SS		
Bushing	Bronze	316 SS		
Bushing Retainer	300 series SS	316 SS		
Shaft Mechanical Seal	Carbon ceramic (5-40 hp) / Sand Fighter $^{\circledast}$ Seal System (50-60 hp)	Sand Fighter [®]		
Mechanical Seal / Rubber Components	Nitrile (5-40 hp) / FKM (50-60 hp)	Nitrile (5-40 hp) / FKM (50-60 hp)		
Diaphragm Material	Nitrile (5-40 hp) / FKM (50-60 hp)	Nitrile (5-40 hp) / FKM (50-60 hp)		
Diaphragm Plate	300 series SS	316 SS		
Diaphragm Spring	300 series SS	25-6 MO SS		
Shaft Slinger	Nitrile (5-40 hp) / FKM (50-60 hp)	Nitrile		
Lead Wire	Over molded	Overmolded		
Lead Potting	Ероху	Ероху		
Lead Jam Nut	Brass	316 SS		
Thrust Bearing Rating (86°F / 30°C)	300 lbs (5-30 hp) / 6000 lbs (40-60 hp)	300 lbs (5-30 hp) / 6000 lbs (40-60 hp)		
Method of Connecting System Ground to Motor	Ground wire in power lead connector	Ground wire in power lead connector		

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