

# 4, 6, 8 & 10 INCH SUBMERSIBLE MOTORS

60Hz BOOKLET



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## 4 INCH ENCAPSULATED PREMIUM MOTOR

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### PRODUCT APPLICATION AND PRODUCT SPECIFICATION

#### GENERAL DATA

These 4 Inch Encapsulated motors, manufactured in ISO 9001:2015 certified facilities

#### Applications

This motor is built for dependable operation in 4" diameter or larger water wells. It is fitted with water lubricated radial and thrust bearings for a maintenance – free operations. The motor is filled with a special fluid, Providing frost protection down to 5°F storage temperature . A special diaphragm ensures pressure compensation inside the motor..

#### Product advantages:

- Hermetically sealed stator , Anti track, self healing stator resin prevents motor burn out.
- High efficiency electrical design (low operation cost, cooler winding temperature).
- Removable water resistance lead connector.
- Motor with sand slinger.
- Cable material in accordance with regulations for drinking water.
- Water lubricated radial and thrust bearing.
- All motors pre-filled and 100% tested.
- Non contaminating, water-filled design.
- Max. storage temperature 5°F to 140°F.

#### Technical Specification

- Power range : 0.5-5 HP – Single phase  
0.5-10 HP – Three phase
- Mounting : 4" NEMA
- Degree of protection : IP68
- Insulation Class : F
- Ambient temperature : 86°F
- Cooling flow : 0.25 ft/sec
- Starts/hr : 20
- Voltage tolerance : +6% / -10%  $U_N$

## 4 INCH ENCAPSULATED PREMIUM MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS																
Material	Stainless Steel 304/316							Rating		0.5 HP - 5.0 HP						
Type	Encapsulated							Thrust Rating		1500 - 6500 N						

### SINGLE PHASE (3 WIRE) MOTOR SPECIFICATION (60 Hz) 3450 RPM

Type	Material Code	Rating				Full Load		Maximum Load		Winding Resistance (Ohms)	Efficiency %		Power Factor %		Locked Rotor Amps	Thrust (lbf)
		HP	kW	Volts	S.F.	Amps	Watts	Amps	Watts	M=MAIN RES S=START RES	S.F.	F.L.	S.F.	F.L.		
4" 2-wire	9000029663	0.50	0.37	115	1.6	10	670	12	960	1.15-1.39	62	56	73	58	64.4	337
	9000027592	0.50	0.37	230	1.6	5	670	6	960	2.74-3.31	62	56	73	58	32.2	337
	9000027581	0.75	0.55	230	1.5	6.8	940	8	1310	2.74-3.31	64	59	74	62	40.7	337
	9000027582	1.00	0.75	230	1.4	8.2	1210	10.4	1600	2.09-2.53	65	62	74	63	48.7	337
	9000028352	1.50	1.10	230	1.3	10.6	1710	13.1	2280	2.09-2.53	64	63	83	76	66.2	337
4 " 3-wire	9000008299	0.5	0.37	230	1.6	Y=3.2 B=3.7 R=2.0	655	Y=4.3 B=4.0 R=2.0	890	M=5.13-6.20 S=7.15-8.65	67	57	90	81	23	337
						Y=4.4 B=5.0 R=3.2		Y=5.7 B=5.2 R=3.1								
						Y=5.6 B=5.7 R=3.4		Y=8.1 B=6.2 R=3.3								
	9000008300	0.75	0.55	230	1.5	Y=10 B=9.9 R=1.3	1620	Y=11.5 B=11.0 R=1.3	2080	M=4.66-5.64 S=4.75-5.75	69	60	92	84	34.2	337
						Y=5.6 B=5.7 R=3.4		Y=8.1 B=6.2 R=3.3								
						Y=10 B=9.9 R=1.3		Y=11.5 B=11.0 R=1.3								
	9000008301	1	0.75	230	1.4	Y=10 B=9.9 R=1.3	1160	Y=11.5 B=11.0 R=1.3	1490	M=4.23-5.12 S=5.00-6.05	70	64	92	86	41.8	337
						Y=10 B=9.9 R=1.3		Y=11.5 B=11.0 R=1.3								
						Y=10 B=9.9 R=1.3		Y=11.5 B=11.0 R=1.3								
	9000008302	1.5	1.1	230	1.3	Y=10 B=9.9 R=1.3	1620	Y=11.5 B=11.0 R=1.3	2080	M=2.07-2.51 S=5.95-7.21	70	69	85	79	51.4	337
						Y=10 B=9.9 R=1.3		Y=11.5 B=11.0 R=1.3								
						Y=10 B=9.9 R=1.3		Y=11.5 B=11.0 R=1.3								
	9000013748	2	1.5	230	1.25	Y=10 B=9.9 R=1.3	2025	Y=13.2 B=11.9 R=2.6	2555	M=1.57-1.90 S=3.80-4.60	73	74	95	94	53.1	674
						Y=10 B=9.9 R=1.3		Y=13.2 B=11.9 R=2.6								
						Y=10 B=9.9 R=1.3		Y=13.2 B=11.9 R=2.6								
	9000013749	3	2.2	230	1.15	Y=14.0 B=11.2 R=6.1	3000	Y=17.0 B=12.6 R=6.0	3400	M=1.10-1.33 S=1.78-2.16	75	75	99	99	83.4	674
						Y=14.0 B=11.2 R=6.1		Y=17.0 B=12.6 R=6.0								
						Y=14.0 B=11.2 R=6.1		Y=17.0 B=12.6 R=6.0								
	9000008331	5	3.7	230	1.15	Y=23.0 B=15.9 R=11	4830	Y=27.5 B=19.1 R=10.8	5500	M=0.68-0.83 S=1.05-1.28	78	77	100	100	129	1461
						Y=23.0 B=15.9 R=11		Y=27.5 B=19.1 R=10.8								
						Y=23.0 B=15.9 R=11		Y=27.5 B=19.1 R=10.8								

1. M: Main winding = yellow to black; S: Start winding = yellow to red

2. Y: Yellow lead = line amps; B: Black lead = main winding amps; R: Red lead = start or auxiliary winding amps

## 4 INCH ENCAPSULATED PREMIUM MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS			
Material	Stainless Steel 304/316	Rating	0.5 HP - 10 HP
Type	Encapsulated	Thrust Rating	1500 - 6500 N

#### THREE PHASE (3 WIRE) MOTOR SPECIFICATION (60 Hz) 3450 RPM

Material Code	Rating				Full Load		Maximum Load		Winding Resistance (Ohms)	Efficiency %		Locked Rotor Amps	Thrust (lbf)
	HP	kW	Volts	S.F.	Amps	Watts	Amps	Watts		SF	FL		
9000008280	0.5	0.37	230	1.6	2.4	585	2.9	860	8.91-10.78	70	64	15.2	337
9000008274			460	1.6	1.2	585	1.5	860	31.00-37.51			7.6	
9000008281	0.75	0.55	230	1.5	3.1	810	3.8	1150	9.15-11.06	73	69	21.4	337
9000008275			460	1.5	1.6	810	1.9	1150	31.00-37.51			10.7	
9000008282	1	0.75	230	1.4	3.9	1070	4.7	1440	5.53-6.68	72	70	26.9	337
9000008276			460	1.4	2	1070	2.4	1440	15.88-19.21			13.5	
9000008283	1.5	1.1	230	1.3	5	1460	5.9	1890	4.62-5.58	76	76	33.2	337
9000008277			460	1.3	2.5	1460	3.1	1890	11.56-13.9			16.6	
9000008284	2	1.5	230	1.25	6.7	1960	8.1	2430	2.95-3.57	76	76	45	337
9000008278			460	1.25	3.4	1960	4.1	2430	8.31-10.05			22.5	
9000013741	3	2.2	230	1.15	9.5	2920	10.9	3360	1.67-2.02	77	77	60.3	674
9000013738			460	1.15	4.8	2920	5.5	3360	4.04-4.88			31	
9000008313	5	3.7	230	1.15	15.9	4800	17.8	5500	1.09-1.32	78	78	102	1461
9000008307			460	1.15	8	4800	8.9	5500	2.33-2.81			53.7	
9000008315	7.5	5.5	230	1.15	23	7150	26.4	8200	0.74-0.89	78	78	152	1461
9000008309			460	1.15	11.5	7150	13.2	8200	2.08-2.52			83.8	
9000008316	10	7.5	230	1.15	31.2	10000	33.9	11400	0.57-0.69	75	75	195	1461
9000008310			460	1.15	15.9	10000	17.30	11400	1.82-2.32			116	

## 4 INCH ENCAPSULATED PREMIUM MOTOR

### MOTOR LENGTH & WEIGHT

SUBMERSIBLE MOTORS			
Material	Stainless Steel 304/316	Rating	0.5 HP - 5.0 HP
Type	Encapsulated	Thrust Rating	1500 - 6500 N

### LENGTH & WEIGHT (3 WIRE) AISI SS 304/316

#### PREMIUM 100 SINGLE PHASE 230V 60Hz

HP	kW	LENGTH (Inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in Inches)
			LBS	KG	
0.5	0.37	9.6	22	10	3.62x3.62x19.68
0.75	0.55	11.57	26	12	3.62x3.62x19.68
1	0.75	11.57	26	12	3.62x3.62x19.68
1.5	1.1	13.46	33	15	3.62x3.62x21.65
2	1.5	15.98	37	17	3.62x3.62x21.65
3	2.2	21.45	53	24	3.62x3.62x31.49
4	3	27.44	68	31	3.62x3.62x31.496
5	3.7	27.44	68	31	3.62x3.62x35.43

#### PREMIUM 100 THREE PHASE 230V 60Hz

HP	kW	LENGTH (Inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in Inches)
			LBS	KG	
0.5	0.37	10.75	24	11	3.62x3.62x19.68
0.75	0.55	10.75	24	11	3.62x3.62x19.68
1	0.75	11.57	26	12	3.62x3.62x19.68
1.5	1.1	13.46	33	15	3.62x3.62x21.65
2	1.5	15.98	37	17	3.62x3.62x21.65
3	2.2	21.45	53	24	3.62x3.62x31.49
5	3.7	22.95	57	26	3.62x3.62x35.43
7.5	5.5	30.47	77	35	3.62x3.62x43.30

#### PREMIUM 100 THREE PHASE 460V 60Hz

HP	kW	LENGTH (Inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in Inches)
			LBS	KG	
0.5	0.37	10.75	24	11	3.62x3.62x19.68
0.75	0.55	10.75	24	11	3.62x3.62x19.68
1	0.75	11.57	26	12	3.62x3.62x19.68
1.5	1.1	13.46	33	15	3.62x3.62x21.65
2	1.5	15.98	37	17	3.62x3.62x21.65
3	2.2	21.45	53	24	3.62x3.62x31.49
5	3.7	22.95	68	31	3.62x3.62x35.43
7.5	5.5	30.472	77	35	3.62x3.62x43.30
10	7.5	32.75	84	38	3.62x3.62x43.30

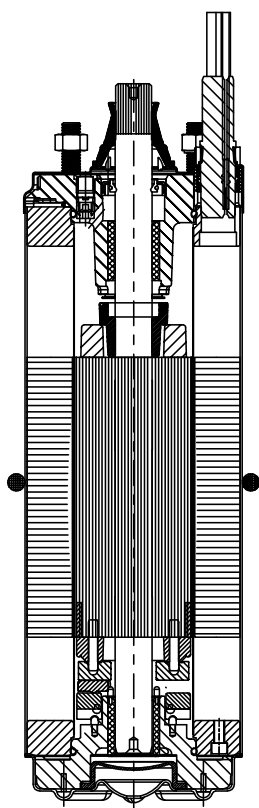
## 4 INCH ENCAPSULATED PREMIUM MOTOR

### MATERIAL OF CONSTRUCTION

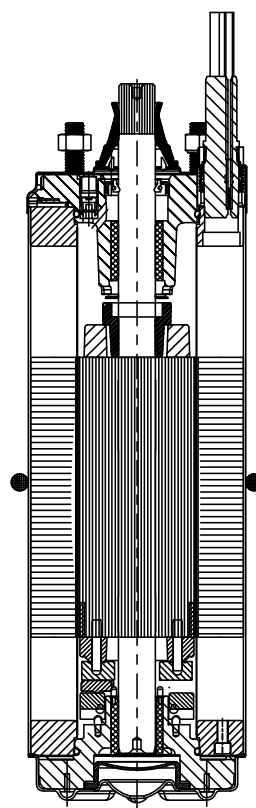
SUBMERSIBLE MOTORS			
Material	Stainless Steel 304/316	Rating	0.5 HP - 10 HP
Type	Encapsulated	Thrust Rating	1500 - 6500 N

#### PREMIUM (0.5 TO 2 HP)

SS AISI 304



SS AISI 316



PART	MATERIAL
SAND SLINGER	NBR
SEAL COVER	PPS
OIL SEAL	EPDM+ SS AISI 304
TOP END BELL COVER	SS AISI-304
TOP END BELL	CAST IRON - POWDER COATED
BUSH	CARBON WITH RESIGN IMPREGATED
ROTOR SHAFT	SS (STAINLESS STEEL SPECIAL GRADE)
ROTOR SUB ASSLY	N/A
TOP FLANGE	MS
STATOR PIPE	SS AISI-304
STATOR SUB ASSLY	N/A
THRUST DISC	ANTIMONY CARBON
THRUST PAD	SS AISI-420
LEVELING DISC	MS+ HARD CHROM
BOTTOM END BELL	CAST IRON - POWDER COATED
DIAPHRAGM	EPDM
BOTTOM FLANGE	MS
BOTTOM END BELL COVER	SS AISI-304

PART	MATERIAL
SAND SLINGER	NBR
SEAL COVER	PPS
OIL SEAL	EPDM+ SS AISI 304
TOP END BELL COVER	SS AISI-316
TOP END BELL	CAST IRON - POWDER COATED
BUSH	CARBON WITH RESIGN IMPREGATED
ROTOR SHAFT	SS (STAINLESS STEEL SPECIAL GRADE)
ROTOR SUB ASSLY	N/A
TOP FLANGE	MS
STATOR PIPE	SS AISI-316
STATOR SUB ASSLY	N/A
THRUST DISC	ANTIMONY CARBON
THRUST PAD	SS AISI-420
LEVELING DISC	MS+ HARD CHROM
BOTTOM END BELL	CAST IRON - POWDER COATED
DIAPHRAGM	EPDM
BOTTOM FLANGE	MS
BOTTOM END BELL COVER	SS AISI-316

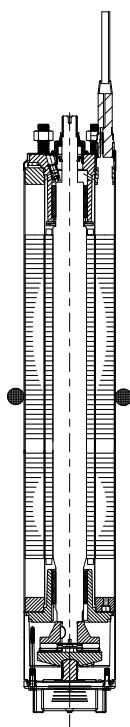
## 4 INCH ENCAPSULATED PREMIUM MOTOR

### MATERIAL OF CONSTRUCTION

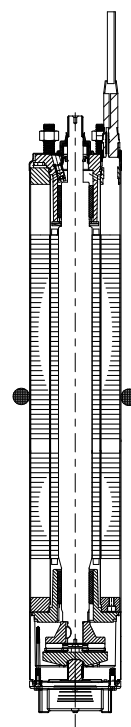
SUBMERSIBLE MOTORS			
Material	Stainless Steel 304/316	Rating	0.5 HP - 10 HP
Type	Encapsulated	Thrust Rating	1500 - 6500 N

#### PREMIUM (3 TO 10 HP)

SS AISI 304



SS AISI 316



PART	MATERIAL
SAND SLINGER	NBR
SEAL COVER	PPS
OIL SEAL	EPDM+ SS AISI 304
TOP END BELL COVER	SS AISI-304
TOP END BELL	CAST IRON - POWDER COATED
BUSH	CARBON WITH RESIN IMPREGATED
ROTOR SHAFT	SS (STAINLESS STEEL SPECIAL GRADE)
ROTOR SUB ASSLY	N/A
TOP FLANGE	MS
STATOR PIPE	SS AISI-304
STATOR SUB ASSLY	N/A
THRUST HOUSING	CAST IRON - POWDER COATED
THRUST PIPE	SS AISI-304
THRUST DISC	CAST IRON - POWDER COATED
CARBON PLATE	REGIN IMPREGNATED
LEVELING DISC	SS AISI 410L
ADJUSTING STUD	DUPLEX
BOTTOM END BELL	CAST IRON - POWDER COATED
DIAPHRAGM	EPDM
BOTTOM FLANGE	MS
BASE	SS AISI-304

PART	MATERIAL
SAND SLINGER	NBR
SEAL COVER	PPS
OIL SEAL	EPDM+ SS AISI 304
TOP END BELL COVER	SS AISI-316
TOP END BELL	CAST IRON - POWDER COATED
BUSH	CARBON WITH RESIN IMPREGATED
ROTOR SHAFT	SS (STAINLESS STEEL SPECIAL GRADE)
ROTOR SUB ASSLY	N/A
TOP FLANGE	MS
STATOR PIPE	SS AISI-316
STATOR SUB ASSLY	N/A
THRUST HOUSING	CAST IRON - POWDER COATED
THRUST HOUSING	SS AISI-304
THRUST DISC	CAST IRON - POWDER COATED
CARBON PLATE	REGIN IMPREGNATED
LEVELING DISC	SS AISI 410L
ADJUSTING STUD	DUPLEX
BOTTOM END BELL	CAST IRON - POWDER COATED
DIAPHRAGM	EPDM
BOTTOM FLANGE	MS
BASE	SS AISI-316



## 6 INCH MTSML MOTOR

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## 6 INCH MTSML MOTOR

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### PRODUCT APPLICATION AND PRODUCT SPECIFICATION

#### GENERAL DATA

These 150 mm rewindable motors, manufactured in ISO 9001 : 2015 & ISO 14001 : 2015 certified facilities.

#### Applications

This motor is built for dependable operation in 150 mm diameter or larger water wells. It is fitted with water lubricated radial and thrust bearings for a maintenance – free operations. The motor is filled with a special fluid, Providing frost protection down to -15°C storage temperature . A special diaphragm ensures pressure compensation inside the motor.

#### Product advantages

- High efficiency electrical design (low operation cost, cooler winding temperature).
- Motor with oil seal and sand slinger.
- Cable material in accordance with regulations for drinking water.
- Water lubricated radial and thrust bearing.
- All motors pre-filled and 100% tested.
- Non contaminating, water-filled design.
- Max. storage temperature -15°C to +60°C.

#### Technical specification

Power range	: 5 - 15 HP / 3.7 - 11 kW
Flange	: 150 mm NEMA
Degree of protection	: IP68
Ambient temperature	: 30°C
Cooling flow	: 5 - 15 HP / 3.7 - 11 kW = 0.2 m/s
Starts/hr	: 20
Voltage tolerance	: +6% / -10% $U_N$

Considering continuous product development the information/performance/specifications and illustrations disseminated in this catalogue are subject to change without notice.

## 6 INCH MTSML MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS			
Material	Cl, Stainless Steel 304/316	Rating	5 HP - 15 HP
Type	Rewindable NG SML	Thrust Rating	15500 - 27500 N

Material Code	Rating				Full Load		Maximum Load		Winding Resistance (Ohms)	Efficiency %		Power Factor %		Locked Rotor Amps	Thrust (lbf)
	HP	kW	Volts	S.F.	Amps	Watts	Amps	Watts	M=MAIN RES S=START RES	S.F.	F.L.	S.F.	F.L.		
9000017886	5	3.7	230	1.15	Y=23 B=14.3 R=10.8	4910	Y=27.5 B=17.4 R=10.5	5570	M=0.65-0.78 S=1.31-1.58	77	76	100	99	99	3484
9000017887	7.5	5.5		1.15	Y=36.5 B=34.4 R=5.5	7300	Y=42.1 B=40.5 R=5.4	8800	M=0.47-0.57 S=1.05-1.28	73	74	91	90	165	3484
9000017888	10	7.5		1.15	Y=44 B=39.5 R=9.3	9800	Y=51 B=47.5 R=8.9	11300	M=0.26-0.32 S=0.80-0.97	76	77	96	96	204	3484
9000017579	15	11		1.15	Y=62.0 B=52.0 R=17.5	13900	Y=75.0 B=62.5 R=16.9	16200	M=0.21-0.25 S=0.55-0.66	79	80	97	98	303	3484

1. M: Main winding = yellow to black; S: Start winding = yellow to red

2. Y: Yellow lead = line amps; B: Black lead = main winding amps; R: Red lead = start or auxiliary winding amps

### Motor Lengths & Weights 50Hz/60Hz

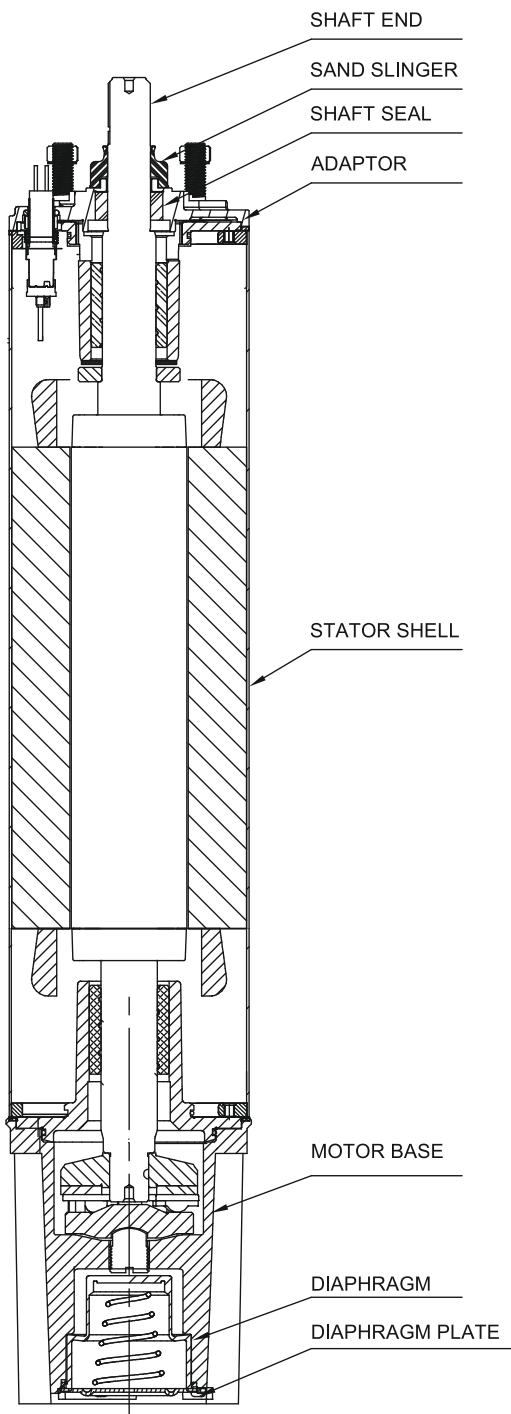
[HP]	[kW]	L [MM]	Motor Weight (Net) KG
5	4	621	39
7.5	5.5	621	40
10	7.5	670	45
15	11	725	50
20	15	775	55
25	18.5	825/878	60

## 6 INCH MTSML MOTOR

### MATERIAL OF CONSTRUCTION

SUBMERSIBLE MOTORS			
Material	CI, Stainless Steel 304/316	Rating	5 HP - 15 HP
Type	Rewindable NG SML	Thrust Rating	15500 - 27500 N

### 6" Rewindable MOC



#### List of Material

PART	MATERIAL
ADAPTOR	AISI SS 304
STATOR SHELL	AISI SS 304
SEALS	NBR
SAND SLINGER	NBR
SHAFT END	DUPLEX
SHAFT SEAL	SIC
MOTOR BASE	AISI SS 304
DIAPHRAGM	EPDM
DIAPHRAGM PLATE	AISI SS 304
LEAD	EPR

## 6 INCH REWINDABLE MTSF MOTOR

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## GENERAL DATA

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## 6 INCH REWINDABLE MTSF MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS			
Material	CI, Stainless Steel 304/316	Rating	5 HP - 50 HP
Type	Rewindable MTSFC / MTSFN	Thrust Rating	15500 - 27500 N

### THREE PHASE MOTOR SPECIFICATION (60 Hz) 3450 RPM & SF-1.15

Three phase 6 " Mtsf motor specification (60 Hz) 3450 rpm													Thrust (lbf)
Material Code (CI)	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	
	HP	kW	Volts	S.F	Amps	Watts	Amps	Watts		S.F	F.L		
9000027941	5	3.7	230	1.15	15	4700	17.6	5400	0.76-0.92	79	79	86	3484
9000027929			460	1.15	7.5	4700	8.8	5400	3.45-4.17			43	
9000027942	7.5	5.5	230	1.15	21.8	7000	24.6	8000	0.58-0.70	80	80	130	3484
9000027930			460	1.15	10.9	7000	12.3	8000	2.89-3.50			65	
9000027943	10	7.5	230	1.15	28.4	9400	32.2	10800	0.47-0.57	79	79	172	3484
9000027931			460	1.15	14.2	9400	16.1	10800	2.28-2.76			86	
9000027945	15	11	230	1.15	41.6	13700	47.4	15800	0.29-0.35	81	81	266	3484
9000027933			460	1.15	20.8	13700	23.7	15800	1.38-1.67			133	
9000027947	20	15.0	230	1.15	53.8	18100	60.6	20900	0.23-0.28	82	82	362	3484
9000027935			460	1.15	26.9	18100	30.3	20900	0.84-1.01			181	
9000027948	25	19	230	1.15	67	22500	76.4	25700	0.16-0.19	83	83	480	6182
9000027936			460	1.15	33.5	22500	38.2	25700	0.70-0.85			240	
9000027949	30	22	230	1.15	79	26900	90.4	31100	0.15-0.19	83	83	568	6182
9000027937			460	1.15	39.5	26900	45.2	31100	0.52-0.63			284	
9000027939	40	30	460	1.15	54.9	35600	62.9	41400	0.35-0.43	83	83	302	6182
9000027940	50	37	460	1.15	68.1	45100	78.1	52200	0.29-0.35	82	83	414	6182

Three phase 6 " Mtsf motor specification (60 Hz) 3450 rpm													Thrust (lbf)
Material Code (CI)	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	
	HP	kW	Volts	S.F	Amps	Watts	Amps	Watts		S.F	F.L		
9000023477	60	45	400	1.15	74	48913	85.5	56250	0.198-0.242	92	92	NA	10116

## 6 INCH REWINDABLE MTSF MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS			
Material	CI, Stainless Steel 304/316	Rating	5 HP - 50 HP
Type	Rewindable MTSFC / MTSFN	Thrust Rating	15500 - 27500 N

### THREE PHASE MOTOR SPECIFICATION (60 Hz) 3450 RPM & SF-1.15

Material Code (SS - 304)	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	Thrust (lbf)
	HP	kW	Volts	S.F	Amps	Watts	Amps	Watts		S.F	F.L		
9000026831	7.5	5.5	460	1.15	10.9	7000	12.3	8000	2.89-3.50	80	80	65	3484
9000026832	10	7.5	460	1.15	14.2	9400	16.1	10800	2.28-2.76	79	79	86	3484
9000026834	15	11	460	1.15	20.8	13700	23.7	15800	1.38-1.67	81	81	133	3484
9000026836	20	15	460	1.15	26.9	18100	30.3	20900	0.84-1.01	82	82	181	3484
9000026837	25	19	460	1.15	33.5	22500	38.2	25700	0.70-0.85	83	83	240	6182
9000026838	30	22	460	1.15	39.5	26900	45.2	31100	0.52-0.63	83	83	284	6182
9000026840	40	30	460	1.15	54.9	35600	62.9	41400	0.35-0.43	83	83	302	6182
9000029680	50	37	460	1.15	68.1	45100	78.1	52200	0.29-0.35	82	83	414	6182

Material Code (SS - 316) PE2PA WINDING WIRE	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	Thrust (lbf)
	HP	kW	Volts	S.F	Amps	Watts	Amps	Watts		S.F	F.L		
9000027327	7.5	5.5	460	1.15	10.9	7000	12.3	8000	2.89-3.50	80	80	65	3484
9000027328	10	7.5	460	1.15	14.2	9400	16.1	10800	2.28-2.76	79	79	86	3484
9000027329	15	11	460	1.15	20.8	13700	23.7	15800	1.38-1.67	81	81	133	3484
9000027331	20	15	460	1.15	26.9	18100	30.3	20900	0.84-1.01	82	82	181	3484
9000027332	25	19	460	1.15	33.5	22500	38.2	25700	0.70-0.85	83	83	240	6182
9000027333	30	22	460	1.15	39.5	26900	45.2	31100	0.52-0.63	83	83	284	6182
9000027335	40	30	460	1.15	54.9	35600	62.9	41400	0.35-0.43	83	83	302	6182
—	50	37	460	1.15	68.1	45100	78.1	52200	0.29-0.35	82	83	414	6182

1. M: Main winding = yellow to black; S: Start winding = yellow to red
2. Y: Yellow lead = line amps; B: Black lead = main winding amps; R: Red lead = start or auxiliary winding amps



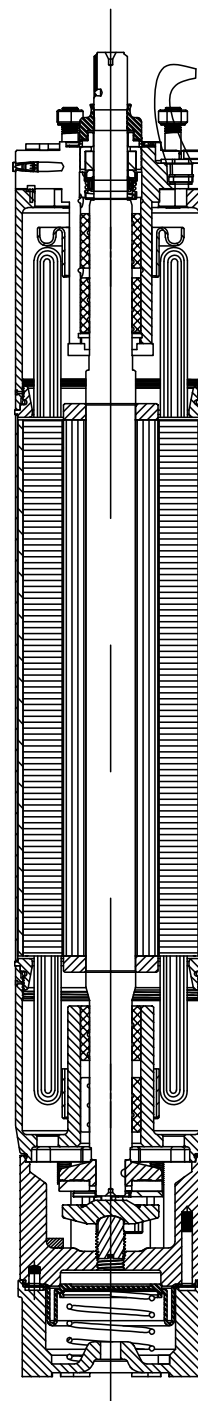
## 6 INCH REWINDABLE MTSF MOTOR

### MATERIAL OF CONSTRUCTION

SUBMERSIBLE MOTORS			
Material	CI, Stainless Steel 304/316	Rating	5 HP - 50 HP
Type	Rewindable MTSFC / MTSFN	Thrust Rating	15500 - 27500 N

### MTSF 150 (5 TO 50 HP)

PART	MATERIAL DIN/AISI	
	CAST IRON	AISI-SS 304
SAND SLINGER	NBR	NBR
DUST COVER	AISI SS 304	AISI SS 304
ADAPTOR	CAST IRON POWDER COATED	AISI-SS 304
STATOR SHELL	AISI-SS 304	AISI-SS 304
SHAFT SEAL	SIC	SIC
SHAFT EXTENTION	DUPLEX(EN 1.4362)	DUPLEX(EN 1.4362)
DIAPHRAGM	EPDM	EPDM
DIAPHRAGM COVER	AISI SS 304	AISI SS 304
THRUST BEARING HOUSING	CAST IRON POWDER COATED	AISI-SS 304
LEAD	EPR	EPR



## 6 INCH REWINDABLE MTSF MOTOR

### MOTOR LENGTH & WEIGHT

SUBMERSIBLE MOTORS			
Material	CI, Stainless Steel 304/316	Rating	5 HP - 50 HP
Type	Rewindable MTSFC / MTSFN	Thrust Rating	15500 - 27500 N

### MTSF -150 THREE PHASE 230V/460V 60Hz DIM & WEIGHT CHART

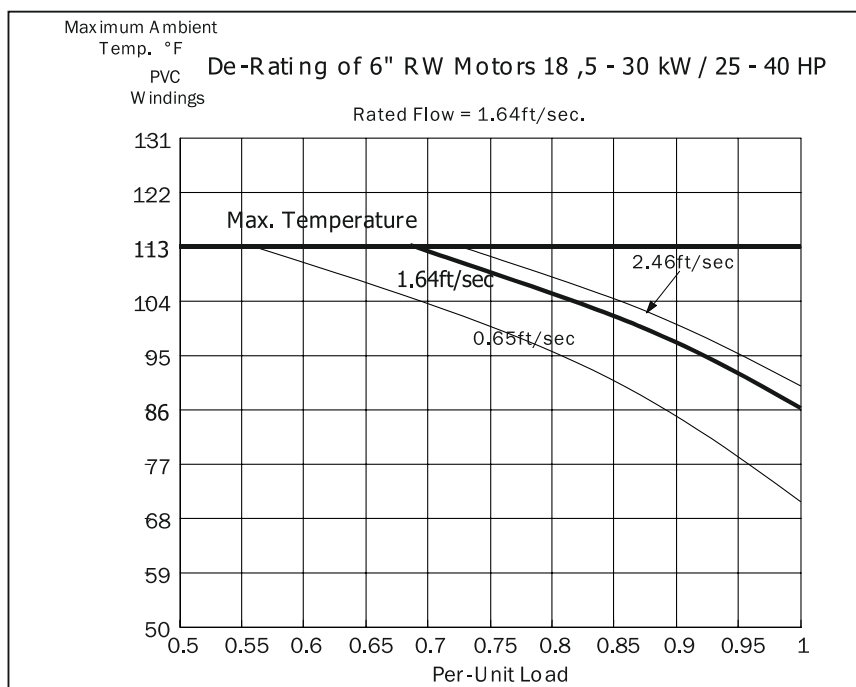
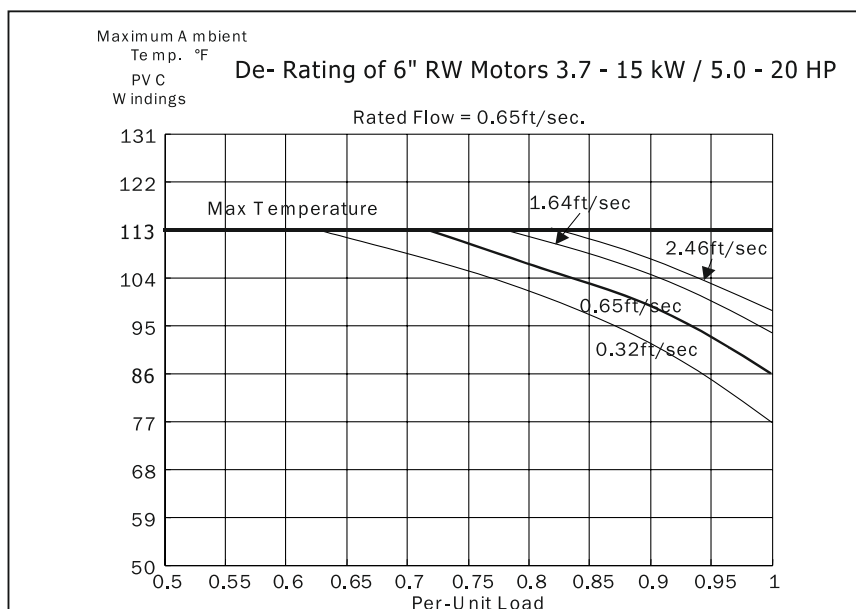
HP	kW	LENGTH (Inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in Inches)
			LBS	KG	
5.0	3.7	27.52	112	51	39.37x6.5x6.5
7.5	5.5	27.52	112	51	39.37x6.5x6.5
10	7.5	28.31	119	54	39.37x6.5x6.5
15	11	30.67	130	59	44.49x6.5x6.5
20	15	34.41	154	70	49.21x6.5x6.5
25	18.5	36.18	161	73	49.21x6.5x6.5
30	22	39.72	180	82	53.15x6.5x6.5
40	30	47.80	236	107	53.15x6.5x6.5
50	37	50.94	254	115	55.91x6.5x6.5

## 6 INCH REWINDABLE MTSF MOTOR

### DE-RATING CURVES

SUBMERSIBLE MOTORS			
Material	CI, Stainless Steel 304/316	Rating	5 HP - 50 HP
Type	Rewindable MTSFC / MTSFN	Thrust Rating	15500 - 27500 N

#### 6" REWINDABLE MOTORS DE- RATING CURVES



## 8 INCH REWINDABLE MTSF MOTOR

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## 8 INCH REWINDABLE MTSF MOTOR

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### PRODUCT APPLICATION AND PRODUCT SPECIFICATION

#### GENERAL DATA

These 8" Rewindable motors, manufactured in ISO 9001:2015 certified facilities

#### Applications

This motor is built for dependable operation in 8" diameter or larger water wells. It is fitted with water lubricated radial and thrust bearings for a maintenance – free operations. The motor is filled with a special fluid, Providing frost protection down to 5°F storage temperature . A special diaphragm ensures pressure compensation inside the motor.

#### Product advantages:

- High efficiency electrical design (low operation cost, cooler winding temperature).
- Design for retrofittable PT100 sensor.
- Motor With SiC Mechanical seal and sand slinger.
- Cable material in accordance with regulations for drinking water.
- Water lubricated radial and thrust bearing.
- All motors pre-filled and 100% tested.
- Non contaminating, water-filled design.
- Max. storage temperature 5°F to 140°F.

#### Technical Specification

- Power range : 40-125 HP
- Mounting : 8" NEMA
- Degree of protection : IP68
- Ambient temperature : 86°F
- Cooling flow : 40-70 HP = 0.66 ft/sec
- : 75-125 HP = 1.64 ft/sec
- Starts/hr : 10
- Voltage tolerance : +6% / -10%  $U_N$

## 8 INCH REWINDABLE MTSF MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	40 HP -125 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

### THREE PHASE 8 " MTSF MOTOR SPECIFICATION (60 HZ) 3450 RPM

Material Code (SS 304) PE2PA WINDING WIRE	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	Thrust (lbf)
	HP	kW	Volts	S.F	Amps	Watts	Amps	Watts		S.F	F.L		
9000025962	40	30	460	1.15	53	35000	60	40000	0.29-0.35	86	86	396	10116
9000025963	50	37	460	1.15	64	43000	73	49000	0.29-0.35	87	87	542	10116
9000027720	60	45	460	1.15	76	52000	86	60000	0.23-0.28	88	87	658	10116
9000024446	75	55	460	1.15	94	64000	107	73500	0.16-0.19	88	88	864	10116
9000024447	100	75	460	1.15	132	85000	148	97500	0.109-0.134	89	89	1211	10116
9000024448	125	93	460	1.15	167	109000	188	125000	0.10-0.13	87	86	1318	10116

### THREE PHASE 8 " MTSF MOTOR WITH 6" FLANGE SPECIFICATION (60 HZ) 3450 RPM

Material Code (ss 304)	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	Thrust (lbf)
	HP	kW	Volts	S.F	Amps	Watts	Amps	Watts		S.F	F.L		
9000013523	30	22	460	1.15	40.1	22581	46.1	29416	0.39-0.47	86	86	296	10116
9000013524	40	30	460	1.15	53	35000	60	40000	0.29-0.35	86	86	396	10116
9000013525	50	37	460	1.15	64	43000	73	49000	0.29-0.35	87	87	542	10116
9000024438	60	45	460	1.15	76	52000	86	60000	0.23-0.28	88	87	658	10116

## 8 INCH REWINDABLE MTSF MOTOR

### MOTOR LENGTH & WEIGHT

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	40 HP -125 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

### MTSF -200 THREE PHASE 460V 60Hz DIM & WEIGHT CHART

HP	kW	LENGTH (Inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in Inches)
			LBS	KG	
40	30	44.88	362	164	61.02x7.87x11.42
50	37	44.88	362	164	61.02x7.87x11.42
60	45	48.43	417	189	61.02x7.87x11.42
75	55	52.76	448	203	64.96x7.87x11.42
100	75	61.42	644	292	78.74x7.87x11.42
125	93	68.50	787	357	82.68x7.87x11.42

## 8 INCH REWINDABLE MTSF MOTOR

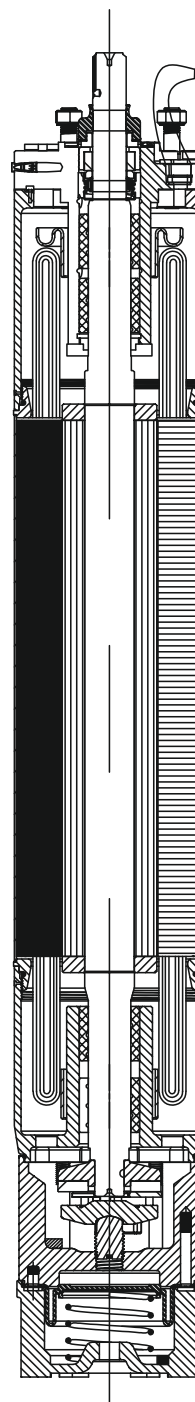
### MATERIAL OF CONSTRUCTION

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	40 HP -125 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

### MTSF 200 (40 TO 125 HP)

#### Material of Construction

Part	Material DIN/AISI	
	SS 304	SS 316
Sator shell	SS AISI 304	SS AISI 316
End bell	Cast Iron / Power Coated	SS AISI 316
Thrust Housing	Cast Iron / Power Coated	SS AISI 316
Seals	BUNA-N	BUNA-N
Seal Cover	Cast Iron	SS AISI 316
Shaft Seal	SiC	SiC
Shaft end	SS AISI 304	SS AISI 316
Diaphragm	EPDM	EPDM
Diaphragm Cover	SS AISI 304	SS AISI 316
Lead	EPR	EPR



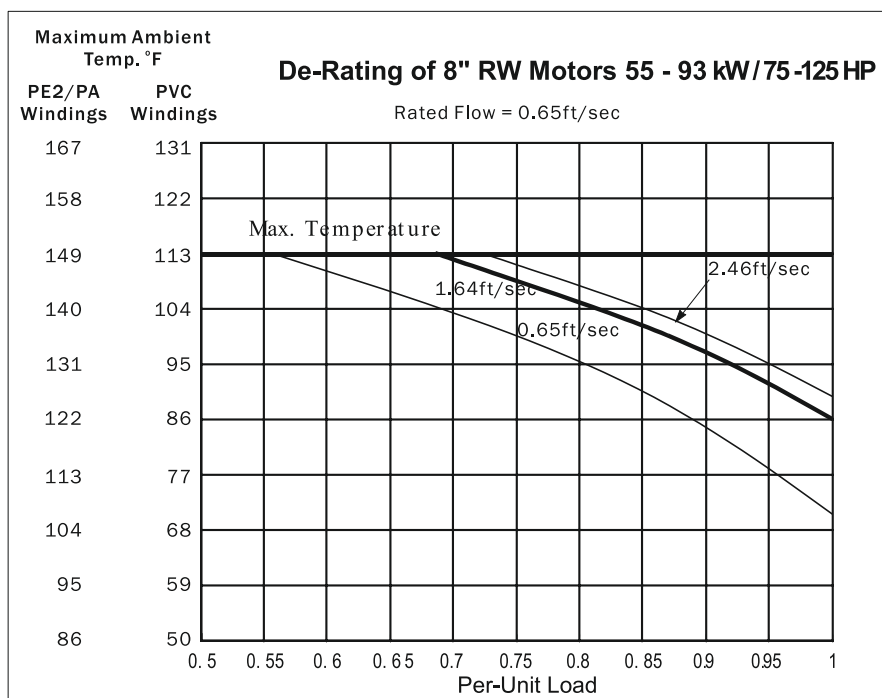
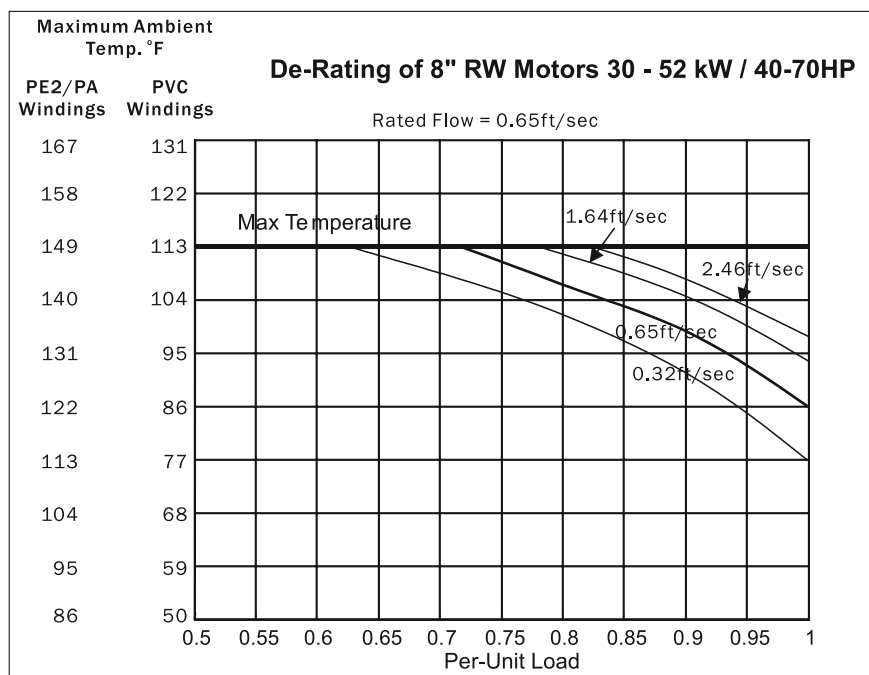


## 8 INCH REWINDABLE MTSF MOTOR

### DE-RATING CURVES

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	40 HP -125 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

#### 8" REWINDABLE MOTORS DE- RATING CURVES



## 10 INCH REWINDABLE MTSF MOTOR

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## 10 INCH REWINDABLE MTSF MOTOR

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### PRODUCT APPLICATION AND PRODUCT SPECIFICATION

#### GENERAL DATA

These 10" Rewindable motors, manufactured in ISO 9001:2015 certified facilities

#### Applications

This motor is built for dependable operation in 10" diameter or larger water wells. It is fitted with water lubricated radial and thrust bearings for a maintenance – free operations. The motor is filled with a special fluid, Providing frost protection down to 5°F storage temperature . A special diaphragm ensures pressure compensation inside the motor.

#### Product advantages:

- High efficiency electrical design (low operation cost, cooler winding temperature).
- Design for retrofittable PT100 sensor.
- Motor With SiC Mechanical seal and sand slinger.
- Cable material in accordance with regulations for drinking water.
- Water lubricated radial and thrust bearing.
- All motors pre-filled and 100% tested.
- Non contaminating, water-filled design.
- Max. storage temperature 5°F to 140°F.

#### Technical Specification

- Power range : 150 -250 HP
- Mounting : 10"
- Degree of protection : IP68
- Ambient temperature : 86°F
- Cooling flow : 1.64 ft/sec
- Starts/hr : 10
- Voltage tolerance : +6% / -10%  $U_N$

## 10 INCH REWINDABLE MTSF MOTOR

### MOTOR PERFORMANCE DATA

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	150 HP -250 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

### THREE PHASE MOTOR SPECIFICATION (60 Hz) 3450 RPM

Material Code (CI)	Rating				Full load		Maximum Load		Line to Line resistance Ohms	Efficiency %		Locked rotor amps	Thrust (lbf)
	HP	kW	Volts	S.F	Amps	KW	Amps	KW		S.F	F.L		
9000024450	150	110	460	1.15	196	129	225	148	0.08-0.10	87	87	1176	13489
9000024451	175	130	460	1.15	219	149	254	172	0.06-0.08	87	87	1308	13489
9000024452	200	150	460	1.15	249	172	294	199	0.05-0.06	87	87	1557	13489
9000024454	250	185	460	1.15	322	213	377	246	0.03-0.04	87	87	2130	13489

## 10 INCH REWINDABLE MTSF MOTOR

### MOTOR LENGTH & WEIGHT

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	150 HP -252 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

### MTSF -250 THREE PHASE 460V 60Hz DIM & WEIGHT CHART

HP	kW	LENGTH (Inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in Inches)
			LBS	KG	
150	110	60.20	816	370	13.78x10.24x78.74
175	130	65.31	908	412	13.78x10.24x78.74
200	150	69.65	964	437	13.78x10.24x78.74
250	185	75.55	1058	480	13.78x10.24x78.74

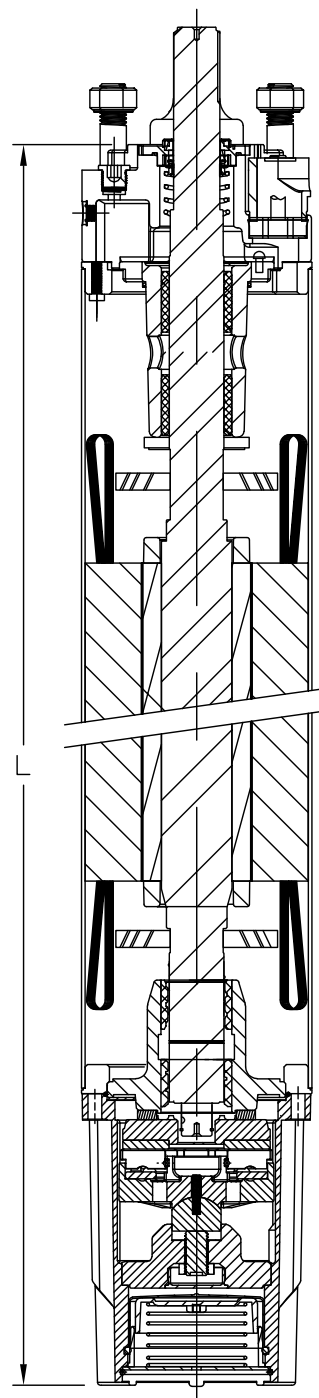
## 10 INCH REWINDABLE MTSF MOTOR

### MATERIAL OF CONSTRUCTION

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	150 HP -252 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

#### MTSF 250 (150 TO 252 HP)

PART	MATERIAL DIN/AISI	
	CAST IRON	AISI-SS 304
ADAPTOR	CAST IRON - POWDER COATED	AISI-SS 304
STATOR SHELL	AISI-SS 304	AISI-SS 304
SHAFT SEAL	SIC	SIC
SHAFT EXTENTION	DUPLEX(EN 1.4362)	DUPLEX(EN 1.4362)
DIAPHRAGM	EPDM	EPDM
DIAPHRAGM COVER	AISI SS 304	AISI SS 304
MOTOR BASE	CAST IRON - POWDER COATED	AISI-SS 304
LEAD	EPR	EPR

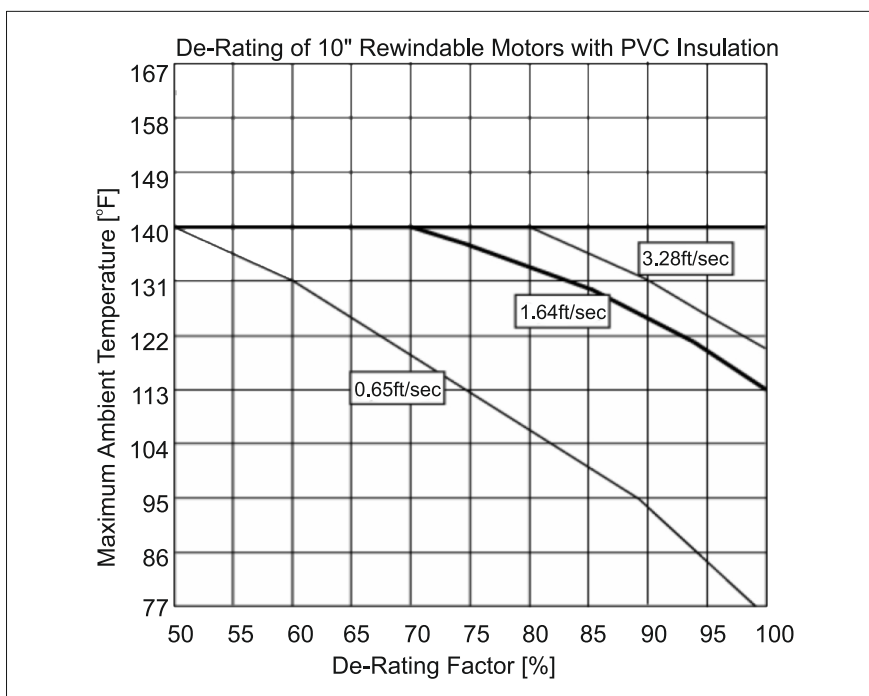
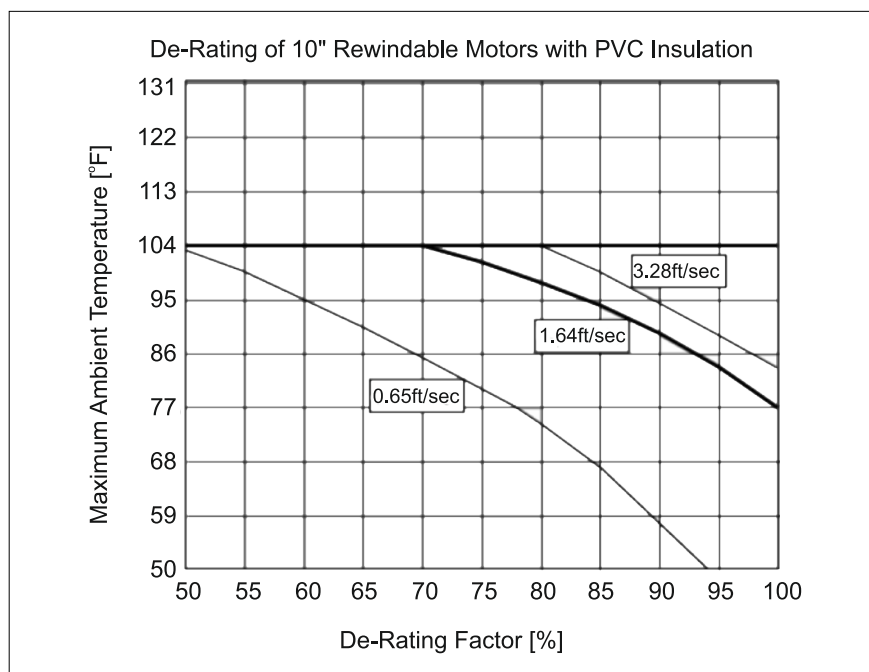


## 10 INCH REWINDABLE MTSF MOTOR

### DE-RATING CURVES

SUBMERSIBLE MOTORS			
Material	CI, SS 304/316	Rating	150 HP -252 HP
Type	Rewindable MTSF	Thrust Rating	45000 N

#### 10" REWINDABLE MOTORS DE- RATING CURVES



## CABLE SELECTION CHART

### 4- INCH/SINGLE-PHASE / 3-LEAD / 75 °C CABLE

MOTOR RATING			AWG Copper Wire Size												
VOLTS	HP	KW	14	12	10	8	6	4	3	2	1	0	0	0	0
115	0.5	0.37	100	160	250	390	620	960	1190	1460	1780	2160	2630	3140	3770
230	0.5	0.37	400	650	1020	1610	2510	3880	4810	5880	7170	8720	--	--	--
	0.75	0.55	300	480	760	1200	1870	2890	3580	4370	5330	6470	7870	9380	--
	1	0.75	250	400	630	990	1540	2380	2960	3610	4410	5360	6520	7780	9350
	1.5	1.1	190	310	480	770	1200	1870	2320	2850	3500	4280	5240	6300	7620
	2	1.5	150	250	390	620	970	1530	1910	2360	2930	3620	4480	5470	6700
	3	2.2	120	190	300	470	750	1190	1490	1850	2320	2890	3610	4470	5550
	5	3.7	0	110	180	280	450	710	890	1110	1390	1740	2170	2680	3330

### 4- INCH/THREE-PHASE / 3-LEAD / 75 °C CABLE

MOTOR RATING			Maximum Cable Length (ft) Measured from Service entrance to motor																	
			AWG Copper Wire Size												MCM Copper Wire Size					
			14	12	10	8	6	4	3	2	1	0	0	0	0	250	300	350	400	500
230	0.5	0.37	930	1490	2350	3700	5760	8910	--	--	--	--	--	--	--	--	--	--	--	--
	0.75	0.55	670	1080	1700	2580	4190	6490	8060	9860	--	--	--	--	--	--	--	--	--	--
	1	0.75	560	910	1430	2260	3520	5460	6780	8290	--	--	--	--	--	--	--	--	--	--
	1.5	1.1	420	670	1060	1670	2610	4050	5030	6160	7530	9170	--	--	--	--	--	--	--	--
	2	1.5	320	510	810	1280	2010	3130	3890	4770	5860	7170	8780	--	--	--	--	--	--	--
	3	2.2	240	390	620	990	1540	2400	2980	3660	4480	5470	6690	8020	9680	--	--	--	--	--
	5	3.7	140	230	370	590	920	1430	1790	2190	2690	3290	4030	4850	5870	6650	7560	8460	9220	--
	7.5	5.5	0	160	260	420	650	1020	1270	1560	1920	2340	2870	3440	4160	4710	5340	5970	6500	7510
460	0.5	0.37	3770	6020	9460	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	0.75	0.55	2730	4350	6850	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1	0.75	2300	3670	5770	9070	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1.5	1.1	1700	2710	4270	6730	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	1.5	1300	2070	3270	5150	8050	--	--	--	--	--	--	--	--	--	--	--	--	--
	3	2.2	1000	1600	2520	3970	6200	--	--	--	--	--	--	--	--	--	--	--	--	--
	5	3.7	590	950	1500	2360	3700	5750	--	--	--	--	--	--	--	--	--	--	--	--
	7.5	5.5	420	680	1070	1690	2640	4100	5100	6260	7680	--	--	--	--	--	--	--	--	--
	10	7.5	310	500	790	1250	1960	3050	3800	4680	5750	7050	--	--	--	--	--	--	--	--
	15	11	0	340	540	850	1340	2090	2600	3200	3930	4810	5900	7110	--	--	--	--	--	--

### 6- INCH/SINGLE-PHASE / 3-LEAD / 75 °C CABLE

MOTOR RATING			AWG Copper Wire Size												
VOLTS	HP	KW	14	12	10	8	6	4	3	2	1	0	0	0	0
230	5	3.7	0	110	180	280	450	710	890	1110	1390	1740	2170	2680	3330
	7.5	5.5	0	0	120	200	310	490	610	750	930	1140	1410	1720	2100
	10	7.5	0	0	0	160	250	390	490	600	750	930	1160	1430	1760
	15	11	0	0	0	0	170	270	340	430	530	660	820	1020	1260



## CABLE SELECTION CHART

### 6- INCH/THREE-PHASE / 3-LEAD / 75 °C CABLE

MOTOR RATING			Maximum Cable Length (ft) Measured from Service entrance to motor																		
			AWG Copper Wire Size												MCM Copper Wire Size						
VOLTS	HP	KW	14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500	
460	5	3.7	590	950	1500	2360	3700	5750	—	—	—	—	—	—	—	—	—	—	—	—	
	7.5	5.5	420	680	1070	1690	2640	4100	5100	6260	7680	—	—	—	—	—	—	—	—	—	
	10	7.5	310	500	790	1250	1960	3050	3800	4680	5750	7050	—	—	—	—	—	—	—	—	
	15	11	0	340	540	850	1340	2090	2600	3200	3930	4810	5900	7110	—	—	—	—	—	—	
	20	15	0	0	410	650	1030	1610	2000	2470	3040	3730	4580	5530	—	—	—	—	—	—	
	25	19	0	0	330	530	830	1300	1620	1990	2450	3010	3700	4470	5430	—	—	—	—	—	—
	30	22	0	0	270	430	680	1070	1330	1640	2030	2490	3060	3700	4500	5130	5860	—	—	—	
	40	30	0	0	0	320	500	790	980	1210	1490	1830	2250	2710	3290	3730	4250	—	—	—	
	50	37	0	0	0	0	410	640	800	980	1210	1480	1810	2190	2650	3010	3420	3830	4180	4850	
	60	45	0	0	0	0	0	540	670	830	1020	1250	1540	1850	2240	2540	2890	3240	3540	4100	

### 8- INCH/THREE-PHASE / 3-LEAD / 75 °C CABLE

MOTOR RATING			Maximum Cable Length (ft) Measured from Service entrance to motor																	
			AWG Copper Wire Size													MCM Copper Wire Size				
VOLTS	HP	KW	14	12	10	8	6	4	3	2	1	0	00	000	0000	250	300	350	400	500
460	40	30	0	0	0	320	500	790	980	1210	1490	1830	2250	2710	3290	3730	4250	—	—	—
	50	37	0	0	0	0	410	640	800	980	1210	1480	1810	2190	2650	3010	3420	3830	4180	4850
	60	45	0	0	0	0	0	540	670	830	1020	1250	1540	1850	2240	2540	2890	3240	3540	4100
	75	55	0	0	0	0	0	440	550	680	840	1030	1260	1520	1850	2100	2400	2700	2950	3440
	100	75	0	0	0	0	0	0	0	500	620	760	940	1130	1380	1560	1790	2010	2190	2550
	125	93	0	0	0	0	0	0	0	0	0	600	740	890	1000	1220	1390	1560	1700	1960
	150	110	0	0	0	0	0	0	0	0	0	0	630	760	920	1050	1190	1340	1460	1690
	175	130	0	0	0	0	0	0	0	0	0	0	0	670	810	930	1060	1190	1300	1510
	200	150	0	0	0	0	0	0	0	0	0	0	0	590	710	810	920	1030	1130	1310

### 10- INCH/THREE-PHASE / 3-LEAD / 75 °C CABLE

MOTOR RATING			Maximum Cable Length (ft) Measured from Service entrance to Motor																				
			AWG Copper Wire Size							MCM Copper Wire Size													
VOLTS	HP	KW	2	1	0	00	000	0000	250	300	350	400	500	600	700	750	800	900	1000	1250	1500	1750	2000
460	175	130	0	0	0	570	690	830	950	1090	1220	1330	1550	1720	1860	1930	1990	2100	2190	2400	2550	2750	2860
	200	150	0	0	0	0	600	720	820	940	1050	1150	1340	1480	1610	1670	1720	1810	1890	2070	2210	2370	2470
	250	185	0	0	0	0	0	0	640	730	810	880	1020	1130	1210	1260	1290	1360	1410	1540	1630	1740	1810

## MOTOR LEAD DIMENSIONS

Type	Rating			Default Lead Length	Lead Cross Section
	HP	kW	Volts		
4" Single-phase (2-wire)	0.5	0.37	115	5.5 feet	14 AWG
	0.5	0.37	230	5.5 feet	14 AWG
	0.75	0.55		5.5 feet	14 AWG
	1	0.75		5.5 feet	14 AWG
	1.5	1.1		5.5 feet	14 AWG
4" Single-phase (3-wire)	0.5	0.37		5.5 feet	14 AWG
	0.75	0.55		5.5 feet	14 AWG
	1	0.75		5.5 feet	14 AWG
	1.5	1.1		5.5 feet	14 AWG
	2	1.5		5.5 feet	14 AWG
	3	2.2		5.5 feet	14 AWG
	5	3.7		10 feet	14 AWG
4" Three-phase	0.5	0.37	460	5.5 feet	14 AWG
			230	5.5 feet	14 AWG
	0.75	0.55	460	5.5 feet	14 AWG
			230	5.5 feet	14 AWG
	1	0.75	460	5.5 feet	14 AWG
			230	5.5 feet	14 AWG
	1.5	1.1	460	5.5 feet	14 AWG
			230	5.5 feet	14 AWG
	2	1.5	460	5.5 feet	14 AWG
			230	5.5 feet	14 AWG
	3	2.2	460	5.5 feet	14 AWG
			230	5.5 feet	14 AWG
	5	3.7	460	10 feet	14 AWG
			230	10 feet	14 AWG
	7.5	5.5	460	10 feet	14 AWG
			230	10 feet	14 AWG
6" Single-Phase	5	3.7	230	13 feet	12 AWG
				13 feet	12 AWG
	10	7.5		13 feet	12 AWG
	15	11		13 feet	10 AWG

## MOTOR LEAD DIMENSIONS

Type	Rating			Default Lead Length	Lead Cross Section
	HP	kW	Volts		
6" Three-Phase	5.5	4	460	13 feet	12 AWG
	7.5	5.5	460	13 feet	12 AWG
			230	13 feet	12 AWG
	10	7.5	460	13 feet	12 AWG
			230	13 feet	12 AWG
	15	11	460	13 feet	10 AWG
			230	13 feet	10 AWG
	20	15	460	13 feet	10 AWG
			230	13 feet	10 AWG
	25	18.5	460	13 feet	10 AWG
			230	13 feet	10 AWG
	30	22	460	13 feet	10 AWG
			230	13 feet	10 AWG
8" Three-Phase	40	30	460	13 feet	8 AWG
	50	37	460	13 feet	8 AWG
	30	22	460	13 feet	10 AWG
	40	30		13 feet	10 AWG
	50	37		13 feet	10 AWG
	60	45		13 feet	8 AWG
	75	55		20 Feet	6 AWG
	100	75		20 Feet	4 AWG
10" Three-Phase	125	90		20 Feet	4 AWG
	150	110	460	20 Feet	0 AWG
	177	130		20 Feet	0 AWG
	204	150		20 Feet	0 AWG
	252	185		20 Feet	0 AWG

## CAPACITOR RATING

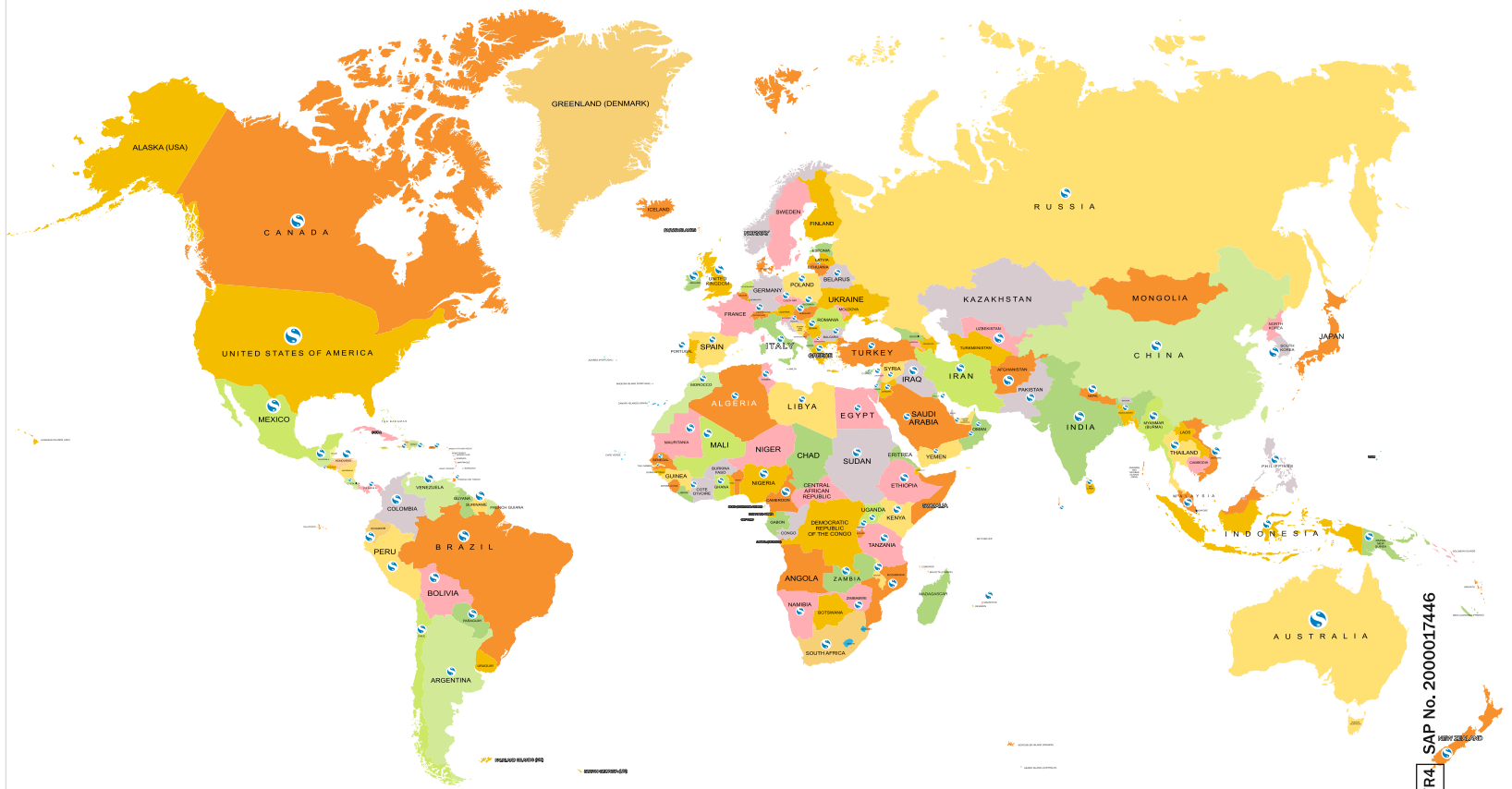
Motor Size	Motor Rating (HP)	Start Capacitor		Qty	Run Capacitor		
		MFD.	Volts		MFD.	Volts	Qty
4"	0.5	43-52	330	1	15	450	1
	0.75	64-77	330	1	20	450	1
	1	88-106	330	1	20	450	1
	1.5	100-120	330	1	15	450	1
	2	189-227	330	1	20	450	1
	3	250-300	330	1	45	450	1
	5	189-227	330	2	80	450	1
6"	5	250-300	330	1	80	450	2
	7.5	250-300	330	2	45	450	2
	10	189-227	330	1	100	450	1
		250-300	330	2			
	15	189-227	330	1	45	450	3
		250-300	330	2			

## FUSING SIZE

Type	Rating			Circuit Breakers or Fuse Amps (Maximum per NEC)			Circuit Breakers or Fuse Amps (Typical Submersible)		
	HP	kW	Volts	Standard Fuse	Dual Element Time Delay Fuse	Circuit Breakers	Standard Fuse	Dual Element Time Delay Fuse	Circuit Breakers
4" Single-phase (2-wire)	0.5	0.37	230	35	20	30	30	15	30
	0.5	0.37		20	10	15	15	8	15
	0.75	0.55		25	15	20	20	10	20
	1	0.75		30	20	25	25	11	25
	1.5	1.1		35	20	30	35	15	30
4" Single-phase (3-wire)	0.5	0.37		20	10	15	15	8	15
	0.75	0.55		25	15	20	20	10	20
	1	0.75		30	20	25	25	11	25
	1.5	1.1		35	20	30	30	15	30
	2	1.5		30	20	25	30	15	30
	3	2.2		45	30	40	45	20	40
	5	3.7		80	45	60	70	30	60

## FUSING SIZE

Type	Rating			Circuit Breakers or Fuse Amps (Maximum per NEC)			Circuit Breakers or Fuse Amps (Typical Submersible)		
	HP	kW	Volts	Standard Fuse	Dual Element Time Delay Fuse	Circuit Breakers	Standard Fuse	Dual Element Time Delay Fuse	Circuit Breakers
4" Three- phase	0.5	0.37	460	4	2.25	3	4	2	15
			230	8	4.5	6	8	4	15
	0.75	0.55	460	5	2.8	4	5	3	15
			230	10	5.6	8	10	5	15
	1	0.75	460	6	3.5	5	6	3	15
			230	15	7	10	12	6	15
	1.5	1.1	460	8	4.5	8	8	4	15
			230	15	9	15	15	8	15
	2	1.5	460	15	6	10	11	5	15
			230	25	12	20	25	10	20
	3	2.2	460	15	9	15	15	6	15
			230	30	17.5	25	30	12	25
	5	3.7	460	25	15	20	25	10	20
			230	50	30	40	45	20	40
	7.5	5.5	460	40	25	30	35	15	30
			230	80	45	60	70	30	60
6" Single- Phase	10	7.5	460	60	30	45	50	25	45
	5	3.7	230	80	45	60	70	30	60
	7.5	5.5		125	70	100	110	50	100
	10	7.5		150	80	125	150	60	125
6" Three- Phase	15	11		200	125	175	200	90	175
	5	3.7	460	25	15	20	25	10	20
	7.5	5.5	460	35	20	30	35	15	30
			230	70	40	60	70	30	60
	10	7.5	460	45	25	40	45	20	40
			230	90	50	80	90	40	80
	15	11	460	70	40	60	60	30	60
			230	150	80	110	125	60	110
	20	15	460	90	50	70	80	35	70
			230	175	100	150	175	70	150
	25	18.5	460	110	60	90	100	45	90
			230	225	125	175	200	90	175
	30	22	460	125	70	110	125	50	100
			230	250	150	225	250	100	200
8" Three- Phase	40	30	460	175	100	150	175	70	150
	50	37	460	200	125	175	200	80	175
	60	45		250	150	200	225	100	200
	75	55		300	175	250	300	125	250
	100	75		400	225	350	400	175	350
	125	90		225	125	175	200	90	175



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