

SUBMERSIBLE MOTOR

3" OIL LUBRICATED REWINDABLE MOTOR

TECHNICAL SPECIFICATIONS:

- 3" Oil Lubricated Motors are rewindable.
- Winding wires are Enamelled dual coated.
- Insulation class : B.
- Degree of protection : Ip58.
- Max oil temperature : 35°C.
- Start per hour : 30 times (Max.).
- Allowable voltage variation : +6% - 10%.
- Motor shaft of Stainless Steel.
- Stator shell of Stainless Steel.
- Max depth immersion : 100M.
- Mounting : Vertical / Horizontal.
- Upper / Lower bracket in Cast Iron with Epoxy Point
- Single Phase Motors are Capacitor start and run.
- Motor Cable length : 3 Meter (3 Core / earth wire separate on demand).
- Coolant : Die electric non - toxic.

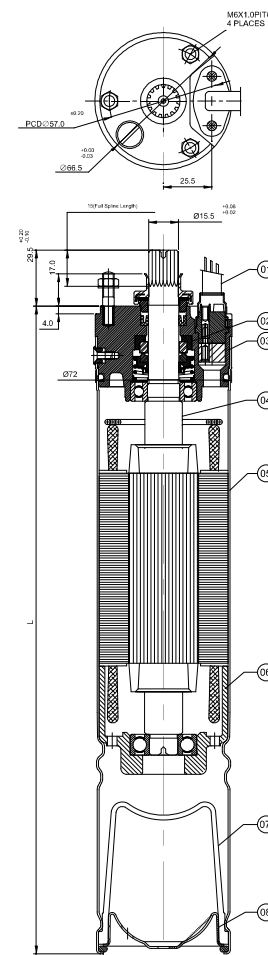
VERSIONS:

Single Phase : 0.37 kW to 1.10 kW, 220-230 Volt / 50 Hz.

Single Phase : 0.37 kW to 1.10 kW, 230 Volt / 60 Hz.

Motors with other Voltage and frequency ratings are available on specific demand.

3" O/L REWINDABLE MOTOR



No.	PARTS NAME	MATERIAL
01	CABLE 3 CORE/4 CORE	P.V.C
02	MECH. SEAL	CERAMIC CARBON
03	UPPER HOUSING	CAST IRON (FG 200)
04	ROTOR SHAFT	SS 420
05	MOTOR SHELL	S.S.304
06	LOWER HOUSING	CAST IRON (FG 200)
07	PRESSURE CUP	HBR
08	MOTOR BASE PLATE	S.S.304
09	ALL HARDWARE	S.S.304

P _N		S.P. L [mm]	MOTOR WEIGHT [kg]	MOTOR WEIGHT (incl.pkg)[kg]
[kW]	[H.P.]			
0.37	0.50	338	7.50	8.50
0.55	0.75	363	8.00	9.00
0.75	1.00	388	8.50	9.50
0.94	1.25	413	9.50	10.5

P _N		T.P. L [mm]	MOTOR WEIGHT [kg]	MOTOR WEIGHT (incl.pkg)[kg]
[kW]	[H.P.]			
1.10	1.5	438	10.00	11.00

SUBMERSIBLE MOTOR

Technical Data of 3" Motors Single Phase (220-230 Volt / 50 Hz) CSR

PN		Thrust Load [N]	UN [V]	nN [min-1]	IN [A]	IA [A]	η(Eff.) [%] at % load			cos φ (PF) at % load			TN [Nm]	TA [Nm]	Capacitor Running μF (Uc=450V)
[H.P.]	[kW]						50	75	100	50	75	100			
0.50	0.37	1500	220	2690	5.00	6.30	33	34	35	0.94	0.96	0.97	1.30	0.99	30
			230	2700	4.80	6.60	31	32	33	0.92	0.95	0.97	1.30	1.01	
0.75	0.55	1500	220	2690	5.40	8.90	34	36	39	0.92	0.95	0.96	1.95	1.35	30
			230	2700	5.20	9.35	32	34	37	0.91	0.93	0.94	1.95	1.48	
1.00	0.75	1500	220	2740	6.20	10.70	44	48	50	0.92	0.96	0.97	2.55	2.07	30
			230	2750	6.00	11.20	42	46	48	0.91	0.95	0.96	2.55	2.27	
1.50	1.10	1500	220	2740	6.80	12.40	50	51	55	0.90	0.92	0.95	3.83	2.91	30
			230	2750	6.60	13.00	48	49	53	0.88	0.90	0.93	3.83	3.22	

Technical Data of 3" Motors Single Phase (220-230 Volt / 50 Hz) CSCR

Pn		Thrust Load [N]	Un [V]	nN [min-1]	In [A]	Ia [A]	η (Eff.) [%] at % load			cos φ (PF) at % load			Tn [Nm]	Ta [Nm]	Capacitor Running μF (Uc=450V)	Capacitor Starting μF (Uc=270V)
[H.P.]	[kW]						50	75	100	50	75	100				
0.50	0.37	1500	220	2690	5.00	6.30	33	34	35	0.94	0.96	0.97	1.30	2.17	30	100-120
			230	2700	4.80	6.60	31	32	33	0.92	0.95	0.97	1.30	2.17		
0.75	0.55	1500	220	2690	5.40	8.90	34	36	39	0.92	0.95	0.96	1.95	2.92	30	100-120
			230	2700	5.20	9.35	32	34	37	0.91	0.93	0.94	1.95	2.92		
1.00	0.75	1500	220	2740	6.20	10.70	44	48	50	0.92	0.96	0.97	2.55	4.18	30	100-120
			230	2750	6.00	11.20	42	46	48	0.91	0.95	0.96	2.55	4.18		
1.50	1.10	1500	220	2740	6.80	12.40	50	51	55	0.90	0.92	0.95	3.83	6.21	36	100-120
			230	2750	6.60	13.00	48	49	53	0.88	0.90	0.93	3.83	6.21		

- PN - Rated Output
- F[N] - Axial Thrust Load
- UN - Rated Voltage
- nN - RPM
- IN - Full Load Current
- IA - Starting Current
- η - Motor Efficiency
- cosφ - Power Factor
- TN - Full Load Torque
- TA - Starting Torque

Technical Data of 3" Motors Single Phase / 60 Hz (CSR)

PN		Thrust Load [N]	UN [V]	nN [min-1]	IN [A]	IA [A]	η (Eff.) [%] at % load			cos ϕ (PF) at % load			TN [Nm]	TA [Nm]	Capacitor Running μF (UC=450V)
[H.P.]	[kW]						50	75	100	50	75	100			
0.5	0.37	1500	230	3430	4.6	12.2	38	40	42	0.80	0.82	0.84	1.02	0.84	20
0.75	0.55	1500	230	3430	6.3	17.3	45	47	49	0.86	0.88	0.91	1.54	1.26	30
1.0	0.75	1500	230	3440	8.7	23	48	50	51	0.88	0.90	0.92	2.04	1.82	30
1.5	1.1	1500	230	3440	12	34	49	51	53	0.87	0.88	0.90	3.06	2.6	36

- PN - Rated Output
- F[N] - Axial Thrust Load
- UN - Rated Voltage
- nN - RPM
- IN - Full Load Current
- IA - Starting Current
- η - Motor Efficiency
- cosφ - Power Factor
- TN - Full Load Torque
- TA - Starting Torque

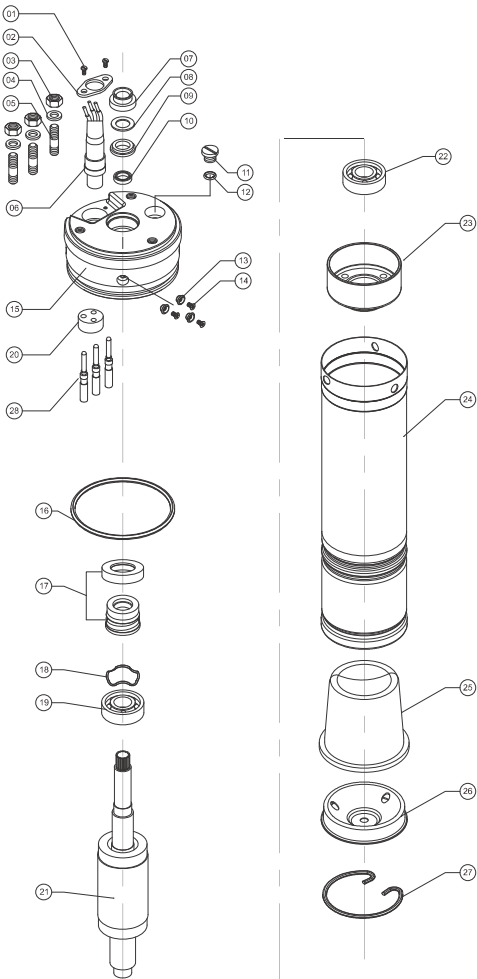
Technical Data of 3" Motors Single Phase / 60 Hz (CSCR)

P _N		Thrust Load [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]	Capacitor Running μF (U _C =450V)	Capacitor Starting μF (U _C =270V)
[H.P.]	[kW]						50	75	100	50	75	100				
0.5	0.37	1500	230	3430	4.6	12.2	38	40	42	0.80	0.82	0.84	1.02	1.70	20	100-120
0.75	0.55	1500	230	3430	6.3	17.3	45	47	49	0.86	0.88	0.91	1.54	2.31	30	100-120
1.0	0.75	1500	230	3440	8.7	23	48	50	51	0.88	0.90	0.92	2.04	3.35	30	100-120
1.5	1.1	1500	230	3440	12	34	49	51	53	0.87	0.88	0.90	3.06	4.96	36	100-120

- PN - Rated Output
- F[N] - Axial Thrust Load
- UN - Rated Voltage
- nN - RPM
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- TN - Full Load Torque
- TA - Starting Torque

SUBMERSIBLE MOTOR

EXPLODED DRAWING OF 3" O/L MOTORS



No.	Parts Name
1	CABLE CLIP SCREW
2	CABLE CLIP
3	HEX NUT
4	SPRING WASHER
5	UPPER STUD
6	CABLE SET
7	SAND GUARD
8	TEFLON WASHER
9	UPPER COLLAR
10	OIL SEAL
11	DRAIN PLUG
12	DRAIN PLUG 'O' RING
13	SCREW COLLAR
14	SCREW (FOUR WAY)
15	UPPER HOUSING
16	O' RING (UPPER HOUSING)
17	MECH. SEAL
18	WAVE WASHER
19	BALL BEARING (UPPER SIDE)
20	SMALL GROMMET
21	ROTOR FINISH
22	BALL BEARING (LOWER SIDE)
23	LOWER HOUSING
24	STATOR BODY
25	PRESSURE CUP
26	MOTOR BASE PLATE
27	CIR CLIP
28	MALE PIN
29	FEMALE PIN

SUBMERSIBLE MOTOR

3" WATER LUBRICATED REWINDABLE MOTORS

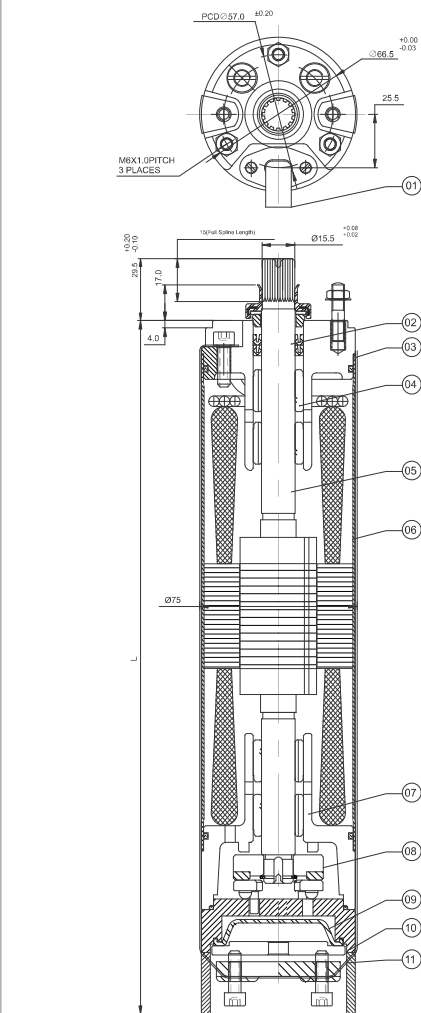
TECHNICAL SPECIFICATIONS:

- 3" Water lubricated Motors are rewindable.
- Winding wire: Polywrapped.
- Degree of protection : Ip68.
- Max water temperature : 35° C.
- Start per hour: 30 times (Max.).
- Allowable voltage variation: +6% -10%.
- Motor shaft of Stainless Steel.
- Stator shell of Stainless Steel.
- Max depth immersion : 100 M.
- Mounting : vertical / horizontal.
- Upper / Lower bracket in Cast Iron with Epoxy Paint.
- Single Phase Motors are Capacitor start and run.
- Motor Cable length : 3 Meter (3 Core / earth wire separate on demand).
- Coolant : Clear Water.

VERSIONS:

Single Phase : 0.37 kW to 1.10 kW , 220 - 230Volt / 50 Hz.
Single Phase : 0.37 kW to 1.10 kW, 230 Volt / 60 Hz.
Motors with other Voltage and frequency ratings are available on specific demand.

3" W/L REWINDABLE MOTOR



NO.	PARTS NAME	MATERIAL
01	CABLE 3 CORE	P.V.C
02	OIL SEAL	N.B.R
03	UPPER HOUSING	CAST IRON (F.G 200)
04	BEARING BUSH	L.T.B-4(2%Ni)
05	ROTOR SHAFT	SS 420
06	MOTOR SHELL	S.S 304
07	LOWER HOUSING	CAST IRON (F.G 200)
08	THRUST BEARING	CARBON / S.S.420
09	PRESSURE CUP	HBR
10	MOTOR BASE	CAST IRON (F.G 200)
11	CLAMPING STRIP	S.S.304
12	ALL HARDWARE	S.S.304

P _N		S.P. L [mm]	MOTOR WEIGHT [kg]	MOTOR WEIGHT (incl.pkg)[kg]
[kW]	[H.P.]			
0.37	0.50	391	8.50	9.50
0.55	0.75	406	9.50	10.5
0.75	1.00	421	11.0	12.0
1.10	1.50	496	12.0	13.0
1.10	1.50	481	11.5	12.5
1.50	2.00	531	13.5	14.5
1.50	2.00	511	13.0	14.0



Technical Data of 3" Motors Single Phase (220-230 Volt / 50 Hz) CSR

PN		Thrust Load [N]	UN [V]	nN [min ⁻¹]	IN [A]	IA [A]	η (Eff.) [%] at % load			cos φ (PF) at % load			TN [Nm]	TA [Nm]	Capacitor Running μF (UC=450)
[H.P.]	[kW]						50	75	100	50	75	100			
0.50	0.37	1500	220	2870	4.20	8.00	34	35	36	0.89	0.92	0.93	1.20	0.91	50
			230	2880	4.70	8.40	33	34	35	0.88	0.90	0.92	1.20	1.00	
0.75	0.55	1500	220	2870	5.20	13.20	36	39	41	0.84	0.86	0.88	1.80	1.24	50
			230	2880	6.00	13.70	35	37	39	0.81	0.83	0.85	1.80	1.37	
1.00	0.75	1500	220	2850	7.00	16.10	48	49	51	0.75	0.77	0.78	2.46	1.99	72
			230	2860	8.50	16.80	46	47	50	0.73	0.74	0.75	2.46	2.19	
1.50	1.10	1500	220	2790	8.50	16.10	53	55	56	0.77	0.79	0.85	3.78	2.87	72
			230	2800	9.00	16.80	51	53	55	0.76	0.78	0.83	3.76	3.15	

Technical Data of 3" Motors Single Phase (220-230 Volt / 50 Hz) CSCR

Pn		Thrust Load [N]	Un [V]	nn [min-1]	In [A]	Ia [A]	η (Eff.) [%] at % load			cos φ (PF) at % load			Tn [Nm]	TA [Nm]	Capacitor Running μ F (Uc=450V)	Capacitor Starting μ F (Uc=270V)
[H.P.]	[kW]						50	75	100	50	75	100				
0.50	0.37	1500	220	2870	4.20	8.00	34	35	36	0.89	0.92	0.93	1.20	2.00	50	100-120
			230	2880	4.70	8.40	33	34	35	0.88	0.90	0.92	1.20	2.00		
0.75	0.55	1500	220	2870	5.20	13.20	36	39	41	0.84	0.86	0.88	1.80	2.70	50	100-120
			230	2880	6.00	13.70	35	37	39	0.81	0.83	0.85	1.80	2.70		
1.00	0.75	1500	220	2850	7.00	16.10	48	49	51	0.75	0.77	0.78	2.46	4.00	72	100-120
			230	2860	8.50	16.80	46	47	50	0.73	0.74	0.75	2.46	4.00		
1.50	1.10	1500	220	2790	9.50	16.10	53	55	56	0.77	0.79	0.85	3.78	6.00	72	100-120
			230	2800	9.00	16.80	51	53	55	0.76	0.78	0.83	3.76	6.00		

- PN - Rated Output
- F[N] - Axial Thrust Load
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- $\cos\phi$ - Power Factor
- TN - Full Load Torque
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