



4" SUBMERSIBLE MOTOR



motralec

4 rue Lavoisier . ZA Lavoisier . 95223 HERBLAY CEDEX

Tel. : 01.39.97.65.10 / Fax. : 01.39.97.68.48

Demande de prix / e-mail : service-commercial@motralec.com

www.motralec.com





APPLICATIONS

SAVA rewindable 4" oil filled submersible motors are designed to operate dependably in 4" and larger boreholes.

GENERAL SPECIFICATIONS

Mounting flange	4" NEMA standard
Degree of protection	IP 68
Insulation class	F
Single phase motors	0.37 kW up to 3.7 kW
Three phase motors	0.37 kW up to 7.5 kW
Standard voltages	1~ 230V(50Hz) 1~ 110V or 230V(60Hz) 3~ 230V or 400V (50Hz) 3~ 230V or 400V (60Hz)
Cable length	1.7 M 0.37 kW up to 1.5 kW 2.5 M 2.2 kW up to 7.5 kW

OPERATING PARAMETERS

Max voltage variation	+ 10% / - 10%
Max starts / h	40
Max water temperature	35°C
Flow rate	0.2m/sec
Axial thrust	2000N from 0.37 kW up to 1.5 kW 3000N 2.2 kW 5000N from 3 kW up to 7.5 kW
Max immersion depth	200m

FEATURES

- Removable waterproof cable connector for easy maintenance operations.
- Cable materials are CE approved (for potable water applications).
- Non-toxic oil - Premium quality, colorless white oil meeting the requirements of international and national authorities for pharmaceutical white oils. (USA FDA, US Pharmacopeia/National Formulary, European Pharmacopoeia approved).
- Special stator design for high starting torque in single-phase models.
- Unique single-phase electrical design for PSC starting, and starting capacitor + PSC starting.
- Motor casing, shaft, upper cover and bottom end made of stainless steel.
- Zinc-plated cast iron upper bracket.
- Stators are designed for higher efficiency and the ability to operate within wider voltage fluctuations.
- Use of high quality European made components such as mechanical seal, cable connectors, copper winding wires and insulations.
- All motors 100% tested.

TECHNICAL DATA

SINGLE-PHASE MOTORS 50 Hz PSC

Motor Type	P2		Voltage	In	Istart	Efficiency	PF	RPM	Thrust Load	Capacitor	Cable	
	kW	HP	V	A	A		COsφ		N	μF	mm2	m
4R201	0.37	0.5	230	3.7	12	0.53	0.95	2840	2000	16	1.5	1.7
4R202	0.55	0.75	230	5	15	0.62	0.90	2840	2000	20	1.5	1.7
4R203	0.75	1	230	6.2	20	0.64	0.90	2840	2000	25	1.5	1.7
4R204	1.1	1.5	230	8.1	32	0.68	0.90	2850	2000	35	1.5	1.7
4R206	1.5	2	230	10.4	38	0.73	0.90	2850	2000	40	1.5	1.7
4R307	2.2	3	230	15	46	0.72	0.88	2820	3000	55	1.5	2.5

THREE-PHASE MOTORS 50 HZ DOL

Motor Type	P2		Voltage	In	Istart	Efficiency	PF	RPM	Thrust Load	Capacitor	Cable	
	kW	HP	V	A	A		COsφ		N	μF	mm2	m
4R222	0.37	0.5	230	2.8	7.8	0.60	0.78	2820	2000		1.5	1.7
4R223	0.55	0.75	230	3.3	11.6	0.64	0.78	2830	2000		1.5	1.7
4R224	0.75	1	230	4	15	0.66	0.78	2830	2000		1.5	1.7
4R225	1.1	1.5	230	5.4	21	0.70	0.84	2840	2000		1.5	1.7
4R226	1.5	2	230	7	24	0.72	0.84	2840	2000		1.5	1.7
4R328	2.2	3	230	9.7	38	0.71	0.83	2840	3000		1.5	2.5
4R529	3	4	230	12.8	74	0.73	0.80	2850	5000		1.5	2.5
4R530	4	5.5	230	17	84	0.75	0.80	2850	5000		1.5	2.5
4R531	5.5	7.5	230	24	112	0.75	0.80	2850	5000		1.5	2.5
4R210	0.37	0.5	400	1.6	4.5	0.60	0.78	2820	2000		1.5	1.7
4R211	0.55	0.75	400	1.9	6.7	0.64	0.78	2830	2000		1.5	1.7
4R212	0.75	1	400	2.3	8.9	0.66	0.78	2830	2000		1.5	1.7
4R213	1.1	1.5	400	3.1	12	0.70	0.84	2840	2000		1.5	1.7
4R214	1.5	2	400	4	14	0.72	0.84	2840	2000		1.5	1.7
4R316	2.2	3	400	5.6	22	0.71	0.83	2840	3000		1.5	2.5
4R517	3	4	400	7.4	43	0.73	0.80	2850	5000		1.5	2.5
4R518	4	5.5	400	9.8	49	0.75	0.80	2855	5000		1.5	2.5
4R519	5.5	7.5	400	13.7	65	0.75	0.80	2850	5000		1.5	2.5
4R521	7.5	10	400	18.7	87	0.76	0.80	2850	5000		1.5	2.5

SINGLE-PHASE MOTORS 60 Hz PSC

Motor Type	P2		Voltage	S.F	In	I _{max}	Istart	Efficiency	RPM	Thrust Load	Capacitor	Cable	
	kW	HP	V	--	A	A	A			N	μF	mm2	m
4R261	0.37	0.5	110	1.6	8.5	9.8	30	0.64	3440	2000	65	1.5	1.7
4R251	0.37	0.5	230	1.6	4.8	5.2	15	0.64	3440	2000	16	1.5	1.7
4R262	0.55	0.75	110	1.5	10.9	12.8	38	0.65	3440	2000	80	1.5	1.7
4R252	0.55	0.75	230	1.5	5.6	6.6	19	0.65	3440	2000	20	1.5	1.7
4R263	0.75	1	110	1.4	11.5	14.5	50	0.68	3430	2000	100	1.5	1.7
4R253	0.75	1	230	1.4	6.3	7.6	25	0.68	3430	2000	25	1.5	1.7
4R254	1.1	1.5	230	1.3	8.7	10.3	34	0.69	3440	2000	35	1.5	1.7
4R256	1.5	2	230	1.25	10.6	12.2	41	0.72	3420	2000	40	1.5	1.7
4R357	2.2	3	230	1.15	14.4	16.1	45	0.7	3420	3000	55	1.5	2.5
4R558	3.7	5	230	1.15	24.2	27.2	64	0.71	3450	5000	75	1.5	2.5

THREE-PHASE MOTORS 60 HZ DOL

Motor Type	P2		Voltage	S.F	In	I _{max}	Istart	Efficiency	RPM	Thrust Load		Cable	
	kW	HP	V	--	A	A	A			N		mm2	m
4R280	0.37	0.5	230	1.6	2.7	3.3	10	0.68	3400	2000		1.5	1.7
4R281	0.55	0.75	230	1.5	3.8	4.3	17	0.69	3400	2000		1.5	1.7
4R282	0.75	1	230	1.4	4.5	5.2	24	0.72	3420	2000		1.5	1.7
4R283	1.1	1.5	230	1.3	5.7	6.6	33	0.72	3430	2000		1.5	1.7
4R284	1.5	2	230	1.25	7.6	8.5	40	0.74	3430	2000		1.5	1.7
4R386	2.2	3	230	1.15	10.3	11.2	48	0.74	3440	3000		1.5	2.5
4R587	3.7	5	230	1.15	16.9	18	109	0.75	3450	5000		1.5	2.5
4R588	5.5	7.5	230	1.15	25.4	28.5	134	0.75	3450	5000		1.5	2.5
4R589	7.5	10	230	1.15	37	39	159	0.76	3470	5000		1.5	2.5
4R270	0.37	0.5	400	1.6	1.6	1.9	9	0.68	3400	2000		1.5	1.7
4R271	0.55	0.75	400	1.5	2.2	2.5	11	0.69	3400	2000		1.5	1.7
4R272	0.75	1	400	1.4	2.6	3	14	0.72	3420	2000		1.5	1.7
4R273	1.1	1.5	400	1.3	3.3	3.8	19	0.72	3430	2000		1.5	1.7
4R274	1.5	2	400	1.25	4.4	4.9	23	0.74	3430	2000		1.5	1.7
4R376	2.2	3	400	1.15	6	6.5	28	0.74	3440	3000		1.5	2.5
4R577	3.7	5	400	1.15	9.8	10.4	63	0.75	3450	5000		1.5	2.5
4R578	5.5	7.5	400	1.15	14.7	16.5	78	0.75	3450	5000		1.5	2.5
4R579	7.5	10	400	1.15	21.5	22.5	92	0.76	3470	5000		1.5	2.5

DIMENSIONS AND WEIGHTS

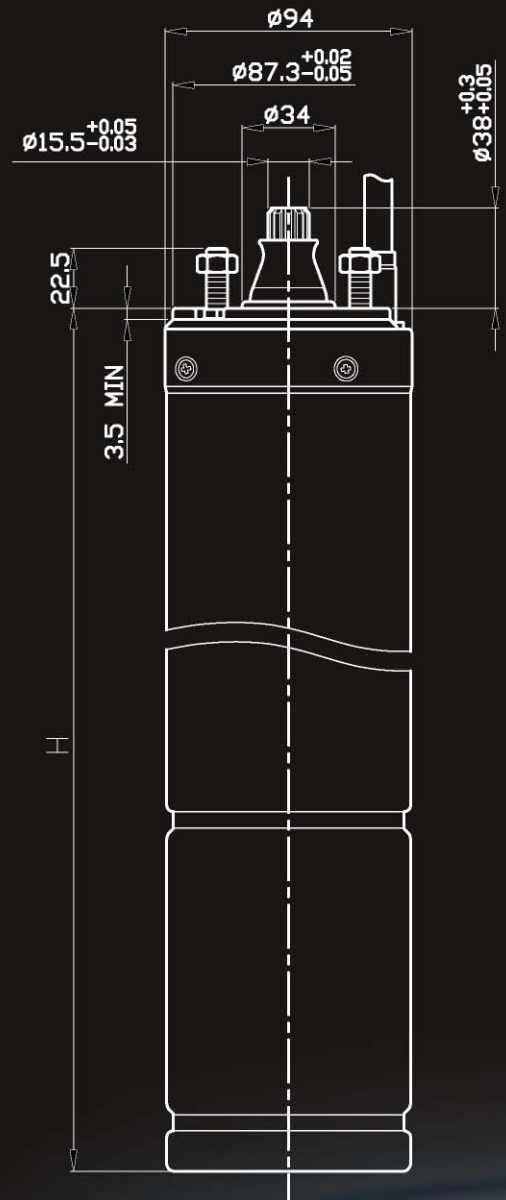
SINGLE-PHASE MOTORS 50Hz & 60Hz

P2		H	Weight	Thrust Load
kW	HP	mm	Kg	N
0.37	0.5	346	7.3	2000
0.55	0.75	365	8.2	2000
0.75	1	380	8.8	2000
1.1	1.5	405	10.0	2000
1.5	2	440	11.5	2000
2.2	3	495	14.0	3000
3.7	5	683	22.7	5000



THREE-PHASE MOTORS 50Hz & 60Hz

P2		H	Weight	Thrust Load
kW	HP	mm	Kg	N
0.37	0.5	330	6.7	2000
0.55	0.75	346	7.4	2000
0.75	1	365	8.2	2000
1.1	1.5	380	8.9	2000
1.5	2	405	10.0	2000
2.2	3	440	11.6	3000
3	4	516	15.2	5000
4	5.5	607	19.5	5000
5.5	7.5	683	23.1	5000
7.5	10	783	27.5	5000



MATERIAL SPECIFICATIONS

Component	Material
Motor Shell	304 Stainless steel
Sand Guard	NBR
Cable Connector	EPDM
Upper end bracket cover	304 Stainless steel
Upper end bracket	Zinc plated cast iron
Mechanical seal	Ceremic/Carbon
Shaft (0.5 - 3 HP)	304 Stainless steel
Shaft (4 - 10HP)	630 Stainless steel
Rotor (0.5 - 3 HP)	Aluminum
Rotor (4 - 10HP)	Copper
Connector	PPS
Winding	Copper
Lower end bracket	Aluminum
Lower end bracket cover	304 Stainless steel
Diaphragm	NBR

Note:
Specifications subject to change without notice.

STAIRS INDUSTRIAL CO., LTD.

NO.3-8, Sanchial Tsun, Lutsao Hsiang, Chiai Hsien, Taiwan, R.O.C. 4 rue Lavoisier . ZA Lavoisier . 95223 HERBLAY CEDEX

E-mail: stairs@stairs.com.tw

Website: www.stairs.com.tw

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Tel. : 01.39.97.65.10 / Fax. : 01.39.97.68.48

Demande de prix / e-mail : service-commercial@motralec.com

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