

DIMENSIONS AND WEIGHTS

2 WIRE SINGLE-PHASE MOTORS 50Hz & 60Hz

P2		H	Weight	Thrust Load
kW	HP	mm	Kg	N
0.37	0.5	396	7.7	2000
0.55	0.75	416	8.6	2000
0.75	1	431	9.2	2000
1.1	1.5	456	10.4	2000
1.5	2	491	11.9	2000

3 WIRE 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	4	607	19.4	5000
3.7	5	683	22.7	5000
4	5.5	683	22.8	5000

3 WIRE 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
3.7	5	607	19.5	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 - 10HP)	304 Stainless steel/S45C
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

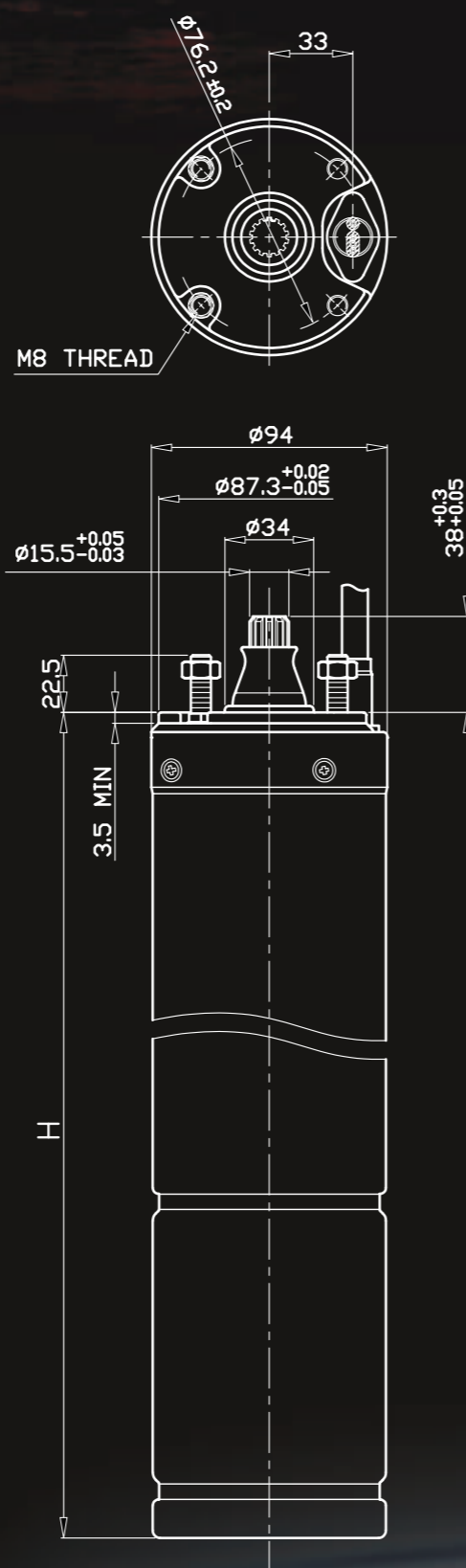
Note:
Specifications subject to change without notice.

STAIRS INDUSTRIAL CO., LTD.

NO.3-8, Sanchial Tsun, Lutsao Hsiang, Chiai Hsien, Taiwan,

E-mail: stairs@stairs.com.tw

Website: www.stairs.com.tw



4" SUBMERSIBLE MOTOR - 2 WIRE - 3 WIRE



APPLICATIONS

STAIRS 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 4.0 kW
Three phase motors	0.37 kW up to 7.5 kW
Standard voltages	1~ 230V (50Hz) 1~ 110V or 230V or 254 (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.
- 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	Nn	Thrust Load	Capacitor	Cable	
3-Wire	2-Wire	KW	HP	V	A	A	%	COSφ	RPM	N	μF	mm2	m
4R201	4R201M	0.37	0.5	207-244	3.7	12	53	0.90	2840	2000	16	1.5	1.7
4R202	4R202M	0.55	0.75	207-244	5.0	15	62	0.90	2840	2000	20	1.5	1.7
4R203	4R203M	0.75	1	207-244	6.2	20	64	0.90	2840	2000	25	1.5	1.7
4R204	4R204M	1.1	1.5	207-244	8.1	32	68	0.90	2840	2000	35	1.5	1.7
4R206	4R206M	1.5	2	207-244	10.4	38	73	0.90	2840	2000	40	1.5	1.7
4R307	N/A	2.2	3	207-244	15.0	46	72	0.90	2840	3000	55	1.5	2.5
4R508	N/A	3	4	207-244	22.7	70.8	67	0.90	2840	5000	70	2	2.5
4R509	N/A	4	5.5	207-244	28.1	85	70	0.90	2840	5000	85	2	2.5

THREE-PHASE MOTORS 50 HZ DOL

Motor Type		P2		Voltage	In	Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable	
3-Wire		KW	HP	V	A	A	%	COSφ	RPM	N	μF	mm2	m
4R222		0.37	0.5	207-244	2.9	7.8	60	0.80	2870	2000		1.5	1.7
4R210		0.37	0.5	360-424	1.6	4.5	60	0.80	2820	2000		1.5	1.7
4R223		0.55	0.75	207-244	3.4	11.6	64	0.80	2850	2000		1.5	1.7
4R211		0.55	0.75	360-424	1.9	6.7	64	0.80	2840	2000		1.5	1.7
4R224		0.75	1	207-244	4.0	15	66	0.80	2840	2000		1.5	1.7
4R212		0.75	1	360-424	2.3	8.9	66	0.80	2840	2000		1.5	1.7
4R225		1.1	1.5	207-244	5.3	21	70	0.80	2850	2000		1.5	1.7
4R213		1.1	1.5	360-424	3.1	12	70	0.80	2850	2000		1.5	1.7
4R226		1.5	2	207-244	6.9	24	72	0.80	2850	2000		1.5	1.7
4R214		1.5	2	360-424	4.0	14	72	0.80	2850	2000		1.5	1.7
4R328		2.2	3	207-244	9.7	38	71	0.85	2850	3000		1.5	2.5
4R316		2.2	3	360-424	5.6	22	71	0.85	2850	3000		1.5	2.5
4R529		3	4	207-244	12.8	74	73	0.85	2850	5000		2.0	2.5
4R517		3	4	360-424	7.4	43	73	0.85	2840	5000		2.0	2.5
4R530		4	5.5	207-244	17.1	84	75	0.85	2850	5000		2.0	2.5
4R518		4	5.5	360-424	9.8	49	75	0.85	2850	5000		2.0	2.5
4R531		5.5	7.5	207-244	23.8	123	76	0.85	2850	5000		2.0	2.5
4R519		5.5	7.5	360-424	13.7	71	76	0.85	2850	5000		2.0	2.5
4R533		7.5	10	207-244	32.4	166	76	0.85	2850	5000		2.0	2.5
4R521		7.5	10	360-424	18.7	96	76	0.85	2850	5000		2.0	2.5

SINGLE-PHASE MOTORS 60 Hz PSC

Motor Type		P2		Voltage	S.F	In	Imax	Istart	Efficiency	PF %		Nn	Thrust Load	Capacitor	Cable	
3-Wire	2-Wire	KW	HP	V	--	A	A	A	%	allowable load	overload factor	RPM	N	μF	mm2	m
4R261	4R261M	0.37	0.5	100-116	1.6	8.5	9.8	30	64	0.89	0.95	3430	2000	65	1.5	1.7
4R251	4R251M	0.37	0.5	207-244	1.6	4.8	5.2	15	64	0.75	0.87	3430	2000	16	1.5	1.7
4R291	4R291M	0.37	0.5	254	1.6	4.3	4.7	13.8	58	0.75	0.87	3430	2000	12.5	1.5	1.7
4R262	4R262M	0.55	0.75	100-116	1.5	10.9	12.8	38	65	0.59	0.64	3440	2000	80	1.5	1.7
4R252	4R252M	0.55	0.75	207-244	1.5	5.6	6.6	19	65	0.75	0.88	3440	2000	20	1.5	1.7
4R292	4R292M	0.55	0.75	254	1.5	5.3	6	17.1	62	0.79	0.90	3430	2000	16	1.5	1.7
4R263	4R263M	0.75	1	100-116	1.4	11.5	14.5	50	68	0.98	0.99	3440	2000	100	1.5	1.7
4R253	4R253M	0.75	1	207-244	1.4	6.3	7.6	25	68	0.89	0.95	3440	2000	25	1.5	1.7
4R293	4R293M	0.75	1	254	1.4	5.5	6.7	19.3	66	0.88	0.95	3430	2000	20	1.5	1.7
4R254	4R254M	1.1	1.5	207-244	1.3	8.7	10.3	34	69	0.90	0.95	3450	2000	35	1.5	1.7
4R294	4R294M	1.1	1.5	254	1.3	7.9	9.2	25.7	65	0.89	0.95	3450	2000	30	1.5	1.7
4R256	4R256M	1.5	2	207-244	1.25	10.6	12.2	41	72	0.92	0.95	3450	2000	40	1.5	1.7
4R296	4R296M	1.5	2	254	1.25	11	12	38	68	0.84	0.90	3450	2000	35	1.5	1.7
4R357	N/A	2.2	3	207-244	1.15	14.4	16.1	45	70	0.96	0.98	3450	3000	55	1.5	2.5
4R397	N/A	2.2	3	254	1.15	14	15.4	48.9	71	0.93	0.96	3450	3000	45	1.5	2.5
4R558	N/A	3.7	5	207-244	1.15	24.2	27.2	64	71	0.96	0.97	3450	5000	75	2.0	2.5

THREE-PHASE MOTORS 60 HZ DOL

Motor Type		P2		Voltage	S.F	In	Imax	Istart	Efficiency	PF %		Nn	Thrust Load	Cable	
3-Wire		KW	HP	V	--	A	A	A	%	allowable load	overload factor	RPM	N	mm2	m
4R280		0.37	0.5	207-244	1.6	2.8	3.3	10	68	0.55	0.63	3450	2000	1.5	1.7
4R270		0.37	0.5	360-424	1.6	1.6	1.9	9	68	0.63	0.77	3450	2000	1.5	1.7
4R281		0.55	0.75	207-244	1.5	3.8	4.3	17	69	0.63	0.78	3450	2000	1.5	1.7
4R271		0.55	0.75	360-424	1.5	2.2	2.5	11	69	0.65	0.80	3450	2000	1.5	1.7
4R282		0.75	1	207-244	1.4	4.5	5.2	24	72	0.65	0.77	3450	2000	1.5	1.7
4R272		0.75	1	360-424	1.4	2.6	3	14	72	0.58	0.69	3450	2000	1.5	1.7
4R283		1.1	1.5	207-244	1.3	5.7	6.6	33	72	0.73	0.81	3450	2000	1.5	1.7
4R273		1.1	1.5	360-424	1.3	3.3	3.8	19	72	0.74	0.82	3450	2000	1.5	1.7
4R284		1.5	2	207-244	1.25	7.6	8.5	40	74	0.69	0.77	3450	2000	1.5	1.7
4R274		1.5	2	360-424	1.25	4.4	4.9	23	74	0.67	0.75	3450	2000	1.5	1.7
4R386		2.2	3	207-244	1.15	10.3	11.2	48	74	0.76	0.80	3450	3000	1.5	2.5
4R376		2.2	3	360-424	1.15	6	6.5	28	74	0.74	0.79	3450	3000	1.5	2.5
4R587		3.7	5	207-244	1.15	17.5	18.7	109	75	0.75	0.78	3450	5000	2.0	2.5
4R577		3.7	5	360-424	1.15	10	11	63	75	0.73	0.77	3450	5000	2.0	2.5
4R566		4	5.5	207-244	1.15	19.4	21.1	109	75	0.77	0.81	3450	5000	2.0	2.5
4R567		4	5.5	360-424	1.15	11.2	12.2	63	76	0.75	0.79	3450	5000	2.0	2.5
4R588		5.5	7.5	207-244	1.15	25.3	27.6	134	75	0.76	0.80	3450	5000	2.0	2.5
4R578		5.5	7.5	360-424	1.15	14.5	15.9	78	75	0.76	0.80	3450	5000	2.0	2.5
4R589		7.5	10	207-244	1.15	34.5	37.5	215	76	0.73	0.78	3450	5000	2.0	2.5
4R579		7.5	10	360-424	1.15	20	21.8	124	76	0.73	0.78	3450	5000	2.0	2.5