

# ECT-4R series 50 / 60 HZ

## 4" Submersible Motor - 2 & 3 Wire



### ECT PUMP



### APPLICATIONS

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	50Hz	
	1Φ 207 - 244 V	1Φ 100 - 116 V 1Φ 207 - 244 V 1Φ 254 V
	3Φ 207 - 244 V 3Φ 360 - 424 V	3Φ 207 - 244 V 3Φ 360 - 424 V 3Φ 460V
	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	

### FEATURES

1. Removable waterproof cable connector for easy maintenance operations.
2. Cable materials are CE approved (for potable water applications).
3. Non-toxic oil - Premium quality, colorless white oil.
4. Special stator design for high starting torque in single-phase models.
5. Unique single-phase electrical design for PSC starting, and starting capacitor + PSC starting.
6. Motor casing, shaft, upper cover and bottom end made of stainless steel.
7. Zinc-plated cast iron upper bracket.
8. Stators are designed for higher efficiency and the ability to operate within wider voltage fluctuations.
9. Use of high quality European made components such as mechanical seal, cable connectors, copper winding wires and insulations.
10. All motors 100% tested.

### OPERATING PARAMETERS

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

### 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	Ceramic/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

# ECT-4R

## General Data

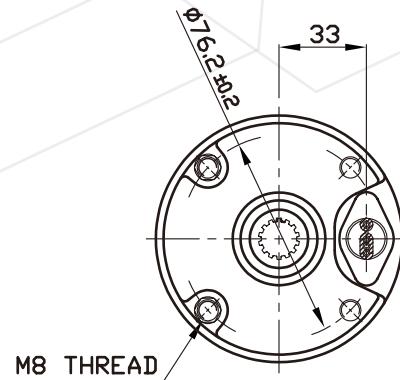


## ECT PUMP

### DIMENSIONS

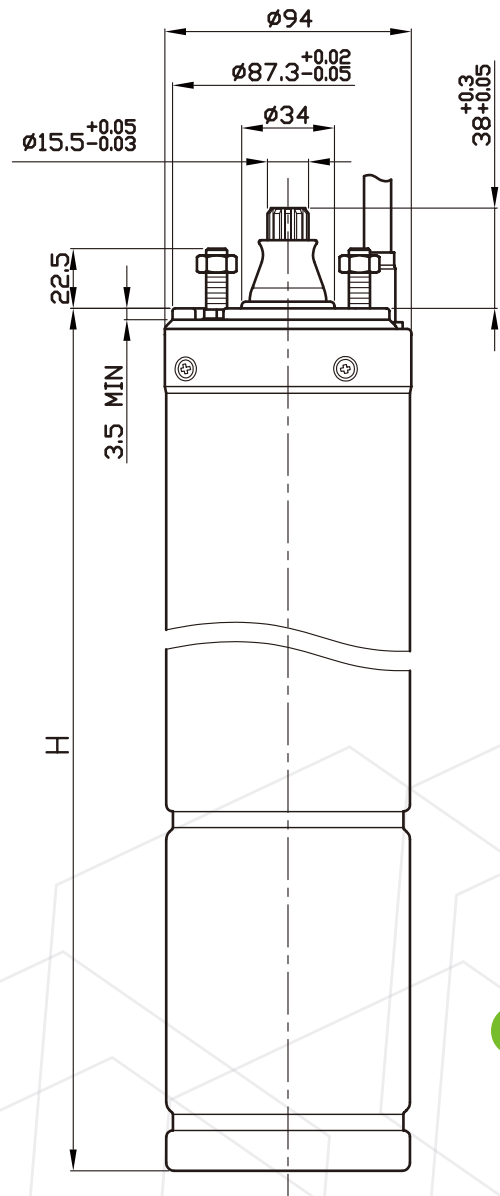
#### 2 WIRE SINGLE-PHASE MOTORS 50Hz & 60Hz

P2		H	Thrust Load
kW	HP	mm	N
0.37	0.5	396	2000
0.55	0.75	416	2000
0.75	1	431	2000
1.1	1.5	456	2000
1.5	2	491	2000



#### 3 WIRE SINGLE-PHASE MOTORS 50Hz & 60Hz

P2		H	Thrust Load
kW	HP	mm	N
0.37	0.5	346	2000
0.55	0.75	365	2000
0.75	1	380	2000
1.1	1.5	405	2000
1.5	2	440	2000
2.2	3	495	3000
3	4	607	5000
3.7	5	683	5000
4	5.5	683	5000



#### 3 WIRE THREE-PHASE MOTORS 50Hz & 60Hz

P2		H	Thrust Load
kW	HP	mm	N
0.37	0.5	330	2000
0.55	0.75	346	2000
0.75	1	365	2000
1.1	1.5	380	2000
1.5	2	405	2000
2.2	3	440	3000
3	4	516	5000
3.7	5	607	5000
4	5.5	607	5000
5.5	7.5	683	5000
7.5	10	783	5000

# ECT-4R

## Technical Data



## ECT PUMP

### SINGLE-PHASE MOTORS 50Hz PSC

Motor Type		P2		Voltage	In	Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable		N.W	
3-Wire	2-Wire	KW	HP	V	A	A	%	COSφ	RPM	N	μF	mm2	m	3-Wire	2-Wire
ECT-4R201	ECT-4R201M	0.37	0.5	207-244	3.7	12	53	0.90	2840	2000	16	1.5	1.7	7.47	7.92
ECT-4R202	ECT-4R202M	0.55	0.75	207-244	5.0	15	62	0.90	2840	2000	20	1.5	1.7	8.34	8.84
ECT-4R203	ECT-4R203M	0.75	1	207-244	6.2	20	64	0.90	2840	2000	25	1.5	1.7	9.04	9.51
ECT-4R204	ECT-4R204M	1.1	1.5	207-244	8.1	32	68	0.90	2840	2000	35	1.5	1.7	10.08	10.57
ECT-4R206	ECT-4R206M	1.5	2	207-244	10.4	38	73	0.90	2840	2000	40	1.5	1.7	11.78	12.26
ECT-4R307	N/A	2.2	3	207-244	15.0	46	72	0.90	2840	3000	55	1.5	2.5	14.40	N/A
ECT-4R508	N/A	3	4	207-244	22.7	70.8	67	0.90	2840	5000	70	2	2.5	20.08	N/A
ECT-4R509	N/A	4	5.5	207-244	28.1	85	70	0.90	2840	5000	85	2	2.5	23.64	N/A

### THREE-PHASE MOTORS 50Hz DOL

Motor Type 3-Wire	P2		Voltage	In	Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable		N.W
	KW	HP	V	A	A	%	COSφ	RPM	N	μF	mm2	m	
ECT-4R222	0.37	0.5	207-244	2.9	7.8	60	0.80	2870	2000	-	1.5	1.7	6.74
ECT-4R210	0.37	0.5	360-424	1.6	4.5	60	0.80	2820	2000	-	1.5	1.7	6.76
ECT-4R223	0.55	0.75	207-244	3.4	11.6	64	0.80	2850	2000	-	1.5	1.7	7.41
ECT-4R211	0.55	0.75	360-424	1.9	6.7	64	0.80	2840	2000	-	1.5	1.7	7.43
ECT-4R224	0.75	1	207-244	4.0	15	66	0.80	2840	2000	-	1.5	1.7	8.25
ECT-4R212	0.75	1	360-424	2.3	8.9	66	0.80	2840	2000	-	1.5	1.7	8.27
ECT-4R225	1.1	1.5	207-244	5.3	21	70	0.80	2850	2000	-	1.5	1.7	9.03
ECT-4R213	1.1	1.5	360-424	3.1	12	70	0.80	2850	2000	-	1.5	1.7	9.06
ECT-4R226	1.5	2	207-244	6.9	24	72	0.80	2850	2000	-	1.5	1.7	10.09
ECT-4R214	1.5	2	360-424	4.0	14	72	0.80	2850	2000	-	1.5	1.7	10.11
ECT-4R328	2.2	3	207-244	9.7	38	71	0.85	2850	3000	-	1.5	2.5	11.93
ECT-4R316	2.2	3	360-424	5.6	22	71	0.85	2850	3000	-	1.5	2.5	11.95
ECT-4R529	3	4	207-244	12.8	74	73	0.85	2850	5000	-	2.0	2.5	16.01
ECT-4R517	3	4	360-424	7.4	43	73	0.85	2840	5000	-	2.0	2.5	16.29
ECT-4R530	4	5.5	207-244	17.1	84	75	0.85	2850	5000	-	2.0	2.5	19.85
ECT-4R518	4	5.5	360-424	9.8	49	75	0.85	2850	5000	-	2.0	2.5	19.95
ECT-4R531	5.5	7.5	207-244	23.8	123	76	0.85	2850	5000	-	2.0	2.5	23.45
ECT-4R519	5.5	7.5	360-424	13.7	71	76	0.85	2850	5000	-	2.0	2.5	23.56
ECT-4R533	7.5	10	207-244	32.4	166	76	0.85	2850	5000	-	2.0	2.5	27.96
ECT-4R521	7.5	10	360-424	18.7	96	76	0.85	2850	5000	-	2.0	2.5	28.06

# ECT-4R

## Technical Data



## ECT PUMP

### SINGLE-PHASE MOTORS 60Hz PSC

Motor Type		P2		Voltage	S.F	In	Imax	Istart	Efficiency	PF %		Nn	Thrust Load	Capacitor	Cable		N.W	
3-Wire	2-Wire	KW	HP	V	--	A	A	A	%	allowable load	overload factor	RPM	N	µF	mm2	m	3-Wire	2-Wire
ECT-4R261	ECT-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	7.05	7.93
ECT-4R251	ECT-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	7.47	7.98
ECT-4R291	ECT-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	7.50	7.74
ECT-4R262	ECT-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	8.19	8.6
ECT-4R252	ECT-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	8.26	8.88
ECT-4R292	ECT-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	8.30	8.6
ECT-4R263	ECT-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	9.01	9.2
ECT-4R253	ECT-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	9.02	9.55
ECT-4R293	ECT-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	9.08	9.2
ECT-4R254	ECT-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	10.05	10.61
ECT-4R294	ECT-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	10.08	10.4
ECT-4R256	ECT-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	11.70	12.28
ECT-4R296	ECT-4R296M	1.5	2	254	1.25	11	12	38	68	0.84	0.90	3450	2000	35	1.5	1.7	11.80	11.9
ECT-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	14.27	N/A
ECT-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	14.31	N/A
ECT-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	23.61	N/A

### THREE-PHASE MOTORS 60Hz DOL

Motor type	P2		Voltage	S.F	In	Imax	Istart	Efficiency	PF%		Nn	Thrust Load	Cable		N.W
	3-Wire	kw	HP	V	--	A	A	A	%	allowable load	overload factor	RPM	N	mm2	
ECT-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	6.9
ECT-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	6.9
ECT-4R240	0.37	0.5	460	1.6	1.5	1.7	7	64	0.63	0.76	3450	2000	1.5	1.7	6.9
ECT-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	7.5
ECT-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	7.5
ECT-4R241	0.55	0.75	460	1.5	1.7	2.1	8	83	0.72	0.83	3450	2000	1.5	1.7	7.5
ECT-4R282	0.75	1	207-244	1.4	4.5	5.2	24	72	0.65	0.77	3450	2000	1.5	1.7	8.4
ECT-4R272	0.75	1	360-424	1.4	2.6	3.0	14	72	0.58	0.69	3450	2000	1.5	1.7	8.4
ECT-4R242	0.75	1	460	1.4	2.1	2.5	9	84	0.76	0.84	3450	2000	1.5	1.7	8.3
ECT-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	9.1
ECT-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	9.2
ECT-4R243	1.1	1.5	460	1.3	2.8	3.3	13	83	0.74	0.83	3440	2000	1.5	1.7	9.1
ECT-4R284	1.5	2	207-244	1.25	7.6	8.5	40	74	0.69	0.77	3450	2000	1.5	1.7	10.2
ECT-4R274	1.5	2	360-424	1.25	4.4	4.9	23	74	0.67	0.75	3450	2000	1.5	1.7	10.2
ECT-4R244	1.5	2	460	1.25	3.8	4.3	17	84	0.77	0.84	3450	2000	1.5	1.7	10.2
ECT-4R386	2.2	3	207-244	1.15	10.3	11.2	48	74	0.76	0.80	3450	3000	1.5	2.5	11.9
ECT-4R376	2.2	3	360-424	1.15	6.0	6.5	28	74	0.74	0.79	3450	3000	1.5	2.5	11.9
ECT-4R345	2.2	3	460	1.15	5.0	5.6	23	83	0.79	0.83	3450	3000	1.5	2.5	11.6
ECT-4R587	3.7	5	207-244	1.15	17.5	18.7	109	75	0.75	0.78	3450	5000	2.0	2.5	20.0
ECT-4R577	3.7	5	360-424	1.15	10.0	11.0	63	75	0.73	0.77	3450	5000	2.0	2.5	20.1
ECT-4R547	3.7	5	460	1.15	8.8	9.8	45	82	0.78	0.81	3450	5000	2.0	2.5	19.5
ECT-4R566	4.0	5.5	207-244	1.15	19.4	21.1	109	75	0.77	0.81	3450	5000	2.0	2.5	20.0
ECT-4R567	4.0	5.5	360-424	1.15	11.2	12.2	63	76	0.75	0.79	3450	5000	2.0	2.5	20.1
ECT-4R548	4.0	5.5	460	1.15	6.4	7.4	30	74	0.80	0.83	3450	5000	2.0	2.5	20.1
ECT-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	23.6
ECT-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	23.7
ECT-4R549	5.5	7.5	460	1.15	12.6	13.9	60	80	0.77	0.80	3450	5000	2.0	2.5	23.1
ECT-4R589	7.5	10	207-244	1.15	34.5	37.5	215	76	0.73	0.78	3450	5000	2.0	2.5	28.1
ECT-4R579	7.5	10	360-424	1.15	20.0	21.8	124	76	0.73	0.78	3450	5000	2.0	2.5	28.2
ECT-4R550	7.5	10	460	1.15	17.7	19.4	105	79	0.74	0.79	3450	5000	2.0	2.5	27.5