ECT-4R series 50 / 60 HZ 4" Submersible Motor - 2 & 3 Wire



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.
- 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.

APPLICSTIONS

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

GENERAL SPECIFICATIONS

Mounting flage	4" NEMA stando	ard						
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							
	50Hz	60Hz						
Standard voltages	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						
Cable length	1.7 M 0.37 kW u 2.5 M 2.2 kW u							

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	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

Energy & Care Technology GmbH

ECT PUMP

ECT-4R General Data

DIMENSIONS

2 WIRE SINGLE-PHASE MOTORS 50Hz & 60Hz

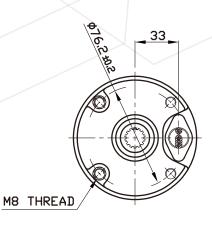
rust Load					
N					
2000					
000					
000					
000					
2000					
0					

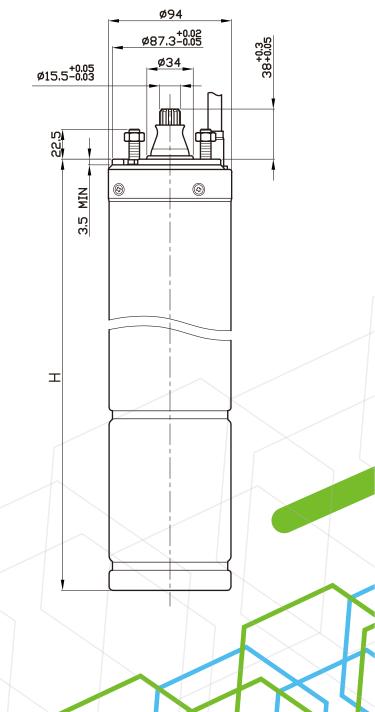
3 WIRE SINGLE-PHASE MOTORS 50Hz & 60Hz

~	P	2	Н	Thrust Load
	kW	HP	mm	Ν
1	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

P	2	Н	Thrust Load			
kW	HP	mm	Ν			
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 PUMP

Technical Data

ECT-4R

SINGLE-PHASE MOTORS 50Hz PSC

					_	_		<u>×</u>							
Motor Type		P2		Voltage In		Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable		N.W	
3-W	re 2-Wire	KW	HP	V	А	А	%	COSφ	RPM	N	μF	mm2	m	3-Wire	2-Wire
ECT-4R	01 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-4R	02 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-4R	03 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-4R	04 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-4R	06 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-4R	07 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-4R	08 N/A	3	4	207-244	22.7	70.8	67	0.90	2840	5000	70	2	2.5	20.08	N/A
ECT-4R	09 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	P2		Voltage	In	Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable		N.W
3-Wire	KW	HP	V	А	А	%	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

Technical Data

ECT-4R

SINGLE-PHASE MOTORS 60Hz PSC

					_		_												
	Moto	r Type	P	2	Voltage	S.F	In	Imax	Istart	Efficiency	PF	%	Nn	Thrust Load	Capacitor	Cal	ble	N.	.w
	3-Wire	2-Wire	КW	HP	V		А	А	А	%	allowable load	overload factor	RPM	N	μF	mm2		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
4	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
4	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
1	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

ECT PUMP

THREE-PHASE MOTORS 60Hz DOL

Motor type	P	2	Voltage	S.F	In	Imax	Istart	Efficiency	PF	-%	Nn	Thrust Load	Cal	ole	
3-Wire	kw	HP	V		Α	Α	Α	%	allowable load	overload factor	RPM	Ν	mm2	m	N.W
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

www.ectg.com.de info.service@ectg.de.com