

IE1

SERIES THREE-PHASE INDUCTION MOTOR



PRODUCT INTRODUCTION

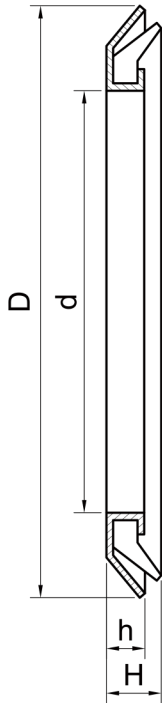
SUNVIM IE1 electric motors are independently designed, and has obtained the national layout-design invention patent. The motors are designed with reliable structure, low noise and low vibration. They are widely used to drive various general equipments, like fans, pumps, machining tools, compressors and transport machineries. The motors can also work safely and stably in industry field of petroleum, chemical, steel, mining and other places where there is with heavy load and harsh operating environment. All IE1 motors are provided with premium quality cold-rolled silicon steel, protection degree IP55 and insulation grade F. The dimension and efficiency comply to international standard IEC60034, and is the preferred choice to replace Y, Y2, and Y3 series motor.

SPECIFICATION

Standard: IEC60034-30-1
Frame size: H80-355mm
Rated power: 0.718kW-315kW
Degrees or energy efficiency: IE1
Voltage and frequency: 400V/ 50Hz
Degrees of protections: IP55
Degrees of insulation/Temperature rise: F/B
Installation Method: B3\ B5\B35\V1
Ambient temperature: -15°C~+40°C
Relative humidity should be less than 90%
Altitude should be lower than 1000 m above sea level
Cooling Method: IC411、IC416、IC418、IC410

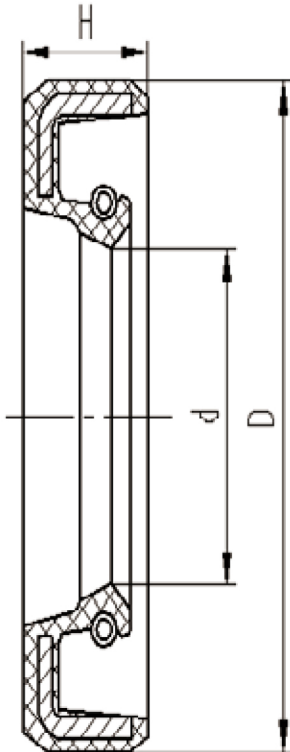
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Oil Sealing



Frame	Type	d	D	h	H
80	RB20*35*4.0	Ø20	Ø35	3	6
90	RB25*40*4.0	Ø25	Ø40	3	6
100	RB30*47*4.5	Ø30	Ø47	3.5	6
112	RB30*47*4.5	Ø30	Ø47	3.5	6
132	RB40*57*4.5	Ø40	Ø57	3.5	6.5
160	RB45*62*4.5	Ø45	Ø62	3.5	6.5
180	RB55*75*5.5	Ø55	Ø75	4.5	6.5
200	RB60*80*5.5	Ø60	Ø80	4.5	6.5
225	RB65*85*5.5	Ø65	Ø85	4.5	8
250	RB70*90*5.5	Ø70	Ø90	4.5	8
280-2	RB70*90*5.5	Ø70	Ø90	4.5	8
280-4	RB85*105*5.5	Ø85	Ø105	4.5	8
315-2	RB80*100*5.5	Ø80	Ø100	4.5	8
315-4	RB95*115*5.5	Ø95	Ø115	4.5	8
355-2	RB95*115*5.5	Ø95	Ø115	4.5	8
355-4	RB110*130*5.5	Ø110	Ø130	4.5	8

Oil Sealing



Frame	Type	d	D	H
80	(F)B20X42X5	Ø20	Ø42	5
90	(F)B25X47X5	Ø25	Ø47	5
100	(F)B30X52X7	Ø30	Ø52	7
112	(F)B30X52X7	Ø30	Ø52	7
132	(F)B40X62X5	Ø40	Ø62	5
160	(F)B45X70X8	Ø45	Ø70	8
180	(F)B55X80X8	Ø55	Ø80	8
200	(F)B60X85X8	Ø60	Ø85	8
225	(F)B65X90X10	Ø65	Ø90	10
250	(F)B70X95X10	Ø70	Ø95	10
280-2	(F)B70X95X10	Ø70	Ø95	10
280-4.6.8	(F)B85X110X12	Ø85	Ø110	12
315-2	(F)B80X105X10	Ø80	Ø105	10
315-4.6.8	(F)B95X120X12	Ø95	Ø120	12
355-2	(F)B95X120X12	Ø95	Ø120	12
355-4.6.8	(F)B110X140X12	Ø110	Ø140	12
355L3-4P , L2-6P	(F)B120X150X12	Ø120	Ø150	12

2-pole, 3000 synchronous speed

Motor Type	Rated Power (kW)	Rated Speed r/min	Rated Current A	Rated Eff. η %	Power Factor $\cos\phi$	Rated Torque Nm	$\frac{I_{st}}{I_n}$	$\frac{T_{st}}{T_n}$	$\frac{T_{max}}{T_n}$	$\frac{T_{min}}{T_n}$	LW dB(A) no load	LW dB(A) load	Net Weight kg
80M1-2	0.75	2840	1.8	75.0	0.83	2.5	6.1	2.2	2.3	1.5	67	69	16
80M2-2	1.1	2840	2.6	76.2	0.84	3.7	6.9	2.2	2.3	1.5	67	69	17
90S-2	1.5	2850	3.5	78.5	0.84	5	7.0	2.2	2.3	1.5	72	74	20
90L-2	2.2	2850	4.9	81.0	0.85	7.4	7.0	2.2	2.3	1.4	72	74	25
100L-2	3	2880	6.3	82.6	0.87	10	7.5	2.2	2.3	1.4	76	78	30
112M-2	4	2880	8.2	84.2	0.88	13.3	7.5	2.2	2.3	1.4	77	79	38
132S1-2	5.5	2900	11.1	85.7	0.88	18.1	7.5	2.2	2.3	1.2	80	82	57
132S2-2	7.5	2900	14.9	87.0	0.88	24.5	7.5	2.2	2.3	1.2	80	82	60
160M1-2	11	2930	21.2	88.4	0.89	35.8	7.5	2.2	2.3	1.2	86	88	100
160M2-2	15	2930	28.6	89.4	0.89	48.8	7.5	2.2	2.3	1.2	86	88	110
160L-2	18.5	2930	34.7	90.0	0.90	60.4	7.5	2.2	2.3	1.1	86	88	125
180M-2	22	2940	41	90.5	0.90	71.4	7.5	2.0	2.3	1.1	89	91	175
200L1-2	30	2950	55.4	91.4	0.90	97.2	7.5	2.0	2.3	1.1	92	94	225
200L2-2	37	2950	67.9	92.0	0.90	120	7.5	2.0	2.3	1.1	92	94	245
225M-2	45	2970	82.1	92.5	0.90	145	7.5	2.0	2.3	1.0	92	94	280
250M-2	55	2970	99.8	93.0	0.90	177	7.5	2.0	2.3	1.0	93	95	380
280S-2	75	2970	135	93.6	0.90	241	7.0	2.0	2.3	0.9	94	96	510
280M-2	90	2970	160	93.9	0.91	290	7.1	2.0	2.3	0.9	94	96	580
315S-2	110	2980	195	94.0	0.91	353	7.1	1.8	2.2	0.9	96	98	850
315M-2	132	2980	233	94.5	0.91	423	7.1	1.8	2.2	0.9	96	98	945
315L1-2	160	2980	282	94.6	0.91	513	7.1	1.8	2.2	0.9	99	101	1020
315L2-2	200	2980	348	94.8	0.92	641	7.1	1.8	2.2	0.8	99	101	1180
355M-2	250	2980	434	95.2	0.92	802	7.1	1.6	2.2	0.8	103	105	1740
355L-2	315	2980	545	95.4	0.92	1010	7.1	1.6	2.2	0.8	103	105	1900

4-pole, 1500 synchronous speed

Motor Type	Rated Power (kW)	Rated Speed r/min	Rated Current A	Rated Eff. η %	Power Factor $\cos\phi$	Rated Torque Nm	$\frac{I_{st}}{I_n}$	$\frac{T_{st}}{T_n}$	$\frac{T_{max}}{T_n}$	$\frac{T_{min}}{T_n}$	LW dB(A) no load	LW dB(A) load	Net Weight kg
80M1-4	0.55	1390	1.6	71.0	0.75	3.8	5.2	2.4	2.3	1.7	58	63	17
80M2-4	0.75	1390	2.1	73.0	0.76	5.2	6.0	2.3	2.3	1.6	58	63	18
90S-4	1.1	1400	2.8	76.2	0.77	7.5	6.0	2.3	2.3	1.6	61	66	20
90L-4	1.5	1400	3.7	78.5	0.78	10.2	6.0	2.3	2.3	1.6	61	66	23
100L1-4	2.2	1420	5.1	81.0	0.81	14.8	7.0	2.3	2.3	1.5	64	69	30
100L2-4	3	1420	6.7	82.6	0.82	20.2	7.0	2.3	2.3	1.5	64	69	35
112M-4	4	1440	8.8	84.2	0.82	26.5	7.0	2.3	2.3	1.5	65	70	40
132S-4	5.5	1440	11.7	85.7	0.83	36.5	7.0	2.3	2.3	1.4	71	76	60
132M-4	7.5	1440	15.6	87.0	0.84	49.8	7.0	2.3	2.3	1.4	71	76	70
160M-4	11	1460	22.5	88.4	0.84	72	7.0	2.2	2.3	1.4	75	79	110
160L-4	15	1460	30	89.4	0.85	98.2	7.5	2.2	2.3	1.4	75	79	130
180M-4	18.5	1470	36.3	90.0	0.86	120	7.5	2.2	2.3	1.2	76	80	165
180L-4	22	1470	42.9	90.5	0.86	143	7.5	2.2	2.3	1.2	76	80	180
200L-4	30	1470	58	91.4	0.86	195	7.2	2.2	2.3	1.2	79	83	240
225S-4	37	1480	70.2	92.0	0.87	239	7.2	2.2	2.3	1.2	81	85	280
225M-4	45	1480	85.0	92.5	0.87	291	7.2	2.2	2.3	1.1	81	85	310
250M-4	55	1480	103	93.0	0.87	355	7.2	2.2	2.3	1.1	83	86	400
280S-4	75	1480	138	93.6	0.88	484	6.8	2.2	2.3	1.0	86	89	540
280M-4	90	1480	165	93.9	0.88	581	6.8	2.2	2.3	1.0	86	89	620
315S-4	110	1480	201	94.5	0.88	710	6.9	2.1	2.2	1.0	93	96	870
315M-4	132	1480	240	94.8	0.88	852	6.9	2.1	2.2	1.0	93	96	990
315L1-4	160	1480	288	94.9	0.89	1032	6.9	2.1	2.2	1.0	97	100	1050
315L2-4	200	1480	360	94.9	0.89	1290	6.9	2.1	2.2	0.9	97	100	1250
355M1-4	220	1490	390	95.2	0.90	1411	6.9	2.1	2.2	0.9	101	104	1650
355M2-4	250	1490	443	95.2	0.90	1603	6.9	2.1	2.2	0.9	101	104	1750
355L1-4	280	1490	497	95.2	0.90	1796	7.1	2.1	2.2	0.9	101	104	1790
355L2-4	315	1490	559	95.2	0.90	2020	7.1	2.1	2.2	0.8	101	104	1900

6-pole, 1000 synchronous speed

Motor Type	Rated Power (kW)	Rated Speed r/min	Rated Current A	Rated Eff. η %	Power Factor $\cos\phi$	Rated Torque Nm	$\frac{I_{st}}{I_n}$	$\frac{T_{st}}{T_n}$	$\frac{T_{max}}{T_n}$	$\frac{T_{min}}{T_n}$	LW dB(A) no load	LW dB(A) load	Net Weight kg
80M1-6	0.37	890	1.3	62.0	0.70	4.0	4.7	1.9	2.0	1.5	54	61	15
80M2-6	0.55	890	1.8	65.0	0.72	5.9	4.7	1.9	2.1	1.5	54	61	17
90S-6	0.75	910	2.3	69.0	0.72	7.9	4.7	2.0	2.1	1.5	57	64	20
90L-6	1.1	910	3.2	72.0	0.73	11.5	5.3	2.0	2.1	1.3	57	64	23
100L-6	1.5	920	4	76.0	0.75	15.6	5.5	2.0	2.1	1.3	61	68	30
112M-6	2.2	940	5.6	79.0	0.76	22.4	5.5	2.0	2.1	1.3	65	72	38
132S-6	3	960	7.4	81.0	0.76	29.9	6.5	2.1	2.1	1.3	69	76	55
132M1-6	4	960	9.8	82.0	0.76	39.8	6.5	2.1	2.1	1.3	69	76	63
132M2-6	5.5	960	12.9	84.0	0.77	54.7	6.5	2.1	2.1	1.3	69	76	70
160M-6	7.5	970	17.2	86.0	0.77	73.9	6.5	2.0	2.1	1.3	73	80	105
160L-6	11	970	24.5	87.5	0.78	108	6.5	2.0	2.1	1.2	73	80	120
180L-6	15	970	31.6	89.0	0.81	148	7.0	2.0	2.1	1.2	73	80	175
200L1-6	18.5	970	38.6	90.0	0.81	182	7.0	2.1	2.1	1.2	76	82	220
200L2-6	22	970	44.7	90.0	0.83	217	7.0	2.0	2.1	1.2	76	82	235
225M-6	30	980	59.3	91.5	0.84	293	7.0	2.0	2.1	1.2	76	82	300
250M-6	37	980	71.1	92.0	0.86	361	7.0	2.1	2.1	1.2	78	84	370
280S-6	45	980	85.9	92.5	0.86	439	7.0	2.1	2.0	1.1	80	85	480
280M-6	55	980	105	92.8	0.86	536	7.0	2.1	2.0	1.1	80	85	535
315S-6	75	990	142	93.5	0.86	724	6.7	2.0	2.0	1.0	85	90	790
315M-6	90	990	170	93.8	0.86	869	6.7	2.0	2.0	1.0	85	90	880
315L1-6	110	990	207	94.0	0.86	1062	6.7	2.0	2.0	1.0	85	90	997
315L2-6	132	990	245	94.2	0.87	1274	6.7	2.0	2.0	1.0	85	90	1100
355M1-6	160	990	292	94.5	0.88	1544	6.7	1.9	2.0	1.0	92	96	1400
355M2-6	200	990	365	94.5	0.88	1930	6.7	1.9	2.0	0.9	92	96	1750
355L-6	250	990	457	94.5	0.88	2413	6.7	1.9	2.0	0.9	92	96	1950