



# SDF

## Series

THREE PHASE  
ASYNCHRONOUS  
INDUCTION MOTOR  
WITH CAST IRON HOUSING

### INTRODUCTION :

Koyo series three phase induction motor is specially designed for international market. Motor is having very compact structure & good appearance. It possesses the features such as high efficiency, energy saving, low noise & vibration. Efficiency of KOYO series meets EFF1, EFF2 standards.

### OPERATIONAL CONDITION :

Rated Voltage: 380 V, Rated frequency: 50 Hz, Protection Class: IP55, Insulation Class: F, Mounting B3, Duty S1 (Continuous), Cooling Method: ISO141, Key Way: Closed Type.



Manufactured by :

**INDO KOYO IMPORT & EXPORT CO. INDIA**  
(Designed and Developed with technical support from Malaysian Group)

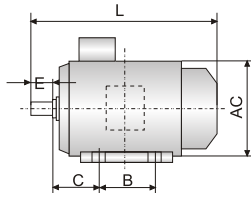


TECHNICAL DATA

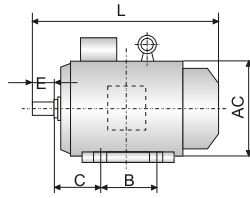
Model	Output		Current (A)		Speed (r/min)	Efficiency (%)	Power Factor	Tstart/Tn	Ist/In	Timax/In
	kW	HP	380 V	400 V						
380V 50 Hz Synchronous Speed 1000 r/min (6 Poles)										
711-6	0.18	0.24	0.70	0.67	865	59.0	0.66	2.3	4.0	2.4
712-6	0.25	0.33	0.90	0.83	865	64.0	0.68	2.0	4.0	2.0
801-6	0.37	0.50	1.20	1.1	885	62.5	0.76	2.0	4.7	2.1
802-6	0.55	0.75	1.70	1.5	885	69.0	0.76	2.0	4.7	2.1
90S-6	0.75	1	2.40	2.3	915	72.4	0.71	2.0	55	2.2
90L-6	1.1	1.5	3.30	3.1	915	75.2	0.72	2.0	5.5	2.2
100L-6	1.5	2	4.00	3.7	940	77.4	0.76	2.1	6.2	2.2
112M-6	2.2	3	5.50	5.0	980	79.8	0.76	2.2	5.0	2.2
132S-6	3.0	4	7.50	7.0	960	81.4	0.76	2.2	6.3	2.8
132M1-6	4.0	5.5	10.0	9.5	960	83.2	0.76	2.4	6.4	2.9
132M2-6	5.5	7.5	13.0	12	960	84.6	0.77	2.4	6.5	2.8
160M-6	7.5	10	17.0	16	970	86.2	0.78	2.0	6.5	2.3
160L-6	11	15	24.0	23	970	87.6	0.79	2.0	6.5	2.3
180L-6	15	20	31.0	29	970	88.9	0.83	2.1	7.0	2.2
200L1-6	18.5	25	38.0	38	975	89.6	0.82	2.1	6.5	2.8
200L2-6	22	30	45.0	42	975	90.4	0.83	2.1	6.5	2.7
225M-6	30	40	58.0	55	980	91.1	0.85	2.1	6.9	2.5
250M-6	37	50	71.0	68	980	91.7	0.86	2.3	6.9	2.3
280S-6	45	60	86.0	82	980	92.3	0.86	2.3	7.0	2.7
280M-6	55	75	105	100	980	92.8	0.86	2.3	7.0	2.7
315S-6	75	100	142	135	980	93.6	0.86	2.0	7.0	2.4
315M-6	90	125	170	160	935	93.9	0.86	2.0	7.0	2.4
315L1-6	110	150	207	197	935	94.3	0.86	2.1	7.0	2.4
315L2-6	132	180	245	233	935	94.8	0.87	2.1	7.0	2.3
355M1-6	160	215	293	277	935	94.9	0.88	2.0	7.0	2.0
355M2-6	200	270	363	345	990	95.0	0.88	2.0	7.0	2.0
355L-6	250	340	450	425	990	95.0	0.89	2.3	7.0	2.5
380V 50Hz Synchronous Speed 750r/min (8 Poles)										
801-8	0.18	0.25	0.82	0.78	630	52.0	0.64	1.8	3.5	2.0
802-8	0.25	0.34	1.10	1.0	640	54.0	0.64	1.8	3.5	2.0
90S-8	0.37	0.50	1.60	1.5	660	59.0	0.60	1.9	4.0	2.3
90L-8	0.55	0.75	2.20	2.1	660	62.0	0.60	2.0	4.0	2.3
100L1-8	0.75	1	2.40	2.3	690	68.4	0.67	2.0	5.0	2.2
100L2-8	1.1	1.5	3.40	3.2	690	71.6	.69	1.8	5.0	2.2
112M-8	1.5	2	4.00	3.8	680	74.6	0.75	2.0	5.0	2.5
132S-8	2.2	3	6.00	5.7	710	77.8	0.71	1.8	6.0	2.5
132M-8	3.0	4	7.90	7.5	710	79.8	0.73	1.8	6.0	2.4
160M1-8	4.0	5.5	10.3	9.8	720	81.5	0.73	1.9	6.0	2.0
160M2-8	5.5	7.5	13.6	12.8	720	83.4	0.74	2.0	6.0	2.0
160L-8	7.5	10	18.0	17	720	85.5	0.75	2.0	6.0	2.0
180L-8	11	15	25.0	24	730	87.0	0.76	2.2	6.2	2.0
200L-8	15	20	35.0	32	730	88.5	0.76	2.2	6.2	2.8
225S-8	18.5	25	40.0	38	730	89.6	0.77	2.2	6.8	2.8
225M-8	22	30	47.0	44	740	89.7	0.80	2.2	6.7	2.3
250M-8	30	40	63.0	60	740	90.9	0.80	1.9	5.5	2.9
280S-8	37	50	78.0	74	740	91.5	0.79	2.0	6.6	2.8
280M-8	45	60	95.0	90	740	92.0	0.79	2.0	6.6	2.4
315S-8	55	75	115	110	740	92.8	0.81	1.8	6.6	2.4
315M-8	75	100	150	145	740	93.5	0.81	1.8	6.6	2.2
315L1-8	90	125	180	170	740	93.8	0.82	1.8	6.6	2.2
315L2-8	110	150	220	205	740	94.1	0.82	1.9	6.6	2.3
355M1-8	132	180	265	250	740	94.4	0.82	1.9	6.5	2.3
355M2-8	160	215	315	300	740	94.7	0.83	1.9	6.5	2.0
355L-8	200	270	386	367	740	94.8	0.83	1.9	6.5	2.0
380V 50Hz Synchronous Speed 600 r/min (10 Poles)										
315S-10	45	60	100	95	590	91.5	0.75	1.5	6.2	2.0
315M-10	55	75	122	115	590	92.0	0.75	1.5	6.2	2.0
315L1-10	75	100	163	155	590	92.5	0.76	1.5	6.2	2.0
315L2-10	90	125	191	182	590	93.0	0.77	1.5	6.2	2.0
355M1-10	110	150	230	218	590	93.2	0.78	1.3	6.0	2.0
355M2-10	132	180	275	261	590	93.5	0.78	1.3	6.0	2.0
355L-10	160	215	333	317	590	93.5	0.78	1.3	6.0	2.0

**TECHNICAL DATA**

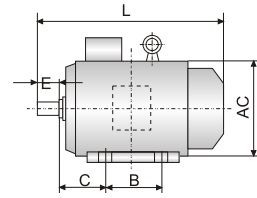
Model	Output		Current (A)		Speed (r/min)	Efficiency (%)	Power Factor	Tstart/Tn	Ist/In	Timax/In
	kW	HP	380 V	400 V						
380V 50Hz Synchronous Speed 3000rpm (2 poles)										
631-2	0.18	0.24	0.53	0.50	2730	65.0	0.80	2.2	5.5	2.2
632-2	0.25	0.33	0.66	0.60	2730	70.0	0.81	2.6	5.5	2.6
711-2	0.37	0.50	0.95	0.90	2750	72.3	0.82	2.4	6.1	2.5
712-2	0.55	0.75	1.33	2.27	2790	76.0	0.82	2.4	6.1	2.9
801-2	0.75	1	1.83	1.74	2845	76.1	0.83	2.4	7.0	2.5
802-2	1.1	1.5	2.60	2.5	2840	76.2	0.83	2.5	7.0	2.5
90S-2	1.5	2	3.50	3.3	2840	78.8	0.84	2.7	7.0	2.8
90L-2	2.2	3	4.80	4.6	2840	81.0	0.84	2.5	6.0	2.8
100L-2	3.0	4	6.40	8.0	2830	82.8	0.87	2.2	7.5	2.5
112M-2	4.0	5.5	8.10	7.7	2890	84.2	0.88	2.3	7.1	2.3
132S1-2	5.5	7.5	11.0	10.5	2910	85.9	0.88	2.3	7.5	2.5
132S2-2	7.5	10	15.0	14.3	2905	87.3	0.88	2.2	7.5	2.4
160M1-2	11	15	22.0	20	2935	88.6	0.89	2.3	7.7	3.1
160M2-2	15	20	29.0	27	2935	89.4	0.90	2.4	7.6	3.1
160L-2	18.5	25	35.0	33	2935	90.1	0.91	2.7	7.7	3.2
180M-2	22	30	41.0	39	2940	90.6	0.90	2.0	7.7	2.7
200L1-2	30	40	56.0	53	2945	91.6	0.90	2.1	6.9	2.8
200L2-2	37	50	68.0	64	2945	92.2	0.90	2.2	7.0	2.6
225M-2	45	60	81.0	77	2950	92.7	0.90	2.4	7.3	3.1
250M-2	55	75	100	95	2965	93.1	0.90	2.6	7.6	3.1
280S-2	75	100	134	127	2965	93.8	0.91	2.2	7.8	2.5
280M-2	90	125	160	152	2965	94.1	0.91	2.2	7.8	2.5
315S-2	110	150	196	186	2975	94.4	0.91	1.8	7.1	2.4
315M-2	132	180	234	222	2975	94.9	0.91	1.8	7.1	2.4
315L1-2	160	215	280	266	2975	95.1	0.92	1.8	7.1	2.5
315L2-2	200	270	348	331	2975	95.2	0.92	1.8	7.1	2.5
355M-2	250	340	432	410	2970	95.3	0.92	1.6	7.3	2.2
355L-2	315	420	543	515	2970	95.6	0.92	1.6	7.3	2.2
380V 50Hz Synchronous Speed 1500rpm (4 poles)										
631~4	0.12	0.16	0.44	0.42	1320	57.0	0.72	2.4	5.2	2.2
632~4	0.18	0.24	0.63	0.52	1320	60.0	0.72	2.4	5.2	2.5
711~4	0.25	0.33	0.83	0.73	1350	65.0	0.70	2.5	5.2	3.0
712~4	0.37	0.50	1.10	1.0	1340	67.0	0.75	2.5	5.2	3.1
801~4	0.55	0.75	1.50	1.4	1390	71.0	0.77	2.5	5.3	2.5
802~4	0.75	1.0	2.0	1.9	1380	74.4	0.77	2.5	5.3	2.5
90S-4	1.1	1.5	3.0	2.9	1390	76.3	0.75	2.5	4.7	2.3
90L-4	1.5	2	3.9	3.7	1390	78.5	0.76	2.2	5.2	2.6
100L1-4	2.2	3	5.2	4.9	1410	81.2	0.81	2.3	6.8	2.5
100L2-4	3.0	4	6.8	8.5	1410	82.8	0.82	2.3	7.1	2.5
112M-4	4.0	5.5	8.7	8.3	1440	84.2	0.82	2.3	6.4	2.6
132S-4	5.5	7.5	12	11	1445	85.7	0.83	2.3	7.0	2.5
132M-4	7.5	10	16	15	1445	87.2	0.84	2.3	7.0	2.5
160M-4	11	15	23	22	1460	88.4	0.85	2.4	7.0	2.9
160L-4	15	20	30	28	1460	89.5	0.85	2.6	7.6	2.9
180M-4	18.5	25	36	34	1470	90.2	0.87	2.2	7.0	3.0
180L-4	22	30	42	40	1470	90.6	0.87	2.2	7.0	2.7
200L-4	30	40	58	55	1470	91.4	0.86	2.2	7.2	3.0
225S-4	37	50	70	66	1475	92.2	0.87	2.2	6.9	2.8
225M-4	45	60	85	80	1475	92.5	0.87	2.2	7.0	3.0
250M-4	55	75	103	98	1475	93.1	0.87	2.2	7.4	2.8
280S-4	75	100	140	133	1485	93.7	0.87	2.2	7.5	2.4
280M-4	90	125	167	159	1485	93.9	0.87	2.2	7.5	2.4
315S-4	110	150	201	191	1485	94.5	0.88	2.2	6.9	2.7
315M-4	132	180	241	229	1485	94.8	0.88	2.2	6.9	2.6
315L1-4	160	215	288	273	1485	95.1	0.89	2.2	6.9	2.4
315L2-4	200	270	350	342	1485	95.2	0.89	2.2	6.9	2.4
355M-4	250	340	440	415	1490	95.3	0.91	2.3	6.8	2.3
355L-4	315	420	550	520	1490	95.6	0.91	2.3	6.8	2.3



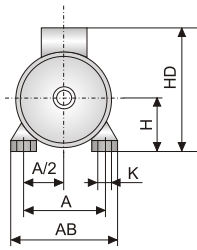
H63~90



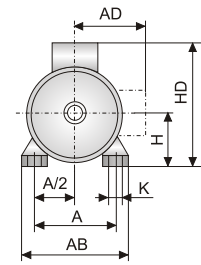
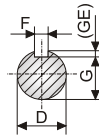
H100~132



H160~355



H63~71



H80~355

**Frame with Feet And endshield without Flange**

Frame Size	Poles	Mounting Dimensions										Overall Dimensions					
		A	A/2	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L	
63	2, 4	100	50	80	40	11	23	4	8.5	63	7	135	130	70	180	225	
71	2, 4, 6	112	56	90	45	14	30	5	11	71		150	145	80	195	250	
80	2, 4, 6, 8	125	62.5	100	50	19	40	6	15.5	80		165	175	145	214	295	
90S		100	140	70	100	56	24	50	8	20	90	10	180	195	155	250	315
90L					125												340
100L		12	160	80	140	63	28	60	24	100	112	12	205	215	180	270	385
112M																	190
132S		15	216	180	140	89	38	80	10	33	132	15	270	275	210	345	470
132M					178												510
160M		19	254	127	210	108	42	110	12	37	160	19	320	330	255	420	615
160L					254												670
180M		24	279	139.5	241	121	48	110	14	42.5	180	24	355	380	280	455	700
180L					279												740
200L		19	318	159	305	133	55	140	16	49	200	19	395	425	305	545	770
225S																	4, 8
225M		2	356	178	311	149	60	140	18	49	225	19	435	475	335	555	820
		4, 6, 8															55
250M	2	406	203	349	168	60	140	18	53	250	24	490	510	370	615	910	
	4, 6, 8															65	58
280S	2	457	228.5	368	190	75	140	20	67.5	280	24	550	580	410	680	985	
	4, 6, 8															65	58
280M	2	457	228.5	419	190	75	140	20	67.5	280	24	550	580	410	680	1035	
	4, 6, 8															75	67.5
315S	2	508	254	406	216	80	170	22	71	315	28	635	645	530	845	1160	
	4, 6, 8, 10															6	140
315M	2	508	254	457	216	80	170	22	71	315	28	635	645	530	845	1300	
	4, 6, 8, 10															65	140
315L	2	508	254	508	216	80	170	22	71	315	28	635	645	530	845	1300	
	4, 8															75	140
355M	2	610	254	560	254	95	170	25	86	355	28	730	710	655	1010	1500	
	4, 6, 8, 10															75	140
355L	2	610	254	630	254	95	170	25	86	355	28	730	710	655	1010	1500	
	4, 6, 8, 10															75	140