

Y

SERIES THREE-PHASE INDUCTION MOTORS

• Frame size	H80-355
• Power	0.55-315KW
• Synchronous speed	3000; 1500; 1000; 750RPM
• Voltage	220/380V; 380/660V
• Frequency	50Hz; 60Hz
• Protection class	IP44; IP54; IP55
• Insulation class	B; F
• Ambi.temperature	-15~+40°C
• Altitude above sea level	≤ 1000m



- See Table 1 for the mounting arrangements and respective frame numbers
- See Table 2 for the bearings
- See Table 3-4 for the technical data
- See Table 7-10 for the types and mounting dimensions

Y2

SERIES THREE-PHASE INDUCTION MOTORS

• Frame size	H63-355
• Power	0.120-315KW
• Synchronous speed	3000; 1500; 1000; 750RPM
• Voltage	230/400V; 400/690V
• Frequency	50Hz; 60Hz
• Protection class	IP54; IP55
• Insulation class	F
• Ambi.temperature	-15~+40°C
• Altitude above sea level	≤ 1000m



- See Table 1 for the mounting arrangements and respective frame numbers
- See Table 2 for the bearings
- See Table 5-6 for the technical data
- See Table 11-14 for the types and mounting dimensions

MOUNTING ARRANGEMENTS

The Commonly used mounting arrangements and the corresponding frame numbers are shown in table 1

Frame No.	Basic			Variations								
	B3	B5	B35	Based on B5		Based on B3				Based on B35		
				V1	V3	V5	V6	B6	B7	B8	V15	V36
H63-160	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
H180-225	✓	✓	✓	✓	—	—	—	—	—	—	—	—
H250-355	✓	—	✓	✓	—	—	—	—	—	—	—	—

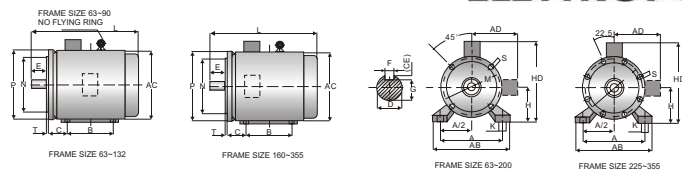
BEARINGS

Frame No.	Driving End				Non-driving End			
	2P		4,6,8P		2P	4,6,8P	2P	4,6,8P
	Y	Y ₂	Y	Y ₂	Y	Y	Y ₂	Y ₂
63	6201				6201			
71	6202				6202			
80	6204				6204			
90	6205				6205			
100	6206				6206			
112	6206				6206			
132	6208				6208			
160	6309	6209	6309		6309		6209	
180	6311	6211	6311		6311		6211	
200	6312	6212	6312		6312		6212	
225	6313	6312	6313		6313		6312	
250	6314	6313	6314		6314		6313	
280	6314		6317		6314	6317	6314	
315	6317		N319		6317	6319	6317	6319
355	6319		N322		6319	6322	6319	6322

Model	Rated output (KW)	At full load				Locked current Rated current	Locked torque Rated torque	Max torque Rated torque	Net weight (kg)	Noise level dB(A)	
		Speed (r/min)	Current (A)	Eff. (%)	Power factor (cos φ)					I	II
Synchronous Speed 3000r/min 50Hz											
63M1	0.18	2730	0.5	65	0.80	5.5	2.2	5	61	63	
63M2	0.25	2800	0.7	68	0.81			5.4			
71M1	0.37	2760	1.0	70	6.1	2.2	7.8	64	66		
71M2	0.55	2800	1.4	73			0.82			10	
80M1	0.75	2830	1.8	75	0.83	7	2.2	16	67	69	
80M2	1.1		2.5	77	0.84			17			
90S	1.5	2840	3.3	79	0.85	7	2.2	22	72	74	
90L	2.2		4.6	81				0.85			25
100L	3	2860	6.0	83	0.87	7.5	2.3	33	76	78	
112M	4	2880	7.7	85	0.88			2			2.2
132S1	5.5	2900	10.5	86		0.89	7.5		2.3	64	
132S2	7.5		14.1	87	0.89			70			
160M1	11	2930	20.3	88	0.90	7.5	2.3	117	86	88	
160M2	15		27.3	89				0.89			125
160L	18.5	2940	33	90	0.90	2	2.2	147	89	91	
180M	22		39.2	90				0.90			180
200L1	30	2950	52.8	91.2	0.91	7.1	1.8	210	92	94	
200L2	37		64.5	92				0.91			255
225M	45	2970	78.2	92.3	0.91	7.1	1.6	309	93	95	
250M	55		95.4	92.5				0.91			403
280S	75	2980	129.3	93	0.92	7.1	1.8	544	94	96	
280M	90		152.2	93.8				0.92			620
315S	110	2980	185.6	94	0.92	7.1	1.8	980	96	98	
315M	132		221.6	94.5				0.92			1080
315L1	160	2980	265.4	94.6	0.92	7.1	1.6	1160	99	101	
315L2	200		331.0	94.8				0.92			1190
355M	250	315	411.6	95.3	0.92	7.1	1.6	1760	103	105	
355L	315		517.0	95.6				0.92			1850
Synchronous Speed 1500r/min 50Hz											
63M1	0.12	1320	0.4	57	0.72	4.4	2.1	2.2	5.2	52	57
63M2	0.18		0.6	60	0.73				5.5		
71M1	0.25	1350	0.8	65	0.74	5.2	2.4	7	55	60	
71M2	0.37	1340	1.1	67	0.75			7.5			
80M1	0.55	1390	1.5	71	0.75	6	2.3	17	58	63	
80M2	0.75		2.0	73				0.76			18
90S	1.1	1390	2.8	75	0.77	6	2.3	22	61	66	
90L	1.5		3.5	78	0.79			27			
100L1	2.2	1410	4.9	80	0.81	7	2.3	34	64	69	
100L2	3		6.5	82	0.82			38			
112M	4	1440	8.4	84	0.82	7	2.3	43	65	70	
132S	5.5	11.3	85	0.83				68			
132M	7.5	1440	14.8	87	0.84	7.5	2.2	81	71	76	
160M	11	21.5	88	0.84	123						
160L	15	1460	30.1	89	0.85	7.5	2.2	144	75	80	
180M	18.5	34.3	90.5	0.86	182						
180L	22	1470	40.6	91	0.86	7.5	2.2	190	76	80	
200L	30		54.7	92				0.86			270
225S	37	1480	66.4	92.5	0.87	7.2	2.2	284	81	85	
225M	45		80.5	92.8				0.87			320
250M	55	1480	98.1	93	0.87	7.2	2.2	427	83	86	
280S	75		132.7	93.8				0.87			562
280M	90	1490	158.5	94.2	0.88	6.9	2.1	667	86	89	
315S	110		191.0	94.5				0.88			1000
315M	132	228.4	94.8	0.88	1100	6.9	2.1	1160	93	96	
315L1	160	273.4	94.9	0.89	1270						
315L2	200	334.4	95	0.89	1700	6.9	2.1	1270	97	100	
355M	250	420.7	95.3	0.90	1700						
355L	315	528.4	95.6	0.90	1850	6.9	2.1	1850	101	104	

Model	Rated output (KW)	At full load				Locked current Rated current	Locked torque Rated torque	Max torque Rated torque	Net weight (kg)	Noise level dB(A)	
		Speed (r/min)	Current (A)	Eff. (%)	Power factor (cos φ)					I	II
Synchronous Speed 1000r/min 50Hz											
71M1	0.18	870	0.7	56	0.66	4.00	1.90	2.00	7	52	59
71M2	0.25	870	0.9	59	0.68				8		
80M1	0.37	890	1.3	62	0.70	4.70	1.90	2.00	17	54	61
80M2	0.55		1.7	65	0.72				19		
90S	0.75	910	2.2	69	0.72	5.50	2.00	2.10	23	57	64
90L	1.1		3.0	72					0.73		
100L	1.5	920	3.8	76	0.75	6.50	2.10	2.10	33	61	68
112M	2.2	940	5.3	79	0.76				45		
132S	3	960	7.0	81	0.77	7.00	2.10	2.10	63	69	76
132M1	4		9.3	82					0.77		
132M2	5.5	970	12.3	84	0.81	7.00	2.10	2.00	84	73	80
160M	7.5		16.4	86					0.81		
160L	11	980	23.3	87.5	0.86	7.00	2.10	2.00	147	76	82
180L	15		30.0	89.0					0.86		
200L1	18.5	990	36.6	90.0	0.88	6.70	1.90	2.00	220	76	82
200L2	22		42.5	90.0					0.88		
225M	30	990	56.3	91.5	0.88	6.70	1.90	2.00	292	76	82
250M	37		67.5	92					0.88		
280S	45	990	81.7	92.5	0.88	6.70	1.90	2.00	536	80	85
280M	55		99.5	92.8					0.88		
315S	75	990	134.6	93.5	0.88	6.70	1.90	2.00	990	85	90
315M	90		161.1	93.8					0.88		
315L1	110	990	196.1	94.0	0.88	6.70	1.90	2.00	1150	85	90
315L2	132		232.5	94.2					0.88		
355M1	160	990	227.7	94.5	0.88	6.70	1.90	2.00	1600	92	96
355M2	200		346.4	94.7					0.88		
355L	250	432.1	94.9	0.88	1800	6.70	1.90	2.00	1800	92	96
Synchronous Speed 750r/min 50Hz											
80M1	0.18	630	0.9	51.0	0.61	3.30	1.90	2.00	17	52	60
80M2	0.25	640	1.1	54.0					19		
90S	0.37	660	1.4	62.0	0.69	4.00	1.80	2.00	23	56	64
90L	0.55		2.1	63.0					0.69		
100L1	0.75	690	2.3	71.0	0.67	5.00	1.80	2.00	33	59	67
100L2	1.1		3.2	73.0					0.67		
112M	1.5	680	4.2	75.0	0.69	6.00	1.90	2.00	50	61	69
132S	2.2	710	5.8	78.0	0.71				63		
132M	3	720	7.5	79.0	0.73	6.00	1.90	2.00	79	68	76
160M1	4		9.8	81.0					0.73		
160M2	5.5	730	12.9	83.0	0.76	6.60	1.90	2.00	119	70	78
160L	7.5		16.9	85.5					0.76		
180L	11	740	23.9	87.5	0.79	6.60	1.90	2.00	184	73	80
200L	15		32.4	88.0					0.79		
225S	18.5	740	39.1	90.0	0.81	6.40	1.80	2.00	266	76	82
225M	22		45.0	90.5					0.81		
250M	30	740	63.4	91.0	0.82	6.40	1.80	2.00	405	75	82
280S	37		73.9	91.5					0.82		
280M	45	740	89.4	92.0	0.82	6.40	1.80	2.00	592	76	82
315S	55		105.6	92.8					0.82		
315M	75	740	143.7	93.0	0.82	6.40	1.80	2.00	1100	82	88
315L1	90		168.9	93.8					0.82		
315L2	110	740	206.0	94.0	0.83	6.40	1.80	2.00	1230	82	88
355M1	132		248.0	93.7					0.83		
355M2	160	740	299.0	94.2	0.83	6.40	1.80	2.00	1700	90	95
355L	200		368.1	94.5					0.83		

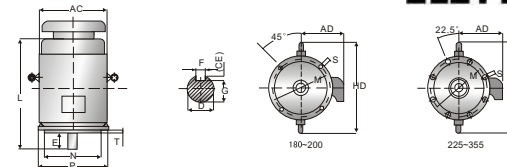
Y2 SERIES MOUNTING DIMENSIONS



IMB35

Frame No.	Poles	Mounting Dimensions & Tolerance																	Frame Dimensions						
		A	A/2	B	C	D	E	F	G ¹⁾	H	K ²⁾	M	N	P ³⁾	R ⁴⁾	S	T	Holes No.	AB	AC	AD	HD	L		
63M	2,4	100	50	80	40	11	+0.008 -0.003	23	4	8.5	63	7	115	95	+0.013 -0.008	140	10	+0.36 0	3	0 -0.10	135	130	70	180	230
71M	2,4,6	112	56	90	45	14	30	5	0	0	71	10	+0.360 0	130	110	160	10	0	0	150	145	80	195	255	
80M	2,4,6,8	125	63	100	50	19	40	6	±1.5	16	80	10	185	130	200	12	3.5	0	0	165	175	145	220	295	
90S	2,4,6,8	140	70	100	56	24	+0.008 -0.004	50	±0.310	20	90	12	185	130	200	12	3.5	0	0	180	195	155	250	320	
90L	2,4,6,8	140	70	125	56	24	+0.008 -0.004	50	±0.310	8	90	12	185	130	200	12	3.5	0	0	180	195	155	250	345	
100L	2,4,6,8	160	80	140	63	28	60	0	-0.036	24	100	10	215	180	250	15	4	0	0	205	215	180	270	385	
112M	2,4,6,8	190	95	140	70	±2.0	80	10	±0.370	33	132	15	265	230	300	15	4	0	0	230	240	190	300	400	
132S	2,4,6,8	216	108	140	89	38	80	10	33	132	15	265	230	300	15	4	0	0	270	275	210	345	470		
132M	2,4,6,8	216	108	178	89	38	80	10	33	132	15	265	230	300	15	4	0	0	270	275	210	345	510		
160M	2,4,6,8	254	127	210	108	42	+0.018 +0.002	12	37	160	15	300	250	350	±3.0	0	-0.12	0	0	320	330	255	420	615	
160L	2,4,6,8	254	127	254	108	42	+0.018 +0.002	12	37	160	15	300	250	350	±3.0	0	-0.12	0	0	320	330	255	420	670	
180M	2,4,6,8	279	140	241	121	48	110	±0.430	14	43	180	15	300	250	350	±3.0	0	-0.12	0	355	380	280	455	700	
180L	2,4,6,8	279	140	279	121	48	110	±0.430	14	43	180	15	300	250	350	±3.0	0	-0.12	0	355	380	280	455	740	
200L	2,4,6,8	318	159	305	133	55	16	49	200	19	400	350	±0.016	400	19	5	0	0	395	420	305	505	770		
225S	2,4,6,8	356	178	286	149	60	140	+0.500	18	0	225	400	350	±0.018	450	19	5	0	0	435	470	335	560	815	
225M	2,4,6,8	356	178	311	149	55	110	±0.430	16	53	225	400	350	±0.018	450	19	5	0	0	435	470	335	560	820	
250M	2,4,6,8	406	203	349	168	60	18	250	-1.0	0	250	490	510	370	615	910	0	0	490	510	370	615	910		
280S	2,4,6,8	457	229	368	190	65	20	0	-0.052	68	280	500	450	±0.020	550	24	0	0	550	580	410	680	985		
280M	2,4,6,8,10	457	229	419	190	65	18	0	-0.043	58	280	500	450	±0.020	550	24	0	0	550	580	410	680	1035		
315S	2,4,6,8,10	508	254	406	216	65	18	0	-0.043	58	315	600	550	±0.022	660	24	0	0	635	645	530	845	1295		
315M	2,4,6,8,10	508	254	457	216	65	18	0	-0.043	58	315	600	550	±0.022	660	24	0	0	635	645	530	845	1325		
315L	2,4,6,8,10	508	254	457	216	65	18	0	-0.043	58	28	600	550	±0.022	660	24	0	-0.15	0	635	645	530	845	1295	
355M	2,4,6,8,10	610	305	560	254	75	20	0	-0.052	86	355	740	680	±0.025	800	24	0	0	730	710	655	1010	1500		
355L	2,4,6,8,10	610	305	630	254	75	20	0	-0.052	86	355	740	680	±0.025	800	24	0	0	730	710	655	1010	1530		

Y2 SERIES MOUNTING DIMENSIONS



IMV1

Frame No.	Poles	Mounting Dimensions & tolerance													Frame Dimensions			
		D	E	F	G ¹⁾	M	N	P ³⁾	R ⁴⁾	S	T	Holes No.	AC	AD	HF	L		
180M	2,4,6,8	48	+0.018 -0.022	14	42.5	300	250	+0.016 -0.013	350	±3.0	0	4	380	280	500	760		
180L	2,4,6,8	48	+0.018 -0.022	14	42.5	300	250	+0.016 -0.013	350	±3.0	0	4	380	280	500	800		
200L	2,4,6,8	55	±0.430	16	49	350	300	±0.016	400	±3.0	0	4	420	305	550	840		
225S	2,4,6,8	60	±0.500	18	53	400	350	±0.018	450	±3.0	0	4	470	335	610	905		
225M	2,4,6,8	55	±0.430	16	49	400	350	±0.018	450	±3.0	0	4	470	335	610	910		
225L	2,4,6,8	60	±0.500	18	53	400	350	±0.018	450	±3.0	0	4	470	335	610	935		
250M	2,4,6,8	65	±0.500	20	58	500	450	±0.020	550	±4.0	0	8	510	370	650	1015		
280S	2,4,6,8	75	±0.030 +0.011	18	67.5	500	450	±0.020	550	±4.0	0	8	510	370	650	1110		
280M	2,4,6,8	75	±0.030 +0.011	18	67.5	500	450	±0.020	550	±4.0	0	8	510	370	650	1150		
315S	2,4,6,8,10	80	±0.500	22	71	600	550	±0.022	660	±4.0	0	8	645	530	900	1280		
315M	2,4,6,8,10	80	±0.500	22	71	600	550	±0.022	660	±4.0	0	8	645	530	900	1310		
315L	2,4,6,8,10	80	±0.500	22	71	600	550	±0.022	660	±4.0	0	8	645	530	900	1430		
355M	2,4,6,8,10	95	+0.035 -0.013	25	86	740	680	±0.025	800	±4.0	0	8	710	655	1010	1640		
355L	2,4,6,8,10	95	+0.035 -0.013	25	86	740	680	±0.025	800	±4.0	0	8	710	655	1010	1670		

The note for: 1)G=D-GE. The limit of deviation in GE is (+0.10/0) for frame No. up to 80, the rest is (+0.20/0).

2)The position tolerance for hole K is based on the axis of shaft extension.

3)Dimension P is the maximum limit value.

4)R is the distance from the matching surface of flange to the shoulder of shaft extension.