

YG Series Induction Motors for Roller Table



- Frame sizes: 112-225 Rated output: 0.3-15Kw
- Voltage: 380V Frequency: 50Hz or 60Hz
- Degree of protection: IP54 Poles: 4,6,8,10,12,16,20
- Duty Cycle: S5 FC: 40%
- Insulation class: F (YGa series) ; F (YGb series frame size 112-200) / H (YGb series frame size 225)

Applications: Ideal for driving the work roller table and conveyance equipment in steel mill. YGa is suitable for driving the mill table and YGb is suitable for driving the live-roll table in

metallurgy industry.

Features: Small size and lightweight, easy to maintain, reliable operation; suitable for driving the devices that feature on frequent start, frequent brake, co-rotation and reverse, plug brake, impact load; or in such harsh environment with high temperature or much dust for continuous on duty or short time on duty. YGa series motor is of H insulation grade, YGb motor is of F insulation (frame 112-200) and H insulation (frame 225).

Performance Data (YGa)

380V 50Hz

Model	LRT (N·m)	LRA (A)	Output (kW)	dynamic constant (kg·m ²)/h				Rotor inertia (kg·m ²)	WGT. (kg)
				Fc=15%	Fc=25%	Fc=40%	Fc=60%		
Synchronous speed (1500r/min)									
YGa112L1-4	22	13	1.2	94	92	90	86	0.0112	57
YGa112L2-4	36	19	1.8	140	135	130	125	0.0166	66
Synchronous speed (1000r/min)									
YGa112L1-6	22	8.5	0.8	215	210	205	200	0.0112	57
YGa112L2-6	34	12	1.2	290	285	280	270	0.0166	66
YGa132M1-6	50	18	1.7	315	310	300	290	0.0251	90
YGa132M2-6	71	24	2.4	390	380	375	360	0.0333	98
Synchronous speed (750r/min)									
YGa112L1-8	17	5.8	0.45	350	345	335	320	0.0112	57
YGa112L2-8	28	9	0.75	495	485	470	450	0.0166	66
YGa132M1-8	42	12	1.1	530	520	510	480	0.0251	90
YGa132M2-8	60	17	1.6	670	655	640	605	0.0333	98
YGa160S1-8	80	22	2.2	810	790	770	736	0.0646	131
YGa160S2-8	110	30	3	1010	990	950	916	0.0841	142
YGa160L1-8	150	40	4	1230	1200	1160	1110	0.114	172
YGa160L2-8	210	56	5.3	1470	1430	1380	1310	0.139	190
YGa180L1-8	280	67	6.7	1640	1600	1540	1460	0.237	229

Model	LRT (N·m)	LRA (A)	Output (kW)	dynamic constant (kg·m ²)/h				Rotor inertia (kg·m ²)	WGT. (kg)
				Fc=15%	Fc=25%	Fc=40%	Fc=60%		
Synchronous speed (600r/min)									
YGa112L1-10	16	4.5	0.32	520	510	490	465	0.0112	57
YGa112L2-10	25	7.5	0.5	700	685	660	625	0.0166	66
YGa132M1-10	38	9	0.75	790	770	740	700	0.0251	90
YGa132M2-10	56	13	1.1	990	970	930	880	0.0333	98
YGa160S1-10	80	18	1.6	1220	1190	1150	1090	0.0646	131
YGa160S2-10	110	24	2.2	1470	1440	1380	1300	0.0814	142
YGa160L1-10	150	32	3	1880	1830	1760	1670	0.114	172
YGa160L2-10	200	40	3.8	2260	2200	2120	2000	0.139	190
YGa180L1-10	250	48	4.8	2500	2440	2350	2220	0.237	229
YGa180L2-10	320	60	6	2880	2810	2690	2530	0.294	252
YGa200L1-10	400	75	7.5	3260	3180	3050	2880	0.509	302
YGa200L2-10	500	95	9.5	3790	3690	3530	3320	0.631	337
YGa225M1-10	630	125	12	3870	3740	3550	3280	0.91	410
YGa225M2-10	800	150	15	4440	4290	4050	3740	1.11	445
Synchronous speed (500r/min)									
YGa112L1-12	22	5.3	0.3	1060	1030	990	930	0.0166	66
YGa132M1-12	36	8	0.56	1130	1090	1050	990	0.0251	90
YGa132M2-12	53	11	0.85	1400	1360	1300	1220	0.0333	98
YGa160S1-12	75	15	1.2	1670	1620	1550	1440	0.0646	131
YGa160S2-12	105	20	1.6	2060	2000	1910	1780	0.0814	142
YGa160L1-12	140	26	2.2	2590	2510	2400	2230	0.114	172
YGa160L2-12	190	34	3	3120	3020	2880	2680	0.139	190
YGa180L1-12	250	42	4	3600	3500	3340	3130	0.237	229
YGa180L2-12	320	53	5	4180	4050	3860	3610	0.294	252
YGa200L1-12	400	63	6.3	4650	4500	4290	4010	0.509	302
YGa200L2-12	500	80	8	5470	5300	5040	4700	0.631	337
YGa225M1-12	630	100	10	5550	5350	5050	4650	0.91	410
YGa225M2-12	800	130	12	6330	6080	5710	5220	1.11	445
Synchronous speed (375r/min)									
YGa160S1-16	50	9.5	0.48	2770	2660	2500	2290	0.0646	131
YGa160S2-16	75	13	0.75	3390	3250	3050	2770	0.0814	142
YGa160L1-16	105	18	1.1	4340	4160	3990	3540	0.114	172
YGa160L2-16	140	24	1.6	5170	4950	4640	4180	0.139	190
YGa180L1-16	190	30	2.2	5850	5610	5270	4800	0.237	229
YGa180L2-16	250	38	3	6950	6670	6260	5710	0.294	252
YGa200L1-16	320	50	4	7890	7580	7100	6490	0.509	302
YGa200L2-16	420	63	5.3	9100	8710	8100	7370	0.631	337
YGa225M1-16	530	80	6.7	9380	8950	8310	7460	0.91	410
YGa225M2-16	670	100	8.5	10770	10250	9460	8400	1.11	445

Performance Data (YGa)

380V 50Hz

Synchronous speed (300r/min)									
YGa200L1-20	250	36	2	11210	10630	9750	8590	0.509	302
YGa200L2-20	340	48	2.8	12980	12250	11150	9690	0.631	337
YGa225M1-20	450	63	3.6	13830	12990	11760	10050	0.91	410
YGa225M2-20	560	80	4.5	15750	14760	13300	11280	1.11	445

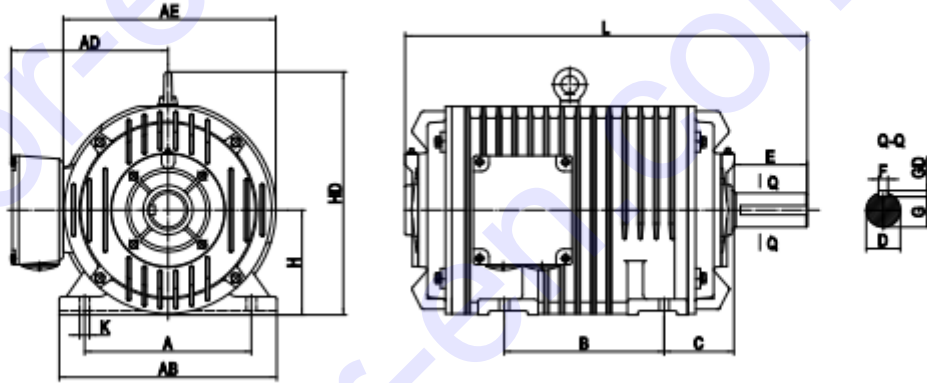
Performance Data (YGb)

380V 50Hz

Model	continuous duty			LRT (N·m)	LRA	Rotor inertia (kg·m ²)	WGT. (kg)
	Output (kW)	RPM	Current (A)				
Synchronous speed (1500r/min)							
YGb112L1-4	1.2	1410	2.8	20	18	0.0112	57
YGb112L2-4	1.8	1410	4	32	26	0.0166	66
Synchronous speed (1000r/min)							
YGb112L1-6	0.85	930	2.2	20	12	0.0112	57
YGb112L2-6	1.25	930	3	28	17	0.0166	66
YGb132M1-6	1.8	935	4.6	42	25	0.0251	90
YGb132M2-6	2.4	935	5.3	60	32	0.03333	98
Synchronous speed (750r/min)							
YGb112L1-8	0.5	690	1.7	15	7	0.0112	57
YGb112L2-8	0.85	690	2.6	25	12	0.0166	66
YGb132M1-8	1.25	695	3.4	36	16	0.0251	90
YGb132M2-8	1.8	695	4.5	50	22	0.0333	98
YGb160S1-8	2.5	695	6	71	30	0.0646	131
YGb160S2-8	3.4	695	8	100	42	0.0814	142
YGb160L1-8	4.5	695	10.5	140	56	0.114	172
YGb160L2-8	5.6	695	14	190	75	0.139	190
YGb180L1-8	6.7	695	16	240	95	0.237	229
YGb180L2-8	8	695	20	300	110	0.294	252
Synchronous speed (600r/min)							
YGb112L1-10	0.36	550	1.7	13	6	0.0112	57
YGb112L2-10	0.53	550	2.4	20	9	0.0166	66
YGb132M1-10	0.85	550	3	30	12	0.0251	90
YGb132M2-10	1.25	550	4	45	16	0.0333	98
YGb160S1-10	1.8	550	5.6	63	25	0.0646	131
YGb160S2-10	2.4	550	7.1	90	32	0.0814	142
YGb160L1-10	3.2	550	9	120	42	0.114	172
YGb160L2-10	4.2	550	12	160	53	0.139	190
YGb180L2-10	5.6	555	17	250	85	0.294	252
YGb200L1-10	7.1	555	19	320	105	0.509	302
YGb200L2-10	9	555	24	400	130	0.631	337

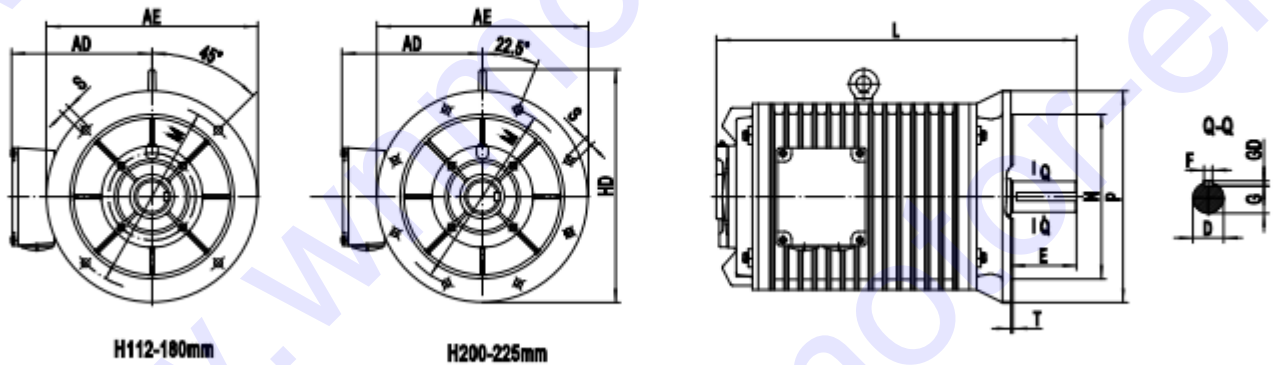
Model	continuous duty			LRT (N·m)	LRA	Rotor inertia (kg·m ²)	WGT. (kg)
	Output (kW)	RPM	Current (A)				
Synchronous speed (600r/min)							
YGb225M1-10	11	560	30	500	170	0.91	410
YGb225M2-10	14	560	37	630	210	1.11	445
Synchronous speed (500r/min)							
YGb112L1-12	0.3	455	1.6	12	4.5	0.0112	57
YGb112L2-12	0.45	455	2.2	18	6.7	0.0166	66
YGb132M1-12	0.63	455	2.8	26	9.5	0.0251	90
YGb132M2-12	0.95	455	3.8	38	14	0.0333	98
YGb160S1-12	1.3	455	5.0	56	20	0.0646	131
YGb160S2-12	1.8	455	6.7	80	26	0.0814	142
YGb160L1-12	2.6	455	9	110	36	0.114	172
YGb160L2-12	3.4	455	12	150	48	0.139	190
YGb180L1-12	4.2	460	14	200	60	0.237	229
YGb180L2-12	5	460	17	260	75	0.294	252
YGb200L1-12	6.3	460	20	320	90	0.509	302
YGb200L2-12	8	460	24	400	115	0.631	337
YGb225M2-12	11	460	36	630	165	1.11	445
Synchronous speed (375r/min)							
YGb132M1-16	0.36	320	2.6	20	6.7	0.0251	90
YGb132M2-16	0.5	320	3.5	30	9.5	0.0333	98
YGb160S1-16	0.71	330	4.5	42	12	0.0646	131
YGb160S2-16	1	330	6	60	17	0.0814	142
YGb160L1-16	1.5	330	8.5	80	24	0.114	172
YGb160L2-16	2	330	11	110	30	0.139	190
YGb180L1-16	2.5	340	12.5	150	40	0.237	229
YGb180L2-16	3	340	17	190	50	0.294	252
YGb200L1-16	4.2	340	20	250	63	0.509	302
YGb200L2-16	5.3	340	24	340	80	0.631	337
YGb225M1-16	6.7	340	30	450	100	0.91	410
YGb225M2-16	8.5	340	40	600	125	1.11	445
Synchronous speed (300r/min)							
YGb180L2-20	1.4	275	16	130	35	0.294	252
YGb200L1-20	2.2	275	18	180	45	0.509	302
YGb200L2-20	3.2	275	24	250	60	0.631	337
YGb225M1-20	4	275	30	340	80	0.91	410
YGb225M2-20	4.8	275	38	450	100	1.11	445

B3 (Horizontal Foot Mounted Only)



Frame	Pole	Mounting Dimension											Overall Dimension				
		A	B	C	D	E	F	G	GD	H	K	AB	AE	AD	HD	L	
YG112L	4,6,8,10,12	190	159	70	32	80	10	27	8	112	12	235	240	205	240	445	
YG132M	6,8,10,12,16	216	178	89	38	80	10	33	8	132	12	265	265	220	265	495	
YG160S	8,10,12,16	254	178	108	48	110	14	42.5	9	160	15	315	315	250	320	570	
YG160L	8,10,12,16	254	254	108	48	110	14	42.5	9	160	15	315	315	250	320	690	
YG180L	8,10,12,16,20	279	279	121	55	110	16	49	10	180	15	360	360	295	365	730	
YG200L	10,12,16,20	318	305	133	65	140	18	58	11	200	19	415	415	320	415	780	
YG225M	10,12,16,20	356	311	149	75	140	20	67.5	12	225	19	470	470	335	465	835	

B5 (Footless and B5 Flange Mounted)

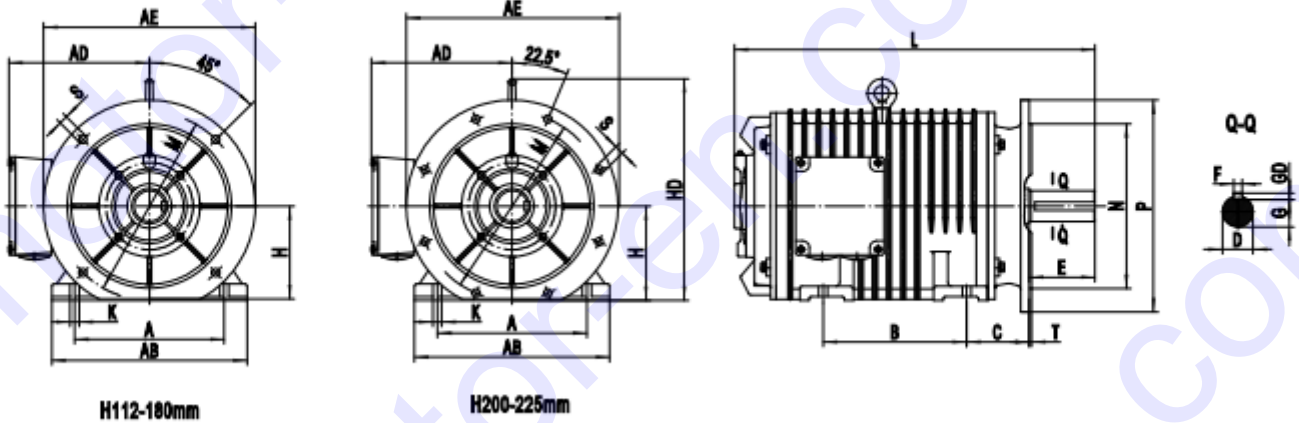


Frame	Pole	Mounting Dimension												Overall Dimension			
		D	E	F	G	GD	M	N	P	R	S	T	Holes	AD	AE	HD	L
YG112L	4,6,8,10,12	32	80	10	27	8	215	180	250	0	15	4	4	205	240	240	445
YG132M	6,8,10,12,16	38	80	10	33	8	265	230	300	0	15	4	4	220	265	285	495
YG160S	8,10,12,16	48	110	14	42.5	9	300	250	350	0	19	5	4	250	315	335	570
YG160L	8,10,12,16	48	110	14	42.5	9	300	250	350	0	19	5	4	250	315	335	690

YG180L	8,10,12,16,20	55	110	16	49	10	300	250	350	0	19	5	4	295	360	355	730
YG200L	10,12,16,20	65	140	18	58	11	400	350	450	0	19	5	8	320	415	450	780

YG225M	10,12,16,20	75	140	20	67.5	12	400	350	450	0	19	5	8	335	470	465	835
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B35 (Foot and B5 Flange Mounted)



Frame	Pole	Mounting Dimension																	Overall Dimension				
		A	B	C	D	E	F	G	GD	H	K	M	N	P	R	S	T	Holes	AB	AD	AE	HD	L
YG112L	4,6,8,10,12	190	159	70	32	80	10	27	8	112	12	215	180	250	0	15	4	4	235	205	240	240	445
YG132M	6,8,10,12,16	216	178	89	38	80	10	33	8	132	12	265	230	300	0	15	4	4	265	220	265	290	495
YG160S	8,10,12,16	254	178	108	48	110	14	42.5	9	160	15	300	250	350	0	19	5	4	315	250	315	345	570
YG160L	8,10,12,16	254	254	108	48	110	14	42.5	9	160	15	300	250	350	0	19	5	4	315	250	315	345	690
YG180L	8,10,12,16,20	279	279	121	55	110	16	49	10	180	15	300	250	350	0	19	5	4	360	295	360	365	730
YG200L	10,12,16,20	318	305	133	65	140	18	58	11	200	19	400	350	450	0	19	5	8	415	320	415	430	780
YG225M	10,12,16,20	356	311	149	75	140	20	67.5	12	225	19	400	350	450	0	19	5	8	470	335	470	465	835

YG series Diameter of the pipe thread

frame	diameter of the pipe thread	diameter of cable entry
YG112~160	M36×2-6H	25
YG180~225	M48×2-6H	36

YG series bearing sheet

frame	pole	bearing type		frame	pole	bearing type	
		DE	ODE			DE	ODE
112	4~12	2307 Z1	M-307 Z1	180	8~20	2312 Z1	M-312 Z1
132	6~16	2309 Z1	M-309 Z1	200	10~20	2314 Z1	M-314 Z1
160	8~16	2311 Z1	M-311 Z1	225	10~20	2316 Z1	M-316 Z1

Data above may be changed without prior notice.