

## YXVF Series High Efficiency Frequency Variable Speed Regulation Motor



- Frame sizes: 80 to 355 Rated output: 0.37 to 375kW
- Insulation class: F Voltage: 380V
- Efficiency levels: IE2
- Frequency range for 2P: (3) 5-100Hz (frame size 80-250)  
(3) 5-70Hz (frame size 280)  
(3) 5-60Hz (frame size 315-355)
- Frequency range for 4, 6, 8, 10P: (3) 5-100Hz

**Applications:** Widely applied in metallurgy, chemistry, textile, pharmacy, printing, packing and food industry on the machine or equipment by which speed-regulation is needed, like fan, pump, numerical control machine, machining center, etc.

### Features:

- Stepless speed regulation in a wide range
- Good performance, energy saving
- High-grade insulation material and special technology can withstand high frequency pulse impact
- Separated fan for forced-ventilation

### Performance Data

380V

50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	dB(A)	Constant Torque Frequency Range Hz	Constant Output Frequency Range Hz
Synchronous speed 3000r/min									
YXVF80M1-2	0.75	1.8	2855	77.4	0.82	2.51	70	5-50	50-100
YXVF80M2-2	1.1	2.5	2870	79.6	0.83	3.66	70		
YXVF90S-2	1.5	3.3	2865	81.3	0.84	5.00	74		
YXVF90L-2	2.2	4.7	2870	83.2	0.85	7.32	74		
YXVF100L-2	3	6.2	2875	84.6	0.87	9.97	78		
YXVF112M-2	4	8.0	2910	85.8	0.88	13.1	82		
YXVF132S1-2	5.5	10.9	2935	87.0	0.88	17.9	85		
YXVF132S2-2	7.5	14.5	2930	88.1	0.89	24.4	85		
YXVF160M1-2	11	21.0	2950	89.4	0.89	35.6	87		
YXVF160M2-2	15	28.4	2945	90.3	0.89	48.6	87		
YXVF160L-2	18.5	34.7	2945	90.9	0.89	60.0	87		
YXVF180M-2	22	41.1	2950	91.3	0.89	71.2	90		
YXVF200L1-2	30	55.7	2960	92.0	0.89	96.8	92		
YXVF200L2-2	37	68.3	2960	92.5	0.89	119	92		
YXVF225M-2	45	82.7	2965	92.9	0.89	145	94		
YXVF250M-2	55	101	2970	93.2	0.89	177	96	5-50	50-70
YXVF280S-2	75	137	2975	93.8	0.89	241	98		
YXVF280M-2	90	163	2970	94.1	0.89	289	98		

Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	dB(A)	Constant Torque Frequency Range Hz	Constant Output Frequency Range Hz
Synchronous speed 3000r/min									
YXVF315S-2	110	197	2975	94.3	0.90	353	100	5-50	50-60
YXVF315M-2	132	236	2975	94.6	0.90	424	100		
YXVF315L1-2	160	282	2975	94.8	0.91	514	100		
YXVF315L-2	185	325	2975	94.9	0.91	594	100		
YXVF315L2-2	200	352	2975	95.0	0.91	642	100		
YXVF315L3-2	220	387	2975	95.0	0.91	706	100		
YXVF355M1-2	220	387	2980	95.0	0.91	705	103		
YXVF355M-2	250	439	2980	95.0	0.91	801	103		
YXVF355L1-2	280	492	2980	95.0	0.91	897	103		
YXVF355L-2	315	554	2980	95.0	0.91	1009	103		
YXVF355L2-2	355	624	2980	95.0	0.91	1138	103		
YXVF355L3-2	375	659	2980	95.0	0.91	1202	103		
Synchronous speed 1500r/min									
YXVF80M1-4	0.55	1.4	1430	79.0	0.75	3.67	62	5-50	50-100
YXVF80M2-4	0.75	1.9	1425	79.6	0.76	5.03	62		
YXVF90S-4	1.1	2.7	1420	81.4	0.77	7.40	64		
YXVF90L-4	1.5	3.5	1420	82.8	0.78	10.1	64		
YXVF100L1-4	2.2	5.0	1430	84.3	0.80	14.7	68		
YXVF100L2-4	3	6.6	1430	85.5	0.81	20.0	68		
YXVF112M-4	4	8.7	1450	86.6	0.81	26.3	72		
YXVF132S-4	5.5	11.6	1465	87.7	0.82	35.9	76		
YXVF132M-4	7.5	15.5	1465	88.7	0.83	48.9	76		
YXVF160M-4	11	22.4	1470	89.8	0.83	71.5	79		
YXVF160L-4	15	29.9	1470	90.6	0.84	97.4	79		
YXVF180M-4	18.5	36.3	1470	91.2	0.85	120	83		
YXVF180L-4	22	42.9	1465	91.6	0.85	143	83		
YXVF200L-4	30	58.1	1475	92.3	0.85	194	85		
YXVF225S-4	37	70.5	1480	92.7	0.86	239	88		
YXVF225M-4	45	85.4	1480	93.1	0.86	290	88		
YXVF250M-4	55	104	1485	93.5	0.86	354	92		
YXVF280S-4	75	139	1490	94.0	0.87	481	94		
YXVF280M-4	90	165	1485	94.2	0.88	579	94		
YXVF315S-4	110	199	1485	94.5	0.89	707	96		
YXVF315M-4	132	238	1485	94.7	0.89	849	96		
YXVF315L1-4	160	285	1485	94.9	0.90	1029	96		
YXVF315L-4	185	329	1485	95.0	0.90	1190	96		
YXVF315L2-4	200	355	1485	95.1	0.90	1286	96		

Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	dB(A)	Constant Torque Frequency Range Hz	Constant Output Frequency Range Hz
Synchronous speed 1500r/min									
YXVF315L3-4	220	391	1485	95.1	0.90	1415	96	5-50	50-75
YXVF355M1-4	220	391	1490	95.1	0.90	1410	98		
YXVF355M-4	250	444	1490	95.1	0.90	1602	98		
YXVF355L1-4	280	497	1490	95.1	0.90	1795	98		
YXVF355L-4	315	559	1490	95.1	0.90	2019	98		
YXVF355L2-4	355	645	1490	95.1	0.88	2275	98		
YXVF355L3-4	375	681	1490	95.1	0.88	2404	98		
Synchronous speed 1000r/min									
YXVF80M1-6	0.37	1.2	910	67.0	0.70	3.88	61	5-50	50-100
YXVF80M2-6	0.55	1.7	910	70.0	0.71	5.77	61		
YXVF90S-6	0.75	2.1	935	75.9	0.71	7.66	63		
YXVF90L-6	1.1	3.0	935	78.1	0.72	11.2	63		
YXVF100L-6	1.5	4.0	945	79.8	0.72	15.2	66		
YXVF112M-6	2.2	5.7	965	81.8	0.72	21.8	71		
YXVF132S-6	3	7.6	975	83.3	0.72	29.4	75		
YXVF132M1-6	4	9.7	975	84.6	0.74	39.2	75		
YXVF132M2-6	5.5	13.0	975	86.0	0.75	53.9	75		
YXVF160M-6	7.5	16.8	975	87.2	0.78	73.5	78		
YXVF160L-6	11	23.9	975	88.7	0.79	108	78		
YXVF180L-6	15	31.8	980	89.7	0.80	146	82		
YXVF200L1-6	18.5	38.9	980	90.4	0.80	180	84		
YXVF200L2-6	22	45.4	980	90.9	0.81	214	84		
YXVF225M-6	30	60.6	985	91.7	0.82	291	86		
YXVF250M-6	37	73.5	985	92.2	0.83	359	90		
YXVF280S-6	45	86.8	990	92.7	0.85	434	92		
YXVF280M-6	55	104	990	93.1	0.86	531	92		
YXVF315S-6	75	145	990	93.7	0.84	723	94		
YXVF315M-6	90	171	990	94.0	0.85	868	94		
YXVF315L1-6	110	209	990	94.3	0.85	1061	94		
YXVF315L2-6	132	247	990	94.6	0.86	1273	94		
YXVF315L3-6	160	298	990	94.8	0.86	1543	94		
YXVF355M1-6	160	298	990	94.8	0.86	1543	96		
YXVF355M-6	185	344	990	94.9	0.86	1785	96		
YXVF355M2-6	200	372	990	95.0	0.86	1929	96		
YXVF355L1-6	220	409	990	95.0	0.86	2122	96		
YXVF355L-6	250	465	990	95.0	0.86	2412	96		
YXVF355L2-6	280	521	990	95.0	0.86	2701	96		
YXVF355L3-6	315	586	995	95.0	0.86	3023	96		

Performance Data

380V

50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	dB(A)	Constant Torque Frequency Range Hz	Constant Output Frequency Range Hz
Synchronous speed 750r/min									
YXVF80M1-8	0.18	0.85	700	52.8	0.61	2.46	61	5-50	50-100
YXVF80M2-8	0.25	1.1	700	57.0	0.61	3.41	61		
YXVF90S-8	0.37	1.4	695	64.0	0.62	5.08	63		
YXVF90L-8	0.55	2.0	695	67.5	0.63	7.56	63		
YXVF100L1-8	0.75	2.3	705	71.5	0.68	10.2	66		
YXVF100L2-8	1.1	3.3	705	74.5	0.69	14.9	66		
YXVF112M-8	1.5	4.4	715	75.4	0.69	20.0	71		
YXVF132S-8	2.2	6.0	730	78.2	0.71	28.8	75		
YXVF132M-8	3	7.7	730	80.6	0.73	39.2	75		
YXVF160M1-8	4	10.1	725	82.7	0.73	52.7	78		
YXVF160M2-8	5.5	13.4	725	84.3	0.74	72.4	78		
YXVF160L-8	7.5	17.7	730	85.8	0.75	98.1	78		
YXVF180L-8	11	25.0	725	87.8	0.76	145	82		
YXVF200L-8	15	33.7	730	89.0	0.76	196	84		
YXVF225S-8	18.5	40.0	735	90.2	0.78	240	86		
YXVF225M-8	22	47.4	735	90.5	0.78	286	86		
YXVF250M-8	30	63.4	735	91.0	0.79	390	90		
YXVF280S-8	37	77.8	740	91.5	0.79	478	92		
YXVF280M-8	45	93.9	740	92.2	0.79	581	92		
YXVF315S-8	55	111	740	93.1	0.81	710	94		
YXVF315M-8	75	151	740	93.2	0.81	968	94		
YXVF315L1-8	90	181	740	93.2	0.81	1161	94		
YXVF315L2-8	110	218	740	93.5	0.82	1420	94		
YXVF355M1-8	132	261	745	93.7	0.82	1692	96		
YXVF355M2-8	160	314	745	94.3	0.82	2051	96		
YXVF355L1-8	185	364	745	94.3	0.82	2371	96		
YXVF355L-8	200	392	745	94.5	0.82	2564	96		
YXVF355L2-8	220	431	745	94.5	0.82	2820	96		
YXVF355L3-8	250	484	745	94.5	0.83	3205	96		
Synchronous speed 600 r/min									
YXVF315S-10	45	100	590	91.5	0.75	728	92	5-50	50-100
YXVF315M-10	55	121	590	92.0	0.75	890	92		
YXVF315L1-10	75	162	590	92.5	0.76	1214	92		
YXVF315L2-10	90	191	590	93.0	0.77	1457	92		
YXVF355M1-10	110	230	595	93.2	0.78	1766	94		
YXVF355M2-10	132	275	595	93.6	0.78	2119	94		
YXVF355L1-10	160	333	595	93.6	0.78	2568	94		

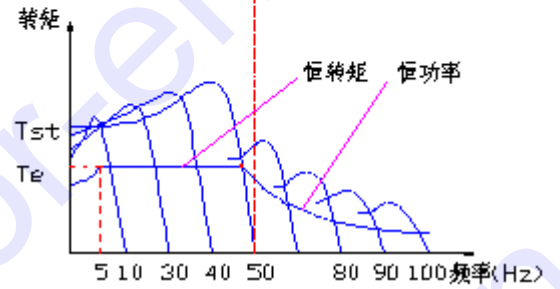
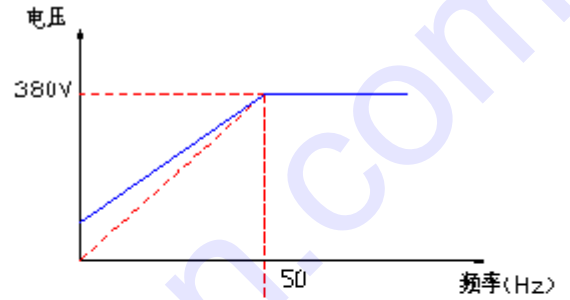
Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	dB(A)	Constant Torque Frequency Range Hz	Constant Output Frequency Range Hz
Synchronous speed 600r/min									
YXVF355L-10	185	385	595	93.6	0.78	2969	94	5-50	50-100
YXVF355L2-10	200	416	595	93.6	0.78	3210	94		
YXVF355L3-10	220	458	595	93.6	0.78	3531	94		

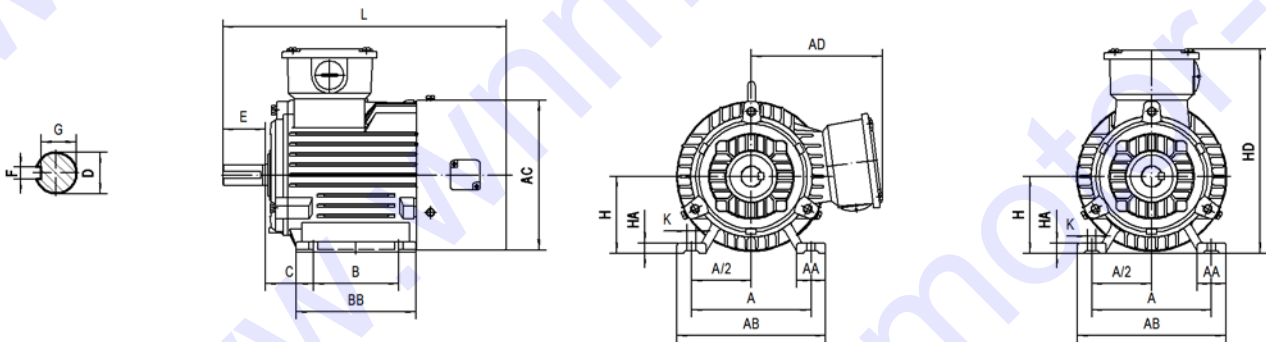
The torque characteristic under the condition of V/f control

The voltage needs to be compensated to increase the torque at low frequency when the motor is operated under the condition of V/f control with constant torque output.



Dimensions & Mounting

B3 (Horizontal Foot Mounted Only)



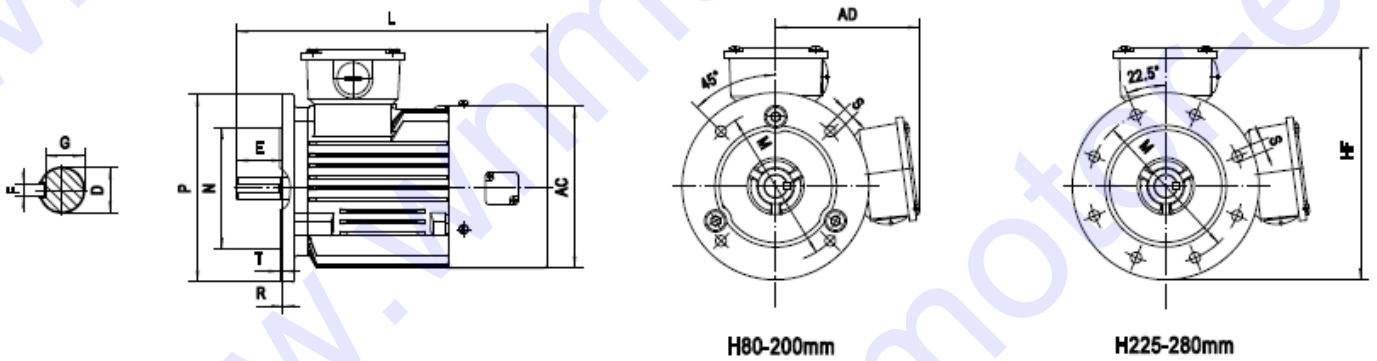
Frame	Poles	Mounting Dimension									Overall Dimension							
		A	B	C	D	E	F	G	H	K	AA	BB	HA	AB	AC	AD	HD	L
80M	2,4,6,8	125	100	50	19	40	6	155	80	10	32	135	10	160	165	145	225	355
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	34	145	12	180	180	165	255	385
90L			170									410						
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	39	186	14	200	205	175	275	460
112M	2,4,6,8	190	140	70	28	60	8	24	112	12	45	200	14	230	225	190	300	485
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	55	190	18	265	270	220	350	565
132M			230									605						
160M	2,4,6,8	254	210	108	42	110	12	37	160	15	65	260	20	315	320	260	420	700
160L			304									745						
180M	2,4,6,8	279	241	121	48	110	14	425	180	15	70	311	22	355	360	265	445	795



180L		279									349						835
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200L	2,4,6,8	318	305	133	55	110	16	49	200	19	74	379	26	395	400	305	505	870
225S	4,8	356	286	149	60	140	18	53	225	19	78	375	28	435	450	325	550	895
225M	2		311		55	110	16	49				400						890
250M	4,6,8	406	349	168	60	140	18	53	250	24	80	445	30	490	510	380	630	1005
	2				65													58
280S	2	457	368	190	65	140	18	58	280	24	90	485	35	545	550	395	675	1080
280M	4,6,8				75		20	67.5										536
	2	419	65	140	18	58	315	28	120	610	45	635	630	540	855	1135		
315S	4,6,8		75		20	67.5										1285		
	2	508	406	216	65	140	18	58	315	28	120	570	45	635	630	540	855	1315
315M	4,6,8,10				80	170	22	71										1320
	2	508	457	216	65	140	18	58	315	28	120	610	45	635	630	540	855	1350
315L	4,6,8,10				80	170	22	71										1395
	2	610	560	254	75	140	20	67.5	355	28	130	690	52	735	715	645	1000	1425
355M	4,6,8,10				95	170	25	86										1500
	2	630	560	254	75	140	20	67.5	355	28	130	750	52	735	715	645	1000	1530
355L1	4,6,8,10				95	170	25	86										1610
	2	630	560	254	80	170	22	71	355	28	130	750	52	735	715	645	1000	1640
355L2/L3	4,6,8,10				110	210	28	100										1640

**B5 (Footless and B5 Flange Mounted)**



Frame	Poles	Mounting Dimension										Overall Dimension			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HF	L
80M	2,4,6,8	19	40	6	15.5	165	130	200	0	4-Φ12	3.5	165	145	245	355
90S	2,4,6,8	24	50	8	20	165	130	200	0	4-Φ12	3.5	180	165	265	385
90L															410
100L	2,4,6,8	28	60	8	24	215	180	250	0	4-Φ15	4	205	175	300	460
112M	2,4,6,8	28	60	8	24	215	180	250	0	4-Φ15	4	225	190	315	485
132S	2,4,6,8	38	80	10	33	265	230	300	0	4-Φ15	4	270	220	370	565
132M															605
160M	2,4,6,8	42	110	12	37	300	250	350	0	4-Φ19	5	320	260	435	700
160L															745
180M	2,4,6,8	48	110	14	42.5	300	250	350	0	4-Φ19	5	360	265	440	795

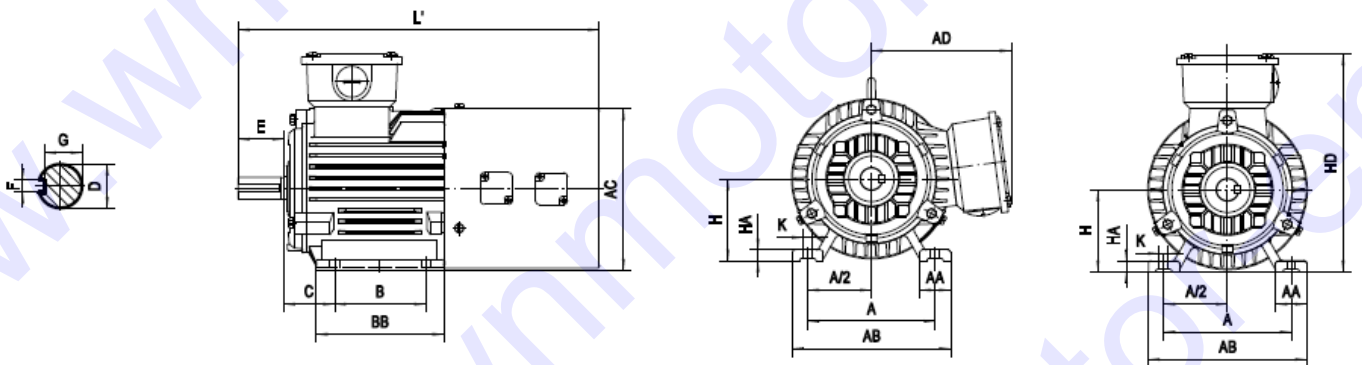


315S	2	508	406	216	65	140	18	58	315	28	600	550	660	0	8-Φ24	6	120	570	45	635	630	540	855	1285																																																																											
	4,6,8,10				80	170	22	71																1315																																																																											
315M	2		457		508	216	65	140																18	58	355	28	740	680	800	0	8-Φ24	6	130	610	52	735	715	645	1000	1320																																																										
	4,6,8,10						80	170																22	71																1350																																																										
315L	2		508		508	216	65	140																18	58																355	28	740	680	800	0	8-Φ24	6	130	680	52	735	715	645	1000	1395																																											
	4,6,8,10						80	170																22	71																															1425																																											
355M	2		560		610	254	75	140																20	67.5																															355	28	740	680	800	0	8-Φ24	6	130	690	52	735	715	645	1000	1500																												
	4,6,8,10						95	170																25	86																																														1530																												
355L/L1	2		630		630	254	75	140																20	67.5																																								355						28	740	680	800	0	8-Φ24	6	130	750	52	735	715	645	1000	1610														
	4,6,8,10						95	170																25	86																																																												1640														
355L2/L3	2		630		630	254	80	170																22	71																																																						355						28	740	680	800	0	8-Φ24	6	130	750	52	735	715	645	1000	1640
	4,6,8,10						110	210																28	100																																																																										1680

The dimensions are the maximum values. Use only certified data for construction.

The YXVF motor can also be equipped with an encoder according to the customer's requirements. The external dimensions as follows:

### B3 (Horizontal Foot Mounted Only)



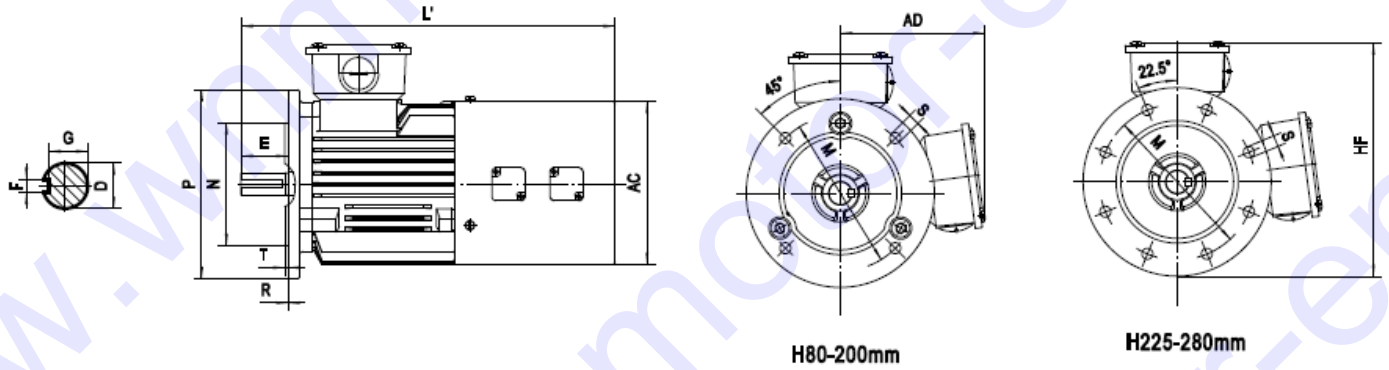
Frame	Poles	Mounting Dimension									Overall Dimension							
		A	B	C	D	E	F	G	H	K	AA	BB	HA	AB	AC	AD	HD	L'
80M	2,4,6,8	125	100	50	19	40	6	155	80	10	32	135	10	160	165	145	225	465
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	34	145	12	180	180	165	255	500
90L			125									170						525
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	39	186	14	200	205	175	275	565
112M	2,4,6,8	190	140	70	28	60	8	24	112	12	45	200	14	230	225	190	300	600
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	55	190	18	265	270	220	350	680
132M			178									230						720
160M	2,4,6,8	254	210	108	42	110	12	37	160	15	65	260	20	315	320	260	420	810
160L			254									304						855
180M	2,4,6,8	279	241	121	48	110	14	425	180	15	70	311	22	355	360	265	445	925
180L			279									349						965
200L	2,4,6,8	318	305	133	55	110	16	49	200	19	74	379	26	395	400	305	505	980
225S	4,8	356	286	149	60	140	18	53	225	19	78	375	28	435	450	325	550	1005
225M	2		311		55	110	16	49				400						1000
	4, 6, 8		60		140	18	53	1035										
250M	2	406	349	168	60	140	18	53	250	24	80	445	30	490	510	380	630	1115



	4, 6, 8				65			58										
280S	2	457	368	190	65	140	18	58	280	24	90	485	35	545	550	395	675	1190
	4, 6, 8				75		20	67.5										

280M	2	457	419	190	65	140	18	58	280	24	90	536	35	545	550	395	675	1245
	4, 6, 8				75		20	67.5										
315S	2	457	406	216	65	140	18	58	315	28	120	570	45	635	630	540	855	1400
	4, 6, 8, 10				80	170	22	71										1430
315M	2	508	457	216	65	140	18	58	315	28	120	610	45	635	630	540	855	1435
	4, 6, 8, 10				80	170	22	71										1465
315L	2	508	457	216	65	140	18	58	315	28	120	680	45	635	630	540	855	1510
	4, 6, 8, 10				80	170	22	71										1540
355M	2	610	560	254	75	140	20	67.5	355	28	130	690	52	735	715	645	1000	1615
	4, 6, 8, 10				95	170	25	86										1645
355L1	2	610	630	254	75	140	20	67.5	355	28	130	750	52	735	715	645	1000	1725
	4, 6, 8, 10				95	170	25	86										1755
355L2/L3	2	610	630	254	80	170	22	71	355	28	130	750	52	735	715	645	1000	1755
	4, 6, 8, 10				110	210	28	100										1795

### B5 (Footless and B5 Flange Mounted)



Frame	Poles	Mounting Dimension										Overall Dimension			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HF	L'
80M	2,4,6,8	19	40	6	15.5	165	130	200	0	4-Φ12	3.5	165	145	245	465
90S	2,4,6,8	24	50	8	20	165	130	200	0	4-Φ12	3.5	180	165	265	500
90L															525
100L	2,4,6,8	28	60	8	24	215	180	250	0	4-Φ15	4	205	175	300	565
112M	2,4,6,8	28	60	8	24	215	180	250	0	4-Φ15	4	225	190	315	600
132S	2,4,6,8	38	80	10	33	265	230	300	0	4-Φ15	4	270	220	370	680
132M															720
160M	2,4,6,8	42	110	12	37	300	250	350	0	4-Φ19	5	320	260	435	810
160L															855
180M	2,4,6,8	48	110	14	42.5	300	250	350	0	4-Φ19	5	360	265	440	925
180L															965
200L	2,4,6,8	55	110	16	49	350	300	400	0	4-Φ19	5	400	305	505	980
225S	4, 8	60	140	18	53	400	350	450	0	8-Φ19	5	450	325	550	1005
225M	2	55	110	16	49										1000
	4, 6, 8	60	140	18	53										1035
250M	2	60	140	18	53	500	450	550	0	8-Φ19	5	510	380	655	1115
	4, 6, 8	65			58										
280S	2	65	140	18	58	500	450	550	0	8-Φ19	5	550	395	670	1190
	4, 6, 8	75		20	67.5										



Above dimensions are the maximum values. Specifications are subject to the physical product.

Specifications of cooling blower and brake for the motor

Motor	Frame	80	90	100	112	132	160	180	200	225	250	280	315	355
Cooling Fan	(W) Power	30	42	52	55	55	80	80	150	200	230	320	700	700
	(A) Current	0.09	0.16	0.18	0.18	0.19	0.26	0.30	0.6	0.6	0.6	1.1	1.8	1.9
	Voltage	Standard 380V, but blower of other voltage can be customized depending on user's requirement.												
Brake	(N·m) Braking Torque	7.5	15	30	40	80	150	200	300	450	600	850	200	-
	(W) Excitation Power	50	60	80	110	130	150	150	200	200	210	340	400	-
	Excitation Voltage	DC99、DC170												
Encoder	Incremental Encoder													

Conventional mounting type and suitable frame size are given in following table (with “√”);

Frame	basic type			derived type											
	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V36	B14	B34	V18
80~112	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
132~160	√	√	√	√	√	√	√	√	√	√	√	√	-	-	-
180~280	√	√	√	√	-	-	-	-	-	-	-	-	-	-	-
315~355	√	-	√	√	-	-	-	-	-	-	-	-	-	-	-

If there is no other request in the order or agreement, terminal box position at the right side of the frame is regarded as standard; data above may be changed without prior notice.