

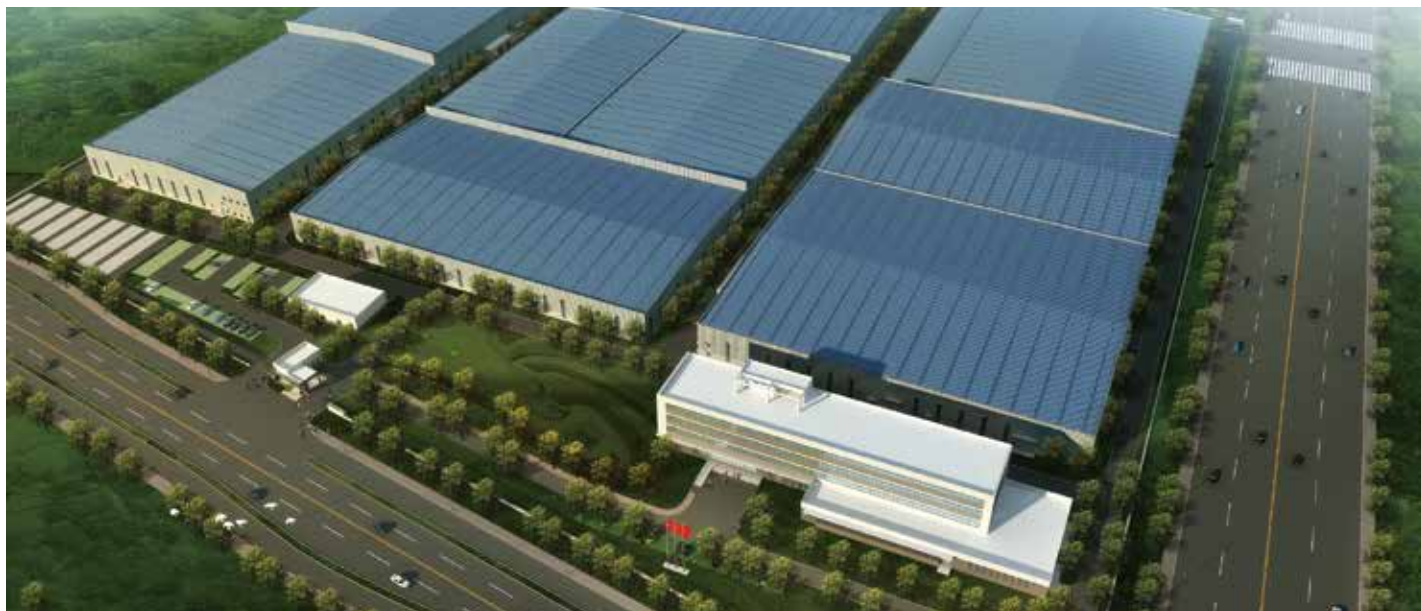
# Beide series other low-voltage AC asynchronous motors

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Catalog



# Company Profile



## Siemens Standard Motors Ltd.

Siemens Standard Motors Ltd. (SSML) is a Siemens-owned company in China. With an area of 133,400 square meters, SSML is located in Yizheng City, Jiangsu Province. The company focuses on developing and producing small and medium low-voltage motors. Currently, SSML mainly produce Siemens brand low voltage AC motors according to IEC standards, and Beide brand low voltage motors designed according to China local standards.

As one of Siemens main low-voltage motor production facilities worldwide, SSML uses the knowledge and experience of more than 100 years in motor design and manufacturing, and implement comprehensive quality control according to ISO9001 2008. SSML will continuously serve customers with high quality products and good service.

# Company Profile



## Quality Guideline

- Quality starts with me, Do it right in the first time.
- Encourage our employee to address problem openly and take responsibility.
- Refuse to accept defective product.
- Continuously improve our process to exceed customer's expectation.

## Environmental Guideline

EHS Policy of Siemens Standard Motors Ltd. is as follows:

- We institute and implement a continuously improving management system addressing our environment, occupational health and safety in compliance with the requirements of ISO14001:2004 and OHSAS18001:2007 criteria.
- We commit ourselves to abiding by the environmental, occupational health and safety laws and regulations, and fulfilling our duties in environmental protecting and occupational health safeguarding.
- We commit ourselves to the fulfillment of our social responsibility and obligation, properly harnessing resources, protecting our environment, enhancing occupational health and safety management with the ultimate goal of zero harm in our production process.

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# YVF2 Series Variable Speed Motors



Rated output: 0.55 ~ 315 kW  
 Frame Size: 80 ~ 355  
 Rated voltage: 380 V  
 Cooling method: IC416  
 Protection degree: IP55  
 Insulation class: F  
 Coolant temperature: -15 ~ 40 °C  
 Site altitude: Up to 1000 m above sea level

## Introduction

YVF2 Series Variable Speed Motors are AC high efficiency, energy saving motors. It can be configured with the frequency converter from domestic and abroad. It has the characteristics with reliable operation and easy maintenance. Separate axial-flow ventilator is installed, which can guarantee a better cooling effect in different speed.

YVF2 series motors can be widely applied to the equipment which need speed control in light industry, textile, chemical, metallurgy and machine tool industries etc.

## Construction and mounting type

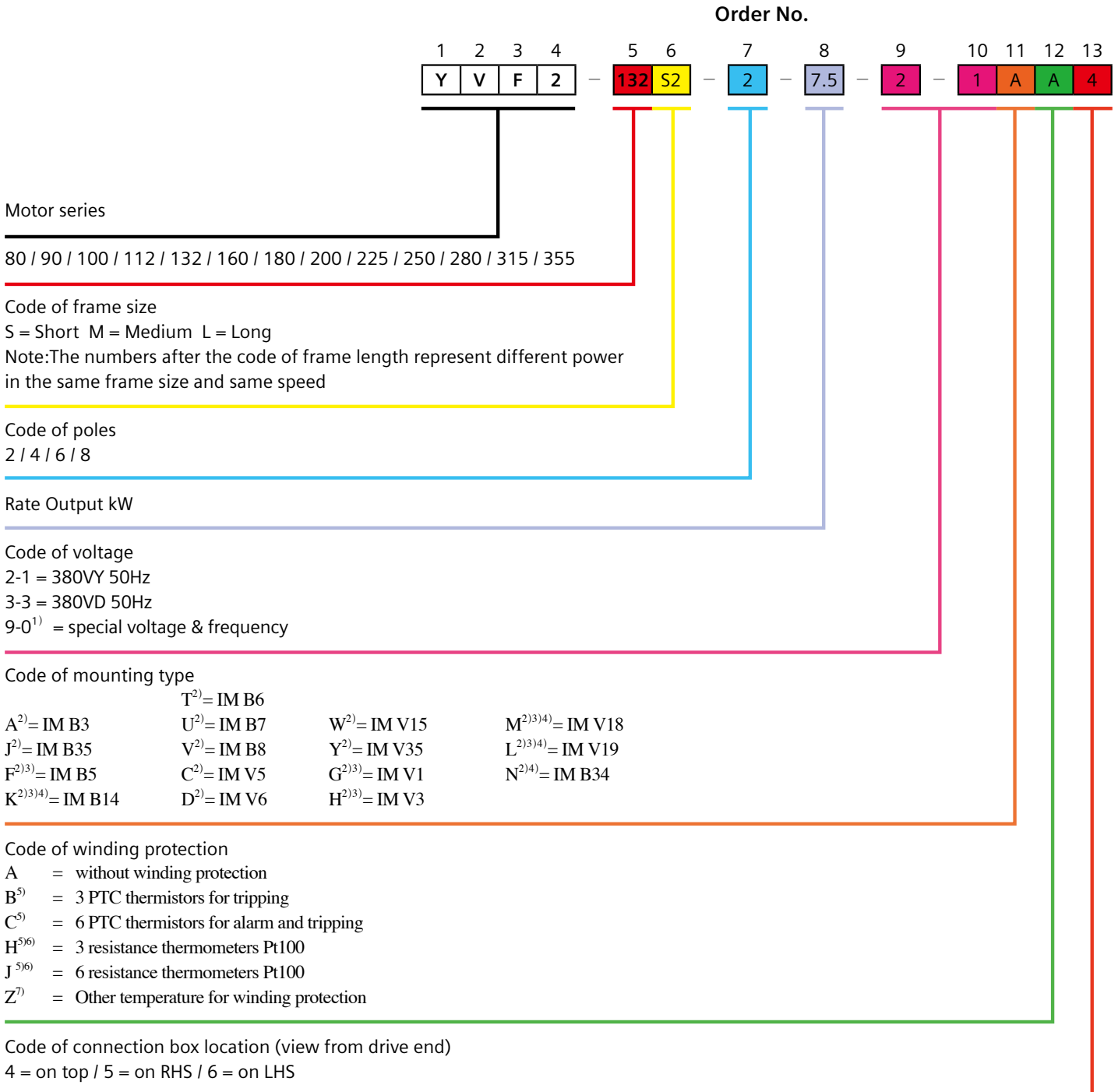
Construction type	With feet and without flange on the end-shield (DE)					
Mounting type	IM B3 FS <sup>3)</sup> 80 ~ 355	IM B6 FS 80 ~ 160	IM B7 FS80 ~ 160	IM B8 FS 80 ~ 160	IM V5 <sup>1)</sup> FS 80 ~ 160	IM V6 <sup>2)</sup> FS 80 ~ 160
Diagram						
Construction type	Without feet and with flange on the end-shield (DE)			With feet and with flange on the end-shield (DE)		
Mounting type	IM B5 FS 80 ~ 280	IM V1 <sup>1)</sup> FS 80 ~ 355	IM V3 <sup>2)</sup> FS 80 ~ 160	IM B35 FS 80 ~ 355	IM V15 <sup>1)</sup> FS 80 ~ 160	IM V35 <sup>2)</sup> FS 80 ~ 160
Diagram						
Construction type	Without feet and with C-flange on the end-shield (DE)			With feet and with C-flange on the end-shield (DE)		
Mounting type	IM B14 FS 80 ~ 112	IM V18 <sup>1)</sup> FS 80 ~ 112	IM V19 <sup>2)</sup> FS 80 ~ 112	IM B34 FS80 ~ 112		
Diagram						

<sup>1)</sup> Motor with protective cover

<sup>2)</sup> At out door application the protection of shaft again jet-water is recommended

<sup>3)</sup> FS-frame size

# Order No. example:



**Foot notes:**

- 1) Order other voltages with voltage code 90 and the corresponding Option code (see under "Option") .
- 2) The type of mounting construction is stamped on the rating plate.
- 3) For motor with IM B5, IM V1, IM V3, IM B14, IM V18 and IM V19 construction and mounting type, the 16th digit of motor order No. must be "4";
- 4) Only for FS80 ~ 112.
- 5) Choose this option, the connection box will be changed to cast iron.
- 6) Only applicable for frame size 100-355.
- 7) Please specially consult with Siemens.

**Order No. example:**

Variable Speed Motors

4 pole, 5.5 kW, IM B3, 380VY 50 Hz, IP55,

connection box at right side and cable entry at bottom (view from DE)

Motor order code: YVF2-132S-4-5.5-2-1AA5

Y	V	F	2	-	132	S	-	4	-	5.5	-	2	-	1	A	A	5
---	---	---	---	---	-----	---	---	---	---	-----	---	---	---	---	---	---	---

Motor series

Frame size: 132

Iron core length: (S)

Poles

Power


Voltage, connection method and frequency: 380VY 50Hz

Construction: IM B3

Winding protection : None

Connection box position at right side

# Nameplate example

			
型号 YVF2-160M1-2	标称功率 11 kW	额定转矩 35 N.m	
50 Hz	恒转矩频率范围 5~50 Hz	IP55 标称电流 21.4 A	
380VY	恒功率频率范围 50~100 Hz	F JB/T7118-2015	
120 kg	LMH-1107/800003888993/003		
西门子电机(中国)有限公司 Siemens Standard Motors Ltd.			

## Bearing system

YVF2 series motors are supplied with the ball bearing as standard. These bearings are either of the sealed or regreasable type.

For FS80 ~ 160, the floating bearings are assembled; for FS180 ~ 355, floating bearing at DE, and fixed bearing at NDE assembled.

### Bearing Assignment

Frame size	Pole	DE bearing	NDE bearing (Horizontal mounting)	NDE bearing (Horizontal mounting)
80	2, 4, 6	6204 2RZ C3	6204 2RZ C3	6204 2RZ C3
90	2, 4, 6	6205 2RZ C3	6205 2RZ C3	6205 2RZ C3
100	2, 4, 6	6206 2RZ C3	6206 2RZ C3	6206 2RZ C3
112	2, 4, 6	6206 2RZ C3	6206 2RZ C3	6206 2RZ C3
132	2, 4, 6, 8	6208 2RZ C3	6208 2RZ C3	6208 2RZ C3
160	2, 4, 6, 8	6309 2RZ C3	6209 2RZ C3	6209 2RZ C3
180	2, 4, 6, 8	6310 C3	6210 C3	6210 C3
200	2, 4, 6, 8	6312 C3	6212 C3	6212 C3
225	2, 4, 6, 8	6313 C3	6213 C3	6213 C3
250	2, 4, 6, 8	6314 C3	6215 C3	7215 AC
280	2, 4, 6, 8	6317 C3	6217 C3	7217 AC
315	2	6319 C3	6317 C3	7317 AC
	4, 6, 8	6319 C3	6319 C3	7319 AC
355	2	6319 C3	6319 C3	7319 AC
	4, 6, 8	6322 C3	6322 C3	7322 AC

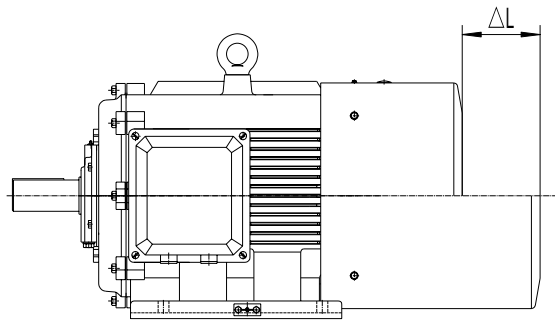
### Frame size, Pole & Frequency Table

Frame size	Pole	Constant Torque	Constant Power
FS80~180	2P	3~50	50~100
FS200~355			50~60
FS80~315	4P		50~100
FS355			50~75
FS80~FS355	6P		50~100
FS80~FS355	8P		

## Connection boxes technical data

Frame size	Contact screw thread	Outer cable diameter (sealing range)	Cable entry size
80 ~ 100	M4	10 ~ 14	M24 x 1.5
112 ~ 132	M5	13 ~ 18	M27 x 2 + M27 x 2
160 ~ 180	M5	18 ~ 25	M36 x 2 + M36 x 2
200 ~ 225	M8	22 ~ 32	M48 x 2 + M48 x 2
250	M10	37 ~ 44	M64 x 2 + M64 x 2
280	M10		
315	M12		
355	M16	45 ~ 52	M72 x 2 + M72 x 2

## Technical data for separately fan



Motor frame size	rated voltage	Rated frequency	Rated output	Current	Speed	$\Delta L$
80	220D/380Y	50	30	0.14/0.08	2800	60
90	220D/380Y	50	30	0.14/0.08	2800	75
100	220D/380Y	50	52	0.21/0.12	2800	70
112	220D/380Y	50	52	0.21/0.12	2800	80
132	220D/380Y	50	45	0.35/0.2	1400	75
160	220D/380Y	50	45	0.35/0.2	1400	45
180	220D/380Y	50	120	1.04/0.6	1400	55
200	220D/380Y	50	120	1.04/0.6	1400	60
225	220D/380Y	50	120	1.04/0.6	1400	70
250	220D/380Y	50	230	1.73/1.0	1400	65
280	220D/380Y	50	300	1.8/1.2	1400	105
315	220D/380Y	50	1100	4.33/2.5	1350	145
355	220D/380Y	50	1100	4.33/2.5	1350	150

Note: The fan can be running with supply 210 ~ 240VD/360 ~ 420VY 50Hz, and also 220 ~ 260VD/380 ~ 480VY 60Hz. Other voltage supply, possible on request.

# Technical data

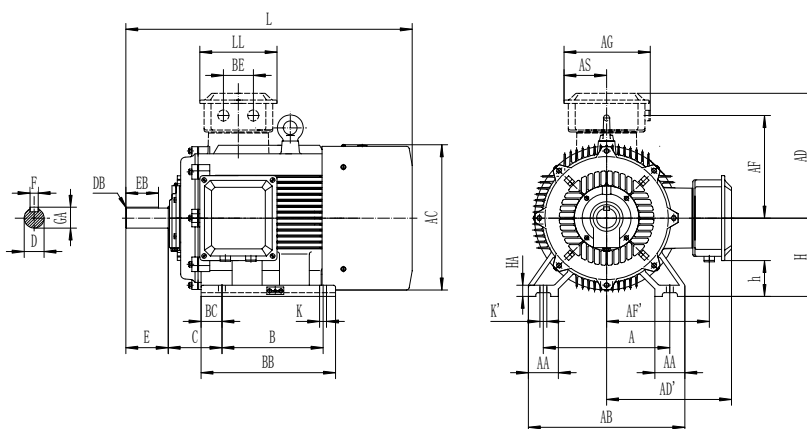
Power (kW)	Type	Rated torque (N.m)	Current (A)	Weight (kG)	Type	Rated torque (N.m)	Current (A)	Weight (kG)	Power of suited converter (kW)
0.55					YVF2-80M1-4	3.5	1.61	14.0	1
0.75	YVF2-80M1-2	2.4	1.9	13.5	YVF2-80M2-4	4.8	2.1	15.5	1
1.1	YVF2-80M2-2	3.5	2.7	15.0	YVF2-90S-4	7	2.9	20	2
1.5	YVF2-90S-2	4.8	3.5	19.0	YVF2-90L-4	9.5	3.8	23	2
2.2	YVF2-90L-2	7	4.95	23	YVF2-100L1-4	14	5.2	30	3
3	YVF2-100L-2	9.5	6.4	30	YVF2-100L2-4	19.1	6.9	33	4
4	YVF2-112M-2	12.7	8.3	37	YVF2-112M-4	25.5	9	42	6
5.5	YVF2-132S1-2	17.5	11.2	54	YVF2-132S-4	35	12	58	10
7.5	YVF2-132S2-2	23.9	14.9	59	YVF2-132M-4	47.7	16	72	10
11	YVF2-160M1-2	35	21.5	103	YVF2-160M-4	70	23	113	15
15	YVF2-160M2-2	47.7	29	113	YVF2-160L-4	97.8	29.5	129	20
18.5	YVF2-160L-2	58.9	35.5	131	YVF2-180M-4	118	37	178	30
22	YVF2-180M-2	70	42	175	YVF2-180L-4	140	43.5	200	30
30	YVF2-200L1-2	95.5	56	251	YVF2-200L-4	191	59	255	40
37	YVF2-200L2-2	118	69	261	YVF2-225S-4	236	72	299	50
45	YVF2-225M-2	143	84	305	YVF2-225M-4	287	87	325	60
55	YVF2-250M-2	175	102	410	YVF2-250M-4	350	106	420	70
75	YVF2-280S-2	239	138	510	YVF2-280S-4	478	141	545	100
90	YVF2-280M-2	287	165	580	YVF2-280M-4	573	167	650	120
110	YVF2-315S-2	350	199	795	YVF2-315S-4	700	205	815	150
132	YVF2-315M-2	420	240	950	YVF2-315M-4	840	245	1050	180
160	YVF2-315L1-2	509	285	1040	YVF2-315L1-4	1019	300	1085	210
185	YVF2-315L-2	589	330	1148	YVF2-315L-4	1180	345	1120	220
200	YVF2-315L2-2	637	355	1158	YVF2-315L2-4	1273	365	1185	270
220	YVF2-355M1-2	704	390	1490	YVF2-355M1-4	1401	405	1670	280
250	YVF2-355M2-2	796	445	1490	YVF2-355M2-4	1592	460	1670	350
280	YVF2-355L1-2	896	495	1620	YVF2-355L1-4	1783	510	1700	400
315	YVF2-355L-2	1003	560	1670	YVF2-355L2-4	2005	580	1790	450

# Technical data

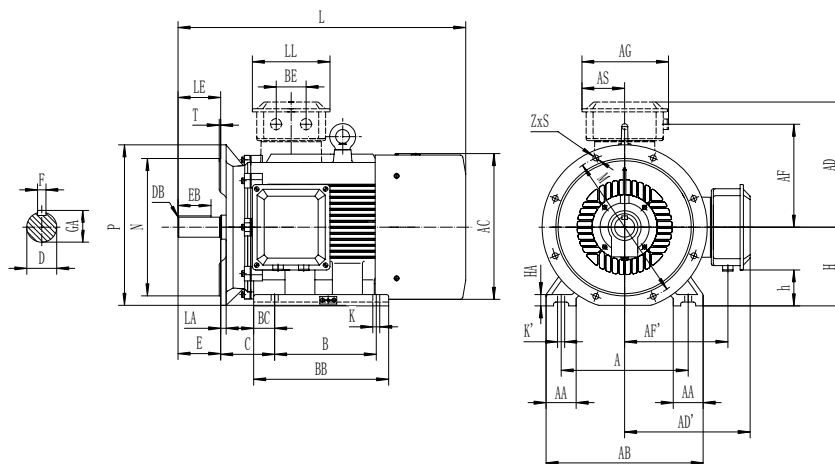
Power (kW)	Type	Rated torque (N.m)	Current (A)	Weight (kG)	Type	Rated torque (N.m)	Current (A)	Weight (kG)	Power of suited converter (kW)
0.55	YVF2-80M2-6	5.3	1.66	16.0					1
0.75	YVF2-90S-6	7.2	2.25	20					1
1.1	YVF2-90L-6	10.5	3.2	24					2
1.5	YVF2-100L-6	14.3	4.2	31					2
2.2	YVF2-112M-6	21	6	41	YVF2-132S-8	28	7.5	72	3
3	YVF2-132S-6	28.6	7.9	54	YVF2-132M-8	38.2	9.9	70	4
4	YVF2-132M1-6	38.2	10.1	65	YVF2-160M1-8	51	11.6	105	6
5.5	YVF2-132M2-6	52.5	13.4	73	YVF2-160M2-8	70	15.1	103	10
7.5	YVF2-160M-6	71.6	17.2	115	YVF2-160L-8	95.5	20.5	127	10
11	YVF2-160L-6	105	24.5	145	YVF2-180L-8	140	26	163	15
15	YVF2-180L-6	143	31.5	183	YVF2-200L-8	191	34	233	20
18.5	YVF2-200L1-6	177	39.5	235	YVF2-225S-8	236	42	246	30
22	YVF2-200L2-6	210	46.5	252	YVF2-225M-8	280	50	286	30
30	YVF2-225M-6	287	62	320	YVF2-250M-8	382	64	355	40
37	YVF2-250M-6	353	75	400	YVF2-280S-8	471	84	427	50
45	YVF2-280S-6	430	88	483	YVF2-280M-8	573	97	485	60
55	YVF2-280M-6	525	106	550	YVF2-315S-8	700	115	665	70
75	YVF2-315S-6	716	146	790	YVF2-315M-8	955	156	845	100
90	YVF2-315M-6	859	173	950	YVF2-315L1-8	1146	182	890	120
110	YVF2-315L1-6	1050	210	1085	YVF2-315L2-8	1401	220	1040	150
132	YVF2-315L2-6	1261	250	1125	YVF2-355M1-8	1681	265	1530	180
160	YVF2-355M1-6	1528	300	1770	YVF2-355M2-8	2037	325	1650	210
185	YVF2-355M2-6	1767	350	1770	YVF2-355L1-8	2356	365	1820	220
200	YVF2-355M3-6	1910	375	1810	YVF2-355L2-8	2547	395	1930	270
220	YVF2-355L1-6	2101	415	1980					280
250	YVF2-355L2-6	2387	470	2010					350

# Dimensions of mounting and outline

## Type of construction IM B3

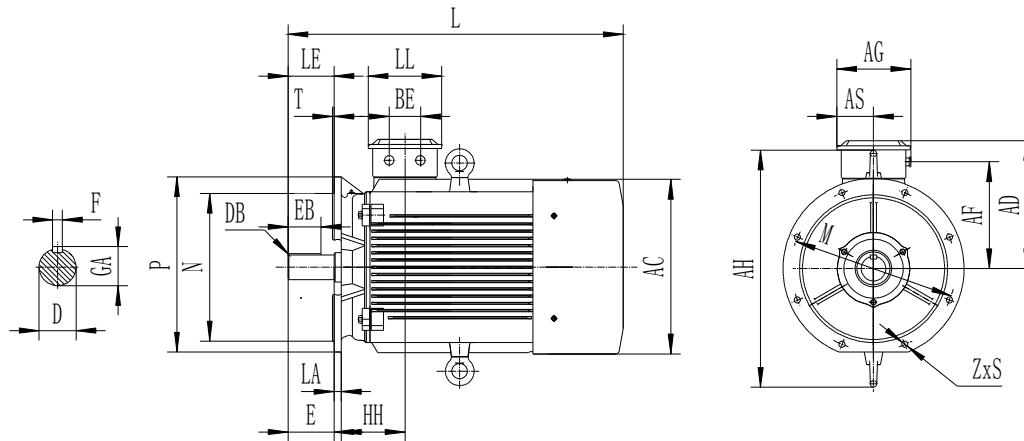


## Type of construction IM B35

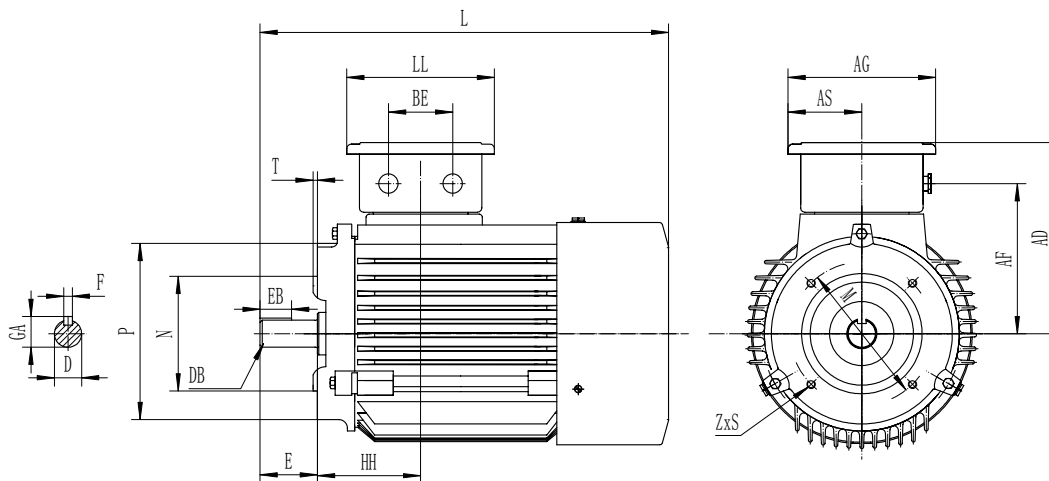


Frame size	Type YVF2-	pols	Dimension designation according to IEC standards									
			A	AA	AB	AC <sup>1)</sup>	AD / AD'	AF / AF'	AG	AH	AS	B <sup>2)</sup>
80 M	80M1-□	2, 4, 6	125	34	160	161	145	107	130	-	52	100
	80M2-□		125	34	160	161	145	107	130	-	52	100
90 S	90S-□	2, 4, 6	140	36	180	175	160	116	135	-	55	100
	90L-□		140	36	180	175	160	116	135	-	55	125
100 L	100L-2	2	160	40	200	196	165	129	135	-	55	140
	100L1-4	4										
	100L-6	6										
	100L2-4	4										
112 M	112M-□	2, 4, 6	190	45	226	217	193	145	152	-	64	140
132 S	132S1-2	2,	216	55	262	258	203	166	152	-	64	140
	132S-□	4, 6, 8										
132 M	132S2-2	2	216	55	262	258	203	166	152	-	64	140
	132M-4	4	216	55	262	258	203	166	152	-	64	178
	132M1-6	6	216	55	262	258	203	166	152	-	64	178
	132M-8	8										
	132M2-6	6										
160 M	160M1-2	2	254	65	314	311	255	207	195	480	83	210
	160M-4	4										
	160M-6	6										
	160M1-8	8										
160 L	160M2-□	2, 8	254	65	314	311	255	207	195	480	83	210
	160L-□	2, 4, 6	254	65	314	311	255	207	195	480	83	254

Type of construction IM B5 and IM V1



Type of construction IM B14



Dimension designation according to IEC standards

DE shaft extension

	BB	BC	BE	C	H	h	HA	HH	K / K'	L	LL	D	DB	E	EB	F	GA
	130	15	-	50	80	29	10	72	10	350	103	19	M6	40	22	6	21.5
	130	15	-	50	80	29	10	72	10	350	103	19	M6	40	22	6	21.5
	140	20	-	56	90	35	12	75	10	395	110	24	M8	50	32	8	27
	165	20	-	56	90	35	12	75	10	420	110	24	M8	50	32	8	27
	188	24	-	63	100	45	14	77	12	455	110	28	M10	60	40	8	31
	188	24	-	63	100	45	14	77	12	455	110	28	M10	60	40	8	31
	180	20	42	70	112	48	15	87	12	480	119	28	M10	60	40	8	31
	186	23	42	89	132	68	18	99	12	545	119	38	M12	80	56	10	41
	186	23	42	89	132	68	18	99	12	545	119	38	M12	80	56	10	41
	224	23	42	89	132	68	18	99	12	585	119	38	M12	80	56	10	41
	224	23	42	89	132	68	18	99	12	585	119	38	M12	80	56	10	41
	260	25	60	108	160	77	20	150	15	660	157	42	M16	110	80	12	45
	260	25	60	108	160	77	20	150	15	660	157	42	M16	110	80	12	45
	320	25	60	108	160	77	20	150	15	720	157	42	M16	110	80	12	45
	304	25	60	108	160	77	20	150	15	705	157	42	M16	110	80	12	45

# Dimensions of mounting and outline

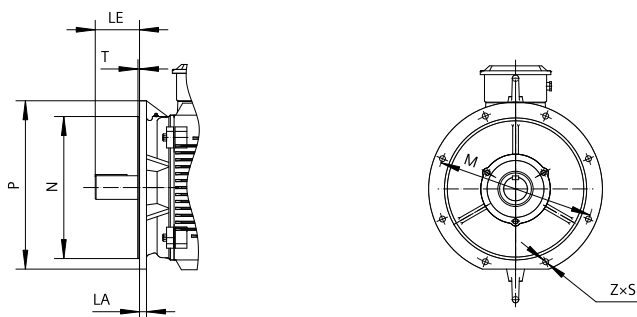
Frame size	Type VVF2-	pols	Dimension designation according to IEC standards									
			A	AA	AB	AC <sup>1)</sup>	AD / AD'	AF / AF'	AG	AH	AS	B <sup>2)</sup>
180M 180L	180M-□ 180L-□	2,4 4,6 8	279 279	70 70	349 349	356 356	275 275	223 223	195 195	515 515	83 83	241 279
200L	200L1-2 200L-4 200L1-6 200L2-2 200L2-6 200L-8	2 4 6 2 6 8	318 318	70 70	388 388	398 398	310 310	248 248	255 255	575 575	107 107	305 305
225S 225M	225S-4 225S-8 225M-2 225M-□ 225M-8	4 8 2 4,6 8	356 356 356	75 75 75	431 431 431	428 428 428	325 325 325	257 257 257	255 255 255	605 605 605	107 107 107	286 311 311 311
250M	250M-2 250M-□ 250M-8	2 4,6 8	406 406	80 80	484 484	475 475	360 360	292 292	285 285	670 670	124 124	349 349
280S 280M	280S-2 280S-□ 280S-8 280M-2 280M-□ 280M-8	2 4,6 8 2 4,6 8	457 457 457 457 457	85 85 85 85	542 542 542 542	530 530 530	395 395 395 395	322 322 322 322	285 285 285	755 755 755	124 124 124	368 368 419 419 419
315S 315M 315L	315S-2 315S-□ 315S-8 315M-2 315M-□ 315M-8 315L1-2 315L-2 315L2-2 315L1-4 315L-4 315L2-4 315L1-6 315L2-6 315L1-8 315L2-8	2 4,6 8 2 4,6 8 2 2 2 4 4 4 6 6 8 8	508 508 508 508 508 508 508 508 508 508 508 508 508 508 508	120 120 120 120 120 120	628 628 628 628 628 628	581 581 581 581 581	505 505 505 505 505	413 413 413 413 413 413	370 370 370 370 370	920 920 920 920 920 920	171 171 171 171 171	406 406 457/508 457/508 457/508
355M 355L	355M1-2 355M1-□ 355M2-2 355M2-□ 355M2-8 355M3-6 355L1-2 355L1-□ 355L1-8 355L-2 355L2-□ 355L2-8	2 4,6,8 2 4,6 8 6 2 4,6 8 2 4,6 8	610 610 610 610 610 610 610 610 610 610 610 610	120 120 120 120 120 120 120	730 730 730 730 730 730 730	698 698 698 698 698 698 698	625 625 625 625 625 625 625	517 517 517 517 517 517 517	454 454 454 454 454 454 454	1145 1145 1145 1145 1145 1145 1145	181 181 181 181 181 181 181	560/630 560/630 560/630 560/630 560/630 560/630 560/630

Dimension designation according to IEC standards												DE shaft extension					
	BB	BC	BE	C	H	h	HA	HH	K / K'	L	LL	D	DB	E	EB	F	GA
	345 385 344	35 35	60 60	121 121	180 180	97 97	22 22	161 161	15 15	785 825 785	157 157	48 48	M16 M16	110 110	80 80	14 14	51.5 51.5
	412  412 379	32  32	72  72	133  133	200  200	94  94	25  25	186  186	19  19	880  880 845	194  194	55  55	M20  M20	110  110	80  80	16  16	59  59
	366  405 405 391	45  45 45	72  72 72	149  149 149	225  225 225	119  119 119	28  28 28	189  189 189	19  19 19	880 880 905 935 905	194  194 194 194	60  55 60 60	M20  M20 M20 M20	140  110 140 140	100  80 100 100	18  16 18 18	64  59 64 64
	460 460 425	40 40	80 80	168 168	250 250	126 126	30 30	222 222	24 24	1020 1020 970	224 224	60 65	M20 M20	140 140	100 100	18 18	64 69
	485 485  536 536 536	74 74  74 74 74	80 80  80 80 80	190 190  190 190 190	280 280  280 280 280	156 156  156 156 156	35 35  35 35 35	216 216  216 216 216	24 24  24 24 24	1090 1090 1075 1140 1140 1125	224 224  224 224 224	65 75  65 75 75	M20 M20  M20 M20 M20	140 140  140 140 140	100 100  100 100 100	18 20  18 20 20	69 79  69 79 79
	540  540 680  680 680  680  680	84  84 84  84 84  84  84	120  120 120  120 120  120  120	216  216 216  216 216  216  216	315  315 315  315 315  315  315	155  155 155  155 155  155  155	45  45 45  45 45  45  45	257  257 257  257 257  257  257	28  28 28  28 28  28  28	1320 1350 1300 1550 1580 1480 1550	280  280 280  280 280  280  280	65 80 80 65 80 80 65	M20  M20 M20  M20 M20  M20  M20	140  170 170 140 170 170 140	100 130 130 100 130 130 100	18 22 22 18 22 22 18	69 85 85 69 85 85 69
	750 750 750  750 750 750  750 750 750	68 68 68  68 68 68  68 68 68	125 125 125  125 125 125  125 125 125	254 254 254  254 254 254  254 254 254	355 355 355  355 355 355  355 355 355	136 136 136  136 136 136  136 136 136	53 53 53  53 53 53  53 53 53	281 281 281  281 281 281  281 281 281	28 28 28  28 28 28  28 28 28	1640 1670 1640 1670 1670 1670 1640 1670 1670 1640 1670	400 400 400  400 400 400  400 400 400	75 95 75 95 95 95 75 95 95 75 95	M20 M24 M20 M24 M24 M24 M20 M24 M24 M20 M24	140 170 140 170 170 170 140 170 170 140 170	125 140 125 140 140 140 125 140 140 125 140	20 25 20 25 25 25 20 25 25 20 25	79.5 100 79.5 100 100 100 79.5 100 100 79.5 100

# Dimensions of mounting and outline

## Flange dimension

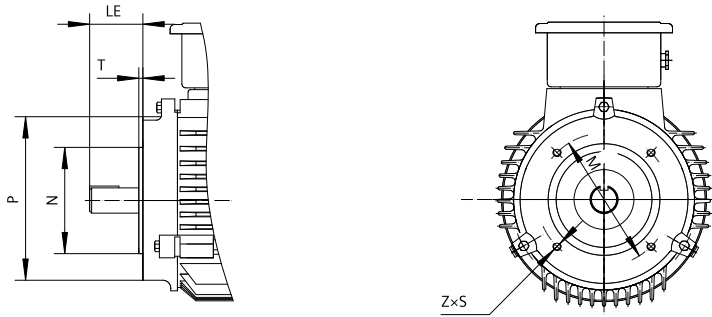
Type of construction IM B5, IM B35, IM V1, IM V3



Frame size	Type of construction	Flange with through holes (FF/A) / tapped holes (FT/C)
		According to DIN EN 50347
80	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 165 FT 100
90	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 165 FT 115
100	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 215 FT 130
112	IM B5, IM B35, IMV1, IM V3 IM B14, IM V18, IM V19	FF 215 FT 130
132	IM B5, IM B35, IMV1, IM V3	FF 265
160	IM B5, IM B35, IMV1, IM V3	FF 300
180	IM B5, IM B35, IMV1, IM V3	FF 300
200	IM B5, IM B35, IMV1, IM V3	FF 350
225	IM B5, IM B35, IMV1, IM V3	FF 400
250	IM B5, IM B35, IMV1, IM V3	FF 500
280	IM B5, IM B35, IMV1, IM V3	FF 500
315	IM B5, IM B35, IMV1, IM V3	FF 600
355	IM B5, IM B35, IMV1, IM V3	FF 740

Flange dimension

Type of construction IM B14, IM V18, IM V19



Dimension designation according to IEC standards								
LA	LE	M	N	P	S	T	Z	
12	40	165	130	200	12	3.5	4	
–	40	100	80	120	M 6	3	4	
12	50	165	130	200	12	3.5	4	
–	50	115	95	140	M 8	3	4	
13	60	215	180	250	14.5	4	4	
–	60	130	110	160	M 8	3.5	4	
14	60	215	180	250	14.5	4	4	
–	60	130	110	160	M 8	3.5	4	
14	80	265	230	300	14.5	4	4	
14	110	300	250	350	18.5	5	4	
15	110	300	250	350	18.5	5	4	
17	110	350	300	400	18.5	5	4	
20	110 / 140	400	350	450	18.5	5	8	
22	140	500	450	550	18.5	5	8	
22	140	500	450	550	18.5	5	8	
22	140 / 170	600	550	660	24	6	8	
25	140 / 170	740	680	800	24	6	8	

# Standard Options – YVF2

Option Code	Option Code	Application Scope
Q5A	Installation of 2 PT 100 screw-in resistance thermometers (basic circuit) for rolling-contact bearings	FS180~355
Q04 <sup>1)</sup>	Anti-condensation heater for 220V	FS80~355
R10 <sup>2)</sup>	Rotation of terminal box by 90 ° , inserted from drive end	FS80~355
R11 <sup>3)</sup>	Rotation of terminal box by 90 ° , inserted from non-drive end	FS80~355
R12	Rotation of terminal box by 180 °	FS80~355
M12	English Nameplate	FS80~355
P80 <sup>4)</sup>	Round flange	FS80~315
X77	Turning flange	FS80~315
S01	Unpainted	FS80~355
L80	SKF bearings	FS80~355
W02	NSK bearings	FS80~355
H00	Motor with protection cover	FS80~355

<sup>1)</sup> When choose these options, the connection boxes will be changed to cast iron shell

<sup>2)</sup> Not applicable to the FS80~100 flange mounted motors

<sup>3)</sup> Not applicable to the outlet on top

<sup>4)</sup> Not applicable to the FS180、200、225 and 280 motors, these motors include the full circle flange

# YD Series Change-Poles Multi-Speed Asynchronous Motors



Frame size: 80 ~ 280  
 Rated voltage: 380 V  
 Rated frequency: 50 Hz  
 Cooling method: IC411  
 Protection degree: IP44  
 Insulation class: B  
 Coolant temperature: -15 ~ 40 °C  
 Site altitude: Up to 1000 m above sea level

## Introduction

YD series pole-changing multi-speed three-phase asynchronous motors can apply to various transmission mechanism which need control speed step by step.

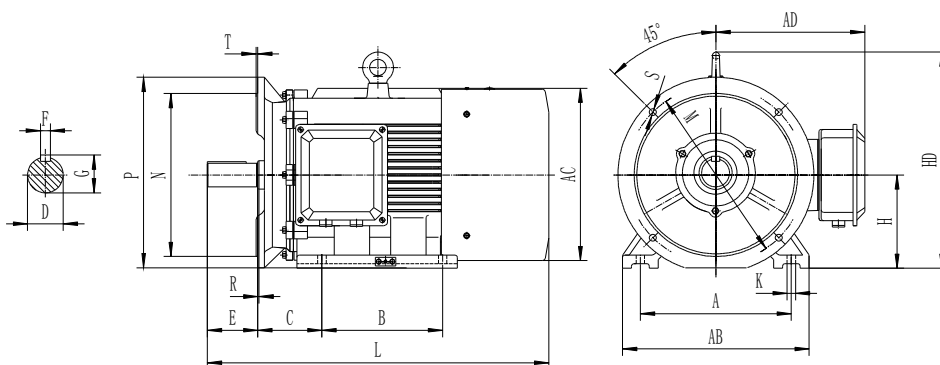
## Mounting type

Diagram												
Mounting type (IM)	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V36
Motor size	80 ~ 280	80 ~ 225	80 ~ 280	80 ~ 280	80 ~ 160							

## Specification table

Type	Synchronous speed (r/min)			
	1500/3000	1000/1500	750/1500	500/1000
	poles			
	4/2	6/4	8/4	12/6
Power (kW)				
YD801	0.45/0.55			
YD802	0.55/0.75			
YD90S		0.65/0.85		
YD90L	1.3/1.8	0.85/1.1	0.45/0.75	
YD100L1	2/2.4	1.3/1.8	0.85/1.5	
YD100L2	2.4/3	1.5/2.2		
YD112M	3.3/4	2.2/2.8	1.5/2.4	
YD132S	4.5/5.5	3/4	2.2/3.3	
YD132M1	6.5/8	4/5.5	3/4.5	
YD132M2				
YD160M	9/11	6.5/8	5/7.5	2.6/5
YD160L	11/14	9/11	7/11	3.7/7
YD180M	15/18.5	11/14		
YD180L	18.5/22	13/16	11/17	5.5/10
YD200L1	26/30	18.5/22	14/22	7.5/13
YD200L2			17/26	9/15
YD225S	32/37	22/28		
YD225M	37/45	26/32	24/34	12/20
YD250M	45/52	32/42	30/42	15/24
YD280S		42/55	40/55	20/30
YD280M		55/67	47/67	24/37

# Dimensions of mounting and Outline



Note:

1. The drawing is B35 type. There have housing feet and flange on end shield.
2. B3 type motors have frame feet but no flange, the dimensions have no M、N、P、R、S、T。
3. B5 type motors have flange but no frame feet, the dimensions have no A、B、C、AB。
4. There are eight symmetrical distributed holes for flange mounting on the FS225 ~ 355 motors.
5. R is the distance from the flange to the drive shaft end.

Motor size	Mounting Dimensions															Outline Dimensions				
	H	A	B	C	D	E	F	G	K	M	N	P	R	S	T	AB	AC	AD	HD	L
80	80	125	100	50	19	40	6	15.5	10	165	130	200	0	12	3.5	165	175	150	175	290
90S	90	140	100	56	24	50	8	20	10	165	130	200	0	12	3.5	180	195	160	195	315
90L	90	140	125	56	24	50	8	20	10	165	130	200	0	12	3.5	180	195	160	195	340
100L	100	160	140	63	28	60	8	24	12	215	180	250	0	15	4	205	215	180	245	380
112M	112	190	140	70	28	60	8	24	12	215	180	250	0	15	4	245	240	190	265	400
132S	132	216	140	89	38	80	10	33	12	265	230	300	0	15	4	280	275	210	315	475
132M	132	216	178	89	38	80	10	33	12	265	230	300	0	15	4	280	275	210	315	515
160M	160	254	210	108	42	110	12	37	15	300	250	350	0	19	5	330	335	265	385	610
160L	160	254	254	108	42	110	12	37	15	300	250	350	0	19	5	330	335	265	385	655
180M	180	279	241	121	48	110	14	42.5	15	300	250	350	0	19	5	355	380	285	430	670
180L	180	279	279	121	48	110	14	42.5	15	300	250	350	0	19	5	355	380	285	430	710
200L	200	318	305	133	55	110	16	49	19	350	300	400	0	19	5	395	420	315	475	775
225S	225	356	286	149	60	140	18	53	19	400	350	450	0	19	5	435	475	345	530	820
225M	225	356	311	149	60	140	18	53	19	400	350	450	0	19	5	435	475	345	530	845
250M	250	406	349	168	65	140	18	58	24	500	450	550	0	19	5	490	515	385	575	930
280S	280	457	368	190	75	140	20	67.5	24	500	450	550	0	19	5	550	585	410	640	1000
280M	280	457	419	190	75	140	20	67.5	24	500	450	550	0	19	5	550	585	410	640	1050

# Certificates



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