WONDER POWER

WEA SERIES(IE3)

SWEA PREMIUM EFFICIENCY ALUMINUM MOTORS

SWEA series motors are premium efficiency cast motors.It is Wonder designed premium efficiency electric motors.The premium efficiency motors is for the application of carpentry,fans,pumps,compressors,and other mechanicalequipment. The efficiency indictors are in line with IE3.

- IP55 protection, class F-class insulation,B-level Temperature rise,S1 duty;
- Rated voltage 400V, Rated frequency 50 Hz;
- Operation conditions: ambient temperature:-20℃ ~40℃;
- Altitude ≤1000m.

MOUNTING ARRANGEMENTS

Types	Basic type of costruction	Derived types of construction				
SWEA63-132	IM B3 IM1001	IM V5 IM1011	IM V6 IM1031	IM B6 IM1051	IM B7 IM1061	IM B8 IM1071
SWEA63-132	IM B35 IM2001	IM V15 IM2011	IM V36 IM2031	* IM2051	* IM2061	* IM2071
SWEA63-132	IM B34 IM2101	* IM2111	* IM2131	* IM2151	* IM2161	* IM2171
SWEA63-132	IM B5 IM3001	IM V1 IM3011	IM V6 IM3031			
SWEA63-132	IM B14 IM3601	IM V18 IM3611	IM V19 IM3631			

basic types of construction may be used in all derived types of construcion
(*) not-defined mounting by IEC 60034-7
1) for the types of construction IM V6,IM B6,IM B8 inquiry is necessary.

WONDER POWER

SWEA PREMIUM EFFICIENCY ALUMINUM MOTORS

TECHNICAL SPECIFICATIONS

IE3

Output		IEC Frame	Rated speed	Full load current	Efficiency η %			Power factor cosφ			Locked rotor current	Locked rotor torque	Break-down torque	Sound LP	Moment of inertia	Weight
					% of full load											
kW	HP		(rpm)	400V	100	75	50	100	75	50	I_L/I_n	T_L/T_n	T_b/T_n	dB(A)	J(kgm2)	(kg)
3000 min⁻¹(2poles) 50Hz																
0.75	1	80M1	2855	1.61	81.2	81.0	78.2	0.83	0.78	0.70	6.5	3.4	3.8	55	0.00093	9
1.1	1.5	80M2	2855	2.30	83.2	83.1	80.6	0.83	0.80	0.72	7.5	4.0	4.4	55	0.001	11
1.5	2	90S	2905	2.93	84.8	84.5	81.4	0.87	0.83	0.71	8.0	2.6	3.3	60	0.002	14
2.2	3	90L	2905	4.17	86.6	86.4	83.2	0.88	0.83	0.73	8.5	3.0	3.3	59	0.003	16
3	4	100L	2900	5.54	87.8	87.3	84.8	0.89	0.84	0.73	9.0	3.0	3.7	63	0.005	21
4	5.5	112M	2900	7.39	88.8	88.7	86.6	0.88	0.84	0.79	8.0	2.6	3.0	63	0.013	26
5.5	7.5	132S1	2930	9.9	89.9	90.0	87.1	0.89	0.87	0.83	8.9	2.4	3.7	68	0.024	37
7.5	10	132S2	2930	13.2	90.8	90.3	89.6	0.90	0.86	0.82	9.0	2.4	3.5	68	0.025	41
9.2	12.5	132M	2930	16.4	91.0	91.1	90.3	0.89	0.86	0.83	8.9	2.4	3.4	68	0.035	42
11	15	160M1	2940	19.3	91.6	91.5	91.2	0.90	0.87	0.83	7.6	2.7	3.0	71	0.056	99
15	20	160M2	2940	25.7	92.4	92.4	91.7	0.91	0.89	0.85	7.6	2.7	3.0	70	0.064	85
18.5	25	160L	2940	32.0	92.8	92.8	92.4	0.90	0.89	0.85	7.6	2.7	3.0	70	0.073	98
22	30	180M	2950	37.9	93.1	93.0	92.8	0.90	0.89	0.87	7.6	2.6	3.4	71	0.105	113
1500 min⁻¹(4 poles) 50Hz																
0.75	1	80M2	1440	1.80	82.5	81.2	78.4	0.73	0.68	0.56	5.5	2.9	3.2	47	0.005	12
1.1	1.5	90S	1445	2.39	85.0	84.6	82.8	0.78	0.66	0.58	6.0	2.3	2.8	49	0.006	15
1.5	2	90L	1445	3.23	86.0	84.6	82.7	0.78	0.67	0.60	7.0	2.7	3.0	51	0.007	18
2.2	3	100L1	1450	4.56	88.2	88.3	85.1	0.79	0.72	0.64	8.0	3.0	4.0	51	0.008	23
3	4	100L2	1450	6.20	88.4	88.2	86.2	0.79	0.75	0.65	8.6	3.5	3.8	51	0.009	27
4	5.5	112M	1450	7.82	89.0	89.0	88.1	0.83	0.75	0.71	8.0	3.0	3.0	55	0.018	31
5.5	7.5	132S	1465	10.9	90.2	89.9	88.5	0.81	0.76	0.66	8.5	2.9	3.3	55	0.037	45
7.5	10	132M	1465	14.7	90.8	90.4	89.6	0.81	0.75	0.68	9.0	3.0	3.3	56	0.045	58
9.2	12.5	132M	1465	18.0	91.2	90.1	89.8	0.81	0.76	0.70	8.7	2.8	3.0	57	0.075	50
11	15	160M	1475	20.1	91.7	90.6	90.3	0.86	0.81	0.71	7.1	2.9	3.1	62	0.105	95
15	20	160L	1475	27.2	92.4	92.4	91.2	0.86	0.82	0.73	7.6	3.0	3.1	62	0.115	110
18.5	25	180M	1475	33.8	92.9	93.0	91.3	0.85	0.81	0.72	7.6	2.5	3.0	63	0.166	145
22	30	180L	1475	40.0	93.3	93.1	92.6	0.85	0.82	0.72	8.0	2.8	3.2	63	0.188	160
1000 min⁻¹(6 poles) 50Hz																
0.75	1	90S	955	1.95	79.2	78.6	74.8	0.70	0.62	0.50	4.2	2.0	2.5	45	0.005	13
1.1	1.5	90L	955	2.75	81.4	81.0	74.5	0.71	0.63	0.51	4.1	2.0	2.5	45	0.006	15
1.5	2	100L	960	3.73	83.0	82.9	80.1	0.70	0.65	0.55	4.7	2.0	2.6	47	0.008	20
2.2	3	112M	960	4.94	84.5	84.5	82.1	0.76	0.68	0.60	5.0	2.0	2.3	46	0.015	24
3	4	132S	975	6.70	86.2	86.2	84.7	0.75	0.68	0.58	7.1	2.5	2.5	50	0.005	32
4	5.5	132M1	975	8.81	87.4	87.2	85.9	0.75	0.70	0.58	7.5	2.8	3.1	50	0.05	42
5.5	7.5	132M2	975	11.8	88.4	88.5	87.8	0.76	0.72	0.60	7.5	3.0	3.1	53	0.06	50
7.5	10	160M	975	15.7	89.5	89.2	88.7	0.77	0.74	0.64	7.0	2.5	2.8	56	0.13	75
11	15	160L	975	22.8	90.5	90.5	90.1	0.77	0.74	0.63	7.0	3.0	3.1	56	0.24	95
15	20	180L	985	29.5	91.7	91.4	90.6	0.80	0.76	0.65	8.5	3.0	3.4	59	0.35	130

Premium efficiency motors IEC60034-30, IE3 code
Efficiency testing method IEC 60034-2-1:2007

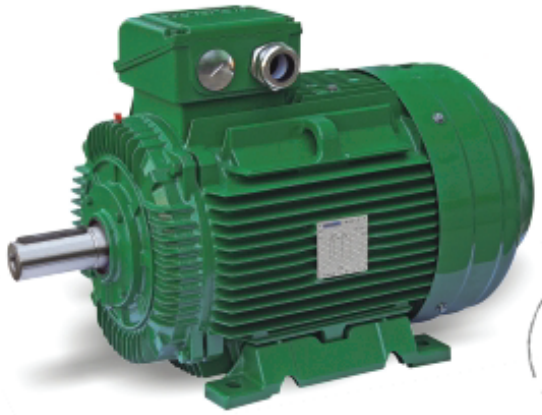
BEARINGS

Frame Size	Driving End		Non-driving End	
	2P	4-8P	2P	4-8P
SWEA80	6204-2Z/C3	6204-2Z/C3	6203-2Z/C3	6203-2Z/C3
SWEA90	6205-2Z/C3	6205-2Z/C3	6204-2Z/C3	6204-2Z/C3
SWEA100	6306-2Z/C3	6306-2Z/C3	6205-2Z/C3	6205-2Z/C3
SWEA112	6306-2Z/C3	6306-2Z/C3	6205-2Z/C3	6205-2Z/C3
SWEA132	6208-2Z/C3	6208-2Z/C3	6206-2Z/C3	6206-2Z/C3
SWEA160	6209-2Z/C3	6209-2Z/C3	6209-2Z/C3	6209-2Z/C3
SWEA180	6211/C3	6311/C3	6211/C3	6211/C3

WONDER POWER

SWE SERIES (IE3)

THREE PHASE PREMIUM EFFICIENCY ASYNCHRONOUS CAST IRON MOTORS



ORIGINAL WONDER QUALITY

SWE series three phase asynchronous motor is premium efficiency electric motors with cast iron housing. Its efficiency indicators are in line with IE3.

Characteristics for all WONDER standard 3-Phase asynchronous motors

- Widely applied in general machinery and industries such as pumps & water treatment, road machinery, petroleum, chemical, metallurgy, cement and paper-milling.
- IP55 protection, Class F insulation, B Temperature rise, S1 duty,
- Rated voltage 400V, Rated frequency 50Hz.
- Operation conditions: ambient temperature:-20℃ ~40℃, altitude≤1000m.
- Y-connection for motors up to 3kW and △-connection for 4kW and above
- Cooling method is IC411.

MOUNTING ARRANGEMENTS

Types	Basic type of costruction	Derived types of construction				
SWE160-355	IM B3 IM 1001	IM V5 IM 1011	IM V6 IM 1031	IM B6 IM 1051	IM B7 IM 1061	IM B8 IM 1071
SWE160-355	IM B35 Im2001	IM V15 IM2011	IM V36 IM 2031	* IM2051	* IM2061	* IM 2071
SWE80-355	IM B5 IM 3001	IM V1 IM3011	IM V6 IM3031			

basic types of construction may be used in all derived types of constructon
(*) not-defined mounting by IEC 60034-7
1) for the types of construction IM V6,IM B6,IM B8 inquiry is necessary.

WONDER POWER

SWE PREMIUM EFFICIENCY CAST IRON MOTORS

TECHNICAL SPECIFICATIONS

IE3

Output		IEC Frame	Rated speed	Full load current I_n(A)	Efficiency η %			Power factor cosφ			Locked rotor current I_L/I_n	Locked rotor torque T_L/T_n	Break-down torque T_b/T_n	Sound LP dB(A)	Moment of inertia J(kgm²)	Weight (kg)
					%Of full load											
KW	HP		(rpm)	400V	100	75	50	100	75	50						
3000 min⁻¹(2poles) 50Hz																
11	15	160M1	2945	19.3	91.6	91.5	90.1	0.90	0.82	0.70	7.6	2.7	3.0	69	0.066	113
15	20	160M2	2945	25.7	92.4	92.3	90.7	0.91	0.83	0.75	7.6	2.7	3.0	69	0.068	124
18.5	25	160L	2945	32.0	92.8	92.8	91.5	0.90	0.85	0.71	7.6	2.7	3.0	69	0.076	141
22	30	180M	2955	37.9	93.1	93.0	91.9	0.90	0.84	0.76	7.6	2.6	3.2	69	0.173	177
30	40	200L1	2955	50.9	93.5	93.2	92.2	0.91	0.86	0.80	7.6	2.3	3.4	75	0.193	224
37	50	200L2	2955	63.0	94.2	94.0	92.3	0.90	0.84	0.80	8.5	3.0	3.8	75	0.203	240
45	60	225M	2970	75.5	94.5	94.3	93.1	0.91	0.88	0.81	8.5	2.8	3.9	75	0.411	237
55	75	250M	2980	93.9	95.0	94.6	93.4	0.89	0.86	0.76	8.0	2.6	3.9	81	0.435	391
75	100	280S	2980	126	95.2	95.2	93.6	0.90	0.84	0.80	8.5	2.8	3.9	80	0.743	518
90	125	280M	2980	150	95.4	95.2	93.8	0.91	0.89	0.85	6.5	2.1	2.9	80	0.823	550
110	150	315S	2980	182	95.7	95.1	94.1	0.91	0.88	0.86	7.5	2.2	3.6	80	1.64	940
132	175	315M	2980	218	95.9	95.8	94.8	0.91	0.87	0.84	7.5	2.2	3.3	80	1.78	985
160	215	315L1	2980	264	96.0	96.0	95.1	0.91	0.89	0.86	8.0	2.5	3.2	82	1.97	1100
200	270	315L2	2980	330	96.2	96.1	95.5	0.91	0.88	0.85	8.0	2.5	3.3	83	2.31	1200
250	335	355M	2980	412	96.3	96.1	95.3	0.91	0.87	0.84	6.5	1.9	2.6	83	3.90	1725
280	375	355L1	2980	465	96.5	96.5	95.7	0.90	0.87	0.85	7.6	1.8	2.6	82	4.01	1885
315	420	355L2	2980	512	96.6	96.4	95.8	0.92	0.89	0.87	7.5	1.8	2.5	82	4.03	1930
1500 min⁻¹(4 poles) 50Hz																
11	15	160M	1470	20	91.7	91.5	90.0	0.86	0.81	0.75	7.1	2.9	3.1	60	0.108	125
15	20	160L	1470	27	92.4	92.3	91.8	0.86	0.80	0.73	7.6	3.0	3.1	60	0.109	143
18.5	25	180M	1470	34	92.9	92.9	91.5	0.85	0.81	0.75	7.6	2.5	3.0	65	0.159	185
22	30	180L	1470	40	93.3	93.0	92.7	0.85	0.83	0.74	8.0	2.8	3.2	66	0.193	195
30	40	200L	1480	53	93.9	93.6	93.0	0.87	0.85	0.73	8.0	2.7	3.4	70	0.311	250
37	50	225S	1480	65	94.3	93.9	93.1	0.87	0.83	0.71	7.5	2.5	2.9	70	0.612	300
45	60	225M	1480	79	94.6	94.2	93.9	0.87	0.86	0.79	8.5	2.6	2.8	70	0.679	342
55	75	250M	1480	96	95.0	94.8	94.1	0.87	0.85	0.80	8.0	2.4	3.0	68	0.841	391
75	100	280S	1485	130	95.4	95.0	94.8	0.87	0.86	0.78	7.4	2.3	2.9	68	1.53	520
90	125	280M	1485	158	95.5	95.4	95.0	0.86	0.85	0.77	7.4	2.4	3.0	68	1.77	632
110	150	315S	1485	189	95.7	95.7	95.3	0.88	0.86	0.78	8.0	2.6	3.5	68	4.01	940
132	175	315M	1485	226	96.0	95.8	95.1	0.88	0.87	0.76	7.8	2.7	3.4	70	3.74	1020
160	215	315L1	1490	270	96.1	96.1	95.8	0.89	0.86	0.80	7.0	2.3	3.0	70	7.56	1090
200	270	315L2	1490	337	96.3	96.2	95.7	0.89	0.86	0.81	7.0	2.4	3.0	70	5.16	1223
250	335	355M	1490	421	96.4	96.2	95.8	0.89	0.88	0.82	7.2	2.4	2.3	80	8.03	1723
280	375	355L1	1490	471	96.4	96.4	96.0	0.89	0.87	0.82	7.3	2.4	2.3	78	8.76	1869
315	420	355L2	1490	535	96.6	96.6	96.0	0.88	0.86	0.80	7.3	2.4	2.3	78	9.56	1986

Premium efficiency motors IEC60034-30, IE3 code
Efficiency testing method IEC 60034-2-1; 2007

SWE PREMIUM EFFICIENCY CAST IRON MOTORS

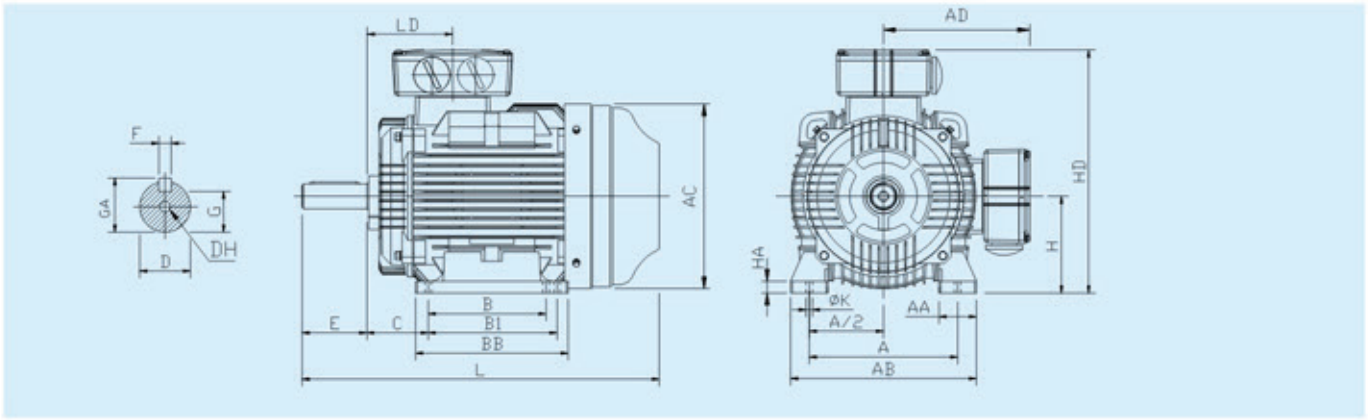
TECHNICAL SPECIFICATIONS

IE3

Output		IEC Frame	Rated speed	Full load current I_n(A)	Efficiency η %			Power factor cosφ			Locked rotor current I_L/I_n	Locked rotor torque T_L/T_n	Break-dowon torque T_b/T_n	Sound LP dB(A)	Moment of inertia J(kgm²)	Weight (kg)
					% of full load											
KW	HP		(rpm)	400V	100	75	50	100	75	50						
1000 min⁻¹(6 poles) 50Hz																
7.5	10	160M	970	16	89.5	89.2	88.4	0.77	0.71	0.62	7.0	2.5	2.8	56	0.22	139
11	15	160L	975	23	90.5	90.4	89.3	0.77	0.69	0.61	7.0	3.0	3.1	56	0.16	139
15	20	180L	980	30	91.7	91.5	89.5	0.80	0.72	0.63	8.5	3.0	3.4	59	0.37	189
18.5	25	200L1	980	35	92.1	91.7	90.8	0.82	0.75	0.66	7.4	2.8	2.9	59	0.38	231
22	30	200L2	980	42	92.6	92.3	91.8	0.82	0.75	0.65	7.0	2.5	2.6	59	0.44	240
30	40	225M	985	55	93.4	93.1	92.5	0.84	0.78	0.65	7.0	2.2	2.3	59	0.73	305
37	50	250M	980	66	93.8	93.3	92.8	0.86	0.78	0.68	8.0	2.8	3.4	59	0.11	390
45	60	280S	980	80	94.4	94.4	93.0	0.86	0.80	0.70	8.0	2.8	3.3	60	1.75	485
55	75	280M	980	97	94.7	94.5	93.2	0.86	0.81	0.73	8.0	2.8	3.2	60	1.99	562
75	100	315S	980	134	95.2	95.1	94.1	0.85	0.80	0.75	7.0	2.0	2.6	68	3.86	905
90	125	315M	990	158	95.4	95.4	94.5	0.86	0.82	0.74	7.0	2.0	2.6	69	4.95	955
110	150	315L1	990	195	95.6	95.2	94.3	0.85	0.82	0.76	7.0	2.0	2.6	70	5.76	1135
132	175	315L2	990	234	95.7	95.3	94.5	0.85	0.83	0.77	7.0	2.0	2.6	70	5.79	1205
160	215	355M1	990	273	96.0	95.8	94.7	0.88	0.85	0.80	7.0	2.3	2.5	70	9.96	1765
180	240	355M2	990	311	96.1	96.0	95.2	0.87	0.83	0.80	7.2	2.2	2.5	70	10.2	1790
200	270	355M3	995	345	96.1	96.1	95.8	0.87	0.84	0.82	7.3	2.2	2.4	70	11.5	1905
225	300	355L1	995	388	96.2	96.0	95.6	0.87	0.84	0.83	7.2	2.2	2.4	75	11.8	1985
250	335	355L2	995	431	96.3	96.4	96.0	0.87	0.85	0.83	7.0	2.2	2.4	75	12.6	1963
280	375	355L3	995	482	96.3	96.1	96.0	0.87	0.86	0.84	7.0	2.2	2.4	75	13.0	2020

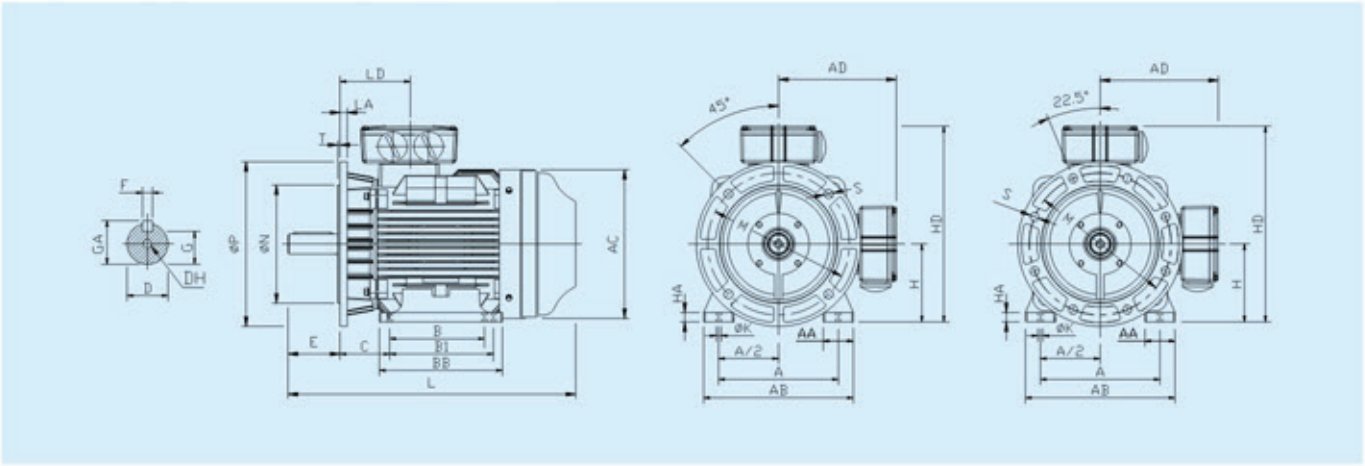
Premium efficiency motors IEC60034-30,IE3 code
Efficiency testing method IEC 60034-2-1;2007

B3 MOUNTING AND OVERALL DIMENSIONS



Frame size	Poles	Mounting dimensions(mm)											Overall dimensions(mm)									
		A	B	B1	C	D	E	F	G	H	K	DH	GA	AA	AB	AC	AD	HA	HD	BB	LD	L
160M	2~8	254	210	/	108	42	110	12	37	160	15	M16x36	45	65	315	315	265	20	409	260	146	614
160L	2~8	254	254	/	108	42	110	12	37	160	15	M16x36	45	65	315	315	265	20	409	384	146	658
180M	2.4	279	241	/	121	48	110	14	42.5	180	15	M16x36	51.5	70	350	360	280	22	445	311	161	690
180L	4.6.8	279	279	/	121	48	110	14	42.5	180	15	M16x36	51.5	70	350	360	280	22	445	349	161	728
200L	2~8	318	305	/	133	55	110	16	49	200	19	M20x42	59	70	388	400	310	25	492	370	186	780
225S	4.8	356	286	/	149	60	140	18	53	225	19	M20x42	64	75	435	450	335	28	540	361	189	825
225M	2	356	311	/	149	55	110	16	49	225	19	M20x42	59	75	435	450	335	28	540	386	189	820
	4~8	356	311	/	149	60	140	18	53	225	19	M20x42	64	75	435	450	335	28	540	386	189	850
250M	2	406	349	/	168	60	140	18	53	250	24	M20x42	64	80	503	485	375	30	616	445	207	915
	4~8	406	349	/	168	65	140	18	58	250	24	M20x42	69	80	503	485	375	30	616	445	207	915
280S	2	457	368	/	190	65	140	18	58	280	24	M20x42	69	85	545	550	405	35	672	490	215	968
	4~8	457	368	/	190	75	140	20	67.5	280	24	M20x42	79.5	85	545	550	405	35	672	490	215	968
280M	2	457	419	/	190	65	140	18	58	280	24	M20x42	69	85	545	550	405	35	672	540	215	1020
	4~8	457	419	/	190	75	140	20	67.5	280	24	M20x42	79.5	85	545	550	405	35	672	540	215	1020
315S	2	508	406	/	216	65	140	18	58	315	28	M20x46	69	120	630	625	530	45	815	570	257	1204
	4~8	508	406	/	216	80	170	22	71	315	28	M20x46	85	120	630	625	530	45	815	570	257	1234
315M,L	2	508	457	508	216	65	140	18	58	315	28	M20x46	69	120	630	625	530	45	815	680	257	1307
	4~8	508	457	508	216	80	170	22	71	315	28	M20x46	85	120	630	625	530	45	815	680	257	1337
355M	2	610	560	560	254	75	140	20	67.5	355	28	M20x46	79.5	120	730	710	615	52	970	750	284	1526
	4~8	610	560	560	254	95	170	25	86	355	28	M20x46	100	120	730	710	615	52	970	750	284	1556
355L	2	610	630	630	254	75	140	20	67.5	355	28	M20x46	79.5	120	730	710	615	52	970	750	284	1526
	4~8	610	630	630	254	95	170	25	86	355	28	M20x46	100	120	730	710	615	52	970	750	284	1556

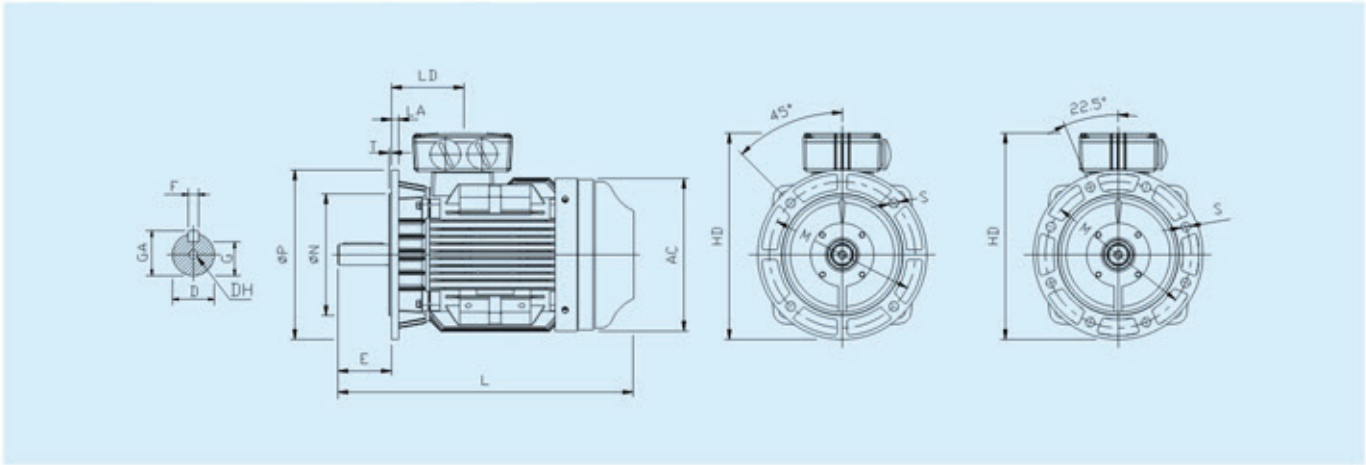
B35 MOUNTING AND OVERALL DIMENSIONS



Frame size	Poles	Mounting dimensions(mm)															Overall dimensions(mm)										
		A	B	B1	C	D	E	F	G	H	K	M	N	P	S	T	DH	GA	AA	AB	AC	AD	BB	HA	HD	LA	LD	L
160M	2~8	254	210	/	108	42	110	12	37	160	15	300	250	350	4-φ19	5	M16x36	45	65	315	315	265	260	20	425	15	146	614
160L	2~8	254	254	/	108	42	110	12	37	160	15	300	250	350	4-φ19	5	M16x36	45	65	315	315	265	305	20	425	15	146	658
180M	2	279	241	/	121	48	110	14	42.5	180	15	300	250	350	4-φ19	5	M16x36	51.5	70	350	360	280	315	22	460	15	161	690
180L	4~8	279	279	/	121	48	110	14	42.5	180	15	300	250	350	4-φ19	5	M16x36	51.5	70	350	360	280	350	22	460	15	161	728
200L	2~8	318	305	/	133	55	110	16	49	200	19	350	300	400	4-φ19	5	M20x42	59	70	390	400	310	370	25	510	17	186	780
225S	4~8	356	286	/	149	60	140	18	53	225	19	400	350	450	8-φ19	5	M20x42	64	75	435	450	335	370	28	555	20	189	825
225M	2	356	311	/	149	55	110	16	49	225	19	400	350	450	8-φ19	5	M20x42	59	75	435	450	335	395	28	555	20	189	820
	4~8	356	311	/	149	60	140	18	53	225	19	400	350	450	8-φ19	5	M20x42	64	75	435	450	335	395	28	555	20	189	850
250M	2	406	349	/	168	60	140	18	53	250	24	500	450	550	8-φ19	5	M20x42	64	80	485	490	375	445	30	625	22	207	915
	4~8	406	349	/	168	65	140	18	58	250	24	500	450	550	8-φ19	5	M20x42	69	80	485	490	375	445	30	625	22	207	915
280S	2	457	368	/	190	65	140	18	58	280	24	500	450	550	8-φ19	5	M20x42	69	85	545	550	405	490	35	685	22	215	968
	4~8	457	368	/	190	75	140	20	67.5	280	24	500	450	550	8-φ19	5	M20x42	79.5	85	545	550	405	490	35	685	22	215	968
280M	2	457	419	/	190	65	140	18	58	280	24	500	450	550	8-φ19	5	M20x42	69	85	545	550	405	540	35	685	22	215	1020
	4~8	457	419	/	190	75	140	20	67.5	280	24	500	450	550	8-φ19	5	M20x42	79.5	85	545	550	405	540	35	685	22	215	1020
315S	2	508	406	/	216	65	140	18	58	315	28	600	550	660	8-φ24	6	M20x46	69	120	630	625	530	570	45	845	22	257	1180
	4~8	508	406	/	216	80	170	22	71	315	28	600	550	660	8-φ24	6	M20x46	85	120	630	625	530	570	45	845	22	257	1210
315M,L	2	508	457	508	216	65	140	18	58	315	28	600	550	660	8-φ24	6	M20x46	69	120	630	625	530	680	45	845	22	257	1290
	4~8	508	457	508	216	80	170	22	71	315	28	600	550	660	8-φ24	6	M20x46	85	120	630	625	530	680	45	845	22	257	1320
355M	2	610	500	560	254	75	140	20	67.5	355	28	740	680	800	8-φ24	6	M20x46	79.5	120	730	710	615	750	52	970	25	284	1526
	4~8	610	500	560	254	95	170	25	86	355	28	740	680	800	8-φ24	6	M20x46	100	120	730	710	615	750	52	970	25	284	1556
355L	2	610	560	630	254	75	140	20	67.5	355	28	740	680	800	8-φ24	6	M20x46	79.5	120	730	710	615	750	52	970	25	284	1526
	4~8	610	560	630	254	95	170	25	86	355	28	740	680	800	8-φ24	6	M20x46	100	120	730	710	615	750	52	970	25	284	1556

R=0 distance from flange to shaft shoulder

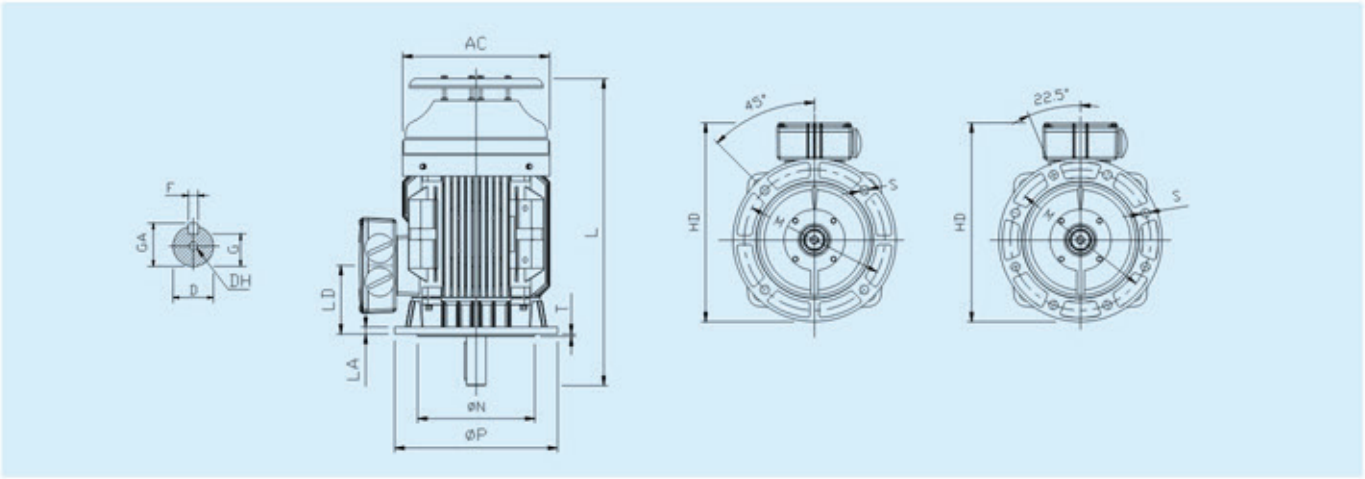
B5 MOUNTING AND OVERALL DIMENSIONS



Frame size	Poles	Mounting dimensions(mm)									Overall dimensions(mm)						
		D	E	F	G	M	N	P	S	T	DH	GA	AC	HD	LA	LD	L
160M	2~8	42	110	12	37	300	250	350	4-φ19	5	M16x36	45	315	424	15	146	614
160L	2~8	42	110	12	37	300	250	350	4-φ19	5	M16x36	45	315	424	15	146	658
180M	2.4	48	110	14	42.5	300	250	350	4-φ19	5	M16x36	51.5	360	440	15	161	690
180L	4.6.8	48	110	14	42.5	300	250	350	4-φ19	5	M16x36	51.5	360	440	15	161	728
200L	2~8	55	110	16	49	350	300	400	4-φ19	5	M20x42	59	400	492	17	186	780
225S	4.8	60	140	18	53	400	350	450	8-φ19	5	M20x42	64	450	540	20	189	825
225M	2	55	110	16	49	400	350	450	8-φ19	5	M20x42	59	450	540	20	189	820
	4~8	60	140	18	53	400	350	450	8-φ19	5	M20x42	64	450	540	20	189	850
250M	2	60	140	18	53	500	450	550	8-φ19	5	M20x42	64	485	639	22	207	915
	4~8	65	140	18	58	500	450	550	8-φ19	5	M20x42	69	485	639	22	207	915
280S	2	65	140	18	58	500	450	550	8-φ19	5	M20x42	69	550	685	22	215	968
	4~8	75	140	20	67.5	500	450	550	8-φ19	5	M20x42	79.5	550	685	22	215	968
280M	2	65	140	18	58	500	450	550	8-φ19	5	M20x42	69	550	685	22	215	1020
	4~8	75	140	20	67.5	500	450	550	8-φ19	5	M20x42	79.5	550	685	22	215	1020

R=0 distance from flange to shaft shoulder

V1 MOUNTING AND OVERALL DIMENSIONS



Frame size	Poles	Mounting dimensions(mm)									Overall dimensions(mm)						
		D	E	F	G	M	N	P	S	T	DH	GA	AC	LA	HD	LD	L
160M	2~8	42	110	12	37	300	250	350	4-Φ19	5	M16x36	45	315	15	424	146	660
160L	2~8	42	110	12	37	300	250	350	4-Φ19	5	M16x36	45	315	15	424	146	704
180M	2.4	48	110	14	42.5	300	250	350	4-Φ19	5	M16x36	51.5	360	15	440	161	744
180L	4~8	48	110	14	42.5	300	250	350	4-Φ19	5	M16x36	51.5	360	15	440	161	782
200L	2~8	55	110	16	49	350	300	400	4-Φ19	5	M20x42	59	400	17	492	186	849
225S	4.8	60	140	18	53	400	350	450	8-Φ19	5	M20x42	64	450	20	540	189	911
225M	2	55	110	16	49	400	350	450	8-Φ19	5	M20x42	59	450	20	540	189	895
	4~8	60	140	18	53	400	350	450	8-Φ19	5	M20x42	64	450	20	540	189	935
250M	2	60	140	18	53	500	450	550	8-Φ19	5	M20x42	64	490	22	639	207	1010
	4~8	65	140	18	58	500	450	550	8-Φ19	5	M20x42	69	490	22	639	207	1010
280S	2	65	140	18	58	500	450	550	8-Φ19	5	M20x42	69	550	22	685	215	1082
	4~8	75	140	20	67.5	500	450	550	8-Φ19	5	M20x42	79.5	550	22	685	215	1080
280M	2	65	140	18	58	500	450	550	8-Φ19	5	M20x42	69	550	22	685	215	1133
	4~8	75	140	20	67.5	500	450	550	8-Φ19	5	M20x42	79.5	550	22	685	215	1131
315S	2	65	140	18	58	600	550	660	8-Φ24	6	M20x46	69	625	22	845	257	1324
	4~8	80	170	22	71	600	550	660	8-Φ24	6	M20x46	85	625	22	845	257	1354
315M,L	2	65	140	18	58	600	550	660	8-Φ24	6	M20x46	69	625	22	845	257	1427
	4~8	80	170	22	71	600	550	660	8-Φ24	6	M20x46	85	625	22	845	257	1457
355M,L	2	75	140	20	67.5	740	680	800	8-Φ24	6	M20x46	79.5	710	25	970	284	1665
	4~8	95	170	25	86	740	680	800	8-Φ24	6	M20x46	100	710	25	970	284	1700

R=0 distance from flange to shaft shoulder

BEARINGS

Frame size	Driving End		Non-driving End	
	2 pole	4,6,8 pole	2 pole	4,6,8 pole
160	6209 2Z/C3	6209 2Z/C3	6209 2Z/C3	6209 2Z/C3
180	6211/C3	6311/C3	6211/C3	6211/C3
200	6212/C3	6312/C3	6212/C3	6212/C3
225	6312/C3	6313/C3	6312/C3	6312/C3
250	6313/C3	6314/C3	6313/C3	6313/C3
280	6314/C3	6317/C3	6314/C3	6314/C3
315	6317/C3	Nu319	6317C3/7317B(V1)	6319C3/7319B(V1)
355	6319/C3	Nu322	6319C3/7319B(V1)	6322/7322B(V1)