WONDER® Since 1988

In Synchronization with the Future

ISO14001 ISO9001 ISO45001

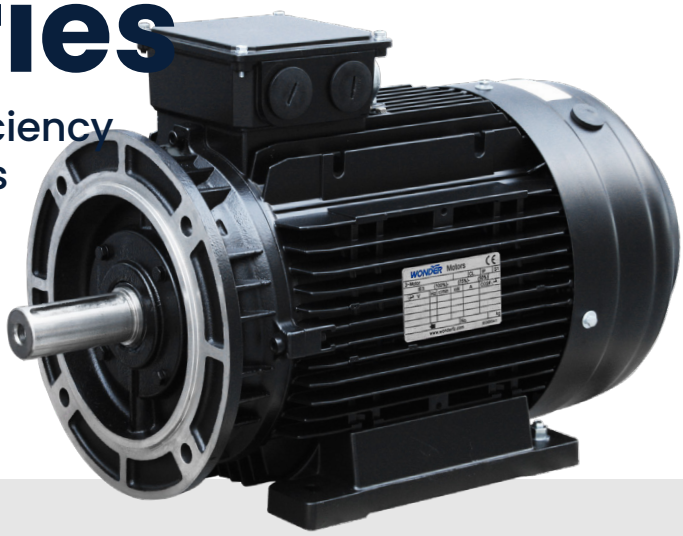
SSWEA Series

Three Phase Super Premium Efficiency Asynchronous Aluminum Motors

IE4

SSWEA Series

Three Phase Super Premium Efficiency Asynchronous Aluminum Motors



General Information:

SSWEA Series three phase asynchronous induction motors are super premium efficiency motors with aluminum housing. The efficiency indicators are in line with IE4.

Wonder three phase asynchronous motors are widely applied in general machinery and industries such as pumps & water treatment, road machinery, petroleum, chemical & metallurgy, cement and papermilling.

Technical Characteristics:

- IP55 protection, class F insulation, B-level temperature rise, S1 duty;
- Rated voltage 400V;
- Rated frequency 50Hz;
- Operation ambient temperature: -20°C~40°C;
- Operation altitude ≤1000m.
- Y-connection for motors up to 3kW, △-connection for 4kW and above.
- Cooling method: IC411/IC416.

Mounting Arrangements:

Types	Basic Type of Construction	Derived Types of Construction				
SSWEA 80-180	IM B3 IM 1001	IM V5 IM 1011	IM V6 IM 1031	IM B6 IM 1051	IM B7 IM 1061	IM B8 IM 1071
SSWEA 80-180	IM B35 IM 2001	IM V15 IM 2011	IM V36 IM 2031	* IM 2051	* IM 2061	* IM 2071
SSWEA 80-180	IM B34 IM 2101	* IM 2111	* IM 2131	* IM 2151	* IM 2161	* IM 2171
SSWEA 80-180	IM B5 IM 3001	IM V1 IM 3011	IM V3 IM 3031			
SSWEA 80-180	IM B14 IM 3601	IM V18 IM 3611	IM V19 IM 3631			

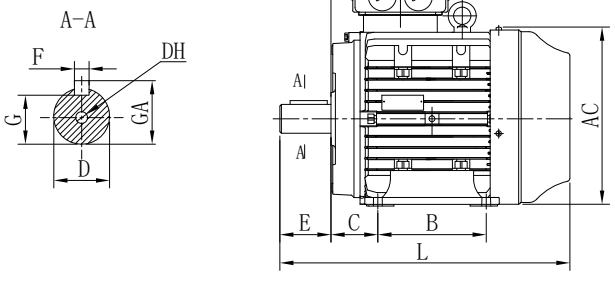
Basic types of construction may be used in all derived types of construction.
1) "*" means not-defined mounting by IEC 60034-7.
2) for the types of construction IM V6, IM B6, IM B8 inquiry is necessary.

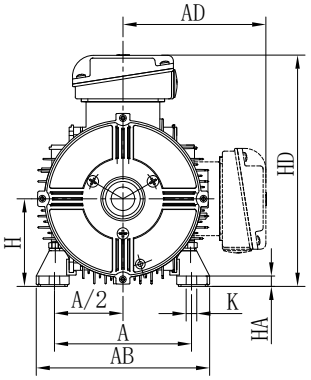
Technical Specifications

Rated Output		IEC Frame	Rated Speed r/m	Full Load Current I_n(A)	Effciency 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			400V	100	75	50	100	75	50						
3000r/m (2 Pole) 50Hz																
0.75	1	80M1	2870	1.66	83.5	84.6	83.1	0.78	0.70	0.57	7.3	4.6	3.9	62	0.001	11
1.1	1.5	80M2	2875	2.48	85.2	85.3	83.7	0.75	0.67	0.53	8.3	4.8	4.2	62	0.001	12.5
1.5	2	90S	2905	2.84	86.5	87.3	87.3	0.88	0.83	0.73	8.8	3.1	3.7	67	0.002	16.5
2.2	3	90L	2895	4.10	88.0	89.1	88.9	0.88	0.83	0.72	9.5	3.3	3.7	67	0.003	21
3	4	100L	2910	5.59	89.1	88.9	87.5	0.87	0.82	0.72	11.4	5.1	4.6	74	0.005	31
4	5.5	112M	2915	7.37	90.0	89.9	88.0	0.87	0.83	0.74	9.2	3.0	3.6	77	0.014	31
5.5	7.5	132S1	2930	9.81	90.9	90.7	89.9	0.89	0.85	0.76	9.6	3.2	3.8	79	0.028	47
7.5	10	132S2	2930	13.26	91.7	91.2	90.5	0.89	0.86	0.77	10.1	3.2	3.9	79	0.028	55
11	15	160M1	2945	19.48	92.6	92.5	91.0	0.88	0.86	0.80	7.8	2.2	3.7	69	0.066	98
15	20	160M2	2945	26.37	93.3	93.1	92.0	0.88	0.86	0.80	8.2	2.2	3.8	69	0.068	108
18.5	25	160L	2945	32.02	93.7	93.5	92.0	0.89	0.87	0.81	8.2	2.2	3.8	60	0.076	130
22	30	180M/L	2955	38.39	94.0	93.8	92.5	0.88	0.86	0.80	8.0	2.5	3.2	70	0.173	150
1500r/m (4 Pole) 50Hz																
0.75	1	80M2	1445	1.82	85.2	85.3	83.7	0.70	0.61	0.47	7.9	5.0	4.3	56	0.005	17
1.1	1.5	90S	1445	2.40	87.2	87.5	85.3	0.76	0.68	0.55	7.6	3.8	3.8	59	0.007	19
1.5	2	90L	1445	3.23	88.2	88.5	86.5	0.76	0.68	0.54	7.7	3.0	3.5	59	0.008	21
2.2	3	100L1	1455	4.61	89.5	88.2	86.6	0.77	0.69	0.55	9.8	4.1	4.1	64	0.009	32
3	4	100L2	1455	6.22	90.4	89.6	88.3	0.77	0.69	0.55	10.5	4.1	4.4	64	0.010	35
4	5.5	112M	1445	8.13	91.1	90.4	90.0	0.78	0.71	0.59	8.5	3.7	3.6	65	0.019	36
5.5	7.5	132S	1465	10.80	91.9	91.2	90.0	0.80	0.73	0.60	9.3	3.2	3.3	71	0.042	61
7.5	10	132M	1465	14.80	92.6	92.0	91.0	0.79	0.73	0.60	10.5	3.6	4.0	71	0.051	74
11	15	160M	1475	20.50	93.3	93.1	92.2	0.83	0.77	0.67	8.8	3.3	3.4	60	0.068	106
15	20	160L	1475	27.78	93.9	93.8	92.9	0.83	0.79	0.70	9.0	3.6	3.8	60	0.076	124
18.5	25	180M/L	1475	34.15	94.2	94.0	93.0	0.83	0.76	0.68	7.9	2.3	3.8	65	0.159	162
22	30	180L	1475	40.49	94.5	94.3	93.3	0.83	0.76	0.68	8.5	2.3	3.7	65	0.193	186
1000r/m (6 Pole) 50Hz																
0.75	1	90S	955	1.87	82.7	82.1	78.3	0.70	0.62	0.50	4.2	2.0	2.5	57	0.005	18.5
1.1	1.5	90L	955	2.65	84.5	84.1	77.6	0.71	0.63	0.51	4.1	2.0	2.5	57	0.007	21
1.5	2	100L	960	3.60	85.9	85.8	83.0	0.70	0.65	0.55	4.7	2.0	2.6	61	0.008	27
2.2	3	112M	960	4.78	87.4	87.4	85.0	0.76	0.68	0.60	5.0	2.0	2.3	65	0.016	34
3	4	132S	975	6.52	88.6	88.6	87.1	0.75	0.68	0.58	7.1	2.5	2.5	69	0.038	51
4	5.5	132M1	975	8.60	89.5	89.3	88.0	0.75	0.70	0.58	7.5	2.8	3.1	69	0.06	63
5.5	7.5	132M2	975	11.54	90.5	90.6	89.9	0.76	0.72	0.60	7.5	3.0	3.1	69	0.065	71
7.5	10	160M	970	15.81	91.3	91.0	90.2	0.75	0.69	0.60	7.0	2.5	2.8	56	0.12	138
11	15	160L	975	22.94	92.3	92.2	91.1	0.75	0.67	0.59	7.0	3.0	3.1	56	0.16	162
15	20	180L	980	29.88	92.9	92.7	90.7	0.78	0.70	0.61	8.5	3.0	3.4	59	0.37	239

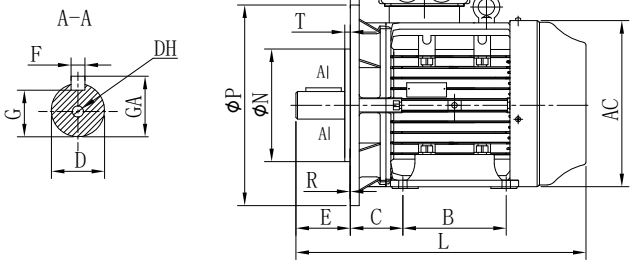
B3, B35, B5 Mounting and Overall Dimensions

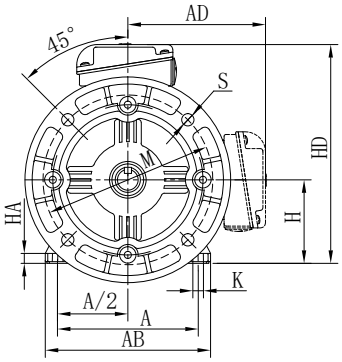
B3



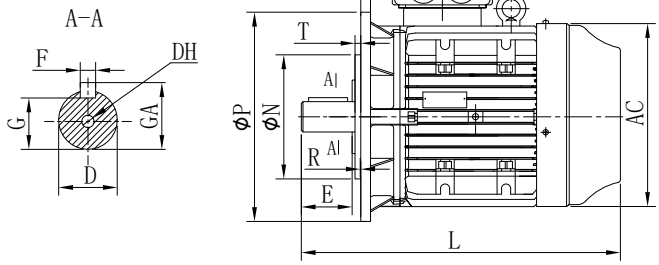


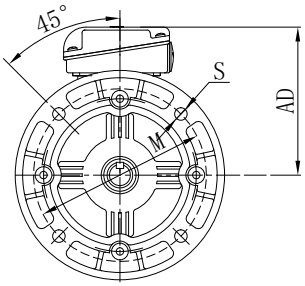
B35





B5

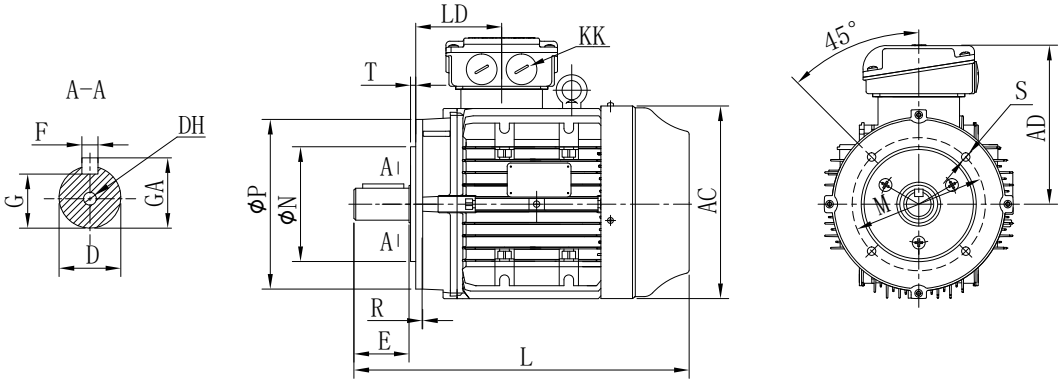




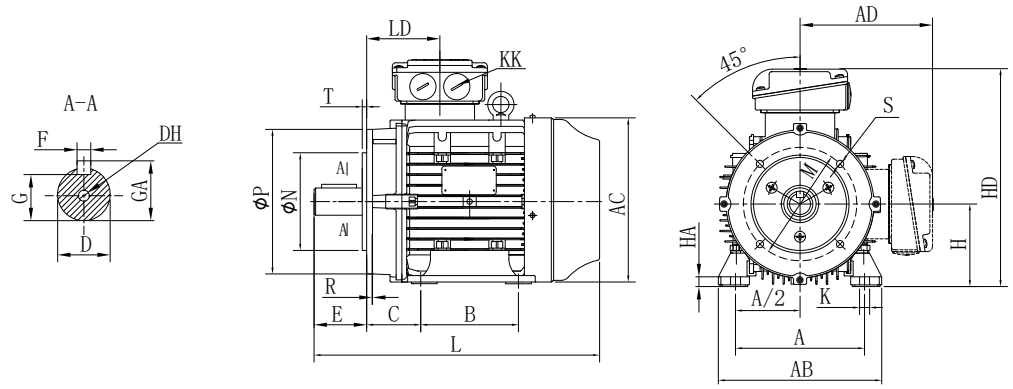
Frame Size	Mounting and Overall Dimensions (mm)																								
	A	A/2	B	C	D	DH	E	F	G	H	K	KK	M	N	P	R	S	T	AB	AC	AD	HD	GA	LA	LD	HA	L
80M-2	125	62.5	100	50	19	M6×16	40	6	15.5	80	4-Φ10	M20×1.5	165	130	200	0±1.5	4-Φ12	3.5	154	157	124	204	21.5	9.5	75	10	296
80M2-4	125	62.5	100	50	19	M6×16	40	6	15.5	80	4-Φ10	M20×1.5	165	130	200	0±1.5	4-Φ12	3.5	154	157	124	204	21.5	9.5	75	10	331
90S	140	70	100	56	24	M8×20	50	8	20	90	4-Φ10	M25×1.5	165	130	200	0±1.5	4-Φ12	3.5	180	175	143	233	27	10	87	10	324
90L	140	70	125	56	24	M8×20	50	8	20	90	4-Φ10	M25×1.5	165	130	200	0±1.5	4-Φ12	3.5	180	175	143	233	27	10	87	10	349
100L1-4 100L-2.6	160	80	140	63	28	M10×22	60	8	24	100	4-Φ12	M25×1.5	215	180	250	0 ± 2	4-Φ14.5	4	200	199	159	259	31	12	78	12	374
100L2-4	160	80	140	63	28	M10×22	60	8	24	100	4-Φ12	M25×1.5	215	180	250	0 ± 2	4-Φ14.5	4	200	199	159	259	31	12	78	12	418
112M	190	95	140	70	28	M10×22	60	8	24	112	4-Φ12	M25×1.5	215	180	250	0 ± 2	4-Φ14.5	4	230	222	169	281	31	12	85	12	381
132S	216	108	140	89	38	M12×28	80	10	33	132	4-Φ12	M32×1.5	265	230	300	0 ± 2	4-Φ14.5	4	264	260	193	325	41	14	129	15	475
132M	216	108	178	89	38	M12×28	80	10	33	132	4-Φ12	M32×1.5	265	230	300	0 ± 2	4-Φ14.5	4	264	260	193	325	41	14	129	15	513
160M	254	127	210	108	42	M16×36	110	12	37	160	4-Φ14.5	M40×1.5	300	250	350	0 ± 3	4-Φ18.5	5	314	314	237	397	45	15	154	22	612
160L	254	127	254	108	42	M16×36	110	12	37	160	4-Φ14.5	M40×1.5	300	250	350	0 ± 3	4-Φ18.5	5	314	314	237	397	45	15	154	22	656
180M	279	139.5	241	121	48	M16×36	110	14	42.5	180	4-Φ14.5	M40×1.5	300	250	350	0 ± 3	4-Φ18.5	5	347	355	255	435	51.5	15	159	25	685
180L	279	139.5	279	121	48	M16×36	110	14	42.5	180	4-Φ14.5	M40×1.5	300	250	350	0 ± 3	4-Φ18.5	5	347	355	255	435	51.5	15	159	25	723

B14, B34 Mounting and Overall Dimensions

B14



B34



Frame Size	Mounting and Overall Dimensions (mm)																								
	A	A/2	B	C	D	DH	E	F	G	H	K	KK	M	N	P	R	S	T	AB	AC	AD	HD	GA	LD	HA	L
80M-2	125	62.5	100	50	19	M6×16	40	6	15.5	80	4-Φ10	M20x1.5	100	80	120	0±1.5	4-M6	3	154	157	124	204	21.5	75	10	296
80M2-4	125	62.5	100	50	19	M6×16	40	6	15.5	80	4-Φ10	M20x1.5	100	80	120	0±1.5	4-M6	3	154	157	124	204	21.5	75	10	331
90S	140	70	100	56	24	M8×20	50	8	20	90	4-Φ10	M25x1.5	115	95	140	0±1.5	4-M8	3	180	175	143	233	27	87	10	324
90L	140	70	125	56	24	M8×20	50	8	20	90	4-Φ10	M25x1.5	115	95	140	0±1.5	4-M8	3	180	175	143	233	27	87	10	349
100L1-4 100L-2.6	160	80	140	63	28	M10×22	60	8	24	100	4-Φ12	M25x1.5	130	110	160	0±2	4-M8	3.5	200	199	159	259	31	78	12	374
100L2-4	160	80	140	63	28	M10×22	60	8	24	100	4-Φ12	M25x1.5	130	110	160	0±2	4-M8	3.5	200	199	159	259	31	78	12	418
112M	190	95	140	70	28	M10×22	60	8	24	112	4-Φ12	M25x1.5	130	110	160	0±2	4-M8	3.5	230	222	169	281	31	85	12	381
132S	216	108	140	89	38	M12×28	80	10	33	132	4-Φ12	M32x1.5	165	130	200	0±2	4-M10	3.5	264	260	193	325	41	129	15	475
132M	216	108	178	89	38	M12×28	80	10	33	132	4-Φ12	M32x1.5	165	130	200	0±2	4-M10	3.5	264	260	193	325	41	129	15	513

Bearings

Frame Size	Driving End		Non-driving End	
	2 Pole	4, 6, 8 Pole	2 Pole	4, 6, 8 Pole
SSWEA 80	6204-2Z/C3	6204-2Z/C3	6203-2Z/C3	6203-2Z/C3
SSWEA 90	6205-2Z/C3	6205-2Z/C3	6204-2Z/C3	6204-2Z/C3
SSWEA 100	6306-2Z/C3	6306-2Z/C3	6205-2Z/C3	6205-2Z/C3
SSWEA 112	6306-2Z/C3	6306-2Z/C3	6205-2Z/C3	6205-2Z/C3
SSWEA 132	6208-2Z/C3	6208-2Z/C3	6206-2Z/C3	6206-2Z/C3
SSWEA 160	6209-2Z/C3	6209-2Z/C3	6209-2Z/C3	6209-2Z/C3
SSWEA 180	6211/C3	6311/C3	6211/C3	6211/C3

WONDER

Since 1988

Fuzhou Wonder Electric Co., Ltd.

Add: No. 120, Changyang Road, Fuzhou Development Zone, Fujian, China
Website: www.wonderfz.com
Email: wonder@wonderfz.com
Tel: +86-591-83998899
Fax: +86-591-83998666

Wonder Electric Co., Ltd.

Add: No. 239, Xingda Road, Fuan Electrical Machinery and Appliances Zone, Fujian, China
Website: www.wonder-cn.com
Email: wonder@dayu-casting.com
Tel: +86-593-6379666 6379988
Fax: +86-593-6379999

Wonder Electric Motor (M) Sdn. Bhd.

Add: No.11, Jalan Meranti Jaya 16, Taman Meranti Jaya Industrial Park, 47120 Puchong, Selangor, Malaysia
Email: sales@wonderelectric.com.my
Tel: +603-8063-9399
Fax: +603-8060-8399

Wonder Electric Motor (S) Pte. Ltd.

Add: No. 111, Neythal Road, Singapore, 628598
Email: wondersg@singnet.com.sg
Tel: +65-6265-8698
Fax: +65-6265-6589