

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 mechanical equipment. The efficiency indicators 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°C ~ 40°C ;
- Altitude ≤ 1000m.

MOUNTING ARRANGEMENTS

Types	Basic type of construction	Derived types of construction				
SWEA6 3-132	IM B3 IM 1001	IM V5 IM 1011	IM V6 IM 1031	IM B6 IM 1051	IM B7 IM 1061	IM B8 IM 1071
SWEA6 3-132	IM B35 IM 2001	IM V15 IM 2011	IM V36 IM 2031	IM 2051	IM 2061	IM 2071
SWEA6 3-132	IM B34 IM 2101	IM 2111	IM 2131	IM 2151	IM 2161	IM 2171
SWEA6 3-132	IM B5 IM 3001	IM V1 IM 3011	IM V6 IM 3031			
SWEA6 3-132	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

(*) not-defined mounting by IEC 60034-7

1) for the types of construction IM V6, IM B6, IM B8 inquiry is necessary.

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TECHNICAL SPECIFICATIONS

IE3

Output		IEC Frame	Rated speed (rpm)	Full load current I_n (A)	Efficiency η %				Power factor $\cos\phi$			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(kg m^2)	Weight (kg)
kW	HP				% of full load												
				400V	100	75	50	100	75	50							

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