Brake Motors Cast Iron Frame Improved Efficiency EFF2

Standard Features:

- Three-phase, multivoltage, IP55, TEFC
- Output: 0.12 up to 30kW
- Frames: 63 up to 200L
- Voltage: 220-240/380-415V (up to 100L)
  380-415/660V (from 112M and up)
- Class “F” insulation (ΔT=80K)
- Continuous duty: S1
- Design N
- Ambient temperature: 40°C , at 1000 m.a.s.l.
- Squirrel cage rotor/Aluminium die cast
- Ball bearings
- D.E.: V’Ring
- N.D.E.: Lip Seal
- Stainless steel nameplate
- Dimensions according to IEC-72
- Performance characteristics according to IEC 34
- Color: RAL 5007

Options Available:

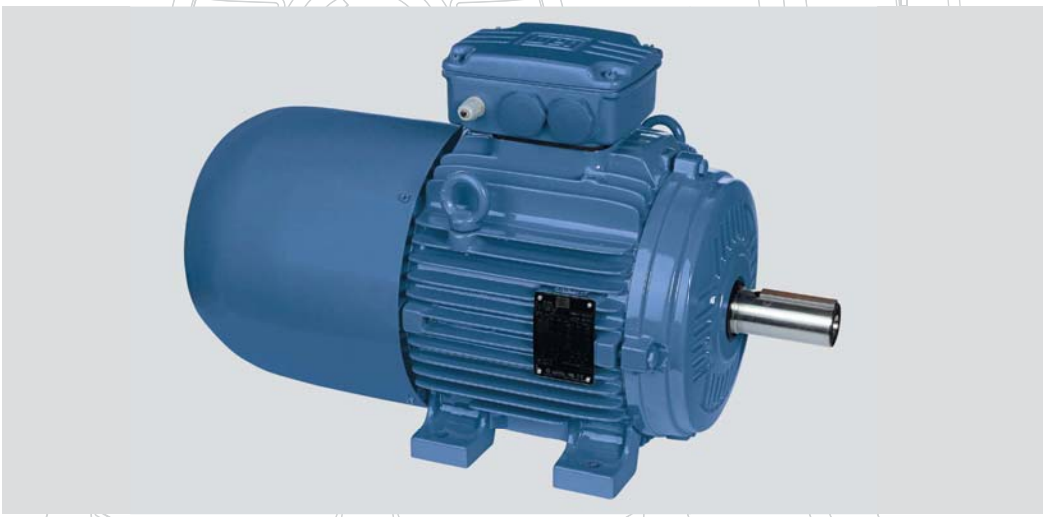
- Thermal protection
- Space heaters
- Shaft dimensions to customer requirements
- Special finishing paint
- Class “H” insulation
- Other mounting configurations

More options available, on request

Typical Applications:

These motors can be used on any machine that requires quick stops and time savings during installation:

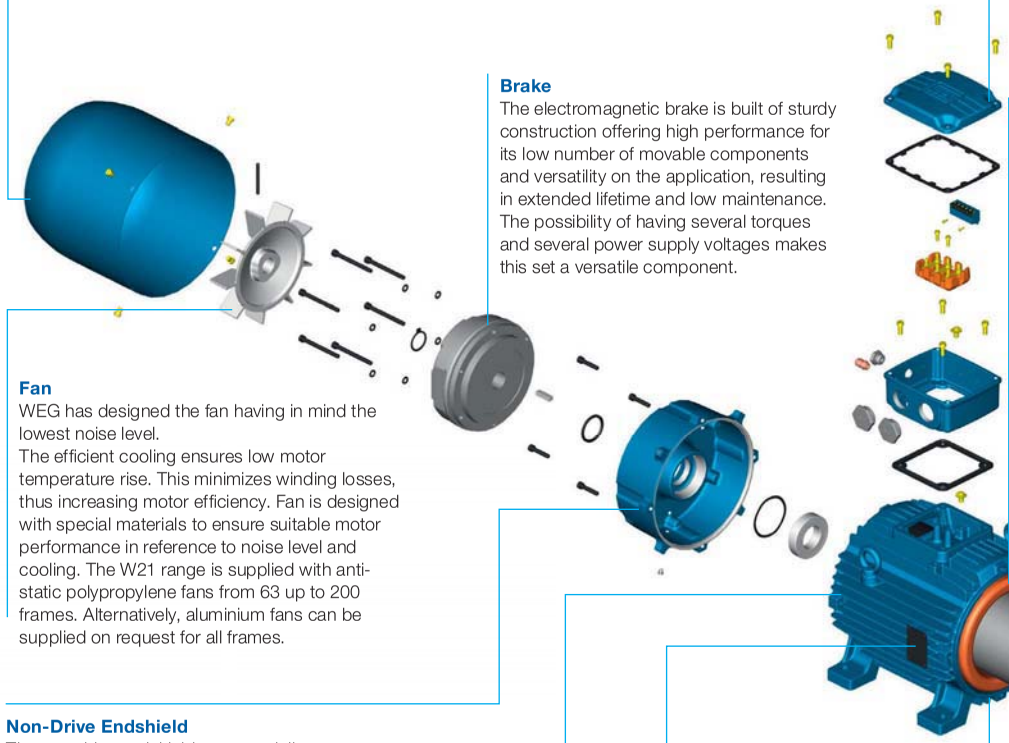
- Packing equipments
- Conveyor belts
- Washing and bottling machines
- Rolling bridges
- Elevators
- Printing machines
- Gates
- Wood machinery
- Cranes and others



Fan Cover
Made of steel plate for frames 63 up to 200L. The fan cover offers higher mechanical strength, corrosion-resistance and extended lifetime. With a design incorporating the braking system it is suitable for operation in severe environments. In addition, it offers quality and performance requirements of the motors such as noise level.

Brake
The electromagnetic brake is built of sturdy construction offering high performance for its low number of movable components and versatility on the application, resulting in extended lifetime and low maintenance. The possibility of having several torques and several power supply voltages makes this set a versatile component.

Terminal Box
Cast iron made with plenty of internal space. The terminal box can be rotated in 90° intervals, having one or two threaded holes to connect the power supply cables. Suitable to take the additional connection of the brake as well as bridge rectifier which is fixed internally without affecting the motor degree of protection. Larger volumes compared to standard motor allow easier connection and disconnection operations of the power supply, bridge rectifier and protection leads.
* Available as top or side mounting.



Winding
The wire is enameled with class H varnish. Supplied with patented WISE (WEG Insulation System Evolution), which allows three times longer motor lifetime designed to operate in environments with excess of moisture and suitable for VFD application.

Shaft
WEG uses SAE/AISI 1040/45 carbon steel as standard, which provides high mechanical strength, avoiding bending under load and minimizes fatigue which extends lifetime. Specially designed to withstand torques caused during motor acceleration and deceleration.

Rotor
High pressure die cast rotor dynamically balanced, thus reducing vibrations.

Fan
WEG has designed the fan having in mind the lowest noise level.
The efficient cooling ensures low motor temperature rise. This minimizes winding losses, thus increasing motor efficiency. Fan is designed with special materials to ensure suitable motor performance in reference to noise level and cooling. The W21 range is supplied with anti-static polypropylene fans from 63 up to 200 frames. Alternatively, aluminium fans can be supplied on request for all frames.

Bearings
WEG motors are fitted with the highest quality bearings selected from the best manufacturers in the world and designed to ensure long life of the motor even under heavy operating conditions.
WEG also uses the Super-premium Polyrex EM polyurea grease that is specially formulated for electric motor bearings. Its advanced thickener formulation provides low noise characteristics, improved bearing performance and protection.

Endshields
Made of cast iron, they are provided with external fins for better heat dissipation, thus increasing bearing life time.

Non-Drive Endshield
The non-drive endshield was specially designed to be coupled to the braking set as well as to withstand high thrusts coming from this set.

Stator
Built with low magnetic loss steel lamination to reduce losses and operating temperature.

Seals
WEG motors are fitted with either V-ring seals, Oil seals, Lip seals and may also be fitted with Labyrinth Taconite or W3Seal to ensure the best possible protection under dusty and high moisture environments.

Nameplate
Stainless steel nameplate ensuring a permanent record of all motor data.

Frame
WEG motors are made of FC-200 high-grade cast iron (same density as flameproof motors). The frames are provided with fins aiming at improving the heat dissipation and properly spaced to minimize air blockage due to accumularion of dirt. The motors can be mounted in either horizontal or vertical positions.

Drain Hole
Provided with plastic drain plug allowing drainage of condensed water.

Brake Motors Cast Iron Frame - Improved Efficiency EFF2

Output		IEC Frame	Full load torque C_n (Nm)	Locked rotor current I_l/I_n	Locked rotor torque T_l/T_n	Break-down torque T_b/T_n	Inertia J kgm²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I_n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
II Pole - 3000 rpm																		
0.12	0.16	63	0.41	3.8	2.3	2.3	0.00011	27/59	6.7	52	2720	45.5	53.5	56	0.55	0.68	0.8	0.387
0.18	0.25	63	0.64	4.2	2.4	2.3	0.00013	30/66	6.7	52	2730	50.5	56.5	59	0.55	0.69	0.8	0.55
0.25	0.33	63	0.85	4.3	2.5	2.3	0.00016	25/55	7	52	2720	52	57	60	0.5	0.65	0.76	0.791
0.37	0.5	71	1.29	4.3	2.3	2.3	0.00026	23/51	8.8	56	2730	61.2	66	67.6	0.6	0.75	0.85	0.929
0.55	0.75	71	1.94	4.2	2.5	2.7	0.00034	10/22	9.6	56	2710	67.5	70	70	0.65	0.78	0.87	1.3
0.75	1	80	2.54	5	2.4	2.4	0.00057	9/20	12	59	2770	66	72	73	0.59	0.73	0.82	1.81
1.1	1.5	80	3.8	5	2.6	2.6	0.00079	7/15	13.5	59	2770	74	76.5	76.5	0.6	0.75	0.83	2.5
1.5	2	90S	4.95	6.3	2.7	2.6	0.0017	7/15	18.9	64	2840	77	79.5	79.5	0.63	0.76	0.83	3.28
2.2	3	90L	7.5	6.8	2.8	2.9	0.00218	9/20	21.3	64	2810	78	80	81.5	0.63	0.77	0.85	4.584
3	4	100L	9.79	6.7	2.3	2.8	0.00518	9/20	28.6	67	2870	81.3	83	83.5	0.69	0.81	0.87	5.961
4	5.5	112M	13.44	6.8	2.4	3	0.00728	9/20	39	64	2875	82	84	85	0.71	0.82	0.87	7.81
5.5	7.5	132S	18.1	6.5	2.4	3	0.01589	11/24	54.2	68	2910	83.5	86	86.5	0.71	0.81	0.87	10.5
7.5	10	132S	24.22	6.4	2.3	2.6	0.0187	11/24	66.7	68	2900	86	87.5	87.5	0.72	0.82	0.87	14.2
9.2	12.5	132M	30.17	7.5	2.7	3.1	0.02431	8/18	64.4	68	2910	86.5	88.5	88.5	0.7	0.81	0.86	17.4
11	15	160M	35.96	6.5	2	3	0.0353	11/24	98.1	70	2930	87	88.5	88.8	0.7	0.81	0.86	20.8
15	20	160M	47.86	7.4	2.2	3.1	0.04707	9/20	107.9	70	2935	88	90	90.1	0.69	0.8	0.86	27.9
18.5	25	160L	59.83	8	2.5	3.2	0.05589	7/15	129.3	70	2935	89	90.5	90.7	0.67	0.78	0.86	34.2
22	30	180M	71.55	7.3	2.3	3.2	0.09649	11/24	185.1	70	2945	91	92	92	0.74	0.83	0.87	39.7
30	40	200L	94.92	7.3	2.6	2.9	0.1794	13/29	229.8	74	2960	91	92	92.4	0.7	0.8	0.85	55.1
HIGH-OUTPUT DESIGN																		
0.37	0.5	63	1.28	5.2	3.1	2.9	0.00021	14/31	7.9	52	2740	67	71	71.3	0.57	0.7	0.79	0.948
0.75	1	71	2.5	6.2	3.1	3.1	0.00052	8/18	11.1	56	2810	69	73	74	0.65	0.76	0.84	1.74
1.5	2	80	5.07	6	3	2.7	0.00096	10/22	14.9	59	2770	77	78.5	77.7	0.7	0.82	0.87	3.2
2.2	3	90S	7.5	6.8	2.8	2.9	0.00218	9/20	19	64	2810	78	80	81.5	0.63	0.77	0.85	4.584
3	4	90L*	9.93	6.2	3.2	3.1	0.00266	6/13	21.8	64	2830	81	82	82	0.55	0.68	0.78	6.77
4	5.5	100L	13.46	7.5	2.9	3.1	0.00672	7/15	31.1	67	2870	81	82.3	82.5	0.72	0.81	0.86	8.14
5.5	7.5	112M	18.36	7.7	2.5	3	0.00995	10/22	45.8	64	2870	86.5	87.5	87.5	0.8	0.87	0.9	10.1
7.5	10	112M*	24.47	7.6	3	3	0.00995	6/13	46.3	64	2870	86.5	87.5	87.5	0.59	0.72	0.81	15.3
11	15	132M	36.08	8	2.7	3.2	0.02804	8/18	73.6	68	2920	88	89.5	89.5	0.71	0.81	0.86	20.6
22	30	160L*	71.92	7.5	2.5	3	0.06766	6/13	133.3	70	2930	90	90.6	90.7	0.72	0.82	0.86	40.7
IV Pole - 1500 rpm																		
0.12	0.16	63	0.82	3.5	2	2.2	0.00034	30/66	6.6	44	1375	45	54	57	0.49	0.61	0.72	0.422
0.18	0.25	63	1.29	3.4	2	2.2	0.00039	23/51	6.9	44	1360	46	54	58	0.49	0.63	0.74	0.605
0.25	0.33	71	1.77	3.5	1.9	2.1	0.00039	21/46	8.7	43	1310	50	55	59	0.5	0.65	0.76	0.805
0.55	0.75	80	3.74	4.7	2.1	2.2	0.0019	17/37	12.7	44	1410	58.5	66.3	68	0.54	0.7	0.82	1.424
0.75	1	80	5.04	5	2.3	2.2	0.00225	14/31	13.6	44	1395	64.5	71	72	0.55	0.7	0.81	1.856
1.1	1.5	90S	7.42	5.6	2.3	2.4	0.00392	8/18	18.7	49	1420	70	76	77	0.55	0.69	0.79	2.61
1.5	2	90L	9.96	5.5	2.3	2.4	0.00476	8/18	20.1	49	1410	76.5	78.5	79	0.58	0.73	0.82	3.342
2.2	3	100L	14.94	5.6	2.4	2.6	0.00651	9/20	25.8	53	1410	80.5	81.5	81.5	0.6	0.74	0.82	4.751
3	4	100L	20.07	6	2.8	3	0.00842	8/18	29.4	53	1400	80	81	82.6	0.57	0.72	0.81	6.472
4	5.5	112M	26.83	6.2	2.1	2.5	0.01473	13/29	41.6	56	1440	83.5	84.6	85	0.65	0.77	0.83	8.18
5.5	7.5	132S	36.33	6.5	2.1	2.5	0.03489	11/24	54.5	60	1450	84.5	85.6	86	0.63	0.77	0.84	11
7.5	10	132M	48.27	6.7	2.1	2.9	0.04652	8/18	69	60	1455	85	86.5	87	0.63	0.77	0.84	14.8
9.2	12.5	132M	60.34	7.5	2.2	2.8	0.05815	6/13	69.5	60	1455	86.5	87.7	87.7	0.64	0.78	0.85	17.8
11	15	160M	72.41	6	2.3	2.6	0.07528	12/26	95.8	67	1455	86.5	88.5	88.5	0.62	0.74	0.81	22.1
15	20	160L	96.22	5.8	2.3	2.4	0.10539	12/26	123.9	67	1460	88.5	90	89.7	0.68	0.79	0.83	29.1
18.5	25	180M	119.46	7	2.5	3	0.16146	11/24	171.5	64	1470	89.5	90.5	90.5	0.67	0.77	0.84	35.1
22	30	180L	143.84	7	2.7	2.9	0.18837	11/24	173	64	1465	90	91.5	91.2	0.69	0.8	0.85	41
30	40	200M	190.48	6.7	2.5	2.8	0.30338	14/31	233	69	1475	90.3	91.5	92	0.68	0.78	0.84	56
HIGH-OUTPUT DESIGN																		
0.25	0.33	63	1.64	5	3.1	3.1	0.00067	17/37	8.3	44	1415	52	60	62	0.44	0.54	0.65	0.895
0.37	0.5	71	2.66	3.7	2	2	0.00056	17/37	9.8	43	1320	55	60	62	0.5	0.63	0.76	1.133
0.55	0.75	71	3.8	5	2.8	2.9	0.00096	19/42	11.8	43	1385	66	70.5	72	0.45	0.58	0.68	1.62
1.1	1.5	80	7.61	5	2.3	2.3	0.00328	10/22	16	44	1385	65	68.5	69	0.55	0.7	0.81	2.84
1.5	2	90S	9.96	5.5	2.3	2.4	0.00476	8/18	20.6	49	1410	76.5	78.5	79	0.58	0.73	0.82	3.342
2.2	3	90L	14.94	5.8	2.7	2.5	0.00672	8/18	23.5	49	1410	75	76.5	76.5	0.57	0.71	0.8	5.19
4	5.5	100L*	27.79	6.7	2.6	2.6	0.01072	7/15	34.7	53	1390	81.5	82.2	82	0.64	0.76	0.83	8.483
5.5	7.5	112M*	36.33	6.5	2.5	2.6	0.01875	8/18	46.3	56	1450	84	85.7	85.7	0.54	0.66	0.75	12.4
7.5	10	132S	48.27	6.7	2.1	2.9	0.04652	8/18	62.3	60	1455	85	86.5	87	0.63	0.77	0.84	14.8
11	15	132M/L*	72.41	7.5	2.4	2.7	0.06978	5/11	81.4	60	1455	87	88.4	88	0.7	0.81	0.88	20.5
15	20	160M	96.22	5.8	2.3	2.4	0.10539	12/26	119.3	67	1460	88.5	90	89.7	0.68	0.79	0.83	29.1
18.5	25	160L*	120.69	6	2.4	2.4	0.11542	12/26	130.2	67	1455	88.5	90	90	0.64	0.76	0.82	36.2

Notes:
**Class "F" insulation with ΔT105K*
Standard voltage, connection and frequency: 220-240V Δ 50Hz *380-415V Δ 50Hz*
380-415V Y 50Hz *660-690V Y 50Hz*
The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Brake Motors Cast Iron Frame - Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I_n (A)	Rated speed (rpm)	% of full load						Full load current I_n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
II Pole - 3000 rpm																	
0.12	0.16	2690	48	55	58.8	0.59	0.74	0.84	0.369	2735	43	51	53.5	0.52	0.64	0.75	0.416
0.18	0.25	2700	52.5	57.5	59.5	0.6	0.75	0.85	0.541	2750	47.8	54.5	58	0.52	0.64	0.76	0.568
0.25	0.33	2685	54	59	60	0.56	0.71	0.81	0.782	2740	50	55.5	59.9	0.47	0.6	0.72	0.806
0.37	0.5	2700	62.8	66.5	67	0.66	0.81	0.89	0.943	2750	60	65.5	67	0.55	0.7	0.81	0.948
0.55	0.75	2670	68.5	70	69	0.71	0.83	0.9	1.35	2730	65	69	70.1	0.6	0.73	0.84	1.3
0.75	1	2740	69	73	72.5	0.67	0.79	0.86	1.83	2790	63	70.5	72.5	0.51	0.67	0.78	1.85
1.1	1.5	2745	75.5	76.5	76.5	0.68	0.81	0.87	2.51	2790	72	75.5	76.3	0.54	0.7	0.8	2.51
1.5	2	2820	78	80.1	78.9	0.7	0.81	0.87	3.32	2855	75	78.9	79.3	0.57	0.71	0.8	3.29
2.2	3	2790	78.5	80.2	80.8	0.7	0.82	0.88	4.701	2820	77.5	79.8	81.5	0.57	0.72	0.82	4.58
3	4	2855	82.4	83	83	0.75	0.85	0.89	6.17	2880	80.5	82.4	83.5	0.64	0.77	0.84	5.95
4	5.5	2860	83	84.2	84.5	0.77	0.86	0.89	8.08	2885	80.8	83.4	84.8	0.66	0.78	0.85	7.72
5.5	7.5	2895	84.4	86	86	0.77	0.85	0.89	10.9	2915	82.7	85.5	86.5	0.66	0.78	0.84	10.5
7.5	10	2890	86.8	87.5	87	0.78	0.86	0.89	14.7	2910	85	87	87.5	0.66	0.78	0.84	14.2
9.2	12.5	2900	87.4	88.5	88.4	0.76	0.85	0.89	17.8	2915	85.3	88	88.4	0.63	0.76	0.83	17.4
11	15	2915	87.5	88.5	88.5	0.76	0.84	0.87	21.7	2935	85	87.5	88	0.67	0.78	0.84	20.7
15	20	2925	88.5	90	90	0.74	0.83	0.87	29.1	2940	87.5	89.2	89.7	0.64	0.76	0.83	28
18.5	25	2930	89.5	90.5	90.5	0.74	0.83	0.87	35.7	2940	88	90	90.5	0.63	0.75	0.82	34.7
22	30	2935	91.5	92	91.5	0.78	0.85	0.88	41.5	2950	90.5	91.5	92	0.7	0.8	0.85	39.1
30	40	2955	91	92	92.2	0.76	0.84	0.87	56.8	2965	90	91.5	92	0.64	0.76	0.82	55.3
HIGH-OUTPUT DESIGN																	
0.37	0.5	2710	69.5	71.7	71	0.62	0.75	0.83	0.954	2765	65	70	71	0.52	0.66	0.76	0.954
0.75	1	2790	71	74	74	0.7	0.8	0.87	1.77	2830	67	71.5	73.5	0.6	0.71	0.8	1.77
1.5	2	2750	78	78.5	76.5	0.75	0.85	0.89	3.35	2790	76	78.5	78.5	0.65	0.78	0.85	3.13
2.2	3	2790	78.5	80.2	80.8	0.7	0.82	0.88	4.701	2820	77.5	79.8	81.5	0.57	0.72	0.82	4.58
3	4	2800	82	82.5	81.5	0.61	0.74	0.81	6.9	2845	80	81.5	81.5	0.5	0.64	0.74	6.92
4	5.5	2850	81.5	82.5	82	0.77	0.84	0.88	8.42	2890	80.3	82	82.5	0.68	0.78	0.84	8.03
5.5	7.5	2860	87	87.5	87.2	0.83	0.89	0.91	10.5	2880	86	87.5	87.7	0.77	0.85	0.89	9.8
7.5	10	2850	86.5	87	87	0.66	0.79	0.85	15.4	2885	85	87	87	0.53	0.67	0.76	15.8
11	15	2910	88.5	89.5	89	0.76	0.84	0.88	21.3	2930	87.5	89	89.5	0.66	0.77	0.83	20.6
22	30	2925	90.5	90.7	90.5	0.77	0.85	0.88	42	2935	89.5	90.5	90.7	0.68	0.79	0.84	40.2
IV Pole - 1500 rpm																	
0.12	0.16	1360	47	55	57	0.53	0.65	0.76	0.421	1385	42	51	55	0.45	0.57	0.67	0.457
0.18	0.25	1340	46	54	58	0.54	0.67	0.79	0.597	1370	43	52	56	0.45	0.57	0.68	0.658
0.25	0.33	1280	50	55	56	0.55	0.7	0.8	0.848	1320	43	51	55	0.45	0.58	0.7	0.903
0.55	0.75	1400	61	68	68.2	0.61	0.75	0.86	1.425	1415	58.5	66	67.6	0.51	0.67	0.79	1.433
0.75	1	1380	65	71.5	72	0.61	0.75	0.84	1.884	1405	61	68.4	71	0.5	0.64	0.76	1.934
1.1	1.5	1405	73	76	76.5	0.62	0.75	0.83	2.632	1425	67	75	77	0.49	0.64	0.75	2.65
1.5	2	1400	78.5	79	79	0.65	0.78	0.86	3.354	1415	74.5	78	79	0.52	0.67	0.77	3.431
2.2	3	1400	80.5	81	80.5	0.67	0.79	0.85	4.885	1420	79	81	81.5	0.55	0.68	0.78	4.815
3	4	1390	81.5	82	81.9	0.64	0.77	0.84	6.625	1410	78	81	82.6	0.52	0.67	0.78	6.478
4	5.5	1430	84.3	85	84.5	0.71	0.81	0.86	8.36	1445	82	84	85	0.59	0.72	0.8	8.18
5.5	7.5	1445	85.5	86	85.6	0.7	0.81	0.86	11.4	1455	83.2	85	85.7	0.58	0.72	0.81	11
7.5	10	1450	86.5	86.8	86.8	0.71	0.82	0.87	15.1	1455	83.2	85.7	86.7	0.57	0.72	0.8	15
9.2	12.5	1450	87.3	87.8	87.4	0.7	0.82	0.87	18.4	1455	85.3	87.1	87.5	0.59	0.73	0.82	17.8
11	15	1455	87	88.5	88	0.68	0.79	0.83	22.9	1460	85.5	87.5	88	0.57	0.7	0.78	22.3
15	20	1455	89	89.5	89.3	0.72	0.82	0.85	30	1465	88	90	89.7	0.64	0.75	0.82	28.4
18.5	25	1465	90	90.5	90.2	0.71	0.81	0.85	36.7	1470	88.5	90	90.5	0.62	0.74	0.81	35.1
22	30	1460	90.6	91.3	90.7	0.73	0.82	0.86	42.9	1470	89.5	91	91	0.64	0.76	0.82	41
30	40	1470	91	92	91.6	0.73	0.81	0.85	58.5	1475	89.5	91	91.5	0.63	0.75	0.81	56.3
HIGH-OUTPUT DESIGN																	
0.25	0.33	1405	54	61	63	0.49	0.6	0.7	0.861	1420	49	58	61	0.41	0.51	0.6	0.95
0.37	0.5	1300	57	60	62	0.52	0.67	0.78	1.162	1340	52	57	60	0.44	0.55	0.68	1.262
0.55	0.75	1370	69	72	72.5	0.51	0.63	0.72	1.6	1400	62	68	71	0.42	0.53	0.64	1.68
1.1	1.5	1370	68	69	69.5	0.61	0.76	0.86	2.8	1400	60	66	67	0.5	0.65	0.76	3.01
1.5	2	1400	78.5	79	79	0.65	0.78	0.86	3.354	1415	74.5	78	79	0.52	0.67	0.77	3.431
2.2	3	1390	76	77	76	0.65	0.75	0.83	5.3	1420	73	76	76.5	0.53	0.66	0.76	5.26
4	5.5	1380	82	82	81	0.69	0.8	0.85	8.827	1400	81	82.1	82.5	0.6	0.73	0.81	8.327
5.5	7.5	1445	85	86	85.7	0.6	0.72	0.79	12.3	1455	82	85.7	85.7	0.49	0.62	0.71	12.6
7.5	10	1450	86.5	86.8	86.8	0.71	0.82	0.87	15.1	1455	83.2	85.7	86.7	0.57	0.72	0.8	15
11	15	1450	87.5	88.4	88	0.75	0.84	0.89	21.4	1460	86.5	88.4	88.4	0.67	0.79	0.86	20.1
15	20	1455	89	89.5	89.3	0.72	0.82	0.85	30	1465	88	90	89.7	0.64	0.75	0.82	28.4
18.5	25	1450	89	90	89.4	0.7	0.8	0.84	37.4	1460	88	90	90	0.6	0.73	0.8	35.7

Brake Motors Cast Iron Frame - Improved Efficiency EFF2

Output		IEC Frame	Full load torque C_n (Nm)	Locked rotor current I_l/I_n	Locked rotor torque T_l/T_n	Break-down torque T_b/T_n	Inertia J kgm²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I_n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
VI Pole - 1000 rpm																		
0.12	0.16	63	1.31	2.6	1.7	1.6	0.00051	46/101	8.1	43	855	40.7	46.7	45.5	0.49	0.6	0.71	0.536
0.18	0.25	71	1.94	3.3	2	2.2	0.00079	50/110	9.6	43	905	46	54	57	0.46	0.55	0.62	0.735
0.25	0.33	71	2.58	3.5	2.2	2.2	0.00096	43/95	11.3	43	900	53	60.5	64	0.4	0.5	0.57	0.989
0.37	0.5	80	3.88	3.6	1.7	1.7	0.0019	16/35	12.6	43	905	55	60	63	0.5	0.64	0.75	1.13
0.55	0.75	80	5.66	4.5	2.3	2.3	0.00311	10/22	14.8	43	930	60	65	67	0.5	0.63	0.73	1.62
0.75	1	90S	7.72	4.2	1.9	2	0.00448	16/35	19.2	45	910	71	73	72.4	0.55	0.69	0.79	1.89
1.1	1.5	90L	11.39	4.8	2.7	2.7	0.00616	9/20	22.4	45	925	72.5	74	72.5	0.47	0.6	0.72	3.042
1.5	2	100L	15.44	4.1	2	2.2	0.00897	17/37	25.8	44	910	74.5	77.5	76	0.51	0.65	0.73	3.902
2.2	3	112M	22.42	5	2.2	2.3	0.01682	14/31	34.5	48	940	77.5	80.5	80.1	0.53	0.66	0.74	5.36
3	4	132S	29.27	5.3	2	2.2	0.03489	20/44	50.7	52	960	80	82.7	82.5	0.58	0.7	0.77	6.82
4	5.5	132M	40.24	5.8	2.3	2.4	0.04458	19/42	57.3	52	960	81.5	83.6	84.2	0.54	0.66	0.74	9.27
5.5	7.5	132M	54.87	6.4	2.7	2.8	0.05814	15/33	66.6	52	960	82.5	84.8	85.8	0.49	0.62	0.71	13
7.5	10	160M	72.79	5.7	2.2	2.5	0.10773	11/24	99.9	56	965	86	87.5	87	0.64	0.76	0.83	15
9.2	12.5	160L	90.98	6	2	2.6	0.12928	10/22	112.6	56	965	86.5	87.5	87	0.63	0.75	0.82	18.6
11	15	160L	109.18	6	2.2	2.6	0.158	11/24	124.5	56	965	87.5	88.5	88	0.65	0.77	0.83	21.7
15	20	180M	144.08	7.5	2.3	2.7	0.26201	7/15	163	56	975	88	89	89	0.76	0.84	0.88	27.6
18.5	25	200L	180.1	6	2.1	2.5	0.34083	11/24	213	58	975	89	90.5	90.2	0.64	0.76	0.82	36.1
22	30	200L	216.12	6	2.3	2.4	0.41258	14/31	234.6	58	975	89	90.9	91.3	0.7	0.79	0.84	41.4
HIGH-OUTPUT DESIGN																		
3	4	112M	29.27	6.3	2.6	2.6	0.02617	10/22	45.8	48	960	78.5	81.7	84	0.53	0.65	0.73	7.06
4	5.5	132S	40.24	5.8	2.3	2.4	0.04458	19/42	59.4	52	960	81.5	83.6	84.2	0.54	0.66	0.74	9.27
VIII Pole - 750 rpm																		
0.12	0.16	71	1.7	2.2	2.1	2	0.00079	84/185	10.7	41	660	36.3	43.4	45.6	0.37	0.45	0.53	0.717
0.18	0.25	80	2.53	2.8	2.2	2.4	0.00208	29/64	12.9	42	695	36.2	44.1	48.6	0.45	0.53	0.62	0.862
0.25	0.33	80	3.31	3.5	2.3	2.2	0.00277	24/53	14.5	42	700	46.1	53.6	56.6	0.42	0.52	0.61	1.045
0.37	0.5	90S	5.13	3	1.9	1.8	0.00392	32/70	18.2	43	685	50.6	56.5	57.4	0.44	0.55	0.64	1.454
0.55	0.75	90L	7.8	3.3	1.9	2	0.00561	25/55	21.3	43	675	58	60	60	0.43	0.56	0.66	2.005
0.75	1	100L	9.96	3.5	1.8	2.4	0.00785	33/73	24.2	50	705	62	67.2	67.8	0.42	0.53	0.62	2.575
1.1	1.5	100L	15.05	4	1.7	2.3	0.01177	27/59	30.2	50	700	69.3	72.3	71.2	0.45	0.57	0.66	3.379
1.5	2	112M	20.07	4.2	2.2	2.2	0.01776	26/57	44.4	46	700	73.7	75.4	73.5	0.48	0.61	0.7	4.208
2.2	3	132S	29.68	6.1	2.5	2.8	0.06023	22/48	67.6	48	710	75.8	78	77.1	0.55	0.68	0.77	5.349
3	4	132M	39.57	6.1	2.2	2.6	0.07277	18/40	75.3	48	710	78.5	80.1	79	0.55	0.68	0.76	7.212
4	5.5	160M	53.29	4.7	2.2	2.4	0.10055	18/40	96.6	51	725	80	82	82	0.5	0.63	0.72	9.78
5.5	7.5	160M	72.66	4.8	2.2	2.3	0.12209	18/40	105.7	51	725	81	83	83.5	0.48	0.62	0.71	13.4
7.5	10	160L	96.88	4.7	2.2	2.3	0.15082	16/35	121.2	51	725	83	85	85.5	0.5	0.64	0.73	17.3
9.2	12.5	180M	120.27	6.7	2.2	2.9	0.23443	11/24	163	51	730	83	86	85.9	0.64	0.75	0.81	19.1
11	15	180L	145.32	6.8	2.3	2.5	0.2758	11/24	164.9	51	725	87	88.5	88.3	0.68	0.79	0.84	21.4
15	20	200L	192.44	4.6	2	2.1	0.3767	23/51	228.7	53	730	86.5	88.6	89	0.56	0.68	0.75	32.4
HIGH-OUTPUT DESIGN																		
7.5	10	160M	96.88	4.7	2.2	2.3	0.15082	16/35	123	51	725	83	85	85.5	0.5	0.64	0.73	17.3

Notes:
**Class "F" insulation with ΔT105K*
Standard voltage, connection and frequency: 220-240V Δ 50Hz
380-415V Y 50Hz
380-415V Δ 50Hz
660-690V Y 50Hz
The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Brake Motors Cast Iron Frame - Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I_n (A)	Rated speed (rpm)	% of full load						Full load current I_n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
VI Pole - 1000 rpm																	
0.12	0.16	845	46.2	50.6	47.6	0.52	0.64	0.76	0.504	860	36.2	42.8	43.2	0.48	0.57	0.67	0.577
0.18	0.25	895	49	55.5	57.5	0.49	0.59	0.65	0.732	910	43	52	56.5	0.44	0.52	0.59	0.751
0.25	0.33	890	56	63	65.3	0.44	0.55	0.61	0.954	905	50	58	62.5	0.37	0.46	0.54	1.03
0.37	0.5	890	57	62	65	0.54	0.69	0.8	1.08	910	55	60	62	0.47	0.6	0.72	1.15
0.55	0.75	920	62	65.8	68	0.54	0.67	0.77	1.6	935	58	64	66	0.47	0.59	0.68	1.7
0.75	1	895	70	72	72	0.61	0.75	0.83	1.91	915	70	71	71	0.52	0.66	0.76	1.93
1.1	1.5	915	73.2	76.4	75.6	0.52	0.67	0.77	2.871	930	71.3	71.4	72.5	0.42	0.55	0.67	3.15
1.5	2	900	73.6	78.5	79	0.57	0.7	0.77	3.747	920	74.2	75.9	74.2	0.46	0.6	0.69	4.076
2.2	3	930	79	80.8	79.7	0.58	0.7	0.76	5.52	950	76	80.3	80.5	0.5	0.63	0.72	5.28
3	4	955	81	83	82	0.61	0.72	0.79	7.04	965	79	82.5	82.6	0.53	0.66	0.74	6.83
4	5.5	960	82.7	84.2	84	0.58	0.73	0.78	9.28	965	80	82.9	83.9	0.52	0.64	0.72	9.21
5.5	7.5	960	84.2	85.5	85.7	0.56	0.69	0.75	13	965	81	83.7	85.4	0.45	0.57	0.66	13.6
7.5	10	960	86	86.5	86	0.69	0.8	0.85	15.6	965	85	86.5	86.5	0.61	0.73	0.8	15.1
9.2	12.5	960	87	87	86.5	0.68	0.79	0.84	19.2	970	86	87.5	87	0.59	0.72	0.8	18.4
11	15	960	88	88	87.5	0.7	0.8	0.85	22.5	970	87	88.6	88.2	0.61	0.74	0.81	21.4
15	20	970	88	88.5	88.5	0.8	0.86	0.89	28.9	975	88	89	89	0.73	0.82	0.87	27
18.5	25	975	89.5	90	90	0.69	0.8	0.84	37.2	980	88	90	90	0.6	0.73	0.8	35.7
22	30	970	89.6	91	91.2	0.74	0.82	0.85	43.1	980	88.4	90.7	91.3	0.66	0.76	0.82	40.9
HIGH-OUTPUT DESIGN																	
3	4	955	80	82	83.9	0.59	0.7	0.76	7.15	965	76.5	81.4	84	0.48	0.6	0.69	7.2
4	5.5	960	82.7	84.2	84	0.58	0.73	0.78	9.28	965	80	82.9	83.9	0.52	0.64	0.72	9.21
VIII Pole - 750 rpm																	
0.12	0.16	650	41	47.1	47.6	0.39	0.48	0.57	0.672	670	32.7	40.3	43.2	0.36	0.43	0.5	0.773
0.18	0.25	690	40.7	47.7	50.6	0.47	0.57	0.66	0.819	700	32.8	41.2	46.1	0.43	0.51	0.59	0.921
0.25	0.33	690	49	55.6	57.2	0.45	0.56	0.65	1.022	700	43.1	51.7	55.6	0.4	0.5	0.58	1.079
0.37	0.5	680	54.4	59	58.3	0.48	0.6	0.69	1.397	690	46.6	53.8	56.1	0.41	0.51	0.61	1.504
0.55	0.75	665	61.7	62	60	0.47	0.6	0.7	1.99	680	54.8	59	59	0.41	0.52	0.62	2.092
0.75	1	695	65.6	69	68	0.46	0.58	0.66	2.539	710	58.3	64.6	66.7	0.39	0.49	0.58	2.697
1.1	1.5	690	72.1	73.6	70.8	0.5	0.62	0.7	3.372	705	66.2	70.7	70.7	0.41	0.53	0.62	3.491
1.5	2	690	75.9	76.2	73.2	0.52	0.65	0.73	4.265	705	71.6	74.2	73.1	0.44	0.57	0.66	4.325
2.2	3	705	77.1	78.3	76.7	0.6	0.73	0.8	5.447	715	74.7	77.5	77.1	0.52	0.65	0.74	5.364
3	4	705	79.7	80.5	78.6	0.6	0.73	0.8	7.249	715	77.1	79.6	79	0.51	0.64	0.73	7.237
4	5.5	720	81	83	82	0.54	0.67	0.75	9.88	725	78.5	82	82.5	0.46	0.6	0.69	9.78
5.5	7.5	720	82	84	83	0.54	0.67	0.74	13.6	725	80	82.5	83	0.45	0.58	0.68	13.6
7.5	10	715	84	85	85	0.56	0.69	0.76	17.6	725	81	84	85.5	0.47	0.6	0.7	17.4
9.2	12.5	725	84	86.1	85.5	0.69	0.79	0.84	19.5	730	82	85.9	85.9	0.59	0.72	0.79	18.9
11	15	720	87.5	88.3	87.8	0.71	0.81	0.85	22.4	730	86.5	88.6	88.5	0.65	0.77	0.83	20.8
15	20	725	87.5	88.9	88.9	0.61	0.72	0.77	33.3	730	85.5	88.3	88.9	0.5	0.64	0.72	32.6
HIGH-OUTPUT DESIGN																	
7.5	10	715	84	85	85	0.56	0.69	0.76	17.6	725	81	84	85.5	0.47	0.6	0.7	17.4

Brake Motors Cast Iron Frame Premium Efficiency EFF1

Standard Features:

- Three-phase, multivoltage, IP55, TEFC
- Output: 0.12 up to 37kW
- Frames: 63 up to 200L
- Voltage: 220-240/380-415V (up to 100L)
  380-415/660V (from 112M and up)
- Class “F” insulation (ΔT=80K)
- Continuous duty: S1
- Design N
- Ambient temperature: 40°C , at 1000 m.a.s.l.
- Squirrel cage rotor/Aluminium die cast
- Ball bearings
- D.E.: V’Ring
- N.D.E.: Lip Seal
- Stainless steel nameplate
- Dimensions according to IEC-72
- Performance characteristics according to IEC 34
- Color: RAL 5009

Options Available:

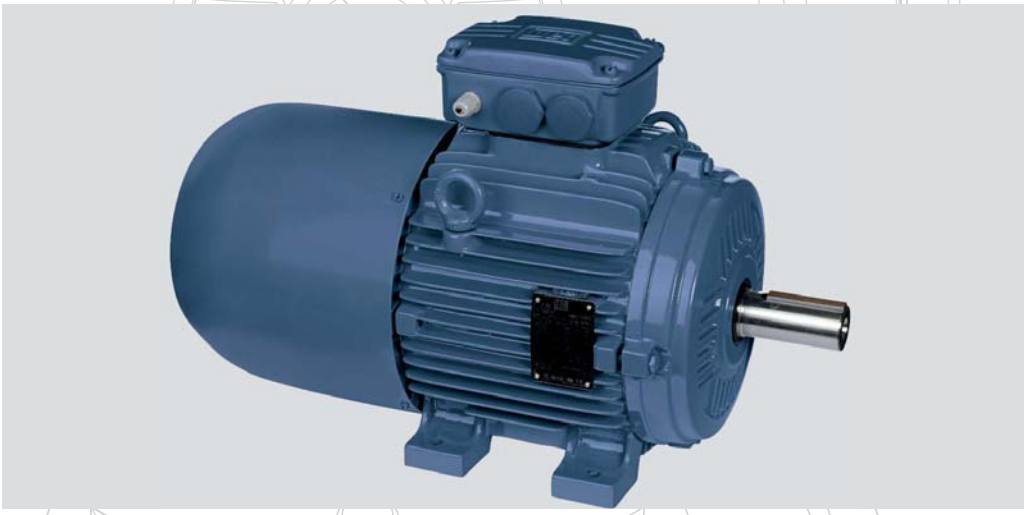
- Thermal protection
- Space heaters
- Shaft dimensions to customer requirements
- Special finishing paint
- Class “H” insulation
- Other mounting configurations

More options available, on request

Typical Applications:

These motors can be used on any machine that requires quick stops and time savings during installation:

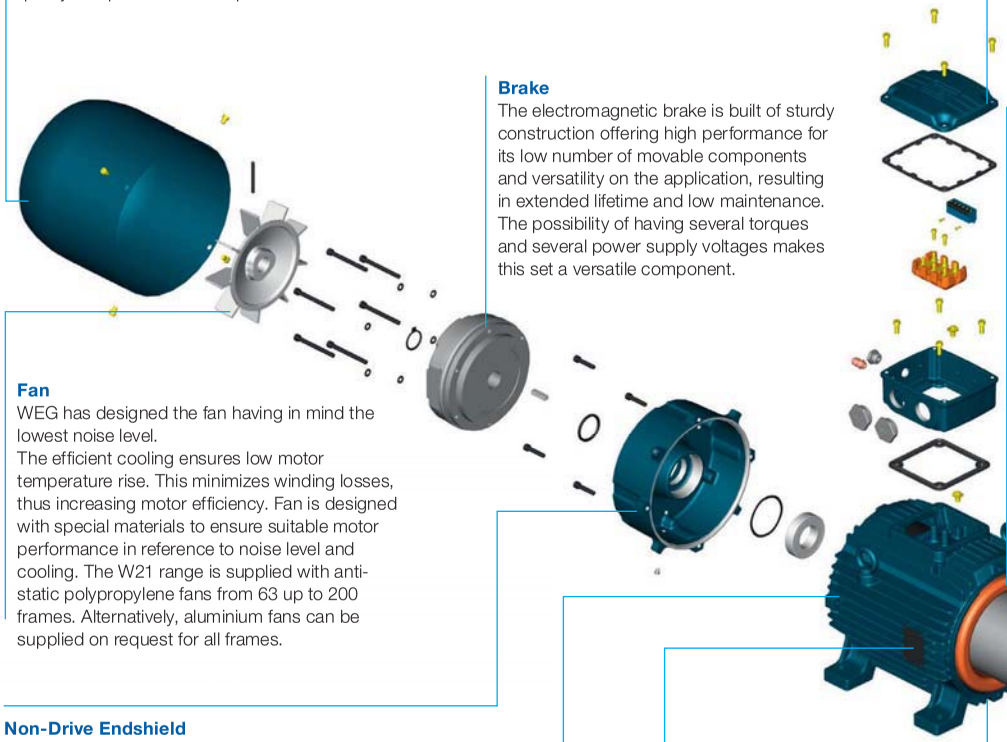
- Packing equipments
- Conveyor belts
- Washing and bottling machines
- Rolling bridges
- Elevators
- Printing machines
- Gates
- Wood machinery
- Cranes and others



Fan Cover
Made of steel plate for frames 63 up to 200L. The fan cover offers higher mechanical strength, corrosion-resistance and extended lifetime. With a design incorporating the braking system it is suitable for operation in severe environments. In addition, it offers quality and performance requirements of the motors such as noise level.

Brake
The electromagnetic brake is built of sturdy construction offering high performance for its low number of movable components and versatility on the application, resulting in extended lifetime and low maintenance. The possibility of having several torques and several power supply voltages makes this set a versatile component.

Terminal Box
Cast iron made with plenty of internal space. The terminal box can be rotated in 90° intervals, having one or two threaded holes to connect the power supply cables. Suitable to take the additional connection of the brake as well as bridge rectifier which is fixed internally without affecting the motor degree of protection. Larger volumes compared to standard motor allow easier connection and disconnection operations of the power supply, bridge rectifier and protection leads.
* Available as top or side mounting.



Winding
The wire is enameled with class H varnish. Supplied with patented WISE (WEG Insulation System Evolution), which allows three times longer motor lifetime designed to operate in environments with excess of moisture and suitable for VFD application. The winding is designed to obtain the minimal Joule losses and temperature rise.

Shaft
WEG uses SAE/AISI 1040/45 carbon steel as standard, which provides high mechanical strength, avoiding bending under load and minimizes fatigue which extends lifetime. Specially designed to withstand torques caused during motor acceleration and deceleration.

Rotor
High pressure die cast rotor dynamically balanced, thus reducing vibrations.

Fan
WEG has designed the fan having in mind the lowest noise level.
The efficient cooling ensures low motor temperature rise. This minimizes winding losses, thus increasing motor efficiency. Fan is designed with special materials to ensure suitable motor performance in reference to noise level and cooling. The W21 range is supplied with anti-static polypropylene fans from 63 up to 200 frames. Alternatively, aluminium fans can be supplied on request for all frames.

Bearings
WEG motors are fitted with the highest quality bearings selected from the best manufacturers in the world and designed to ensure long life of the motor even under heavy operating conditions.
WEG also uses the Super-premium Polyrex EM polyurea grease that is specially formulated for electric motor bearings. Its advanced thickener formulation provides low noise characteristics, improved bearing performance and protection.

Endshields
Made of cast iron, they are provided with external fins for better heat dissipation, thus increasing bearing life time.

Non-Drive Endshield
The non-drive endshield was specially designed to be coupled to the braking set as well as to withstand high thrusts coming from this set.

Stator
Built with low magnetic loss steel lamination to reduce losses and operating temperature.

Seals
WEG motors are fitted with either V-ring seals, Oil seals, Lip seals and may also be fitted with Labyrinth Taconite or W3Seal to ensure the best possible protection under dusty and high moisture environments.

Frame
WEG motors are made of FC-200 high-grade cast iron (same density as flameproof motors). The frames are provided with fins aiming at improving the heat dissipation and properly spaced to minimize air blockage due to accumularion of dirt. The motors can be mounted in either horizontal or vertical positions.

Nameplate
Stainless steel nameplate ensuring a permanent record of all motor data.

Drain Hole
Provided with plastic drain plug allowing drainage of condensed water.

Brake Motors Cast Iron Frame - Premium Efficiency EFF1

Output		IEC Frame	Full load torque C_n (Nm)	Locked rotor current I_r/I_n	Locked rotor torque T_r/T_n	Break-down torque T_b/T_n	Inertia J kgm²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I_n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
II Pole - 3000 rpm																		
0.12	0.16	63	0.41	5	2.8	3	0.00012	25/55	6.8	52	2760	58	64.8	65.5	0.51	0.64	0.74	0.357
0.18	0.25	63	0.64	4.4	2.5	2.5	0.00012	30/66	6.9	52	2730	63.5	68.5	69.5	0.62	0.76	0.81	0.462
0.25	0.33	63	0.85	4.5	2.5	2.5	0.00016	18/40	7.3	52	2730	64	68.5	71.2	0.58	0.71	0.8	0.634
0.37	0.5	71	1.25	5.5	3	3.2	0.00037	23/51	10	56	2810	69	73.8	74.5	0.63	0.77	0.85	0.843
0.55	0.75	71	1.89	5.7	2.7	2.7	0.00045	16/35	10.6	56	2790	72.5	76.6	76.7	0.68	0.8	0.86	1.2
0.75	1	80	2.51	6.8	3.1	3.1	0.00079	20/44	13.8	59	2795	76.5	80.5	80.5	0.73	0.82	0.86	1.56
1.1	1.5	80	3.74	7.8	3.4	3.4	0.00096	15/33	14.9	59	2820	81	83	83.6	0.64	0.76	0.84	2.26
1.5	2	90S	4.91	7.3	2.8	2.8	0.00205	14/31	19.4	62	2860	83.2	84.9	84.5	0.68	0.8	0.85	3.01
2.2	3	90L	7.35	8.4	3.7	3.5	0.00266	9/20	21.8	62	2865	84	86	86.6	0.64	0.76	0.83	4.42
3	4	100L	9.7	8.9	3	3.1	0.00672	11/26	31.4	67	2895	84.5	87	88.3	0.73	0.83	0.87	5.64
4	5.5	112M	13.32	8.2	2.7	3.4	0.00842	17/37	42.7	64	2900	87	88.4	88.6	0.72	0.83	0.87	7.49
5.5	7.5	132S	17.95	8	2.7	3.2	0.02056	19/42	60.9	67	2935	88.5	90	90.1	0.71	0.81	0.86	10.2
7.5	10	132S	24.01	8	2.5	2.9	0.0243	13/29	66	67	2925	88.5	90.6	90.8	0.72	0.82	0.87	13.7
11	15	160M	35.72	8.5	2.8	3.3	0.05295	14/31	114.7	70	2950	90	91.9	92.3	0.7	0.8	0.85	20.2
15	20	160M	47.7	8.2	2.4	3.3	0.05883	11/26	120.5	70	2945	91	92	92.5	0.74	0.82	0.86	27.2
18.5	25	160L	59.63	8.8	2.5	3.2	0.06766	10/22	133.7	70	2945	91.9	92.8	93.1	0.73	0.82	0.85	33.7
22	30	180M	71.43	8.6	2.7	3.3	0.11919	14/31	189.4	70	2950	92.5	93.5	93.7	0.76	0.84	0.87	39
30	40	200L	94.92	7.4	2.7	2.8	0.2063	31/68	246.7	74	2960	92.8	93.7	94	0.77	0.84	0.87	52.9
37	50	200L	118.65	7.6	2.7	2.7	0.22424	25/55	257.9	74	2960	93.2	94	94.6	0.76	0.84	0.87	64.9
HIGH-OUTPUT DESIGN																		
5.5	7.5	112M	18.36	7.7	2.5	3	0.00995	10/22	45	64	2870	87.5	88.5	88.6	0.78	0.86	0.89	10.1
9.2	12.5	132M	29.91	8.5	2.8	3.1	0.02804	11/24	73.8	67	2935	88.5	90.9	91	0.7	0.81	0.87	16.8
IV Pole - 1500 rpm																		
0.12	0.16	63	0.79	4.5	2.6	2.7	0.00045	20/44	7.3	44	1415	56.5	62.5	64.5	0.43	0.55	0.65	0.413
0.18	0.25	63	1.25	4.6	2.6	2.7	0.00056	27/59	7.8	44	1400	58	64	67.5	0.44	0.55	0.66	0.583
0.25	0.33	71	1.66	5	3	3.1	0.00079	48/106	11.1	43	1400	69	73	75	0.5	0.61	0.69	0.697
0.37	0.5	71	2.52	5	2.7	2.8	0.00079	37/81	11.1	43	1395	69	74	75.5	0.47	0.59	0.69	1.03
0.55	0.75	80	3.68	6	2.6	2.8	0.00242	17/37	14	44	1430	72	77	78	0.56	0.69	0.78	1.3
0.75	1	80	4.95	6	2.6	2.6	0.00328	16/35	15.9	44	1420	76	78.6	80.1	0.62	0.75	0.82	1.65
1.1	1.5	90S	7.29	7	2.6	3	0.0056	14/31	21.4	49	1445	80	83.8	83.8	0.59	0.72	0.8	2.37
1.5	2	90L	9.69	7.5	2.8	3.3	0.00672	12/26	23.7	49	1450	80.5	84.6	85.2	0.54	0.68	0.77	3.3
2.2	3	100L	14.79	7.4	3	3	0.01072	17/37	32.2	53	1425	85.3	86.4	86.4	0.65	0.77	0.83	4.43
3	4	100L	19.65	7.8	2.9	3.3	0.01225	12/26	39.4	53	1430	84.5	86.5	87.5	0.64	0.76	0.83	5.96
4	5.5	112M	26.73	6.6	2.1	2.6	0.01875	12/26	46.4	56	1445	87.1	88.3	88.6	0.66	0.77	0.83	7.85
5.5	7.5	132S	35.96	8.5	2.4	3.1	0.05427	12/26	66.9	56	1465	88	89.6	90.1	0.69	0.79	0.85	10.4
7.5	10	132M	47.95	8.2	2.5	3	0.0659	9/20	72.4	56	1465	89	90	90.4	0.71	0.81	0.86	13.9
9.2	12.5	160M	60.14	5.6	2.3	2.3	0.08029	27/59	103.6	67	1460	89.6	91	91	0.7	0.8	0.84	17.4
11	15	160M	71.92	6	2.5	2.6	0.10037	19/42	111.3	67	1465	90.3	91.4	91.2	0.68	0.78	0.83	21
15	20	160L	95.89	6.1	2.5	2.6	0.11542	17/37	130	67	1465	90.5	91.9	91.8	0.66	0.77	0.83	28.4
18.5	25	180M	119.46	8	2.9	2.9	0.19733	12/26	188.8	64	1470	91.6	93	93.4	0.65	0.76	0.82	34.9
22	30	180L	142.86	7.9	2.8	2.9	0.23321	16/35	195.3	64	1475	92.5	93.5	93.7	0.71	0.81	0.86	39.4
30	40	200L	190.48	7	2.5	2.6	0.33095	18/40	243.2	69	1475	93	94	93.9	0.67	0.78	0.83	55.6
HIGH-OUTPUT DESIGN																		
2.2	3	90L	14.84	5.8	2.7	2.5	0.00672	8/18	24	49	1420	76.5	79	81	0.55	0.69	0.78	5.026
7.5	10	132S	47.95	8.2	2.5	3	0.05815	9/20	80	56	1465	88.5	90	90.2	0.7	0.81	0.86	14
9.2	12.5	132M	59.93	8	2.5	3	0.06202	7/15	74	56	1465	88	89.5	90.4	0.68	0.8	0.85	17.281
37	50	200L	238.91	6.2	2.1	2.2	0.38611	19/42	260	69	1470	92.5	93	93.2	0.69	0.79	0.83	69.038

Notes:
**Class "F" insulation with ΔT105K*
Standard voltage, connection and frequency: 220-240V Δ 50Hz *380-415V Δ 50Hz*
380-415V Y 50Hz *660-690V Y 50Hz*
The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Brake Motors Cast Iron Frame - Premium Efficiency EFF1

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I_n (A)	Rated speed (rpm)	% of full load						Full load current I_n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
II Pole - 3000 rpm																	
0.12	0.16	2730	60	66	67	0.56	0.69	0.79	0.344	2790	55	63	63	0.48	0.61	0.71	0.373
0.18	0.25	2700	65	69	69	0.66	0.79	0.83	0.478	2760	62	68	70	0.58	0.73	0.78	0.459
0.25	0.33	2700	65.5	69.5	70	0.62	0.75	0.83	0.654	2755	62.5	67.5	71.9	0.55	0.68	0.77	0.628
0.37	0.5	2790	70.5	73.8	74.3	0.68	0.8	0.88	0.86	2825	67.5	73.8	74.5	0.6	0.74	0.82	0.843
0.55	0.75	2760	73.5	76.7	76.5	0.73	0.82	0.88	1.24	2810	71.5	76.5	76.7	0.64	0.77	0.84	1.19
0.75	1	2770	77	80.5	79.8	0.76	0.85	0.88	1.62	2805	76	80.5	80.5	0.7	0.79	0.84	1.54
1.1	1.5	2800	82	83.2	82.8	0.69	0.8	0.86	2.35	2835	80	82.5	83.5	0.58	0.72	0.81	2.26
1.5	2	2845	83.6	84.8	84.3	0.73	0.83	0.87	3.11	2870	82.8	84.8	84.6	0.64	0.77	0.83	2.97
2.2	3	2855	84.5	86	86	0.69	0.8	0.86	4.52	2875	83.5	86	86.6	0.58	0.72	0.8	4.42
3	4	2890	85	86.7	87.5	0.77	0.85	0.88	5.92	2900	84	86.7	88	0.69	0.81	0.86	5.51
4	5.5	2890	87.5	88.3	88.3	0.77	0.85	0.89	7.73	2910	86.5	88.3	88.5	0.68	0.81	0.86	7.31
5.5	7.5	2930	89	90.3	90.2	0.75	0.83	0.87	10.6	2940	88	89.8	90	0.68	0.78	0.84	10.1
7.5	10	2920	89	90.5	90.6	0.75	0.84	0.88	14.3	2930	88	90.6	90.9	0.7	0.8	0.86	13.3
11	15	2945	90.5	92	92.2	0.74	0.83	0.87	20.8	2955	89.5	91.8	92.2	0.66	0.77	0.83	20
15	20	2940	91.5	92	92.4	0.78	0.85	0.87	28.4	2950	90.5	91.9	92.4	0.7	0.8	0.85	26.6
18.5	25	2940	92.1	92.8	93	0.76	0.84	0.87	34.7	2950	91.7	92.7	93	0.7	0.8	0.83	33.3
22	30	2945	92.8	93.5	93.5	0.79	0.86	0.89	40.2	2955	92.2	93.5	93.7	0.73	0.82	0.85	38.4
30	40	2955	93	93.7	93.8	0.81	0.86	0.88	55.2	2965	92.6	93.7	94.1	0.74	0.82	0.86	51.6
37	50	2955	93.4	94	94.4	0.8	0.86	0.88	67.7	2965	93	94	94.6	0.72	0.82	0.86	63.3
HIGH-OUTPUT DESIGN																	
5.5	7.5	2860	87.7	88.3	88	0.82	0.88	0.9	10.6	2880	87.3	88.5	88.6	0.75	0.84	0.88	9.81
9.2	12.5	2930	89	91	91	0.76	0.85	0.89	17.3	2940	88	90.8	91	0.66	0.77	0.85	16.5
IV Pole - 1500 rpm																	
0.12	0.16	1405	59	64	65	0.46	0.59	0.69	0.407	1425	54	60.5	63	0.4	0.51	0.61	0.434
0.18	0.25	1390	60	65	67	0.47	0.57	0.68	0.6	1410	56	63	67	0.41	0.53	0.64	0.584
0.25	0.33	1385	70	73.5	74.5	0.54	0.65	0.73	0.698	1415	68	72.5	75.5	0.46	0.58	0.66	0.698
0.37	0.5	1385	71	74.5	75.5	0.51	0.63	0.72	1.03	1405	67	73.5	75	0.43	0.55	0.66	1.04
0.55	0.75	1420	73	77.5	77.5	0.59	0.72	0.81	1.33	1435	71	76.5	78	0.53	0.65	0.75	1.31
0.75	1	1410	77	78.7	79.6	0.66	0.78	0.85	1.68	1425	75	78.5	80.1	0.58	0.71	0.79	1.65
1.1	1.5	1440	81.5	83.8	83.6	0.64	0.76	0.83	2.41	1450	78.5	83.8	83.8	0.55	0.69	0.77	2.37
1.5	2	1440	81.5	84.7	85	0.59	0.73	0.8	3.35	1455	79.5	84.5	85	0.5	0.64	0.74	3.32
2.2	3	1420	85.5	86.3	86.2	0.7	0.81	0.86	4.51	1430	85	86.4	86.4	0.62	0.75	0.81	4.37
3	4	1425	85	86.5	87.5	0.68	0.8	0.85	6.13	1435	84	86.5	87.5	0.6	0.73	0.81	5.89
4	5.5	1440	87.5	88.4	88.3	0.7	0.8	0.86	8	1450	86.7	88.2	88.6	0.62	0.74	0.81	7.75
5.5	7.5	1460	88.5	89.6	90	0.72	0.81	0.86	10.8	1470	87.5	89.4	90.1	0.65	0.77	0.83	10.2
7.5	10	1460	89.2	89.8	89.8	0.75	0.84	0.88	14.4	1465	88.7	89.8	90.3	0.68	0.79	0.85	13.6
9.2	12.5	1455	90	91	90.7	0.74	0.82	0.85	18.1	1465	89.2	91	91	0.67	0.78	0.83	16.9
11	15	1460	90.6	91.5	91	0.72	0.81	0.85	21.6	1470	90	91.3	91.3	0.64	0.75	0.81	20.7
15	20	1460	90.9	91.9	91.5	0.7	0.8	0.85	29.3	1470	90.1	91.9	91.8	0.62	0.74	0.81	28.1
18.5	25	1465	91.8	93	93.3	0.7	0.8	0.84	35.9	1475	91.3	92.9	93.3	0.6	0.73	0.8	34.5
22	30	1470	92.8	93.4	93.5	0.75	0.83	0.88	40.6	1475	92.2	93.4	93.7	0.68	0.79	0.85	38.4
30	40	1475	93.5	94.1	93.7	0.71	0.81	0.85	57.2	1480	92.5	93.9	93.8	0.63	0.75	0.81	54.9
HIGH-OUTPUT DESIGN																	
2.2	3	1410	77	79.5	80.5	0.58	0.72	0.8	5.19	1430	75	78	80	0.52	0.66	0.76	5.034
7.5	10	1460	89	90	89.8	0.74	0.83	0.87	14.6	1465	88	89.5	90.3	0.65	0.78	0.84	13.8
9.2	12.5	1460	89	89.5	89.5	0.73	0.83	0.87	17.952	1465	87	89	90.3	0.64	0.76	0.83	17.077
37	50	1465	92.7	92.9	93	0.72	0.81	0.85	71.114	1475	92	93	93.2	0.67	0.77	0.81	68.186

Brake Motors Cast Iron Frame - Premium Efficiency EFF1

Output		IEC Frame	Full load torque C_n (Nm)	Locked rotor current I_l/I_n	Locked rotor torque T_l/T_n	Break-down torque T_b/T_n	Inertia J kgm²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I_n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
VI Pole - 1000 rpm																		
0.12	0.16	63	3.5	1.23	2.2	2.1	0.00067	41/90	8	43	910	44	52	56.3	0.44	0.53	0.63	0.488
0.18	0.25	71	3.5	1.95	2.1	2.2	0.00079	49/108	10.8	43	900	49	57	61	0.42	0.51	0.6	0.71
0.25	0.33	71	3.5	2.58	2.1	2.2	0.00096	43/95	11.7	43	900	53	63	67	0.39	0.48	0.55	0.979
0.37	0.5	80	4.7	3.8	2.1	2.2	0.00242	14/31	13.8	43	925	62	67.5	70	0.48	0.61	0.7	1.09
0.55	0.75	80	4.8	5.73	2.2	2.4	0.00311	11/24	15.2	43	920	62	68.5	70.3	0.48	0.63	0.72	1.57
0.75	1	90S	4.8	7.63	2.1	2.2	0.0056	20/44	21.6	45	920	74	77.7	77.7	0.5	0.63	0.72	1.94
1.1	1.5	90L	5	11.45	2.3	2.4	0.00672	12/26	23.9	45	920	72	77.7	77.7	0.48	0.61	0.71	2.88
1.5	2	100L	5.5	14.87	2.2	2.5	0.01289	19/42	30.6	44	945	79	81.5	81.5	0.49	0.6	0.7	3.8
2.2	3	112M	6.2	22.18	2.4	2.6	0.02243	16/35	43	48	950	81.5	84	83.8	0.52	0.64	0.72	5.26
3	4	132S	6	29.27	2.1	2.5	0.04264	28/62	58.9	52	960	82	85	86.5	0.53	0.67	0.74	6.76
4	5.5	132M	6.5	40.24	2.2	2.5	0.05039	21/46	66.1	52	960	85	86.6	87.2	0.56	0.69	0.76	8.71
5.5	7.5	132M	6.8	54.59	2.3	2.5	0.0659	17/37	76	52	965	84.5	87.5	87.6	0.53	0.65	0.73	12.4
7.5	10	160M	6.6	72.41	2.5	2.9	0.14364	19/42	115.4	56	970	87.5	89.5	90	0.61	0.74	0.81	14.8
11	15	160L	7	108.62	2.4	2.7	0.17595	13/29	132.6	56	970	89	90.3	90.3	0.58	0.72	0.79	22.3
15	20	180L	8	144.82	2.7	3	0.28959	9/20	171.9	56	970	91.2	91.9	91.6	0.72	0.81	0.87	27.2
18.5	25	200L	6.3	180.1	2.3	2.5	0.37671	17/37	226.8	58	975	91.3	92.7	92.9	0.67	0.78	0.82	35.1
22	30	200L	6.2	216.12	2.3	2.6	0.44846	15/33	242.5	58	975	91.2	92.6	92.9	0.65	0.75	0.82	41.7
HIGH-OUTPUT DESIGN																		
9.2	12.5	160L	6.2	90.51	2.2	2.7	0.16518	15/33	130	56	970	89.4	90.1	90.1	0.6	0.73	0.8	18.4
VIII Pole - 750 rpm																		
0.12	0.16	71	1.64	2.5	1.9	2.1	0.00079	44/97	11.4	41	685	38	46.2	49	0.38	0.47	0.55	0.643
0.18	0.25	80	2.51	3.1	1.8	2	0.00242	16/35	14.7	42	700	42	51	55.8	0.42	0.52	0.61	0.763
0.25	0.33	80	3.34	3.5	2	2	0.00294	15/33	14.8	42	695	51	60	64.3	0.41	0.52	0.61	0.92
0.37	0.5	90S	5.09	4	2	2	0.00448	21/46	18	43	690	53.5	61.3	64.5	0.39	0.5	0.59	1.4
0.55	0.75	90L	7.63	4	2	2.2	0.00616	21/46	22.5	43	690	59	64	66.3	0.39	0.5	0.6	2
0.75	1	100L	9.89	4.2	1.9	2.2	0.01121	38/84	28.5	50	710	71	74.2	76	0.4	0.53	0.61	2.34
1.1	1.5	100L	15.05	4.2	1.8	2.2	0.01289	31/68	29.2	50	700	71	74.5	77	0.4	0.52	0.62	3.33
1.5	2	112M	19.79	5.4	2.4	2.7	0.0243	32/70	44.4	46	710	79	81.3	82	0.43	0.55	0.66	4
2.2	3	132S	29.68	6.2	2.4	2.5	0.07527	25/55	67.8	48	710	82	84.3	84.2	0.54	0.66	0.73	5.17
3	4	132M	39.57	6	2.4	2.4	0.08531	21/46	73.1	48	710	82.8	84.6	84.5	0.54	0.67	0.75	6.83
4	5.5	160M	53.29	5.2	2.2	2.8	0.12209	27/59	113.1	51	725	83	85.8	86.6	0.44	0.57	0.66	10.1
5.5	7.5	160M	72.16	5.6	2.5	2.8	0.16518	22/48	123.9	51	730	83.5	86.4	87	0.42	0.55	0.65	14
7.5	10	160L	96.88	5.2	2	2.4	0.16518	19/42	133.7	51	725	85.5	88	88.5	0.52	0.64	0.71	17.2
9.2	12.5	180M	121.1	7	2.2	2.7	0.262	12/26	163	51	725	87.5	88.3	88.5	0.67	0.77	0.83	18.1
11	15	180L	145.32	7	2.2	2.4	0.26201	9/20	173.2	51	725	88	89	89	0.68	0.78	0.83	21.5
15	20	200L	192.44	5	2	2.2	0.50227	28/62	262.1	53	730	89.5	90.8	91.5	0.53	0.65	0.71	33.3

Notes:
**Class "F" insulation with ΔT105K*
Standard voltage, connection and frequency: 220-240V Δ 50Hz 380-415V Δ 50Hz
380-415V Y 50Hz 660-690V Y 50Hz
The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Brake Motors Cast Iron Frame - Premium Efficiency EFF1

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I_n (A)	Rated speed (rpm)	% of full load						Full load current I_n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
VI Pole - 1000 rpm																	
0.12	0.16	900	47	54	57	0.47	0.56	0.66	0.485	915	41	50	55	0.41	0.5	0.6	0.506
0.18	0.25	890	51	58	61	0.46	0.55	0.63	0.712	910	47	56	61	0.39	0.47	0.57	0.72
0.25	0.33	890	55	64	67	0.4	0.53	0.59	0.961	910	51	62	67	0.37	0.44	0.53	0.979
0.37	0.5	920	64	68.5	70.5	0.52	0.65	0.74	1.08	930	60	66.5	69.5	0.44	0.57	0.66	1.12
0.55	0.75	910	64	69.5	70.5	0.53	0.67	0.76	1.56	930	60	67.5	70	0.44	0.59	0.66	1.66
0.75	1	910	75	77.5	76.8	0.55	0.67	0.74	2.01	930	73	77.7	77.7	0.46	0.6	0.7	1.92
1.1	1.5	910	73	77.5	76.8	0.53	0.65	0.74	2.94	930	71	77.7	77.7	0.44	0.57	0.67	2.94
1.5	2	940	80	81.5	81.5	0.53	0.64	0.72	3.88	950	78	81.5	81.5	0.45	0.57	0.68	3.77
2.2	3	945	82.5	83.5	83.4	0.55	0.67	0.74	5.42	955	80.5	84	84	0.48	0.61	0.7	5.21
3	4	955	83	85.2	86	0.57	0.69	0.76	6.97	965	81	84.8	86.5	0.5	0.64	0.72	6.7
4	5.5	955	85.7	86.8	87	0.6	0.72	0.78	8.96	965	84.3	86.4	87.2	0.52	0.66	0.74	8.62
5.5	7.5	960	85.5	87.6	87.6	0.58	0.7	0.76	12.6	965	83.5	87.4	87.6	0.48	0.61	0.7	12.5
7.5	10	965	88	89.7	89.9	0.65	0.77	0.82	15.5	975	87	89.3	90	0.58	0.71	0.79	14.7
11	15	970	89.5	90.5	90.2	0.62	0.76	0.81	22.9	975	88.5	90	90.3	0.54	0.68	0.76	22.3
15	20	970	91.4	91.8	91.4	0.75	0.83	0.89	28	975	91	91.8	91.6	0.7	0.8	0.85	26.8
18.5	25	970	91.8	92.6	92.7	0.72	0.81	0.84	36.1	980	90.8	92.6	92.9	0.64	0.75	0.8	34.6
22	30	970	92	92.9	92.9	0.7	0.78	0.84	42.8	980	90.4	92.2	92.9	0.6	0.72	0.8	41.2
HIGH-OUTPUT DESIGN																	
9.2	12.5	970	90	90.3	90	0.64	0.75	0.81	19.2	975	88.7	89.9	90	0.55	0.71	0.79	18
VIII Pole - 750 rpm																	
0.12	0.16	675	42	50	52	0.42	0.5	0.59	0.594	695	34	42	46.5	0.35	0.45	0.52	0.69
0.18	0.25	690	44	53	56	0.44	0.55	0.64	0.763	705	40	49	55.5	0.4	0.49	0.58	0.778
0.25	0.33	685	53	61	63.8	0.43	0.55	0.63	0.945	700	49	59	63.8	0.4	0.5	0.59	0.924
0.37	0.5	680	55	62.5	65	0.42	0.54	0.64	1.35	695	52	60	64	0.37	0.47	0.56	1.44
0.55	0.75	680	61	65	66.5	0.42	0.54	0.64	1.96	700	57	63	66	0.37	0.47	0.57	2.03
0.75	1	700	72	74.4	75.5	0.44	0.56	0.64	2.36	715	70	74	76	0.38	0.5	0.58	2.37
1.1	1.5	690	72.5	75.5	76.9	0.44	0.57	0.65	3.34	710	69.5	73.5	76.9	0.37	0.49	0.59	3.37
1.5	2	700	79.8	81.6	82	0.47	0.59	0.69	4.03	715	78.2	81	81.8	0.4	0.51	0.63	4.05
2.2	3	705	83	84.3	84.2	0.58	0.7	0.75	5.29	715	81	84.3	84.3	0.5	0.63	0.71	5.11
3	4	705	83.2	84.6	84.5	0.58	0.71	0.77	7.01	715	82.5	84.6	84.6	0.51	0.64	0.73	6.76
4	5.5	725	84	86.2	86.6	0.48	0.61	0.7	10	730	82	85.4	86.6	0.41	0.53	0.63	10.2
5.5	7.5	725	84	86.7	87	0.46	0.6	0.69	13.9	730	83	86.1	87	0.4	0.52	0.62	14.2
7.5	10	720	86.5	88.2	88.5	0.56	0.68	0.74	17.4	725	84.5	87.8	88.5	0.48	0.6	0.69	17.1
9.2	12.5	725	87.8	88.3	88	0.71	0.81	0.85	18.7	730	87.2	88.3	88.6	0.63	0.75	0.81	17.8
11	15	725	88.2	89	88.8	0.73	0.81	0.85	22.1	730	87.8	89	89	0.65	0.75	0.81	21.2
15	20	730	90	91	91.2	0.56	0.67	0.73	34.2	735	89	90.6	91.3	0.5	0.63	0.69	33.1

Brake Motors Cast Iron Frame
Top Premium Efficiency Exceeds EFF1

Standard Features:

- Three-phase, multivoltage, IP55, TEFC
- Output: 4 up to 37kW
- Frames: 112 up to 200L
- Voltage: 220-240/380-415V (up to 100L)
  380-415/660V (from 112M and up)
- Class “F” insulation (ΔT=80K)
- Continuous duty: S1
- Design N
- Ambient temperature: 40°C , at 1000 m.a.s.l.
- Squirrel cage rotor/Aluminium die cast
- Ball bearings
- D.E.: V’Ring
- N.D.E.: Lip Seal
- Stainless steel nameplate
- Dimensions according to IEC-72
- Performance characteristics according to IEC 34
- Color: RAL 6021

Options Available:

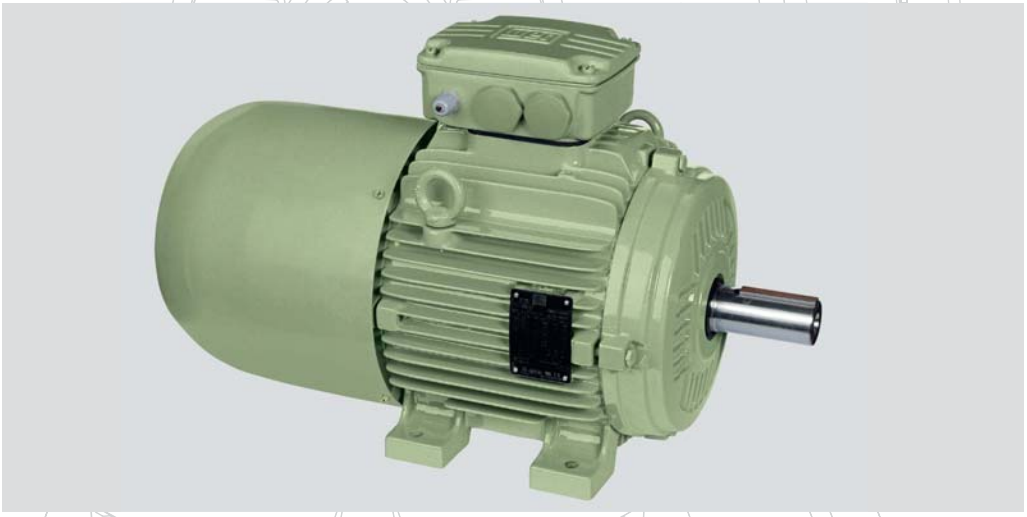
- Thermal protection
- Space heaters
- Shaft dimensions to customer requirements
- Special finishing paint
- Class “H” insulation
- Other mounting configurations

More options available, on request

Typical Applications:

These motors can be used on any machine that requires quick stops and time savings during installation:

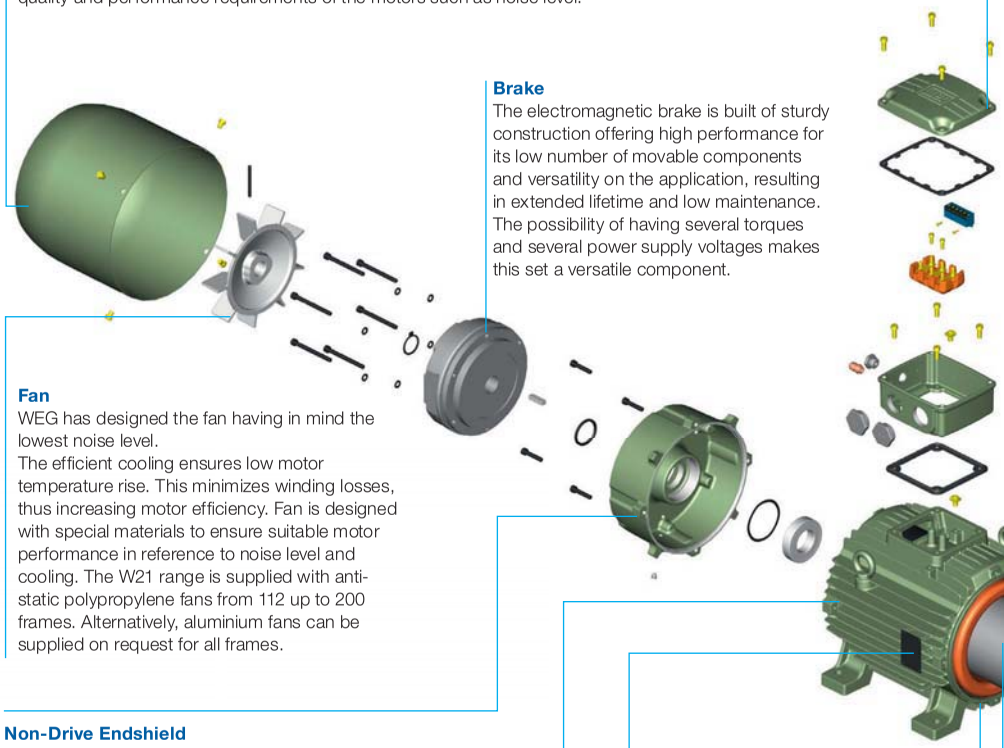
- Packing equipments
- Conveyor belts
- Washing and bottling machines
- Rolling bridges
- Elevators
- Printing machines
- Gates
- Wood machinery
- Cranes and others



Fan Cover
Made of steel plate for frames 112 up to 200L. The fan cover offers higher mechanical strength, corrosion-resistance and extended lifetime. With a design incorporating the braking system it is suitable for operation in severe environments. In addition, it offers quality and performance requirements of the motors such as noise level.

Terminal Box
Cast iron made with plenty of internal space. The terminal box can be rotated in 90º intervals, having one or two threaded holes to connect the power supply cables. Suitable to take the additional connection of the brake as well as bridge rectifier which is fixed internally without affecting the motor degree of protection. Larger volumes compared to standard motor allow easier connection and disconnection operations of the power supply, bridge rectifier and protection leads.
* Available as top or side mounting.

Brake
The electromagnetic brake is built of sturdy construction offering high performance for its low number of movable components and versatility on the application, resulting in extended lifetime and low maintenance. The possibility of having several torques and several power supply voltages makes this set a versatile component.



Winding
The wire is enameled with class H Varnish and are impregnated with dipping and baking process (frames 112 up to 200L). Supplied with patented WISE (WEG Insulation System Evolution), which allows three times longer motor lifetime designed to operate in environments with excess of moisture and suitable for VFD application. The winding is designed to obtain the minimal Joule losses and temperature rise.

Shaft
WEG uses SAE/AISI 1040/45 carbon steel as standard, which provides high mechanical strength, avoiding bending under load and minimizes fatigue which extends lifetime. Specially designed to withstand torques caused during motor acceleration and deceleration.

Fan
WEG has designed the fan having in mind the lowest noise level.
The efficient cooling ensures low motor temperature rise. This minimizes winding losses, thus increasing motor efficiency. Fan is designed with special materials to ensure suitable motor performance in reference to noise level and cooling. The W21 range is supplied with anti-static polypropylene fans from 112 up to 200 frames. Alternatively, aluminium fans can be supplied on request for all frames.

Bearings
WEG motors are fitted with the highest quality bearings selected from the best manufacturers in the world and designed to ensure long life of the motor even under heavy operating conditions.
WEG also uses the Super-premium Polyrex EM polyurea grease that is specially formulated for electric motor bearings. Its advanced thickener formulation provides low noise characteristics, improved bearing performance and protection.

Endshields
Made of cast iron, they are provided with external fins for better heat dissipation, thus increasing bearing life time.

Non-Drive Endshield
The non-drive endshield was specially designed to be coupled to the braking set as well as to withstand high thrusts coming from this set.

Stator
The stator is built with highest quality of steel lamination and it is thermally and chemically treated to reduce electrical losses and operating temperature. Guarantees high efficiency and extended motor lifetime.

Rotor
High-pressure die casting aluminium rotor dynamically balanced reducing vibration. Advantages of aluminum rotors include lower inertia, higher starting torque and higher mechanical stiffness, among others. The steel laminations are thermally and chemically treated to improve efficiency and minimize mechanical stress.

Seals
WEG motors are fitted with either V-ring seals, Oil seals, Lip seals and may also be fitted with Labyrinth Taconite or W3Seal to ensure the best possible protection under dusty and high moisture environments.

Frame
WEG motors are made of FC-200 high-grade cast iron (same density as flameproof motors). The frames are provided with fins aiming at improving the heat dissipation and properly spaced to minimize air blockage due to accumularion of dirt. The motors can be mounted in either horizontal or vertical positions.

Nameplate
Stainless steel nameplate ensuring a permanent record of all motor data.

Drain Hole
Provided with plastic drain plug allowing drainage of condensed water.

Brake Motors Cast Iron Frame - Top Premium Efficiency Exceeds EFF1

Output		IEC Frame	Full load torque C_n (Nm)	Locked rotor current I_r/I_n	Locked rotor torque T_r/T_n	Break-down torque T_b/T_n	Inertia J kgm²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I_n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
II Pole - 3000 rpm																		
4	5.5	112M	13.32	8.5	2.6	3.1	0.00842	21/46	42.6	64	2900	88.7	89.8	89.8	0.61	0.79	0.85	7.56
5.5	7.5	132S	17.92	8.5	2.5	3	0.02056	19/42	65.8	67	2940	90.1	91.2	91.3	0.7	0.8	0.85	10.2
7.5	10	132S	23.89	8.5	2.7	3.1	0.02804	8/18	70.9	67	2940	89	91.3	91.6	0.72	0.83	0.87	13.6
11	15	160M	35.72	8.6	2.3	3	0.05295	12/26	113.9	70	2950	91.7	93	93	0.65	0.78	0.83	20.6
15	20	160M	47.7	8.3	2.4	2.9	0.05883	11/24	120.6	70	2945	92.2	93.3	93.3	0.71	0.81	0.84	27.6
18.5	25	160L	59.63	9	2.3	2.7	0.06766	11/24	131.4	70	2945	92.9	93.8	93.8	0.67	0.79	0.85	33.5
22	30	180M	71.31	8.6	2.8	2.7	0.15082	9/20	189.4	70	2955	93.2	94.3	94.1	0.75	0.83	0.87	38.8
30	40	200L	95.08	7.6	2.7	2.4	0.2063	35/77	246.8	74	2955	92.6	93.9	94.2	0.75	0.83	0.86	53.5
37	50	200L	118.65	8.4	2.6	2.6	0.22424	16/35	251.4	74	2960	93.3	94.2	94.7	0.76	0.84	0.87	64.8
IV Pole - 1500 rpm																		
4	5.5	112M	26.73	6.6	2	2.6	0.01875	8/18	46.6	56	1445	87.4	89.9	89.9	0.66	0.77	0.83	7.738
5.5	7.5	132S	35.96	8.5	2.4	3.1	0.05427	12/26	67.1	56	1465	88.5	90.1	90.7	0.69	0.79	0.85	10.3
7.5	10	132M	47.95	8	2.5	3	0.0659	7/15	100.9	56	1465	89	91.1	91.7	0.71	0.81	0.85	13.9
11	15	160M	71.67	7.5	2.8	3	0.1104	12/26	123.8	67	1470	91.1	92.3	92.6	0.62	0.73	0.8	21.4
15	20	160L	95.89	6.3	2	2.4	0.13048	11/24	138.3	67	1465	91.1	92.4	92.9	0.65	0.76	0.82	28.4
18.5	25	180M	119.46	8.3	2.7	2.8	0.17939	12/26	196.7	64	1470	92.1	93.2	93.6	0.7	0.81	0.85	33.6
22	30	180L	142.86	8.6	2.8	2.9	0.24666	11/24	200.5	64	1475	92.9	94	94.3	0.68	0.78	0.84	40.1
30	40	200L	189.84	7.3	2.7	2.9	0.38611	19/42	268.8	69	1480	94	94.7	94.5	0.65	0.76	0.82	55.9

Notes:
**Class "F" insulation with ΔT105K*
Standard voltage, connection and frequency: 220-240V Δ 50Hz *380-415V Δ 50Hz*
380-415V Y 50Hz *660-690V Y 50Hz*
The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Brake Motors Cast Iron Frame - Top Premium Efficiency Exceeds EFF1

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I_n (A)	Rated speed (rpm)	% of full load						Full load current I_n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
II Pole - 3000 rpm																	
4	5.5	2885	88.2	89.4	89.6	0.65	0.83	0.88	7.71	2910	88.2	89.6	89.7	0.58	0.75	0.83	7.47
5.5	7.5	2930	90.3	91.3	91.2	0.72	0.82	0.87	10.5	2950	89.8	91.2	91.3	0.66	0.77	0.83	10.1
7.5	10	2930	89	91.3	91.5	0.76	0.84	0.88	14.2	2945	89	91.3	91.6	0.7	0.8	0.85	13.4
11	15	2945	91.6	92.8	92.8	0.72	0.82	0.85	21.2	2955	91.6	93	93.1	0.61	0.74	0.81	20.3
15	20	2940	92.2	93.1	93.1	0.74	0.82	0.85	28.8	2950	92.1	93.2	93.3	0.68	0.8	0.83	26.9
18.5	25	2940	92.9	93.7	93.7	0.7	0.81	0.86	34.9	2950	92.8	93.8	93.8	0.63	0.77	0.84	32.7
22	30	2950	93.3	94.3	94.1	0.78	0.85	0.88	40.4	2955	93	94.2	94	0.72	0.81	0.86	37.9
30	40	2950	92.5	93.9	94.2	0.76	0.84	0.87	55.6	2960	92.6	93.9	94.2	0.74	0.82	0.85	52.1
37	50	2955	93.5	94.3	94.3	0.81	0.86	0.88	67.7	2960	93	94	94.4	0.73	0.82	0.86	63.4
IV Pole - 1500 rpm																	
4	5.5	1440	87.5	88.7	88.9	0.7	0.8	0.85	8.043	1450	87.3	89.9	89.9	0.62	0.74	0.81	7.642
5.5	7.5	1460	89	90	90.5	0.72	0.81	0.86	10.7	1470	88	89.9	90.6	0.65	0.77	0.83	10.2
7.5	10	1460	89.5	91	91.5	0.73	0.82	0.86	14.5	1470	88	91	91.7	0.68	0.8	0.84	13.5
11	15	1465	91	92.2	92.5	0.64	0.75	0.82	22	1475	91	92.2	92.6	0.6	0.7	0.78	21.2
15	20	1460	91.2	92.3	92.8	0.7	0.79	0.84	29.2	1470	91	92.3	92.8	0.6	0.73	0.8	28.1
18.5	25	1465	92	93.2	93.5	0.73	0.84	0.87	34.6	1475	92	93.2	93.6	0.65	0.78	0.84	32.7
22	30	1470	93	94	94.3	0.7	0.8	0.85	41.7	1475	92.5	93.9	94.3	0.66	0.76	0.83	39.1
30	40	1475	94.1	94.6	94.4	0.69	0.79	0.84	57.5	1480	93.8	94.5	94.5	0.6	0.73	0.8	55.2