

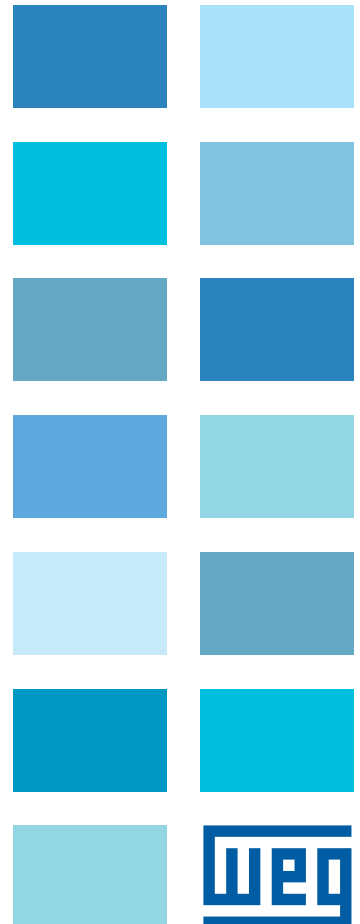
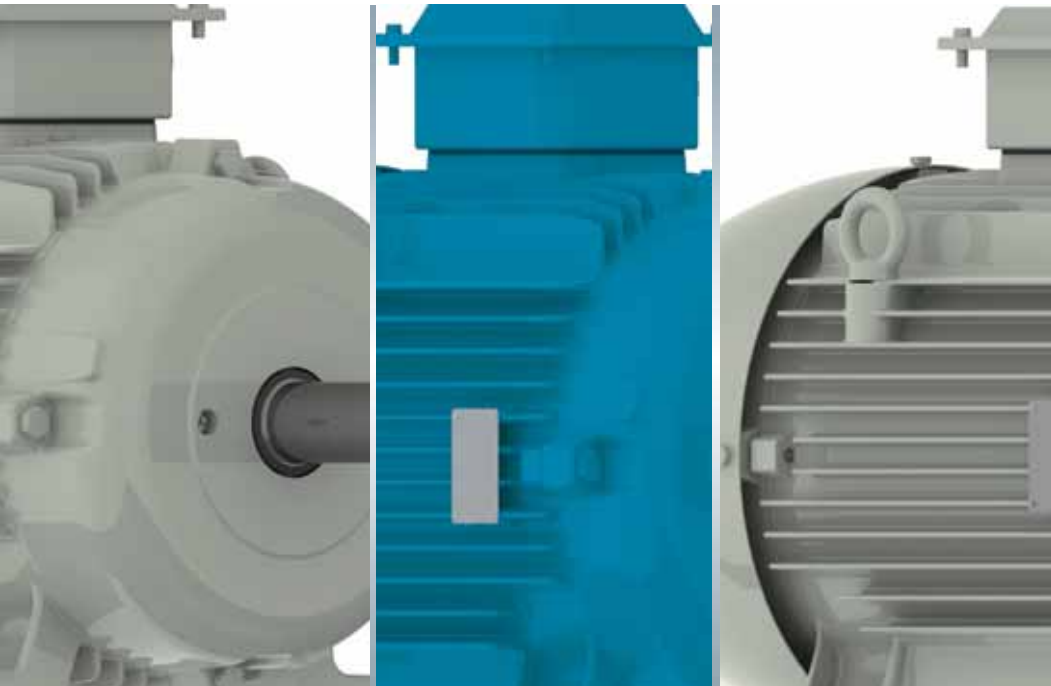
W20

Three-phase Induction Motor

Catalogue
African Market



2 Year Guarantee
on W20 Range





W20 Three Phase Low Voltage Motors

Designed and created to improve performance and provide the reliability you need

WEG Worldwide

WEG was founded in 1961 in Jaraguá do Sul, which is in the south of Brazil. As one of the worlds biggest motor producers, WEG covers an area of more than 2,500,000 square meters.

WEG supplies industry solutions through five different business units: Motors, Automation, Energy, Transmission & Distribution and Coatings.

WEG has a strong commitment to contributing to the development of the African region, and has been servicing the continent for more than 35 years. Its in-depth understanding of operating conditions, applications and years of experience on the African continent has ensured that our service offering is fit-for-purpose.

WEG W20 Motors

The W20 motor is a very robust motor and is suitable to be operated in environments that pose harsh conditions.

These motors are ideal for use in light industrial sectors such as the Agricultural Sector. They have proven to be a most cost effective solution to the industry.

The W20 is designed and manufactured to last, with high quality cast iron frames, endshields and terminal box. As well as class F enameled windings. The Motor is designed to maximise versatility with the terminal box mounted on top of the Motor.

We are able to offer a full range of the W20, complying with IEC and SABS standards.

WEG's W20 motors are equipped with the following features:

- Motors are supplied with 6 pin terminal Blocks for ease of Cable connection
- Motors are supplied with Class F insulation and are suitable for Variable Speed Drives (VSDs)
- True Metric IEC Frames and Mechanical dimensions as per SABS
- IE1 Standard Efficiency as per IEC 60034-30
- Terminal box located on top for ease of cable connection, rotatable to left or right hand side
- Rubber drains allow for easy motor drainage during maintenance and increase the IP Protection for harsh conditions

Applications

General purpose: pumps, compressors, fans, crushers, conveyors, mills, centrifugal machines, presses, elevators, packaging equipment, grinders, among others.

Standard Features

Output: 0,37kW to 355kW
 Frame size: 80 to 355M/L
 IP 55
 Class F Insulation
 IE1 Standard Efficiency
 Number of poles: 2 to 8 poles
 Voltage: 220 - 240 / 380 - 415
 440 - 460V (80 to 100L)
 380 - 415 / 660
 440 - 460V (112M to 355M/L)
 525 - 550V (80 to 355M/L)



Calculate the motor savings for yourself:

$$\text{Demand Savings kW} = \frac{\text{Output}_{(\text{OLD MOTOR})}(\text{kW})}{\left(\frac{\text{Efficiency}_{(\text{OLD MOTOR})}(\%)}{100}\right)} - \frac{\text{Output}_{(\text{NEW MOTOR})}(\text{kW})}{\left(\frac{\text{Efficiency}_{(\text{NEW MOTOR})}(\%)}{100}\right)}$$

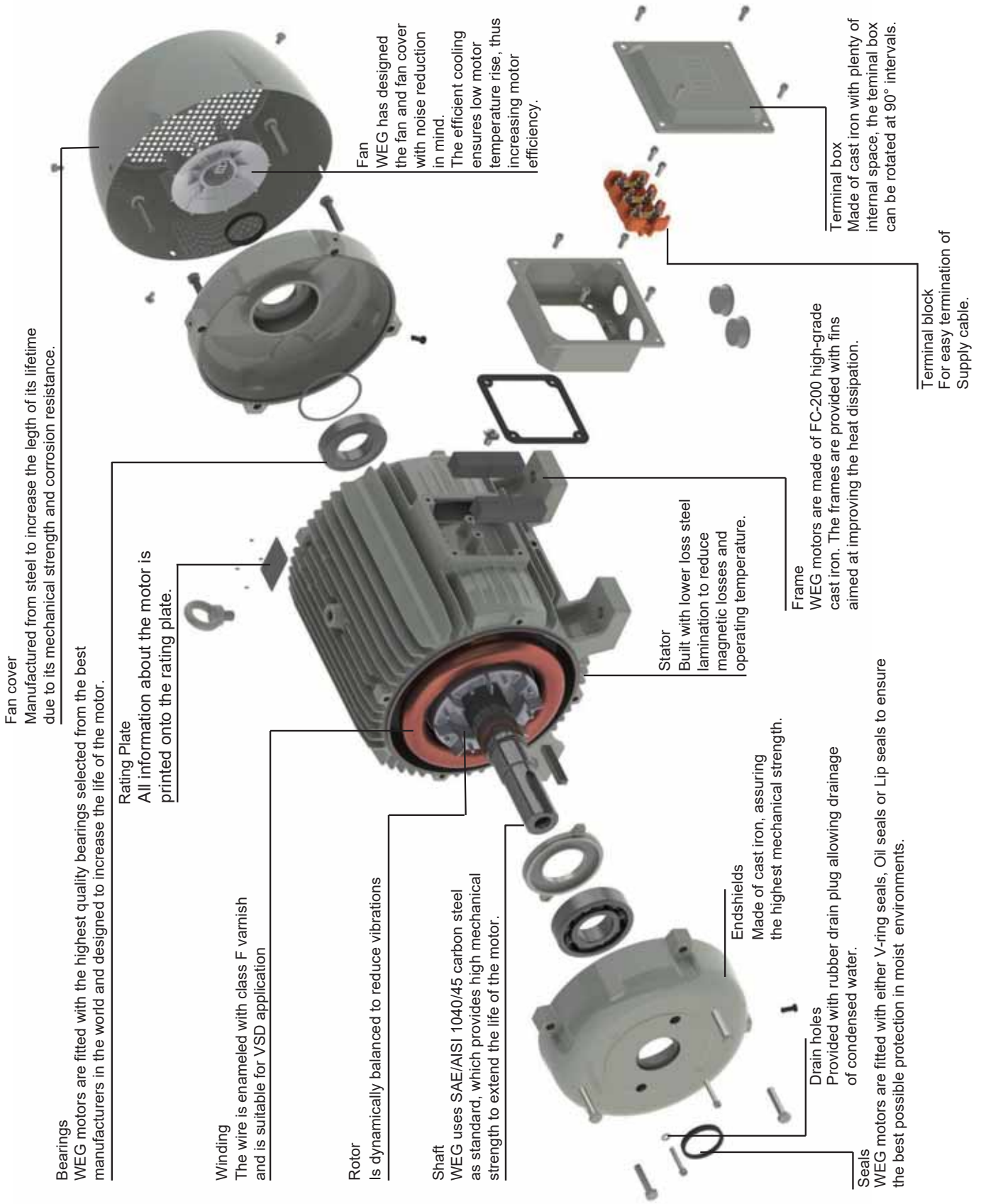
$$\text{Annual Energy Savings kWh} = \text{Demand Saving kW} \times \text{Operating days} \times \text{Operating hours per day}$$

$$\text{Annual Savings} = \text{Annual Energy Savings kWh} \times \text{Effective Energy Cost}$$

Construction Features

Frame		80	90	100	112	132	160	180	200	225	250	280	315	355	
Mechanical features															
Nameplate		CE; IEC 60034													
Mounting		B3T													
Frame	Materials	Cast iron													
Degree of protection		IP55													
Grounding		Inside the terminal box and frame										Double grounding (terminal box + frame)			
Cooling method		TEFC													
Fan	Materials	Plastic												Aluminium	
Fan cover	Materials	Steel Plate													
Endshields	Materials	Cast Iron													
Drain		Rubber Automatically Operated													
Bearings	Shielded/Clearance (DE)	ZZ					C3								
	Shielded/Clearance (NDE)	ZZ					Z-C3			C3					
	Locating bearing configuration	NDE bearing fitted with wave washer					DE bearing locked with inner bearing cap and fitted with wave washer in the NDE bearing			DE bearing locked with outer bearing caps and fitted with pre-load springs in the NDE bearing					
	Drive end	2P 4-8P	6204 ZZ	6205 ZZ	6206 ZZ	6307 ZZ	6308 ZZ	6309	6311	6312	6314	6314	6314	6314	6316
	Non-drive end	2P 4-8P	6203 ZZ	6204 ZZ	6205 ZZ	6206 ZZ	6207 ZZ	6209	6211	6212			6314	6314	6314
Bearing seal		V'ring													
Lubrication	Grease type	Polyrex EM													
	Grease fitting	None										with grease fittings in DE and NDE bearings			
Terminal block		six terminals													
Terminal box	Materials	Cast Iron													
Leads inlet	Main T-box	1xM20			1xM25	2xM25		2xM32		2xM40	2xM50	2xM63			
	Plug	Plastic plugs for transport and storage purposes													
Shaft	Materials	AISI 1040/45													
	Threaded Hole	2P 4 - 8P	M6	M8	M10	M10	M12	M16	M16	M20	M20	M20	M20	M20	M20 M24
Vibration		Grade A													
Balancing level		With 1/2 key													
Nameplate	Materials	Stainless steel AISI 304													
Painting	Plan	201A													
	Color	RAL 7000													
Electrical Features															
Design		N													
Voltage		230/400V			400/690V										
Winding	Insulation class	F (DT 80K)													
Service factor		1.00													
Rotor		Die-cast Aluminium													
Thermal Protection		None													





Construction Details

Frame

Made of FC-200 cast iron, the frame is not only good for improving heat conductivity, but also strong enough to meet the most hostile environments.



figure 1 frame

Terminal Box

The W20 motors' terminal box is made of cast iron and reserves enough space inside to make connection easy. The terminal box can be rotated at 90 intervals.



figure 4 - terminal box

End Shield

The same of frame, W20 motors DE and NDE shields are made of FC-200 cast iron. This new design makes sure of the low shaft performances temperature and better heat radiation.



figure 2-1 DE shield; 2-2 NDE shield

Terminal Block - Connection

W20 motors are equipped with 6 Pin terminal blocks.

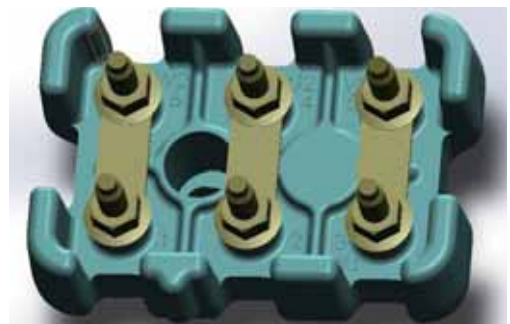


figure 5 -terminal block

Fan Cover

W20 motors' fan cover is made of steel plate.



figure 3 fan cover

Note: Vertical motors in an outdoor environment should consider of rain cover.





Electrical Data

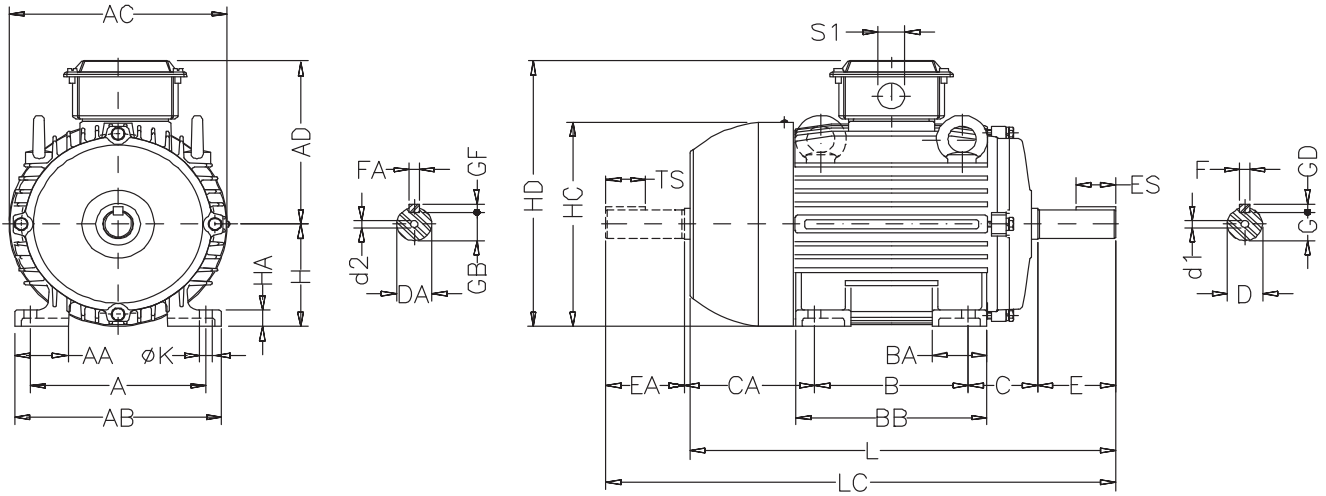
W20-Cast Iron Three Phase Motors IE1

Output		Frame	Full Load Torque (kgfm)	Locked Rotor Current II/In	Locked Rotor Torque TI/Tn	Break-down Torque Tb/Tn	Inertia J (kgm2)	Allowable locked rotor time (s)		Weight (kg)	Sound dB(A)	400 V							Full load current In (A)
												Rated speed (rpm)	% of full load			Power Factor			
													Efficiency			Power Factor			
kW	HP							Hot	Cold			50	75	100	50	75	100		
2P-3000rpm-50HZ																			
0.75	1	80	0.260	5.0	2.4	2.4	0.0006	9	20	10.0	59.0	2770	66.0	72.0	72.5	0.59	0.73	0.82	1.82
1.1	1.5	80	0.390	5.0	2.6	2.6	0.0008	7	15	11.5	59.0	2770	73.0	75.0	75.5	0.60	0.75	0.83	2.53
1.5	2	90S	0.510	6.3	2.7	2.6	0.0017	7	15	15.0	64.0	2840	75.0	78.0	78.0	0.63	0.76	0.83	3.28
2.2	3	90L	0.760	6.8	2.8	2.9	0.0022	9	20	16.7	64.0	2810	77.0	78.0	80.0	0.63	0.77	0.85	4.58
3	4	100L	1.02	6.7	2.3	2.8	0.0052	9	20	23.5	67.0	2870	80.0	81.0	82.0	0.69	0.81	0.87	5.96
4	5.5	112M	1.36	6.8	2.4	3.0	0.0073	9	20	31.0	64.0	2875	81.0	83.0	84.0	0.71	0.82	0.87	7.81
5.5	7.5	132S	1.84	6.5	2.4	3.0	0.0159	11	24	42.0	68.0	2910	83.0	85.0	85.5	0.71	0.81	0.87	10.5
7.5	10	132S	2.52	6.4	2.3	2.6	0.0187	11	24	53.0	68.0	2900	85.0	86.5	86.5	0.72	0.82	0.87	14.2
9.2	12.5	132M	3.08	7.5	2.7	3.1	0.0243	8	18	58.0	68.0	2910	86.0	87.0	87.0	0.70	0.81	0.86	17.4
11	15	160M	3.64	7.5	2.0	3.0	0.0353	11	24	97.0	70.0	2945	86.5	87.5	88.0	0.70	0.81	0.86	21.0
15	20	160M	4.96	7.4	2.2	3.1	0.0471	9	20	109	70.0	2945	87.0	88.5	89.0	0.69	0.80	0.86	28.3
18.5	25	160L	6.14	8.0	2.5	3.2	0.0559	7	15	122	70.0	2935	88.0	89.5	89.5	0.67	0.78	0.86	34.2
22	30	180M	7.25	8.7	2.5	3.5	0.0965	7	15	172	70.0	2955	89.5	90.5	90.5	0.74	0.83	0.87	40.3
30	40	200L	9.87	7.3	2.6	2.9	0.1794	13	29	229	74.0	2960	89.0	90.0	91.0	0.70	0.80	0.85	56.0
37	50	200L	12.2	7.0	2.6	2.8	0.2063	12	26	245	74.0	2960	90.0	91.0	91.5	0.71	0.80	0.86	67.9
45	60	225S/M	14.8	7.0	2.8	3.1	0.3139	16	35	356	82.0	2960	90.0	91.0	92.0	0.76	0.85	0.88	80.2
55	75	250S/M	18.1	7.5	2.5	3.3	0.3767	15	33	410	82.0	2965	91.0	91.5	92.5	0.77	0.85	0.88	97.5
75	100	250S/M	24.5	8.0	2.4	3.2	1.08	22	48	663	83.0	2980	91.0	92.8	93.0	0.76	0.85	0.88	131
90	125	280S/M	29.4	8.0	2.4	3.2	1.18	19	42	675	83.0	2980	91.0	93.0	93.5	0.78	0.85	0.88	157
110	150	280S/M	36.0	7.7	2.4	3.0	1.41	21	46	810	83.0	2975	92.5	93.7	93.8	0.78	0.85	0.88	191
132	175	315S/M	43.2	7.5	2.4	3.0	1.65	18	40	870	84.0	2975	93.2	94.0	94.0	0.80	0.87	0.89	226
150	200	315S/M	49.1	8.4	2.6	3.0	1.88	17	37	930	84.0	2975	93.8	94.0	94.2	0.80	0.87	0.89	256
160	220	315S/M	52.4	7.5	2.6	3.1	2.12	17	37	1010	84.0	2975	93.8	94.0	94.2	0.83	0.88	0.90	270
185	250	315S/M	60.5	8.2	2.4	3.5	1.96	28	62	1010	84.0	2980	94.5	94.7	94.7	0.80	0.86	0.88	320
200	270	355M/L	65.3	7.2	1.8	2.6	4.56	70	154	1490	81.0	2985	93.0	94.6	94.9	0.89	0.91	0.92	329
220	300	355M/L	71.8	8.5	2.2	3.0	4.88	65	143	1650	81.0	2985	93.8	94.9	94.9	0.88	0.91	0.92	360
250	340	355M/L	81.6	7.8	2.2	2.5	5.39	65	143	1750	81.0	2985	93.8	94.9	94.9	0.88	0.91	0.92	409
280	380	355M/L	91.4	8.5	2.3	2.7	5.90	25	55	1850	81.0	2985	94.8	95.0	95.0	0.89	0.91	0.92	462
300	400	355M/L	97.9	7.8	2.0	2.6	5.90	40	88	1850	83.0	2985	95.1	95.4	95.4	0.85	0.90	0.90	504
315	430	355M/L	103	7.6	2.1	2.6	5.90	40	88	1850	83.0	2980	95.1	95.4	95.4	0.86	0.90	0.91	524
330	450	355M/L*	108	7.8	2.0	2.5	5.90	40	88	1850	83.0	2980	95.1	95.4	95.4	0.87	0.90	0.91	549
4P-1500rpm-50HZ																			
0.55	0.75	80	0.380	4.7	2.1	2.2	0.0019	17	37	10.0	44.0	1410	58.5	66.3	70.0	0.54	0.70	0.82	1.38
0.75	1	80	0.520	5.0	2.3	2.2	0.0023	14	31	11.0	44.0	1395	63.5	71.0	72.1	0.55	0.70	0.81	1.86
1.1	1.5	90S	0.770	5.6	2.3	2.4	0.0039	8	18	14.5	49.0	1400	70.0	75.0	75.5	0.55	0.69	0.79	2.66
1.5	2	90L	1.05	5.5	2.3	2.4	0.0048	8	18	17.0	49.0	1390	76.5	78.5	79.0	0.58	0.73	0.82	3.34
2.2	3	100L	1.52	5.6	2.4	2.6	0.0065	9	20	23.0	53.0	1410	79.0	80.0	80.0	0.60	0.74	0.82	4.84
3	4	100L	2.06	6.0	2.8	3.0	0.0084	8	18	30.0	53.0	1420	79.0	80.0	81.5	0.57	0.72	0.81	6.47
4	5.5	112M	2.71	7.0	2.1	2.5	0.0147	13	29	33.0	56.0	1440	82.0	83.1	83.5	0.65	0.77	0.83	8.33
5.5	7.5	132S	3.69	6.5	2.1	2.5	0.0349	11	24	47.0	60.0	1450	83.5	84.5	85.0	0.63	0.77	0.84	11.0
7.5	10	132M	5.02	6.7	1.9	2.8	0.0465	8	18	64.5	60.0	1455	84.0	85.5	86.0	0.63	0.77	0.84	15.0
9.2	12.5	132M	6.16	7.5	2.2	2.8	0.0582	6	13	70.0	60.0	1455	85.5	86.5	87	0.64	0.78	0.85	18
11	15	160M	7.34	6.0	2.3	2.6	0.0753	12	26	102	67.0	1460	86.0	87.5	88.0	0.62	0.74	0.81	22.3
15	20	160L	10.0	6.3	2.3	2.4	0.1054	12	26	121	67.0	1460	88.0	88.5	89.0	0.68	0.79	0.83	29.3
18.5	25	180M	12.3	7.0	2.5	2.7	0.1615	11	24	172	64.0	1470	88.5	89.5	89.5	0.67	0.77	0.84	35.5
22	30	180L	14.6	7.2	2.7	2.9	0.1884	8	18	174	64.0	1465	89.0	90.5	90.5	0.69	0.80	0.85	41.0
30	40	200L	19.8	7.2	2.5	2.8	0.3034	8	18	233	69.0	1475	89.5	90.0	91.0	0.68	0.78	0.83	57.3
37	50	225S/M	24.4	6.7	2.3	2.8	0.5599	17	37	335	70.0	1475	91.0	91.0	91.5	0.71	0.81	0.86	67.4
45	60	225S/M	29.7	7.0	2.4	3.0	0.6649	12	26	360	70.0	1475	90.5	91.5	92.0	0.68	0.77	0.83	85.1
55	75	250S/M	36.3	6.8	2.3	2.7	0.8748	14	31	430	70.0	1475	92.0	92.0	92.5	0.77	0.85	0.89	95.3
75	100	250S/M	49.2	6.7	2.0	2.7	1.85	22	48	647	76.0	1485	92.5	93.0	93.5	0.77	0.84	0.87	132
90	125	280S/M	59.0	7.3	2.4	2.8	2.17	19	42	700	76.0	1485	93.0	93.6	93.6	0.77	0.85	0.87	159
110	150	280S/M	72.2	7.3	2.4	2.8	2.57	17	37	825	77.0	1485	93.4	93.8	93.8	0.75	0.83	0.86	196
132	175	315S/M	86.6	7.7	2.4	2.8	3.21	17	37	930	77.0	1485	93.7	94.2	94.2	0.74	0.83	0.86	234
150	200	315S/M	98.4	7.5	2.8	2.8	3.45	17	37	962	77.0	1485	92.5	94.6	94.6	0.77	0.84	0.86	265
160	220	315S/M	105	7.5	2.5	2.8	3.77	17	37	1010	77.0	1485	93.8	94.5	94.5	0.76	0.83	0.86	283
185	250	315S/M*	121	7.3	2.3	2.5	3.63	15	33	1010	77.0	1485	93.0	94.8	94.8	0.75	0.82	0.86	325
200	270	315S/M*	131	7.0	2.4	2.8	3.77	10	22	1010	77.0	1485	94.6	94.7	94.8	0.70	0.80	0.85	356
220	300	355M/L	144	7.0	2.1	2.3	6.89	39	86	1525	79.0	1490	94.0	94.7	94.8	0.80	0.86	0.88	378
250	340	355M/L	163	6.9	2.2	2.5	8.12	36	79	1615	79.0	1490	94.0	94.7	94.8	0.80	0.86	0.88	428
260	350	355M/L	170	6.5	2.2	2.3	8.12	30	66	1615	79.0	1490	94.0	94.7	94.8	0.80	0.86	0.88	445
280	380	355M/L	183	7.1	2.2	2.4	9.02	39	86	1770	79.0	1490	94.0	94.7	94.8	0.81	0.87	0.88	479
300	400	355M/L	196	6.7	2.2	2.4	9.92	47	103	1770	79.0	1490	94.0	94.7	94.8	0.81	0.87	0.89	508
315	430	355M/L	206	6.7	2.2	2.4	9.92	42	92	1770	79.0	1490	94.0	94.7	94.8	0.79	0.86	0.88	537
330	450	355M/L	216	6.5	2.3	2.3	10.8	32	70	1865	79.0	1490	94.2	94.8	94.9	0.81	0.87	0.89	556
355	480	355M/L*	232	7.9	2.4	2.5	11.7	28	62	1865	79.0	1490	94.5	94.9	95.0	0.80	0.87	0.88	605

Output		Frame	Full Load Torque (kgfm)	Locked Rotor Current I/In	Locked Rotor Torque Tl/Tn	Break-down Torque Tb/Tn	Inertia J (kgm ²)	Allowable locked rotor time (s)		Weight (kg)	Sound dB(A)	400 V						Full load current In (A)	
								Rated speed (rpm)	% of full load										
									Efficiency			Power Factor							
kW	HP						Hot	Cold			50	75	100	50	75	100			
6P-1000rpm-50HZ																			
0.37	0.5	80	0.400	3.6	1.7	1.7	0.0019	16	35	12.1	43.0	905	55.0	60.0	63.0	0.50	0.64	0.75	1.13
0.55	0.75	80	0.580	4.5	2.3	2.3	0.0030	10	22	15.5	43.0	930	60.0	65.0	67.0	0.50	0.63	0.73	1.62
0.75	1	90S	0.800	4.2	1.9	2.0	0.0045	16	35	19.1	45.0	910	70.0	70.0	71.0	0.55	0.69	0.79	1.89
1.1	1.5	90L	1.16	4.8	2.7	2.7	0.0062	9	20	22.0	45.0	925	70.0	71.0	73.0	0.47	0.60	0.72	3.04
1.5	2	100L	1.61	4.1	2.0	2.2	0.0090	17	37	25.0	44.0	910	72.0	75.5	75.5	0.51	0.65	0.73	3.93
2.2	3	112M	2.28	5.0	2.2	2.3	0.0165	14	31	34.5	52.0	940	76.0	78.5	78.5	0.53	0.66	0.74	5.36
3	4	132S	3.06	5.3	2.0	2.2	0.0340	20	44	55.0	53.0	955	78.0	80.5	80.5	0.58	0.70	0.77	6.82
4	5.5	132M	4.06	5.8	2.3	2.4	0.0446	19	42	59.0	53.0	960	80.0	81.5	82.0	0.54	0.66	0.74	9.27
5.5	7.5	132M	5.58	6.4	2.7	2.8	0.0581	15	33	73.0	53.0	960	81.0	83.5	84.0	0.49	0.62	0.71	13.0
7.5	10	160M	7.57	5.7	2.2	2.5	0.1077	11	24	100	56.0	965	84.0	85.0	85.5	0.64	0.76	0.83	15.0
9.2	12.5	160L	9.29	6.0	2.0	2.6	0.1293	10	22	115	56.0	965	85.0	86.0	86.0	0.63	0.75	0.82	18.6
11	15	160L	11.1	6.0	2.2	2.6	0.1580	11	24	125	56.0	965	86.5	87.0	87.0	0.65	0.77	0.83	21.7
15	20	180L	15.0	7.5	2.3	2.7	0.2620	7	15	163	56.0	975	88.0	89.0	89.0	0.76	0.84	0.88	27.6
18.5	25	200L	18.5	6.0	2.1	2.5	0.3408	11	24	213	58.0	975	88.0	89.0	89.0	0.64	0.76	0.82	36.1
22	30	200L	22.0	6.0	2.3	2.4	0.4037	14	31	235	58.0	975	88.5	90.5	90.5	0.70	0.79	0.84	41.4
30	40	225S/M	29.7	7.2	2.6	2.7	0.9253	20	44	366	61.0	985	90.0	91.3	91.3	0.77	0.84	0.87	54.2
37	50	250S/M	36.8	7.5	2.7	2.6	1.16	18	40	440	61.0	980	91.8	91.9	91.9	0.77	0.85	0.87	66.4
45	60	250S/M	44.5	6.8	2.4	2.6	2.07	24	53	580	66.0	985	89.5	91.5	92.0	0.68	0.78	0.83	84.5
55	75	280S/M	54.4	6.5	2.3	2.5	2.41	23	51	616	66.0	985	91.0	92.5	92.5	0.69	0.80	0.83	103
75	100	280S/M	74.2	6.7	2.3	2.5	3.22	20	44	768	69.0	985	91.0	93.0	93.0	0.71	0.81	0.85	136
90	125	315S/M	89.0	6.3	2.1	2.3	3.57	18	40	818	69.0	985	92.0	93.1	93.3	0.71	0.80	0.84	166
110	150	315S/M	109	6.4	2.3	2.4	4.83	18	40	942	69.0	985	93.0	93.8	93.8	0.71	0.80	0.84	200
132	175	315S/M*	131	6.3	2.1	2.2	5.29	13	29	990	69.0	985	93.0	94.0	94.0	0.72	0.81	0.85	237
150	200	355M/L	147	6.2	2.0	2.1	9.05	81	178	0.0	73.0	995	92.8	94.9	95.3	0.68	0.76	0.81	280
160	220	355M/L	157	6.2	1.9	2.1	9.53	72	158	1485	73.0	990	93.0	95.0	95.3	0.67	0.77	0.82	296
185	250	355M/L	182	6.0	1.9	2.1	10.2	76	167	1530	73.0	990	93.0	94.2	94.8	0.68	0.76	0.81	348
200	270	355M/L	197	6.3	2.1	2.3	12.4	85	187	1700	73.0	990	93.5	94.5	94.8	0.70	0.78	0.81	376
220	300	355M/L	216	6.5	2.0	2.3	13.8	72	158	1795	73.0	990	93.4	94.8	95.3	0.67	0.77	0.80	417
250	340	355M/L	245	6.1	2.2	2.2	14.8	64	141	1830	73.0	995	94.0	95.1	95.6	0.70	0.79	0.82	460
260	350	355M/L	255	6.1	2.1	2.1	14.8	64	141	1830	73.0	995	94.0	95.1	95.6	0.70	0.79	0.82	479
280	380	355M/L	275	6.0	2.1	2.2	14.8	54	119	1830	73.0	990	94.3	95.2	95.4	0.68	0.77	0.80	530
300	400	355M/L*	295	6.4	2.1	2.1	14.8	39	86	1920	73.0	990	94.0	95.5	95.6	0.63	0.73	0.79	573
315	430	355M/L*	310	6.0	1.9	1.9	15.5	38	84	1950	73.0	990	94.3	95.8	95.9	0.69	0.78	0.81	585
8P-750rpm-50HZ																			
0.18	0.25	80	0.250	2.8	2.2	2.4	0.0021	29	64	12.6	42.0	695	36.2	44.1	48.6	0.45	0.53	0.62	0.862
0.25	0.33	80	0.350	3.5	2.3	2.2	0.0028	24	53	14.2	42.0	700	46.1	53.6	56.6	0.42	0.52	0.61	1.05
0.37	0.5	90S	0.530	3.0	1.9	1.8	0.0039	32	70	15.4	43.0	685	50.6	56.5	57.4	0.44	0.55	0.64	1.45
0.55	0.75	90L	0.790	3.3	1.9	2.0	0.0056	25	55	16.5	43.0	675	58.0	60.0	60.0	0.43	0.56	0.66	2.01
0.75	1	100L	1.04	3.5	1.8	2.4	0.0079	33	73	23.8	50.0	705	62.0	67.2	67.8	0.42	0.53	0.62	2.58
1.1	1.5	100L	1.53	4.0	1.7	2.3	0.0118	27	59	28.5	50.0	700	69.3	72.3	71.2	0.45	0.57	0.66	3.38
1.5	2	112M	2.09	4.2	2.2	2.2	0.0178	26	57	33.4	46.0	700	73.7	75.4	73.5	0.48	0.61	0.70	4.21
2.2	3	132S	3.02	6.1	2.5	2.8	0.0602	22	48	55.3	48.0	710	75.8	78.0	77.1	0.55	0.68	0.77	5.35
3	4	132M	4.12	6.1	2.2	2.6	0.0728	18	40	65.0	48.0	710	78.5	80.1	79.0	0.55	0.68	0.76	7.21
4	5.5	160M	5.37	4.7	2.2	2.4	0.1006	18	40	97.0	51.0	725	80.0	82.0	82.0	0.50	0.63	0.72	9.78
5.5	7.5	160M	7.39	4.8	2.2	2.3	0.1221	18	40	107	51.0	725	81.0	83.0	83.5	0.48	0.62	0.71	13.4
7.5	10	160L	10.1	4.7	2.2	2.3	0.1508	16	35	122	51.0	725	83.0	85.0	85.5	0.50	0.64	0.73	17.3
9.2	12.5	180M	12.4	7.0	2.2	2.9	0.2344	11	24	163	51.0	725	83.0	86.0	85.9	0.64	0.75	0.81	19.1
11	15	180L	14.8	6.8	2.3	2.5	0.2758	11	24	175	51.0	725	87.0	88.5	88.3	0.68	0.79	0.84	21.4
15	20	200L	19.6	4.6	1.8	2.1	0.36721	15	32	217	53.0	730	86.5	88.6	89.0	0.54	0.66	0.73	33.3
18.5	25	225S/M	24.7	6.9	2.1	2.8	0.8328	17	37	341	60.0	730	88.5	90.1	90.0	0.72	0.80	0.85	34.9
22	30	225S/M	29.4	7.5	2.2	2.7	0.9716	19	42	365	60.0	730	89.0	91.0	91.0	0.73	0.82	0.85	41.1
30	40	250S/M	40.0	7.9	2.3	2.9	1.16	17	37	440	60.0	730	89.5	91.2	91.6	0.70	0.79	0.84	56.3
37	50	250S/M	48.7	6.5	1.9	2.3	2.07	29	64	570	62.0	740	90.5	92.2	92.3	0.65	0.75	0.79	73.2
45	60	280S/M	59.2	6.5	2.0	2.4	2.53	26	57	624	62.0	740	90.5	92.1	92.3	0.65	0.75	0.80	88.0
55	75	280S/M	72.4	6.5	1.9	2.2	3.05	27	59	745	62.0	740	91.2	93.1	93.0	0.69	0.78	0.82	104
75	100	315S/M	98.7	6.6	1.9	2.2	4.37	20	44	876	62.0	740	92.0	93.4	93.5	0.67	0.79	0.82	141
90	125	315S/M	118	6.8	2.1	2.4	5.29	23	51	985	62.0	740	92.5	93.8	94.2	0.65	0.76	0.81	170
110	150	315S/M*	145	7.0	1.9	2.2	5.53	14	31	970	62.0	740	92.5	94.1	94.6	0.61	0.73	0.79	212
132	175	355M/L	174	6.5	1.6	2.2	12.8	47	103	1445	70.0	740	93.0	94.5	94.8	0.63	0.73	0.79	254
150	200	355M/L	197	6.5	1.6	2.2	14.3	40	88	1570	70.0	740	93.0	94.7	94.7	0.61	0.72	0.78	293
160	220	355M/L	211	6.6	1.6	2.2	15.9	42	92	1620	70.0	740	93.3	94.7	94.7	0.64	0.75	0.80	305
185	250	355M/L	244	6.5	1.6	2.2	16.7	30	66	1730	70.0	740	93.0	94.6	95.1	0.60	0.71	0.78	360
200	270	355M/L	263	6.8	1.6	2.1	18.9	37	81	1830	70.0	740	93.3	94.6	95.2	0.60	0.72	0.79	384
220	300	355M/L*	290	6.5	1.6	2.1	19.8	35	77	1930	70.0	740	93.4	94.7	95.2	0.62	0.73	0.78	428

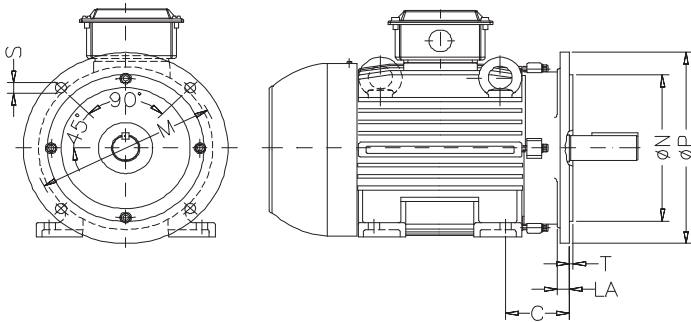
Mechanical Data

W20-Cast Iron Three Phase Motors IE1



Frame	A	AA	AB	AC	AD	B	BA	BB	C	CA	Shaft dimensions											H	HA	HC	HD	K	L	LC	S1	d1	d2	Bearings				
											D	E	ES	F	G	GD	DA	EA	TS	FA	GB											GF	D.E.	O.D.E.		
80	125	35	149	159	134	100	40	125.5	50	93	19j6	40	28	6	15.5	6	14j6	30	18	11	5	5	80	13	157	214	10	276	313	M20	DM6	DM4	6204-ZZ	6203-ZZ		
90S	140	38	164	179	148	125	42	131	56	104	24j6	50	36	8	20	7	16j6	40	28	5	13	5	90	15	177	238	10	304	350	M20	DM8	DM6	6205-ZZ	6204-ZZ		
90L								156																				329	375							
100L	160	49	188	199	158	140	50	173	63	118	28j6	60	45	8	24	7	22j6	50	36	6	18.5	6	100	16	198	258	12	376	431	DM10	DM8	6206-ZZ	6205-ZZ			
112M	190	48	220	222	179			177																				70	128					24j6	20	20
132S	216	51	248	270	207	178	55	187	89	150	38k6	80	63	10	33	8	28j6	60	45	8	24	7	132	20	274	339	12	452	519	M25	DM12	DM10	6308-ZZ	6207-ZZ		
132M								225																				490	557							
160M	254	64	308	312	241	210	65	254	108	174	42k6	12	37	8	42k6	12	37	8	160	22	317	401	14.5	160	22	317	401	14.5	590	712	DM16	DM16	6309-C3	6209-Z-C3		
160L								298																					634	756						
180M	279	80	350	358	261	241	75	294	121	200	48k6	14	42.5	9	48k6	110	80	14	42.5	9	180	28	360	441	14.5	180	28	360	441	14.5	656	782	DM16	DM16	6311-C3	6211-Z-C3
180L								279																							694	820				
200M	318	82	385	396	303	267	85	133	222	55m6	16	49	10	55m6*	100	16	49	10	200	30	402	503	18.5	200	30	402	503	18.5	721	842	2xM32	DM20	DM20	6312-C3	6212-Z-C3	
200L																													305	759						880
225S/M	356	80	436	476	374	311	105	391	149	280	55m6*	18	11	60m6*	140	125	58	60m6*	140	125	18	11	225	34	466	599	24	809	935	2xM40	DM20	DM20	6314-C3	6314-C3		
250S/M								168																				312	60m6*						60m6*	60m6*
280S/M	457	557	474	142	510	190	152	558	216	376	65m6*	20	67.5	12	65m6	140	125	18	58	65m6	140	125	18	58	280	578	754	24	1026	1188	2xM50	DM20	DM20	6316-C3	6316-C3	
315S/M								457																					350	65m6*						65m6*
355M/L	610	140	750	816	676	560	200	760	254	467	75m6*	140	125	20	67.5	12	60m6*	140	125	18	53	11	315	52	613	814	28	1116	1278	2xM63	DM20	DM20	6316-C3	6314-C3		
								457																				325	80m6						170	160
						630				397	100m6	210	200	28	90	16	80m6	170	160	22	71	14					28	1457	1661		DM24	DM20	NU 322	6319-C3		

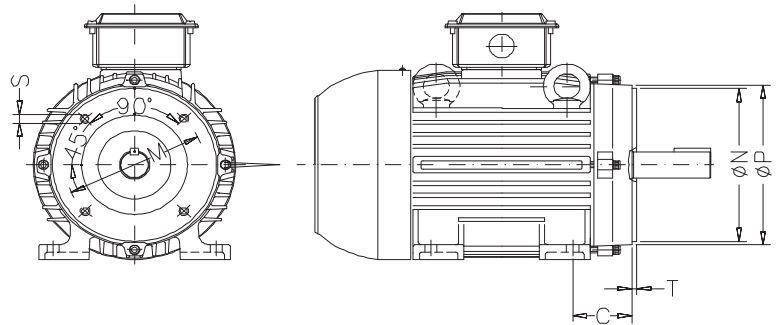
Note:
 All dimensions are in millimeters.
 The values shown are subject to change without prior notice. Please contact our sales office for guaranteed values.



Frame	FF flange									No. of holes
	Flange	C	LA	M	N	P	T	S	a	
80	FF-165	50	10	165	130	200	3.5	12	45°	4
90S/L		56								
100L	FF-215	63	11	215	180	250	4	15		
112M		70								
132S/M	FF-265	89	12	265	230	300	5	19		
160M/L	FF-300	108	18	300	250	350				
180M/L		121								
200M/L	FF-350	133	18	350	300	400	5	19		
225S/M	FF-400	149	18	400	350	450				
250S/M	FF-500	168	18	500	450	550	5	19		
280S/M		190								
315S/M	FF-600	216	22	600	550	660	6	24		
355M/L	FF-740	254	22	740	680	800				

Frame	"C-DIN" flange							No. of holes
	Flange	C	M	N	P	S	T	
80	C-120	50	100	80	120	M6	3	4
90S/L	C-140	56	115	95	140	M8		
100L	C-160	63	130	110	160		3.5	
112M		70						
132S/M	C-200	89	165	130	200	M10		

Frame	"C" flange							No. of holes
	Flange	C	M	N	P	S	T	
80	FC-95	50	95.2	76.2	143	1/4"20	4	4
90S/L	FC-149	56	149.2	114.3	165	UNC 3/8"16		
100L		63						
112M	70							
132S/M	FC-184	89	184.2	215.9	225	UNC 1/2"13	6.3	
160M/L		108						
180M/L	FC-228	121	228.6	266.7	280	UNC 5/8"11	8	
200M/L		133						
225S/M	FC-279	149	279.4	317.5	395	UNC 5/8"11		
250S/M	FC-355	168	355.6	406.4	455			
280S/M		190						
315S/M	FC-368	216	368.3	419.1	455	UNC 5/8"11		
355M/L		254						



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 and Contracting
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Zest Energy

Integrated Power Generation,
 Electrical Infrastructure and Mobile Solutions
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 Epping Industrial 1
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Low and Medium Voltage Packaged
 Switchgear Solutions
 18 Mt. Ida Road, Robertsham
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 info@shaw.zestweg.com

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