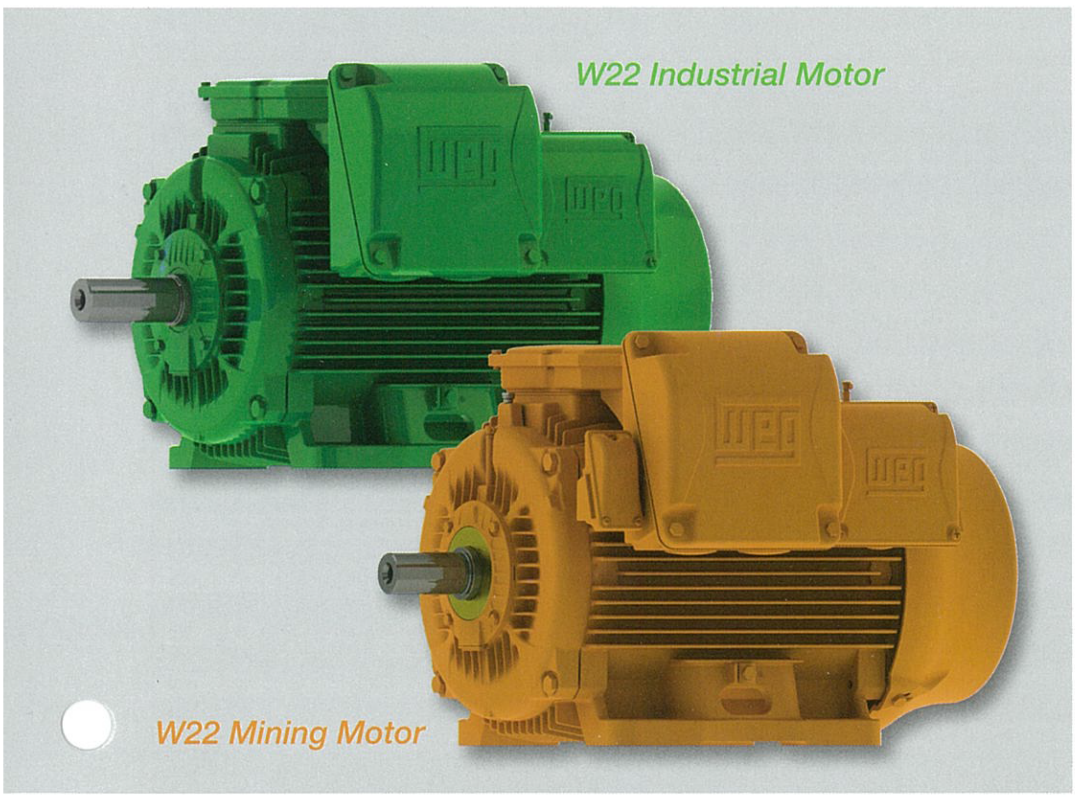
W22

Three-Phase Electric Motor High Efficiency E3

Performance Data
AUSTRALIA/NEW ZEALAND

- High efficiency E3
- High torque
- IP66, class H
- WISE® insulation
- Low noise level
- Superior lifetime
- Lower maintenance



W22 High Efficiency E3 Performance Data

Part No.	Output kW	IEC Frame	Rated speed (rpm)	Full load current I_r (A)	Locked rotor current I_L/I_r	Full load torque T_r (Nm)	Locked rotor torque T_L/T_r	Break-down torque T_b/T_r	415 V % of full load Efficiency η 50	75	100	Power factor (Cos φ) 50	75	100	Sound pressure level dB (A)	Moment of Inertia J (kgm²)	Max. locked rotor time(s) Cold	Hot	Approx Weight (kg)
2 Pole - 3000 rpm - 50 Hz																			
K07 W22	0.18	63	2800	0.46	5.2	0.59	3.2	3.2	64.0	69.0	70.0	0.55	0.68	0.77	52	0.0002	70	32	6.7
K1 W22	0.25	63	2805	0.63	5.5	0.88	3.2	3.2	65.0	70.0	72.0	0.54	0.68	0.77	52	0.0002	59	27	7.2
K3 W22	0.37	7 1	2790	0.80	6.3	1.27	2.5	2.5	74.0	76.0	76.0	0.66	0.79	0.85	56	0.0004	26	12	7.5
K5 W22	0.55	71	2770	1.15	5.9	1.86	3.0	3.0	76.0	77.0	77.5	0.68	0.81	0.86	56	0.0005	40	18	8.5
K7 W22	0.75	80	2825	1.52	7.5	2.55	3.5	3.5	81.0	83.0	83.4	0.63	0.76	0.82	59	0.0008	62	28	13.5
K9 W22	1.1	80	2830	2.21	7.4	3.73	3.6	3.6	82.0	84.0	84.6	0.63	0.76	0.82	59	0.0009	51	23	15.0
K11 W22	1.5	90S	2875	2.91	7.6	5.00	3.3	3.3	84.0	86.0	86.5	0.64	0.76	0.83	62	0.0020	33	15	18.5
K15 W22	2.2	90L	2870	4.20	7.5	7.35	3.4	3.5	86.5	87.0	87.7	0.65	0.77	0.83	62	0.0026	26	12	23.5
K22 W22	3	100L	2910	5.47	8.5	9.81	3.4	3.4	86.5	87.8	88.7	0.69	0.81	0.86	67	0.0064	33	15	32.0
K192 W22	4	112M	2900	7.22	7.7	13.1	2.9	3.5	88.1	89.1	89.6	0.69	0.80	0.86	64	0.0080	48	22	41.0
K20 W22	5.5	132S	2935	9.73	8.0	17.9	2.7	2.9	88.9	90.4	90.5	0.72	0.82	0.87	67	0.0189	42	19	65.0
K24 W22	7.5	132S	2935	13.3	8.5	24.4	3.0	3.4	89.4	90.8	91.2	0.69	0.80	0.86	67	0.0252	37	17	69.0
K27 W22	9.2	132M	2930	15.9	8.5	30.0	2.9	3.3	90.7	91.5	91.5	0.75	0.84	0.88	67	0.0306	35	16	78.0
K29 W22	11	160M	2950	19.4	8.0	35.6	2.7	3.5	91.0	92.3	92.7	0.71	0.81	0.85	67	0.0554	37	17	115
K31 W22	15	160M	2950	26.1	8.0	48.5	2.6	3.3	91.5	92.5	92.9	0.71	0.81	0.86	67	0.0625	26	12	119
K33 W22	18.5	160L	2950	32.1	8.4	59.9	2.8	3.6	92.0	92.9	93.2	0.70	0.80	0.86	67	0.0735	18	8	136
K35 W22	22	180M	2950	37.4	8.6	71.2	2.7	3.3	92.8	93.8	94.0	0.76	0.84	0.87	70	0.1084	31	14	180
K37 W22	30	200L	2960	51.4	7.4	96.8	2.7	2.8	93.2	94.1	94.4	0.76	0.83	0.86	74	0.1865	68	31	245
K39 W22	37	200L	2965	63.2	7.3	119	2.6	2.9	93.3	94.0	94.6	0.73	0.82	0.86	69	0.2119	37	17	265
K41 W22	45	225S/M	2970	74.8	8.0	145	2.4	3.2	94.6	95.1	95.1	0.77	0.85	0.88	74	0.4415	26	12	416
K43 W22	55	250S/M	2965	90.1	7.9	178	2.8	2.9	94.9	95.3	95.4	0.80	0.86	0.89	74	0.4924	31	14	485
K45 W22	75	250S/M	2965	122	7.9	241	3.0	2.8	95.0	95.3	95.4	0.83	0.87	0.89	74	0.5132	24	11	500
K47 W22	90	280S/M	2980	146	7.4	288	2.2	2.8	94.8	95.6	95.8	0.84	0.89	0.90	77	1.3400	66	30	762
K49 W22	110	280S/M	2980	177	7.9	353	2.3	2.9	94.8	95.7	96.0	0.82	0.88	0.90	77	1.5600	46	21	819
K61 W22	132	315S/M	2980	212	7.5	423	2.1	2.8	95.2	95.9	96.3	0.83	0.89	0.90	77	2.5600	66	30	1048
K51 W22	150	315S/M	2980	241	7.5	481	2.4	2.8	95.3	96.0	96.4	0.84	0.88	0.90	77	2.8300	70	32	1070
K162 W22	160	315S/M	2980	253	7.9	513	2.3	2.8	95.6	96.2	96.6	0.83	0.89	0.91	77	2.9900	53	24	1129
K53 W22	185	315S/M	2980	296	7.8	593	2.4	2.7	95.7	96.4	96.6	0.83	0.89	0.90	77	3.2000	48	22	1197
K202 W22	200	315S/M	2980	320	8.2	641	2.6	2.8	96.0	96.5	96.7	0.83	0.89	0.90	77	3.4200	37	17	1305
K55 W22	220	355M/L	2985	352	7.7	704	2.0	2.7	95.8	96.5	96.7	0.85	0.88	0.90	80	4.6100	48	22	1585
K57 W22	250	355M/L	2985	395	7.7	800	2.1	2.8	96.0	96.7	96.8	0.86	0.90	0.91	80	5.0400	48	22	1665
K59 W22	300	355M/L	2985	474	8.2	960	2.4	2.9	95.0	95.7	95.8	0.84	0.91	0.92	80.0	6.01	68	31	1838
High-Output Design - Special Frame																			
K20/1 W22	5.5	112M*	2895	10.0	8.0	18.1	3.0	3.4	88.0	88.6	88.6	0.70	0.81	0.86	64	0.0095	31	14	43.0
K29/1 W22	11	132M*	2925	18.9	8.2	35.9	2.7	3.0	90.8	91.2	91.2	0.75	0.85	0.89	67	0.0306	24	11	78.0
K55/1 W22	220	315L	2980	348	7.7	704	2.4	2.6	96.1	96.5	96.7	0.84	0.89	0.91	78.0	3.72	53	24	1370
K57/1 W22	250	315L	2980	395	7.8	800	2.5	2.7	96.4	96.6	96.8	0.86	0.90	0.91	78.0	4.17	37	17	1434
6 Pole - 1000 rpm - 50 Hz																			
K08A W22	0.18	71	900	0.64	3.2	1.87	2.0	2.1	58.0	64.0	65.0	0.40	0.51	0.60	43	0.0008	260	118	11.5
K2A W22	0.25	71	880	0.87	3.2	2.75	2.0	2.0	58.0	62.8	63.8	0.39	0.51	0.60	43	0.0008	196	89	11.5
K4A W22	0.37	80	925	1.05	4.7	3.82	2.1	2.2	62.0	67.5	70.0	0.48	0.61	0.70	43	0.0024	31	14	12.5
K6A W22	0.55	80	925	1.40	4.8	5.69	2.2	2.2	68.0	72.5	73.0	0.50	0.64	0.75	43	0.0034	44	20	14.5
K8A W22	0.75	L90S	945	1.82	5.2	7.55	2.5	2.8	78.0	80.1	80.6	0.50	0.62	0.71	45	0.0066	68	31	22.0
K10A/1 W22	1.1	100L	705	3.10	4.6	14.9	2.1	2.4	75.0	79.0	79.6	0.41	0.53	0.62	50	0.0143	79	36	33.0
K12A W22	1.5	100L	950	3.50	5.5	15.1	2.3	2.8	82.0	83.0	84.1	0.49	0.62	0.71	44	0.0143	66	30	32.0
K16A W22	2.2	112M	950	4.96	6.0	22.2	2.5	2.6	84.0	85.5	85.6	0.53	0.64	0.72	48	0.0257	57	26	42.0
K23A W22	3	132S	960	6.56	6.4	29.8	2.0	2.3	86.0	87.0	87.1	0.52	0.65	0.73	52	0.0453	84	38	61.0
K196 W22	4	132M	960	8.55	6.5	39.8	2.2	2.5	87.0	88.0	88.0	0.53	0.66	0.74	52	0.0566	70	32	66.0
K21A W22	5.5	132M/L	965	12.0	7.0	54.4	2.5	2.8	87.5	88.5	89.1	0.50	0.64	0.72	52	0.0755	57	26	80.0
K25A W22	7.5	160M	975	14.2	6.5	73.5	2.3	2.9	89.3	90.3	90.7	0.63	0.74	0.81	56	0.1492	44	20	122
K30A W22	11	160L	975	20.7	6.5	108	2.4	3.0	90.0	90.8	91.2	0.62	0.74	0.81	56	0.2111	35	16	143
K32A W22	15	180L	975	27.0	8.0	147	2.6	3.2	91.3	91.7	92.0	0.65	0.78	0.84	56	0.3240	22	10	193
K34A W22	18.5	200L	980	33.9	6.2	180	2.2	2.8	91.7	92.3	92.5	0.65	0.76	0.82	60	0.3861	42	19	223
K36A W22	22	200L	980	40.2	6.3	215	2.3	2.9	92.0	92.6	92.9	0.65	0.76	0.82	60	0.4563	40	18	240
K38A W22	30	225S/M	985	52.2	7.4	291	2.3	2.8	93.7	94.0	94.0	0.70	0.80	0.85	63	0.9559	37	17	401
K40A W22	37	250S/M	985	64.2	7.4	359	2.3	2.7	94.0	94.4	94.4	0.72	0.81	0.85	64	1.4200	37	17	486
K42A W22	45	250S/M	990	77.9	8.0	434	2.8	2.8	93.5	94.5	94.5	0.70	0.80	0.85	64	1.6100	22	10	550
K44A W22	55	280S/M	990	98.3	6.7	531	2.2	2.7	94.5	95.0	95.3	0.67	0.77	0.82	65	3.2500	62	28	723
K46A W22	75	280S/M	990	137	8.0	724	3.0	3.5	94.8	95.3	95.5	0.63	0.75	0.80	65	4.4800	18	8	725
K48A W22	90	315S/M	990	157	6.7	869	2.2	2.5	95.3	95.8	96.1	0.67	0.78	0.83	67	6.5100	75	34	1048
K50A W22	110	315S/M	990	192	6.8	1059	2.4	2.6	95.5	96.0	96.2	0.67	0.78	0.83	67	7.2300	70	32	1106
K62A W22	132	315S/M	990	232	7.2	1275	2.5	2.7	95.6	96.1	96.3	0.67	0.77	0.82	67	8.3200	57	26	1190
K52A W22	150	315S/M	990	261	7.5	1451	2.5	2.7	95.8	96.3	96.3	0.69	0.79	0.83	67	8.9000	44	20	1365
K166 W22	160	355M/L	990	294	6.5	1544	2.1	2.3	94.9	95.6	95.8	0.63	0.74	0.79	73	10.2	73	33	1594
K54A W22	185	355M/L	990	340	6.6	1785	2.2	2.4	94.9	95.6	95.8	0.64	0.74	0.79	73	11.1000	75	34	1666
K206 W22	200	355M/L	995	361	6.5	1927	2.1	2.3	95.4	96.0	96.2	0.64	0.75	0.80	73	12.0	88	40	1739
K56A W22	220	355M/L	995	397	6.5	2108	2.2	2.3	95.5	96.1	96.3	0.64	0.75	0.80	73	13.4000	79	36	1854
K58A W22	250	355M/L	995	451	6.5	2403	2.3	2.4	95.5	96.1	96.3	0.64	0.75	0.80	73	15.0000	84	38	1970
K60A W22	300	355M/L	995	548	6.4	2883	2.1	2.4	94.9	95.9	96.3	0.63	0.73	0.79	73	15.0000	66	30	1970
High-Output Design - Special Frame																			
K10A W22	1.1	L90L*	920	2.70	5.0	112	2.2	2.2	72.0	77.7	79.9	0.48	0.61	0.71	45	0.0077	22	10	25.0
K166/1 W22	160	315L	990	279	7.4	1540	2.6	2.7	95.7	96.2	96.4	0.67	0.78	0.83	68	11.1	53	24	1448

W22 High Efficiency E3 Performance Data

Part No.	Output kW	IEC Frame	Rated speed (rpm)	Full load current I_r (A)	Locked rotor current I_L/I_r	Full load torque T_r (Nm)	Locked rotor torque T_L/T_r	Break-down torque T_b/T_r	415 V % of full load Efficiency η 50	75	100	Power factor (Cos φ) 50	75	100	Sound pressure level dB (A)	Moment of Inertia J (kgm²)	Max. locked rotor time(s) Cold	Hot	Approx Weight (kg)
4 Pole - 1500 rpm - 50 Hz																			
K08 W22	0.18	63	1400	0.55	4.6	1.27	2.4	2.5	58.0	64.0	67.5	0.46	0.57	0.68	44	0.0006	59	27	7.2
K2 W22	0.25	71	1370	0.65	4.8	1.77	2.1	2.3	69.0	71.0	72.5	0.52	0.65	0.74	43	0.0007	143	65	8.0
K4 W22	0.37	71	1370	0.93	4.8	2.55	2.6	2.6	71.0	74.0	75.5	0.51	0.64	0.73	43	0.0008	123	56	9.5
K6 W22	0.55	80	1420	1.20	6.3	3.73	2.9	3.2	77.0	79.0	80.0	0.61	0.74	0.80	44	0.0026	48	22	12.5
K8/1 W22	0.75	90S	1455	1.54	7.8	4.90	2.4	3.3	82.5	84.0	84.5	0.60	0.73	0.80	49	0.0049	46	21	18.5
K10 W22	1.1	L90S	1460	2.23	8.2	7.16	2.7	3.1	85.0	85.9	85.9	0.62	0.74	0.80	49	0.0063	26	12	23.0
K12 W22	1.5	L90L	1455	3.07	7.9	9.81	2.8	3.4	85.0	86.5	87.1	0.56	0.70	0.78	49	0.0071	29	13	24.0
K16 W22	2.2	L100L	1440	4.33	8.1	14.6	3.9	3.6	87.2	88.2	88.5	0.60	0.73	0.80	53	0.0108	42	19	35.0
K23 W22	3	L100L	1440	5.85	7.5	19.9	3.5	3.3	87.5	88.5	89.1	0.60	0.73	0.80	53	0.0120	37	17	37.5
K194 W22	4	112M	1450	7.62	7	26.4	2.3	3.1	88.8	89.9	90.1	0.62	0.74	0.81	56	0.0182	33	15	44.0
K21 W22	5.5	132S	1465	9.93	8.2	35.9	2.4	3.4	90.0	90.7	91.0	0.67	0.79	0.85	56	0.0528	35	16	69.0
K25 W22	7.5	132M	1465	13.4	8.2	48.9	2.5	3.4	91.0	91.5	91.6	0.69	0.80	0.85	56	0.0642	29	13	78.0
K30 W22	11	160M	1470	20.0	7.0	71.5	2.5	3.0	91.0	91.8	92.2	0.65	0.76	0.83	61	0.1397	37	17	123
K32 W22	15	160L	1470	27.4	7.3	97.5	2.7	3.2	91.8	92.5	93.0	0.65	0.76	0.82	61	0.1743	22	10	145
K34 W22	18.5	180M	1470	33.5	8.0	121	2.9	2.9	91.7	93.1	93.5	0.65	0.76	0.82	64	0.1914	26	12	175
K36 W22	22	180L	1475	38.0	7.9	142	2.8	2.9	92.5	93.5	93.7	0.71	0.81	0.86	64	0.2272	35	16	195
K38 W22	30	200L	1480	54.1	7.3	193	2.5	3	92.8	93.6	94.2	0.64	0.75	0.82	63	0.3469	35	16	243
K40/1 W22	37	225S/M	1480	63.2	7.8	239	2.7	3.0	94.0	94.6	94.6	0.72	0.81	0.86	63	0.6388	31	14	392
K42 W22	45	225S/M	1480	76.5	7.9	290	2.8	3.2	94.2	94.8	94.8	0.70	0.80	0.85	63	0.6903	29	13	420
K44 W22	55	250S/M	1480	93.4	7.9	355	2.8	3.3	94.6	95.0	95.3	0.71	0.81	0.86	64	1.1100	31	14	507
K46 W22	75	250S/M	1480	125	8.4	484	2.8	3.3	95.0	95.5	95.5	0.73	0.83	0.87	64	1.2200	18	8	531
K48 W22	90	280S/M	1485	152	7.4	579	2.3	2.8	95.0	95.5	95.8	0.74	0.82	0.86	69	2.5500	55	25	777
K50 W22	110	280S/M	1485	183	7.6	708	2.4	2.8	95.4	95.8	96.0	0.74	0.83	0.87	69	3.2500	53	24	884
K62 W22	132	315S/M	1490	222	7.6	846	2.9	3.0	95.5	96.0	96.4	0.75	0.83	0.86	71	4.2200	57	26	1095
K52 W22	150	315S/M	1490	252	7.0	962	2.5	2.5	95.5	96.3	96.4	0.76	0.84	0.86	71	4.4200	57	26	1110
K164 W22	160	315S/M	1490	265	7.6	1030	2.6	2.6	95.7	96.2	96.5	0.75	0.83	0.87	71	4.6500	48	22	1152
K54 W22	185	315S/M	1490	307	7.6	1187	2.5	2.5	95.8	96.3	96.5	0.74	0.83	0.87	71	4.9700	40	18	1222
K204 W22	200	315S/M	1490	331	7.6	1285	2.5	2.5	96.1	96.5	96.7	0.74	0.83	0.87	71	5.3000	44	20	1332
K56 W22	220	355M/L	1490	372	7.4	1412	2.4	2.5	96.0	96.6	96.8	0.72	0.80	0.85	74	7.5200	44	20	1554
K58 W22	250	355M/L	1490	422	7.3	1598	2.3	2.4	96.2	96.6	96.9	0.73	0.82	0.85	74	8.5900	35	16	1621
K60 W22	300	355M/L	1490	501	7.3	1922	2.3	2.5	96.4	96.7	96.9	0.74	0.83	0.86	74	10.4000	44	20	1815
K3554 W22	355	355M/L	1490	593	7.2	2275	2.4	2.5	96.5	96.8	96.9	0.74	0.83	0.86	74	11.6000	33	15	1878
High-Output Design - Special Frame																			
K8 W22	0.75	L80*	1425	1.56	5.7	5.03	2.8	2.9	80.3	82.3	83.4	0.59	0.72	0.80	44	0.0037	57	26	16
K28 W22	9.2	132M/L*	1465	17.2	8.3	60	2.8	3.5	90.3	91.0	91.0	0.66	0.78	0.84	56	0.0681	30	14	82
K40 W22	37	200L	1480	68.1	7.0	239	2.6	3.0	93.3	94.0	94.5	0.64	0.76	0.82	63	0.3994	41	19	284
K56/1 W22	220	315L	1490	368	7.8	1412	2.6	2.6	96.1	96.6	96.7	0.74	0.83	0.86	73.0	6.86	35	16	1430
K58/1 W22	250	315L	1490	417	8.0	1598	2.7	2.6	96.2	96.6	96.9	0.73	0.82	0.86	73.0	8.39	35	16	1527
8 Pole - 750 rpm - 50 Hz																			
K08B W22	0.18	80	680	0.65	3.3	2.56	2.0	2.2	51.0	57.0	59.0	0.45	0.55	0.65	42	0.0029	139	63	13.5
K2B W22	0.25	80	680	0.88	3.3	3.54	2.0	2.2	53.0	58.0	60.0	0.45	0.56	0.66	42	0.0034	108	49	14.5
K4B W22	0.37	90S	690	1.26	3.7	5.11	2.1	2.4	61.0	66.0	66.0	0.41	0.53	0.62	43	0.0052	117	53	19.0
K6B W22	0.55	90L	685	1.72	3.6	7.65	1.8	2.1	63.0	66.5	66.5	0.44	0.57	0.67	43	0.0063	90	41	23.0
K8B W22	0.75	100L	710	2.19	4.6	10.1	1.9	2.3	74.0	77.0	77.0	0.41	0.53	0.62	50	0.0127	112	51	30.5
K10B W22	1.1	100L	705	3.10	4.6	14.9	2.1	2.4	75.0	79.0	79.6	0.41	0.53	0.62	50	0.0143	79	36	33.0
K12B W22	1.5	112M	705	3.78	5.0	20.3	2.5	2.8	79.0	80.5	81.2	0.45	0.59	0.68	46	0.0238	79	36	43.0
K16B W22	2.2	132S	710	5.09	6.2	29.6	2.3	2.5	82.8	83.0	83.6	0.51	0.65	0.72	48	0.0690	59	27	69.0
K23B W22	3	132M	710	6.80	6.4	40.4	2.4	2.6	84.1	84.9	85.2	0.51	0.64	0.72	48	0.0838	46	21	75.0
K198 W22	4	160M	725	8.93	5.0	52.7	2.1	2.3	85.0	86.8	86.6	0.52	0.65	0.72	51	0.1229	75	34	114
K21B W22	5.5	160M	725	12.0	5.0	72.5	2.1	2.3	86.0	87.3	87.7	0.52	0.65	0.73	51	0.1492	62	28	123
K25B W22	7.5	160L	730	16.1	5.3	98.1	2.2	2.5	87.0	88.3	88.9	0.52	0.65	0.73	51	0.2199	48	22	145
K30B W22	11	180L	725	22.3	6.5	145	2.3	2.7	89.5	90.0	90.3	0.55	0.68	0.76	51	0.2846	26	12	185
K32B W22	15	200L	730	30.8	4.9	196	1.9	2.1	90.0	91.0	91.4	0.56	0.68	0.74	56	0.4571	75	34	235
K34B W22	18.5	225S/M	735	34.3	6.5	240	1.7	2.5	93.0	93.0	92.7	0.63	0.75	0.81	56	0.8219	62	28	377
K36B W22	22	225S/M	735	40.7	6.5	286	1.8	2.5	93.0	93.1	93.0	0.63	0.75	0.81	56	0.9574	48	22	402
K38B W22	30	250S/M	735	54.0	7.4	390	1.9	2.8	93.3	93.3	93.2	0.66	0.77	0.83	56	1.4300	40	18	490
K40B/1 W22	37	280S/M	740	69.2	6.0	478	1.8	2.3	93.7	94.2	94.2	0.63	0.73	0.79	59	2.8200	70	32	673
K42B W22	45	280S/M	740	83.9	6.0	581	1.8	2.2	94.0	94.5	94.5	0.63	0.73	0.79	59	3.4900	66	30	741
K44B W22	55	280S/M	740	108	7.0	710	2.3	2.5	94.0	94.6	94.6	0.55	0.68	0.75	59	3.9400	40	18	830
K46B W22	75	315S/M	740	137	6.0	968	1.8	2.2	94.6	95.1	95.2	0.65	0.75	0.80	62	6.5600	88	40	1049
K48B W22	90	315S/M	740	164	6.0	1157	1.9	2.2	94.9	95.3	95.5	0.65	0.75	0.80	62	7.8400	88	40	1149
K50B W22	110	355M/L	745	202	6.2	1412	1.3	2.3	94.7	95.8	95.8	0.62	0.74	0.79	70	12.6000	123	56	1484
K62B W22	132	355M/L	745	242	6.2	1697	1.3	2.3	95.4	96.1	96.1	0.64	0.74	0.79	70	14.7000	106	48	1587
K52B W22	150	355M/L	745	275	6.8	1922	1.6	2.3	95.5	96.3	96.3	0.64	0.75	0.79	70	16.8000	110	50	1747
K168 W22	160	355M/L	745	289	6.4	2055	1.3	2.3	95.4	95.9	96.3	0.64	0.75	0.80	70	17.3	123	56	1747
K54B W22	185	355M/L	745	334	6.3	2373	1.3	2.3	95.5	95.9	96.3	0.64	0.75	0.80	70	18.9000	123	56	1819
K208 W22	200	355M/L	745	361	6.2	2566	1.3	2.3	95.5	95.9	96.3	0.65	0.76	0.80	70	19.8	123	56	1891
K56B W22	220	355M/L	745	409	8.0	2824	2.2	3.0	95.3	96.0	96.0	0.60	0.73	0.78	70	19.8000	123	56	1891
High-Output Design - Special Frame																			
K40B W22	37	250S/M*	735	68.0	8.0	481	2.2	3.0	93.3	93.5	93.5	0.63	0.75	0.81	56	1.6600	70	32	673

** Output available in reduced frame; meeting efficiency level E2.* Part numbers for different mounting configurations :

W22 Industrial:- **K07 W22** = W22 E3 Industrial, B3 (Foot Mounted); **L07 W22** = W22 E3 Industrial, B35 (Foot & Flange Mounted); **M07 W22** = W22 E3 Industrial, B5 (Flange Mounted)

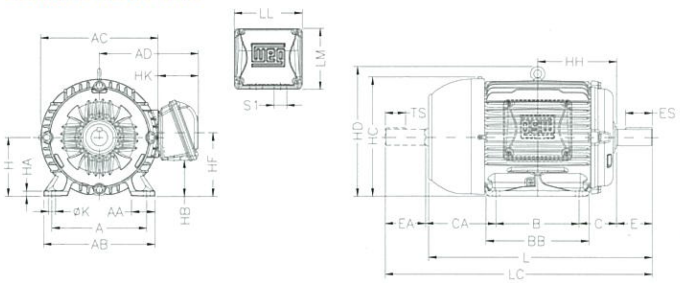
W22 Mining:- **KTE07 W22M** = W22 E3 Mining, B3 (Foot Mounted); **LTE07 W22M** = W22 E3 Mining, B35 (Foot & Flange Mounted); **MTE07 W22M** = W22 E3 Mining, B5 (Flange Mounted)

Other kW/frame combinations available on request. Please consult your nearest WEG office for details.

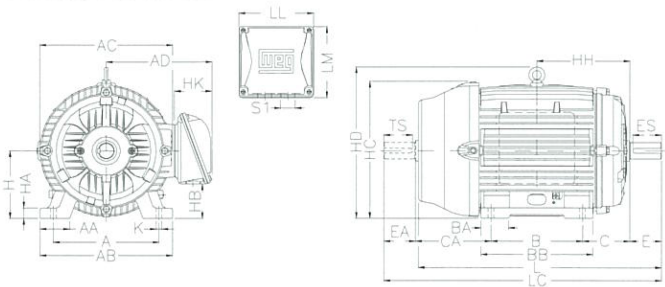
W22 Mechanical Data

	Main Dimensions (mm)																								Bearings	
IEC Frame	A	AA	AB	AC	AD	B	BA	BB	C	CA	H	HA	HB	HC	HD	HF	HG	HH	HK	LL	LM	K	L	LC	S1	D.E.	N.D.E.
63	100	25.5	116	125	122	80	N/A	95	40	78	63	7	25.5	129	N/A	68.5	-	80	59	108	98	7	216	241	M20x1.5	6201 ZZ	6201 ZZ
71	112	28.5	132	141	130	90	N/A	113.5	45	88	71	7	33	145	N/A	76	-	90	59	108	98	7	248	276	M20x1.5	6202 ZZ	6202 ZZ
80	125	30.5	149	159	139	100	N/A	125.5	50	93	80	8	43.5	163	N/A	87	-	100	59	108	98	10	276	313	M20x1.5	6204 ZZ	6203 ZZ
L80	125	30.5	149	159	139	100	N/A	125.5	50	93	80	8	43.5	163	N/A	87	-	100	59	108	98	10	325	362	M20x1.5	6204 ZZ	6203 ZZ
90S	140	36.5	164	179	157	100	N/A	131	56	104	90	9	45	182	N/A	90	-	106	67	115	104	10	304	350	M20x1.5	6205 ZZ	6204 ZZ
L90S	140	36.5	164	179	157	100	N/A	131	56	104	90	9	45	182	N/A	90	-	106	67	115	104	10	355	381	M20x1.5	6205 ZZ	6204 ZZ
90L	140	36.5	164	179	157	125	N/A	156	56	104	90	9	45	182	N/A	90	-	118.5	67	115	104	10	329	375	M20x1.5	6205 ZZ	6204 ZZ
L90L	140	36.5	164	179	157	125	N/A	156	56	104	90	9	45	182	N/A	90	-	118.5	67	115	104	10	360	406	M20x1.5	6205 ZZ	6204 ZZ
100L	160	40	188	199	167	140	N/A	173	63	118	100	10	61.5	205	244	106.4	-	133	67	115	104	12	376	431	M20x1.5	6206 ZZ	6205 ZZ
L100L	160	40	188	199	167	140	N/A	173	63	118	100	10	61.5	205	244	106.4	-	133	67	115	104	12	420	475	M20x1.5	6206 ZZ	6205 ZZ
112M	190	40.5	220	222	192	140	N/A	177	70	128	112	10	54.5	235	280	112	-	140	80	140	130.5	12	393	448	M25x1.5	6207 ZZ	6206 ZZ
132S	216	45	248	272	218	140	N/A	187	89	150	132	16	75	266	319	132	-	159	80	140	130.5	12	452	519	M25x1.5	6308 ZZ	6207 ZZ
132M	216	51	248	271	218	178	55	225	89	150	132	20	75	266	319	132	-	178	79	140	133	12	490	557	2xM32x1.5	6308 ZZ	6207 ZZ
160M	254	64	308	329	264	210	63	254	108	174	160	22	79	327	374	168	-	213	100.5	198	188	14.5	598	712	2xM32x1.5	6309 C3	6209 Z-C3
160L	254	64	308	329	264	254	63	298	108	174	160	22	79	327	374	168	-	235	100.5	198	188	14.5	642	756	2xM32x1.5	6309 C3	6209 Z-C3
180M	279	78	350	360	279	241	70	294	121	200	180	28	92	363	413	180	-	241.5	100.5	198	188	14.5	664	782	2xM40x1.5	6311 C3	6211 C3
180L	279	78	350	360	279	279	70	332	121	200	180	28	92	363	413	180	-	260.5	100.5	198	188	14.5	702	820	2xM40x1.5	6311 C3	6211 Z-C3
200L	318	82	385	402	317	305	82	370	133	222	200	30	119	405	464	218	-	285.5	118	228	217	18.5	767	880	2xM50x1.5	6312 C3	6212 Z-C3
225S/M 2P	356	80	436	455	408	286/311	124	412	149	319/294	225	34	255	453	550	403	523	212	153	269	285	18.5	856	974	2xM50x1.5	6314 C3	6314 C3
225S/M *	356	80	436	455	408	286/311	124	412	149	319/294	225	34	255	453	550	403	523	212	153	269	285	18.5	886	1004	2xM50x1.5	6314 C3	6314 C3
250S/M 2P	406	100	506	486	408	311/349	146	467	168	354/316	250	43	290	493	583	449	566	214	153	269	285	24	965	1113	2xM63x1.5	6314 C3	6314 C3
250S/M *	406	100	506	486	408	311/349	146	467	168	354/316	250	43	290	493	583	449	566	214	153	269	285	24	965	1113	2xM63x1.5	6316 C3	6314 C3
280S/M 2P	457	100	557	599	442	368/419	151	517	190	385/334	280	42	383	580	696	556	667	266	153	314	312	24	1071	1223	2xM63x1.5	6314 C3	6314 C3
280S/M *	457	100	557	599	442	368/419	151	517	190	385/334	280	42	383	580	696	556	667	266	153	314	312	24	1101	1253	2xM63x1.5	6319 C3	6316 C3
315S/M 2P	508	120	630	657	525	406/457	184	621	216	494/443	315	48	386	644	768	615	744	264	180	372	382	28	1244	1396	2xM63x1.5	6314 C3	6314 C3
315S/M *	508	120	630	657	525	406/457	184	621	216	494/443	315	48	386	644	768	615	744	264	180	372	382	28	1274	1426	2xM63x1.5	6319 C3	6316 C3
315L 2P	508	120	630	657	589	508	219	752	216	497	315	48	336	644	774	575	760	284	215	404	438	28	1353	1505	2xM63x1.5	6314 C3	6314 C3
315L *	508	120	630	657	589	508	219	752	216	497	315	48	336	644	774	575	760	284	215	404	438	28	1383	1535	2xM63x1.5	6319 C3	6316 C3
355M/L 2P	610	140	750	736	609	560/630	230	760	254	483/413	355	50	461	723	898	700	850	340	225	404	436	28	1412	1577	2xM80x2.0	6316 C3	6314 C3
355M/L *	610	140	750	736	609	560/630	230	760	254	483/413	355	50	461	723	898	700	850	340	225	404	436	28	1482	1647	2xM80x2.0	6322 C3	6319 C3

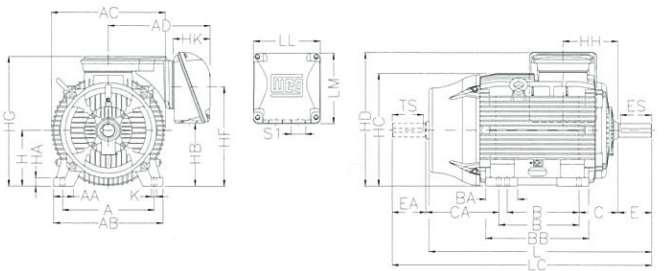
Frames 63 to 132



Frames 160 to 200

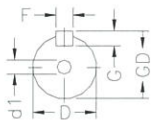


Frames 225 to 355

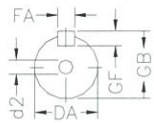


Shaft Dimensions

Drive End (D.E.)



Non Drive End (N.D.E.)



	Shaft Dimensions (mm)													
IEC Frame	D.E. shaft dimensions							N.D.E. shaft dimensions						
	Ø D	E	ES	F	G	GD	d1	Ø DA	EA	TS	FA	GB	GF	d2
63	11j6	23	14	4	8.5	4	EM4	9j6	20	12	3	7.2	3	EM3
71	14j6	30	18	5	11	5	DM5	11j6	23	14	4	8.5	4	EM4
80	19j6	40	28	6	15.5	6	DM6	14j6	30	18	5	11	5	DM4
90	24j6	50	36	8	20	7	DM8	16j6	40	28	5	13	5	DM6
100	28j6	60	45	8	24	7	DM10	22j6	50	36	6	18.5	6	DM8
112	28j6	60	45	8	24	7	DM10	24j6	50	36	8	20	7	DM8
132	38k6	80	63	10	33	8	DM12	28j6	60	45	8	24	7	DM10
160	42k6	110	80	12	37	8	DM16	42k6	110	80	12	37	8	DM16
180	48k6	110	80	14	42.5	9	DM16	48k6	110	80	14	42.5	9	DM16
200	55m6	110	80	16	49	10	DM20	48k6	110	80	14	42.5	9	DM20
225S/M 2P	55m6	110	100	16	49	10	DM20	55m6	110	100	16	49	10	DM20
225S/M *	60m6	140	125	18	53	11	DM20	60m6	140	125	18	53	11	DM20
250S/M 2P	60m6	140	125	18	53	11	DM20	60m6	140	125	18	53	11	DM20
250S/M *	70m6	140	125	20	62.5	12	DM20	60m6	140	125	18	53	11	DM20
280S/M 2P	65m6	140	125	18	58	11	DM20	60m6	140	125	18	53	11	DM20
280S/M *	80m6	170	160	22	71	14	DM20	65m6	140	125	18	58	11	DM20
315S/M 2P	65m6	140	125	18	58	11	DM20	60m6	140	125	18	53	11	DM20
315S/M *	85m6	170	160	22	76	14	DM20	65m6	140	125	18	58	11	DM20
315L 2P	65m6	140	125	18	58	11	DM20	60m6	140	125	18	53	11	DM20
315L *	85m6	170	160	22	76	14	DM20	65m6	140	125	18	53	11	DM20
355M/L 2P	75m6	140	125	20	67.5	12	DM20	60m6	140	125	18	53	11	DM20
355M/L *	100m6	210	200	28	90	16	DM24	80m6	170	160	22	71	14	DM20

Notes:

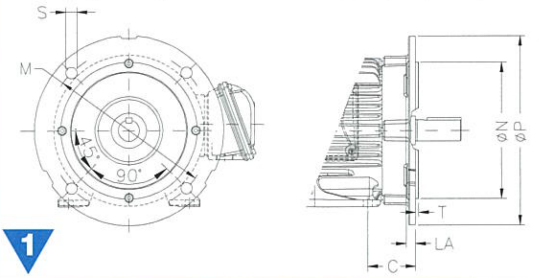
1. *W22 mining motors frames 225 to 355 4, 6 and 8 pole have NU roller bearings on D.E.*
2. *Auxiliary terminal box or heater terminal box dimensions are not shown.*

(*) Dimensions are applicable to 4, 6 and 8 pole motors.

W22 Mechanical Data

FF Flange (IEC) - frames 63 to 132

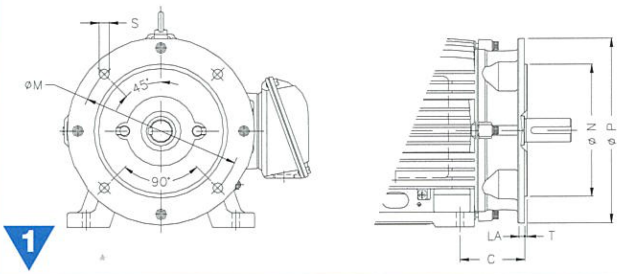
Mounting configurations B35, B5, V1, V3, V15, V36



1

FF Flange (IEC) - frames 160 to 200

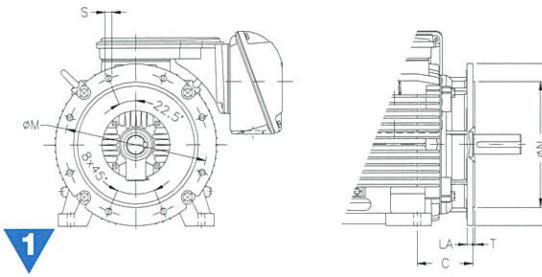
Mounting configurations B35, B5, V1, V3, V15, V36



1

FF Flange (IEC) - frames 225 to 355

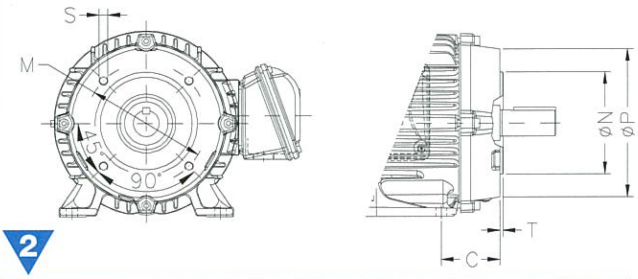
Mounting configurations B35, B5, V1, V3, V15, V36



1

C-DIN Flange (DIN 42677) (B14A) - frames 63 to 132

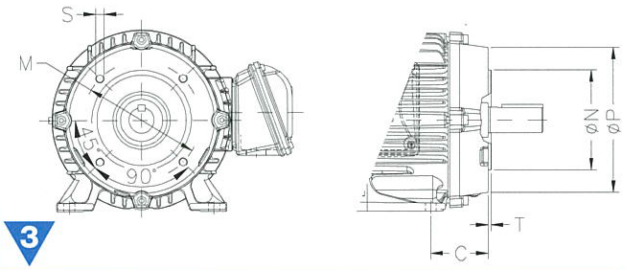
Mounting configurations B14, B34, V18, V19



2

C-DIN Flange "Higher" (DIN 42677) (B14B) - frames 63 to 112

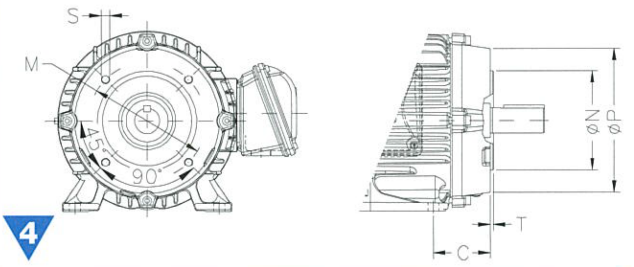
Mounting configurations B14, B34, V18, V19



3

FC Flange (NEMA) - frames 63 to 132

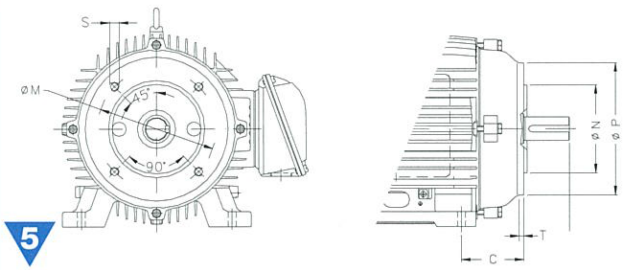
Mounting configurations B14, B34, V18, V19



4

FC Flange (NEMA) - frames 160 to 200

Mounting configurations B14, B34, V18, V19



5

IEC Frame	"C" DIN flange dimensions (mm)							No. of holes
	Flange	C	ØM	ØN	ØP	S	T	
2 C-DIN Flange (DIN 42677) (B14A)								
63	C-90	40	75	60	90	M5	2.5	4
71	C-105	45	85	70	105	M6	2.5	4
80	C-120	50	100	80	120	M6	3	4
90	C-140	56	115	95	140	M8	3	4
100	C-160	63	130	110	160	M8	3.5	4
112	C-160	70	130	110	160	M8	3.5	4
132	C-200	89	165	130	200	M10	3.5	4
3 C-DIN Flange "Higher" (DIN 42677) (B14B)								
63	FG 063CD120GG	40	100	80	120	M6	3	4
71	FG 071CD140GG	45	115	95	140	M8	3	4
80	FG 080CD160GG	50	130	110	160	M8	3.5	4
90	FG 090CD160GG	56	130	110	160	M8	3.5	4
100	FG 100CD200GG	63	165	139	200	M10	3.5	4
112	FG 112CD200GG	70	165	130	200	M10	3.5	4

IEC Frame	"FF" and "FC" flange dimensions (mm)							No. of holes
	Flange	C	ØM	ØN	ØP	S	T	
1 FF Flange (IEC)								
63	FF-115	40	115	95	140	10	3	4
71	FF-130	45	130	110	160	10	3.5	4
80	FF-165	50	165	130	200	12	3.5	4
90	FF-165	56	165	130	200	12	3.5	4
100	FF-215	63	215	180	250	15	4	4
112	FF-215	70	215	180	250	15	4	4
132	FF-265	89	265	230	300	15	4	4
160	FF-300	108	300	250	350	19	5	4
180	FF-300	121	300	250	350	19	5	4
200	FF-350	133	350	300	400	19	5	4
225	FF-400	149	400	350	450	19	5	8
250	FF-500	168	500	450	550	19	5	8
280	FF-500	190	500	450	550	19	5	8
315	FF-600	216	600	550	660	24	6	8
355	FF-740	254	740	680	800	24	6	8
4 FC Flange (NEMA)								
63	FC-95	40	95.2	76.2	143	UNC 1/4'x20	4	4
71	FC-95	45	95.2	76.2	143	UNC 1/4'x20	4	4
80	FC-95	50	95.2	76.2	143	UNC 1/4'x20	4	4
90	FC-149	56	149.2	114.3	165	UNC 3/8'x16	4	4
100	FC-149	63	149.2	114.3	165	UNC 3/8'x16	4	4
112	FC-184	70	184.2	215.9	225	UNC 1/2'x13	6.3	4
132	FC-184	89	184.2	215.9	225	UNC 1/2'x13	6.3	4
5 FC Flange (NEMA)								
160	FC-184	108	184.2	215.9	225	UNC 1/2'x13	6.3	4
180	FC-228	121	228.6	266.7	280	UNC 1/2'x13	6.3	4
200	FC-228	133	228.6	266.7	280	UNC 1/2'x13	6.3	4

*Note: *For certified dimensions, please contact your nearest WEG office or business partner.*

W22 E3 Motors

Standard Features

	W22 Industrial		W22 Mining
Supply up to 100 frame (inclusive):	**50Hz** Δ - 220-240V Y - 380-415V	**60Hz** Δ - 254-276V Y - 440-460V	**50Hz** Δ - 240V Y - 415V
Supply from 112 frame on:	**50Hz** Δ - 380-415V Y - 660-690V	**60Hz** Δ - 440-480V Y - 760-830V	**50Hz** Δ - 415V Y - 720V

• B3R mounting configuration • Thermistor type PTC (1 per phase) frames 160 to 200 • Thermistor type PTC (1 x alarm 155°C, 1 x trip 180°C) 225 frame and above • W22 mining has built-in heaters from 225 frame and auxiliary terminal box • Suitable for continuous duty (S1) • Sealed for life bearings from 63 up to 132 frame • Regreasing system frame 160 to 355 frame (inclusive) • Flange mounted motors with oil seal • WEG paint plan 203A colour RAL 6002 Green (W22 Industrial) and Munsell 2.5 YR 6/14 Orange (W22 Mining) • Manufactured and tested according to IEC and AS standards

Optional Features

• Angular contact bearings (112 frame and above) • Insulated bearing housing • Shaft earthing brush • Forced cooling kit • Double shaft end • Anti-condensation heaters • Cable glands • Oversized and undersized flanges • NEMA frames and flanges • Bearing thermistors or RTD's 160 frame and above • 1000V motors • Special paint plans for hazardous environments • Other colours • Special electrical and mechanical characteristics upon request

W22 Industrial Motor & W22 Mining Motor

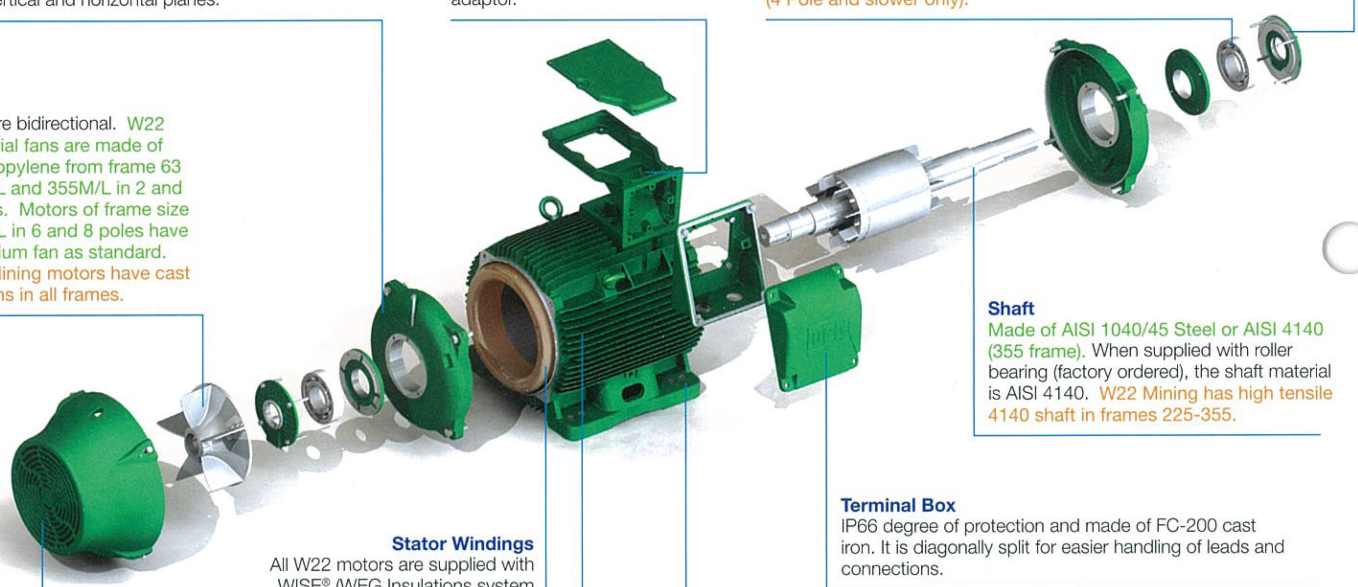
Construction details

Endshields
Designed with fins for better thermal heat dissipation and to ensure low bearing operating temperatures, resulting in extended lubrication intervals.
To facilitate condition monitoring, frame 225 to 355 have been designed with flat areas on both ends for better placement of accelerometers (standard on W22 Mining 160 frame and above). These are available in both vertical and horizontal planes.

Terminal Box Adaptor
Motors of frame 225S/M to 355M/L can easily have the terminal box position changed from left to right hand side and vice verse just by changing the position of the terminal box adaptor.

Bearings
Supplied with ball bearing.
When direct coupled to the load (without axial or radial thrusts), the L_{10} bearing life exceeds 100,000 hours. W22 Mining has roller bearings in frames 225 to 355. (4 Pole and slower only).

Sealing System
Motors of frame 63 to 200 are supplied with oil seal and motors of frame 225S/M to 355M/L are supplied with WSeal® seal. The patented WSeal® seal consists of V-ring with double lip enclosed by a metallic cap. W22 Mining has W3Seal® from 90 to 355 frame.



Fan
Fans are bidirectional. W22 Industrial fans are made of polypropylene from frame 63 to 315L and 355M/L in 2 and 4 poles. Motors of frame size 355M/L in 6 and 8 poles have aluminium fan as standard. W22 Mining motors have cast iron fans in all frames.

Shaft
Made of AISI 1040/45 Steel or AISI 4140 (355 frame). When supplied with roller bearing (factory ordered), the shaft material is AISI 4140. W22 Mining has high tensile 4140 shaft in frames 225-355.

Terminal Box
IP66 degree of protection and made of FC-200 cast iron. It is diagonally split for easier handling of leads and connections.

Stator Windings
All W22 motors are supplied with WISE® (WEG Insulations system evolution) which includes spike-resistant enameled wire 200° C rated.

Feet
The motor feet are completely solid for better mechanical strength, allowing easier alignment and installation.

Fan Cover
The fan cover has an aerodynamic design, which results in a significant reduction of noise level and optimized air flow for improved heat dissipation.

Material:	W22 Industrial	W22 Mining
	Steel (63-132)	Steel (63-132)
	Cast iron (160-355)	Cast iron (160-355)

Frame
Made of high grade cast iron material FC-200, the same density mandated by international standards for explosion proof motors.

PROUDLY REPRESENTED AND SUPPORTED BY:

MOTORDRIVES AUSTRALIA PTY LTD
www.motordrives.com.au