ACTOM

Product SPECIFICATION SHEET

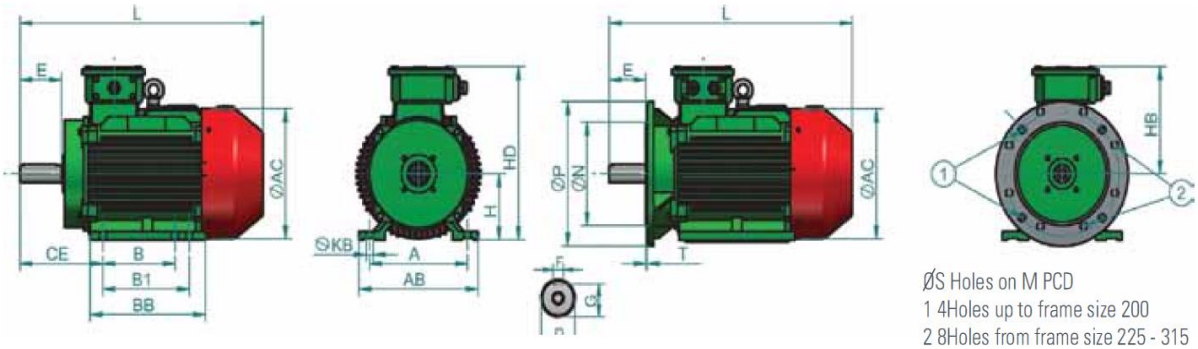
ACDC DYNAMICS
www.acdc.co.za

LS6 Series

IP66

Features

- **Low voltage TEFC frame cast iron motors**
- **Efficiency rating (IE3)**
- **0.37kW up to 450kW**
- **Class F VPI insulation**
- **Class 2, 4, 6 and 8 pole motors**
- **Max operating altitude 1000m.a.s.l.**
- **S1 Duty cycle**
- **Standards SANS 1804-1/2, IEC 60034-1**
- **B3 Foot mount and B35 Foot and Flange mounts available**



ØS Holes on M PCD
1 4Holes up to frame size 200
2 8Holes from frame size 225 - 315

Frame	Pole	A	AB	AC	B	B1	BB	CE	D	E	F	G	H	HB	HD	KB	L	M	N	P	S	T
71	2 - 8	112	150	136	90	—	125	75	14	30	5	11	71	124	195	7	270	130	110	160	10	3.5
80	2 - 8	125	165	156	100	—	130	90	19	40	6	15.5	80	137	217	10	300	165	130	200	12	3.5
90S	2 - 8	140	180	175	100	—	140	106	24	50	8	20	90	160	250	10	315	165	130	200	12	3.5
90L	2 - 8	140	180	175	125	—	165	106	24	50	8	20	90	160	250	10	340	165	130	200	12	3.5
100L	2 - 8	160	205	215	140	—	176	123	28	60	8	24	100	200	290	12	435	215	180	250	14.5	4
112M	2 - 8	190	230	220	140	—	180	130	28	60	8	24	112	188	300	12	470	215	180	250	14.5	4
132S	2 - 8	216	262	260	140	—	224	169	38	80	10	33	132	213	345	12	510	265	230	300	14.5	4
132M	4 - 8	216	262	260	178	—	262	169	38	80	10	33	132	213	345	12	550	265	230	300	14.5	4
160M	2 - 8	254	314	320	210	—	304	218	42	110	12	37	160	260	420	14.5	670	300	250	350	18.5	5
160L	2 - 8	254	314	320	254	—	334	218	42	110	12	37	160	260	420	14.5	700	300	250	350	18.5	5
180M	2 - 4	279	355	390	241	—	353	231	48	110	14	42.5	180	275	455	14.5	716	300	250	350	18.5	5
180L	4 - 8	279	355	390	279	—	400	231	48	110	14	42.5	180	275	455	14.5	764	300	250	350	18.5	5
200L	2 - 8	318	395	398	305	—	375	243	55	110	16	49	200	305	505	18.5	780	350	300	400	18.5	5
225S	4 & 8	356	435	470	286	—	370	289	60	140	18	53	225	370	580	18.5	820	400	350	450	18.5	5
225M	2	356	435	470	311	—	395	259	55	110	16	49	225	370	580	18.5	815	400	350	450	18.5	5
225M	4 - 8	356	435	470	311	—	395	289	60	140	18	53	225	370	580	18.5	845	400	350	450	18.5	5
250S/M	2	406	490	485	311	349	450	308	60	140	18	53	250	385	635	24	915	500	450	550	18.5	5
250S/M	4 - 8	406	490	485	311	349	450	308	70	140	20	62.5	250	385	635	24	915	500	450	550	18.5	5
280S/M	2	457	542	547	368	419	540	330	65	140	18	58	280	400	680	24	1020	500	450	550	18.5	5
280S/M	4 - 8	457	542	547	368	419	540	360	80	170	22	71	280	400	680	24	1065	500	450	550	18.5	5
315S	2	508	630	620	406	—	570	356	65	140	18	58	315	535	870	28	1200	600	550	660	24	6
315S	4 - 8	508	630	620	406	—	570	386	85	170	22	76	315	535	870	28	1235	600	550	660	24	6
315M	2	508	630	620	457	508	680	356	65	140	18	58	315	535	870	28	1310	600	550	660	24	6
315M	4 - 8	508	630	620	457	508	680	386	85	170	22	76	315	535	870	28	1345	600	550	660	24	6
315L	2	508	630	620	457	508	680	356	70	140	20	62.5	315	535	870	28	1310	600	550	660	24	6
315L	4 - 8	508	630	620	457	508	680	386	90	170	25	81	315	535	870	28	1345	600	550	660	24	6
315LX	2	508	628	630	508	—	680	356	70	140	20	62.5	315	600	915	28	1430	600	550	660	24	6
315LX	4 - 8	508	628	630	508	—	680	386	90	170	25	81	315	600	915	28	1460	600	550	660	24	6

Locked rotor ratios - Pu value
Power factor - Power factor under different conditions
Output - Rated output (kW)
Speed - Motor rated speed(r/min)

Frame - IEC frame size
FLT - Full load torque (Nm)
BDT - Break down torque
LRT - Locked rotor time (seconds)

Type - Range type
Efficiency - efficiency under different conditions

ACTOM

Product SPECIFICATION SHEET

ACDC DYNAMICS
www.acdc.co.za

LS6 Series

IP66

2 Pole

Output	Frame Size	Type	Speed	Pole	Current at 400 V	Current at 525 V	FLT	Efficiency			Power Factor			D.O.L		BDT	LRT (s)		Rotor Inertia	Motor Mass
kW		LS6	r/min		A	A	Nm	(%)	(%)	(%)				Starting	pu	p.u.	Cold	Hot	kg.m²	kg
								4/4	3/4	1/2	4/4	3/4	1/2	Torque	Current					
0.75	80	080	2840	2	1.63	1.24	2.5	81.2	81.8	80.1	0.82	0.80	0.72	2.3	7.2	2.3	17	6	0.00100	16
1.1	80	083	2840	2	2.30	1.75	3.7	83.2	83.6	81.4	0.83	0.81	0.73	2.2	7.5	2.3	13	4	0.0013	17.5
1.5	90S	090	2895	2	3.04	2.32	5.0	84.7	85.1	83.2	0.84	0.80	0.73	2.2	7.6	2.3	15	8	0.0020	19.5
2.2	90L	093	2895	2	4.32	3.29	7.4	86.5	86.6	86.0	0.85	0.81	0.74	2.2	7.6	2.3	12	6	0.0024	23.5
3	100L	101	2880	2	5.69	4.33	9.9	87.5	87.5	86.0	0.87	0.83	0.76	2.2	8.1	2.3	14	5	0.0042	38
4	112M	112	2890	2	7.49	5.71	13.3	88.6	88.6	88.1	0.87	0.84	0.80	2.2	8.1	2.3	16	5	0.0074	49
5.5	132S	130	2920	2	10.1	7.68	18.1	89.5	89.5	87.0	0.88	0.85	0.81	2.2	8.0	2.3	25	11	0.0132	63
7.5	132S	131	2925	2	13.6	10.4	24.7	90.5	90.0	89.0	0.88	0.85	0.81	2.2	8.1	2.3	17	6	0.0164	70
9.2	160M	135	2925	2	16.7	12.7	35.8	90.4	90.0	90.2	0.88	0.85	0.81	2.2	8.1	2.3	17	6	0.0174	92
11	160M	163	2950	2	19.5	14.8	35.8	91.6	91.6	90.3	0.89	0.87	0.83	2.1	7.9	2.3	25	8	0.0489	121
15	160M	164	2950	2	26.4	20.1	48.9	92.2	92.0	91.0	0.89	0.87	0.83	2.1	7.9	2.3	20	9	0.0559	132
18.5	160L	166	2950	2	32.3	24.6	60.3	92.8	92.4	91.6	0.89	0.87	0.83	2.1	7.9	2.3	18	6	0.0648	149
22	180M	183	2955	2	38.4	29.2	71.4	93.0	93.0	91.8	0.89	0.87	0.81	2.0	8.2	2.3	10	5	0.0920	191
30	200L	206	2965	2	52.0	39.6	97	93.6	93.3	91.9	0.89	0.87	0.79	2.0	7.6	2.3	22	9	0.195	290
37	200L	207	2965	2	63.9	48.7	120	93.9	93.5	92.2	0.89	0.87	0.80	2.0	7.6	2.3	18	9	0.203	315
45	225M	223	2970	2	77.3	58.9	145	94.4	94.6	94.1	0.89	0.86	0.81	2.0	8.1	2.3	25	11	0.302	340
55	250S	253	2975	2	93.4	71.2	177	94.4	94.5	93.7	0.90	0.87	0.79	2.0	7.7	2.3	19	9	0.42	386
75	250M	255	2980	2	127	96.5	241	95.0	94.9	94.4	0.90	0.88	0.80	1.8	7.7	2.3	22	10	0.585	406
90	280S	283	2970	2	153	117	289	95.3	95.0	94.2	0.89	0.87	0.79	1.8	7.5	2.3	25	13	1.04	560
110	280M	285	2970	2	187	142	354	95.5	95.2	94.4	0.89	0.87	0.79	1.8	7.5	2.3	25	12	1.25	640
132	315S	310	2975	2	220	169	423	95.7	95.3	94.2	0.90	0.89	0.84	1.8	7.7	2.2	25	11	1.5	1035
160	315M	311	2975	2	270	205	513	95.8	95.4	94.4	0.90	0.89	0.84	1.8	7.7	2.2	24	13	1.67	1130
185	315L	312	2975	2	310	235	593	95.9	95.4	94.4	0.90	0.89	0.84	1.8	7.7	2.2	25	12	1.78	1180
200	315L	313	2975	2	335	255	641	96.0	95.9	95.0	0.90	0.89	0.84	1.8	7.7	2.2	25	12	1.88	1220
225	315LX	314	2975	2	380	290	722	96.0	96.0	95.0	0.90	0.90	0.87	1.6	7.2	2.2	25	12	3.2	1563
250	315LX	315	2975	2	420	320	802	96.0	96.0	95.0	0.90	0.90	0.87	1.6	7.2	2.2	25	12	3.5	1568

4 Pole

Output	Frame Size	Type	Speed	Pole	Current at 400 V	Current at 525 V	FLT	Efficiency			Power Factor			D.O.L		BDT	LRT (s)		Rotor Inertia	Motor Mass
kW		LS6	r/min		A	A	Nm	(%)	(%)	(%)				Starting	pu	p.u.	Cold	Hot	kg.m²	kg
								4/4	3/4	1/2	4/4	3/4	1/2	Torque	Current					
0.37	71	073	1330	4	0.95	0.72	2.7	77.4	76.5	74.0	0.73	0.71	0.63	2.1	6.0	2.2	26	12	0.0010	16
0.55	80	080	1390	4	1.31	1.00	3.8	81.0	79.5	78.0	0.75	0.72	0.65	2.3	7.3	2.3	24	8	0.0016	17
0.75	80	083	1390	4	1.75	1.33	5.2	82.6	82.2	80.5	0.75	0.72	0.65	2.3	7.3	2.3	23	8	0.0020	18.5
1.1	90S	090	1440	4	2.47	1.88	7.3	84.7	84.7	83.1	0.76	0.72	0.65	2.3	6.8	2.3	18	10	0.0030	24
1.5	90L	093	1440	4	3.28	2.50	9.9	85.7	86.1	84.3	0.77	0.73	0.66	2.3	7.0	2.3	13	7	0.0040	29.5
2.2	100L	101	1440	4	4.50	3.43	14.6	87.2	87.0	86.5	0.81	0.78	0.71	2.3	7.5	2.3	16	9	0.0077	39.5
3	100L	102	1440	4	5.99	4.57	19.9	88.1	88.1	87.1	0.82	0.78	0.72	2.3	7.5	2.3	18	11	0.0093	43.5
4	112M	112	1440	4	7.92	6.03	26.5	88.9	89.0	88.5	0.82	0.77	0.72	2.3	7.5	2.3	18	6	0.0171	52
5.5	132S	130	1460	4	10.8	8.21	36.0	89.9	89.8	88.9	0.82	0.78	0.74	2.3	7.5	2.3	25	10	0.0339	66
7.5	132M	133	1465	4	14.6	11.1	48.9	90.7	90.9	90.3	0.82	0.78	0.74	2.3	7.5	2.3	21	9	0.0448	78
9.2	132M	135	1465	4	17.9	13.6	60.0	90.7	90.9	90.3	0.82	0.78	0.74	2.3	7.5	2.3	21	9	0.0556	95
11	160M	163	1475	4	20.4	15.5	71.2	91.7	91.8	90.9	0.85	0.81	0.72	2.0	7.5	2.3	19	6	0.0900	122
15	160L	166	1475	4	27.2	20.8	97.1	92.4	92.6	92.0	0.86	0.82	0.73	2.0	7.5	2.3	17	6	0.0180	140
18.5	180M	183	1470	4	33.4	25.4	120	93.0	92.8	91.7	0.86	0.84	0.78	2.0	7.8	2.1	19	7	0.0148	188
22	180L	186	1470	4	39.6	30.2	143	93.3	93.0	92.0	0.86	0.84	0.78	2.0	7.8	2.1	18	6	0.0182	193
30	200L	207	1475	4	53.7	40.9	194	93.8	93.7	92.7	0.86	0.82	0.77	2.0	7.3	2.3	25	11	0.321	295
37	225S	220	1480	4	65.9	50.2	239	94.2	94.0	93.4	0.86	0.82	0.78	2.2	7.9	2.3	18	9	0.473	308
45	225M	223	1480	4	79.9	60.9	290	94.5	94.3	93.9	0.86	0.82	0.78	2.2	7.9	2.3	25	12	0.554	337
55	250S	253	1490	4	97.4	74.2	352	94.8	94.5	93.7	0.86	0.84	0.76	2.2	7.4	2.3	21	10	0.751	410
75	250M	255	1495	4	132	101	479	95.2	94.8	94.1	0.86	0.84	0.76	2.0	7.4	2.3	22	10	0.91	430
90	280S	283	1480	4	155	118	581	95.5	95.3	94.4	0.88	0.85	0.78	2.0	7.5	2.3	26	12	2.32	652
110	280M	285	1480	4	189	144	710	95.7	95.5	94.5	0.88	0.85	0.78	2.0	7.5	2.2	25	12	2.83	720
132	315S	310	1480	4	225	170	852	95.9	95.7	94.9	0.89	0.87	0.83	2.1	7.6	2.2	25	13	2.58	1055
160	315M	311	1480	4	270	205	1032	96.0	95.8	95.1	0.89	0.87	0.83	2.1	7.6	2.2	24	13	2.96	1155
185	315L	312	1480	4	315	240	1194	96.0	95.9	95.4	0.89	0.87	0.83	2.1	7.6	2.2	24	12	3.21	1200
200	315L	313	1480	4	335	255	1290	96.0	95.9	95.4	0.90	0.87	0.83	2.1	7.6	2.2	25	13	3.46	1230
225	315LX	314	1485	4	385	295	1447	96.2	96.2	95.0	0.88	0.87	0.85	2	7.1	2.2	24	11	6.4	1597
250	315LX	315	1485	4	430	325	1608	96.2	96.2	95.0	0.88	0.87	0.85	2	7.1	2.2	25	11	6.9	1601

Locked rotor ratios - Pu value
Power factor - Power factor under different conditions
Output - Rated output (kW)
Speed - Motor rated speed(r/min)

Frame - IEC frame size
FLT - Full load torque (Nm)
BDT - Break down torque
LRT - Locked rotor time (seconds)

Type - Range type
Efficiency - efficiency under different conditions

ACTOM

Product SPECIFICATION SHEET

ACDC DYNAMICS
www.acdc.co.za

LS6 Series

IP66

6 Pole

Output	Frame Size	Type	Speed	Pole	Current at 400 V	Current at 525 V	FLT	Efficiency			Power Factor			D.O.L		BDT	LRT (s)		Rotor Inertia	Motor Mass
kW		LS6	r/min		A	A	Nm	(%)	(%)	(%)				Starting	pu	p.u.	Cold	Hot	kg.m²	kg
								4/4	3/4	1/2	4/4	3/4	1/2	Torque	Current					
0.37	80	080	885	6	1.04	0.79	4.0	73.7	70.0	70.0	0.70	0.67	0.60	2.0	6.9	2.0	24	10	0.0016	15
0.55	80	083	885	6	1.42	1.09	5.9	77.4	75.5	72.0	0.72	0.69	0.62	2.0	6.9	2.1	24	11	0.0020	16
0.75	90S	090	935	6	1.85	1.41	7.7	80.0	80.0	78.0	0.73	0.69	0.62	2.0	6.0	2.1	25	12	0.0040	23
1.1	90L	093	935	6	2.67	2.03	11.2	81.5	81.6	81.0	0.73	0.69	0.62	2.0	6.0	2.1	25	13	0.0050	28.5
1.5	100L	102	950	6	3.54	2.70	15.1	82.7	82.7	81.7	0.74	0.68	0.60	2.0	5.9	2.1	20	7	0.0107	37.5
2.2	112M	112	940	6	5.14	3.92	22.3	84.6	84.6	83.6	0.73	0.66	0.58	2.0	6.9	2.1	25	9	0.0192	48
3	132S	130	970	6	6.81	5.19	29.5	85.9	85.9	85.1	0.74	0.67	0.60	2.1	6.9	2.1	23	9	0.0358	65
4	132M	133	970	6	8.98	6.84	39.4	86.9	86.9	86.1	0.74	0.67	0.60	2.1	6.9	2.1	24	8	0.0478	73
5.5	132M	134	970	6	12.0	9.14	54.1	88.2	88.2	87.0	0.75	0.68	0.61	2.1	6.9	2.1	22	8	0.0631	82
7.5	160M	163	980	6	15.3	11.7	73.1	89.4	89.4	88.5	0.79	0.74	0.62	2.1	7.0	2.3	24	10	0.1140	119
11	160L	166	980	6	21.9	16.7	107	90.6	90.4	89.4	0.80	0.75	0.63	2.1	7.0	2.3	22	9	0.1530	139
15	180L	186	970	6	29.2	22.2	148	91.6	91.6	91.3	0.81	0.79	0.73	2.0	7.3	2.1	16	8	0.2180	178
18.5	200L	206	980	6	35.9	27.4	180	91.8	91.7	91.0	0.81	0.78	0.72	2.0	7.3	2.1	17	8	0.357	265
22	200L	207	980	6	42.4	32.3	214	92.5	92.0	91.5	0.81	0.78	0.72	2.0	7.4	2.1	24	7	0.423	280
30	225M	223	980	6	57.4	43.7	292	93.2	93.4	92.9	0.81	0.76	0.71	2.1	7.5	2.1	16	8	0.533	315
37	250S	253	990	6	67.9	51.8	357	93.6	93.4	91.7	0.84	0.82	0.73	2.0	7.1	2.1	16	8	0.877	369
45	250M	255	990	6	81.4	62.0	434	93.9	93.8	92.2	0.85	0.82	0.75	2.0	7.3	2.0	15	8	1.07	390
55	280S	283	980	6	97.9	74.6	536	94.3	94.2	93.3	0.86	0.83	0.76	2.0	7.3	2.1	15	10	2.12	545
75	280M	285	980	6	136	104	731	94.8	94.6	93.8	0.84	0.81	0.74	2.0	7.0	2.2	15	8	2.83	635
90	315S	310	985	6	161	122	873	95.2	95.2	94.3	0.85	0.82	0.75	2.0	7.3	2.1	25	11	4.28	970
110	315M	311	985	6	196	149	1066	95.4	95.3	94.5	0.85	0.83	0.76	2.0	7.3	2.1	24	11	5.47	1155
132	315L	312	985	6	235	178	1280	95.7	95.7	94.5	0.85	0.83	0.76	2.0	7.3	2.1	22	10	6.59	1260
160	315L	313	985	6	280	215	1551	95.8	95.6	94.4	0.86	0.83	0.76	2.0	7.3	2.1	21	9	7.54	1330
185	315LX	314	983	6	330	250	1797	95.9	95.9	94.5	0.85	0.83	0.82	2	6.8	2.0	24	11	9.5	1612
200	315LX	315	985	6	355	270	1939	96.0	96.0	95.0	0.85	0.83	0.82	2	6.8	2.0	22	10	10.1	1619

8 Pole

Output	Frame Size	Type	Speed	Pole	Current at 400 V	Current at 525 V	FLT	Efficiency			Power Factor			D.O.L		BDT	LRT (s)		Rotor Inertia	Motor Mass
kW		LS6	r/min		A	A	Nm	(%)	(%)	(%)				Starting	pu	p.u.	Cold	Hot	kg.m²	kg
								4/4	3/4	1/2	4/4	3/4	1/2	Torque	Current					
0.37	90S	090	670	8	1.26	0.96	5.3	69.5	67	65	0.61	0.59	0.53	1.8	4.0	2.3	25	15	0.0040	24
0.55	90L	093	670	8	1.78	1.35	7.8	73.2	70.5	70	0.61	0.59	0.53	1.8	4.0	2.2	25	15	0.0050	26
0.75	100L	101	680	8	2.13	1.62	10.5	75.8	75.6	74.0	0.67	0.63	0.59	1.8	4.0	2.2	18	13	0.0063	33
1.1	100L	102	680	8	2.95	2.25	15.4	77.9	76.5	75.0	0.69	0.64	0.6	1.8	5.0	2.2	22	12	0.0097	38
1.5	112M	112	700	8	4.04	3.08	20.5	79.9	79.5	79.0	0.67	0.59	0.51	1.8	5.5	1.8	25	11	0.0192	45
2.2	132S	130	710	8	5.61	4.27	29.6	82.1	82.0	81.6	0.69	0.60	0.52	1.8	6.5	1.8	24	11	0.0393	68
3	132M	133	710	8	7.40	5.64	40.3	83.6	83.5	82.9	0.70	0.61	0.53	1.8	6.5	1.8	25	10	0.0495	70
4	160M	163	730	8	9.21	7.02	52.3	85.9	85.8	84.7	0.73	0.65	0.52	2.0	6.9	2.2	24	11	0.0771	104
5.5	160M	164	730	8	12.3	9.37	71.9	87.2	87.1	85.8	0.74	0.66	0.53	2.0	6.9	2.2	25	11	0.0989	114
7.5	160L	166	730	8	16.6	12.6	98.1	88.3	88.2	86.9	0.74	0.66	0.53	2.0	6.9	2.2	15	10	0.1310	132
11	180L	186	730	8	23.3	17.8	144	89.5	89.2	88	0.76	0.74	0.68	2.0	6.6	2.2	21	11	0.0218	170
15	200L	207	730	8	32.1	24.5	196	89.9	89.8	88.5	0.75	0.72	0.65	2.0	6.8	2.0	21	10	0.491	260
18.5	225S	220	730	8	38.9	29.6	242	90.4	90.4	89.9	0.76	0.71	0.64	1.9	6.6	2.2	25	13	0.481	268
22	225M	223	730	8	46.0	35.0	288	90.9	90.9	90.4	0.76	0.71	0.65	1.9	6.6	2.2	25	12	0.531	288
30	250S	253	735	8	59.7	45.5	390	91.8	91.7	91.1	0.79	0.77	0.69	1.9	6.8	2.0	25	12	0.914	372
37	250M	255	740	8	73.3	55.9	477	92.2	92.2	91.6	0.79	0.77	0.70	1.9	6.9	2.0	25	13	1.12	395
45	280S	283	735	8	89.0	67.8	585	92.4	92.5	91.6	0.79	0.75	0.69	1.9	6.8	2.0	24	11	2.22	555
55	280M	285	735	8	106	80.6	715	92.7	92.8	91.9	0.81	0.76	0.71	1.8	6.8	2.0	24	11	2.68	645
75	315S	310	735	8	143	109	974	93.3	93.4	92.4	0.81	0.78	0.67	1.8	6.6	2.2	21	9	5.18	1100
90	315M	311	735	8	169	129	1169	93.7	93.7	92.7	0.82	0.78	0.67	1.8	6.6	2.2	21	10	6.16	1160
110	315L	312	735	8	215	164	1429	90.0	93.8	93.1	0.82	0.78	0.67	1.8	6.6	2.2	22	10	7.22	1230
132	315L	313	735	8	245	188	1715	94.3	94.2	93.5	0.82	0.78	0.67	1.8	6.6	2.2	22	10	8.21	1280
132	315LX	315	740	8	295	225	2065	94.3	94.0	92.9	0.83	0.8	0.72	1.6	6.5	2.0	23	10	12.2	1620

Locked rotor ratios - Pu value
Power factor - Power factor under different conditions
Output - Rated output (kW)
Speed - Motor rated speed(r/min)

Frame - IEC frame size
FLT - Full load torque (Nm)
BDT - Break down torque
LRT - Locked rotor time (seconds)

Type - Range type
Efficiency - efficiency under different conditions

BRANCH CONTACT DETAILS

Johannesburg	010 202 3300
Germiston	011 418 9600
Cape Town	021 510 0710
Pinetown	031 700 4215
Riverhorse	031 492 4800

NATIONAL CALL CENTRE
Sales 010 202 3400
Technical 010 202 3500
www.acdc.co.za