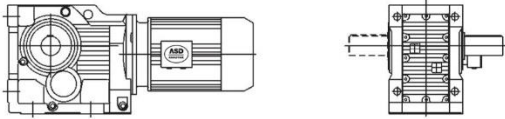
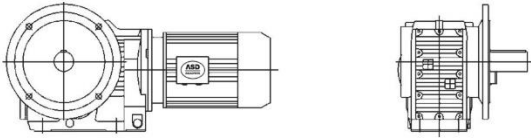


Output shafts of K series geared motors are vertical to input shafts. Each units consist of two stages helical gears and one stage bevel gears.

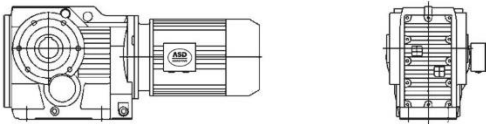
1、Type **K**: Foot mounted Solid output shaft.



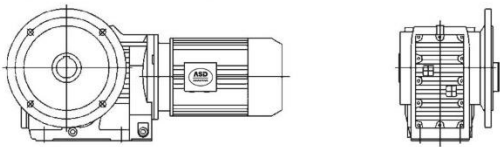
2、Type **KF**: B5 flange mounted Solid output shaft.



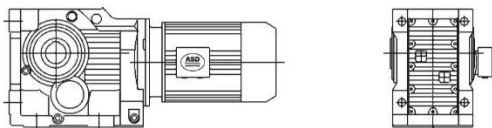
3、Type **KA**: Shaft mounted. Hollow output shaft.



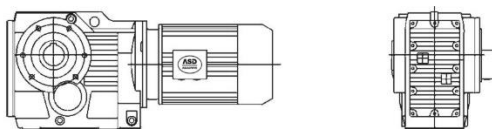
4、Type **KAF**: B5 flange mounted. Hollow output shaft.



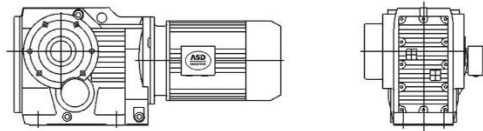
5、Type **KAB/KHB** : Housings of type K are used. Hollow output shaft.



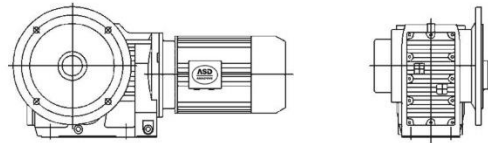
6、Type **KAZ**: B14 flange mounted version with hollow shaft.



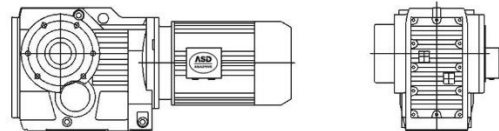
7、Type **KH**: Hollow shaft and shrink disk.



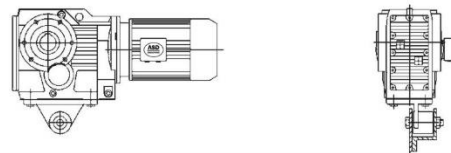
8、Type **KHF**: B5 flange-mounted version with hollow shaft and shrink disk.



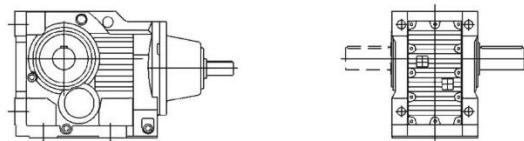
9、Type **KHZ**: B14 flange-mounted version with hollow shaft and shrink disk.



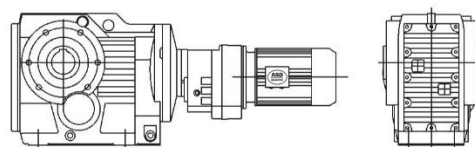
10、Type **KAT/GKHT**: As altered type from type KA/KH, this type is added torque arm and other accessories. Basically, accessories except spring washer do not belong to our standard supply.



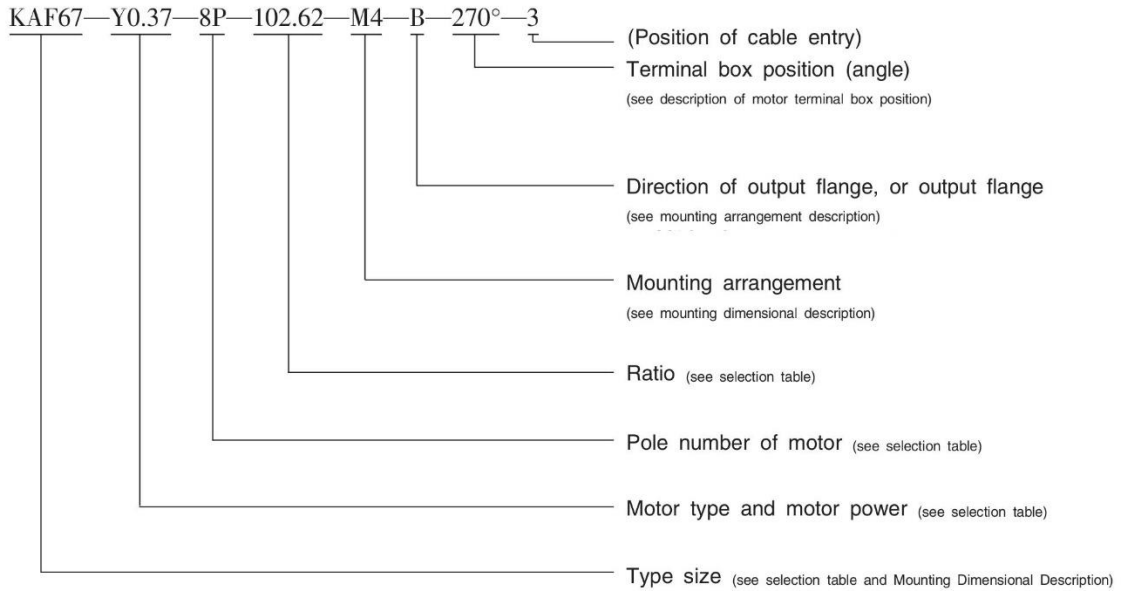
11、Type **K..SZ..AD..**: Input shaft types.



12、Type **K..R**: Combined types of type K and type R.



Type Expression of K Series



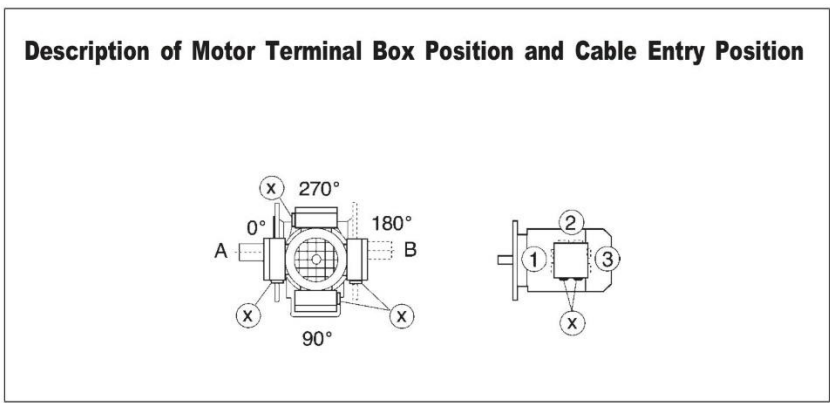
Note: 1、Please make a note, if it needs connecting flange.

2、Contents of motors for input shaft types are not listed.

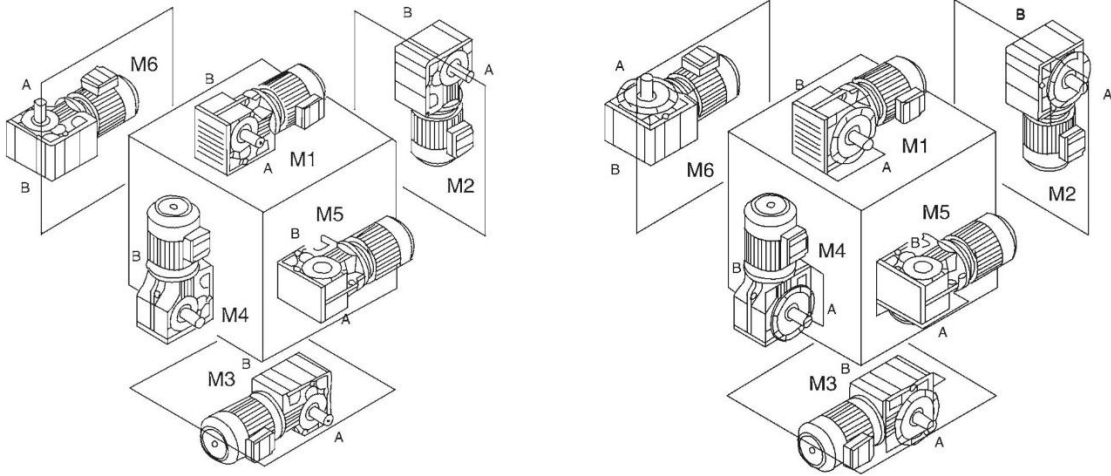
3、Degree=0°, if terminal box position is not mentioned. It is X, if cable entry position is not mentioned.

4、If specific rotation directions of output shaft or/and input shaft are specially requested, please contact our technology department, and make detailed description while placing order.

Description of Motor Terminal Box Position and Cable Entry Position



Mounting Arrangements Description



Different kinds of mounting arrangements are defined as following:

- M1—horizontally mounted motor, unit base is at bottom.
- M2—motor is vertically mounted downwards.
- M3—horizontally mounted motor, unit base is top.
- M4—motor is vertically mounted upwards.
- M5—horizontally mounted motor, if placed on M1 position, left side of unit turns to bottom (view point: towards from motor side).
- M6—horizontally mounted motor, if placed on M1 position, left side of unit turns to top (view point: towards from motor side).

(Gear unit weight)

Size	K37	K47	K57	K67	K77	K87	K97	K107	K127	K157	K167	K187
Weight	14	21	28	32	54	93	153	270	403	630	1122	1630

(Note: The weights mean values, without the motor, only for reference.)

(Description of selection table)

Constant power

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_b	Type size	Pole
↓	↓	↓	↓	↓		
Output speed		Gear unit ratio		Service factor		
	↓		↓			
	Output torque		Permissible radial load			

Constant torque

M_{amax} [Nm]	n_a [r/min]	i	F_{ra} [kN]	Type size	P [kW]/4P
↓	↓	↓	↓		↓
Max. output torque		Gear unit ratio			Motor power
	↓		↓		
	Output speed		Permissible radial load		

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	
0.12kW							0.12kW							
0.08	13734	17396	76	1.00			1.42	730	925	19	2.25	K77R37		
0.08	12521	15859	76	1.10			1.60	645	817	19	2.55	KF77R37	4P	
0.09	11719	14843	77	1.20	K127R77		1.85	561	710	19	2.95	KA77R37		
0.11	9736	12331	77	1.40	KF127R77		2.10	492	623	19	3.35	KAF77R37		
0.12	8542	10819	78	1.60	KA127R77	4P	0.97	1067	1351	8.8	0.80			
0.13	7738	9801	78	1.80	KAF127R77		1.1	925	1171	10	0.95			
0.16	6605	8366	78	2.10			1.3	816	1034	11	1.05			
0.18	5786	7329	78	2.40			1.5	713	903	11	1.20			
0.09	11299	14311	62	0.80			1.7	626	793	12	1.40			
0.11	9641	12211	62	0.90			1.9	550	697	12	1.60	K67R37	4P	
0.12	8430	10678	62	1.00			2.1	484	613	12	1.80	KF67R37		
0.14	7519	9524	62	1.15	K107R77		2.4	428	542	12	2.05	KA67R37		
0.16	6575	8328	62	1.30	KF107R77	4P	2.8	372	471	12	2.35	KAF67R37		
0.18	5739	7269	62	1.45	KA107R77		3.1	332	420	12	2.60			
0.21	4882	6184	62	1.75	KAF107R77		3.6	285	361	12	3.05			
0.23	4470	5662	62	1.90			4.1	255	323	12	3.40			
0.25	4057	5138	62	2.10			4.7	220	279	12	3.95			
0.30	3442	4360	62	2.50			5.3	194	246	12	4.50			
0.16	6360	8055	38	0.80			6.0	171	217	12	5.10			
0.19	5502	6969	38	0.85			1.4	715	906	7.4	0.90			
0.22	4758	6027	38	0.95	K97R57		1.6	636	806	7.8	1.00			
0.24	4257	5392	38	1.05	KF97R57		1.9	552	699	8.3	1.15			
0.28	3686	4669	38	1.25	KA97R57	4P	2.1	486	615	8.5	1.30			
0.32	3222	4081	38	1.40	KAF97R57		2.4	429	544	8.7	1.50			
0.37	2829	3583	38	1.60			2.8	373	473	8.8	1.70	K57R37	4P	
0.42	2454	3108	38	1.85			3.1	332	421	8.9	1.90	KF57R37		
0.48	2176	2756	38	2.10			3.6	286	362	9.0	2.25	KA57R37		
0.54	1910	2419	38	2.50			4.1	252	319	9.1	2.55	KAF57R37		
0.62	1676	2123	38	2.70	K97R57		4.7	221	280	9.2	2.90			
0.71	1465	1856	38	3.10	KF97R57	4P	5.3	194	246	9.3	3.30			
0.81	1283	1625	38	3.55	KA97R57		6.1	170	215	9.3	3.75			
0.92	1129	1430	38	4.05	KAF97R57		6.8	152	192	9.4	4.20			
1.04	996	1261	38	4.60			2.1	505	639	2.4	0.85			
1.19	870	1102	38	5.25			2.4	436	552	6.0	0.95	K47R37		4P
0.25	4136	5239	25	0.80			2.6	391	495	6.6	1.10	KF47R37		
0.29	3602	4562	26	0.80	K87R57		3.1	336	426	6.9	1.25	KA47R37		
0.32	3187	4037	26	0.90	KF87R57	4P	3.5	296	375	7.2	1.45	KAF47R37		
0.36	2849	3609	26	1.00	KA87R57		4.0	257	326	7.3	1.65			
0.42	2452	3106	27	1.15	KAF87R57		4.5	228	289	7.4	1.85			
0.48	2154	2728	27	1.35			3.8	273	346	4.6	0.80			
0.55	1872	2371	27	1.55			4.3	240	304	5.4	0.90			
0.63	1647	2086	27	1.75			4.9	211	267	5.5	1.00	K37R17	4P	
0.71	1464	1854	27	1.95			5.6	185	234	5.8	1.15	KF37R17		
0.79	1309	1658	27	2.20	K87R57		6.4	162	205	5.9	1.30	KA37R17		
0.93	1117	1415	27	2.55	KF87R57	4P	7.2	143	181	6.0	1.50	KAF37R17		
1.07	970	1229	27	2.95	KA87R57		8.2	126	160	6.1	1.70			
1.22	851	1078	27	3.35	KAF87R57		9.6	107	136	6.2	2.00			
1.38	751	951	28	3.80								K67		6P*
1.57	661	837	28	4.35			5.9	185	144.79	12	4.40	KF67		
1.80	573	726	28	5.00							KA67			
0.48	2148	2721	13	0.80	K77R37	4P					KAF67			
0.55	1874	2374	15	0.90	KF77R37		5.9	186	145.15	9.2	3.20			
0.64	1621	2053	16	1.00	KA77R37		6.9	159	123.85	9.3	3.80	K57	6P*	
0.74	1401	1775	17	1.15	KAF77R37		7.8	139	108.29	9.3	4.30	KF57		
0.86	1197	1516	17	1.35	K77R37	4P	8.3	132	102.88	9.3	4.60	KA57		
0.94	1097	1390	18	1.50	KF77R37		9.4	116	90.26	9.4	5.20	KAF57		
1.07	963	1220	18	1.70	KA77R37		11	98	76.56	9.4	6.20			
1.24	833	1055	18	1.95	KAF77R37									

*0.12kW motor of 6 poles needs to be specially requested and then manufactured.

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
0.12kW							0.18kW						
9	121	145.15	9.4	5.00			0.28	5529	4669	38	0.85		
11	103	123.85	9.4	5.80	K57	4P	0.32	4833	4081	38	0.95	K97R57	4P
12	90	108.29	9.5	6.70	KF57		0.37	4243	3583	38	1.10	KF97R57	
13	86	102.88	9.5	7.00	KA57		0.42	3681	3108	38	1.25	KA97R57	
15	75	90.26	9.5	8.00	KAF57		0.48	3264	2756	38	1.40	KAF97R57	
6.4	169	131.87	7.5	2.40	K47		0.54	2865	2419	38	1.60		
7.0	156	121.48	7.6	2.60	KF47	6P*	0.62	2514	2123	38	1.80		
8.1	134	104.37	7.7	3.00	KA47		0.71	2198	1856	38	2.10		
					KAF47		0.81	1924	1625	38	2.35		
9.9	110	131.87	7.7	3.70	K47	4P	0.92	1694	1430	38	2.70	K97R57	4P
					KF47		1.04	1493	1261	38	3.05	KF97R57	
11	101	121.48	7.8	4.00	KA47		1.19	1305	1102	38	3.50	KA97R57	
					KAF47							KAF97R57	
8.0	136	106.38	5.9	1.50	K37	6P*	1.37	1133	957	38	4.05		
8.7	125	97.81	6.0	1.60	KF37		1.53	1013	855	38	4.50		
10	107	83.69	6.1	1.90	KA37		1.76	880	743	38	5.20		
12	93	72.54	6.2	2.20	KAF37		2.01	771	651	38	5.90		
12	88	106.38	6.2	2.30				0.42	3678	3106	25	0.80	K87R57
13	81	97.81	6.2	2.50			0.48	3231	2728	26	0.90	KF87R57	
16	70	83.69	6.2	2.90			0.55	2808	2371	26	1.00	KA87R57	
18	60	72.54	6.3	3.30								KAF87R57	
19	56	67.80	6.3	3.50			0.63	2470	2086	26	1.15		
22	49	58.61	6.1	4.10			0.71	2196	1854	27	1.30		
26	41	49.79	5.8	4.80			0.79	1964	1658	27	1.45		
29	37	44.46	5.6	5.40			0.93	1676	1415	27	1.70	K87R57	4P
35	32	37.97	5.4	6.30	K37	1.1	1455	1229	27	1.95	KF87R57		
37	30	35.57	5.3	6.80	KF37	1.2	1277	1078	27	2.25	KA87R57		
44	25	29.96	5.0	8.00	KA37	1.4	1126	951	27	2.55	KAF87R57		
45	24	28.83	4.9	8.40	KAF37	1.6	991	837	27	2.90			
53	21	24.88	4.7	9.60			1.8	860	726	27	3.35		
56	19	23.36	4.6	10			0.86	1795	1516	14	0.90		
65	17	20.19	4.4	11			0.94	1646	1390	15	1.00		
76	14	17.15	4.2	13			1.1	1445	1220	16	1.15		
86	13	15.32	4.1	14			1.2	1248	1054	17	1.30		
100	11	13.08	3.9	15			1.4	1095	925	17	1.50	K77R37	4P
108	10	12.14	3.8	16			1.6	968	817	18	1.70	KF77R37	
							1.8	841	710	18	1.95	KA77R37	
							2.1	738	623	18	2.25	KAF77R37	
							2.4	655	553	19	2.50		
0.18kW							2.7	574	485	19	2.85		
0.09	17578	14843	70	0.80			3.1	507	428	19	3.25		
0.11	14603	12331	75	0.95			3.6	436	368	19	3.75		
0.12	12813	10819	76	1.10			1.5	1069	903	5.4	0.80		
0.13	11607	9801	76	1.20			1.7	939	793	9.1	0.95		
0.16	9908	8366	77	1.40	K127R77	4P	1.9	825	697	10	1.05		
0.18	8680	7329	77	1.60	KF127R77		2.1	726	613	11	1.20	K67R37	4P
0.20	7615	6430	78	1.80	KA127R77		2.4	642	542	11	1.35	KF67R37	
0.23	6860	5793	78	2.00	KAF127R77		2.8	558	471	12	1.55	KA67R37	
0.27	5831	4924	78	2.35				3.1	497	420	12	1.75	
0.30	5130	4332	78	2.70			3.6	428	361	12	2.05		
0.34	4564	3854	78	3.00			4.1	383	323	12	2.25		
0.40	3887	3282	78	3.55			4.7	330	279	12	2.65		
0.16	9863	8328	62	0.85			2.1	728	615	5.3	0.90		
0.18	8608	7269	62	1.00			2.4	644	544	7.4	1.00	K57R37	4P
0.21	7324	6184	62	1.15			2.8	560	473	7.9	1.15	KF57R37	
0.23	6705	5662	62	1.25	K107R77	3.1	499	421	8.2	1.30	KA57R37		
0.25	6085	5138	62	1.40	KF107R77	3.6	429	362	8.5	1.50	KAF57R37		
0.30	5163	4360	62	1.65	KA107R77	4.1	378	319	8.6	1.70			
0.34	4513	3811	62	1.90	KAF107R77	4.7	332	280	8.8	1.90			
0.39	3977	3358	62	2.15									
0.44	3526	2977	62	2.40									
0.50	3077	2598	62	2.75									
0.57	2707	2286	62	3.15									

*0.12kW motor of 6 poles needs to be specially requested and then manufactured.

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole		
0.18kW							0.18kW								
5.3	291	246	8.9	2.20	K57R37	4P	44	37	29.96	5.0	5.10	K37 KF37 KA37 KAF37	4P		
6.1	255	215	9.1	2.50	KF57R37		45	36	28.83	4.9	5.30				
6.8	227	192	9.1	2.80	KA57R37		52	31	24.99	4.7	6.20				
7.9	197	166	9.2	3.25	KAF57R37		56	29	23.36	4.6	6.40				
3.5	444	375	5.6	0.95	K47R37 KF47R37 KA47R37 KAF47R37	4P	65	25	20.19	4.4	7.00				
4.0	386	326	6.1	1.10			76	21	17.15	4.2	8.10				
4.5	342	289	6.6	1.25			86	19	15.32	4.1	8.80				
5.1	303	256	6.9	1.40			100	16	13.08	3.9	9.70				
5.8	266	225	7.1	1.60			108	15	12.14	3.8	10				
6.6	234	198	7.3	1.80			125	13	10.49	3.6	12				
7.7	203	171	7.5	2.10			147	11	8.91	3.4	14				
8.6	181	153	7.6	2.35			165	9.9	7.96	3.3	15				
10	155	131	7.6	2.75	0.25kW										
6.4	243	205	5.0	0.85	K37R17 KF37R17 KA37R17 KAF37R17	4P	0.14	16121	9801	72	0.85			K127R77 KF127R77 KA127R77 KAF127R77	4P
7.2	214	181	5.4	1.00			0.16	13761	8366	75	1.00				
8.2	189	160	5.6	1.10			0.18	12055	7329	76	1.15				
9.6	161	136	5.8	1.30			0.21	10576	6430	77	1.30				
10	150	127	5.9	1.40			0.23	9528	5793	77	1.45				
9.0	171	144.79	12	2.90	K67	6P	0.27	8099	4924	78	1.70				
11	146	123.54	12	3.40	KF67		0.31	7125	4332	78	1.95				
12	128	108.02	12	3.80	KA67		0.35	6339	3854	78	2.20				
13	122	102.62	12	4.00	KAF67		0.41	5398	3282	78	2.55				
9.0	180	144.79	12	4.30	K67	4P	0.22	10019	6184	62	0.85				
11	154	123.54	12	5.10	KF67		0.23	9173	5662	62	0.90				
12	135	108.02	12	5.80	KA67		0.26	8324	5138	62	1.00				
					KAF67		0.31	7064	4360	62	1.20				
5.9	279	145.15	8.9	2.10	K57	6P	0.35	6174	3811	62	1.35				
6.9	238	123.85	9.0	2.50	KF57		0.40	5440	3358	62	1.55				
7.8	208	108.29	9.1	2.80	KA57		0.45	4823	2977	62	1.75				
8.3	198	102.88	9.1	3.00	KAF57		0.51	4209	2598	62	2.00				
9.4	173	90.26	9.2	3.40			0.58	3704	2286	62	2.25				
9.0	181	145.15	9.2	3.20	K57 KF57 KA57 KAF57	4P	0.69	3141	1939	62	2.65				
11	154	123.85	9.3	3.70											
12	135	108.29	9.3	4.30											
13	128	102.88	9.3	4.50											
15	113	90.26	9.4	5.10											
17	95	76.56	9.4	6.00											
6.4	253	131.87	7.0	1.55	K47 KF47 KA47 KAF47	6P	0.78	2775	1713	62	3.00				
7.0	233	121.48	7.2	1.65			K47	0.86	2519	1555	62	3.30			
8.1	201	104.37	7.4	1.95			KF47	1.0	2164	1336	62	3.85			
9.4	175	90.86	7.5	2.20			KA47								
10	164	85.12	7.5	2.40	KAF47										
10	164	131.87	7.5	2.30	K47 KF47 KA47 KAF47	4P	0.42	5152	3180	38	0.85				
11	151	121.48	7.6	2.50			K47	0.48	4465	2756	38	1.00			
13	130	104.37	7.7	2.90			KF47								
14	113	90.86	7.7	3.40			KA47								
15	106	85.12	7.7	3.60			KAF47								
8.0	204	106.38	5.2	0.95	K37	6P	0.55	3919	2419	38	1.15				
8.7	188	97.81	5.4	1.05	KF37		0.63	3439	2123	38	1.30				
10	161	83.69	5.7	1.20	KA37		0.72	3007	1856	38	1.50				
12	139	72.54	5.9	1.40	KAF37		0.82	2633	1625	38	1.70				
12	133	106.38	5.9	1.45	K37 KF37 KA37 KAF37	4P	0.93	2317	1430	38	1.95				
13	122	97.81	6.0	1.55				1.1	2043	1261	38	2.20			
16	104	83.69	6.1	1.85				1.2	1785	1102	38	2.50			
18	90	72.54	6.1	2.10				1.4	1550	957	38	2.90			
19	85	67.80	6.2	2.30				1.6	1385	855	38	3.25			
22	73	58.61	6.0	2.60				0.64	3380	2086	25	0.85			
26	62	49.79	5.7	3.10				0.72	3004	1854	26	0.95			
29	55	44.46	5.5	3.50				0.80	2686	1658	26	1.05			
35	47	37.97	5.3	4.10				0.94	2292	1415	26	1.25			
37	44	35.57	5.2	4.30				1.1	1991	1229	27	1.40			
								1.2	1746	1078	27	1.60			
						1.4	1541	951	27	1.85					
						1.6	1356	837	27	2.10					
						1.8	1176	726	27	2.40					
						2.1	1034	638	27	2.75					

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
0.25kW							0.25kW						
1.3	1708	1054	14	0.95			9.2	248	145.15	8.9	2.20		
1.4	1499	925	15	1.10			11	211	123.85	9.1	2.60	K57	4P
1.6	1324	817	16	1.20			12	185	108.29	9.2	3.00	KF57	
1.9	1150	710	17	1.40			13	175	102.88	9.2	3.20	KA57	
2.1	1009	623	17	1.60			15	154	90.26	9.3	3.60	KAF57	
2.4	896	553	18	1.80			17	131	76.56	9.3	4.30		
2.7	786	485	18	2.05	K77R37	4P	6.4	352	131.87	6.1	1.10		6P
3.1	693	428	18	2.35	KF77R37		7.0	324	121.48	6.4	1.20	K47	
3.6	596	368	19	2.70	KA77R37		8.1	278	104.37	6.8	1.40	KF47	
4.1	531	328	19	3.05	KAF77R37		9.4	242	90.86	7.1	1.60	KA47	
4.6	471	291	19	3.45			10	227	85.12	7.2	1.75	KAF47	
5.3	408	252	19	3.95			10	225	131.87	7.1	1.65		4P
6.0	358	221	19	4.50			11	207	121.48	7.3	1.80	K47	
6.8	316	195	19	5.15			13	178	104.37	7.4	2.10	KF47	
7.6	284	175	19	5.70			15	155	90.86	7.5	2.40	KA47	
							16	145	85.12	7.6	2.60	KAF47	
2.2	993	613	7.0	0.85		4P	10	223	83.69	5.0	0.90		6P
2.5	878	542	10	1.00			12	194	72.54	5.4	1.00	K37	
2.8	763	471	10	1.10			13	181	67.80	5.5	1.10	KF37	
3.2	680	420	11	1.25	K67R37		15	156	58.61	5.7	1.25	KA37	
3.7	585	361	11	1.45	KF67R37		17	133	49.79	5.9	1.50	KAF37	
4.1	523	323	12	1.65	KA67R37	4P	13	181	106.38	5.4	1.00		4P
4.8	452	279	12	1.90	KAF67R37		14	167	97.81	5.6	1.10		
5.4	399	246	12	2.15			16	143	83.69	5.8	1.30		
6.1	352	217	12	2.45			18	124	72.54	5.9	1.50		
3.2	682	421	5.5	0.90				20	116	67.80	5.9	1.60	
3.7	586	362	7.4	1.05			23	100	58.61	5.7	1.85		
4.2	517	319	8.0	1.20			27	85	49.79	5.5	2.20		
4.8	454	280	8.3	1.40			30	76	44.46	5.4	2.50		
5.4	399	246	8.5	1.55	K57R37	4P	35	65	37.97	5.2	2.90		
6.2	348	215	8.7	1.80	KF57R37		37	61	35.57	5.1	3.10		
6.9	311	192	8.8	2.00	KA57R37		44	51	29.96	4.8	3.60	K37	
8.0	269	166	9.0	2.35	KAF57R37		46	49	28.83	4.8	3.80	KF37	
9.2	235	145	9.1	2.65			53	43	24.99	4.6	4.40	KA37	
10	209	129	9.1	3.00			57	40	23.36	4.5	4.60	KAF37	
12	180	111	9.2	3.50			66	34	20.19	4.4	5.00		
14	157	97	9.3	4.00			78	29	17.15	4.2	5.70		
4.1	547	154.28	19	2.90	K77	8P	87	26	15.31	4.0	6.20		
4.7	480	135.51	19	3.30	KF77		102	22	13.08	3.8	6.90		
5.0	456	128.73	19	3.40	KA77		110	21	12.14	3.7	7.20		
5.6	403	113.75	19	3.90	KAF77		127	18	10.49	3.6	8.30		
4.4	514	192.50	19	2.80	K77		6P	149	15	8.91	3.4	9.80	
4.7	479	179.67	19	3.00	KF77	167		14	7.96	3.3	11.00		
5.5	412	154.28	19	3.70	KA77	196		12	6.80	3.1	12.00		
6.3	362	135.51	19	4.20	KAF77	209		11	6.37	3.1	12.00		
5.2	438	123.54	12	1.90	K67	8P		0.37kW					
5.9	383	108.02	12	2.20	KF67		0.18	17573	7329	69	0.75		4P
6.2	364	102.62	12	2.30	KA67		0.21	15417	6430	73	0.90	K127R77	
7.1	319	90.04	12	2.60	KAF67		0.23	13890	5793	75	1.00	KF127R77	
5.9	386	144.79	12	2.10	K67		0.27	11806	4924	76	1.15	KA127R77	
6.9	330	123.54	12	2.50	KF67	0.31	10387	4332	77	1.30	KAF127R77		
7.9	288	108.02	12	2.80	KA67	0.35	9241	3854	77	1.45			
8.3	274	102.62	12	3.00	KAF67	0.41	7869	3282	78	1.75			
9.2	247	144.79	12	3.10	K67	4P	0.70	4577	1909	78	2.95	K127R77	
11	211	123.54	12	3.60	KF67		0.76	4174	1741	78	3.25	KF127R77	
12	184	108.02	12	4.10	KA67		0.87	3661	1527	78	3.70	KA127R77	
13	175	102.62	12	4.30	KAF67		0.35	9138	3811	62	0.90		
5.9	387	145.15	8.5	1.50				0.40	8052	3358	62	1.05	K107R77
6.9	330	123.85	8.7	1.80	K57	6P	0.45	7138	2977	62	1.15	KF107R77	
7.8	289	108.29	8.8	2.00	KF57		0.51	6229	2598	62	1.35	KA107R77	
8.3	275	102.88	8.9	2.20	KA57		0.58	5481	2286	62	1.55	KAF107R77	
9.4	241	90.26	9.0	2.50	KAF57		0.69	4649	1939	62	1.80		
11	204	76.56	9.1	2.90									

Selection Table
(Constant Power)

n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
0.37kW							0.37kW						
0.78	4107	1713	62	2.05	K107R77	4P	3.8	886	174.19	27	3.00	K87	8P
0.86	3728	1555	62	2.25	KF107R77		4.0	836	164.34	27	3.20	KA87	
1.0	3203	1336	62	2.60	KA107R77		4.5	749	147.32	27	3.50	KAF87	
1.1	2796	1166	62	3.00	KAF107R77								
0.63	5090	2123	38	0.90	K97R57	4P	4.5	744	197.37	27	3.50	K87	6P
0.72	4450	1856	38	1.00			5.1	657	174.19	27	4.00	KF87	
0.82	3896	1625	38	1.15			4.9	689	135.51	18	2.20	K77	
0.93	3429	1430	38	1.30			5.1	655	128.73	18	2.30	KF77	
1.1	3024	1261	38	1.50			5.8	579	113.75	19	2.60	KA77	
1.2	2642	1102	38	1.70			6.8	494	97.21	19	3.10	KAF77	
1.4	2295	957	38	1.95			5.8	582	154.28	19	2.60	K77	
1.6	2050	855	38	2.20			6.6	511	135.51	19	2.90	KF77	
1.8	1782	743	38	2.50	6.9	486	128.73	19	3.10	KA77			
2.0	1561	651	38	2.90	7.8	429	113.75	19	3.50	KAF77			
2.3	1374	573	38	3.25									
0.94	3393	1415	25	0.85	K87R57	4P	6.9	486	192.50	19	3.00	K77	4P
1.1	2947	1229	26	0.95			7.4	453	179.67	19	3.20	KA77	
1.2	2585	1078	26	1.10			8.6	389	154.28	19	3.90	KAF77	
1.4	2280	951	27	1.25									
1.6	2007	837	27	1.40			6.1	549	108.02	11	1.45	K67	8P
1.8	1741	726	27	1.60			6.4	522	102.62	12	1.55	KA67	
2.1	1530	638	27	1.85			7.3	458	90.04	12	1.75	KAF67	
2.4	1348	562	27	2.10			7.2	466	123.54	12	1.70	K67	6P
2.8	1137	474	27	2.50			8.2	407	108.02	12	1.95	KF67	
3.1	1021	426	27	2.75			8.7	387	102.62	12	2.00	KA67	
3.6	894	373	27	3.15	9.9	340	90.04	12	2.30	KAF67			
1.6	1959	817	10	0.85	K77R37	4P	9.2	365	144.79	12	2.20		4P
1.9	1702	710	14	0.95			11	312	123.54	12	2.60	K67	
2.1	1494	623	16	1.10			12	273	108.02	12	3.00	KF67	
2.4	1326	553	16	1.20			15	227	90.04	12	3.60	KA67	
2.7	1163	485	17	1.40			17	193	76.37	12	4.20	KAF67	
3.1	1026	428	18	1.60			7.2	467	123.85	8.1	1.25		6P
3.6	882	368	18	1.85			8.2	408	108.29	8.3	1.40	K57	
4.1	786	328	18	2.05			8.7	388	102.88	8.4	1.50	KF57	
4.6	698	291	18	2.30			9.9	340	90.26	8.6	1.70	KA57	
5.3	604	252	19	2.70			11.6	289	76.56	8.8	2.00	KAF57	
6.0	530	221	19	3.05			12.9	261	69.12	8.9	2.20		
6.8	468	195	19	3.45			9.2	366	145.15	8.6	1.60		4P
7.6	420	175	19	3.85	11	313	123.85	8.8	1.90	K57			
8.6	369	154	19	4.40	12	273	108.29	8.9	2.20	KF57			
3.2	1007	420	8.6	0.85	13	260	102.88	8.9	2.30	KA57			
3.7	866	361	10	1.00	15	228	90.26	9.1	2.60	KAF57			
4.1	774	323	11	1.10	17	193	76.56	9.2	3.10				
4.8	669	279	11	1.30	19	174	69.12	9.2	3.40				
5.4	590	246	12	1.45	8.5	394	104.37	5.2	1.00	K47	6P		
6.1	520	217	12	1.65	9.8	343	90.86	6.2	1.10	KF47			
7.0	458	191	12	1.85	10	321	85.12	6.4	1.20	KA47			
8.0	398	166	12	2.15	12	284	75.20	6.7	1.35	KAF47			
9.2	345	144	12	2.50									
11	293	122	12	2.95									
4.8	671	280	7.1	0.95	K67R37	4P	10	333	131.87	6.4	1.20	K47	4P
5.4	590	246	7.6	1.05			11	307	121.48	6.6	1.30	KF47	
6.2	516	215	8.1	1.20			13	263	104.37	7.0	1.50	KA47	
6.9	460	192	8.3	1.35			15	229	90.86	7.2	1.70	KAF47	
8.0	398	166	8.6	1.55			16	215	85.12	7.3	1.85	K47	
9.2	348	145	8.7	1.80			18	190	75.20	7.4	2.10	KF47	
10	309	129	8.9	2.00			19	176	69.84	7.5	2.20	KA47	
12	266	111	9.0	2.35			21	160	63.30	7.6	2.50	KAF47	
14	233	97	9.1	2.70									

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
0.37kW							0.55kW						
14	247	97.81	2.4	0.80			1.3	3513	1030	62	2.30	K107R77	
16	211	83.69	5.2	0.95			1.5	3083	904	62	2.60	KF107R77	
18	183	72.54	5.4	1.10			1.8	2704	793	62	2.95	KA107R77	4P
20	171	67.80	5.3	1.15			2.0	2374	696	62	3.35	KAF107R77	
23	148	58.61	5.2	1.35			2.3	2094	614	62	3.80		
27	126	49.79	5.1	1.55			0.97	4877	1430	38	0.90		
30	112	44.46	5.0	1.75			1.1	4300	1261	38	1.00		
35	96	37.97	4.8	2.10			1.3	3758	1102	38	1.15		
37	90	35.57	4.7	2.20			1.5	3264	957	38	1.30		
44	76	29.96	4.6	2.60			1.6	2916	855	38	1.45	K97R57	
46	73	28.83	4.5	2.70	K37		1.9	2534	743	38	1.70	KF97R57	4P
53	63	24.99	4.4	3.10	KF37		2.1	2220	651	38	1.95	KA97R57	
57	59	23.36	4.3	3.30	KA37	4P	2.4	1954	573	38	2.20	KAF97R57	
66	51	20.19	4.1	3.60	KAF37		2.8	1719	504	38	2.50		
78	43	17.15	4.0	4.10			3.2	1490	437	38	2.90		
87	39	15.32	3.8	4.50			3.6	1303	382	38	3.30		
102	33	13.08	3.7	4.90			4.6	1040	305	38	4.15		
110	31	12.14	3.6	5.10			1.5	3243	951	25	0.85		
127	26	10.49	3.4	5.90			1.7	2854	837	26	0.95		
149	22	8.91	3.3	7.00			1.9	2476	726	26	1.10		
167	20	7.96	3.2	7.60			2.2	2176	638	27	1.25		
196	17	6.80	3.0	8.60			2.5	1917	562	27	1.40	K87R57	
209	16	6.37	3.0	8.90			2.9	1617	474	27	1.65	KF87R57	4P
248	14	5.36	2.8	10			3.3	1453	426	27	1.85	KA87R57	
0.55kW							3.7	1272	373	27	2.10	KAF87R57	
0.09	51772	15181	162	0.95			4.2	1125	330	27	2.40		
0.11	43519	12761	171	1.10	K187R97	4P	4.7	1003	294	27	2.70		
0.12	39993	11727	171	1.20	KA187R97		5.6	853	250	27	3.15		
0.13	35515	10414	171	1.35			5.9	805	236	27	3.35		
0.21	22389	6565	171	2.10			6.9	685	201	27	3.95		
0.12	39219	11500	135	0.85			2.5	1886	553	5.5	0.80		
0.14	34782	10199	135	0.95			2.9	1654	485	14	0.95		
0.16	29237	8573	135	1.15	K167R97	4P	3.2	1460	428	15	1.05		
0.22	22007	6453	135	1.50	KA167R97		3.8	1255	368	16	1.25	K77R37	
0.26	17959	5266	135	1.85			4.2	1119	328	17	1.40	KF77R37	4P
0.34	13822	4053	135	2.40			4.8	992	291	17	1.55	KA77R37	
0.20	23709	6952	104	0.75	K157R97		5.5	859	252	18	1.80	KAF77R37	
0.23	20616	6045	106	0.85	KF157R97	4P	6.3	754	221	18	2.05		
0.39	12202	3578	109	1.50	KA157R97		7.1	665	195	18	2.35		
0.45	10606	3110	110	1.70	KAF157R97		7.9	597	175	19	2.60		
0.32	14774	4332	72	0.90			9.0	525	154	19	2.95		
0.36	13143	3854	75	1.00	K127R77	4P	5.0	951	279	7	0.85		
0.42	11193	3282	76	1.15	KF127R77		5.7	839	246	10	1.00		
0.47	10170	2982	77	1.30	KA127R77		6.4	740	217	10	1.10	K67R37	4P
0.54	8812	2584	77	1.50	KAF127R77		7.3	651	191	11	1.25	KF67R37	
0.73	6510	1909	78	2.00			8.4	566	166	11	1.45	KA67R37	
0.80	5937	1741	78	2.20	K127R77	4P	9.7	491	144	12	1.65	KAF67R37	
0.91	5208	1527	78	2.50	KF127R77		11	416	122	12	1.95		
1.0	4553	1335	78	2.85	KA127R77		7.2	655	192	4.9	0.90		
1.2	3994	1171	78	3.25	KAF127R77		8.4	566	166	7.5	1.05	K57R37	4P
1.4	3410	1000	78	3.80			9.6	495	145	8.0	1.20	KF57R37	
0.47	10153	2977	62	0.80	K107R77	4P	11	440	129	8.2	1.35	KA57R37	
0.54	8860	2598	62	0.90	KF107R77		13	379	111	8.5	1.60	KAF57R37	
0.61	7796	2286	62	1.05	KA107R77		14	331	97	8.7	1.80		
0.72	6613	1939	62	1.20	KAF107R77								
0.81	5842	1713	62	1.35	K107R77	4P	3.8	1317	174.19	27	2.00	K87	8P
0.89	5303	1555	62	1.50	KF107R77		4.0	1242	164.34	27	2.10	KA87	
1.0	4556	1336	62	1.75	KA107R77		4.5	1114	147.32	27	2.40	KAF87	
1.2	3976	1166	62	2.00	KAF107R77								

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
0.55kW							0.55kW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
4.5	1107	197.37	27	2.30	K87	6P	106	47	13.08	3.5	3.30	K37 KF37 KA37 KAF37	4P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
5.1	977	174.19	27	2.70	KF87		5.4	921	164.34	27	2.80			KA87	6.0	826	147.32	27	3.10	KAF87	4.9	1025	135.51	17	1.50	K77	8P	175	29	7.96	3.1	5.10	KAF37	4P	5.1	973	128.73	17	1.55	KF77	5.8	860	113.75	18	1.75	KA77	6.8	735	97.21	18	2.10	KAF77	5.8	865	154.28	18	1.70	K77	6P	0.75kW							6.6	760	135.51	18	1.95	KF77	0.12	54536	11727	158	0.85	K187R97 KA187R97	4P	6.9	722	128.73	18	2.10	KA77	0.13	48430	10414	169	0.95	7.8	638	113.75	18	2.30	KAF77	0.21	30530	6565	171	1.50	9.0	554	154.28	19	2.60	K77	0.23	28056	6033	171	1.65	10	486	135.51	19	3.00	KF77	0.26	24917	5358	171	1.90	11	462	128.73	19	3.10	KA77	0.16	39868	8573	135	0.85	12	408	113.75	19	3.50	KAF77	0.22	30009	6453	135	1.10	14	349	97.21	19	4.10	K167R97 KA167R97	0.26	24489	5266	135	1.35	7.2	693	123.54	11	1.15	K67	0.34	18848	4053	135	1.75	8.2	606	108.02	11	1.30	KF67	0.42	15440	3320	135	2.10	8.7	575	102.62	11	1.35	KA67	0.39	16639	3578	107	1.10	9.9	505	90.04	12	1.55	KAF67	0.45	14463	3110	108	1.25	12	428	76.37	12	1.85	K67	0.83	7757	1668	110	2.30	11	443	123.54	12	1.70	KF67	1.0	6385	1373	110	2.80	13	388	108.02	12	1.95	KA67	0.42	15263	3282	72	0.85	15	323	90.04	12	2.40	KAF67	0.47	13868	2982	75	0.95	18	274	76.37	12	2.80	K127R77 KF127R77 KA127R77 KAF127R77	0.54	12017	2584	76	1.10	8.2	607	108.29	7.0	0.95	K57	0.73	8878	1909	77	1.45	8.7	577	102.88	7.2	1.00	KF57	0.80	8096	1741	77	1.60	9.9	506	90.26	7.8	1.15	KA57	0.91	7073	1521	78	1.85	12	429	76.56	8.2	1.35	KAF57	1.0	6208	1335	78	2.10	13	388	69.12	8.4	1.50	K127R77 KF127R77 KA127R77 KAF127R77	1.2	5446	1171	78	2.40	15	341	60.81	8.6	1.70	K107R77 KF107R77 KA107R77 KAF107R77	1.4	4650	1000	78	2.80	15	322	57.42	8.7	1.80	K127R77 KF127R77 KA127R77 KAF127R77	1.6	4078	877	78	3.20	11	445	123.85	8.1	1.25	K57	0.81	7966	1713	62	1.00	13	389	108.29	8.4	1.45	KF57	0.89	7231	1555	62	1.10	14	369	102.88	8.4	1.50	KA57	1.0	6213	1336	62	1.30	15	324	90.26	8.6	1.70	KAF57	1.2	5422	1166	62	1.50	18	275	76.56	8.8	2.00	K107R77 KF107R77 KA107R77 KAF107R77	1.3	4790	1030	62	1.65	20	248	69.12	8.9	2.20	K127R77 KF127R77 KA127R77 KAF127R77	1.5	4204	904	62	1.90	23	218	60.81	9.0	2.60	K107R77 KF107R77 KA107R77 KAF107R77	1.8	3688	793	62	2.15	24	206	57.42	9.1	2.70	K107R77 KF107R77 KA107R77 KAF107R77	2.0	3237	696	62	2.45	13	375	104.37	5.6	1.00	K47	2.3	2855	614	62	2.80	15	326	90.86	6.2	1.15	KF47	1.3	5125	1102	38	0.85	16	306	85.12	6.5	1.50	KA47	1.5	4451	957	38	0.95	18	270	75.20	6.8	1.40	KAF47	1.6	3976	855	38	1.10	20	251	69.84	6.9	1.50	K47	1.9	3455	743	38	1.25	22	227	63.30	7.1	1.65	KF47	2.1	3027	651	38	1.40	24	204	56.83	7.3	1.80	KA47	2.4	2665	573	38	1.60	28	176	48.95	7.4	2.10	KAF47	2.8	2344	504	38	1.85	30	165	46.04	7.5	2.20	K37 KF37 KA37 KAF37	3.2	2032	437	38	2.10	24	210	58.61	4.6	0.90	K37 KF37 KA37 KAF37	3.6	1776	382	38	2.40	28	179	49.79	4.6	1.05	K97R57 KF97R57 KA97R57 KAF97R57	4.6	1418	305	38	3.05	31	160	44.46	4.5	1.15	K97R57 KF97R57 KA97R57 KAF97R57	5.4	1200	258	38	3.60	37	136	37.97	4.4	1.35	K97R57 KF97R57 KA97R57 KAF97R57	6.0	1079	232	38	4.00	39	128	35.57	4.4	1.45	K97R57 KF97R57 KA97R57 KAF97R57	7.0	925	199	38	4.65	46	108	29.96	4.2	1.75	K97R57 KF97R57 KA97R57 KAF97R57						48	103	28.83	4.2	1.80	K97R57 KF97R57 KA97R57 KAF97R57						56	90	24.99	4.1	2.10	K97R57 KF97R57 KA97R57 KAF97R57						60	84	23.36	4.0	2.20	K97R57 KF97R57 KA97R57 KAF97R57						69	72	20.19	3.9	2.40	K97R57 KF97R57 KA97R57 KAF97R57						81	62	17.15	3.8	2.70	K97R57 KF97R57 KA97R57 KAF97R57						91	55	15.31	3.7	3.00	K97R57 KF97R57 KA97R57 KAF97R57																																																																																																						
5.4	921	164.34	27	2.80	KA87		6.0	826	147.32	27	3.10			KAF87	4.9	1025	135.51	17	1.50	K77	8P	175	29	7.96	3.1	5.10		KAF37	4P	5.1	973	128.73			17	1.55	KF77	5.8	860	113.75	18	1.75	KA77	6.8	735	97.21	18	2.10	KAF77	5.8	865	154.28	18	1.70	K77	6P	0.75kW							6.6	760	135.51	18	1.95	KF77	0.12	54536	11727	158	0.85	K187R97 KA187R97	4P	6.9			722	128.73	18	2.10	KA77	0.13	48430	10414	169	0.95	7.8	638	113.75	18	2.30	KAF77	0.21	30530	6565	171	1.50	9.0	554	154.28	19	2.60	K77		0.23	28056	6033	171	1.65	10	486	135.51	19	3.00		KF77	0.26	24917	5358	171	1.90	11	462	128.73	19		3.10	KA77	0.16	39868	8573	135	0.85	12	408	113.75		19	3.50	KAF77	0.22	30009	6453	135	1.10	14	349		97.21	19	4.10	K167R97 KA167R97	0.26	24489	5266	135	1.35	7.2		693	123.54	11	1.15	K67	0.34	18848	4053	135	1.75		8.2	606	108.02	11	1.30	KF67	0.42	15440	3320	135		2.10	8.7	575	102.62	11	1.35	KA67	0.39	16639	3578		107	1.10	9.9	505	90.04	12	1.55	KAF67	0.45	14463		3110	108	1.25	12	428	76.37	12	1.85	K67	0.83		7757	1668	110	2.30	11	443	123.54	12	1.70	KF67		1.0	6385	1373	110	2.80	13	388	108.02	12	1.95		KA67	0.42	15263	3282	72	0.85	15	323	90.04	12		2.40	KAF67	0.47	13868	2982	75	0.95	18	274	76.37		12	2.80	K127R77 KF127R77 KA127R77 KAF127R77	0.54	12017	2584	76	1.10	8.2	607		108.29	7.0	0.95	K57	0.73	8878	1909	77	1.45	8.7		577	102.88	7.2	1.00	KF57	0.80	8096	1741	77	1.60		9.9	506	90.26	7.8	1.15	KA57	0.91	7073	1521	78		1.85	12	429	76.56	8.2	1.35	KAF57	1.0	6208	1335		78	2.10	13	388	69.12	8.4	1.50	K127R77 KF127R77 KA127R77 KAF127R77	1.2	5446		1171	78	2.40	15	341	60.81	8.6	1.70	K107R77 KF107R77 KA107R77 KAF107R77	1.4		4650	1000	78	2.80	15	322	57.42	8.7	1.80	K127R77 KF127R77 KA127R77 KAF127R77		1.6	4078	877	78	3.20	11	445	123.85	8.1	1.25		K57	0.81	7966	1713	62	1.00	13	389	108.29	8.4		1.45	KF57	0.89	7231	1555	62	1.10	14	369	102.88		8.4	1.50	KA57	1.0	6213	1336	62	1.30	15	324		90.26	8.6	1.70	KAF57	1.2	5422	1166	62	1.50	18		275	76.56	8.8	2.00	K107R77 KF107R77 KA107R77 KAF107R77	1.3	4790	1030	62	1.65		20	248	69.12	8.9	2.20	K127R77 KF127R77 KA127R77 KAF127R77	1.5	4204	904	62		1.90	23	218	60.81	9.0	2.60	K107R77 KF107R77 KA107R77 KAF107R77	1.8	3688	793		62	2.15	24	206	57.42	9.1	2.70	K107R77 KF107R77 KA107R77 KAF107R77	2.0	3237		696	62	2.45	13	375	104.37	5.6	1.00	K47	2.3		2855	614	62	2.80	15	326	90.86	6.2	1.15	KF47		1.3	5125	1102	38	0.85	16	306	85.12	6.5	1.50		KA47	1.5	4451	957	38	0.95	18	270	75.20	6.8		1.40	KAF47	1.6	3976	855	38	1.10	20	251	69.84		6.9	1.50	K47	1.9	3455	743	38	1.25	22	227		63.30	7.1	1.65	KF47	2.1	3027	651	38	1.40	24		204	56.83	7.3	1.80	KA47	2.4	2665	573	38	1.60		28	176	48.95	7.4	2.10	KAF47	2.8	2344	504	38		1.85	30	165	46.04	7.5	2.20	K37 KF37 KA37 KAF37	3.2	2032	437		38	2.10	24	210	58.61	4.6	0.90	K37 KF37 KA37 KAF37	3.6	1776		382	38	2.40	28	179	49.79	4.6	1.05	K97R57 KF97R57 KA97R57 KAF97R57	4.6		1418	305	38	3.05	31	160	44.46	4.5	1.15	K97R57 KF97R57 KA97R57 KAF97R57		5.4	1200	258	38	3.60	37	136	37.97	4.4	1.35		K97R57 KF97R57 KA97R57 KAF97R57	6.0	1079	232	38	4.00	39	128	35.57	4.4		1.45	K97R57 KF97R57 KA97R57 KAF97R57	7.0	925	199	38	4.65	46	108	29.96		4.2	1.75	K97R57 KF97R57 KA97R57 KAF97R57						48	103		28.83	4.2	1.80	K97R57 KF97R57 KA97R57 KAF97R57						56		90	24.99	4.1	2.10	K97R57 KF97R57 KA97R57 KAF97R57						60	84	23.36	4.0	2.20	K97R57 KF97R57 KA97R57 KAF97R57						69	72	20.19	3.9	2.40	K97R57 KF97R57 KA97R57 KAF97R57						81	62	17.15	3.8	2.70	K97R57 KF97R57 KA97R57 KAF97R57						91	55	15.31	3.7	3.00	K97R57 KF97R57 KA97R57 KAF97R57																																																					
6.0	826	147.32	27	3.10	KAF87		4.9	1025	135.51	17	1.50			K77	8P	175	29	7.96	3.1	5.10		KAF37	4P	5.1	973	128.73				17	1.55	KF77			5.8	860	113.75	18	1.75	KA77	6.8	735	97.21	18	2.10	KAF77	5.8	865	154.28	18	1.70	K77	6P	0.75kW							6.6	760	135.51	18	1.95	KF77	0.12	54536	11727	158	0.85	K187R97 KA187R97	4P	6.9			722			128.73	18	2.10	KA77	0.13	48430	10414	169	0.95	7.8	638	113.75	18	2.30	KAF77	0.21	30530	6565	171	1.50	9.0	554	154.28	19	2.60	K77			0.23	28056	6033	171	1.65	10	486	135.51	19	3.00			KF77	0.26	24917	5358	171	1.90	11	462	128.73		19		3.10	KA77	0.16	39868	8573	135	0.85	12		408	113.75		19	3.50	KAF77	0.22	30009	6453	135		1.10	14	349		97.21	19	4.10	K167R97 KA167R97	0.26	24489		5266	135	1.35	7.2		693	123.54	11	1.15	K67		0.34	18848	4053	135	1.75		8.2	606	108.02	11		1.30	KF67	0.42	15440	3320	135		2.10	8.7	575		102.62	11	1.35	KA67	0.39	16639	3578		107	1.10		9.9	505	90.04	12	1.55	KAF67	0.45	14463		3110		108	1.25	12	428	76.37	12	1.85	K67	0.83			7757	1668	110	2.30	11	443	123.54	12	1.70	KF67			1.0	6385	1373	110	2.80	13	388	108.02	12		1.95		KA67	0.42	15263	3282	72	0.85	15	323		90.04	12		2.40	KAF67	0.47	13868	2982	75	0.95		18	274	76.37		12	2.80	K127R77 KF127R77 KA127R77 KAF127R77	0.54	12017	2584		76	1.10	8.2	607		108.29	7.0	0.95	K57	0.73		8878	1909	77	1.45	8.7		577	102.88	7.2	1.00		KF57	0.80	8096	1741	77	1.60		9.9	506	90.26		7.8	1.15	KA57	0.91	7073	1521	78		1.85	12		429	76.56	8.2	1.35	KAF57	1.0	6208	1335		78		2.10	13	388	69.12	8.4	1.50	K127R77 KF127R77 KA127R77 KAF127R77	1.2	5446			1171	78	2.40	15	341	60.81	8.6	1.70	K107R77 KF107R77 KA107R77 KAF107R77	1.4			4650	1000	78	2.80	15	322	57.42	8.7	1.80		K127R77 KF127R77 KA127R77 KAF127R77		1.6	4078	877	78	3.20	11	445	123.85		8.1	1.25		K57	0.81	7966	1713	62	1.00	13		389	108.29	8.4		1.45	KF57	0.89	7231	1555	62		1.10	14	369	102.88		8.4	1.50	KA57	1.0	6213		1336	62	1.30	15	324		90.26	8.6	1.70	KAF57		1.2	5422	1166	62	1.50	18		275	76.56	8.8		2.00	K107R77 KF107R77 KA107R77 KAF107R77	1.3	4790	1030	62	1.65		20	248		69.12	8.9	2.20	K127R77 KF127R77 KA127R77 KAF127R77	1.5	4204	904	62		1.90		23	218	60.81	9.0	2.60	K107R77 KF107R77 KA107R77 KAF107R77	1.8	3688	793			62	2.15	24	206	57.42	9.1	2.70	K107R77 KF107R77 KA107R77 KAF107R77	2.0	3237			696	62	2.45	13	375	104.37	5.6	1.00	K47		2.3		2855	614	62	2.80	15	326	90.86	6.2		1.15	KF47		1.3	5125	1102	38	0.85	16	306		85.12	6.5	1.50		KA47	1.5	4451	957	38	0.95		18	270	75.20	6.8		1.40	KAF47	1.6	3976	855		38	1.10	20	251	69.84		6.9	1.50	K47	1.9		3455	743	38	1.25	22	227		63.30	7.1	1.65		KF47	2.1	3027	651	38	1.40	24		204	56.83		7.3	1.80	KA47	2.4	2665	573	38	1.60		28		176	48.95	7.4	2.10	KAF47	2.8	2344	504	38			1.85	30	165	46.04	7.5	2.20	K37 KF37 KA37 KAF37	3.2	2032	437			38	2.10	24	210	58.61	4.6	0.90	K37 KF37 KA37 KAF37	3.6		1776		382	38	2.40	28	179	49.79	4.6	1.05		K97R57 KF97R57 KA97R57 KAF97R57	4.6		1418	305	38	3.05	31	160	44.46		4.5	1.15	K97R57 KF97R57 KA97R57 KAF97R57		5.4	1200	258	38	3.60	37		136	37.97	4.4	1.35		K97R57 KF97R57 KA97R57 KAF97R57	6.0	1079	232	38	4.00	39	128	35.57	4.4		1.45	K97R57 KF97R57 KA97R57 KAF97R57	7.0	925	199	38	4.65	46	108	29.96		4.2	1.75	K97R57 KF97R57 KA97R57 KAF97R57						48	103		28.83	4.2	1.80	K97R57 KF97R57 KA97R57 KAF97R57						56		90	24.99	4.1	2.10	K97R57 KF97R57 KA97R57 KAF97R57						60	84	23.36	4.0	2.20	K97R57 KF97R57 KA97R57 KAF97R57						69	72	20.19	3.9	2.40	K97R57 KF97R57 KA97R57 KAF97R57						81	62	17.15	3.8	2.70	K97R57 KF97R57 KA97R57 KAF97R57						91	55	15.31	3.7	3.00	K97R57 KF97R57 KA97R57 KAF97R57				
4.9	1025	135.51	17	1.50	K77	8P	175	29	7.96	3.1	5.10	KAF37	4P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
5.1	973	128.73	17	1.55	KF77		5.8	860	113.75	18	1.75			KA77		6.8	735	97.21	18	2.10				KAF77	5.8	865	154.28			18	1.70	K77	6P	0.75kW							6.6	760	135.51	18	1.95	KF77	0.12	54536	11727	158	0.85	K187R97 KA187R97		4P	6.9		722	128.73	18	2.10	KA77	0.13	48430	10414	169	0.95	7.8	638	113.75	18	2.30			KAF77			0.21	30530	6565	171	1.50	9.0	554	154.28	19	2.60	K77	0.23	28056	6033	171	1.65	10	486	135.51	19	3.00	KF77	0.26	24917	5358	171	1.90	11			462	128.73	19	3.10	KA77	0.16	39868	8573	135	0.85	12	408			113.75	19	3.50	KAF77	0.22	30009	6453	135	1.10	14		349		97.21	19	4.10	K167R97 KA167R97	0.26	24489	5266	135	1.35		7.2	693		123.54	11	1.15	K67	0.34	18848	4053	135		1.75	8.2	606		108.02	11	1.30	KF67	0.42	15440	3320		135	2.10	8.7	575		102.62	11	1.35	KA67	0.39	16639		3578	107	1.10	9.9	505	90.04		12	1.55	KAF67	0.45		14463	3110	108	1.25	12	428	76.37		12	1.85	K67		0.83	7757	1668	110	2.30	11	443	123.54		12	1.70		KF67	1.0	6385	1373	110	2.80	13	388	108.02		12		1.95	KA67	0.42	15263	3282	72	0.85	15	323	90.04		12		2.40	KAF67	0.47	13868	2982	75	0.95	18	274	76.37	12			2.80	K127R77 KF127R77 KA127R77 KAF127R77	0.54	12017	2584	76	1.10	8.2	607	108.29		7.0		0.95	K57	0.73	8878	1909	77	1.45	8.7	577		102.88	7.2		1.00	KF57	0.80	8096	1741	77	1.60	9.9		506	90.26	7.8		1.15	KA57	0.91	7073	1521	78	1.85		12	429	76.56	8.2	1.35		KAF57	1.0	6208	1335	78		2.10	13	388	69.12	8.4	1.50		K127R77 KF127R77 KA127R77 KAF127R77	1.2	5446	1171		78	2.40	15	341	60.81	8.6	1.70		K107R77 KF107R77 KA107R77 KAF107R77	1.4	4650		1000	78	2.80	15	322	57.42	8.7	1.80		K127R77 KF127R77 KA127R77 KAF127R77	1.6		4078	877	78	3.20	11	445	123.85	8.1	1.25		K57	0.81		7966	1713	62	1.00	13	389	108.29	8.4	1.45	KF57			0.89	7231	1555	62	1.10	14	369	102.88	8.4	1.50	KA57			1.0	6213	1336	62	1.30	15	324	90.26	8.6	1.70		KAF57		1.2	5422	1166	62	1.50	18	275	76.56	8.8		2.00	K107R77 KF107R77 KA107R77 KAF107R77		1.3	4790	1030	62	1.65	20	248	69.12		8.9	2.20	K127R77 KF127R77 KA127R77 KAF127R77		1.5	4204	904	62	1.90	23	218		60.81	9.0	2.60	K107R77 KF107R77 KA107R77 KAF107R77	1.8		3688	793	62	2.15	24		206	57.42	9.1	2.70	K107R77 KF107R77 KA107R77 KAF107R77	2.0		3237	696	62	2.45		13	375	104.37	5.6	1.00	K47	2.3		2855	614	62		2.80	15	326	90.86	6.2	1.15	KF47	1.3		5125	1102	38		0.85	16	306	85.12	6.5	1.50	KA47	1.5		4451	957		38	0.95	18	270	75.20	6.8	1.40	KAF47	1.6	3976			855	38	1.10	20	251	69.84	6.9	1.50	K47	1.9	3455			743	38	1.25	22	227	63.30	7.1	1.65	KF47	2.1		3027		651	38	1.40	24	204	56.83	7.3	1.80	KA47		2.4	2665		573	38	1.60	28	176	48.95	7.4	2.10		KAF47	2.8	2344	504		38	1.85	30	165	46.04	7.5		2.20	K37 KF37 KA37 KAF37	3.2	2032	437		38	2.10	24	210	58.61		4.6	0.90	K37 KF37 KA37 KAF37	3.6	1776	382		38	2.40	28	179		49.79	4.6	1.05	K97R57 KF97R57 KA97R57 KAF97R57	4.6	1418	305		38	3.05	31	160		44.46	4.5	1.15	K97R57 KF97R57 KA97R57 KAF97R57	5.4	1200	258		38	3.60	37		136	37.97	4.4	1.35	K97R57 KF97R57 KA97R57 KAF97R57	6.0	1079	232	38		4.00		39	128	35.57	4.4	1.45	K97R57 KF97R57 KA97R57 KAF97R57	7.0	925	199	38			4.65	46	108	29.96	4.2	1.75	K97R57 KF97R57 KA97R57 KAF97R57								48	103	28.83	4.2	1.80	K97R57 KF97R57 KA97R57 KAF97R57								56	90	24.99	4.1	2.10	K97R57 KF97R57 KA97R57 KAF97R57								60	84	23.36	4.0		2.20	K97R57 KF97R57 KA97R57 KAF97R57							69	72		20.19	3.9	2.40	K97R57 KF97R57 KA97R57 KAF97R57							81	62	17.15	3.8	2.70		K97R57 KF97R57 KA97R57 KAF97R57						91	55	15.31	3.7		3.00	K97R57 KF97R57 KA97R57 KAF97R57																								
5.8	860	113.75	18	1.75	KA77		6.8	735	97.21	18	2.10			KAF77		5.8	865	154.28	18	1.70	K77			6P	0.75kW							6.6		760	135.51	18	1.95	KF77	0.12	54536	11727	158	0.85	K187R97 KA187R97	4P	6.9	722	128.73	18	2.10	KA77				0.13	48430	10414	169	0.95	7.8	638	113.75	18	2.30	KAF77	0.21	30530	6565	171	1.50	9.0			554	154.28	19	2.60	K77	0.23	28056	6033	171	1.65	10	486	135.51		19	3.00	KF77	0.26	24917	5358	171	1.90	11	462		128.73	19	3.10	KA77	0.16	39868		8573	135	0.85	12	408		113.75	19	3.50	KAF77	0.22	30009	6453	135		1.10	14	349		97.21	19	4.10	K167R97 KA167R97	0.26	24489	5266	135		1.35	7.2	693		123.54	11	1.15	K67	0.34	18848	4053	135		1.75	8.2	606		108.02	11	1.30	KF67	0.42	15440	3320	135		2.10	8.7	575		102.62	11	1.35	KA67	0.39	16639	3578	107		1.10	9.9	505		90.04	12	1.55	KAF67	0.45	14463	3110	108	1.25		12	428		76.37	12	1.85	K67	0.83	7757	1668	110	2.30		11	443		123.54	12	1.70	KF67	1.0	6385	1373	110	2.80		13	388	108.02		12	1.95	KA67	0.42	15263	3282	72	0.85		15	323	90.04		12	2.40	KAF67	0.47	13868	2982	75	0.95		18	274	76.37		12	2.80	K127R77 KF127R77 KA127R77 KAF127R77	0.54	12017	2584	76	1.10	8.2	607		108.29		7.0	0.95	K57	0.73	8878	1909	77	1.45	8.7	577		102.88		7.2	1.00	KF57	0.80	8096	1741	77	1.60	9.9	506		90.26		7.8	1.15	KA57	0.91	7073	1521	78	1.85	12	429		76.56		8.2	1.35	KAF57	1.0	6208	1335	78	2.10	13	388	69.12			8.4	1.50	K127R77 KF127R77 KA127R77 KAF127R77	1.2	5446	1171	78	2.40	15	341	60.81			8.6	1.70	K107R77 KF107R77 KA107R77 KAF107R77	1.4	4650	1000	78	2.80	15	322	57.42			8.7	1.80	K127R77 KF127R77 KA127R77 KAF127R77	1.6	4078	877	78	3.20	11	445	123.85			8.1	1.25	K57	0.81	7966	1713	62	1.00	13	389	108.29			8.4	1.45	KF57	0.89	7231	1555	62	1.10	14	369	102.88			8.4	1.50	KA57	1.0	6213	1336	62	1.30	15	324	90.26		8.6		1.70	KAF57	1.2	5422	1166	62	1.50	18	275	76.56	8.8			2.00	K107R77 KF107R77 KA107R77 KAF107R77	1.3	4790	1030	62	1.65	20	248	69.12	8.9			2.20	K127R77 KF127R77 KA127R77 KAF127R77	1.5	4204	904	62	1.90	23	218	60.81	9.0			2.60	K107R77 KF107R77 KA107R77 KAF107R77	1.8	3688	793	62	2.15	24	206	57.42	9.1		2.70		K107R77 KF107R77 KA107R77 KAF107R77	2.0	3237	696	62	2.45	13	375	104.37	5.6		1.00		K47	2.3	2855	614	62	2.80	15	326	90.86	6.2		1.15		KF47	1.3	5125	1102	38	0.85	16	306	85.12	6.5		1.50		KA47	1.5	4451	957	38	0.95	18	270	75.20	6.8		1.40		KAF47	1.6	3976	855	38	1.10	20	251	69.84	6.9		1.50	K47		1.9	3455	743	38	1.25	22	227	63.30	7.1		1.65	KF47	2.1		3027	651	38	1.40	24	204	56.83	7.3		1.80	KA47	2.4		2665	573	38	1.60	28	176	48.95	7.4		2.10	KAF47	2.8		2344	504	38	1.85	30	165	46.04	7.5	2.20		K37 KF37 KA37 KAF37	3.2	2032		437	38	2.10	24	210	58.61	4.6	0.90		K37 KF37 KA37 KAF37	3.6	1776		382	38	2.40	28	179	49.79	4.6	1.05		K97R57 KF97R57 KA97R57 KAF97R57	4.6	1418		305	38	3.05	31	160	44.46	4.5	1.15		K97R57 KF97R57 KA97R57 KAF97R57	5.4	1200		258	38	3.60	37	136	37.97	4.4	1.35		K97R57 KF97R57 KA97R57 KAF97R57	6.0	1079		232	38	4.00	39	128	35.57	4.4	1.45		K97R57 KF97R57 KA97R57 KAF97R57	7.0	925	199		38	4.65	46	108	29.96	4.2	1.75		K97R57 KF97R57 KA97R57 KAF97R57							48	103	28.83	4.2	1.80		K97R57 KF97R57 KA97R57 KAF97R57							56	90	24.99	4.1	2.10		K97R57 KF97R57 KA97R57 KAF97R57							60	84	23.36	4.0	2.20		K97R57 KF97R57 KA97R57 KAF97R57							69	72	20.19	3.9	2.40	K97R57 KF97R57 KA97R57 KAF97R57								81	62	17.15	3.8	2.70	K97R57 KF97R57 KA97R57 KAF97R57								91	55	15.31	3.7	3.00			K97R57 KF97R57 KA97R57 KAF97R57																																			
6.8	735	97.21	18	2.10	KAF77		5.8	865	154.28	18	1.70			K77	6P	0.75kW							6.6		760	135.51	18	1.95	KF77	0.12	54536	11727		158	0.85	K187R97 KA187R97	4P	6.9	722	128.73	18	2.10	KA77			0.13	48430	10414	169	0.95	7.8		638		113.75	18	2.30	KAF77	0.21	30530	6565	171	1.50	9.0	554	154.28	19	2.60	K77	0.23	28056	6033	171	1.65	10	486	135.51		19	3.00	KF77	0.26	24917	5358	171	1.90		11	462		128.73	19	3.10	KA77	0.16	39868	8573		135	0.85	12		408	113.75	19	3.50	KAF77	0.22	30009	6453		135	1.10	14		349	97.21	19	4.10	K167R97 KA167R97	0.26	24489	5266		135	1.35	7.2		693	123.54	11	1.15	K67	0.34	18848	4053		135	1.75	8.2		606	108.02	11	1.30	KF67	0.42	15440	3320		135	2.10	8.7		575	102.62	11	1.35	KA67	0.39	16639	3578		107	1.10	9.9		505	90.04	12	1.55	KAF67	0.45	14463	3110		108	1.25	12		428	76.37	12	1.85	K67	0.83	7757	1668		110	2.30	11		443	123.54	12	1.70	KF67	1.0	6385	1373		110	2.80	13		388	108.02	12	1.95	KA67	0.42	15263	3282	72		0.85	15		323	90.04	12	2.40	KAF67	0.47	13868	2982	75		0.95	18		274	76.37	12	2.80	K127R77 KF127R77 KA127R77 KAF127R77	0.54	12017	2584	76		1.10	8.2		607	108.29	7.0	0.95	K57	0.73	8878	1909	77		1.45	8.7		577	102.88	7.2	1.00	KF57	0.80	8096	1741	77		1.60	9.9		506	90.26	7.8	1.15	KA57	0.91	7073	1521	78		1.85	12		429	76.56	8.2	1.35	KAF57	1.0	6208	1335	78		2.10	13		388	69.12	8.4	1.50	K127R77 KF127R77 KA127R77 KAF127R77	1.2	5446	1171	78		2.40	15		341	60.81	8.6	1.70	K107R77 KF107R77 KA107R77 KAF107R77	1.4	4650	1000	78		2.80	15		322	57.42	8.7	1.80	K127R77 KF127R77 KA127R77 KAF127R77	1.6	4078	877	78		3.20	11		445	123.85	8.1	1.25	K57	0.81	7966	1713	62		1.00	13		389	108.29	8.4	1.45	KF57	0.89	7231	1555	62		1.10	14		369	102.88	8.4	1.50	KA57	1.0	6213	1336		62	1.30	15		324	90.26	8.6	1.70	KAF57	1.2	5422	1166		62	1.50	18		275	76.56	8.8	2.00	K107R77 KF107R77 KA107R77 KAF107R77	1.3	4790	1030	62		1.65	20		248	69.12	8.9	2.20	K127R77 KF127R77 KA127R77 KAF127R77	1.5	4204	904	62		1.90	23		218	60.81	9.0	2.60	K107R77 KF107R77 KA107R77 KAF107R77	1.8	3688	793	62		2.15	24		206	57.42	9.1	2.70	K107R77 KF107R77 KA107R77 KAF107R77	2.0	3237	696	62		2.45	13		375	104.37	5.6	1.00	K47	2.3	2855	614	62		2.80	15		326	90.86	6.2	1.15	KF47	1.3	5125	1102	38		0.85	16		306	85.12	6.5	1.50	KA47	1.5	4451	957	38		0.95	18		270	75.20	6.8	1.40	KAF47	1.6	3976	855	38		1.10	20		251	69.84	6.9	1.50	K47	1.9	3455	743	38		1.25		22	227	63.30	7.1	1.65	KF47	2.1	3027	651	38		1.40		24	204	56.83	7.3	1.80	KA47	2.4	2665	573	38		1.60		28	176	48.95	7.4	2.10	KAF47	2.8	2344	504	38		1.85		30	165	46.04	7.5	2.20	K37 KF37 KA37 KAF37	3.2	2032	437	38	2.10			24	210	58.61	4.6	0.90	K37 KF37 KA37 KAF37	3.6	1776	382	38	2.40			28	179	49.79	4.6	1.05	K97R57 KF97R57 KA97R57 KAF97R57	4.6	1418	305	38	3.05			31	160	44.46	4.5	1.15	K97R57 KF97R57 KA97R57 KAF97R57	5.4	1200	258	38	3.60			37	136	37.97	4.4	1.35	K97R57 KF97R57 KA97R57 KAF97R57	6.0	1079	232	38	4.00			39	128	35.57	4.4	1.45	K97R57 KF97R57 KA97R57 KAF97R57	7.0	925	199	38	4.65			46	108	29.96	4.2	1.75	K97R57 KF97R57 KA97R57 KAF97R57								48	103	28.83	4.2	1.80	K97R57 KF97R57 KA97R57 KAF97R57								56	90	24.99	4.1	2.10	K97R57 KF97R57 KA97R57 KAF97R57								60	84	23.36	4.0	2.20	K97R57 KF97R57 KA97R57 KAF97R57								69	72	20.19	3.9	2.40	K97R57 KF97R57 KA97R57 KAF97R57								81	62	17.15	3.8	2.70	K97R57 KF97R57 KA97R57 KAF97R57								91	55	15.31	3.7	3.00	K97R57 KF97R57 KA97R57 KAF97R57																																											
5.8	865	154.28	18	1.70	K77	6P	0.75kW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
6.6	760	135.51	18	1.95	KF77		0.12	54536	11727	158	0.85	K187R97 KA187R97	4P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
6.9	722	128.73	18	2.10	KA77		0.13	48430	10414	169	0.95																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
7.8	638	113.75	18	2.30	KAF77		0.21	30530	6565	171	1.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
9.0	554	154.28	19	2.60	K77	0.23	28056	6033	171	1.65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	486	135.51	19	3.00		KF77	0.26	24917	5358	171	1.90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
11	462	128.73	19	3.10			KA77	0.16	39868	8573	135	0.85																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
12	408	113.75	19	3.50				KAF77	0.22	30009	6453	135	1.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
14	349	97.21	19	4.10	K167R97 KA167R97				0.26	24489	5266	135	1.35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
7.2	693	123.54	11	1.15		K67			0.34	18848	4053	135	1.75																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
8.2	606	108.02	11	1.30			KF67		0.42	15440	3320	135	2.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
8.7	575	102.62	11	1.35				KA67	0.39	16639	3578	107	1.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
9.9	505	90.04	12	1.55	KAF67				0.45	14463	3110	108	1.25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
12	428	76.37	12	1.85		K67			0.83	7757	1668	110	2.30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
11	443	123.54	12	1.70			KF67		1.0	6385	1373	110	2.80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
13	388	108.02	12	1.95				KA67	0.42	15263	3282	72	0.85																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
15	323	90.04	12	2.40	KAF67				0.47	13868	2982	75	0.95																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
18	274	76.37	12	2.80		K127R77 KF127R77 KA127R77 KAF127R77			0.54	12017	2584	76	1.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
8.2	607	108.29	7.0	0.95			K57		0.73	8878	1909	77	1.45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
8.7	577	102.88	7.2	1.00				KF57	0.80	8096	1741	77	1.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
9.9	506	90.26	7.8	1.15	KA57				0.91	7073	1521	78	1.85																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
12	429	76.56	8.2	1.35		KAF57			1.0	6208	1335	78	2.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
13	388	69.12	8.4	1.50			K127R77 KF127R77 KA127R77 KAF127R77		1.2	5446	1171	78	2.40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
15	341	60.81	8.6	1.70				K107R77 KF107R77 KA107R77 KAF107R77	1.4	4650	1000	78	2.80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
15	322	57.42	8.7	1.80	K127R77 KF127R77 KA127R77 KAF127R77				1.6	4078	877	78	3.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
11	445	123.85	8.1	1.25		K57			0.81	7966	1713	62	1.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
13	389	108.29	8.4	1.45			KF57		0.89	7231	1555	62	1.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
14	369	102.88	8.4	1.50				KA57	1.0	6213	1336	62	1.30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
15	324	90.26	8.6	1.70	KAF57				1.2	5422	1166	62	1.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
18	275	76.56	8.8	2.00		K107R77 KF107R77 KA107R77 KAF107R77			1.3	4790	1030	62	1.65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
20	248	69.12	8.9	2.20			K127R77 KF127R77 KA127R77 KAF127R77		1.5	4204	904	62	1.90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
23	218	60.81	9.0	2.60				K107R77 KF107R77 KA107R77 KAF107R77	1.8	3688	793	62	2.15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
24	206	57.42	9.1	2.70	K107R77 KF107R77 KA107R77 KAF107R77				2.0	3237	696	62	2.45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
13	375	104.37	5.6	1.00		K47			2.3	2855	614	62	2.80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
15	326	90.86	6.2	1.15			KF47		1.3	5125	1102	38	0.85																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
16	306	85.12	6.5	1.50				KA47	1.5	4451	957	38	0.95																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
18	270	75.20	6.8	1.40	KAF47				1.6	3976	855	38	1.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
20	251	69.84	6.9	1.50		K47			1.9	3455	743	38	1.25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
22	227	63.30	7.1	1.65			KF47		2.1	3027	651	38	1.40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
24	204	56.83	7.3	1.80				KA47	2.4	2665	573	38	1.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
28	176	48.95	7.4	2.10	KAF47				2.8	2344	504	38	1.85																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
30	165	46.04	7.5	2.20		K37 KF37 KA37 KAF37			3.2	2032	437	38	2.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
24	210	58.61	4.6	0.90			K37 KF37 KA37 KAF37		3.6	1776	382	38	2.40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
28	179	49.79	4.6	1.05				K97R57 KF97R57 KA97R57 KAF97R57	4.6	1418	305	38	3.05																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
31	160	44.46	4.5	1.15	K97R57 KF97R57 KA97R57 KAF97R57				5.4	1200	258	38	3.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
37	136	37.97	4.4	1.35		K97R57 KF97R57 KA97R57 KAF97R57			6.0	1079	232	38	4.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
39	128	35.57	4.4	1.45			K97R57 KF97R57 KA97R57 KAF97R57		7.0	925	199	38	4.65																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
46	108	29.96	4.2	1.75				K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
48	103	28.83	4.2	1.80	K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
56	90	24.99	4.1	2.10		K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
60	84	23.36	4.0	2.20			K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
69	72	20.19	3.9	2.40				K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
81	62	17.15	3.8	2.70	K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
91	55	15.31	3.7	3.00		K97R57 KF97R57 KA97R57 KAF97R57																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
0.75kW							0.75kW						
1.9	3376	726	25	0.80			18	368	75.20	5.8	1.00	K47	4P
2.2	2967	638	26	0.90			20	342	69.84	6.1	1.10	KF47	
2.5	2614	562	26	1.05			22	310	63.30	6.5	1.20	KA47	
2.9	2204	474	27	1.25								KAF47	
3.3	1981	426	27	1.35	K87R57	4P	24	278	56.83	6.8	1.35		4P
3.7	1735	373	27	1.55	KF87R57		28	240	48.95	7.1	1.55	K47	
4.2	1535	330	27	1.75	KA87R57		30	225	46.04	7.2	1.65	KF47	
4.7	1367	294	27	2.00	KAF87R57		35	194	39.61	7.4	1.95	KA47	
5.6	1163	250	27	2.30			39	173	35.39	7.4	2.20	KAF47	
5.9	1098	236	27	2.45			44	153	31.30	7.2	2.50		
6.9	935	201	27	2.90				31	218	44.46	4.0	0.85	
3.8	1711	368	13	0.90	K77R37	37	186	37.97	3.9	1.00			
4.2	1525	328	15	1.00	KF77R37	39	174	35.57	3.9	1.10			
4.8	1353	291	16	1.15	KA77R37	46	147	29.96	3.9	1.30			
5.5	1172	252	17	1.30	KAF77R37	48	141	28.83	3.9	1.35			
6.3	1028	221	17	1.50		56	122	24.99	3.8	1.55			
					K97	60	114	23.36	3.8	1.60			
3.9	1736	176.05	38	2.30	KF97	69	99	20.19	3.7	1.75	K37		
4.5	1511	153.21	38	2.70	KA97	81	84	17.15	3.6	2.00	KF37		
4.9	1383	140.28	38	3.00	KAF97	91	75	15.32	3.5	2.20	KA37		
4.7	1453	147.32	27	1.75	K87	106	64	13.08	3.4	2.40	KAF37		
5.4	1252	126.91	27	2.00	KF87	114	59	12.14	3.3	2.50			
6.0	1142	115.82	27	2.20	KA87	133	51	10.49	3.2	2.90			
6.7	1013	102.71	27	2.50	KAF87	156	44	8.91	3.1	3.50			
5.2	1302	174.19	27	1.95	K87	175	39	7.96	3.0	3.80			
5.5	1229	164.34	27	2.10	KF87	204	33	6.80	2.9	4.20			
6.2	1102	147.32	27	2.30	KA87	218	31	6.37	2.8	4.40			
7.2	949	126.91	27	2.70	KAF87	259	26	5.36	2.7	5.00			
7.0	966	197.37	27	2.60	K87	1.1kW							
8.0	853	174.19	27	3.00	KF87	0.17	56695	8372	154	0.80		4P	
8.5	804	164.34	27	3.20	KA87	0.19	49205	7266	167	0.95			
9.4	721	147.32	27	3.50	KAF87	0.21	44458	6565	171	1.05			
6.7	1013	135.51	17	1.45		0.23	40855	6033	171	1.15	K187R97		
7.1	963	128.73	17	1.50	K77	0.26	36284	5358	171	1.30	KA187R97		
8.0	851	113.75	18	1.70	KF77	0.29	32438	4790	171	1.45			
9.4	727	97.21	18	2.00	KA77	0.33	29167	4307	171	1.60			
10	666	89.12	18	2.20	KAF77	0.36	26140	3860	171	1.75			
9.0	755	154.28	18	1.95		0.27	35661	5266	135	0.90			
10	663	135.51	18	2.20	K77	0.30	31882	4708	135	1.05	K167R97		
11	630	128.73	18	2.30	KF77	0.35	27447	4053	135	1.20	KA167R97		
12	557	113.75	19	2.60	KA77	0.42	22483	3320	135	1.45			
14	476	97.21	19	3.10	KAF77	0.52	18345	2709	135	1.80			
					K67	0.65	14682	2168	135	2.20			
11	605	123.54	11	1.30	KF67	0.83	11465	1693	135	2.80	K167R97		
13	529	108.02	11	1.45	KA67	1.01	9372	1384	135	3.40	KA167R97		
15	441	90.04	12	1.75	KAF67	1.10	8627	1274	135	3.70			
18	374	76.37	12	2.10	K67	0.39	24230	3578	104	0.75	K157R97		
20	338	68.95	12	2.30	KF67	0.45	21061	3110	106	0.85	KF157R97		
23	297	60.66	12	2.60	KA67	0.53	17776	2625	107	1.00	KA157R97		
24	280	57.28	12	2.80	KAF67	0.60	15887	2346	108	1.15	KAF157R97		
11	606	123.85	6.8	0.95		0.84	11296	1668	109	1.60			
13	530	108.29	7.5	1.05		1.0	9298	1373	110	1.95	K157R97		
14	504	102.88	7.8	1.10		1.1	8370	1236	110	2.15	KF157R97		
15	442	90.26	8.1	1.30	K57	1.3	7483	1105	110	2.40	KA157R97		
18	375	76.56	8.4	1.50	KF57	1.5	6501	960	110	2.75	KAF157R97		
20	338	69.12	8.6	1.65	KA57	1.6	5892	870	110	3.05			
23	298	60.81	8.8	1.90	KAF57	0.73	12928	1909	75	1.00	K127R77		
24	281	57.42	8.8	2.00		0.80	11790	1741	76	1.10	KF127R77		
28	239	48.89	9.0	2.40		0.92	10341	1527	76	1.25	KA127R77		
31	217	44.43	9.1	2.60		1.0	9041	1335	77	1.45	KAF127R77		

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	
1.1kW							1.1kW							
1.2	7930	1171	77	1.65			10	966	135.51	17	1.55	K77	4P	
1.4	6772	1000	78	1.90			11	918	128.73	17	1.60	KF77		
1.6	5939	877	78	2.20	K127R77		12	811	113.75	18	1.80	KA77		
1.8	5302	783	78	2.45	KF127R77							KAF77		
2.0	4727	698	78	2.75	KA127R77	4P	14	693	97.21	18	2.10	K77	4P	
2.3	4097	605	78	3.20	KAF127R77			16	635	89.12	18	2.30		KF77
2.6	3711	548	78	3.50				18	557	78.20	19	2.70		KA77
3.0	3203	473	78	4.05				19	528	74.11	19	2.80		KAF77
1.2	7896	1166	62	1.00			13	770	108.02	10	1.00		4P	
1.4	6975	1030	62	1.15			14	732	102.62	10	1.05	K67		
1.5	6122	904	62	1.30			16	642	90.04	11	1.20	KF67		
1.8	5370	793	62	1.50	K107R77		18	544	76.37	11	1.45	KA67		
2.0	4713	696	62	1.70	KF107R77	4P	20	492	68.95	12	1.60	KAF67		
2.3	4158	614	62	1.90	KA107R77			23	432	60.66	12	1.80		
2.7	3535	522	62	2.25	KAF107R77			24	408	57.28	12	1.90	K67	
3.0	3122	461	62	2.55				29	348	48.77	12	2.20	KF67	
3.4	2763	408	62	2.90			32	316	44.32	12	2.50	KA67		
3.8	2465	364	62	3.25			36	274	38.39	12	2.80	KAF67		
4.4	2153	318	62	3.70			16	643	90.26	2.3	0.90		4P	
1.9	5032	743	38	0.85			18	546	76.56	7.4	1.05			
2.2	4409	651	38	0.95	K97R57		20	493	69.12	7.9	1.15			
2.4	3880	573	38	1.10	KF97R57	4P	23	433	60.81	8.2	1.30	K57		
2.8	3413	504	38	1.25	KA97R57			24	409	57.42	8.3	1.40	KF57	
3.2	2959	437	38	1.45	KAF97R57			29	349	48.89	8.6	1.65	KA57	
3.7	2587	382	38	1.65				32	317	44.43	8.7	1.80	KAF57	
4.1	2316	342	38	1.85			36	274	38.49	8.9	2.10			
3.0	3210	474	25	0.85			39	254	35.70	8.9	2.20			
3.3	2885	426	26	0.95			46	216	30.28	9.1	2.60			
3.8	2526	373	26	1.05	K87R57	4P	51	195	27.34	9.0	2.90			
4.2	2235	330	26	1.20	KF87R57			58	171	24.05	8.8	3.30		
4.8	1991	294	27	1.35	KA87R57			62	162	22.71	8.6	3.50		
5.6	1693	250	27	1.60	KAF87R57			72	138	19.34	8.3	4.00		
5.9	1598	236	27	1.70			80	125	17.57	8.1	4.20			
7.0	1361	201	27	2.00			92	108	15.22	7.8	4.70	K57		
3.9	2546	176.05	38	1.60	K97	8P	106	94	13.25	7.5	5.10	KF57		
4.5	2216	153.21	38	1.80	KF97			117	85	11.92	7.2	4.60	KA57	
4.9	2029	140.28	38	2.00	KA97			124	80	11.26	7.1	4.90	KAF57	
5.6	1792	123.93	38	2.20	KAF97			146	68	9.59	6.8	5.60		
5.2	1931	176.05	38	2.10	K97	6P	161	62	8.71	6.6	6.00			
5.9	1680	153.21	38	2.50	KF97			185	54	7.55	6.3	6.40		
6.5	1538	140.28	38	2.70	KA97			213	47	6.57	6.1	7.00		
7.3	1359	123.93	38	3.00	KAF97									
8.0	1255	176.05	38	3.30	K97	4P	25	405	56.83	3.1	0.95	K47		
9.1	1092	153.21	38	3.70	KF97			29	349	48.95	6.0	1.10	KF47	
10	1000	140.28	38	4.10	KA97			30	328	46.04	6.3	1.15	KA47	
					KAF97								KAF47	
5.2	1910	174.19	27	1.35	K87	6P	35	282	39.61	6.7	1.35			
5.5	1802	164.34	27	1.45	KF87			40	252	35.39	6.7	1.50	K47	
6.2	1616	147.32	27	1.60	KA87			45	223	31.30	6.6	1.70	KF47	
7.2	1392	126.91	27	1.85	KAF87			48	209	29.32	6.5	1.80	KA47	
8.0	1242	174.19	27	2.10		4P	54	185	25.91	6.4	2.10	KAF47		
8.5	1171	164.34	27	2.20	K87			64	155	21.81	6.2	2.40		
9.5	1050	147.32	27	2.40	KF87			72	140	19.58	6.0	2.70		
11	905	126.91	27	2.80	KA87									
12	826	115.82	27	3.10	KAF87		47	214	29.96	3.2	0.90			
6.7	1486	135.51	15	1.00	K77	6P	56	178	24.99	3.3	1.05	K37		
7.1	1412	128.73	15	1.05	KF77			60	167	23.36	3.3	1.10	KF37	
8.0	1247	113.75	16	1.20	KA77			69	144	20.19	3.2	1.20	KA37	
9.4	1066	97.21	17	1.40	KAF77			82	122	17.15	3.2	1.40	KAF37	
							91	109	15.32	3.2	1.50			
							107	93	13.08	3.1	1.70			

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
1.1kW							1.5kW						
115	87	12.14	3.1	1.75			2.4	5291	573	38	0.80		
133	75	10.49	3.0	2.00	K37		2.8	4654	504	38	0.90		
157	64	8.91	2.9	2.40	KF37		3.2	4035	437	38	1.05		
176	57	7.96	2.8	2.60	KA37	4P	3.7	3528	382	38	1.20	K97R57	
206	48	6.80	2.7	2.90	KAF37		4.1	3158	342	38	1.35	KF97R57	4P
220	45	6.37	2.7	3.00			4.6	2817	305	38	1.55	KA97R57	
261	38	5.36	2.6	3.50			5.4	2383	258	38	1.80	KAF97R57	
1.5kW							1.5kW						
0.23	55712	6033	154	0.80			6.0	2142	232	38	2.00		
0.26	49478	5358	165	0.95	K187R97	4P	7.0	1838	199	38	2.35		
0.29	44233	4790	171	1.05	KA187R97		4.2	3047	330	25	0.90		
0.33	39773	4307	171	1.15			4.8	2715	294	26	1.00	K87R57	
0.36	35645	3860	171	1.30			5.6	2309	250	26	1.15	KF87R57	4P
0.43	29800	3227	171	1.50			5.9	2179	236	27	1.25	KA87R57	
0.51	25275	2737	171	1.80	K187R97	4P	7.0	1856	201	27	1.45	KAF87R57	
0.62	20796	2252	171	2.20	KA187R97		7.7	1690	183	27	1.60		
0.69	18728	2028	171	2.50			4.7	2871	143.47	62	2.70	K107	8P
0.35	37427	4053	135	0.85	K167R97	4P	5.6	2431	121.46	62	3.20	KF107	
0.42	30659	3320	135	1.05	KA167R97		6.0	2250	112.41	62	3.50	KA107	
0.52	25016	2709	135	1.30								KAF107	
0.65	20020	2168	135	1.60			4.4	3066	153.21	38	1.35	K97	8P
0.83	15634	1693	135	2.10	K167R97	4P	4.8	2807	140.28	38	1.50	KF97	
1.01	12781	1384	135	2.50	KA167R97		5.5	2480	123.93	38	1.70	KA97	
1.10	11765	1274	135	2.70								KAF97	
0.60	21664	2346	105	0.80	K157R97	4P	5.3	2549	176.05	38	1.55	K97	
					KF157R97		6.1	2218	153.21	38	1.80	KF97	6P
					KA157R97		6.7	2031	140.28	38	1.95	KA97	
					KAF157R97		7.6	1794	123.93	38	2.20	KAF97	
0.84	15403	1668	108	1.10			8.0	1711	176.05	38	2.40	K97	
1.0	12679	1373	109	1.35			9.1	1489	153.21	38	2.80	KF97	4P
1.1	11414	1236	109	1.50	K157R97		10	1364	140.28	38	3.00	KA97	
1.3	10204	1105	110	1.70	KF157R97	4P	11	1205	123.93	38	3.40	KAF97	
1.5	8865	960	110	1.95	KA157R97		6.4	2133	147.32	26	1.20	K87	
1.6	8034	870	110	2.15	KAF157R97		7.4	1837	126.91	27	1.35	KF87	6P
2.5	5264	570	110	3.25			8.1	1677	115.82	27	1.50	KA87	
2.7	4710	510	111	3.65			9.2	1487	102.71	27	1.70	KAF87	
2.6	4996	541	78	2.50	K127R87	4P	8.0	1693	174.19	27	1.55		
3.3	3906	423	78	3.15	KF127R87		8.5	1597	164.34	27	1.60	K87	
3.8	3408	369	78	3.65	KA127R87		9.5	1432	147.32	27	1.80	KF87	4P
					KAF127R87		11	1234	126.91	27	2.10	KA87	
0.80	16077	1741	70	0.80			12	1126	115.82	27	2.30	KAF87	
0.92	14101	1527	74	0.90			14	998	102.71	27	2.60		
1.0	12328	1335	76	1.05			16	839	86.34	27	3.10		
1.2	10814	1171	76	1.20			8.3	1647	113.75	13	0.90	K77	
1.4	9235	1000	77	1.40	K127R77	4P	9.7	1407	97.21	15	1.05	KF77	6P
1.6	8099	877	77	1.60	KF127R77		11	1290	89.12	16	1.10	KA77	
1.8	7231	783	78	1.80	KA127R77		12	1132	78.20	17	1.30	KAF77	
2.0	6446	698	78	2.00	KAF127R77		10	1317	135.51	16	1.15		
2.3	5587	605	78	2.35			11	1251	128.73	16	1.20	K77	4P
2.6	5061	548	78	2.55			12	1106	113.75	17	1.35	KF77	
3.0	4368	473	78	3.00			14	945	97.21	17	1.55	KA77	
3.4	3786	410	78	3.45			16	866	89.12	18	1.70	KAF77	
1.4	9512	1030	62	0.85			18	760	78.20	18	1.95		
1.5	8348	904	62	0.95			19	720	74.11	18	2.10		
1.8	7323	793	62	1.10			22	630	64.86	18	2.40	K77	4P
2.0	6427	696	62	1.25	K107R77		24	568	58.44	19	2.60	KF77	
2.3	5670	614	62	1.40	KF107R77		27	498	51.26	19	3.00	KA77	
2.7	4820	522	62	1.65	KA107R77		31	440	45.24	19	3.40	KAF77	
3.0	4257	461	62	1.90	KAF107R77		35	390	40.10	19	3.80		
3.4	3768	408	62	2.10									
3.8	3361	364	62	2.40									
4.4	2937	318	62	2.70									

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
1.5kW							2.2kW						
16	875	90.04	8.9	0.90			0.66	28747	2168	135	1.10		
18	742	76.37	10	1.05	K67		0.84	22449	1693	135	1.40		
20	670	68.95	11	1.15	KF67		1.03	18352	1384	135	1.70	K167R97	4P
23	590	60.66	11	1.35	KA67	4P	1.12	16893	1274	135	1.85	KA167R97	
24	557	57.28	11	1.40	KAF67		1.31	14506	1094	135	2.20		
29	474	48.77	12	1.65			1.54	12318	929	135	2.50		
32	431	44.32	12	1.80			0.86	22117	1668	104	0.80		
36	373	38.39	12	2.00	K67		1.0	18206	1373	106	1.00	K157R97	
39	346	35.61	12	2.30	KF67	4P	1.2	16389	1236	107	1.10	KF157R97	
46	294	30.21	12	2.70	KA67		1.3	14652	1105	108	1.20	KA157R97	4P
51	265	27.27	12	3.00	KAF67		1.5	12729	960	109	1.40	KAF157R97	
58	233	23.99	12	3.30			1.6	11536	870	109	1.55		
23	591	60.81	7.1	0.95	K57		1.9	10077	760	110	1.80		
24	558	57.42	7.4	1.05	KF57		2.6	7174	541	78	1.80		
29	475	48.89	8.0	1.20	KA57	4P	3.0	6325	477	78	2.05	K127R87	
32	432	44.43	8.2	1.35	KAF57		3.4	5609	423	78	2.30	KF127R87	4P
36	374	38.49	8.5	1.55			3.9	4893	369	78	2.65	KA127R87	
39	347	35.70	8.6	1.65	K57		4.3	4416	333	78	2.95	KAF127R87	
46	294	30.28	8.7	1.95	KF57	4P	1.4	13260	1000	74	0.95		
51	266	27.34	8.6	2.20	KA57		1.6	11629	877	76	1.10		
58	234	24.05	8.3	2.50	KAF57		1.8	10382	783	76	1.25	K127R77	
62	221	22.71	8.2	2.60			2.0	9255	698	77	1.40	KF127R77	4P
72	188	19.34	7.9	2.90			2.4	8022	605	77	1.60	KA127R77	
					K47		2.6	7266	548	78	1.80	KAF127R77	
35	385	39.61	5.6	1.00	KF47	4P	3.0	6272	473	78	2.05		
40	344	35.39	6.0	1.10	KA47		3.5	5437	410	78	2.35		
45	304	31.30	6.0	1.25	KAF47		2.3	8142	614	62	1.00		
48	285	29.32	6.0	1.35			2.7	6922	522	62	1.15		
54	252	25.91	5.9	1.50			3.1	6113	461	62	1.30	K107R77	
64	212	21.81	5.7	1.80	K47		3.5	5410	408	62	1.45	KF107R77	4P
72	190	19.58	5.7	2.00	KF47		3.9	4827	364	62	1.65	KA107R77	
83	164	16.86	5.5	2.20	KA47	4P	4.5	4217	318	62	1.90	KAF107R77	
88	154	15.86	5.4	2.40	KAF47		5.0	3792	286	62	2.10		
103	133	13.65	5.3	2.60			5.7	3328	251	62	2.40		
115	118	12.19	5.2	2.80			3.7	5065	382	38	0.85		
119	114	11.77	5.1	2.30			4.2	4535	342	38	0.95	K97R57	
60	227	23.36	2.7	0.80			4.7	4044	305	38	1.05	KF97R57	4P
69	196	20.19	2.8	0.90			5.5	3421	258	38	1.25	KA97R57	
82	167	17.15	2.8	1.05			6.2	3076	232	38	1.40	KAF97R57	
91	149	15.31	2.8	1.10			7.2	2639	199	38	1.60		
107	127	13.08	2.8	1.25	K37		4.9	4033	143.47	62	1.85	K107	
115	118	12.14	2.8	1.30	KF37	4P	5.8	3414	121.46	62	2.20	KF107	8P
133	102	10.49	2.7	1.50	KA37		6.3	3160	112.41	62	2.40	KA107	
157	87	8.91	2.7	1.75	KAF37		7.0	2832	100.75	62	2.70	KAF107	
176	77	7.96	2.6	1.90			6.1	3253	153.21	38	1.25	K97	
206	66	6.80	2.6	2.20			6.7	2979	140.28	38	1.35	KF97	6P
220	62	6.37	2.5	2.20			7.6	2631	123.93	38	1.55	KA97	
261	52	5.36	2.5	2.60			8.9	2232	105.13	38	1.85	KAF97	
2.2kW							8.1	2457	176.05	38	1.65	K97	
0.37	51183	3860	158	0.85	K187R97	4P	9.3	2138	153.21	38	1.90	KF97	4P
0.57	32990	2488	171	1.35	KA187R97		10	1958	140.28	38	2.10	KA97	
0.44	42789	3227	171	1.00			12	1730	123.93	38	2.30	KAF97	
0.52	36292	2737	171	1.20			14	1467	105.13	38	2.80	K97	
0.63	29861	2252	171	1.50	K187R97	4P	15	1351	96.80	38	3.00	KF97	4P
0.71	26891	2028	171	1.65	KA187R97						KA97		
0.78	24345	1836	171	1.80							KAF97		
0.88	21587	1628	171	2.10							K87		
1.08	17583	1326	171	2.30			9.7	2056	147.32	27	1.25	KF87	4P
0.53	35921	2709	135	0.85	K167R97	4P	11	1771	126.91	27	1.45	KA87	
0.64	29821	2249	135	1.05	KA167R97		12	1617	115.82	27	1.55	KAF87	

Selection Table
(Constant Power)

n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
2.2kW							2.2kW						
14	1434	102.71	27	1.75			85	235	16.86	4.9	1.50		
17	1205	86.34	27	2.10	K87		90	221	15.86	4.9	1.60	K47	
18	1107	79.34	27	2.30	KF87	4P	105	191	13.65	4.8	1.75	KF47	4P
20	983	70.46	27	2.60	KA87		117	170	12.19	4.7	1.95	KA47	
23	879	63.00	27	2.90	KAF87		121	164	11.77	4.6	1.60	KAF47	
25	791	56.64	27	3.20			135	148	10.57	4.6	1.80		
13	1588	113.75	14	0.90			157	127	9.10	4.5	2.10		
15	1357	97.21	15	1.05	K77		109	183	13.08	2.3	0.85		
16	1244	89.12	16	1.15	KF77	4P	136	146	10.49	2.3	1.00	K37	4P
18	1091	78.20	17	1.35	KA77		160	124	8.91	2.3	1.20	KF37	
19	1034	74.11	17	1.40	KAF77		180	111	7.96	2.3	1.30	KA37	
22	905	64.86	17	1.60			210	95	6.80	2.3	1.50	KAF37	
24	816	58.44	18	1.80			224	89	6.37	2.3	1.55		
28	715	51.26	18	2.00		267	75	5.36	2.2	1.75			
32	631	45.24	18	2.30	K77		3.0kW						
36	560	40.10	19	2.60	KF77	4P	0.52	49489	2737	160	0.90		
41	492	35.25	19	3.00	KA77		0.57	44987	2488	170	0.95		
46	432	30.93	19	3.40	KAF77		0.63	40720	2252	171	1.05		
49	409	29.31	19	3.60			0.71	36669	2028	171	1.20	K187R97	4P
56	358	25.66	19	4.10			0.78	33198	1836	171	1.30	KA187R97	
24	847	60.66	9.0	0.90		0.88	29437	1628	171	1.50			
25	799	57.28	10	0.95	K67	1.1	23976	1326	171	1.70			
29	681	48.77	11	1.15	KF67	1.1	22548	1247	171	1.95			
32	619	44.32	11	1.25	KA67	1.3	19402	1073	171	2.30			
37	536	38.39	11	1.40	KAF67		0.84	30612	1693	135	1.00		
40	497	35.61	12	1.55		1.0	25025	1384	135	1.20			
47	422	30.21	12	1.80		1.1	23036	1274	135	1.35	K167R97	4P	
52	381	27.27	12	2.00		1.3	19781	1094	135	1.55	KA167R97		
60	335	23.99	12	2.20		1.5	16798	929	135	1.85			
63	316	22.66	12	2.30		1.7	15152	838	135	2.10			
74	269	19.29	12	2.60		1.9	13453	744	135	2.30			
82	245	17.53	12	2.80	K67	1.2	22349	1236	104	0.80			
94	212	15.19	12	3.10	KF67	1.3	19980	1105	105	0.90	K157R97	4P	
108	185	13.22	12	3.40	KA67	1.5	17358	960	107	1.05	KF157R97		
115	174	12.48	12	2.80	KAF67	1.6	15731	870	108	1.15	KA157R97		
135	148	10.63	12	3.20		1.9	13742	760	108	1.30	KAF157R97		
148	135	9.66	12	3.30		2.5	10306	570	109	1.75			
171	117	8.37	12	3.50		2.8	9222	510	110	1.95			
196	102	7.28	12	3.90		2.6	9782	541	77	1.30			
32	620	44.43	4.8	0.90	K57	3.0	8625	477	77	1.50	K127R87	4P	
37	537	38.49	7.5	1.05	KF57	3.4	7648	423	77	1.70	KF127R87		
40	498	35.70	7.8	1.15	KA57	3.9	6672	369	78	1.95	KA127R87		
47	423	30.28	7.8	1.35	KAF57	4.3	6021	333	78	2.15	KAF127R87		
52	382	27.34	7.8	1.45		4.9	5226	289	78	2.45			
59	336	24.05	7.6	1.65		1.8	14158	783	73	0.90			
63	317	22.71	7.6	1.75		2.0	12621	698	75	1.00	K127R77	4P	
74	270	19.34	7.4	2.00	K57	2.4	10939	605	76	1.20	KF127R77		
81	245	17.57	7.2	2.10	KF57	2.6	9909	548	77	1.30	KA127R77		
94	212	15.22	7.1	2.40	KA57	3.0	8625	477	77	1.50	KAF127R77		
108	185	13.25	6.9	2.60	KAF57	3.5	7413	410	77	1.75			
120	166	11.92	6.5	2.30		3.1	8336	461	62	0.95			
127	157	11.26	6.5	2.50		3.5	7377	408	62	1.05	K107R77	4P	
149	134	9.59	6.5	2.90		3.9	6582	364	62	1.20	KF107R77		
164	122	8.71	6.5	3.20		4.5	5750	318	62	1.40	KA107R77		
					K47	5.0	5171	286	62	1.55	KAF107R77		
					KF47	5.7	4538	251	62	1.75			
55	362	25.91	5.0	1.05	KAF47	6.4	4014	222	62	2.00			
66	304	21.81	5.0	1.25									
73	273	19.58	5.0	1.35									

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
3.0kW							3.0kW						
7.3	3544	196	62	2.25	K107R77	4P	32	861	45.24	18	1.70		
8.2	3146	174	62	2.55	KF107R77		36	763	40.10	18	1.90		
9.3	2785	154	62	2.85	KA107R77		37	732	38.45	18	2.20	K77	
10	2531	140	62	3.15	KAF107R77		41	671	35.25	18	2.50	KF77	
					K97R57	4P	46	589	30.93	18	2.80	KA77	4P
5.5	4665	258	38	0.90	KF97R57		49	558	29.31	18	3.00	KAF77	
6.2	4195	232	38	1.00	KA97R57		56	488	25.66	18	3.40		
7.2	3598	199	38	1.20	KAF97R57		62	440	23.11	18	3.80		
4.9	5500	143.47	62	1.40		8P	71	386	20.28	18	4.30		
5.8	4656	121.46	62	1.65	K107		32	844	44.32	9.0	0.90		
6.3	4309	112.41	62	1.80	KF107		37	731	38.39	10	1.00	K67	4P
7.0	3862	100.75	62	2.00	KA107		40	678	35.61	11	1.15	KF67	
7.8	3487	90.96	62	2.20	KAF107	47	575	30.21	11	1.35	KA67		
					K107	52	519	27.27	11	1.45	KAF67		
6.7	4068	143.47	62	1.85	KF107	6P	60	457	23.99	12	1.65		
7.9	3444	121.46	62	2.20	KA107		63	431	22.66	12	1.70		
8.5	3187	112.41	62	2.30	KAF107		74	367	19.29	12	1.95		
9.5	2856	100.75	62	2.60			82	334	17.53	12	2.10		
10	2731	143.47	62	2.70	K107	4P	94	289	15.19	12	2.20	K67	4P
					KF107		108	252	13.22	12	2.50	KF67	
					KA107		115	238	12.48	12	2.10	KA67	
					KAF107		135	202	10.63	12	2.30	KAF67	
7.7	3514	123.93	38	1.15	K97	6P	148	184	9.66	12	2.40		
9.1	2981	105.13	38	1.35	KF97		171	159	8.37	12	2.70		
9.9	2744	96.80	38	1.45	KA97		196	139	7.28	12	3.10		
11	2453	86.52	38	1.65	KAF97								
8.1	3351	176.05	38	1.20	K97	4P	47	576	30.28	6.8	0.95	K57	4P
9.3	2916	153.21	38	1.35	KF97		52	520	27.34	6.8	1.05	KF57	
10	2670	140.28	38	1.50	KA97		59	458	24.05	6.8	1.20	KA57	
12	2359	123.93	38	1.70	KAF97							KAF57	
14	2001	105.13	38	2.00		4P	63	432	22.71	6.8	1.30		4P
15	1842	96.80	38	2.20	K97		74	368	19.34	6.7	1.45		
17	1647	86.52	38	2.40	KF97		81	334	17.57	6.7	1.55		
18	1482	77.89	38	2.70	KA97		94	290	15.22	6.5	1.70	K57	
20	1343	70.54	38	3.00	KAF97	4P	108	252	13.25	6.4	1.90	KF57	4P
23	1191	62.55	38	3.40			120	227	11.92	6.1	1.70	KA57	
25	1076	56.55	38	3.70			127	214	11.26	6.1	1.80	KAF57	
					K87		149	183	9.59	5.9	2.10		
9.7	2804	147.32	26	0.90	KF87	4P	164	166	8.71	5.8	2.20		
11	2416	126.91	26	1.05	KA87		189	144	7.55	5.6	2.40		
12	2204	115.82	26	1.15	KAF87		218	125	6.57	5.5	2.60		
14	1955	102.71	27	1.30									
17	1643	86.34	27	1.55		4P	73	373	19.58	4.2	1.00	K47	4P
18	1510	79.34	27	1.65			85	321	16.86	4.3	1.10	KF47	
20	1341	70.46	27	1.85	K87		90	302	15.86	4.3	1.15	KA47	
23	1199	63.00	27	2.10	KF87							KAF47	
25	1078	56.64	27	2.30	KA87	4P	105	260	13.65	4.3	1.30		4P
29	936	49.16	27	2.70	KAF87		117	232	12.19	4.3	1.40		
32	838	44.02	27	2.90			121	224	11.77	4.2	1.15	K47	
39	695	36.52	27	3.30			135	201	10.57	4.1	1.30	KF47	
16	1696	89.12	12	0.85		4P	157	173	9.10	4.1	1.50	KA47	4P
18	1488	78.20	14	0.95	K77		167	163	8.56	4.1	1.55	KAF47	
19	1411	74.11	15	1.00	KF77		194	140	7.36	4.0	1.65		
22	1234	64.86	16	1.15	KA77		217	125	6.58	3.9	1.80		
24	1112	58.44	17	1.30	KAF77	4P	246	111	5.81	3.8	1.95		4P
28	976	51.26	17	1.50			160	170	8.91	1.9	0.90		
							180	152	7.96	1.9	0.95	K37	
							210	129	6.80	2.0	1.10	KF37	
						224	121	6.37	2.0	1.10	KA37		
						267	102	5.36	2.0	1.30	KAF37		

**Selection Table
(Constant Power)**

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
4.0kW							4.0kW						
1.7	19991	835	171	2.50	K187R107	4P	6.4	5666	112.41	62	1.35	K107	8P
3.2	10774	450	171	4.00	KA187R107		7.1	5078	100.75	62	1.50	KF107	
0.64	53916	2252	152	0.80	K187R97 KA187R97	7.9	4585	90.96	62	1.65	KA107		
0.71	48553	2028	162	0.90		8.7	4164	82.61	62	1.85	KAF107		
0.78	43956	1836	170	1.00		6.7	5423	143.47	62	1.40			
0.88	38976	1628	171	1.10		7.9	4591	121.46	62	1.65	K107		
1.1	31746	1326	171	1.25		8.5	4249	112.41	62	1.80	KF107		
1.2	29855	1247	171	1.45		9.5	3809	100.75	62	2.00	KA107		
1.3	25689	1073	171	1.70	11	3438	90.96	62	2.20	KAF107			
1.5	22385	935	171	1.95	10	3616	143.47	62	2.10				
1.7	20254	846	171	2.20	12	3061	121.46	62	2.50	K107			
1.0	33135	1384	135	0.90	13	2833	112.41	62	2.70	KF107			
1.1	30501	1274	135	1.00	14	2539	100.75	62	3.00	KA107			
1.3	26192	1094	135	1.20	16	2292	90.96	62	3.30	KAF107			
1.6	22241	929	135	1.40	17	2082	82.61	62	3.60				
1.7	20063	838	135	1.55	20	1847	73.30	62	4.10				
1.9	17812	744	135	1.75	9.4	3861	153.21	38	1.05	K97			
2.3	15035	628	135	2.10	10	3535	140.28	38	1.15	KF97			
1.7	20829	870	105	0.85	12	3123	123.93	38	1.30	KA97			
1.9	18195	760	106	1.00	14	2649	105.13	38	1.50	KAF97			
2.5	13647	570	108	1.30	15	2439	96.80	38	1.65	K97			
2.8	12210	510	109	1.45	17	2180	86.52	38	1.85	KF97			
3.3	10462	437	109	1.70	18	1963	77.89	38	2.00	KA97			
2.7	12952	541	75	1.00	20	1778	70.54	38	2.30	KAF97			
3.0	11420	477	76	1.15	23	1576	62.55	38	2.60				
3.4	10127	423	77	1.30	25	1425	56.55	38	2.85				
3.9	8834	369	77	1.45	12	2919	115.82	25	0.85	K87			
4.3	7972	333	77	1.65	14	2588	102.71	26	1.00	KF87			
5.0	6919	289	78	1.90	17	2176	86.34	26	1.15	KA87			
5.7	6081	254	78	2.15	18	1999	79.34	27	1.25	KAF87			
2.4	14484	605	72	0.90	20	1776	70.46	27	1.40				
2.6	13120	548	75	1.00	23	1588	63.00	27	1.60				
3.0	11324	473	76	1.15	25	1427	56.64	27	1.75	K87			
3.5	9816	410	76	1.30	29	1239	49.16	27	2.00	KF87			
4.0	8715	364	62	0.90	33	1109	44.02	27	2.20	KA87			
4.5	7613	318	62	1.05	39	920	36.52	26	2.50	KAF87			
5.0	6847	286	62	1.15	46	791	31.38	26	2.90				
5.7	6009	251	62	1.35	52	702	27.87	26	3.20				
6.5	5315	222	62	1.50	22	1635	64.86	13	0.90				
7.3	4692	196	62	1.70	25	1473	58.44	14	1.00	K77			
8.3	4166	174	62	1.90	28	1292	51.26	16	1.15	KF77			
9.4	3687	154	62	2.15	32	1140	45.24	17	1.30	KA77			
10	3352	140	62	2.40	36	1011	40.10	17	1.45	KAF77			
7.2	4764	199	38	0.90	37	969	38.45	17	1.45				
					41	888	35.25	18	1.65				
					47	779	30.93	18	1.85				
					49	739	29.31	18	1.95	K77			
5.3	6809	135.09	78	1.80	56	647	25.66	18	2.20	KF77			
5.9	6159	122.20	78	2.00	62	582	23.11	19	2.50	KA77			
6.6	5527	109.66	78	2.20	71	511	20.28	19	2.80	KAF77			
6.4	5107	149.04	78	2.20	80	451	17.89	19	3.15				
7.1	4619	135.09	78	2.40	91	400	15.86	19	3.55				
7.9	4145	122.20	78	2.70	106	341	13.54	19	4.20				
8.8	4249	109.66	78	3.00									

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
4.0kW							5.5kW						
48	761	30.21	10	1.00	K67	4P	6.5	7308	222	62	1.10		
53	687	27.27	10	1.10	KF67		7.3	6452	196	62	1.25	K107R77	4P
60	605	23.99	11	1.25	KA67		8.3	5728	174	62	1.40	KF107R77	
64	571	22.66	11	1.30	KAF67		9.4	5070	154	62	1.60	KA107R77	
75	486	19.29	12	1.45		10	4609	140	62	1.75	KAF107R77		
82	442	17.53	12	1.55			4.7	10565	152.45	109	1.60	K157	8P
95	383	15.19	12	1.70	K67	5.8	8542	123.25	110	2.00	KF157		
109	333	13.22	12	1.90	KF67	7.2	6921	99.87	110	2.40	KA157		
115	315	12.48	12	1.60	KA67	7.8	6399	92.33	110	2.70	KAF157		
135	268	10.63	12	1.75	KAF67		5.3	9362	135.09	77	1.30	K127	8P
149	243	9.66	12	1.85		5.9	8469	122.20	77	1.45	KF127		
172	211	8.37	12	1.95		6.6	7600	109.66	77	1.60	KA127		
198	183	7.28	11	2.10		8.1	6175	89.10	78	1.95	KAF127		
60	606	24.05	5.8	0.95			7.1	7022	135.09	78	1.75	K127	6P
63	572	22.71	5.9	1.00		7.9	6352	122.20	78	1.95	KF127		
74	487	19.34	5.9	1.10		8.8	5700	109.66	78	2.20	KA127		
82	443	17.57	5.9	1.15		11	4631	89.10	78	2.60	KAF127		
95	384	15.22	5.9	1.30	K57		8.5	5843	112.41	62	1.30	K107	6P
109	334	13.25	5.8	1.45	KF57	9.5	5237	100.75	62	1.45	KF107		
121	300	11.92	5.5	1.30	KA57	11	4728	90.96	62	1.60	KA107		
128	284	11.26	5.5	1.35	KAF57	12	4294	82.61	62	1.75	KAF107		
150	242	9.59	5.4	1.55			10	4972	143.47	62	1.80		4P
165	220	8.71	5.4	1.65		12	4209	121.46	62	1.80			
191	190	7.55	5.3	1.80		13	3895	112.41	62	1.95	K107		
219	166	6.57	5.1	1.95		14	3491	100.75	62	2.20	KF107		
5.5kW							5.5kW						
0.9	53593	1628	153	0.80			16	3152	90.96	62	2.40	KA107	4P
1.1	43651	1326	165	0.95		17	2863	82.61	62	2.60	KAF107		
1.2	41050	1247	171	1.05		20	2540	73.30	62	2.90			
1.4	34137	1037	171	1.25	K187R97	22	2305	66.52	62	3.20			
1.5	30780	935	171	1.45	KA187R97	25	1981	57.17	62	3.70			
1.7	27850	846	171	1.60			12	4294	123.93	38	0.95	K97	4P
2.4	20081	610	171	2.00		14	3643	105.13	38	1.10	KF97		
2.6	18369	558	171	2.40		15	3354	96.80	38	1.20	KA97		
1.3	36014	1094	135	0.85		17	2998	86.52	38	1.35	KAF97		
1.6	30582	929	135	1.00			18	2699	77.89	38	1.50		4P
1.7	27586	838	135	1.15		20	2444	70.54	38	1.65			
1.9	24492	744	135	1.25	K167R97	23	2167	62.55	38	1.85	K97		
2.3	20673	628	135	1.50	KA167R97	25	1960	56.55	38	2.10	KF97		
2.6	18139	551	135	1.70		30	1661	47.93	37	2.40	KA97	4P	
3.0	15571	473	135	2.00		34	1451	41.87	37	2.70	KAF97		
3.4	13826	420	135	2.30		38	1327	38.29	37	3.00			
2.2	21891	665	104	0.80		42	1186	34.22	37	3.30			
2.5	18764	570	106	0.95	K157R97		17	2992	86.34	25	0.85		4P
2.8	16789	510	107	1.05	KF157R97	18	2749	79.34	26	0.95	K87		
3.3	14386	437	108	1.25	KA157R97	20	2442	70.46	26	1.05	KF87		
3.8	12542	381	109	1.45	KAF157R97	23	2183	63.00	26	1.15	KA87		
4.2	11193	340	109	1.60		25	1963	56.64	26	1.30	KAF87		
3.4	13925	423	74	0.95			29	1703	49.16	26	1.50		4P
3.9	12147	369	76	1.05		33	1525	44.02	25	1.60			
4.3	10962	333	76	1.20	K127R87	39	1265	36.52	25	1.85	K87		
5.0	9514	289	77	1.35	KF127R87	46	1087	31.38	24	2.30	KF87		
5.7	8362	254	77	1.55	KA127R87	52	966	27.87	23	2.50	KA87		
6.7	7045	214	78	1.85	KAF127R87	58	864	24.92	23	2.80	KAF87		
7.1	6650	202	78	1.95		64	776	22.40	23	3.00			
8.6	5530	168	78	2.35		74	674	19.44	23	3.30			
9.8	4839	147	78	2.70									

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
5.5kW							7.5kW						
32	1568	45.24	14	0.95			4.3	14948	333	72	0.90		
36	1390	40.10	15	1.05	K77		5.0	12973	289	75	1.00		
47	1072	30.93	17	1.35	KF77	4P	5.7	11402	254	76	1.15	K127R87	
49	1016	29.31	17	1.45	KA77		6.7	9606	214	77	1.35	KF127R87	4P
56	889	25.66	18	1.65	KAF77		7.1	9068	202	77	1.45	KA127R87	
62	801	23.11	18	1.85			8.6	7542	168	78	1.75	KAF127R87	
71	703	20.28	18	2.00			9.8	6599	147	78	2.00		
80	620	17.89	18	2.20			4.5	15109	159.88	135	1.95	K167	
91	550	15.86	18	2.40	K77		5.0	13699	144.96	135	2.20	KA167	8P
106	469	13.54	18	2.70	KF77		5.6	12252	129.64	135	2.40		
117	428	12.36	17	2.20	KA77	4P	6.1	11215	159.88	135	2.60	K167	
133	376	10.84	17	2.50	KAF77		6.7	10169	144.96	135	2.95	KA167	6P
150	332	9.57	17	2.80			7.5	9094	129.64	135	3.20		
170	294	8.48	17	3.00			6.4	10694	152.45	109	1.60		
199	251	7.24	17	3.30			7.9	8646	123.25	110	1.95	K157	
60	831	23.99	9.2	0.90			9.7	7006	99.87	110	2.40	KF157	6P
64	785	22.66	10	0.95	K67		11	6477	92.33	110	2.60	KA157	
75	668	19.29	11	1.05	KF67	4P	12	5664	80.75	110	3.00	KAF157	
82	607	17.53	11	1.15	KA67		7	9476	135.09	77	1.30	K127	
95	526	15.19	11	1.25	KAF67		8	8572	122.20	77	1.40	KF127	6P
109	458	13.22	12	1.40			9	7692	109.66	77	1.60	KA127	
115	432	12.48	12	1.15			11	6250	89.10	78	1.95	KAF127	
135	368	10.63	12	1.30	K67		9.7	7043	149.04	78	1.80		
149	335	9.66	12	1.35	KF67	4P	11	6383	135.09	78	1.90	K127	
172	290	8.37	11	1.45	KA67		12	5774	122.20	78	2.10	KF127	
198	252	7.28	11	1.55	KAF67		13	5182	109.66	78	2.40	KA127	4P
82	609	17.57	4.8	0.85			16	4210	89.10	78	2.90	KAF127	
95	527	15.22	4.9	0.95			18	3838	81.23	78	3.20		
109	459	13.25	5.0	1.05	K57		20	3346	70.82	78	3.70		
121	413	11.92	4.7	0.95	KF57		10	6779	143.47	62	1.10	K107	
128	390	11.26	4.7	1.00	KA57	4P	12	5739	121.46	62	1.30	KF107	4P
150	332	9.59	4.7	1.15	KAF57		13	5312	112.41	62	1.40	KA107	
165	302	8.71	4.7	1.20			14	4761	100.75	62	1.60	KAF107	
191	262	7.55	4.7	1.30			16	4298	90.96	61	1.75		
219	228	6.57	4.7	1.45			17	3904	82.61	60	1.95	K107	
7.5kW							20	3464	73.30	59	2.20	KF107	4P
1.7	37483	835	171	1.30	K187R107		22	3143	66.52	58	2.40	KA107	
2.0	32680	728	171	1.50	KA187R107	4P	25	2701	57.17	56	2.80	KAF107	
2.4	26575	592	171	1.75			29	2358	49.90	55	3.10		
1.3	48167	1073	163	0.90			34	2000	42.33	53	3.50		
1.5	41972	935	171	1.05			39	1748	37.00	51	3.90		
1.7	37977	846	171	1.15	K187R97	4P	15	4574	96.80	36	0.90		
2.4	27383	610	171	1.45	KA187R97		17	4088	86.52	36	1.00	K97	
2.6	25049	558	171	1.75			18	3681	77.89	36	1.10	KF97	4P
3.0	21233	473	171	2.10			20	3333	70.54	36	1.20	KA97	
1.7	37618	838	135	0.85			23	2956	62.55	36	1.35	KAF97	
1.9	33398	744	135	0.90			25	2672	56.55	35	1.50		
2.3	28191	628	135	1.10	K167R97	4P	30	2265	47.93	35	1.80		
2.6	24734	551	135	1.25	KA167R97		34	1978	41.87	34	2.00	K97	4P
3.0	21233	473	135	1.45			38	1809	38.29	33	2.20	KF97	
3.4	18854	420	135	1.65			42	1617	34.22	33	2.50	KA97	
4.0	16250	362	135	1.90			47	1456	30.81	17	2.75	KAF97	
3.3	19617	437	106	0.95	K157R97		52	1318	27.90	17	3.00		
3.8	17103	381	107	1.05	KF157R97	4P	58	1169	24.74	17	3.30		
4.2	15263	340	108	1.20	KA157R97								
4.9	13153	293	108	1.40	KAF157R97								

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
7.5kW							11.0kW						
23	2977	63.00	23	0.85			6.1	16449	159.88	135	1.80	K167	
25	2676	56.64	23	0.95	K87		6.7	14914	144.96	135	2.05	KA167	6P
29	2323	49.16	23	1.10	KF87	4P	7.5	13338	129.64	135	2.20		
33	2080	44.02	23	1.20	KA87		9.1	10929	159.88	135	2.70	K167	
39	1726	36.52	23	1.35	KAF87		10	9909	144.96	135	3.05	KA167	4P
46	1483	31.38	22	1.70			11	8861	129.64	135	3.30		
52	1317	27.87	22	1.85			5.9	16849	123.25	107	1.00	K157	
58	1178	24.92	22	2.00	K87		7.3	13653	99.87	108	1.25	KF157	8P
64	1058	22.40	21	2.00	KF87	4P	7.9	12622	92.33	108	1.35	KA157	
74	919	19.44	21	2.40	KA87		9.0	11039	80.75	109	1.55	KAF157	
83	823	17.41	20	2.50	KAF87		6.4	15685	152.45	107	1.10		
90	756	16.00	20	2.20			7.9	12680	123.25	108	1.35	K157	
100	683	14.45	20	2.90			9.7	10275	99.87	109	1.65	KF157	6P
115	593	12.56	20	3.30			10.5	9499	92.33	110	1.80	KA157	
47	1462	30.93	15	1.00			12.0	8308	80.75	110	2.10	KAF157	
49	1385	29.31	15	1.05	K77		9.6	10421	152.45	109	1.65	K157	
56	1213	25.66	16	1.20	KF77	4P	12	8425	123.25	110	2.00	KF157	4P
62	1092	23.11	17	1.35	KA77		15	6827	99.87	110	2.50	KA157	
71	958	20.28	17	1.50	KAF77		16	6311	92.33	110	2.70	KAF157	
80	845	17.89	18	1.60			11	9234	135.09	77	1.30		
91	749	15.86	17	1.75			12	8353	122.20	77	1.45		
106	640	13.54	17	2.00	K77		13	7496	109.66	77	1.60	K127	4P
117	584	12.36	16	1.60	KF77	4P	16	6090	89.10	78	2.00	KF127	
133	512	10.84	16	1.80	KA77		18	5552	81.23	78	2.20	KA127	
150	452	9.57	15	1.95	KAF77		21	4841	70.82	78	2.50	KAF127	
170	401	8.48	15	2.10			23	4259	62.31	78	2.80		
199	342	7.24	15	2.30			28	3620	52.96	78	3.20		
11.0kW							13	7684	112.41	55	1.00	K107	
1.7	54222	835	162	0.90			14	6887	100.75	55	1.10	KF107	4P
2.0	47274	728	171	1.05			16	6218	90.96	55	1.20	KA107	
2.5	38443	592	171	1.20	K187R107	4P	18	5647	82.61	55	1.35	KAF107	
3.2	29222	450	171	1.45	KA187R107		20	5010	73.30	54	1.50		
3.7	25520	393	171	1.65			22	4547	66.52	53	1.65		
4.1	23053	355	171	2.10			26	3908	57.17	52	1.90	K107	4P
2.4	39611	610	171	1.00	K187R97		29	3411	49.90	51	2.20	KF107	
2.6	36235	558	171	1.20	KA187R97	4P	34	2893	42.33	50	2.40	KA107	
3.1	30715	473	171	1.40			39	2529	37.00	49	2.70	KAF107	
4.9	19481	300	135	1.50			45	2234	32.68	49	3.00		
5.6	17013	262	135	1.70	K167R107		47	2138	31.28	48	3.00		
6.1	15650	241	135	1.95	KA167R107	4P	50	1982	28.99	48	3.20		
6.9	13702	211	135	2.30			21	4822	70.54	31	0.85	K97	
7.5	12598	194	135	2.30			23	4276	62.55	31	0.95	KF97	4P
2.6	35780	551	135	0.85			26	3865	56.55	31	1.05	KA97	
3.1	30715	473	135	1.00	K167R97	4P	30	3276	47.93	31	1.25	KAF97	
3.5	27273	420	135	1.15	KA167R97		35	2862	41.87	31	1.40		
4.0	23507	362	135	1.30			38	2617	38.29	30	1.55		
					K157R97		43	2339	34.22	30	1.70		
4.3	22078	340	104	0.80	KF157R97	4P	47	2106	30.81	30	1.90	K97	
5.0	19026	293	106	0.95	KA157R97		52	1907	27.90	29	2.10	KF97	4P
					KAF157R97		59	1691	24.74	29	2.40	KA97	
6.8	13896	214	74	0.95	K127R87		65	1529	22.37	28	2.60	KAF97	
7.2	13117	202	75	1.00	KF127R87	4P	77	1296	18.96	28	3.00		
8.7	10909	168	76	1.20	KA127R87		88	1132	16.56	28	3.30		
9.9	9546	147	77	1.35	KAF127R87		105	947	13.85	28	3.80		
5.6	17723	129.64	135	1.60	K167	8P	33	3009	44.02	19	0.80		
6.3	15951	116.68	135	1.85	KA167		40	2496	36.52	19	0.95	K87	
6.7	14859	108.69	135	2.00			47	2145	31.38	20	1.20	KF87	4P
							52	1905	27.87	20	1.30	KA87	
							59	1703	24.92	19	1.40	KAF87	

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
11.0kW							15.0kW						
65	1531	22.40	19	1.40			11	12592	135.09	75	0.95	K127	
75	1329	19.44	19	1.60			12	11390	122.20	76	1.10	KF127	4P
84	1190	17.41	19	1.75			13	10221	109.66	76	1.20	KA127	
91	1094	16.00	18	1.55	K87		16	8305	89.10	77	1.45	KAF127	
101	988	14.45	18	2.00	KF87	4P	18	7571	81.23	77	1.60	K127	
116	859	12.56	18	2.20	KA87		21	6601	70.82	78	1.85	KF127	4P
131	763	11.16	17	1.85	KAF87		23	5808	62.31	76	2.10	KA127	
146	684	10.00	17	2.10			28	4936	52.96	74	2.50	KAF127	
176	567	8.29	16	2.30			31	4348	46.65	72	2.80		
202	493	7.21	16	2.50			36	3768	40.42	72	3.20		
63	1580	23.11	14	0.90			16	8478	90.96	48	0.90	K107	
72	1386	20.28	15	1.00			18	7700	82.61	49	1.00	KF107	4P
82	1223	17.89	16	1.10			20	6832	73.30	49	1.10	KA107	
92	1084	15.86	16	1.20	K77	4P	22	6200	66.52	48	1.25	KAF107	
108	926	13.54	15	1.35	KF77		26	5329	57.17	48	1.45		
118	845	12.36	15	1.10	KA77		29	4651	49.90	48	1.60		
135	741	10.84	15	1.25	KAF77		34	3946	42.33	47	1.75	K107	
153	654	9.57	14	1.35			39	3449	37.00	46	2.00	KF107	4P
172	580	8.48	14	1.45			45	3046	32.68	45	2.20	KA107	
202	495	7.24	14	1.55			47	2915	31.28	44	2.20		
15.0kW							15.0kW						
2.5	52422	592	161	0.90			50	2702	28.99	44	2.50	KAF107	
3.2	39848	450	171	1.05	K187R107	4P	55	2452	26.31	44	2.70		
3.7	34800	393	171	1.20	KA187R107		65	2107	22.61	44	3.20		
4.1	31435	355	171	1.55			30	4468	47.93	27	0.90		
6.5	20012	226	171	2.10			35	3903	41.87	27	1.05	K97	4P
4.9	26565	300	135	1.10			38	3569	38.29	27	1.15	KF97	
5.6	23200	262	135	1.30			43	3190	34.22	27	1.30	KA97	
6.1	21341	241	135	1.45	K167R107	4P	47	2872	30.81	27	1.40	KAF97	
6.9	18684	211	135	1.65	KA167R107		52	2601	27.90	27	1.55		
7.5	17179	194	135	1.75			59	2306	24.74	27	1.75		
8.2	15762	178	135	1.95			65	2085	22.37	26	1.95	K97	4P
9.7	13371	151	135	2.20			77	1767	18.96	26	2.30	KF97	
6.2	20809	235	105	0.85			88	1544	16.56	25	2.70	KA97	
6.8	19127	216	106	0.95	K157R107	4P	105	1291	13.85	25	3.00	KAF97	
7.7	16825	190	107	1.05	KF157R107		122	1118	11.99	25	3.30		
9.2	14079	159	108	1.30	KA157R107		140	970	10.41	25	3.80		
12	10980	124	109	1.65	KAF157R107		168	812	8.71	25	4.50		
14	9563	108	110	1.90			47	2925	31.38	16	0.90		
5.5	24804	176.80	171	1.90	K187	6P	52	2598	27.87	17	0.95	K87	4P
6.0	22532	160.60	171	2.10	KA187		59	2323	24.92	17	1.00	KF87	
7.5	18188	129.64	135	1.60	K167	6P	65	2088	22.40	17	1.05	KA87	
8.3	16370	116.68	135	1.85	KA167		75	1812	19.44	17	1.20	KAF87	
8.9	15249	108.69	135	1.95			84	1623	17.41	17	1.30		
9.1	14903	159.88	135	2.00	K167	4P	91	1491	16.00	16	1.15		
10	13512	144.96	135	2.25	KA167		101	1347	14.45	17	1.50	K87	4P
11	12084	129.64	135	2.40			116	1171	12.56	17	1.60	KF87	
7.9	17292	123.25	107	1.00	K157	6P	131	1040	11.16	16	1.35	KA87	
9.7	14011	99.87	108	1.20	KF157		146	932	10.00	16	1.55	KAF87	
11	12954	92.33	108	1.35	KA157		176	773	8.29	15	1.70		
12	11329	80.75	109	1.55	KAF157		202	672	7.21	15	1.85		
14	9540	68.00	109	1.75			18.5kW						
9.6	14210	152.45	108	1.20			3.3	48811	450	159	0.85		
12	11488	123.25	109	1.50	K157	4P	3.7	42628	393	171	1.00	K187R107	4P
15	9309	99.87	108	1.85	KF157		4.1	38506	355	171	1.25	KA187R107	
16	8606	92.33	107	2.00	KA157		6.5	24514	226	171	1.70		
18	7527	80.75	104	2.30	KAF157		7.7	20718	191	171	2.00		
21	6338	68.00	104	2.70									
24	5719	61.36	104	3.00									

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
18.5kW							18.5kW						
4.9	32541	300	135	0.90			35	4833	42.33	44	1.45		
5.6	28419	262	135	1.05			40	4225	37.00	43	1.60		
6.1	26141	241	135	1.20			45	3731	32.68	43	1.85	K107	
7.0	22887	211	135	1.35	K167R107		47	3548	31.28	43	1.80		
7.6	21043	194	135	1.40	KA167R107	4P	51	3310	28.99	42	2.10	KF107	4P
8.3	19307	178	135	1.60			56	3004	26.31	42	2.30	KA107	
9.7	16379	151	135	1.80			65	2582	22.61	41	2.60	KAF107	
11	13884	128	135	2.10			74	2254	19.74	40	3.00		
13	12149	112	135	2.40			88	1911	16.74	38	3.50		
7.7	20609	190	105	0.90	K157R107		35	4781	41.87	24	0.85	K97	
9.2	17247	159	107	1.05	KF157R107	4P	48	3518	30.81	25	1.15	KF97	4P
12	13450	124	108	1.35	KA157R107		53	3186	27.90	25	1.30	KA97	
14	11715	108	107	1.55	KAF157R107		59	2825	24.74	25	1.45	KAF97	
5.5	30592	176.80	171	1.55			66	2554	22.37	25	1.60		
6.0	27789	160.60	171	1.65	K187	6P	78	2165	18.96	24	1.90	K97	
6.7	24868	143.72	171	1.90	KA187		89	1891	16.56	24	2.20	KF97	
7.3	23013	133.00	171	2.10			106	1581	13.85	24	2.60	KA97	4P
8.3	20187	176.80	171	2.30			123	1369	11.99	23	2.70	KAF97	
9.2	18337	160.60	171	2.50	K187		141	1189	10.41	23	3.00		
10	16410	143.72	171	2.90	KA187	4P	169	994	8.71	23	3.50		
11	15186	133.00	171	3.20			59	2845	24.92	15	0.85		
10	16551	144.96	135	1.70			66	2558	22.40	15	0.85		
11	14802	129.64	135	1.95			76	2220	19.44	15	1.00		
13	13322	116.68	135	2.25	K167		84	1988	17.41	16	1.05	K87	
14	12410	108.69	135	2.40	KA167	4P	102	1650	14.45	16	1.20	KF87	
15	11034	96.64	135	2.70			117	1434	12.56	16	1.30	KA87	4P
17	9786	85.71	135	3.00			132	1274	11.16	15	1.10	KAF87	
9.7	15976	99.87	106	1.00	K157		147	1142	10.00	15	1.25		
11	13972	92.33	107	1.10	KF157		177	947	8.29	14	1.40		
12	11766	80.75	106	1.25	KA157	6P	204	823	7.21	14	1.50		
14	21326	68.00	104	1.40	KAF157		22kW						
12	14072	123.25	106	1.20			3.7	50693	393	155	0.85		
15	11403	99.87	104	1.50			4.1	45791	355	171	1.05		
16	10542	92.33	102	1.65			6.5	29152	226	171	1.45	K187R107	4P
18	9220	80.75	100	1.85	K157		7.7	24637	191	171	1.70	KA187R107	
22	7764	68.00	98	2.10	KF157	4P	8.8	21541	167	171	1.95		
24	7006	61.36	96	2.50	KA157		10	18188	141	171	2.30		
27	6262	54.84	94	2.80	KAF157		5.6	33795	262	135	0.85		
31	5445	47.69	91	3.20			6.1	31087	241	135	1.00		
38	4418	38.69	87	3.90			7.0	27217	211	135	1.15		
					K127		7.6	25024	194	135	1.20	K167R107	4P
13	12521	109.66	75	1.00	KF127	4P	8.3	22960	178	135	1.35	KA167R107	
16	10173	89.10	75	1.20	KA127		9.7	19477	151	135	1.50		
18	9275	81.23	75	1.30	KAF127		11	16511	128	135	1.80		
21	8086	70.82	74	1.50			13	14447	112	135	2.10		
24	7114	62.31	73	1.70									
28	6047	52.96	71	2.00	K127		9.2	20509	159	104	0.90	K157R107	
32	5326	46.65	70	2.20	KF127	4P	12	15995	124	103	1.15	KF157R107	4P
36	4615	40.42	68	2.70	KA127		14	13931	108	102	1.30	KA157R107	
41	4142	36.28	66	3.00	KAF127								
46	3611	31.63	65	3.40			5.5	36380	176.80	171	1.30		
53	3178	27.83	63	3.90			6.0	33046	160.60	171	1.40		
20	8369	73.30	44	0.90	K107		6.7	29573	143.72	171	1.60	K187	6P
22	7595	66.52	44	1.00	KF107	4P	7.3	27367	133.00	171	1.80	KA187	
26	6528	57.17	44	1.15	KA107		8.2	24410	118.63	171	1.90		
29	5697	49.90	44	1.30	KAF107		9.6	20890	101.52	171	2.10		
							8.3	24006	176.80	171	1.95		
							9.2	21806	160.60	171	2.10	K187	
							10	19514	143.72	171	2.40	KA187	4P
							11	18059	133.00	171	2.70		

Selection Table
(Constant Power)

n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
22kW							22kW						
11	17602	129.64	135	1.65			76	2640	19.44	14	0.80		
13	15843	116.68	135	1.90			84	2364	17.41	14	0.90		
14	14758	108.69	135	2.00	K167	4P	102	1962	14.45	14	1.00	K87	
15	13122	96.64	135	2.20	KA167		117	1705	12.56	15	1.10	KF87	4P
17	11638	85.71	135	2.50			132	1515	11.16	13	0.95	KA87	
19	10402	76.61	135	2.90			147	1358	10.00	13	1.05	KAF87	
9.7	20550	99.87	101	0.85			177	1126	8.29	14	1.20		
11	18999	92.33	101	0.90	K157		204	979	7.21	13	1.25		
12	16616	80.75	100	1.05	KF157	6P	30kW						
14	13992	68.00	99	1.20	KA157		6.5	39752	226	171	1.05		
16	12626	61.36	98	1.35	KAF157		7.7	33596	191	171	1.25	K187R107	4P
12	16735	123.25	100	1.05			8.8	29375	167	171	1.45	KA187R107	
15	13560	99.87	99	1.25			10	24801	141	171	1.70		
16	12536	92.33	98	1.35	K157		7.0	37114	211	135	0.85		
18	10964	80.75	97	1.55	KF157	4P	7.6	34124	194	135	0.85		
22	9233	68.00	95	1.80	KA157		8.3	31309	178	135	1.00	K167R107	4P
24	8331	61.36	93	2.10	KAF157		9.7	26560	151	135	1.10	KA167R107	
27	7446	54.84	91	2.30			11	22515	128	135	1.30		
31	6475	47.69	89	2.70			13	19700	112	135	1.50		
38	5253	38.69	85	3.30			8.3	32735	176.80	171	1.45		
16	12098	89.10	70	1.00	K127		9.2	29736	160.60	171	1.55		
18	11029	81.23	70	1.10	KF127	4P	10	26610	143.72	171	1.75		
21	9616	70.82	70	1.30	KA127		11	24625	133.00	171	2.00	K187	4P
24	8460	62.31	69	1.45	KAF127		12	21965	118.63	171	2.22	KA187	
28	7191	52.96	67	1.70			14	18797	101.52	171	2.30		
32	6334	46.65	67	1.90			16	16842	90.96	171	2.50		
36	5488	40.42	66	2.30	K127		20	13566	73.27	171	2.90		
41	4926	36.28	64	2.50	KF127	4P	13	21604	116.68	135	1.30		
46	4295	31.63	63	2.90	KA127		14	20124	108.69	135	1.50		
53	3779	27.83	61	3.30	KAF127		15	17893	96.64	135	1.70		
62	3211	23.65	60	3.80			17	15869	85.71	135	1.85	K167	4P
71	2828	20.83	58	4.30			19	14185	76.61	135	2.10	KA167	
					K107		22	12524	67.64	135	2.40		
26	7762	57.17	41	1.00	KF107	4P	24	11172	60.34	135	2.70		
29	6775	49.90	41	1.10	KA107		29	9426	50.91	135	3.20		
35	5748	42.33	41	1.20	KAF107		15	18491	99.87	88	0.90		
40	5024	37.00	41	1.35			16	17095	92.33	88	1.00		
45	4437	32.68	41	1.55			18	14951	80.75	88	1.15	K157	
47	4220	31.28	41	1.50			22	12590	68.00	87	1.30	KF157	4P
51	3936	28.99	40	1.75			24	11361	61.36	86	1.50	KA157	
56	3572	26.31	40	1.90			27	10154	54.84	85	1.70	KAF157	
65	3070	22.61	39	2.20	K107		31	8830	47.69	83	1.95		
74	2680	19.74	38	2.50	KF107	4P	38	7164	38.69	81	2.40		
88	2273	16.74	37	2.90	KA107		47	5840	31.54	78	3.00		
100	1986	14.63	36	3.30	KAF107		21	13113	70.82	61	0.95		
109	1824	13.43	35	2.20			24	11537	62.31	61	1.05		
125	1591	11.72	34	2.60			28	9806	52.96	61	1.25		
148	1350	9.94	33	2.90			32	8637	46.65	61	1.40	K127	
169	1180	8.69	32	3.20			36	7484	40.42	61	1.65	KF127	4P
48	4183	30.81	22	0.95	K97		41	6717	36.28	60	1.85	KA127	
53	3788	27.90	23	1.05	KF97	4P	46	5856	31.63	59	2.10	KAF127	
59	3359	24.74	23	1.20	KA97		53	5153	27.83	58	2.40		
66	3037	22.37	23	1.35	KAF97		62	4379	23.65	57	2.80		
78	2574	18.96	23	1.60			71	3857	20.83	56	3.00		
89	2248	16.56	23	1.80	K97		81	3342	18.05	56	3.50		
106	1881	13.85	23	2.20	KF97	4P	35	7838	42.33	34	0.90	K107	
123	1628	11.99	22	2.30	KA97		40	6851	37.00	36	1.00	KF107	4P
141	1413	10.41	21	1.90	KAF97		47	5792	31.28	34	1.10	KA107	
169	1183	8.71	20	2.10								KAF107	

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
30kW							37kW						
51	5368	28.99	36	1.25			41	8229	36.28	56	1.50		
56	4871	26.31	36	1.40			47	7174	31.63	56	1.70		
65	4186	22.61	36	1.65			53	6312	27.83	55	1.95		
74	3655	19.74	36	1.85	K107		63	5364	23.65	54	2.30	K127	
88	3099	16.74	35	2.20	KF107		71	4725	20.83	53	2.60	KF127	
100	2709	14.63	34	2.40	KA107	4P	82	4094	18.05	52	3.00	KA127	4P
109	2487	13.43	33	1.65	KAF107		103	3257	14.36	50	3.50	KAF127	
125	2170	11.72	32	1.90			115	2919	12.87	48	2.80		
148	1840	9.94	31	2.20			133	2529	11.15	46	3.10		
169	1609	8.69	31	2.40			167	2012	8.87	44	3.50		
59	4581	24.74	19	0.90			40	8392	37.00	28	0.80		
66	4142	22.37	19	1.00			47	7096	31.28	30	0.90		
78	3511	18.96	20	1.15	K97		51	6575	28.99	32	1.05		
89	3066	16.56	20	1.35	KF97		56	5967	26.31	33	1.15		
106	2564	13.85	20	1.60	KA97	4P	65	5128	22.61	33	1.30	K107	
123	2220	11.99	20	1.65	KAF97		75	4477	19.74	33	1.50	KF107	
141	1927	10.41	19	1.40			88	3797	16.74	33	1.75	KA107	4P
169	1613	8.71	18	1.55			101	3318	14.63	32	1.95	KAF107	
37kW							45kW						
6.5	48697	226	158	0.85			7.7	50054	191	155	0.85	K187R107	
7.7	41155	191	171	1.00	K187R107		8.9	43764	167	167	0.95	KA187R107	4P
8.9	35984	167	171	1.15	KA187R107	4P	10	36951	141	171	1.15		
10	30382	141	171	1.40			12	33544	128	135	0.85	K167R107	4P
8.3	38354	178	135	0.80			13	29351	112	135	1.00	KA167R107	
10	32536	151	135	9.00	K167R107		8	46332	176.80	167	0.95		
12	27580	128	135	1.05	KA167R107	4P	9	42087	160.60	171	1.05		
13	24133	112	135	1.20			10	37663	143.72	171	1.20		
8.4	40100	176.80	171	1.15			11	34854	133.00	171	1.30		
9.2	36426	160.60	171	1.25			12	31086	118.62	171	1.45	K187	
10	32597	143.72	171	1.45			15	26604	101.52	171	1.50	KA187	4P
11	30166	133.00	171	1.60	K187		16	23837	90.96	171	1.65		
12	26904	118.62	171	1.75	KA187	4P	20	19201	73.27	171	1.95		
15	23026	101.52	171	1.85			22	17537	66.92	169	2.30		
16	20631	90.96	171	2.00			24	15873	60.57	160	2.50		
20	16619	73.27	171	2.40			28	14091	53.77	160	2.80		
22	15178	66.92	171	2.60			14	28483	108.69	135	1.00		
14	24652	108.69	135	1.20			15	25326	96.64	135	1.10		
15	21919	96.64	135	1.35			17	22461	85.71	135	1.25		
17	19440	85.71	135	1.50			19	20076	76.61	135	1.40		
19	17376	76.61	135	1.70	K167		22	17726	67.64	135	1.60	K167	
22	15342	67.64	135	1.95	KA167	4P	25	15813	60.34	134	1.80	KA167	4P
25	13686	60.34	135	2.20			29	13341	50.91	130	2.10		
29	11547	50.91	135	2.60			36	10650	40.64	127	2.60		
36	9218	40.64	135	3.20			41	9487	36.20	120	2.80		
16	20942	92.33	79	0.80	K157		44	8847	33.76	120	3.00		
18	18315	80.75	80	0.95	KF157		22	18758	68.00	73	0.85		
					KA157	4P	24	16926	61.36	74	1.00		
					KAF157		27	15128	54.84	74	1.15		
22	15423	68.00	81	1.05			31	13155	47.69	74	1.30	K157	
24	13917	61.36	80	1.25	K157		38	10673	38.69	73	1.60	KF157	
27	12438	54.84	80	1.40	KF157		47	8700	31.54	72	1.95	KA157	4P
31	10817	47.69	79	1.60	KA157	4P	56	7327	26.56	71	2.20	KAF157	
38	8775	38.69	77	1.95	KAF157		62	6612	23.97	69	2.60		
47	7154	31.54	75	2.40			69	5909	21.42	68	2.90		
56	6024	26.56	75	2.80			79	5136	18.62	66	3.30		
24	14133	62.31	55	0.85	K127								
28	12012	52.96	56	1.00	KF127								
32	10581	46.65	56	1.15	KA127	4P							
37	9168	40.42	56	1.35	KAF127								

Selection Table
(Constant Power)

n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	M_a [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole
45kW							55kW						
32	12869	46.65	50	0.95	K127	4P	63	7974	23.65	47	1.55	K127 KF127 KA127 KAF127	4P
37	11150	40.42	51	1.10	KF127		71	7023	20.83	47	1.75		
41	10008	36.28	51	1.25	KA127		82	6086	18.05	47	2.00		
47	8725	31.63	52	1.40	KAF127		103	4842	14.36	46	2.40		
53	7677	27.83	51	1.60		115	4339	12.87	44	1.85			
63	6524	23.65	51	1.85		133	3759	11.15	43	2.10			
71	5746	20.83	51	2.10	K127	167	2991	8.87	41	2.30			
82	4979	18.05	50	2.50	KF127	75kW							
103	3961	14.36	48	2.90	KA127	11	61147	133.00	148	0.80	K187 KA187	4P	
115	3550	12.87	46	2.30	KAF127	12	54536	118.62	148	0.85			
133	3076	11.15	45	2.50		15	46674	101.52	149	0.90			
167	2447	8.87	43	2.80		16	41819	90.96	150	1.00			
51	7997	28.99	24	0.85	K107	20	33686	73.27	150	1.15			
56	7258	26.31	27	0.95	KF107	22	30767	66.92	149	1.40			
65	6237	22.61	29	1.10	KA107	24	27847	60.57	147	1.60			
75	5445	19.74	30	1.25	KAF107	28	24721	53.77	144	1.95			
88	4618	16.74	30	1.45		34	20082	43.68	141	2.30			
101	4036	14.63	30	1.60	K107	37	18312	39.83	140	2.50			
110	3705	13.43	28	1.10	KF107	41	16409	35.69	140	2.80			
126	3233	11.72	28	1.25	KA107	19	35222	76.61	113	0.85	K167 KA167	4P	
149	2742	9.94	28	1.45	KAF107	22	31098	67.64	114	0.95			
170	2397	8.69	28	1.60		25	27742	60.34	115	1.10			
10	48456	143.72	169	0.95	K187 KA187	4P	29	23406	50.91	114			1.30
11	44841	133.00	171	1.10			36	18684	40.64	113			1.55
12	39993	118.62	171	1.15			41	16643	36.20	111			1.80
15	34228	101.52	170	1.25			44	15521	33.76	109			2.10
16	30668	90.96	168	1.35			49	13848	30.12	107			2.30
20	24703	73.27	166	1.60			58	11682	25.41	105			2.70
22	22562	66.92	162	1.90			73	9324	20.28	100			3.20
24	20421	60.57	159	2.20			82	8308	18.07	100	3.60		
28	18129	53.77	150	2.50			38	17788	38.69	58	1.00	K157 KF157 KA157 KAF157	4P
34	14727	43.68	150	3.00			47	14501	31.54	59	1.20		
17	28897	85.71	131	1.00	56	12211	26.56	59	1.35				
19	25829	76.61	130	1.15	62	11020	23.97	59	1.55				
22	22805	67.64	129	1.30	69	9848	21.42	59	1.75				
25	20344	60.34	128	1.50	79	8561	18.62	59	2.00				
29	17164	50.91	125	1.75	98	6947	15.11	57	2.50				
36	13702	40.64	121	2.10	113	5995	13.04	56	2.80				
41	12205	36.20	119	2.50	47	14542	31.63	37	0.85	K127 KF127 KA127 KAF127	4P		
44	11382	33.76	118	2.70	53	12795	27.83	39	0.95				
49	10155	30.12	118	3.00	63	10873	23.65	40	1.10				
58	8567	25.41	118	3.50	71	9577	20.83	41	1.25				
24	20688	61.36	66	0.85	82	8299	18.05	41	1.50				
27	18490	54.84	67	0.95	103	6602	14.36	42	1.75				
31	16079	47.69	68	1.10	115	5917	12.87	39	1.40				
38	13044	38.69	68	1.35	133	5126	11.15	39	1.55				
47	10634	31.54	67	1.60	167	4078	8.87	38	1.70				
56	8955	26.56	67	1.85	90kW								
62	8082	23.97	66	2.10	16	49846	90.96	136	0.85	K187 KA187	4P		
69	7222	21.42	65	2.40	20	40152	73.27	138	1.00				
79	6278	18.62	64	2.80	22	36672	66.92	139	1.15				
98	5094	15.11	62	3.40	25	33193	60.57	138	1.35				
113	4396	13.04	60	3.80	28	29466	53.77	137	1.60				
37	13628	40.42	45	0.90	34	23937	43.68	134	1.90				
47	10664	31.63	47	1.15	37	21827	39.83	134	2.00				
53	9383	27.83	47	1.30	42	19558	35.69	132	2.20				
					52	15755	28.75	130	2.70				

Selection Table
(Constant Torque)

n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole	n_a [r/min]	Ma [Nm]	i	F_{ra} [kN]	f_B	Type size	Pole		
90kW							132kW								
22	37067	67.64	104	0.80	K167 KA167	4P	22	53786	66.92	111	0.80	K187 KA187	4P		
25	33067	60.34	105	0.90			25	48682	60.57	114	0.90				
29	27899	50.91	106	1.05			28	43217	53.77	117	1.10				
37	22271	40.64	106	1.30			34	35107	43.68	118	1.30				
41	19838	36.20	105	1.50			37	32013	39.83	118	1.40				
44	18501	33.76	104	1.70			42	28685	35.69	118	1.55				
49	16506	30.12	103	1.90			52	23107	28.75	117	1.75				
59	13925	25.41	101	2.30			57	21098	26.25	115	2.10				
73	11114	20.28	98	2.70			63	19097	23.76	113	2.30				
82	9902	18.07	95	3.20			71	16959	21.10	110	2.60				
39	21202	38.69	50	0.80	87	13776	17.14	108	2.80						
47	17284	31.54	53	1.00	37	32664	40.64	87	0.90						
56	14555	26.56	54	1.10	41	29095	36.20	89	1.05						
62	13136	23.97	55	1.30	44	27134	33.76	90	1.15						
70	11738	21.42	55	1.45	49	24209	30.12	90	1.30						
80	10204	18.62	55	1.70	59	20423	25.41	90	1.55						
99	8280	15.11	55	2.10	73	16300	20.28	89	1.85						
114	7146	13.04	54	2.30	82	14524	18.07	88	2.20						
110kW							160kW								
63	12960	23.65	35	0.95	K127 KF127 KA127 KAF127	4P	28	52384	53.77	103	0.90	K187 KA187	4P		
72	11415	20.83	36	1.05			34	42554	43.68	106	1.05				
83	9891	18.05	37	1.25			52	28009	28.75	108	1.45				
104	7869	14.36	38	1.45			57	25573	26.25	108	1.75				
116	7053	12.87	36	1.15			63	23148	23.76	107	1.90				
134	6110	11.15	36	1.30			71	20556	21.10	105	2.10				
168	4861	8.87	36	1.45	87	16698	17.14	103	2.30						
20	49075	73.27	122	0.80	K187 KA187	4P	41	35267	36.20	78	0.85	K167 KA167	4P		
22	44822	66.92	126	0.95			59	24755	25.41	83	1.25				
25	40569	60.57	127	1.10			73	19757	20.28	83	1.55				
28	36014	53.77	127	1.30			82	17604	18.07	82	1.80				
34	29256	43.68	127	1.55			200kW								
37	26677	39.83	126	1.65			34	53193	43.68	90	0.85			K187 KA187	4P
42	23905	35.69	125	1.85			52	35011	28.75	97	1.15				
52	19256	28.75	123	2.10			57	31967	26.25	98	1.30				
63	15914	23.76	121	2.50	63	28935	23.76	99	1.40						
71	14132	21.10	120	2.80	71	25695	21.10	98	1.50						
29	34099	50.91	95	0.85	87	20873	17.14	97	1.70						
37	27220	40.64	97	1.05											
41	24246	36.20	97	1.25											
44	22612	33.76	97	1.40											
49	20174	30.12	97	1.55											
59	17019	25.41	95	1.85											
73	13583	20.28	94	2.20											
84	11822	17.65	92	2.60											
62	16055	23.97	48	1.05	K157 KF157 KA157 KAF157	4P									
70	14347	21.42	49	1.10											
80	12471	18.62	50	1.15											
99	10120	15.11	50	1.26											
114	8734	13.04	50	1.35											

Selection Table
(Constant Torque)

Mamax [Nm]	n _a [r/min]	i	F _{ra} [kN]	Type size	P [kW]/4P	Mamax [Nm]	n _a [r/min]	i	F _{ra} [kN]	Type size	P [kW]/4P
200	0.19	6832	5.4	K37R17 KF37R17 KA37R17 KAF37R17	0.12	400	3.5	375	5.6	K47R37	0.25
	0.22	5922	5.4					KF47R37			
	0.24	5491	5.4					KA47R37			
	0.28	4759	5.4					KAF47R37			
	0.31	4160	5.4				K47R37 KF47R37 KA47R37 KAF47R37	0.37	5.2	256	5.6
	0.36	3645	5.4						5.9	225	5.6
	0.41	3205	5.4						6.7	198	5.6
	0.47	2801	5.4				K47R37 KF47R37 KA47R37 KAF47R37	0.55	8.1	171	5.6
	0.53	2454	5.4						9.1	153	5.6
	0.59	2466	5.4						11	131	5.6
	0.69	1892	5.4	K57R37 KF57R37 KA57R37 KAF57R37	0.12		600	0.11	12169	7.2	
	0.79	1660	5.4					0.12	11162	7.2	
	0.89	1466	5.4					0.14	9503	7.2	
	1.02	1288	5.4					0.15	8547	7.2	
	1.15	1136	5.4					0.18	7277	7.2	
	1.32	996	5.4					0.20	6478	7.2	
	1.50	876	5.4					0.23	5662	7.2	
	1.72	761	5.4					0.26	5033	7.2	
	1.95	671	5.4					0.30	4340	7.2	
	2.24	585	5.4					0.34	3854	7.2	
2.56	512	5.4	0.39	3390	7.2						
2.90	451	5.4	0.45	2924	7.2						
3.31	396	5.4	0.51	2593	7.2						
3.79	346	5.4	0.58	2249	7.2						
4.31	304	5.4	0.66	1986	7.2						
4.91	267	5.4	0.75	1743	7.2						
5.60	234	5.4	0.85	1539	7.2						
6.39	205	5.4	0.97	1354	7.2						
7.3	181	5.4	1.1	1174	7.2						
8.3	160	5.4	1.3	1036	7.2						
9.8	136	5.4	1.4	906	7.2						
10.5	127	5.4	1.6	806	7.2						
12	110	5.4	1.9	699	7.2						
14	96	5.4	2.1	615	7.2						
400	0.13	10138	5.6	K57R37 KF57R37 KA57R37 KAF57R37	0.12	820	0.11	12139	10	K67R37	0.12
	0.15	8534	5.6				0.12	11134	10	KF67R37	
	0.17	7662	5.6				0.14	9479	10	KA67R37	
	0.19	6826	5.6				0.16	8173	10	KAF67R37	
	0.22	5983	5.6				K57R37 KF57R37 KA57R37 KAF57R37	0.25	2.4	544	7.2
	0.25	5158	5.6						2.8	473	7.2
	0.28	4601	5.6						3.2	421	7.2
	0.33	3940	5.6				K57R37 KF57R37 KA57R37 KAF57R37	0.37	3.7	362	7.2
	0.38	3477	5.6						4.2	319	7.2
	0.43	3043	5.6						4.8	280	7.2
	0.48	2732	5.6	K57R37 KF57R37 KA57R37 KAF57R37	0.55		5.7	246	7.2		
	0.56	2354	5.6				6.5	215	7.2		
	0.63	2063	5.6				7.2	192	7.2		
	0.72	1819	5.6	K57R37 KF57R37 KA57R37 KAF57R37	0.75		8.4	166	7.2		
	0.83	1586	5.6				9.6	145	7.2		
	0.94	1388	5.6				11	129	7.2		
	1.1	1222	5.6	K57R37 KF57R37 KA57R37 KAF57R37	1.1		13	111	7.2		
	1.2	1097	5.6				14	97	7.2		
	1.4	945	5.6								
	1.6	831	5.6	K47R37 KF47R37 KA47R37 KAF47R37	0.12						
1.8	718	5.6									
2.1	639	5.6									
2.4	552	5.6	K47R37 KF47R37 KA47R37 KAF47R37	0.18							
2.6	495	5.6									
3.1	426	5.6									

Selection Table
(Constant Torque)

Mamax [Nm]	n_a [r/min]	i	F_{ra} [kN]	Type size	P [kW]/4P	Mamax [Nm]	n_a [r/min]	i	F_{ra} [kN]	Type size	P [kW]/4P
820	0.18	7259	10	K67R37 KF67R37 KA67R37 KAF67R37	0.12	1550				K77R37	0.37
	0.20	6462	10				KF77R37				
	0.23	5648	10				KA77R37				
	0.27	4846	10				KAF77R37				
	0.30	4329	10				K77R37	0.55			
	0.35	3750	10				KF77R37				
	0.40	3315	10				KA77R37				
	0.45	2917	10				KAF77R37				
	0.52	2532	10				K77R37	0.75			
	0.58	2244	10				KF77R37				
	0.66	1981	10				KA77R37				
				KAF77R37							
	0.75	1739	10	K77R37	0.12						
	0.85	1536	10	KF67R37							
	0.97	1351	10	KA67R37							
	1.1	1171	10	KAF67R37	0.18						
	1.3	1034	10	K67R37							
	1.5	903	10	KF67R37							
	1.7	793	10	KA67R37							
				KAF67R37	0.25						
	1.9	697	10	K67R37							
2.2	613	10	KF67R37								
2.5	542	10	KA67R37								
			KAF67R37	0.37							
2.8	471	10	K67R37								
3.2	420	10	KF67R37								
			KA67R37	0.55							
3.9	361	10	KAF67R37								
4.3	323	10	K67R37								
5.0	279	10	KF67R37								
5.7	246	10	KA67R37								
			KAF67R37	0.75							
6.4	217	10	K67R37								
7.3	191	10	KF67R37								
			KA67R37								
			KAF67R37								
1550	0.09	15336	15	K77R37 KF77R37 KA77R37 KAF77R37	0.12	2700	0.09	14828	26	K87R57 KF87R57 KA87R57 KAF87R57	0.12
	0.09	14066	15				0.10	13168	26		
	0.11	11976	15				0.11	11736	26		
	0.13	10234	15				0.13	10217	26		
	0.15	8824	15				0.14	9073	26		
	0.17	7540	15				0.17	7854	26		
	0.20	6617	15				0.19	6832	26		
	0.23	5784	15				0.22	5930	26		
	0.26	5097	15				0.25	5239	26		
	0.29	4497	15				0.29	4562	26		
	0.33	3968	15				0.32	4037	26		
	0.38	3490	15	0.36	3609	26					
	0.45	2906	15	0.42	3106	26					
	0.48	2721	15	0.48	2728	26					
			15	0.56	2371	26					
	0.55	2374	15	0.64	2086	26					
			15	0.72	1854	26					
	0.64	2053	15	0.80	1658	26					
	0.74	1775	15	0.94	1415	26					
	0.86	1516	15	1.08	1229	26					
				1.3	1078	26					
			1.5	951	26						
			1.7	837	26						
			1.9	726	26						
			2.2	638	26						
			2.5	562	26						
			3.0	474	26						
			3.3	426	26						
			3.8	373	26						
			4.2	330	26						
1.0	1390	15	4.9	294	26						
1.1	1220	15	5.7	250	26						
1.3	1054	15	6.1	236	26						
			7.1	201	26						

Selection Table
(Constant Torque)

Mamax [Nm]	n_a [r/min]	i	F_{ra} [kN]	Type size	P [kW]/4P	Mamax [Nm]	n_a [r/min]	i	F_{ra} [kN]	Type size	P [kW]/4P	
4300	0.07	18091	38			8000				K107R77		
	0.08	16666	38				0.12	10678	62	KF107R77	0.18	
	0.09	14896	38				0.14	9524	62	KA107R77		
	0.10	13183	38	K97R57	0.12		0.16	8328	62	KAF107R77		
	0.11	11677	38	KF97R57							K107R77	0.25
	0.13	10317	38	KA97R57				0.18	7269	62	KF107R77	
	0.14	9083	38	KAF97R57				0.22	6184	62	KA107R77	
	0.16	8055	38					0.23	5662	62	KAF107R77	
	0.19	6969	38								K107R77	0.37
	0.22	6027	38	K97R57			0.18	0.26	5138	62	KF107R77	
	0.24	5392	38	KF97R57				0.31	4360	62	KA107R77	
	0.28	4669	38	KA97R57				0.35	3811	62	KAF107R77	
	0.32	4081	38	KAF97R57							K107R77	0.55
	0.37	3583	38	K97R57	0.25		0.41	3358	62	KF107R77		
				KF97R57				0.47	2977	62	KA107R77	
				KA97R57				0.54	2598	62	KAF107R77	
				KAF97R57							K107R77	0.75
	0.43	3108	38				0.61	2286	62	KF107R77		
				K97R57	0.37		0.72	1939	62	KA107R77		
	0.48	2756	38	KF97R57						KAF107R77		
			38	KA97R57						K107R77	1.1	
				KAF97R57			0.82	1713	62	KF107R77		
	0.55	2419	38	K97R57	0.37		0.90	1555	62	KA107R77		
				KF97R57				1.0	1336	62	KAF107R77	
0.63	2123	38	KA97R57					K107R77	1.5			
			KAF97R57		1.2	1166	62	KF107R77				
0.75	1856	38	K97R57	0.55	1.4	1030	62	KA107R77				
0.86	1625	38	KF97R57			1.5	904	62		KAF107R77		
0.97	1430	38	KA97R57					K107R77	2.2			
1.1	1261	38	KAF97R57			1.8	793	62		KF107R77		
			K97R57	0.75	2.1	696	62	KA107R77				
1.3	1102	38	KF97R57			2.3	614	62		KAF107R77		
			KA97R57					K107R77	3.0			
1.5	957	38	KAF97R57			2.7	522	62		KF107R77		
			K97R57	1.1				KA107R77				
1.6	855	38	KF97R57			3.1	461	62	KAF107R77			
1.9	743	38	KA97R57					K107R77	4.0			
2.2	651	38	KAF97R57			3.5	408	62		KF107R77		
			K97R57	1.5	4.0	364	62	KA107R77				
2.4	573	38	KF97R57					KAF107R77				
2.8	504	38	KA97R57					K107R77	5.5			
			KAF97R57			4.5	318	62		KF107R77		
			K97R57	2.2	5.0	286	62	KA107R77				
3.3	437	38	KF97R57			5.7	251	62		KAF107R77		
3.7	382	38	KA97R57					K107R77	0.18			
4.2	342	38	KAF97R57			0.08	17396	75		K127R77		
			K97R57	3.0	0.08	15859	75	KF127R77				
4.7	305	38	KF97R57			0.09	14843	75		KA127R77		
5.5	258	38	KA97R57			0.11	12331	75	KAF127R77			
6.2	232	38	KAF97R57					K127R77	0.25			
			K97R57	4.0	0.12	10819	75	KF127R77				
			KF97R57			0.14	9801	75		KA127R77		
7.2	199	38	KA97R57					KAF127R77				
			KAF97R57					K127R77	0.37			
8000	0.09	14311	62	K107R77	0.12	0.16	8366	75		KF127R77		
				KF107R77			0.18	7329		75	KA127R77	
	0.11	12211	62	KA107R77			0.21	6430		75	KAF127R77	
				KAF107R77								

Selection Table
(Constant Torque)

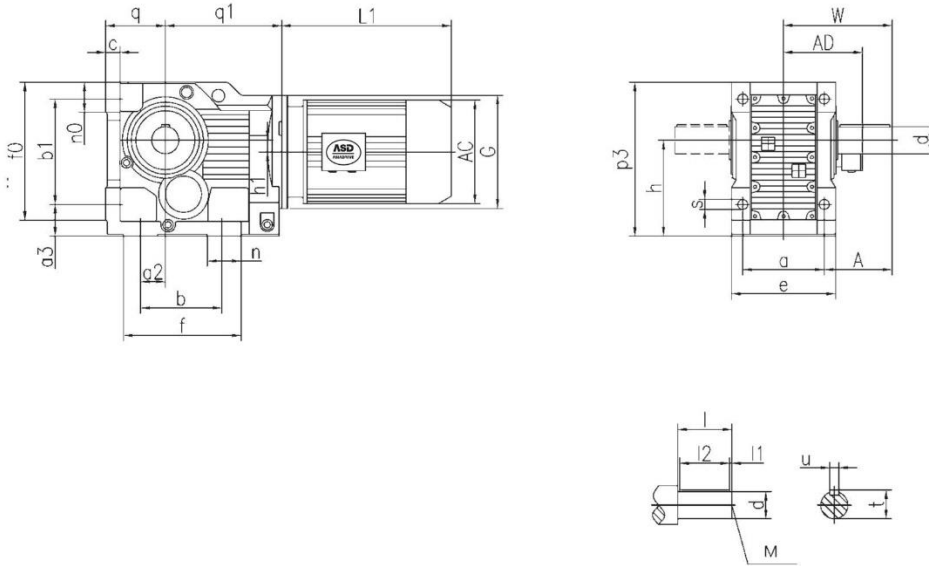
Mamax [Nm]	n _a [r/min]	i	F _{ra} [kN]	Type size	P [kW]/4P	Mamax [Nm]	n _a [r/min]	i	F _{ra} [kN]	Type size	P [kW]/4P	
13000	0.24	5793	75	K127R77	0.55	18000	0.12	11431	107	K157R97	0.55	
	0.28	4924	75	KF127R77			0.14	10219	107	KF157R97		
	0.32	4332	75	KA127R77			0.16	8885	107	KA157R97		
	0.36	3854	75	KAF127R77			0.18	7777	107	KAF157R97		
	0.42	3282	75	K127R77	0.75		0.27	5102	107	K157R97	1.1	
	0.47	2982	75	KF127R77			0.31	4561	107			KF157R97
				KA127R77			0.35	4001	107			KA157R97
	0.54	2584	75	KAF127R77	0.39		3578	107	KAF157R97			1.5
				K127R77	0.45		3110	107	K157R97			
	0.62	2248	75	KF127R77	1.1		0.53	2625	107	KF157R97	1.5	
				KA127R77			0.60	2346	107	KA157R97		
	0.73	1909	75	KAF127R77	1.1		0.70	2040	107	K157R97	2.2	
				K127R77						KF157R97		
	0.80	1741	75	KA127R77	1.5		0.78	1824	107	KA157R97	2.2	
				KAF127R77						KAF157R97		
	0.92	1527	75	K127R77	2.2		0.86	1668	107	K157R97	2.2	
				KF127R77						KF157R97		
	1.1	1335	75	KA127R77	3.0		1.04	1373	107	KA157R97	3.0	
				KAF127R77						KAF157R97		
	1.2	1171	75	K127R77	4.0		1.2	1236	107	K157R97	4.0	
				KF127R77						KF157R97		
	1.4	1000	75	KA127R77	5.5		1.3	1105	107	KA157R97	5.5	
				KAF127R77						KAF157R97		
	1.6	877	75	K127R77	7.5		1.5	960	107	K157R97	7.5	
KF127R77				KF157R97								
1.8	783	75	KA127R77	11	1.7	870	107	KA157R97	11			
			KAF127R77					KAF157R97				
2.0	698	75	K127R77	15	1.9	760	107	K157R97	15			
			KF127R77					KF157R97				
2.4	605	75	KA127R77	22	2.2	665	107	KA157R97	22			
			KAF127R77					KAF157R97				
2.6	548	75	K127R77	30	2.5	570	107	K157R97	30			
			KF127R77					KF157R97				
3.0	473	75	KA127R77	40	2.8	510	107	KA157R97	40			
			KAF127R77					KAF157R97				
3.5	410	75	K127R87	55	3.3	437	107	K157R97	55			
			KF127R87					KF157R97				
2.7	541	75	KA127R87	75	3.8	381	107	KA157R97	75			
			KAF127R87					KAF157R97				
3.0	477	75	K127R87	110	4.2	340	107	K157R97	110			
			KF127R87					KF157R97				
3.4	423	75	KA127R87	150	5.0	293	107	KA157R97	150			
			KAF127R87					KAF157R97				
3.9	369	75	K127R87	200	3.7	392	107	K157R107	200			
			KF127R87					KF157R107				
4.3	333	75	KA127R87	280	4.4	331	107	KA157R107	280			
			KAF127R87					KAF157R107				
5.0	289	75	K127R87	380	4.8	303	107	K157R107	380			
			KF127R87					KF157R107				
5.7	254	75	KA127R87	500	5.7	258	107	KA157R107	500			
			KAF127R87					KAF157R107				
18000	0.08	17778	107	K157R97	0.55	5.7	258	107	K157R107	15		
	0.09	15892	107	KF157R97		6.2	235	107	KF157R107			
	0.09	14803	107	KA157R97		6.8	216	107	KA157R107			
	0.11	13233	107	KAF157R97					KAF157R107			

Selection Table
(Constant Torque)

Mamax [Nm]	n _a [r/min]	i	F _{ra} [kN]	Type size	P [kW]/4P	Mamax [Nm]	n _a [r/min]	i	F _{ra} [kN]	Type size	P [kW]/4P	
32000	0.07	19598	135		0.55	50000	0.05	29171	171		0.55	
	0.08	17297	135					0.06	24289	171		K187R97
	0.09	14751	135	K167R97				0.07	21774	171		KA187R97
	0.11	13019	135	KA167R97				0.08	17118	171		
	0.12	11500	135					0.09	15181	171		
	0.14	10199	135					0.11	12761	171		K187R97
	0.16	8573	135	K167R97	0.75		0.12	11727	171	KA187R97		
	0.22	6453	135	KA167R97			0.13	10414	171			
	0.27	5266	135	K167R97	1.1		0.15	9311	171	K187R97		
	0.30	4708	135	KA167R97			0.17	8372	171	KA187R97		
	0.35	4052	135	K167R97	1.5		0.19	7266	171			
	0.43	3320	135	KA167R97			0.21	6565	171	K187R97		
	0.52	2709	135	K167R97	2.2		0.23	6033	171	KA187R97		
	0.63	2249	135	KA167R97			0.26	5358	171			
	0.65	2168	135	K167R97	3		0.30	4790	171	K187R97		
	0.85	1693	135	KA167R97			0.33	4307	171	KA187R97		
	1.0	1384	135	K167R97	4		0.37	3806	171			
	1.1	1274	135	KA167R97			0.44	3227	171	K187R97		
	1.3	1094	135	K167R97	5.5		0.52	2737	171	KA187R97		
	1.6	929	135	KA167R97			0.64	2252	171	K187R97		
	1.7	838	135	K167R97	7.5		0.71	2028	171	KA187R97		
	1.9	744	135	KA167R97			0.78	1836	171			
	2.6	551	135	K167R97			0.88	1628	171	K187R97		
	3.1	473	135	KA167R97	11		1.1	1326	171	KA187R97		
	3.5	420	135	K167R97			1.2	1247	171	K187R97		
	4.0	362	135	KA167R97	15		1.3	1073	171	KA187R97		
	4.9	300	135	K167R107			2.4	610	171	K187R97		
	5.6	262	135	KA167R107	18.5		2.6	558	171	KA187R97		
	6.1	241	135	K167R107			3.1	473	171	K187R97		
	7.0	211	135	KA167R107	22					KA187R97		
	7.6	194	135	K167R107			1.8	835	171	K187R107		
	8.3	178	135	KA167R107	30		2.0	728	171	KA187R107		
9.8	151	135	K167R107		2.5	592	171	K187R107				
11.6	128	135	KA167R107	37	3.3	450	171	KA187R107				
13.2	112	135	K167R107		3.7	393	171	K187R107				
			KA167R107	45	4.1	355	171	KA187R107				
					6.6	226	171	K187R107				
								KA187R107				
					7.8	191	171	K187R107				
					8.9	167	171	KA187R107				
					10.5	141	171					

K37-157

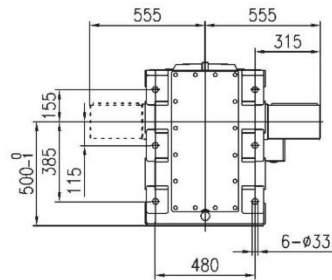
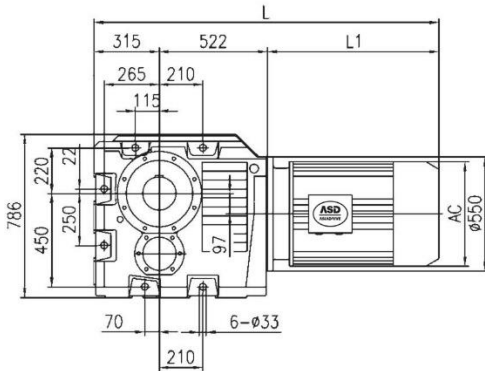
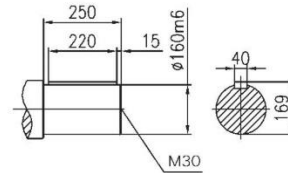
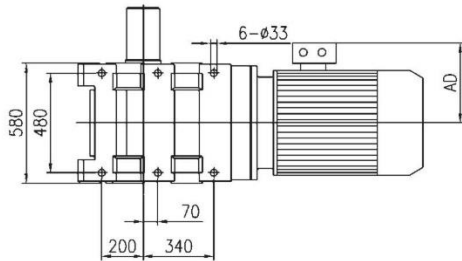
Mounting Dimensional Description



Specification	a	a_2	b_1	q_1	s	d	l_1	u	w	e	c	f_0	n	G	Motor Size														
	b	h	q	h_1	a_3	l	l_2	t	A	p_3	n_0	f	M		AC	AD	L1												
K37	100	28	115	139	$\Phi 11$	$\Phi 25k6$	5	8	110	120	16	150	38	$\Phi 120$	Please see appendix A-2														
	110	100 _{-0.5}	63 _{-0.5}	8.5	32	50	40	28	60	165	37	143	M10																
K47	120	35	130	166	$\Phi 11$	$\Phi 30k6$	3.5	8	135	145	18	170	32	$\Phi 160$				Please see appendix A-2											
	130	112 _{-0.5}	71 _{-0.5}	7.2	37	60	50	33	75	185	37	162	M10																
K57	130	30	150	173	$\Phi 13.5$	$\Phi 35k6$	7	10	153	157	21	190	40	$\Phi 160$							Please see appendix A-2								
	130	132 _{-0.5}	80 _{-0.5}	13.1	45	70	56	38	88	217	43	172	M12																
K67	140	30	160	179	$\Phi 13.5$	$\Phi 40k6$	5	12	171	170	24	203	45	$\Phi 160$										Please see appendix A-2					
	120	140 _{-0.5}	90 _{-0.5}	20	45	80	70	43	101	228	43	170	M16																
K77	165	40	200	202	$\Phi 17.5$	$\Phi 50k6$	10	14	206	200	27	263	55	$\Phi 200$													Please see appendix A-2		
	150	180 _{-0.5}	112 _{-0.5}	31.3	55	100	80	53.5	123.5	288	55	208	M16																
K87	180	55	233	257	$\Phi 22$	$\Phi 60m6$	5	18	240	230	32	305	75	$\Phi 250$	Please see appendix A-2														
	180	212 _{-0.5}	132 _{-0.5}	25.9	70	120	110	64	150	340	67	260	M20																
K97	240	75	295	277	$\Phi 26$	$\Phi 70m6$	7.5	20	291	290	36	372	60	$\Phi 300$				Please see appendix A-2											
	240	265 ₋₁	160 _{-0.5}	32.3	75	140	125	74.5	171	417	82	294	M20																
K107	270	95	360	341	$\Phi 33$	$\Phi 90m6$	5	25	347	340	40	448	100	$\Phi 350$							Please see appendix A-2								
	280	315 ₋₁	200 _{-0.5}	52	95	170	160	95	212	503	98	380	M24																
K127	330	115	420	390	$\Phi 39$	$\Phi 110m6$	15	28	418	400	45	526	100	$\Phi 450$										Please see appendix A-2					
	350	375 ₋₁	225 _{-0.5}	53	110	210	180	116	253	592	111	440	M24																
K157	420	140	500	426	$\Phi 39$	$\Phi 120m6$	5	32	457	500	50	634	100	$\Phi 550$													Please see appendix A-2		
	380	450 ₋₁	280 ₋₁	71.7	130	210	200	127	247	705	130	480	M24																

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

K167
Mounting Dimensional Description

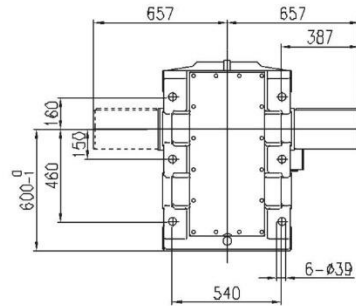
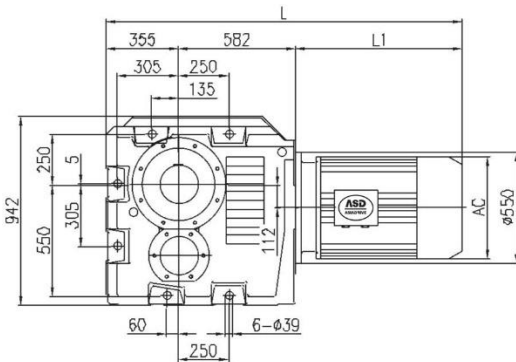
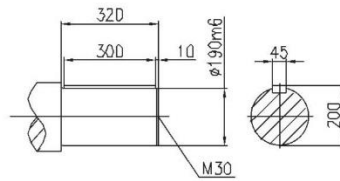
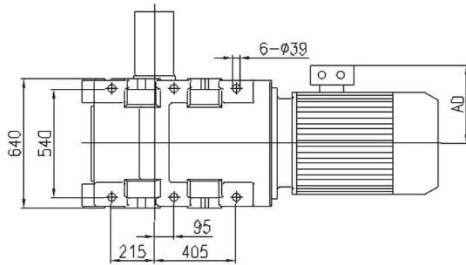


Motor fram size	160M	160L	180M	180L	200	225S	225M	250M	280S	280M	315S	315M	315L
AC	330	330	380	380	420	470	470	510	580	580	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	576
L1	505	560	590	630	660	675	705	770	845	895	1100	1130	1310
L	1342	1397	1427	1467	1497	1512	1542	1607	1682	1732	1937	1967	2147

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

K187

Mounting Dimensional Description

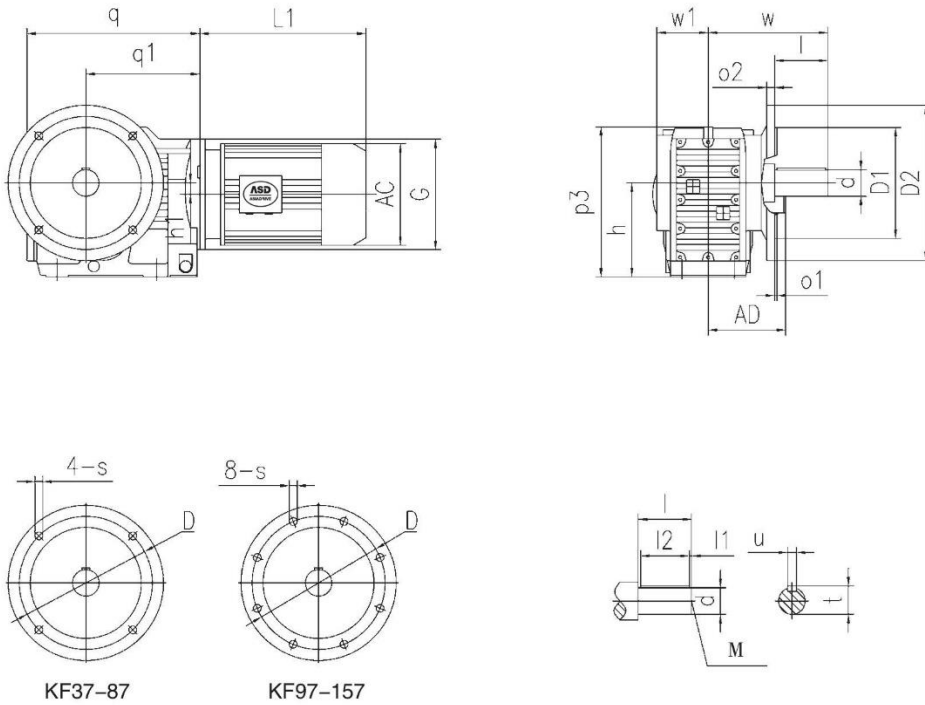


Motor fram size	160L	180M	180L	200	225S	225M	250M	280S	280M	315S	315M	315L
AC	330	380	380	420	470	470	510	580	580	645	645	645
AD	255	280	280	305	335	335	370	410	410	530	530	576
L1	560	590	630	660	675	705	770	845	895	1100	1130	1310
L	1497	1527	1567	1597	1612	1642	1707	1782	1832	2037	2067	2247

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KF37-157

Mounting Dimensional Description



KF37-87

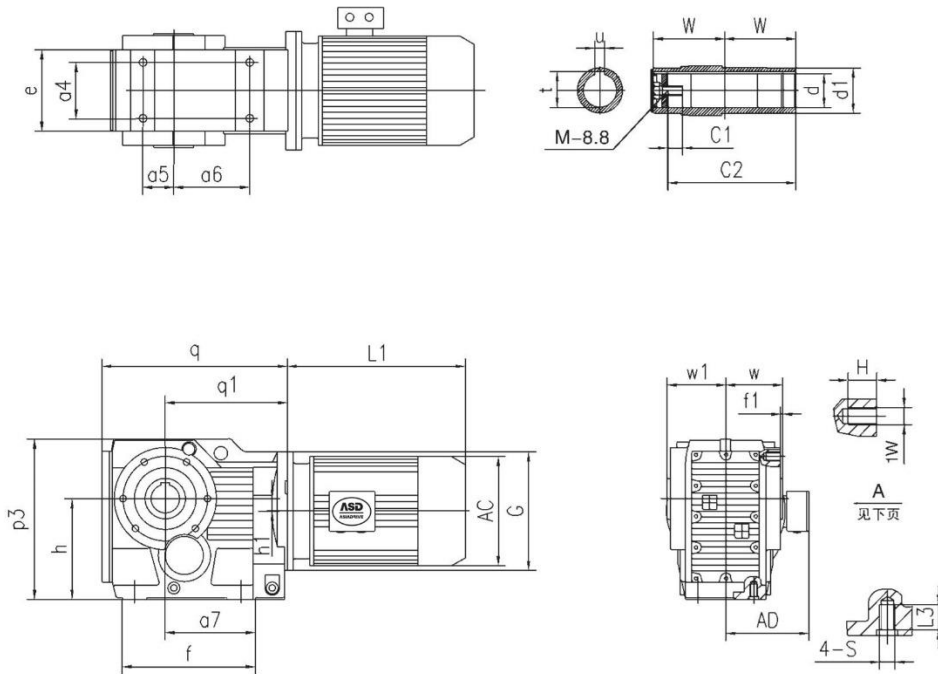
KF97-157

Specification	s ϕ_2	q w	q ₁ w ₁	h ₁ l	D l ₁	D ₁ l ₂	D ₂ d	h M	p ₃ u	o ₁ t	G	Motor Size			
												AC	AD	L1	
KF37	$\Phi 9$ 10	210 134	139 57.5	8.5 50	$\Phi 130$ 5	$\Phi 110j6$ 40	$\Phi 160$ $\Phi 25k6$	100.0.5 M10	164 8	3.5 28	$\Phi 120$	Please see appendix A-2			
KF47	$\Phi 11$ 10	243 160	166 72	7.2 60	$\Phi 165$ 3.5	$\Phi 130j6$ 50	$\Phi 200$ $\Phi 30k6$	112.0.5 M10	185 8	3.5 33	$\Phi 160$				
KF57	$\Phi 13.5$ 15	269 176.5	173 80	13.1 70	$\Phi 215$ 7	$\Phi 180j6$ 56	$\Phi 250$ $\Phi 35k6$	132.0.5 M12	215 10	4 38	$\Phi 160$				
KF67	$\Phi 13.5$ 15	274 193	179 86.5	20 80	$\Phi 215$ 5	$\Phi 180j6$ 70	$\Phi 250$ $\Phi 40k6$	140.0.5 M16	226 12	4 43	$\Phi 160$				
KF77	$\Phi 13.5$ 16	312 242	202 101	31.3 100	$\Phi 265$ 10	$\Phi 230j6$ 80	$\Phi 300$ $\Phi 50k6$	180.0.5 M16	286 14	4 53.5	$\Phi 200$				
KF87	$\Phi 17.5$ 18	390 270	257 116	25.9 120	$\Phi 300$ 5	$\Phi 250h6$ 110	$\Phi 350$ $\Phi 60m6$	212.0.5 M20	338 18	5 64	$\Phi 250$				
KF97	$\Phi 17.5$ 22	435 332	277 171	32.3 140	$\Phi 400$ 7.5	$\Phi 350h6$ 125	$\Phi 450$ $\Phi 70m6$	265.1 M20	414 20	5 74.5	$\Phi 300$				
KF107	$\Phi 17.5$ 22	537 386	341 175	52 170	$\Phi 400$ 5	$\Phi 350h6$ 160	$\Phi 450$ $\Phi 90m6$	315.1 M24	500 25	5 95	$\Phi 350$				
KF127	$\Phi 17.5$ 25	615 466	390 203	53 210	$\Phi 500$ 15	$\Phi 450h6$ 180	$\Phi 550$ $\Phi 110m6$	375.1 M24	592 28	5 116	$\Phi 450$				
KF157	$\Phi 22$ 28	706 520	426 253	71.7 210	$\Phi 600$ 5	$\Phi 550h6$ 200	$\Phi 660$ $\Phi 120m6$	450.1 M24	705 32	6 127	$\Phi 550$				

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KA37-107

Mounting Dimensional Description

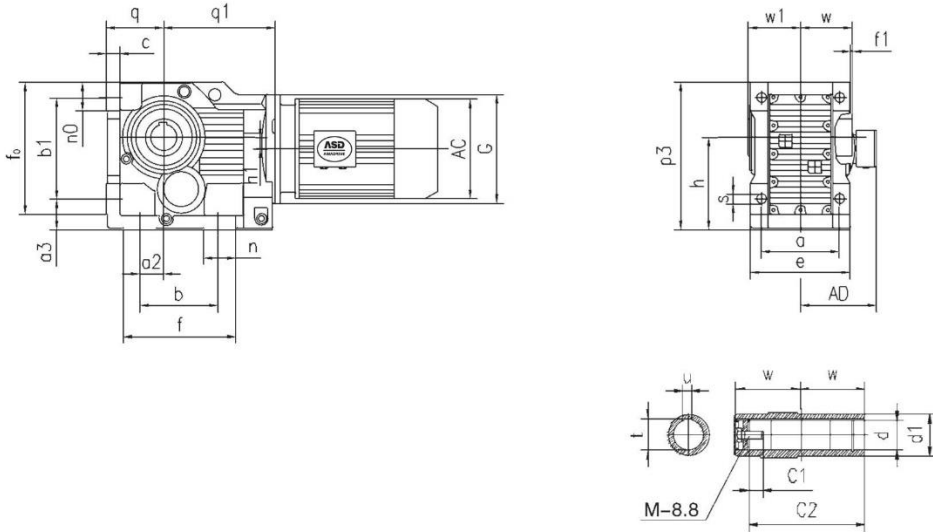


Specification	s	l ₃	e	a ₄	a ₅	a ₆	a ₇	f	h	h ₁	p ₃	c ₂	G	Motor Size															
	q	q ₁	w	d	d ₁	t	u	f ₁	H	M ₁	c ₁	M	W ₁	AC	AD	L1													
KA37	M10	20	100	60	35	82	97	147	100 _{-0.5}	8.5	164	105	Φ 120	Please see appendix A-2															
	210	139	60	Φ 30H7	Φ 45	33.3	8	2.5	12	M8	17	M10x25	63																
KA47	M10	20	110	70	40	100	115	170	112 _{-0.5}	7.2	185	132	Φ 160																
	243	166	75	Φ 35H7	Φ 50	38.3	10	3	12	M8	22	M12x30	78																
KA57	M12	25	122	88	47	105	120	182	132 _{-0.5}	13.1	215	142	Φ 160																
	269	173	83	Φ 40H7	Φ 55	43.3	12	3	20	M12	29	M16x40	86																
KA67	M12	25	130	88	42	110	125	182	140 _{-0.5}	20	226	156	Φ 160																
	274	179	90	Φ 40H7	Φ 55	43.3	12	3.5	20	M12	29	M16x40	94																
KA77	M16	32	156	102	48	122	139	204	180 _{-0.5}	31.3	286	183	Φ 200																
	312	202	105	Φ 50H7	Φ 70	53.8	14	4	20	M12	32	M16x45	108																
KA87	M16	32	170	118	65	160	190	280	212 _{-0.5}	25.9	338	210	Φ 250																
	390	257	120	Φ 60H7	Φ 85	64.4	18	4	26	M16	36	M20x50	123																
KA97	M20	36	226	160	83	165	190	298	265 ₋₁	32.3	414	270	Φ 300																
	435	277	150	Φ 70H7	Φ 95	74.9	20	4	26	M16	34	M20x50	153																
KA107	M24	44	266	190	100	190	230	370	315 ₋₁	52	500	313	Φ 350																
	537	341	175	Φ 90H7	Φ 118	95.4	25	2.5	/	/	40	M24x60	178																

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KA127-157

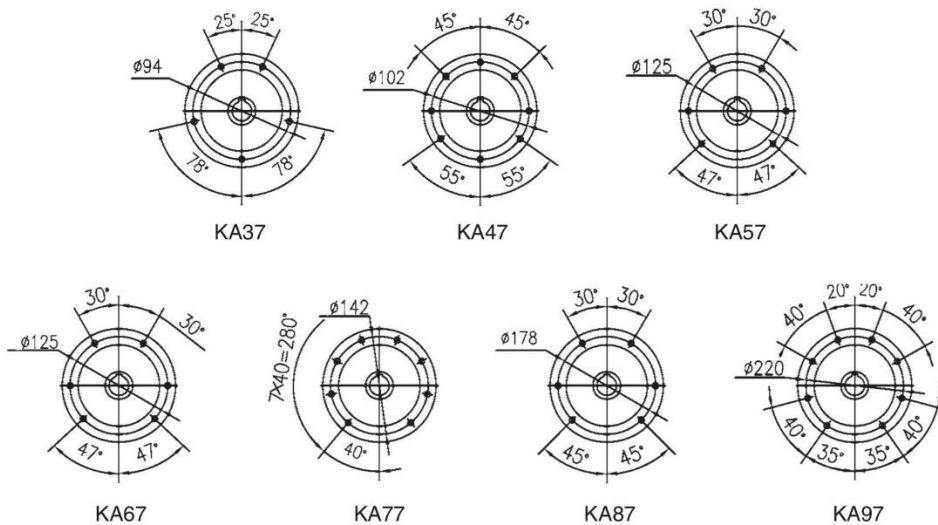
Mounting Dimensional Description



Specification	s	p ₃	h	a	e	f ₁	w	d	d ₁	t	u	f	c ₂	G	Motor Size		
	b	a ₂	n	f ₀	a ₃	b ₁	n ₀	h ₁	c	q	q ₁	c ₁	M	W ₁	AC	AD	L1
KA127	Φ 39 350	592 115	375.1 100	330 526	400 110	2.5 420	205 111	Φ 100H7 53	Φ 135 45	106.4 225 _{-0.5}	28 390	440 38	373 M24x60	Φ 450 208	Please see appendix A-2		
KA157	Φ 39 380	705 140	450.1 100	420 634	500 130	7 500	250 130	Φ 120H7 71.7	Φ 155 50	127.4 280.1	32 426	480 36	460 M24x60	Φ 550 253			

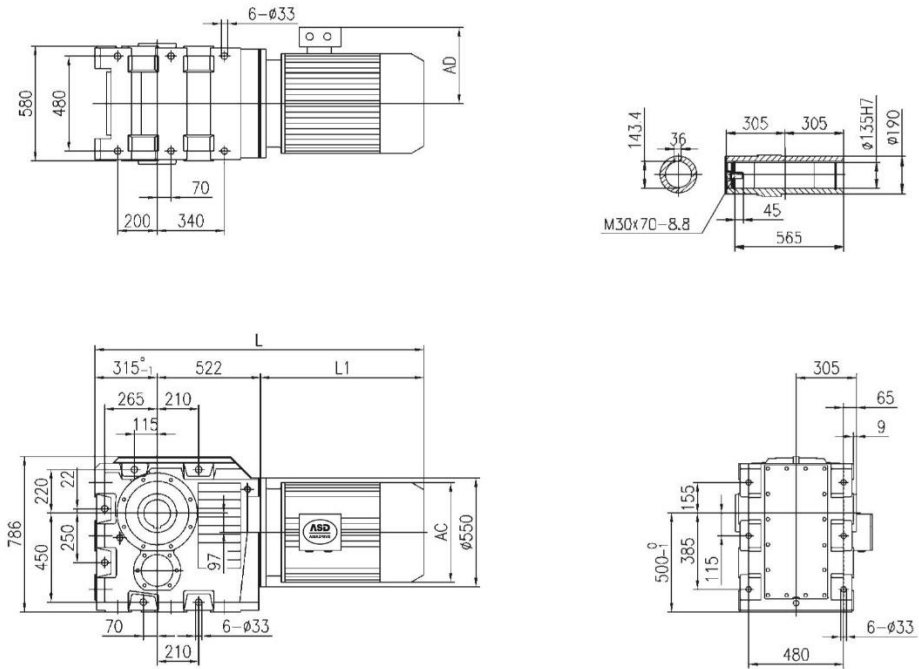
Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

Fig.A Mounting Dimension



KA167

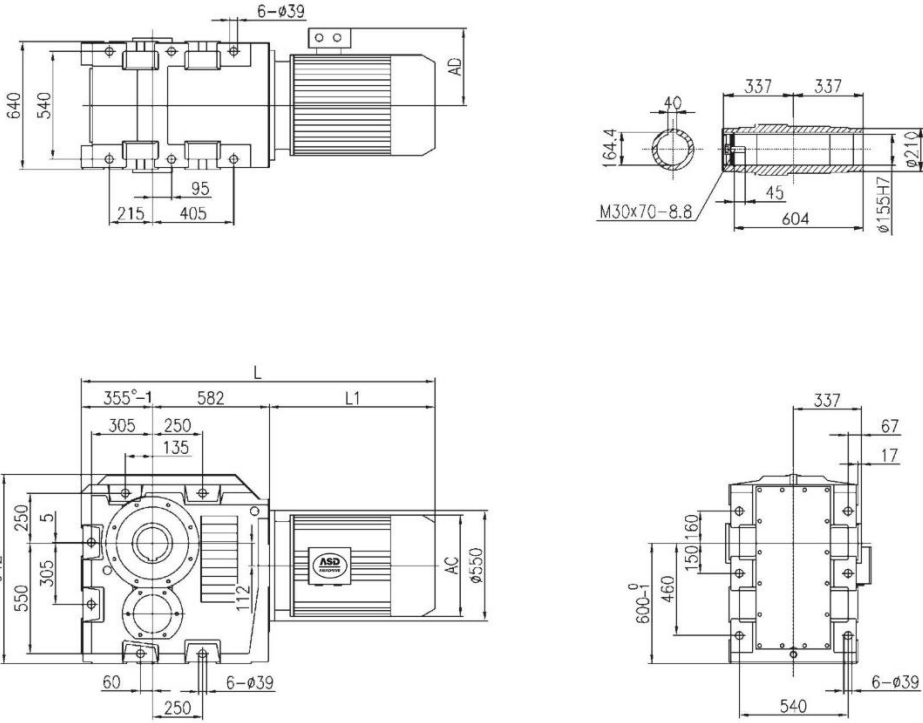
Mounting Dimensional Description



Motor fram size	160M	160L	180M	180L	200	225S	225M	250M	280S	280M	315S	315M	315L
AC	330	330	380	380	420	470	470	510	580	580	645	645	645
AD	255	255	280	280	305	335	335	370	410	410	530	530	576
L1	505	560	590	630	660	675	705	770	845	895	1100	1130	1310
L	1342	1397	1427	1467	1497	1512	1542	1607	1682	1732	1937	1967	2147

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KA187
Mounting Dimensional Description

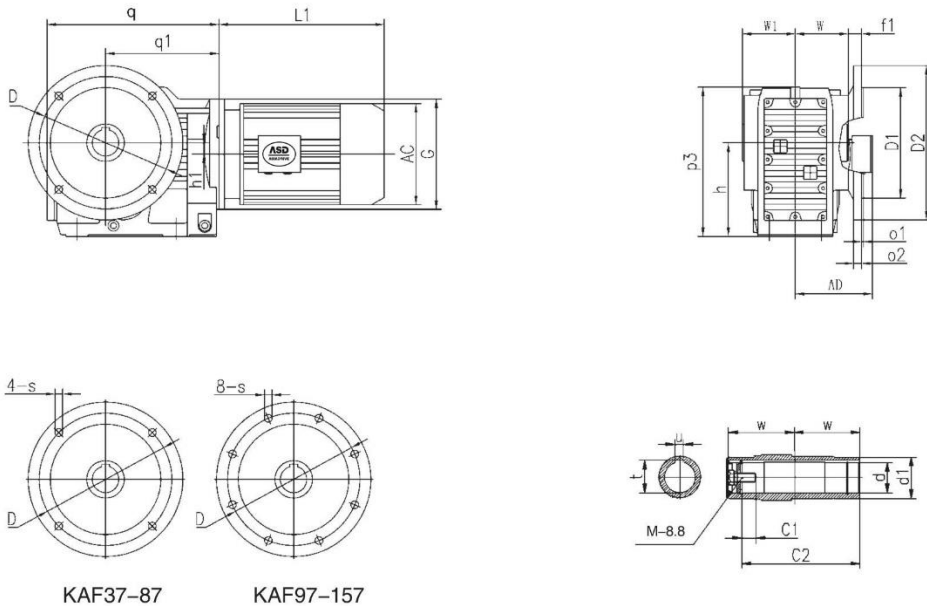


Motor fram size	160L	180M	180L	200	225S	225M	250M	280S	280M	315S	315M	315L
AC	330	380	380	420	470	470	510	580	580	645	645	645
AD	255	280	280	305	335	335	370	410	410	530	530	576
L1	560	590	630	660	675	705	770	845	895	1100	1130	1310
L	1497	1527	1567	1597	1612	1642	1707	1782	1832	2037	2067	2247

Note: When equipping the user's motor or the special one, the flange is required to be connected. (Please see appendix D)

KAF37-157

Mounting Dimensional Description

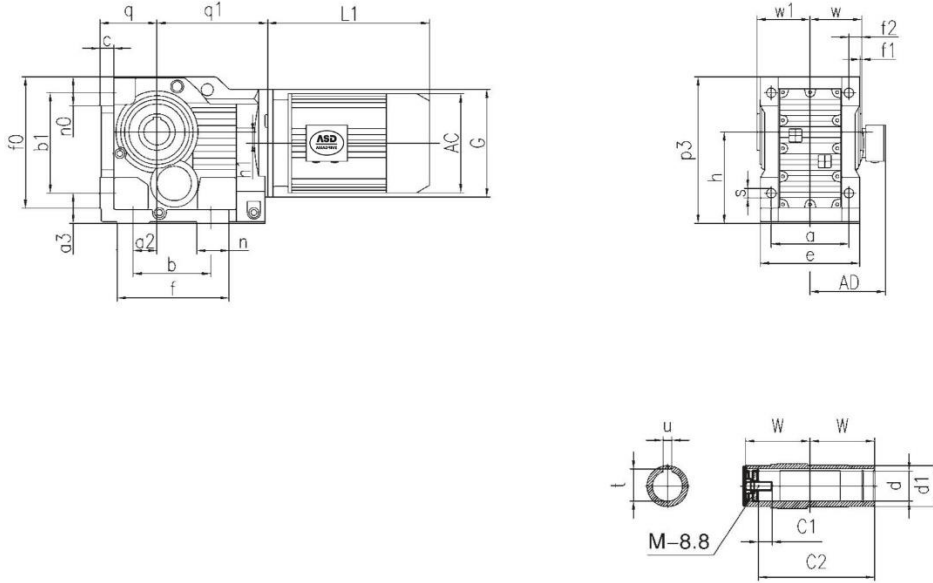


Specification	s o ₁	q o ₂	q ₁ w	h ₁ f ₁	D d	D ₁ d ₁	D ₂ u	h t	p ₃ c ₁	c ₂ M	G W ₁	Motor Size			
												AC	AD	L1	
KAF37	Φ 9 3.5	210 10	139 60	8.5 24	Φ 130 Φ 30H7	Φ 110j6 Φ 45	Φ 160 8	100 _{-0.5} 33.3	164 17	105 M10x25	Φ 120 63	Please see appendix A-2			
KAF47	Φ 11 3.5	243 10	166 75	7.2 25	Φ 165 Φ 35H7	Φ 130j6 Φ 50	Φ 200 10	112 _{-0.5} 38.3	185 22	132 M12x30	Φ 160 78				
KAF57	Φ 13.5 4	269 15	173 83	13.1 23.5	Φ 215 Φ 40H7	Φ 180j6 Φ 55	Φ 250 12	132 _{-0.5} 43.3	215 29	142 M16x40	Φ 160 86				
KAF67	Φ 13.5 4	274 15	179 90	20 23	Φ 215 Φ 40H7	Φ 180j6 Φ 55	Φ 250 12	140 _{-0.5} 43.3	226 29	156 M16x40	Φ 160 94				
KAF77	Φ 13.5 4	312 16	202 105	31.3 37	Φ 265 Φ 50H7	Φ 230j6 Φ 70	Φ 300 14	180 _{-0.5} 53.8	286 32	183 M16x45	Φ 200 108				
KAF87	Φ 17.5 5	390 18	257 120	25.9 30	Φ 300 Φ 60H7	Φ 250h6 Φ 85	Φ 350 18	212 _{-0.5} 64.4	338 36	210 M20x50	Φ 250 123				
KAF97	Φ 17.5 5	435 22	277 150	32.3 41.5	Φ 400 Φ 70H7	Φ 350h6 Φ 95	Φ 450 20	265 ₋₁ 74.9	414 34	270 M20x50	Φ 300 153				
KAF107	Φ 17.5 5	537 22	341 175	52 41	Φ 400 Φ 90H7	Φ 350h6 Φ 118	Φ 450 25	315 ₋₁ 95.4	500 40	313 M24x60	Φ 350 178				
KAF127	Φ 17.5 5	615 25	390 205	53 51	Φ 500 Φ 100H7	Φ 450h6 Φ 135	Φ 550 28	375 ₋₁ 106.4	592 38	373 M24x60	Φ 450 208				
KAF157	Φ 22 6	706 28	426 250	71.7 60	Φ 600 Φ 120H7	Φ 550h6 Φ 155	Φ 660 32	450 ₋₁ 127.4	705 36	460 M24x60	Φ 550 253				

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KAB47-107

Mounting Dimensional Description



Specification	s b	p ₃ a ₂	h n	a f ₀	e a ₃	f ₁ b ₁	w n ₀	d h ₁	d ₁ c	t q	u q ₁	f f ₂	c ₁ c ₂	W ₁ M	G	Motor Size			
																AC	AD	L1	
KAB47	Φ 11 130	185 35	112 _{-0.5} 32	120 170	145 37	3 130	75 37	Φ 35H7 7.2	Φ 50 18	38.3 71 _{-0.5}	10 166	162 15	22 132	78 M12x30	Φ 160	Please see appendix A-2			
KAB57	Φ 13.5 130	217 30	132 _{-0.5} 40	130 190	157 45	3 150	83 43	Φ 40H7 13.1	Φ 55 21	43.3 80 _{-0.5}	12 173	172 18	29 142	86 M16x40	Φ 160				
KAB67	Φ 13.5 120	228 30	140 _{-0.5} 45	140 203	170 45	3.5 160	90 43	Φ 40H7 20	Φ 55 24	43.3 90 _{-0.5}	12 179	170 20	29 156	93 M16x40	Φ 160				
KAB77	Φ 17.5 150	288 40	180 _{-0.5} 55	165 263	200 55	4 200	105 55	Φ 50H7 31.3	Φ 70 27	53.8 112 _{-0.5}	14 202	208 22.5	32 183	108 M16x45	Φ 200				
KAB87	Φ 22 180	340 55	212 _{-0.5} 75	180 305	230 70	4 233	120 67	Φ 60H7 25.9	Φ 85 32	64.4 132 _{-0.5}	18 257	260 30	36 210	123 M20x50	Φ 250				
KAB97	Φ 26 240	417 75	265 ₋₁ 60	240 372	290 75	4 295	150 82	Φ 70H7 32.3	Φ 95 36	74.9 160 _{-0.5}	20 277	294 30	34 270	153 M20x50	Φ 300				
KAB107	Φ 33 280	503 95	315 ₋₁ 100	270 448	340 95	2.5 360	175 98	Φ 90H7 52	Φ 118 40	95.4 200 _{-0.5}	25 341	380 40	40 313	178 M24x60	Φ 350				

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KAZ37-157

Mounting Dimensional Description

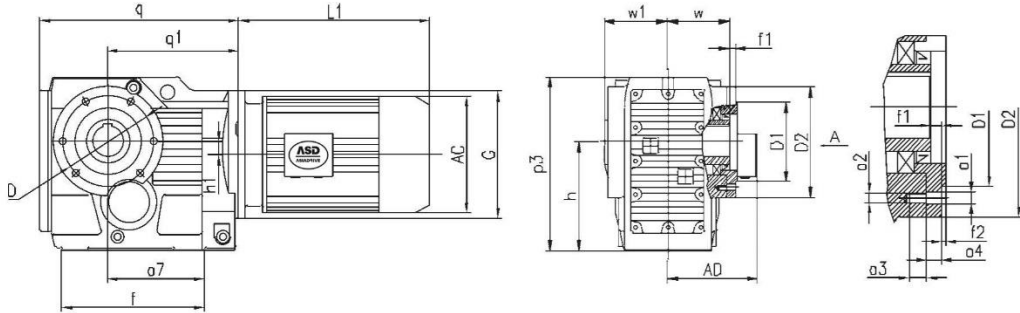
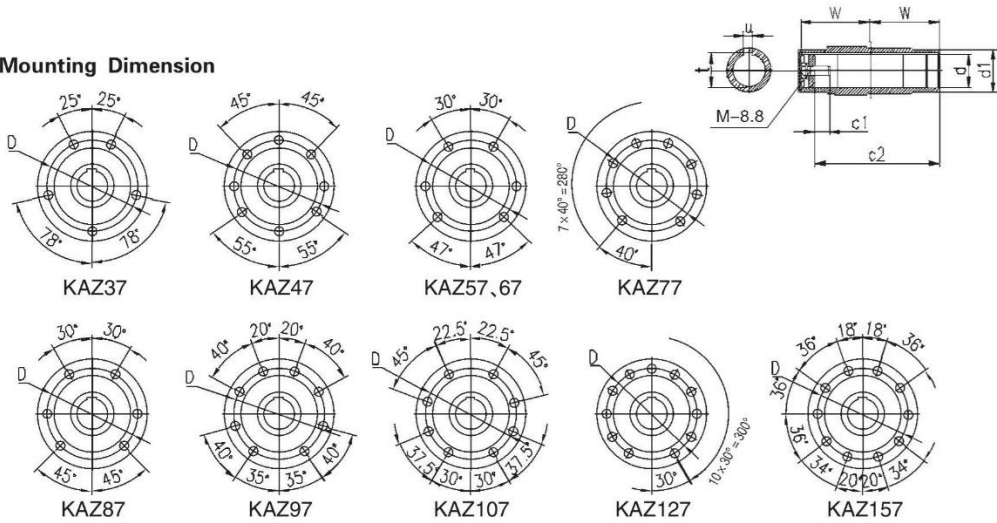


Fig.A Mounting Dimension

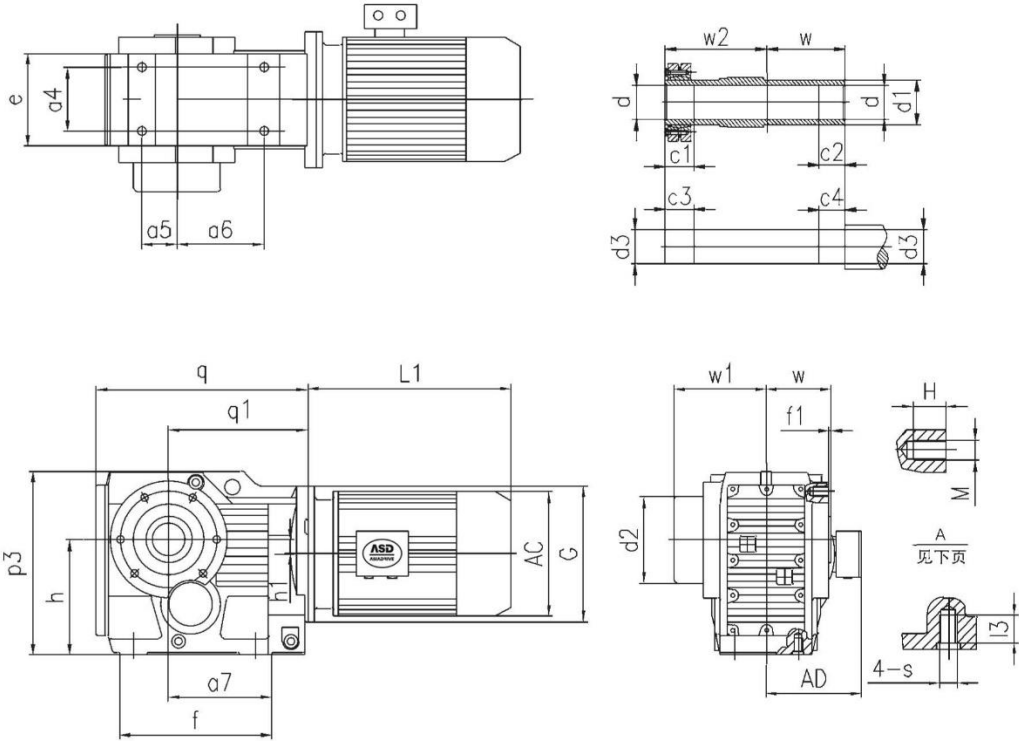


Specification	q	D ₁	h	p ₃	f	w	d	c ₂	t	a ₃	f ₂	a ₁	G	Motor Size			
	q ₁	D ₂	h ₁	a ₇	f ₁	w ₁	d ₁	c ₁	u	a ₄	a ₂	D	M	AC	AD	L1	
KAZ37	210 139	Φ 80j6 Φ 110	100 _{±0.5} 8.5	164 97	147 9	60 63	Φ 30H7 Φ 45	105 17	33.3 8	12 11.5	3 M8	Φ 9 Φ 94	Φ 120 M10x25	Please see appendix A-2			
KAZ47	243 166	Φ 80j6 Φ 120	112 _{±0.5} 7.2	185 115	170 8.5	75 78	Φ 35H7 Φ 50	132 22	38.3 10	12 11	3 M8	Φ 9 Φ 102	Φ 160 M12x30				
KAZ57	269 173	Φ 105j6 Φ 155	132 _{±0.5} 13.1	215 120	182 9	83 86	Φ 40H7 Φ 55	142 29	43.3 12	20 12	3.5 M12	Φ 13.5 Φ 125	Φ 160 M16x40				
KAZ67	274 179	Φ 105j6 Φ 155	140 _{±0.5} 20	226 125	182 8.5	90 94	Φ 40H7 Φ 55	156 29	43.3 12	20 12	3.5 M12	Φ 13.5 Φ 125	Φ 160 M16x40				
KAZ77	312 202	Φ 125j6 Φ 170	180 _{±0.5} 31.3	286 139	204 10	105 108	Φ 50H7 Φ 70	183 32	53.8 14	20 14	3.5 M12	Φ 13.5 Φ 142	Φ 200 M16x45				
KAZ87	390 257	Φ 155j6 Φ 215	212 _{±0.5} 25.9	338 190	280 11	120 123	Φ 60H7 Φ 85	210 36	64.4 18	26.15	4 M16	Φ 17.5 Φ 178	Φ 250 M20x50				
KAZ97	435 277	Φ 180j6 Φ 260	265 _{±1.0} 32.3	414 190	298 14	150 153	Φ 70H7 Φ 95	270 34	74.9 20	26.18	4 M16	Φ 17.5 Φ 220	Φ 300 M20x50				
KAZ107	537 341	Φ 210j6 Φ 304	315 _{±1.0} 52	500 230	370 -8	175 178	Φ 90H7 Φ 118	313 40	95.4 25	30 22	4 M20	Φ 22 Φ 260	Φ 350 M24x60				
KAZ127	615 390	Φ 250h6 Φ 350	375 _{±1.0} 53	592 288	440 0	205 208	Φ 100H7 Φ 135	373 38	106.4 28	28 30	5 M20	Φ 22 Φ 300	Φ 450 M24x60				
KAZ157	706 426	Φ 290h6 Φ 400	450 _{±1.0} 71.7	705 298	480 -14	250 253	Φ 120H7 Φ 155	460 36	127.4 32	36 28	5 M24	Φ 26 Φ 340	Φ 550 M24x60				

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KH37-107

Mounting Dimensional Description

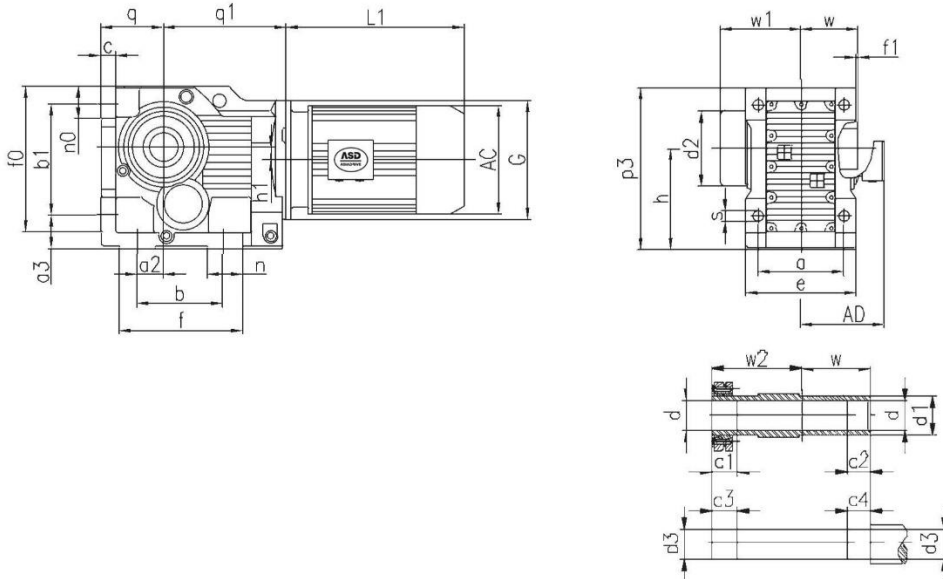


Specification	q	h	e	a ₄	a ₆	f	d ₂	d	w	w ₂	c ₁	c ₃	s	M	Motor Size																			
	q ₁	h ₁	p ₃	a ₅	a ₇	f ₁	d ₁	d ₃	w ₁	G	c ₂	c ₄	l ₃	H	AC	AD	L1																	
KH37	210	100 _{-0.5}	100	60	82	147	Φ 75	Φ 30H7	60	86	31	36	M10	M8	Please see appendix A-2																			
	139	8.5	164	35	97	2.5	Φ 45	Φ 30h6	95	Φ 120	20	25	20	12																				
KH47	243	112 _{-0.5}	110	70	100	170	Φ 83	Φ 35H7	75	102	32	37	M10	M8																				
	166	7.2	185	40	115	3	Φ 50	Φ 35h6	110	Φ 160	20	25	20	12																				
KH57	269	132 _{-0.5}	122	88	105	182	Φ 83	Φ 40H7	83	112	26	31	M12	M12																				
	173	13.1	215	47	120	3	Φ 55	Φ 40h6	117	Φ 160	20	25	25	20																				
KH67	274	140 _{-0.5}	130	88	110	182	Φ 93	Φ 40H7	90	118	38	43	M12	M12																				
	179	20	226	42	125	3.5	Φ 55	Φ 40h6	126	Φ 160	20	25	25	20																				
KH77	312	180 _{-0.5}	154	102	122	204	Φ 114	Φ 50H7	105	136	36	41	M16	M12																				
	202	31.3	286	48	139	4	Φ 70	Φ 50h6	146	Φ 200	30	35	32	20																				
KH87	390	212 _{-0.5}	170	118	160	280	Φ 159	Φ 65H7	120	161	41	46	M16	M16																				
	257	25.9	338	65	190	4	Φ 85	Φ 65h6	170	Φ 250	40	45	32	26																				
KH97	435	265 ₋₁	226	160	165	298	Φ 174	Φ 75H7	150	195	55	60	M20	M16																				
	277	32.3	414	83	190	4	Φ 95	Φ 75h6	206	Φ 300	50	55	36	26																				
KH107	537	315 ₋₁	266	190	190	370	Φ 200	Φ 95H7	175	230	65	75	M24	/																				
	341	52	500	100	230	2.5	Φ 118	Φ 95h6	245	Φ 350	60	70	44	/																				

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KH127-157

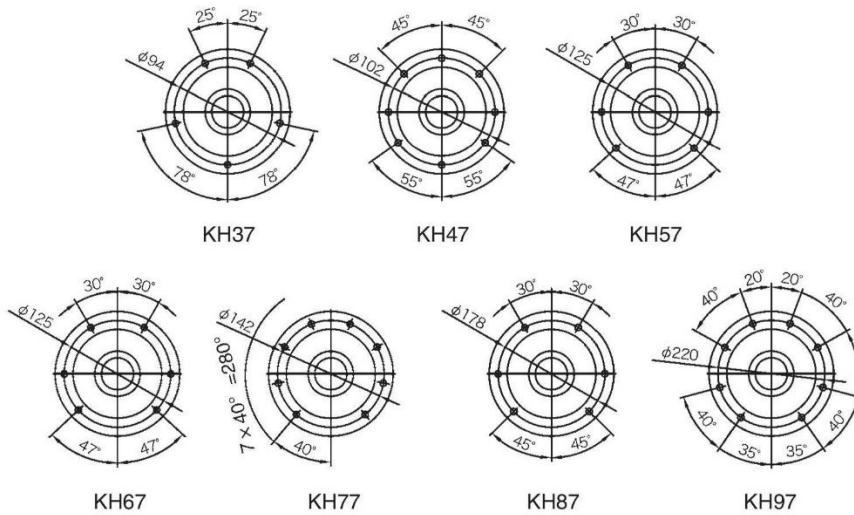
Mounting Dimensional Description



Specification	q_1	c	n_0	f_0	f	a_2	h	a	w	w_2	c_1	c_3	d_2	d	h_1	Motor Size		
	q	s	b_1	a_3	n	b	p_3	e	w_1	f_1	c_2	c_4	d_1	d_3	G	AC	AD	L1
KH127	390 225 _{±0.5}	45 Φ 39	111 420	526 110	440 100	115 350	375.1 592	330 400	205 296	280 2.5	85 70	95 80	Φ 233 Φ 135	Φ 105H7 Φ 105h6	53 Φ 450	Please see appendix A-2		
KH157	426 280.1	50 Φ 39	130 500	634 130	480 100	140 380	450.1 705	420 500	250 370	330 /	90 80	100 90	Φ 315 Φ 155	Φ 125H7 Φ 125h6	71.7 Φ 550			

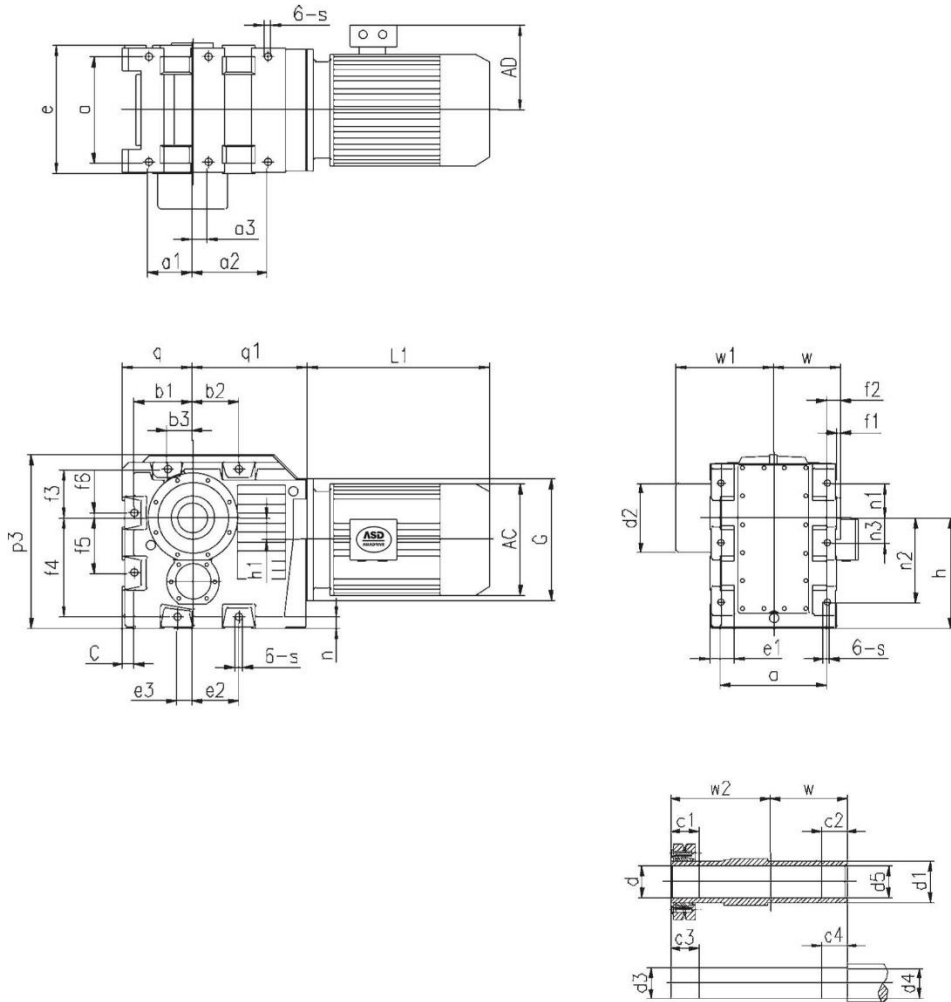
Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

Fig.A Mounting Dimension



KH167-187

Mounting Dimensional Description

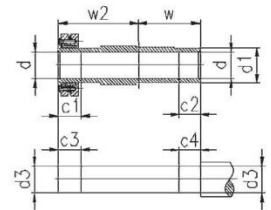
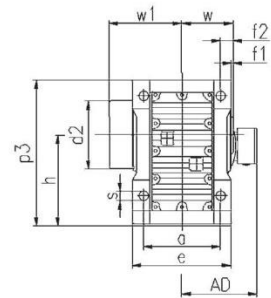
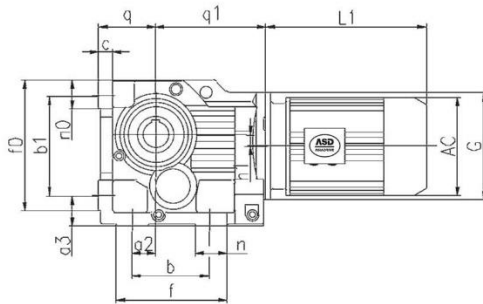


Specification	a ₁	p ₃	b ₁	f ₃	f ₆	e ₂	a	h	n ₃	c ₁	c ₄	w ₂	d	d ₄	Motor Size		
	a ₂ a ₃	q q ₁	b ₂ b ₃	f ₄ f ₅	h ₁ n	e ₃ c	f ₂ f ₁	n ₁ n ₂	e e ₁	c ₂ c ₃	w w ₁	s d ₂	d ₅ d ₃	d ₁ G	AC	AD	L1
KH167	200	786	265	220	22	210	480	500-1	115	122	100	423	Φ 135H7	Φ 140h6	Please see appendix A-2		
	340	315-1	210	450	97	70	65	155	580	90	305	Φ 33	Φ 140H7	Φ 190			
	70	522	115	250	50	50	9	385	104	130	442	Φ 315	Φ 135h6	Φ 550			
KH187	215	942	305	250	5	250	540	600-1	150	117	105	455	Φ 155H7	Φ 160h6			
	405	355-1	250	550	112	60	67	160	640	95	337	Φ 39	Φ 160H7	Φ 200			
	95	582	135	305	50	50	10.5	460	110	130	474	Φ 373	Φ 155h6	Φ 550			

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KHB47-107

Mounting Dimensional Description

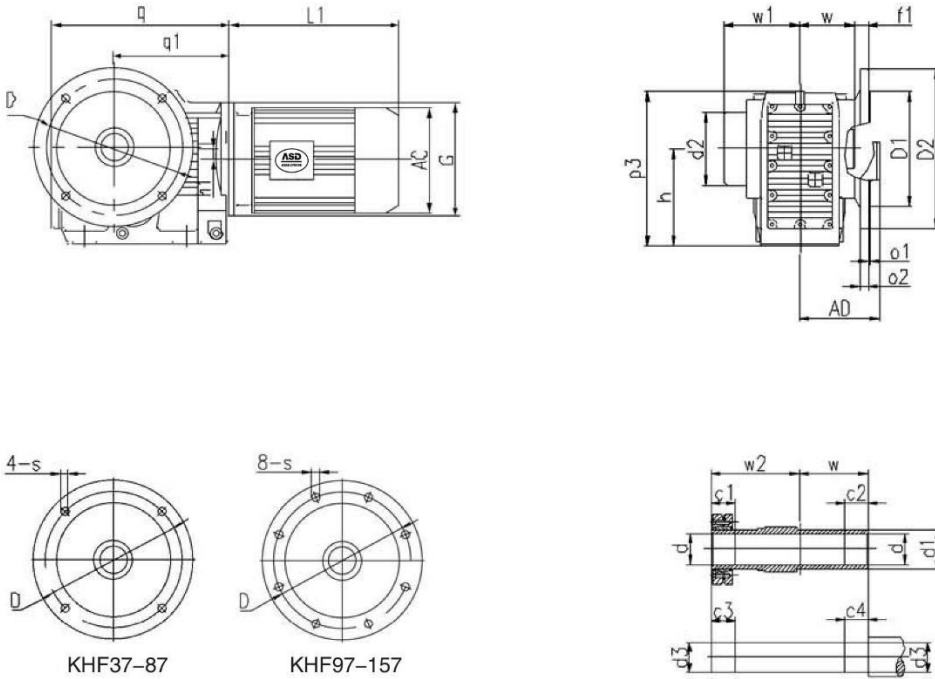


Specification	q	s	p ₃	h	a	e	f ₀	w	d	c	d ₁	f	c ₁	c ₃	w ₁	G	Motor Size							
	q ₁	b	a ₂	n	b ₁	a ₃	f ₁	n ₀	d ₃	h ₁	d ₂	f ₂	c ₂	c ₄	w ₂		AC	AD	L1					
KHB47	71 ^{-0.5}	Φ 11	185	112 ^{-0.5}	120	145	170	75	Φ 35H7	18	Φ 50	162	32	37	110	Φ 160	Please see appendix A-2							
	166	130	35	32	130	37	3	37	Φ 35h6	7.2	Φ 83	15	20	25	102									
KHB57	80 ^{-0.5}	Φ 13.5	217	132 ^{-0.5}	130	157	190	83	Φ 40H7	21	Φ 55	172	26	31	117	Φ 160		Please see appendix A-2						
	173	130	30	40	150	45	3	43	Φ 40h6	13.1	Φ 83	18	20	25	112									
KHB67	90 ^{-0.5}	Φ 13.5	228	140 ^{-0.5}	140	170	203	90	Φ 40H7	24	Φ 55	170	38	43	126	Φ 160			Please see appendix A-2					
	179	120	30	45	160	45	3.5	43	Φ 40h6	20	Φ 93	20	20	25	118									
KHB77	112 ^{-0.5}	Φ 17.5	288	180 ^{-0.5}	165	200	263	105	Φ 50H7	27	Φ 70	208	36	41	146	Φ 200				Please see appendix A-2				
	202	150	40	55	200	55	4	55	Φ 50h6	31.3	Φ 114	22.5	30	35	136									
KHB87	132 ^{-0.5}	Φ 22	340	212 ^{-0.5}	180	230	305	120	Φ 65H7	32	Φ 85	260	41	46	170	Φ 250					Please see appendix A-2			
	257	180	55	75	233	70	4	67	Φ 65h6	25.9	Φ 159	30	40	45	161									
KHB97	160 ^{-0.5}	Φ 26	417	265 ⁻¹	240	290	372	150	Φ 75H7	36	Φ 95	294	55	60	206	Φ 300	Please see appendix A-2							
	277	240	75	60	295	75	4	82	Φ 75h6	32.3	Φ 174	30	50	55	195									
KHB107	200 ^{-0.5}	Φ 33	503	315 ⁻¹	270	340	448	175	Φ 95H7	40	Φ 118	380	65	75	245	Φ 350		Please see appendix A-2						
	341	280	95	100	360	95	2.5	98	Φ 95h6	52	Φ 200	40	60	70	230									

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KHF37-157

Mounting Dimensional Description



KHF37-87

KHF97-157

Specification	q	h	o ₁	s	w ₁	w ₂	c ₂	c ₄	D ₁	d ₁	d	p ₃	Motor Size		
	q ₁	h ₁	o ₂	f ₁	w	c ₁	c ₃	D	D ₂	d ₂	d ₂	G	AC	AD	L1
KHF37	210	100 ^{0.5}	3.5	Φ 9	95	86	20	25	Φ 110j6	Φ 45	Φ 30H7	164	Please see appendix A-2		
	139	8.5	10	24	60	31	36	Φ 130	Φ 160	Φ 30h6	Φ 75	Φ 120			
KHF47	243	112 ^{0.5}	3.5	Φ 11	110	102	20	25	Φ 130j6	Φ 50	Φ 35H7	185			
	166	7.2	10	25	75	32	37	Φ 165	Φ 200	Φ 35h6	Φ 83	Φ 160			
KHF57	269	132 ^{0.5}	4	Φ 13.5	117	112	20	25	Φ 180j6	Φ 55	Φ 40H7	215			
	173	13.1	15	23.5	83	26	31	Φ 215	Φ 250	Φ 40h6	Φ 83	Φ 160			
KHF67	274	140 ^{0.5}	4	Φ 13.5	126	118	20	25	Φ 180j6	Φ 55	Φ 40H7	226			
	179	20	15	23	90	38	43	Φ 215	Φ 250	Φ 40h6	Φ 93	Φ 160			
KHF77	312	180 ^{0.5}	4	Φ 13.5	146	136	30	35	Φ 230j6	Φ 70	Φ 50H7	286			
	202	31.3	16	37	105	36	41	Φ 265	Φ 300	Φ 50h6	Φ 114	Φ 200			
KHF87	390	212 ^{0.5}	5	Φ 17.5	170	161	40	45	Φ 250h6	Φ 85	Φ 65H7	338			
	257	25.9	18	30	120	41	46	Φ 300	Φ 350	Φ 65h6	Φ 159	Φ 250			
KHF97	435	265 ¹	5	Φ 17.5	206	195	50	55	Φ 350h6	Φ 95	Φ 75H7	414			
	277	32.3	22	41.5	150	55	60	Φ 400	Φ 450	Φ 75h6	Φ 174	Φ 300			
KHF107	537	315 ¹	5	Φ 17.5	245	230	60	70	Φ 350h6	Φ 118	Φ 95H7	500			
	341	52	22	41	175	65	75	Φ 400	Φ 450	Φ 95h6	Φ 200	Φ 350			
KHF127	615	375 ¹	5	Φ 17.5	296	280	70	80	Φ 450h6	Φ 135	Φ 105H7	592			
	390	53	25	51	205	85	95	Φ 500	Φ 550	Φ 105h6	Φ 233	Φ 450			
KHF157	706	450 ¹	6	Φ 22	370	330	80	90	Φ 550h6	Φ 155	Φ 125H7	705			
	426	71.7	28	60	250	90	100	Φ 600	Φ 660	Φ 125h6	Φ 315	Φ 550			

Note: When equipping the user's motor or the special one, the flange is required to be connected. (Please see appendix D)

KHZ37-157

Mounting Dimensional Description

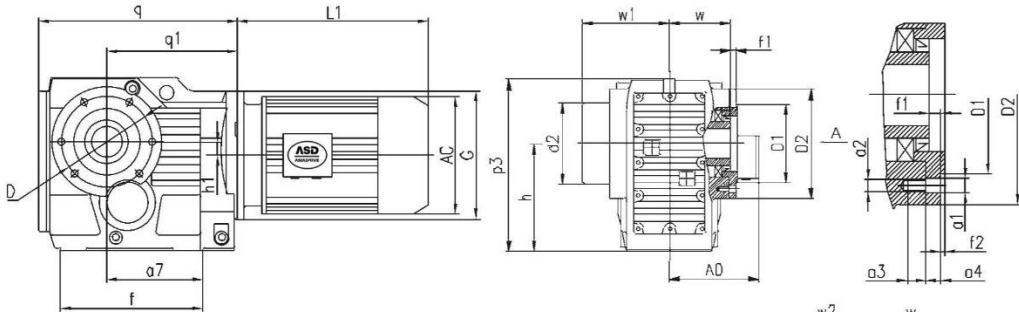
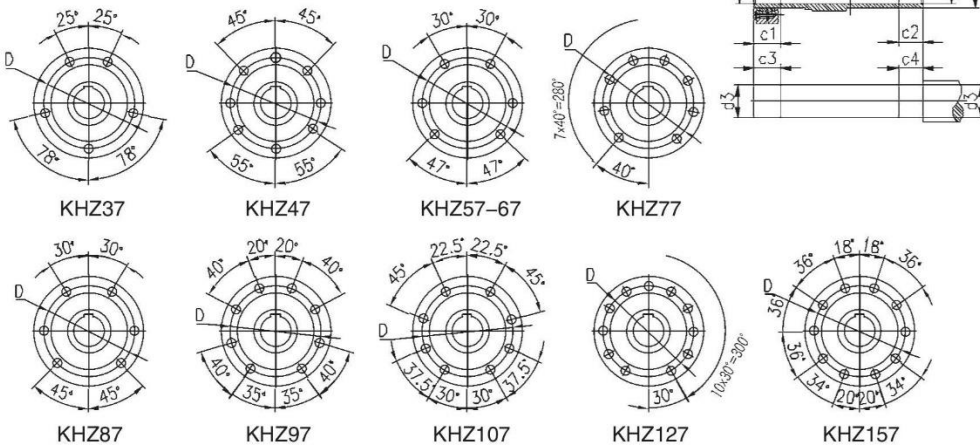


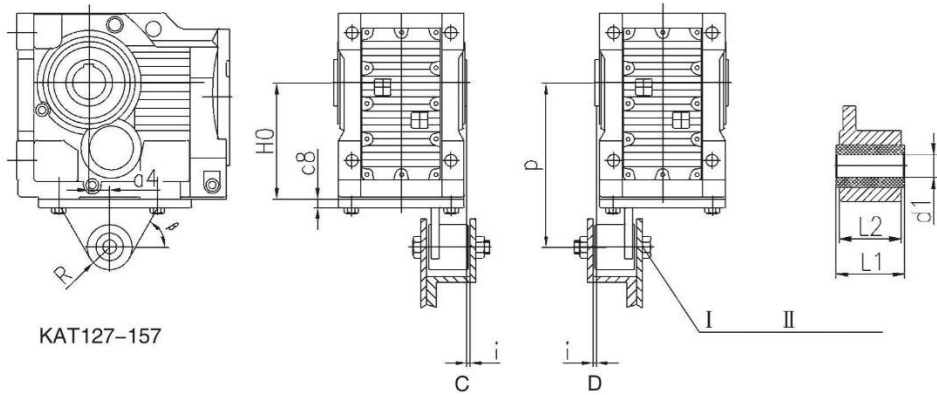
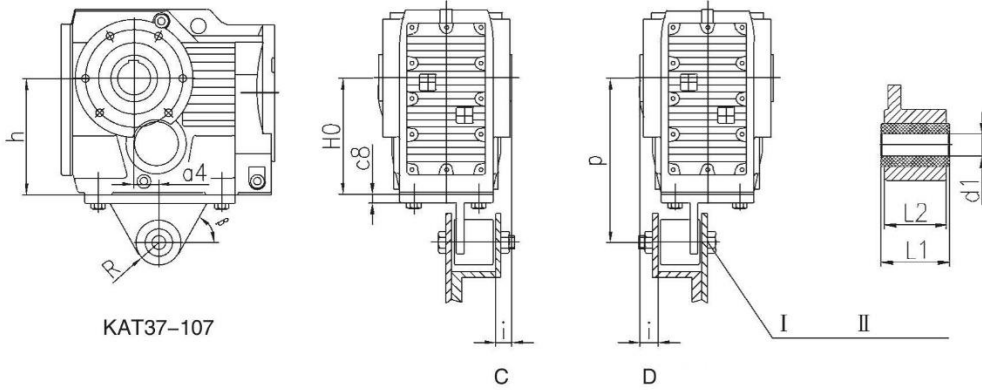
Fig.A Mounting Dimension



Specification	q q ₁	D ₁ D ₂	h h ₁	p ₃ a ₇	f f ₁	w w ₁	G w ₂	d ₂ d ₁	d d ₃	c ₁ c ₂	c ₃ c ₄	a ₃ a ₄	f ₂ a ₂	a ₁ D	Motor Size				
															AC	AD	L1		
KHZ37	210	Φ 80j6	100 _{0.5}	164	147	60	Φ 120	Φ 75	Φ 30H7	31	36	12	3	Φ 9	Please see appendix A-2				
	139	Φ 110	8.5	97	9	95	86	Φ 45	Φ 30h6	20	25	11.5	M8	Φ 94					
KHZ47	243	Φ 80j6	112 _{0.5}	185	170	75	Φ 160	Φ 83	Φ 35H7	32	37	12	3	Φ 9					
	166	Φ 120	7.2	115	8	110	102	Φ 50	Φ 35h6	20	25	11	M8	Φ 102					
KHZ57	269	Φ 105j6	132 _{0.5}	215	182	83	Φ 160	Φ 83	Φ 40H7	26	31	20	3.5	Φ 13.5					
	173	Φ 155	13.1	120	9	117	112	Φ 55	Φ 40h6	20	25	12	M12	Φ 125					
KHZ67	274	Φ 105j6	140 _{0.5}	226	182	90	Φ 160	Φ 93	Φ 40H7	38	43	20	3.5	Φ 13.5					
	179	Φ 155	20	125	8.5	126	118	Φ 55	Φ 40h6	20	25	12	M12	Φ 125					
KHZ77	312	Φ 125j6	180 _{0.5}	286	204	105	Φ 200	Φ 114	Φ 50H7	36	41	20	3.5	Φ 13.5					
	202	Φ 170	31.3	139	10	146	136	Φ 70	Φ 50h6	30	35	14	M12	Φ 142					
KHZ87	390	Φ 155j6	212 _{0.5}	338	280	120	Φ 250	Φ 159	Φ 65H7	41	46	26	4	Φ 17.5					
	257	Φ 215	25.9	190	11	170	161	Φ 85	Φ 65h6	40	45	15	M16	Φ 178					
KHZ97	435	Φ 180j6	265 ₁	414	298	150	Φ 300	Φ 174	Φ 75H7	55	60	26	4	Φ 17.5					
	277	Φ 260	32.3	190	14	206	195	Φ 95	Φ 75h6	50	55	18	M16	Φ 220					
KHZ107	537	Φ 210j6	315 ₁	500	370	175	Φ 350	Φ 200	Φ 95H7	65	75	30	4	Φ 22					
	341	Φ 304	52	230	8	245	230	Φ 118	Φ 95h6	60	70	22	M20	Φ 260					
KHZ127	615	Φ 250h6	375 ₁	592	440	205	Φ 450	Φ 233	Φ 105H7	85	95	28	5	Φ 22					
	390	Φ 350	53	288	0	296	280	Φ 135	Φ 105h6	70	80	30	M20	Φ 300					
KHZ157	706	Φ 290h6	450 ₁	705	480	250	Φ 550	Φ 315	Φ 125H7	90	100	36	5	Φ 26					
	426	Φ 400	71.7	298	14	370	330	Φ 155	Φ 125h6	80	90	28	M24	Φ 340					

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

KAT37-157
Mounting Dimensional Description

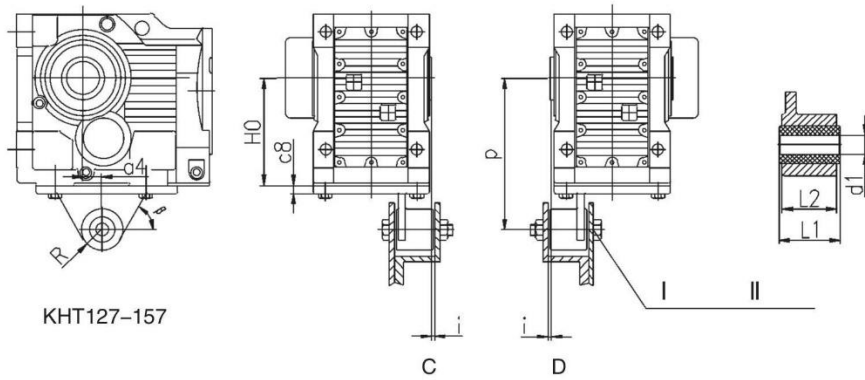
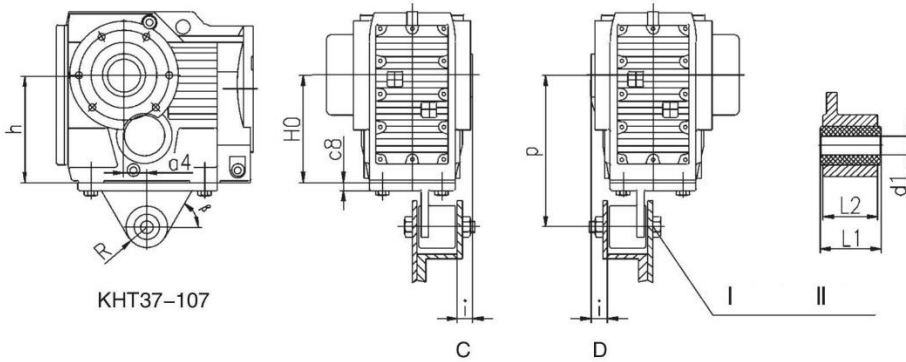


Type Size	a ₄	β	C ₈	i	P	R	H ₀	d ₁	L ₁₋₀₃	L ₂
KAT37	23.5	60°	10	20	140 ^{+0.2} _{-0.7}	22.5	100 _{-0.5}	10.4 ^{+0.1} _{-0.1}	36	31
KAT47	30	55°	12	20	160 ^{+0.2} _{-0.7}	22.5	112 _{-0.5}	10.4 ^{+0.1} _{-0.1}	36	31
KAT57	40	55°	13	18	192 ^{+0.2} _{-0.7}	29	132 _{-0.5}	16.4 ^{+0.08} _{-0.08}	60	54
KAT67	45	55°	13	25	200 ^{+0.2} _{-0.7}	29	140 _{-0.5}	16.4 ^{+0.08} _{-0.08}	60	54
KAT77	52.5	60°	14	25	250 ^{+0.2} _{-0.7}	29	180 _{-0.5}	16.4 ^{+0.08} _{-0.08}	60	54
KAT87	60	60°	16	30	300 ^{+0.2} _{-0.7}	41	212 _{-0.5}	25 ^{+0.08} _{-0.08}	80	72
KAT97	70	50°	17	40	350 ^{+0.2} _{-1.2}	41	265 ₋₁	25 ^{+0.08} _{-0.08}	100	92
KAT107	74	55°	20	45	450 ^{+0.5} _{-1.5}	41	315 ₋₁	25 ^{+0.08} _{-0.08}	100	92
KAT127	60	65°	45	7	550 ^{+0.5} _{-1.5}	70	375 ₋₁	40 ^{+0.08} _{-0.08}	126	110
KAT157	50	65°	45	2	700 ^{+0.5} _{-1.5}	70	450 ₋₁	40 ^{+0.08} _{-0.08}	126	110

For other dimensions, see the type KA.

Note: bolts I and nuts II are prepared by customers.

KHT37-157
Mounting Dimensional Description



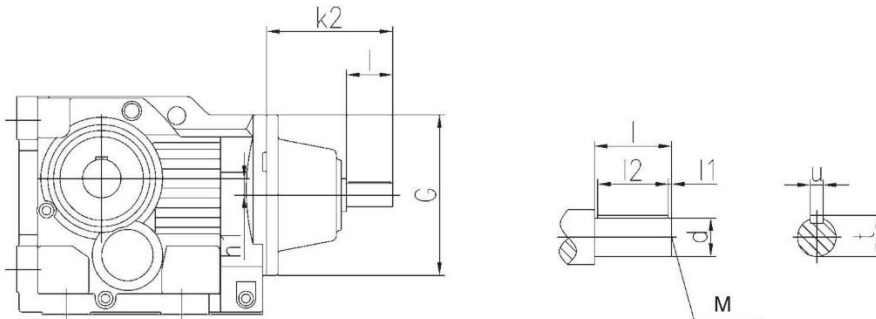
Type Size	a_4	β	C_8	i	P	R	H_0	d_1	$L_{1-0.3}$	L_2
KHT37	23.5	60°	10	20	140 ^{+0.2} _{-0.7}	22.5	100 _{-0.5}	10.4 ^{+0.1} _{-0.1}	36	31
KHT47	30	55°	12	20	160 ^{+0.2} _{-0.7}	22.5	112 _{-0.5}	10.4 ^{+0.1} _{-0.1}	36	31
KHT57	40	55°	13	18	192 ^{+0.2} _{-0.7}	29	132 _{-0.5}	16.4 ^{+0.08} _{-0.08}	60	54
KHT67	45	55°	13	25	200 ^{+0.2} _{-0.7}	29	140 _{-0.5}	16.4 ^{+0.08} _{-0.08}	60	54
KHT77	52.5	60°	14	25	250 ^{+0.2} _{-0.7}	29	180 _{-0.5}	16.4 ^{+0.08} _{-0.08}	60	54
KHT87	60	60°	16	30	300 ^{+0.2} _{-0.7}	41	212 _{-0.5}	25 ^{+0.08} _{-0.08}	80	72
KHT97	70	50°	17	40	350 ^{+0.2} _{-1.2}	41	265 ₋₁	25 ^{+0.08} _{-0.08}	100	92
KHT107	74	55°	20	45	450 ^{+0.5} _{-1.5}	41	315 ₋₁	25 ^{+0.08} _{-0.08}	100	92
KHT127	60	65°	45	7	550 ^{+0.5} _{-1.5}	70	375 ₋₁	40 ^{+0.08} _{-0.08}	126	110
KHT157	50	65°	45	2	700 ^{+0.5} _{-1.5}	70	450 ₋₁	40 ^{+0.08} _{-0.08}	126	110

For other dimensions, see the type KH.

Note: bolts I and nuts II are prepared by customers.

K..SZ37-187AD1-8

Mounting Dimensional Description



K..SZ37-187AD1-8 Mounting Dimensional Description

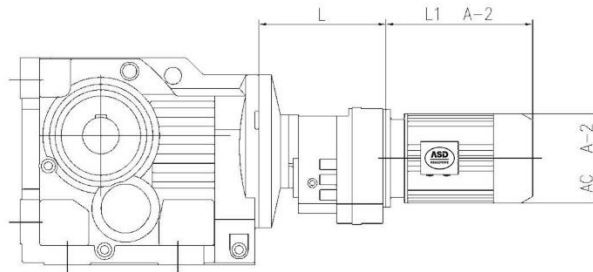
Type Size		d	G	k ₂	l	M	l ₁	l ₂	t	u	h ₁
K..SZ37	AD1	16k6	Φ 120	115	40	M5	4	32	18	5	8.5
	AD2	19k6	Φ 120	115	40	M6	4	32	21.5	6	8.5
K..SZ47	AD2	19k6	Φ 160	120	40	M6	4	32	21.5	6	7.2
	AD3	24k6	Φ 160	130	50	M8	5	40	27	8	7.2
K..SZ57/67	AD2	19k6	Φ 160	120	40	M6	4	32	21.5	6	13.1/20
	AD3	24k6	Φ 160	130	50	M8	5	40	27	8	13.1/20
K..SZ77	AD2	19k6	Φ 200	130	40	M6	4	32	21.5	6	31.3
	AD3	24k6	Φ 200	140	50	M8	5	40	27	8	31.3
	AD4	38k6	Φ 200	140	50	M12	5	40	41	10	31.3
K..SZ87	AD2	19k6	Φ 250	160	40	M6	4	32	21.5	6	25.9
	AD3	28k6	Φ 250	180	60	M10	5	50	31	8	25.9
	AD4	38k6	Φ 250	200	80	M12	5	70	41	10	25.9
	AD5	42k6	Φ 250	200	80	M16	5	70	45	12	25.9
K..SZ97	AD3	28k6	Φ 300	200	60	M10	5	50	31	8	32.3
	AD4	38k6	Φ 300	220	80	M12	5	70	41	10	32.3
	AD5	42k6	Φ 300	220	80	M16	5	70	45	12	32.3
	AD6	48k6	Φ 300	220	80	M16	5	70	51.5	14	32.3
K..SZ107	AD3	28k6	Φ 350	220	60	M10	5	50	31	8	52
	AD4	38k6	Φ 350	240	80	M12	5	70	41	10	52
	AD5	42k6	Φ 350	270	110	M16	10	90	45	12	52
	AD6	48k6	Φ 350	270	110	M16	10	90	51.5	14	52
K..SZ127	AD4	38k6	Φ 450	267	80	M12	5	70	41	10	53
	AD5	42k6	Φ 450	297	110	M16	10	90	45	12	53
	AD6	48k6	Φ 450	297	110	M16	10	90	51.5	14	53
	AD7	55m6	Φ 450	297	110	M20	10	90	59	16	53
	AD8	70m6	Φ 450	297	110	M20	10	90	74.5	20	53
K..SZ157/167/187	AD5	42k6	Φ 550	344	110	M16	10	90	45	12	71.7/97/112
	AD6	48k6	Φ 550	344	110	M16	10	90	51.5	14	71.7/97/112
	AD7	55m6	Φ 550	344	110	M20	10	90	59	16	71.7/97/112
	AD8	70m6	Φ 550	374	140	M20	15	110	74.5	20	71.7/97/112

For other dimensions, see the type K.

Note: double shafts type is also available for type KF/KA/KAB/KAF/KAZ/KH/KHF/KHZ, and these double shafts types are respectively named type KHFSZ..AD.., KASZ..AD.., KABSZ..AD.., KAFSZ..AD.., KAZ..AD.., KHSZ..AD.., KHFSZ..AD...and KHZSZ..AD...

K..R..

Mounting Dimensional Description



Type Size	Motor frame size	L
K..37R17	63	131
	71	
	80	
K..47R37 K..67R37	63	157
	71	
	80	
K..57R37	63	157
	71	
	80	
	90	
K..77R37	63	157
	71	
	80	
	90	
K..87R57	63	187
	71	
	80	
	90	
	100	
K..97R57	63	187
	71	
	80	
	90	
	100	
K..107R77	63	220
	71	
	80	
	90	
	100	
	112	
	132	
160		

Type Size	Motor frame size	L
K..127R77	63	220
	71	
	80	
	90	
	100	
	112	
K..127R87	132	272
	160	
	90	
	100	
	112	
K..157R97 K..167R97 K..187R97	132	320
	160	
	180	
	80	
	90	
	100	
	112	
K..157R107 K..167R107 K..187R107	132	355
	160	
	180	
	100	
	112	
	200	
225		

Note: Combined type is also available for type KA/KAF/KAZ/KH/KHF/KHZ.

Note: When equipping the user's motor or the special one, the flange is required to connected.(Please see appendix D)

Features of Products

1.Highly Standard Modular Designed: The products are easily connected with and driven by different types of motors or other kinds of input power. The same type geared motor can be adapted to optioned powers of motors. It is therefore easy to realize different solutions for varied requirements.

2.Ratio: Featured many closely divided ratios and wide range of them. Very big final ratios can be obtained through combined unites to reach extremely low output speeds.

3.Mounting Arrangement: No strict limitation to the mounting arrangement.

4.High Strength, Compact Dimension: Housings are made of high strength cast iron. Gears and shaft gears are finished with gas carburising process and precise grinding to sequentially get high loading capacity of per certain volume.

5.Long Service Life: Under the condition of accurately selecting type size and the normal maintenance and use, main components (except those easily-disabled parts) can last as long as up to more than 25,000 hours. Easily-disabled parts include lubricating oil, oil seals, and bearings.

6.Low Noise: All key components are finished by precisely machining, accurate assembly, and finally tested, and therefore, fairly low noise is reached.

7.High Efficiency: The efficiency of gear unit can reach 95%, The efficiency of worm gear unit can reach 89%.

8.Large radial loading ability:

9.Axial load ability of up to 5% of radial load.

Site Conditions

The geared motors are suitable for the operation sites in the ambient temperatures from -10°C to 40°C and altitudes up to 1000m above the sea lever.

They can be used both for clockwise running and anti-clockwise running.

There is no limitation to specific application field.

While applied in other aggressive operating atmosphere or environment conditions, please contact our technology department.

Description of Selection Tables

1.Selection Table [Constant Power]:

Motor Power P_m[kW]: Power is indicated on the basis of Y₂ motor.

Output Speed n₂[r/min]: Output speed is calculated on the basis of motor's fully loading speed and geared motor's ratio. Unit: revolutions per minute.

Output Torque M₂ [Nm]: Torque available at output shaft while motor being fully loaded. All internal efficiency factors have already considered.

Ratio [i]: Exact final total transmission ratio from input to output

Permissible Radial Load F_{ra}[kN]: Permissible radial load on the middle point of overhung shaft (F_{ra} value listed in the table must be multiplied by 0.4, if load is placed on the end point of the shaft). The mathematic product of actual radial load Fr and actual service factor f_A should not be bigger than this F_{ra}, i.e. F_{ra} ≥ f_A*Fr (for f_A, please see the description of f_B).

Normally, Fr of a working unit can be got through the following:

$$Fr = M_r * f_r / r \quad (N)$$

where, M_r - working torque of the working unit (Nm)

r - pitch circle radius of the working unit (m)

f_r - radial load factor, which can be got refer to

the following:

f_r=1, for single chain sprocket wheel

f_r=1.25, for single gear or for double chain sprocket wheel

et wheel

f_r=1.5, for V-section belt

f_r=2.5, for flat belt

Service Factor f_B: The ratio of rated power of gear unit to rated power of motor power. It is essential data to select the size and strength of gear unit.

Type Size of Unit: including type and size. Individual unit and combined units are available. Combination is considered commonly under the constant power condition. Each type (and even some other types not mentioned in the tables) can be assembled or combined to any ratio mentioned in the tables.

For the detailed construction dimension, see the relevant dimensional tables.

Pole Number of Motor: The pole number of Y₂ motor.

Mass (Weight) [kg]: Net weight of geared unit, without the motor. This weight is only for your general reference.

2.Selection Table (Constant Torque):

Constant torque selection table is suitable for the conditions where the constant torque system is applied appropriately.

If the Max. torque listed in this table is used when calculating, service factor is 1.0. The meanings of other terms are similar to ones described in Selection Table (Constant Power).

Selection Steps

1、 Type Selection

Types of units are normally selected by customers to meet transmission mounting arrangement requirement. Series R and series F are applied to the conditions that input shafts are parallel to output shafts. And, series S and series K are applied to the conditions that input shafts are vertical to output shafts.

2、 Selection of actual Service Factor f_A

1)、 Normal requirement

f_A is determined by load feature, operating hours, and starts and stops number per hour of working unit. The normal total combined service factor is calculated as follows:

$$f_A = f_{Ah} * f_{Ac}$$

Where: f_{Ah} -the factor determined by load feature and operating hours of per day. See the table of f_{Ah} . The other working unit's f_{Ah} out of the table could be determined by analogy.

f_{Ac} -the factor determined by number of starts and stop per hour of working unit.

Attention: the number should be counted even start or stop.

2)、 Special requirement

If the ambient temperature is special high, the temperature factor f_{At} should be considered. refer to the factor f_{At} column of selection table.

If requiring higher reliability, the security factor f_{As} should be considered.

When you can't select the value of service factor, please contact with us.

3、 Selection of Type (Size)

It is essential to meet following: $f_B \geq f_A$

1)、 For constant power

(1)、 The motor is mounted directly into gear unit or with coupling

a, Reach to a relevant power and pole number of motor from selection table (constant power)

b, Select rudely a size with close ratio, and record it's f_B .

c, Compare, if meet this formula: $f_B \geq f_A$, then this size of gear unit is available. Otherwise select a bigger size of gear unit until meet it.

(2)、 The gear unit with prefixion deceleration unit

When connecting the motor and gear unit using gears, belts or chains, etc. Because the torque of input has been increased, so it is essential to convert motor power into input power of gear unit, the input power is to multiply motor power by radio. Select the size according to the power converted from the selection table. Attention: the number of motor pole is same.

2)、 For constant torque

Select the size of gear unit according to the power and pole of motor and radio from selection table (constant torque). It is essential to restrict the working torque under maximal torque of gear unit selected.

4、 Radial Load Checking

It will checking overhuang load, if the gears, belts and chains, etc, are fired on the shaft of the gear motors. For checking method, refer to the relevant contents in fore-named description of selection table.

5、 Mounting Dimension Checking

Check the mounting dimension when there is a limitation to site mounting condition.

If the selected type by the above method is appropriate to site mounting condition, this final type is standard and should be written in formal type description. If any special requirement is requested, please describe it while placing order.

Normal Delivery Condition:

1、 Motor: Y2 motor of protection class IP54 and of insulation class F, while no special request. But this insulation class F motor is generally recommended to be used in the condition where the class B is required.

2、 Terminal box: Terminal box is at 0° position if no special request (see description of motor terminal box position).

3、 Rotation direction: There will be no mark of rotation direction for input shaft or output shaft, if the relationship between input shaft and output shaft is not requested.

4、 Lubricants: Units are supplied with lubricant oil before delivery.

5、 Accessories: Generally, accessories excluded in mounting dimension table do not belong to our standard supply.

Design and specifications are subject to change without notice, Please forgive.

Service Factor f_{Ah}

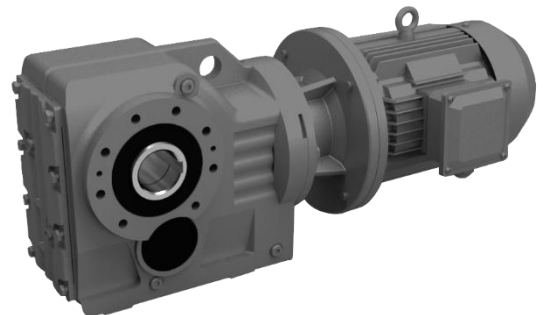
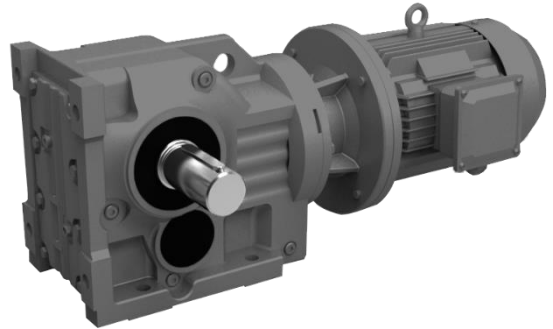
Application	8 hours / day	16 hours /day	24 hours /day
Food industry			
Crushers	1.75	2	2.25
Beet slicers, kneaders	1.25	1.5	1.75
Meat grinders	1.25	1.5	1.5
Filling machines	0.8~1*	1	1.25
Dough mixers	1	1.25	1.5
Extruders	1.25	1.5	1.75
Sugar cane knives	1.75	1.75	1.75
Sugar roller mills	1.75	1.75	1.75
Toasters	1.25	1.25	1.25
Auxiliary drives, servicing			
Inching, no load	0.8~1*		
Normal duty	1.25	1.25	1.25
Compressors			
Centrifugal	1	1.25	1.5
Lobe	1	1.25	1.5
Filters			
	1	1.25	1.5
Construction industry			
Cement mixers	1.25	1.5	1.75
Cement mills	1.5	1.75	2
Mortar spraying machine	0.8~1*	1	1.25
Generators			
	0.8~1*	1	1.25
Water treatment, environment tools			
Aerators	1.75	2.0	2.0
Common aerators	1.5	1.5	1.5
Carrousel aerators	1.75	1.75	1.75
Bar screens, collectors	0.8~1*	1	1.25
Screw pumps	1	1.25	1.5
Screens			
Rotary (for stone, for gravel)	1	1.25	1.5
Traveling water intake	0.8~1*	1	1.25
Agricultural machinery			
Manure scrapers	0.8~1*	1	
Harvesting machines	0.8~1*	1	
Cranes and hoists			
Travel gears	1.5	1.75	2.0
Slewing gears	1.25	1.5	2.0
Hoisting gears	1.25	1.5	1.75
Derricking jib cranes	1.25	1.5	1.75

Service Factor f_{Ah}

Mixers			
Constant density	1.25	1.5	1.5
Variable density	1.5	1.75	1.75
Lumber and plastic industry			
Main drive for saws	1.5	1.75	2
Feed drive for saws	1	1.25	1.5
Chopping machines	1.5	1.75	2
Veneer gluing machines	0.8~1*	1	1.25
Drilling machines	0.8~1*	1	1.25
Extruders	1.25	1.5	1.75
Agitators			
Pure liquids (constant density)	1.25	1.5	1.5
Liquids with variable density	1.5	1.75	2.0
Liquids and solids	1.5	1.75	2.0
Mills			
Ball, rod	1.75	1.75	1.75
Hammer, desintegrator	1.5	1.75	2
Printing and Paper techniques			
Cutters	1	1.25	1.5
Reels	0.8~1*	1	1.25
Bale feeders	1	1.25	1.25
Elevators			
Bucket elevators	1.25	1.5	1.75
Freight elevators	1.25	1.5	1.75
Escalators	1.25	1.25	1.5
Textile industry			
Looms	1.25	1.5	1.75
Spinners	0.8~1*	1	1.25
Washers	1	1.25	1.5
Conveyors			
Bucket conveyors	1.5	1.75	1.75
Uniformly loaded or fed	0.8~1*	1	1.25
Heavy duty, chain & screw conveyors	1.25	1.5	1.5
Shaker conveyors	1.5	1.75	2
Hoists	1.5	1.75	1.75
Belt conveyors	1.25	1.5	1.5
Hauling winches	1.5	1.75	1.75
Apron conveyors			
	1.25	1.25	1.5
Fans			
Centrifugal	0.8~1*	1	1.25

Service Factor f_{Ah}

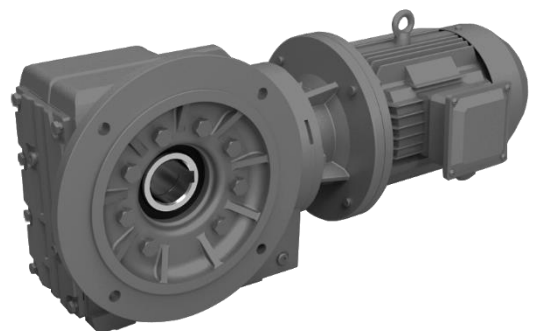
Industrial fans	1	1.25	1.5
Cooling tower drivers	1.75	1.75	1.75
Cooling tower fans	1.75	2.0	2.0
Packing machine			
Cardboard stacking machine	1.25	1.5	1.75
Wrapping machine	0.8~1*	1	1.25
Machine tools			
Plate surfacers, plate planers, bending rolls	1.25	1.5	1.75
Main drives, feed drives	1	1.25	1.5
Feed and auxiliary drive	0.8~1*	1	1.25
Presses	1.75	2	2
Folding machines	1.5	1.75	2
Plate shears	1.75	2	2
Iron and steel industry			
Wire draw benches	1.25	1.5	1.75
Winding machines	1.25	1.75	1.75
Rolling mill: non reversing			
- group drives	1.25	1.5	1.75
- Individual drives	1.5	1.75	2
Pumps			
Centrifugal	1	1.25	1.5
Rotary, gear type, lobe, vane	0.8~1*	1	1.25
Piston pumps: singl cylinder	1.5	1.75	2
multi-cylinder	1.25	1.5	1.75
Screw pumps	1	1.25	1.5


Service Factor f_{Ac}

Number of starts and stop/ hour	
<10	1
<100	1.15
<500	1.25

Service Factor f_{At}

Ambient temperature	+20°C...	+20°C... +30°C	+30°C... +40°C	+40°C... +50°C	+50°C... +60°C
f_{At}	1	1.1	1.25	1.5	1.75

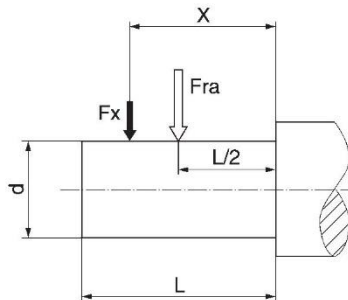


*=0.8, if hours of operation<3 hours/24 hour and no radial overhung load is applied.

These service factors are recommended on the basis of AGMA and ISO specifications and our experiences. They apply for electric motors as prime movers preferably. For specially designed applications, e.g. large inertia factor, please contact our technology department.

Overhung loads

The approved overhung loads given in the selection tables must be calculated using the following formulae in the event of force application not in the center of the shaft end.



$0 \leq X < L/2$	$F_x = [1.25 - (X/2L)] * F_{ra}$	[N]
$X = L/2$	$F_x = F_{ra}$	[N]
$L/2 < X \leq L$	$F_x = [1.6 - (1.2X/L)] * F_{ra}$	[N]

F_{ra} — Approved overhung loads ($X=L/2$) for foot-mounted gear units according to the selection tables in [N]

F_x — Approved overhung loads of formulae in the event of force application in [N]

X — Approved overhung loads of formulae in the event of force application in [N]

L — Length of output shaft in [mm]

The mathematic product of actual overhung loads F_r and actual service factor f_A should not be bigger than the approved overhung loads of formulae in the event of force application F_x , i.e. $F_x \geq f_A * F_r$. (Please see Page.2)

Appendix A-1

Technical Data of Y₂ Series Motors

Type	Rated power/kW	Full load				Blocked current	Blocked torque	Max torque	Moment of inertia / (kg·m ²)	Weight /kg
		Speed / (r/min)	Current /A	Eff (%)	Power factor	Rated current	Rated torque	Rated torque		
Synchronous Speed 3000r/min 2P										
Y2-631-2	0.18	2720	0.53	65.0	0.80	5.5	2.2	2.2	—	—
Y2-632-2	0.25		0.69	68.0	0.81					
Y2-711-2	0.37	2740	0.99	70.0	0.81	6.1	2.2	2.3	—	—
Y2-712-2	0.55		1.4	73.0	0.82					
Y2-801-2	0.75	2830	1.83	75.0	0.83	6.1	2.2	2.3	0.00075	16
Y2-802-2	1.1		2.55	77.0	0.84				0.00090	17
Y2-90S-2	1.5	2840	3.40	79.0	0.85	7.0	2.2	2.3	0.0012	22
Y2-90L-2	2.2		4.8	81.0	0.85				0.0014	25
Y2-100L-2	3.0	2870	6.31	83.0	0.87	7.5	2.2	2.3	0.0029	33
Y2-112M-2	4.0	2890	8.23	85.0	0.88				0.0055	45
Y2-132S1-2	5.5	2900	11.18	86.0	0.89	7.5	2.2	2.3	0.0109	64
Y2-132S2-2	7.5		15.06	87.0					0.0126	70
Y2-160M1-2	11	2930	21.35	88.0	0.90	7.5	2.0	2.2	0.0377	117
Y2-160M2-2	15		28.78	89.0					0.0449	125
Y2-160L-2	18.5	2940	34.72	90.0	0.91	7.1	1.8	2.2	0.055	147
Y2-180M-2	22		41.28	90.5					0.075	180
Y2-200L1-2	30	2950	55.37	91.2	0.92	7.1	1.6	2.2	0.124	240
Y2-200L2-2	37		67.92	92.0					0.139	255
Y2-225M-2	45	2970	82.16	92.3	0.91	7.1	1.8	2.2	0.233	309
Y2-250M-2	55		100.1	92.5					0.312	403
Y2-280S-2	75	2980	134.0	93.2	0.92	7.1	1.6	2.2	0.597	544
Y2-280M-2	90		160.27	93.8					0.675	620
Y2-315S-2	110	2980	195.46	94.0	0.92	7.1	1.6	2.2	1.18	980
Y2-315M-2	132		233.3	94.5					1.82	1080
Y2-315L1-2	160	2980	279.44	94.6	0.92	7.1	1.6	2.2	2.08	1160
Y2-315L2-2	200		347.83	94.8					2.41	1190
Y2-355M-2	250	315	432.5	95.3	0.92	7.1	1.6	2.2	3.56	1760
Y2-355L-2	315		543.25	95.6					4.16	1850

Appendix A-1

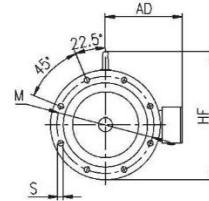
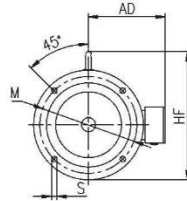
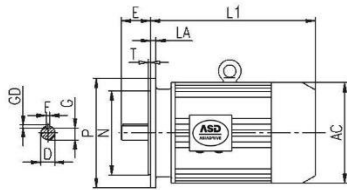
Type	Rated power/kW	Full load				Blocked current	Blocked torque	Max torque	Moment of inertia / (kg·m ²)	Weight /kg
		Speed / (r/min)	Current /A	Eff (%)	Power factor	Rated current	Rated torque	Rated torque		
Synchronous Speed 1500r/min 4P										
Y2-631-4	0.12	1310	0.44	57.0	0.72	4.4	2.1	2.2	—	—
Y2-632-4	0.18		0.62	60.0	0.73				—	—
Y2-711-4	0.25	1330	0.79	65.0	0.74	5.2	2.1	2.2	—	—
Y2-712-4	0.37		1.12	67.0	0.75				—	—
Y2-801-4	0.55	1390	1.57	71.0	0.75	5.2	2.4	2.3	0.0018	17
Y2-802-4	0.75		2.03	73.0	0.77				6.0	2.3
Y2-90S-4	1.1	1400	2.82	75.0		0.79	7.0	2.3		
Y2-90L-4	1.5		3.7	78.0	0.0027				27	
Y2-100L1-4	2.2	1430	5.16	80.0	0.81	7.0	2.3	0.0054	34	
Y2-100L2-4	3.0		6.78	82.0	0.82			2.3	0.0067	38
Y2-112M-4	4.0	1440	8.83	84.0		0.83	7.2		2.2	0.0095
Y2-132S-4	5.5		11.7	85.0	0.84			2.3		0.0214
Y2-132M-4	7.5	15.6	87.0	0.85		2.2	0.0296		81	
Y2-160M-4	11	1460	22.35		88.0		0.86	7.5	2.3	0.0747
Y2-160L-4	15		30.14	89.0	0.87	2.2				0.0918
Y2-180M-4	18.5	1470	36.47	90.5			0.86	7.2	2.2	0.139
Y2-180L-4	22		43.14	91.0	0.87	2.3				0.158
Y2-200L-4	30	57.63	92.0	0.87			2.2	0.262	270	
Y2-225S-4	37	1480	69.89		92.5	0.87		7.2	2.3	0.406
Y2-225M-4	45		95.54	92.8	0.87		2.2			0.469
Y2-250M-4	55	103.1	93.0	0.88		2.1		2.2	0.66	427
Y2-280S-4	75	139.7	93.8		0.88		2.2		1.12	562
Y2-280M-4	90	1490	166.93	94.2		0.89		6.9	2.1	1.46
Y2-315S-4	110		201.06	94.5	0.89		2.2			3.11
Y2-315M-4	132	240.57	94.8	0.90		2.2		3.62	1100	
Y2-315L1-4	160	287.95	94.9		0.90		2.2	4.13	1160	
Y2-315L2-4	200	358.8	95.0	0.90		2.2		4.94	1270	
Y2-355M-4	250	442.12	95.3		0.90		2.2	5.67	1700	
Y2-355L-4	315	555.32	95.6	6.66		1850				

Appendix A-1

Type	Rated power/kW	Full load				Blocked current	Blocked torque	Max torque	Moment of inertia /((kg·m ²))	Weight /kg	
		Speed /(r/min)	Current /A	Eff (%)	Power factor	Rated current	Rated torque	Rated torque			
Synchronous Speed 1000r/min 6P											
Y2-711-6	0.18	850	0.74	56.0	0.66	4.0	1.9	2.0	—	—	
Y2-712-6	0.25	850	0.95	59.0	0.68				—	—	
Y2-801-6	0.37	890	1.3	62.0	0.70	4.7		2.0	0.00158	17	
Y2-802-6	0.55		1.79	65.0	0.72		0.0021		19		
Y2-90S-6	0.75	910	2.26	69.0	0.72	5.5	2.0	2.1	0.0029	23	
Y2-90L-6	1.1		3.14	72.0	0.73				0.0035	25	
Y2-100L-6	1.5	940	3.95	76.0	0.75				6.5	2.1	2.1
Y2-112M-6	2.2		5.57	79.0	0.76	0.0138	45				
Y2-132S-6	3.0	960	7.41	81.0		0.77	7.0	2.1	2.1	0.0286	63
Y2-132M1-6	4.0		9.64	82.0	0.0357					73	
Y2-132M2-6	5.5		12.93	84.0	0.77					0.0449	84
Y2-160M-6	7.5	970	17.0	86.0	0.77	7.0	2.0	2.0	0.0881	119	
Y2-160L-6	11		24.23	87.5	0.78				0.116	147	
Y2-180L-6	15		31.63	89.0	0.81				0.207	195	
Y2-200L1-6	18.5		38.1	90.0					0.315	220	
Y2-200L2-6	22	44.52	90.0	0.83	0.360	250					
Y2-225M-6	30	980	58.63	91.5	0.84	7.0	2.1	2.0	0.547	292	
Y2-250M-6	37		71.08	92.0	0.86				0.834	408	
Y2-280S-6	45		85.98	92.5					1.39	536	
Y2-280M-6	55		104.75	92.8					1.65	595	
Y2-315S-6	75	990	141.77	93.5		0.87	6.7	2.0	2.0	4.11	990
Y2-315M-6	90		169.58	93.8	4.28					1080	
Y2-315L1-6	110		206.83	94.0	5.45					1150	
Y2-315L2-6	132		244.82	94.2	6.12					1210	
Y2-355M1-6	160		291.52	94.5	0.88					8.85	1600
Y2-355M2-6	200		363.64	94.7						9.55	1700
Y2-355L-6	250	453.60	94.9	10.63		1800					

Appendix A-1

Type	Rated power/kW	Full load				Blocked current	Blocked torque	Max torque	Moment of inertia /($\text{kg}\cdot\text{m}^2$)	Weight /kg
		Speed /(r/min)	Current /A	Eff (%)	Power factor	Rated current	Rated torque	Rated torque		
Synchronous Speed 750r/min 8P										
Y2-801-8	0.18	630	0.88	51.0	0.61	3.3	1.9	0.00158	17	
Y2-802-8	0.25	640	1.15	54.0				0.0021	19	
Y2-90S-8	0.37	660	1.49	62.0		4.0		0.0029	23	
Y2-90L-8	0.55		2.18	63.0	0.0035		25			
Y2-100L1-8	0.75	690	2.43	71.0	0.67	5.0	0.0069	33		
Y2-100L2-8	1.1		3.42	73.0	0.0107		38			
Y2-112M-8	1.5	680	4.47	75.0	0.69	6.0	0.0149	50		
Y2-132S-8	2.2	710	6.04	78.0	0.71		0.0314	63		
Y2-132M-8	3.0		7.9	79.0	0.73	0.0395	79			
Y2-160M1-8	4.0	720	10.28	81.0	0.73	6.0	0.0753	118		
Y2-160M2-8	5.5		13.61	83.0	0.74		0.0931	119		
Y2-160L-8	7.5		17.88	85.5	0.75	2.0	0.126	145		
Y2-180L-8	11	730	25.29	87.5	0.76	6.6	0.203	184		
Y2-200L-8	15		34.09	88.0			0.339	250		
Y2-225S-8	18.5		40.58	90.0		0.491	266			
Y2-225M-8	22	740	47.37	90.5	0.78	6.6	0.547	292		
Y2-250M-8	30		63.43	91.0	0.79		1.9	0.834	405	
Y2-280S-8	37		76.83	91.5	1.39	520				
Y2-280M-8	45	92.93	92.0	1.65	592					
Y2-315S-8	55	740	112.97	92.8	0.81	6.6	4.79	1000		
Y2-315M-8	75		151.33	93.0			5.58	1100		
Y2-315L1-8	90		177.86	93.8		6.37	1160			
Y2-315L2-8	110	216.92	94.0	0.82	6.4	1.8	7.23	1230		
Y2-355M1-8	132	260.3	93.7			10.55	1600			
Y2-355M2-8	160	310.07	94.2		11.73	1700				
Y2-355L-8	200	386.36	94.5	0.83	6.4	1.8	12.86	1800		
Synchronous Speed 600r/min 10P										
Y2-315S-10	45	590	99.67	91.5	0.75	6.2	1.5	4.79	810	
Y2-315M-10	55		121.16	92.0	0.75			6.37	930	
Y2-315L1-10	75		162.16	92.5	0.76	7.0		1045		
Y2-315L2-10	90	191.03	93.0	0.77	6.0	1.3	7.15	1115		
Y2-355M1-10	110	230	93.2	12.55			1500			
Y2-355M2-10	132	275.11	93.5	0.78	6.0	1.3	13.75	1600		
Y2-355L-10	160	333.47	93.5				14.86	1700		

Appendix A-2


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Dimensions of Y2 Series Motors

Frame size	Mounting Dimensions																		
	D		E		FxGD		G		M	N	P	S	T	AC	AD	LA	HF	L1	
	2P	4-10P	2P	4-10P	2P	4-10P	2P	4-10P										2P	4-10P
63M	11		23		4X4		8.5	115	95	140	10	3	130	70	10	130	207		
71M	14		30		5X5		11	130	110	160			145	80	10	145	225		
80M	19		40		6X6		15.5	165	130	200			12	3.5	175	145	12	185	255
90S	24		50		8X7		20				215	180			250	15	4	195	155
90L							12	295											
100L	28		60				24	265	230	300	19	5	215	180	14	245	325		
112M							240						190	14	265	340			
132S	38		80		10X8		33	350	300	400	24	6	275	210	14	315	430		
132M							14						430						
160M	42		110		12X8		37	300	250	350	19	5	330	255	16	385	505		
160L							16						560						
180M	48		110		14X9		42.5	350	300	400	19	5	380	280	18	430	590		
180L							18						630						
200L	55				16X10		49	350	300	400	19	5	420	305	18	480	660		
225S		60		140	16X10	18X11		53	400	350	450	19	5	470	335	20	535	675	
225M	55	60	110	140			49	53										710	705
250M	60	65	140		18X11		53	58	500	450	550	19	5	510	370	22	595	770	
280S	65	75			18X11	20X12	58	67.5						22	650	845			
280M					22	895													
315S	65	80	140	170	18X11	22X14	58	71	600	550	660	24	6	645	530	25	845	1020	1100
315M																25	1050	1130	
315L ₁	65	80	140	170	18X11	22X14	58	71	600	550	660	24	6	645	530	25	845	1020	1100
315L ₂																25	1050	1130	

Appendix B
Dimensions of YEJ Series Motors

Fram size	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
L1	350	370	395	420	450	505	545	610	655	715	765	790	860	890

Note: See appendix A for dimensional drawings. Other dimensions are same as Y2 motors.

Appendix C
Max. Output Torque Table, R/S/K/F type Geared Motors
RX Type

Type size	RX57	RX67	RX77	RX87	RX97	RX107	RX137							
Max. output torque (Nm)	70	135	215	400	600	830	1500							

R Type

Type size	R..17	R..27	R..37	R..47	R..57	R..67	R..77	R..87	R..97	R..107	R..137	R..147	R..167	R..177
Max. output torque (Nm)	85	130	200	300	450	600	820	1550	3000	4300	8000	13000	18000	36600

S Type

Type size	S..37	S..47	S..57	S..67	S..77	S..87	S..97	S..100						
Max. output torque (Nm)	87	170	300	520	1220	2300	4000	6500						

K Type

Type size	K..37	K..47	K..57	K..67	K..77	K..87	K..97	K..107	K..127	K..157	K..167	K..187		
Max. output torque (Nm)	200	400	600	820	1550	2700	4300	8000	13000	18000	32000	50000		

F Type

Type size	F..37	F..47	F..57	F..67	F..77	F..87	F..97	F..107	F..127	F..157				
Max. output torque (Nm)	200	400	600	820	1550	2700	4300	8000	13000	18000				

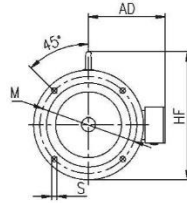
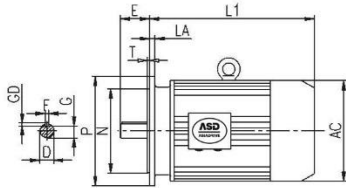
Note: List date is gearmotor's max.output torque. In fact the torque see selection table,the value equal the rate torque and service factor product. On request, please contact us.

Appendix A-1

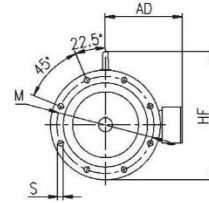
Type	Rated power/kW	Full load				Blocked current	Blocked torque	Max torque	Moment of inertia /((kg·m ²))	Weight /kg
		Speed /(r/min)	Current /A	Eff (%)	Power factor	Rated current	Rated torque	Rated torque		
Synchronous Speed 1000r/min 6P										
Y2-711-6	0.18	850	0.74	56.0	0.66	4.0	1.9	2.0	—	—
Y2-712-6	0.25	850	0.95	59.0	0.68				—	—
Y2-801-6	0.37	890	1.3	62.0	0.70	4.7		2.0	0.00158	17
Y2-802-6	0.55		1.79	65.0	0.72		0.0021		19	
Y2-90S-6	0.75	910	2.26	69.0	0.72	5.5	2.0	2.1	0.0029	23
Y2-90L-6	1.1		3.14	72.0	0.73				0.0035	25
Y2-100L-6	1.5	940	3.95	76.0	0.75				6.5	2.1
Y2-112M-6	2.2		5.57	79.0	0.76	0.0138	45			
Y2-132S-6	3.0	960	7.41	81.0		0.77	7.0	2.1	2.1	0.0286
Y2-132M1-6	4.0		9.64	82.0	0.0357					73
Y2-132M2-6	5.5		12.93	84.0	0.77					0.0449
Y2-160M-6	7.5	970	17.0	86.0	0.77	7.0	2.0	2.0	0.0881	119
Y2-160L-6	11		24.23	87.5	0.78				0.116	147
Y2-180L-6	15		31.63	89.0	0.81				0.207	195
Y2-200L1-6	18.5		38.1	90.0					0.315	220
Y2-200L2-6	22	44.52	90.0	0.83	0.360	250				
Y2-225M-6	30	980	58.63	91.5	0.84	7.0	2.1	2.0	0.547	292
Y2-250M-6	37		71.08	92.0	0.86				0.834	408
Y2-280S-6	45		85.98	92.5					1.39	536
Y2-280M-6	55		104.75	92.8					1.65	595
Y2-315S-6	75		141.77	93.5					4.11	990
Y2-315M-6	90	169.58	93.8	4.28		1080				
Y2-315L1-6	110	990	206.83	94.0	0.87	6.7	1.9	2.0	5.45	1150
Y2-315L2-6	132		244.82	94.2					6.12	1210
Y2-355M1-6	160		291.52	94.5					8.85	1600
Y2-355M2-6	200	363.64	94.7	0.88	9.55	1700				
Y2-355L-6	250	453.60	94.9		10.63	1800				

Appendix A-1

Type	Rated power/kW	Full load				Blocked current	Blocked torque	Max torque	Moment of inertia /($\text{kg}\cdot\text{m}^2$)	Weight /kg
		Speed /(r/min)	Current /A	Eff (%)	Power factor	Rated current	Rated torque	Rated torque		
Synchronous Speed 750r/min 8P										
Y2-801-8	0.18	630	0.88	51.0	0.61	3.3	1.9	0.00158	17	
Y2-802-8	0.25	640	1.15	54.0				0.0021	19	
Y2-90S-8	0.37	660	1.49	62.0		4.0		0.0029	23	
Y2-90L-8	0.55		2.18	63.0	0.0035		25			
Y2-100L1-8	0.75	690	2.43	71.0	0.67	1.8	0.0069	33		
Y2-100L2-8	1.1		3.42	73.0	0.0107		38			
Y2-112M-8	1.5	680	4.47	75.0	0.69	5.0	0.0149	50		
Y2-132S-8	2.2	710	6.04	78.0	0.71	6.0	0.0314	63		
Y2-132M-8	3.0		7.9	79.0	0.73		0.0395	79		
Y2-160M1-8	4.0	720	10.28	81.0	0.73	1.9	0.0753	118		
Y2-160M2-8	5.5		13.61	83.0	0.74		0.0931	119		
Y2-160L-8	7.5		17.88	85.5	0.75	2.0	0.126	145		
Y2-180L-8	11	730	25.29	87.5	0.76		2.0	0.203	184	
Y2-200L-8	15		34.09	88.0		0.339		250		
Y2-225S-8	18.5		40.58	90.0		0.491	266			
Y2-225M-8	22	740	47.37	90.5	0.78	1.9	0.547	292		
Y2-250M-8	30		63.43	91.0	0.79		0.834	405		
Y2-280S-8	37		76.83	91.5		1.39	520			
Y2-280M-8	45	92.93	92.0	1.65	592					
Y2-315S-8	55	740	112.97	92.8	0.81	1.8	4.79	1000		
Y2-315M-8	75		151.33	93.0			5.58	1100		
Y2-315L1-8	90		177.86	93.8	0.82	6.4	6.37	1160		
Y2-315L2-8	110	216.92	94.0	7.23			1230			
Y2-355M1-8	132	260.3	93.7	10.55			1600			
Y2-355M2-8	160	310.07	94.2	0.83	6.4	11.73	1700			
Y2-355L-8	200	386.36	94.5			12.86	1800			
Synchronous Speed 600r/min 10P										
Y2-315S-10	45	590	99.67	91.5	0.75	6.2	1.5	4.79	810	
Y2-315M-10	55		121.16	92.0	0.75			6.37	930	
Y2-315L1-10	75		162.16	92.5	0.76	2.0	7.0	1045		
Y2-315L2-10	90		191.03	93.0	0.77		7.15	1115		
Y2-355M1-10	110	230	93.2	0.78	6.0	1.3	12.55	1500		
Y2-355M2-10	132	275.11	93.5				13.75	1600		
Y2-355L-10	160	333.47	93.5				14.86	1700		

Appendix A-2


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225-280

Dimensions of Y2 Series Motors

Frame size	Mounting Dimensions																			
	D		E		FxGD		G		M	N	P	S	T	AC	AD	LA	HF	L1		
	2P	4-10P	2P	4-10P	2P	4-10P	2P	4-10P										2P	4-10P	
63M	11		23		4X4		8.5		115	95	140	10	3	130	70	10	130	207		
71M	14		30		5X5		11		130	110	160		3.5	145	80	10	145	225		
80M	19		40		6X6		15.5							175	145	12	185	255		
90S	24		50		8X7		20		165	130	200	12	4	195	155	12	195	270		
90L				12		295														
100L	28		60			24		215	180	250	15	15		4	215	180	14	245	325	
112M				240			190								14	265	340			
132S	38		80		10X8		33	265	230	300	19	19	5	275	210	14	315	390		
132M				14		430														
160M	42		110		12X8		37	300	250	350	19	19	5	330	255	16	385	505		
160L				16		560														
180M	48			14X9		42.5		380	280	18	430	18	18	420	305	18	480	590		
180L					18		630													
200L	55				16X10		49	350	300	400	19	19	5	420	305	18	480	660		
225S		60		140	16X10	18X11		53	400	350	450	19	19	5	470	335	20	535	675	
225M	55	60	110	140			49	53									20		710	705
250M	60	65			18X11		53	58	500	450	550	19	19	5	510	370	22	595	770	
280S	65	75	140	170	18X11	20X12	58	67.5									22		650	845
280M																	22			895
315S	65	80	140	170	18X11	22X14	58	71	600	550	660	24	6	645	530	25	845	1020	1100	
315M																25		1050	1130	
315L ₁	65	80	140	170	18X11	22X14	58	71	600	550	660	24	6	645	530	25	845	1020	1100	
315L ₂																25		1050	1130	

Appendix B
Dimensions of YEJ Series Motors

Fram size	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
L1	350	370	395	420	450	505	545	610	655	715	765	790	860	890

Note: See appendix A for dimensional drawings. Other dimensions are same as Y2 motors.

Appendix C
Max. Output Torque Table, R/S/K/F type Geared Motors
RX Type

Type size	RX57	RX67	RX77	RX87	RX97	RX107	RX137							
Max. output torque (Nm)	70	135	215	400	600	830	1500							

R Type

Type size	R..17	R..27	R..37	R..47	R..57	R..67	R..77	R..87	R..97	R..107	R..137	R..147	R..167	R..177
Max. output torque (Nm)	85	130	200	300	450	600	820	1550	3000	4300	8000	13000	18000	36600

S Type

Type size	S..37	S..47	S..47	S..67	S..77	S..87	S..97	S..100						
Max. output torque (Nm)	87	170	300	520	1220	2300	4000	6500						

K Type

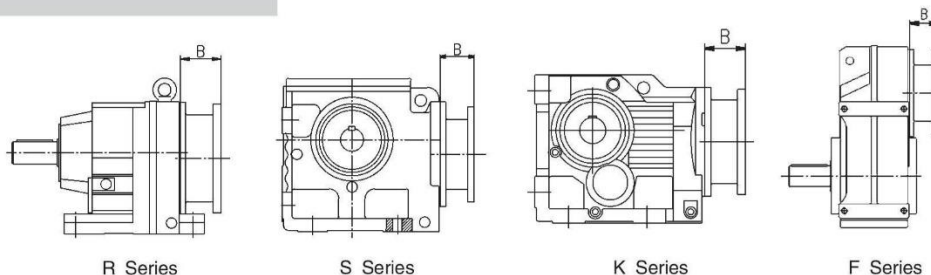
Type size	K..37	K..47	K..57	K..67	K..77	K..87	K..97	K..107	K..127	K..157	K..167	K..187		
Max. output torque (Nm)	200	400	600	820	1550	2700	4300	8000	13000	18000	32000	50000		

F Type

Type size	F..37	F..47	F..57	F..67	F..77	F..87	GF..97	F..107	F..127	F..157				
Max. output torque (Nm)	200	400	600	820	1550	2700	4300	8000	13000	18000				

Note: List date is gearmotor's max.output torque. In fact the torque see selection table,the value equal the rate torque and service factor product. On request, please contact us.

Appendix D



The dimension B of the flange for Y or Y2 series motors

R Series

	63	71	80	90	100	112	132	160	180	200	225	250	280	315
R...17/27/37	45	50.5	60.5	60.5	85.5									
R...47/57/67	44.5	50	69	69	81	81	93							
R...77/RX77	44.5	50	70	70	75	75	96.5	125						
R...87/RX87			70	70	82	82	92	130	130					
R...97/RX97			65	65	81.5	81.5	92	125	125	152				
R...107/RX107					68	68	106	126	126	140	170			
R...137/RX137							106	127	127	140	170	192.5	192.5	
R...147								120	120	139	169	192.5	192.5	
R...167/177								115	115	160	170	192.5	192.5	260
RX...57/67	44.5	50	69	69	81	81	93							

S Series

	63	71	80	90	100	112	132	160	180	200				
S...37/47/57	45	50.5	60.5	60.5	85.5									
S...67	44.5	50	69	69	81	81	93							
S...77	44.5	50	70	70	75	75	96.5	125						
S...87			70	70	82	82	92	130	130					
S...97			65	65	81.5	81.5	92	125	125					
S...100					68	68	106	126	126	140				

K Series

	63	71	80	90	100	112	132	160	180	200	225	250	280	315
K...37	45	50.5	60.5	60.5	85.5									
K...47/57/67	44.5	50	69	69	81	81	93							
K...77	44.5	50	70	70	75	75	96.5	125						
K...87			70	70	82	82	92	130	130					
K...97				65	81.5	81.5	92	125	125	152				
K...107					68	68	106	126	126	140	170			
K...127							98.5	120	120	139	169	192.5	192.5	
K...157/167/187								115	115	160	170	192.5	192.5	260

F Series

	63	71	80	90	100	112	132	160	180	200	225	250	280	315
F...37/47	45	50.5	60.5	60.5	85.5									
F...57/67	44.5	50	69	69	81	81	93							
F...77	44.5	50	70	70	75	75	96.5	125						
F...87			70	70	82	82	92	130	130					
F...97				65	81.5	81.5	92	125	125	152				
F...107					68	68	106	126	126	140	170			
F...127							98.5	120	120	139	169	192.5	192.5	
F...157								115	115	160	170	192.5	192.5	260