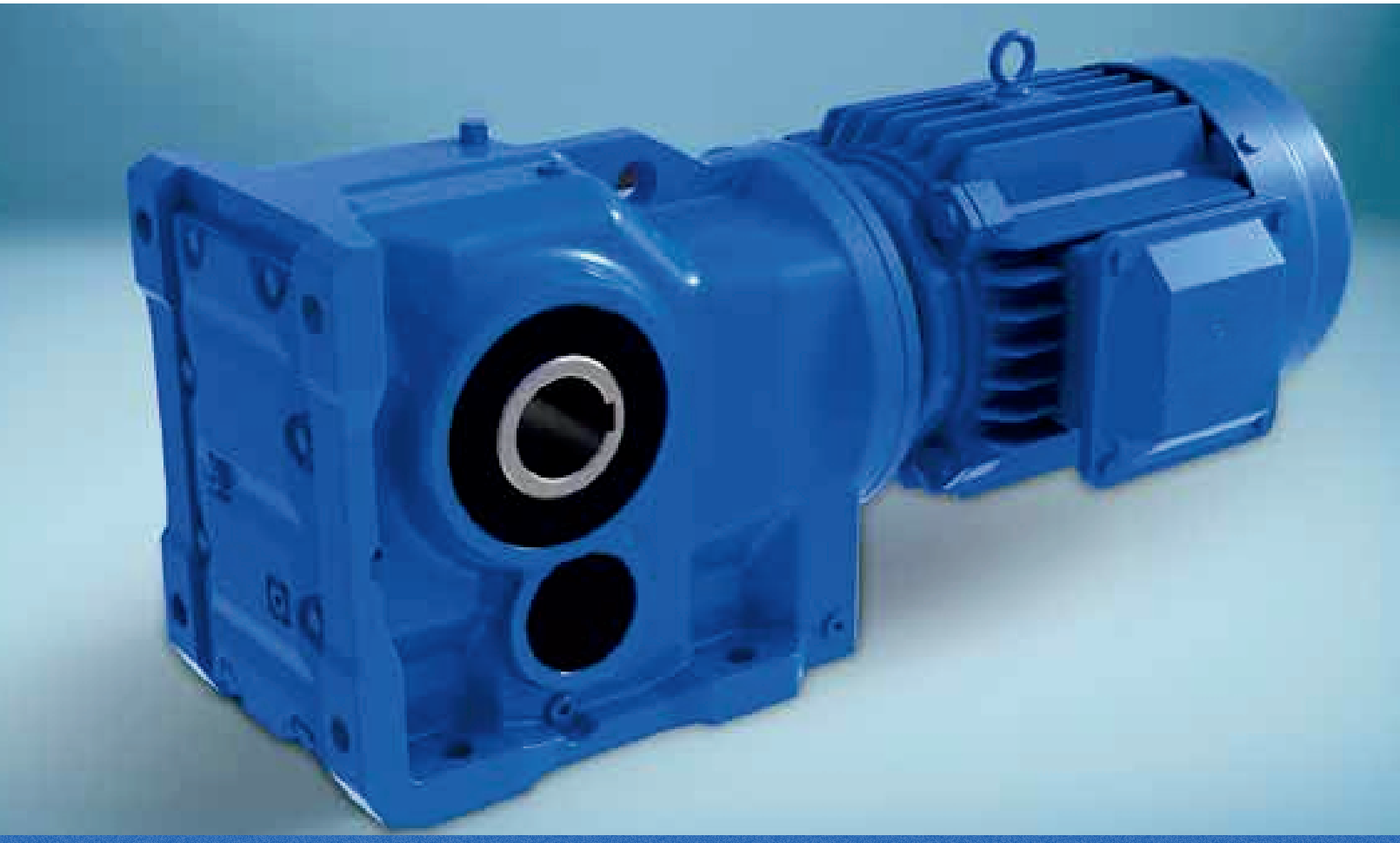
SMC
(주)신명전기



K Series Helical Bevel Gear Units

Note!

1. The structure scheme, appearance diagram and other attached diagrams in sample are examples, there is no strict proportion requirement. If you need exact dimension of certain types, please contact our sales dept.. (The unmarked dimension units are mm).
2. Gear unit has been tested before delivered, users should add lubrication oil before running.
3. We can only refer to the marked oil in the mannul. Actual oil filling level should be the same with the mark on oil immersion lens.
4. Lubrication oil viscosity should be selected according to working conditions and ambient temperature.
5. To prevent accidents, all the rotation parts should be added with protective covers according to safety regulation of the nation and region.
6. The solid shaft input structure gear unit is not equipped with any motor.
7. Unless otherwise specified, you will receive the terminal box at 0°.

1. 샘플에 포함된 구조도, 외형도 및 기타 첨부 도면은 예시용이며, 엄격한 비율 기준은 적용되지 않습니다. 특정 모델의 정확한 치수가 필요한 경우 당사 영업부로 문의해 주시기 바랍니다. (별도 표기가 없는 치수 단위는 mm입니다.)
2. 기어 유닛은 출고 전에 시험 운전을 완료하였으며, 사용 전 반드시 윤활유를 주입한 후 운전해야 합니다.
3. 매뉴얼에 표시된 오일만 참고용으로 제공됩니다. 실제 오일 주입량은 오일 레벨 게이지의 표시선과 동일한 수준으로 맞춰야 합니다.
4. 윤활유의 점도는 사용 조건 및 주변 환경 온도에 따라 적절히 선택해야 합니다.
5. 사고 방지를 위해 모든 회전 부위에는 해당 국가 및 지역의 안전 규정에 따라 보호 커버를 설치해야 합니다.
6. 중실축 입력 구조의 기어 유닛에는 모터가 포함되어 있지 않습니다.
7. 별도 지정이 없는 경우, 단자함은 0° 위치로 제공됩니다.

Guidelines for the selection

▫ Gear units are designed under the circumstance of steady load, stated operating time per day and a few starting times.but the practical condition will be not as perfect as the designed circumstance.so we must confirm driven machine factor f1,prime mover factor f2,starting factor f3 according to actual load type, operating time,starting frequency.let it less than or equale to the service factor fb of selection table,viz f1×f2×f3≤fb.the needed torque of service machine multiply the service factor (f1×f2×f3) should less than or equale to gear units' permissible torque.

Viz $T_n \geq T2 \times f1 \times f2 \times f3$

f1 — Driven machine factor(See table 1)
f2 — Prime mover factor(See table 2)
f3 — Start factor(See table 3)
T2— The torque required by driven machine
T_n— Gear unit permissible torque(See page 03)

▫ We accept the orders of products of special specification, and provide our customer with exclusive design service.

▫ Along with the technology advanced etc., the product of the mannul of SMC will be changed, please forgive.

선정 가이드라인

▫ 기어 유닛은 일정한 부하 조건, 규정된 일일 운전 시간 및 적은 기동 횟수를 기준으로 설계되었습니다. 그러나 실제 사용 환경은 설계 조건만큼 이상적이지 않을 수 있으므로, 실제 부하 유형, 운전 시간 및 기동 빈도에 따라 구동 기계 계수 f1, 원동기 계수 f2, 기동 계수 f3를 반드시 확인해야 합니다.
또한 f1 × f2 × f3의 값은 선정표의 서비스 계수 fb 이하이어야 합니다.
즉:
f1×f2×f3≤fb
서비스 기계에 필요한 토크에 서비스 계수(f1 × f2 × f3)를 곱한 값은 기어 유닛의 허용 토크 이하이어야 합니다.
즉:
Tn≥T2×f1×f2×f3

- f1 — 구동 기계 계수 (표 1 참조)
- f2 — 원동기 계수 (표 2 참조)
- f3 — 기동 계수 (표 3 참조)
- T2 — 구동 기계에 필요한 토크
- T_n — 기어 유닛의 허용 토크 (3페이지 참조)

▫ 당사는 특수 사양 제품 주문을 접수하며, 고객 맞춤형 전용 설계 서비스를 제공합니다.
▫ 기술 발전 등에 따라 SMC 매뉴얼에 기재된 제품 내용은 예고 없이 변경될 수 있으니 양해 부탁드립니다.

Service factor:

Table 1 Driven machine factor f_1

Driven equipment	Daily operating time with load(hour) ≤ 2	> 2–10	> 10
Sewage treatment			
Concentrator(Central Transmission)	–	–	1.2
Compressed filter	1.0	1.3	1.5
Flocculator	0.8	1.0	1.3
Aerator	–	1.8	2.0
Collector	1.0	1.2	1.3
Vertical,rotary group			
Blended collector	1.0	1.3	1.5
Concentrator	–	1.1	1.3
Screw pump	–	1.3	1.5
Water wheel machine	–	–	2.0
Pump			
Centrifugal pump	1.0	1.2	1.3
Volume–down pump			
1Piston	1.3	1.4	1.8
>1Piston	1.2	1.4	1.5
Dredge			
Bucket conveyor	–	1.6	1.6
Unloading device	–	1.3	1.5
Carterpillar traveling mechanism	1.2	1.6	1.8
Bucket digger			
Be used for picking up	–	1.7	1.7
Be used for rough materials	–	2.2	2.2
Chopper	–	2.2	2.2
Traveling mechanism*	–	1.4	1.8
Plate blender	–	1.0	1.0
Chemical industry			
Extruder	–	–	1.6
Paste mixer	–	1.8	1.8
Rubber calendar	–	1.5	1.5
Cooling cylinder	–	1.3	1.4
Material mixer,be used for			
Uniform medium	1.0	1.3	1.4
Non–uniform medium	1.4	1.6	1.7
Blender,be used for			
Uniform density medium	1.0	1.3	1.5
Un–uniformed medium	1.2	1.4	1.6
Un–uniformed gas absorption	1.4	1.6	1.8
Oven	1.0	1.3	1.5
Centrifugal machine	1.0	1.2	1.3
Metal processing equipment			
Plate turnover	1.0	1.0	1.2
Steel pushing device	1.0	1.2	1.2
Winding machine	–	1.6	1.6
Cooling bed transverse frame	–	1.5	1.5
Roller leveler	–	1.6	1.6
Roller path			
Continuous	–	1.5	1.5
Interval	–	2.0	2.0
Reversing mill	–	1.8	1.8
Cutter			
Continuous*	–	1.5	1.5
Crank type*	1.0	1.0	1.0
Continuous casting driving device	–	1.4	1.4
Rolling mill			
Reversing cogging mill	–	2.5	2.5
Reversing plate slab mill	–	2.5	2.5
Reversing wire mill	–	1.8	1.8
Reversing thin plate mill	–	2.0	2.0
Reversing middle thickness plate mill	–	1.8	1.8
Roll gap adjusting and driving device	0.9	1.0	–

Driven equipment	Daily operating time with load(hour) ≤ 2	> 2–10	> 10
Conveyingmachine			
Bucket conveyor	–	1.4	1.5
Winch	1.4	1.6	1.6
Hoist	–	1.5	1.8
Belt conveyor≤150kW	1.0	1.2	1.3
Belt conveyor≥150kW	1.1	1.3	1.4
Elevators for goods*	–	1.2	1.5
Elevators for customers*	–	1.5	1.8
Scraper conveyor	–	1.2	1.5
Automatic ladder	1.0	1.2	1.4
Rail traveling mechanism	–	1.5	–
Various frequency device	–	1.8	2.0
Reciprocating compressor	–	1.8	1.9
Hoisting mechanism**			
Rotary mechanism*		1.4	1.8
Pitching mechanism		1.1	1.4
Traveling mechanism		1.6	2.0
Lifting mechanism		1.1	1.4
Jibcrane		1.2	1.6
Cooling tower			
Cooling tower fan	–	–	2.0
Fan (Shaft flow and centrifugal type)	–	1.4	1.5
Food industry			
Sugar production			
Sugar–cane cutter*	–	–	1.7
Sugar crane mill			
Beet sugar production	–	–	1.7
Beet masher			
Squeeze machine,	–	–	1.2
mechanical refrigerator,			
cooking machine	–	–	1.4
Beet cleaner			
Beet chopper	–	–	1.5
Paper-making machinery			
Various kinds***	–	1.8	2.0
Pulper driving device	Supply goods according to customer requirements		
Centrifugal compressor	–	1.4	1.5
Rope way cable car			
Delivery ropeway	–	1.3	1.4
Cableway of shuttle system	–	1.6	1.8
T rod elevator	–	1.3	1.4
Continuous cableway	–	1.4	1.6
Cement industry			
Concrete blender	–	1.5	1.5
Crusher*	–	1.2	1.4
Rotary kiln	–	–	2.0
Tube mill	–	–	2.0
Powder concentrator	–	1.6	1.6
Roller press	–	–	2.0

Table 1	Driven machine factor			f1			
Driven equipment	Daily running time with load(hour)			Driven equipment	Daily running time with load(hour)		
	⩽ 2	> 2–10	> 10		⩽ 2	> 2–10	> 10
Wood industry				**Plastics industry**			
Barking machine				Miller, compound grinding			
Feed drive	1.25	1.25	1.50	Coating, film	1.25	1.25	1.25
Main drive	1.75	1.75	1.75	Conveying pipe, Pulling rod, thin type			
Conveyor				Pipe type, Pile drawer	1.25	1.25	1.50
Burner,repeating saw				Continuous mixer, Calender			
Rotary tower,transit transport	1.25	1.25	1.50	Blow film, to plasticizing	1.50	1.50	1.50
Main loading,heavy loading	1.50	1.50	1.50	Batch mixer	1.75	1.75	1.75
Main original wood,land base	1.75	1.75	2.00	**Rubber industry**			
Conveying chain							
Floor	1.50	1.50	1.50	Continuous strong inner mixer,Mix roller,			
Green–wood	1.50	1.50	1.75	Batch feeding mixer (except for double sticks)	1.50	1.50	1.50
Cutting Chain				Refiner, calender			
Saw transmission,traction	1.50	1.50	1.75				
Peeling barrel	1.75	1.75	2.00	Double roller clamp feeding and mixed miller	1.25	1.25	1.50
Feed drive							
Edging,wood trimmer				Batch strong inner mixer,			
Planer feed,assorting table,	1.25	1.25	1.50	Double stick single groove grain stick	1.75	1.75	1.75
Automatic incline lifting				Miller heater, double sticks			
Multi–shaft feed,raw wood	1.75	1.75	1.75	Batch feeding mixer			
Transportation and rotation				Wave stick miller	2.00	2.00	2.00
Transportation				**Generator and exciter**	1.00	1.00	1.25
Charging tray				**Hammer crusher**	1.75	1.75	2.00
Plywood lathe drive	1.50	1.50	1.75	**Sand miller**	1.25	1.25	1.50
Conveying chain,Lifting							

⚠ Note: Determine required power P2 of the driven equipment:

*)Determine rated power according to maximum torque.

**)It's necessary to check thermal capacity.

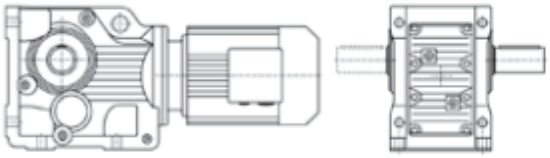
Prime mover factor

Table 2 Factor for prime mover	f2
Electric motors,hydraulic motors,turbines	1.0
Piston engines 4–6 cylinders	1.25
Piston engines 1–3 cylinders	1.5

Table 3 Start factor				f3
f3 \ f1xf2 / Starts per hour	1	1.25 –1.75	2– 2.75	⩾3
⩽5	1	1	1	1
6–25	1.2	1.12	1.06	1
26–60	1.3	1.2	1.12	1.06
61–180	1.5	1.3	1.2	1.12
>180	1.7	1.5	1.3	1.2

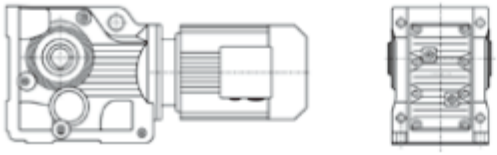


K series gear units are available in the following designs:



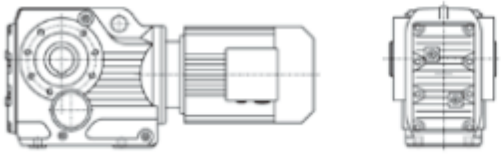
K..Y..

Foot-mounted solid shaft helical bevel gear units



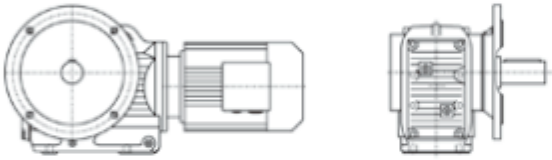
KAB...Y..

Foot-mounted hollow shaft helical bevel gear units



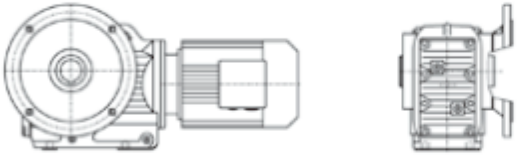
KA...Y..

Hollow shaft helical bevel gear units



KF...Y..

Flanged-mounted solid shaft helical bevel units



KAF...Y..

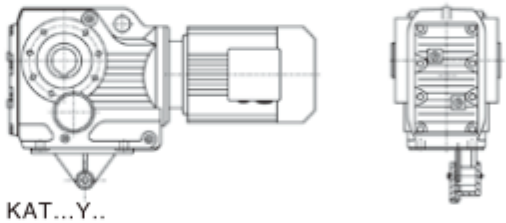
Flange-mounted hollow shaft helical bevel gear units



KAZ...Y..

Short-flange-mounted hollow shaft helical bevel gear units

g



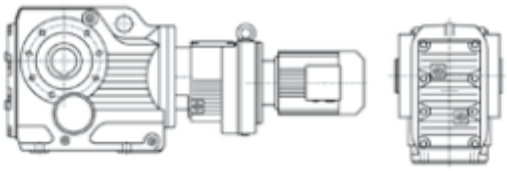
KAT...Y..

Torque-arm-mounted hollow shaft helical bevel gear units



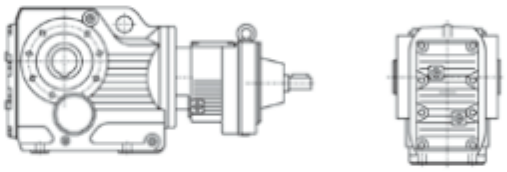
K (KF、KA、KAF、KAB、KAZ) S...

Helical bevel gear units with solid shaft input



KA (K、KF、KAF、KAB、KAZ) ...R...Y...

Combi-type helical bevel gear units



KA (K、KF、KAF、KAB、KAZ) S...R...

Combi-type helical bevel gear units with solid shaft input

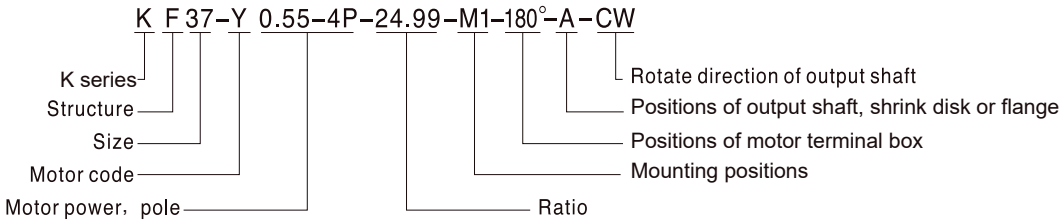


KA (K、KF、KAF、KAB、KAZ) ...Y...

Customers provide the motor by themselves need connected flange.

K

Type Designations:



K series:
Helical bevel gear units

Structure:

Foot-mounted solid shaft	(–)
Hollow shaft	A
Flange-mounted solid shaft	F
Flange-mounted hollow shaft	AF
Short-flange-mounted hollow shaft	AZ
Foot-mounted hollow shaft	AB
Torque-arm-mounted hollow shaft	AT
Foot-mounted solid shaft with solid shaft input	S
Hollow shaft with solid shaft input	AS
Flange-mounted solid shaft with solid shaft input	FS
Flange-mounted hollow shaft with solid shaft input	AFS
Hollow shaft with shrink disk	H..(H,HF,HZ,HT)

Size:
(see selection table)

Motor code:

Common motor	Y(Y2)
Flameproof motor	B
Direct current motor	Z
Brake motor	YEJ
Multi-speed motor	D
Variable frequency motor	YVP
Electromagnetic variable speed motor	YCT
Metallurgy hoisting motor	R
Transduction braking motor	YVPJ
Roller way	G

Motor power，pole :
See selection table

Ratio:
See selection table

Mounting positions:
M1,M2,M3,M4,M5, M6(See page 03)

Positions of motor terminal box:
0°,90°,180°,270°(Seepage 03)

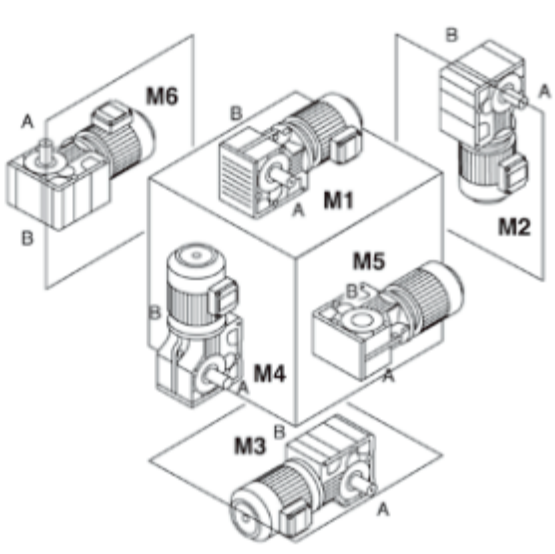
Output shaft \ flange \ shrink disc directions:
Viewing from motor end: left side = A,right side = B,
both side = AB(See mountingpositions)

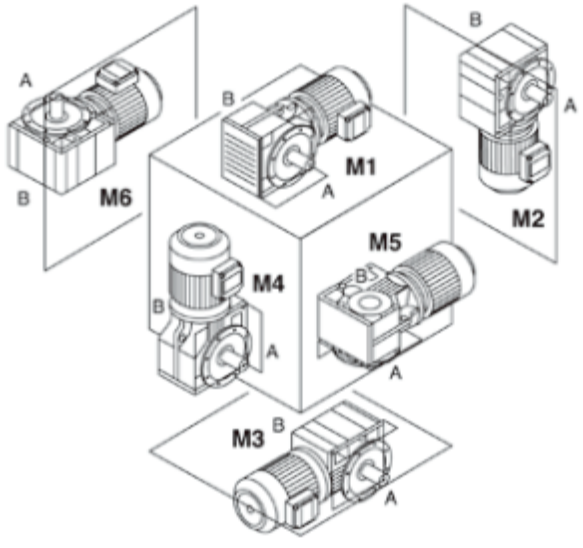
Direction of rotation from the output shaft end:

Clockwise	CW
Counter clockwise	CCW

*Dimensions of hollow shaft with shrink disc, see page 40-41.

Mounting positions





K

Positions of motor terminal box:



Input power rating and permissible torque

Size	37	47	57	67	77	87	97	107	127	157	167	187
Structure	K KA KF KAF KAZ KAT KAB											
Input power rating(kW)	0.18~3.0	0.18~3.0	0.18~5.5	0.18~5.5	0.37~11	0.75~22	1.1~30	3~45	7.5~90	11~160	11~200	18.5~200
Ratio	5.36~106.38	5.81~131.87	6.57~145.14	7.14~144.79	7.24~192.18	7.19~197.37	8.95~176.05	8.74~141.46	8.68~146.07	12.65~150.41	17.28~163.91	17.27~180.78
Permissible torque (n.m)	200	400	600	820	1550	2700	4300	8000	13000	18000	32000	50000

Gear unit weight

Size	37	47	57	67	77	87	97	107	127	157	167	187
Weight (kgs)	11	20	27	33	57	85	130	250	380	610	1015	1700

The marked weight is average value, it has no constraint force.

Oil

K...,KAB...:

Size	Oil level(L)					
	M1	M2	M3	M4	M5	M6
K..37	0.5	1	1	1.3	1	1
K..47	0.8	1.3	1.5	2	1.6	1.6
K..57	1.2	2.3	2.5	3	2.6	2.4
K..67	1.1	2.4	2.6	3.4	2.6	2.6
K..77	2.2	4.1	4.4	5.9	4.2	4.4
K..87	3.7	8	8.7	10.9	7.8	8
K..97	7	14	15.7	20	15.7	15.5
K..107	10	21	25.5	33.5	24	24
K..127	21	41.5	44	54	40	41
K..157	31	62	65	90	58	62
K..167	35	100	100	125	85	85
K..187	60	170	170	205	130	130

KF...:

Size	Oil level(L)					
	M1	M2	M3	M4	M5	M6
KF37	0.5	1.1	1.1	1.5	1	1
KF47	0.8	1.3	1.7	2.2	1.6	1.6
KF57	1.3	2.3	2.7	3	2.9	2.7
KF67	1.1	2.4	2.8	3.6	2.7	2.7
KF77	2.1	4.1	4.4	6	4.5	4.5
KF87	3.7	8.2	9	11.9	8.4	8.4
KF97	7	14.7	17.3	21.5	15.7	16.5
KF107	10	22	26	35	25	25
KF127	21	41.5	46	55	41	41
KF157	31	66	69	92	62	62

KA..、KAF..、KAZ...:

Size	Oil level(L)					
	M1	M2	M3	M4	M5	M6
K..37	0.5	1	1	1.4	1	1
K..47	0.8	1.3	1.6	2.1	1.6	1.6
K..57	1.3	2.3	2.7	3	2.9	2.7
K..67	1.1	2.4	2.7	3.6	2.6	2.6
K..77	2.1	4.1	4.6	6	4.4	4.4
K..87	3.7	8.2	8.8	11.1	8	8
K..97	7	14.7	15.7	20	15.7	15.7
K..107	10	20.5	24	32	24	24
K..127	21	41.5	43	52	40	40
K..157	31	66	67	87	62	62
KA..167	35	100	100	125	85	85
KA..187	60	170	170	205	130	130

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.18kW					
0.09	16482	14975	0.74		
0.11	13692	12440	0.89		
0.13	12013	10914	1.0		
0.14	10807	9819	1.1		
0.16	9293	8443	1.3	K 127R77	4
0.19	8236	7483	1.5	KF 127R77	4
0.21	7226	6565	1.7	KA 127R77	4
0.24	6388	5804	1.9	KAF127R77	4
0.28	5533	5027	2.2		
0.31	4868	4423	2.5		
0.37	4184	3801	2.9		
0.43	3563	3237	3.4		
0.17	9037	8211	0.8		
0.19	7888	7167	1.0		
0.23	6711	6097	1.1		
0.25	6144	5582	1.2		
0.27	5575	5065	1.3	K 107R77	4
0.32	4732	4299	1.6	KF 107R77	4
0.37	4135	3757	1.8	KA 107R77	4
0.43	3562	3236	2.1	KAF107R77	4
0.48	3158	2869	2.4		
0.56	2756	2504	2.7		
0.63	2425	2203	3.1		
0.30	5139	4669	0.79		
0.34	4493	4082	0.90		
0.39	3944	3583	1.0		
0.45	3421	3108	1.2		
0.50	3035	2757	1.3		
0.57	2662	2419	1.5		
0.65	2337	2123	1.7	K 97R57	4
0.75	2043	1856	2.0	KF 97R57	4
0.86	1789	1625	2.3	KA 97R57	4
0.97	1574	1430	2.6	KAF97R57	4
1.1	1388	1261	2.9		
1.3	1213	1102	3.3		
1.5	1053	957	3.8		
1.6	941	855	4.3		
1.9	818	743	4.9		
2.1	717	651	5.6		
0.45	3420	3107	0.74		
0.51	3003	2728	0.85		
0.59	2610	2371	0.97		
0.67	2298	2088	1.1		
0.75	2041	1854	1.2	K 87R57	4
0.84	1825	1658	1.4	KF 87R57	4
1.0	1557	1415	1.6	KA 87R57	4
1.1	1353	1229	1.9	KAF87R57	4
1.3	1187	1078	2.1		
1.5	1047	951	2.4		
1.7	921	837	2.8		
1.9	799	726	3.2		
0.9	1666	1514	0.9		
1.0	1528	1388	1.0		
1.1	1341	1218	1.1		
1.3	1159	1053	1.3		
1.5	1017	924	1.4	K 77R37	4
1.7	897	815	1.6	KF 77R37	4
2.0	780	709	1.9	KA 77R37	4
2.2	685	622	2.1	KAF77R37	4
2.5	608	552	2.4		
2.9	534	485	2.7		
3.2	471	428	3.1		
3.8	404	367	3.6		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.18kW					
1.5	994	903	0.78		
1.8	873	793	0.88		
2.0	767	697	1.0		
2.3	675	613	1.1	K 67R37	4
2.6	597	542	1.3	KF 67R37	4
3.0	518	471	1.5	KA 67R37	4
3.3	462	420	1.7	KAF67R37	4
3.9	397	361	1.9		
4.3	356	323	2.2		
5.1	299	272	2.6		
2.3	677	615	0.8		
2.6	599	544	0.9		
2.9	521	473	1.1		
3.3	463	421	1.2		
3.8	398	362	1.4	K 57R37	4
4.4	351	319	1.6	KF 57R37	4
5.1	300	273	1.9	KA 57R37	4
5.8	264	240	2.1	KAF57R37	4
6.5	237	215	2.4		
7.2	211	192	2.7		
8.4	183	166	3.1		
3.7	413	375	0.9		
4.3	359	326	1.0		
4.8	318	289	1.2	K 47R37	4
5.6	275	250	1.4	KF 47R37	4
6.2	248	225	1.5	KA 47R37	4
7.0	218	198	1.7	KAF47R37	4
8.3	184	167	2.0		
9.3	164	149	2.3		
11	141	128	2.7		
6.8	226	205	0.83	K 37R17	4
7.7	199	181	0.94	KF 37R17	4
8.7	176	160	1.07	KA 37R17	4
10	150	136	1.26	KAF37R17	4
11	140	127	1.34		
5.9	275	144.79	2.8	K 67	6
6.9	235	123.54	3.3	KF 67	6
7.9	205	108.03	3.8	KA 67	6
8.3	195	102.62	4.0	KAF67	6
9.6	168	144.79	4.6	K 67	4
11	144	123.54	5.4	KF 67	4
13	126	108.03	6.1	KA 67	4
				KAF67	4
5.9	276	145.14	2.0	K 57	6
6.9	235	123.85	2.4	KF 57	6
7.8	206	108.29	2.7	KA 57	6
8.3	196	102.88	2.9	KAF57	6
9.4	172	90.26	3.3		
9.6	169	145.14	3.3		
11	144	123.85	3.9	K 57	4
13	126	108.29	4.5	KF 57	4
14	120	102.88	4.7	KA 57	4
15	105	90.26	5.4	KAF57	4
18	89	76.56	6.3		
6.4	251	131.87	1.50	K 47	6
7.0	231	121.48	1.63	KF 47	6
8.1	198	104.37	1.90	KA 47	6
9.4	173	90.86	2.2	KAF47	6
10	162	85.12	2.3		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.18kW					
11	153	131.87	2.5	K 47	4
12	141	121.48	2.7	KF 47	4
13	121	104.37	3.1	KA 47	4
15	106	90.86	3.6	KAF47	4
16	99	85.12	3.8		
8.0	202	106.38	0.93	K 37	6
8.7	186	97.81	1.01	KF 37	6
10	159	83.69	1.18	KA 37	6
12	138	72.54	1.36	KAF37	6
13	124	106.38	1.52		
14	114	97.81	1.65		
17	97	83.69	1.93		
19	84	72.54	2.2		
21	79	67.80	2.4		
24	68	58.60	2.8		
28	58	49.79	3.2		
31	52	44.46	3.6		
37	44	37.97	4.3		
39	41	35.57	4.5	K 37	4
46	35	29.96	5.4	KF 37	4
48	34	28.83	5.6	KA 37	4
56	29	24.99	6.5	KAF37	4
60	27	23.36	6.7		
69	23	20.19	7.4		
81	20	17.15	8.5		
91	18	15.31	9.2		
106	15	13.08	10		
114	14	12.14	11		
133	12	10.49	12		
156	10	8.91	15		
175	9	7.96	16		
0.25kW					
0.14	15010	9819	0.81		
0.16	12907	8443	0.95		
0.19	11438	7482	1.07	K 127R77	4
0.21	10036	6565	1.2	KF 127R77	4
0.24	8872	5804	1.4	KA 127R77	4
0.28	7685	5027	1.6	KAF127R77	4
0.31	6761	4423	1.8		
0.37	5811	3801	2.1		
0.43	4948	3237	2.5		
0.23	9320	6097	0.81		
0.25	8533	5582	0.88		
0.27	7743	5065	1.0		
0.32	6572	4299	1.1		
0.37	5743	3757	1.3		
0.43	4947	3236	1.5	K 107R77	4
0.48	4386	2869	1.7	KF 107R77	4
0.56	3828	2504	2.0	KA 107R77	4
0.63	3368	2203	2.2	KAF107R77	4
0.74	2857	1869	2.6		
0.82	2582	1689	2.9		
0.91	2343	1533	3.2		
1.06	2013	1317	3.7		
0.45	4751	3108	0.9	K 97R57	4
0.50	4215	2757	1.0	KF 97R57	4
0.57	3698	2419	1.1	KA 97R57	4
0.65	3245	2123	1.2	KAF97R57	4
0.75	2837	1856	1.4		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.25kW					
0.86	2484	1625	1.6		
1.0	2186	1430	1.8	K 97R57	4
1.1	1928	1261	2.1	KF 97R57	4
1.3	1685	1102	2.4	KA 97R57	4
1.5	1463	957	2.8	KAF97R57	4
1.6	1307	855	3.1		
0.7	3192	2088	0.80		
0.7	2834	1854	0.90		
0.8	2535	1658	1.0		
1.0	2163	1415	1.2	K 87R57	4
1.1	1879	1229	1.4	KF 87R57	4
1.3	1648	1078	1.5	KA 87R57	4
1.5	1454	951	1.7	KAF87R57	4
1.7	1280	837	2.0		
1.9	1110	726	2.3		
2.2	975	638	2.6		
1.3	1610	1053	0.9		
1.5	1413	924	1.0		
1.7	1246	815	1.2		
2.0	1084	709	1.3		
2.2	951	622	1.5		
2.5	844	552	1.7	K 77R37	4
2.9	741	485	2.0	KF 77R37	4
3.2	654	428	2.2	KA 77R37	4
3.9	547	358	2.7	KAF77R37	4
4.3	489	320	3.0		
4.9	433	283	3.4		
5.7	376	246	3.9		
6.4	330	216	4.4		
7.3	292	191	5.0		
8.2	260	170	5.6		
2.3	937	613	0.8		
2.6	829	542	0.9		
3.0	720	471	1.1	K 67R37	4
3.3	642	420	1.2	KF 67R37	4
3.9	552	361	1.4	KA 67R37	4
4.3	494	323	1.6	KAF67R37	4
5.1	416	272	1.9		
5.8	367	240	2.1		
6.4	332	217	2.3		
3.3	644	421	0.9		
3.8	553	362	1.0		
4.4	488	319	1.2		
5.1	417	273	1.4		
5.8	367	240	1.5	K 57R37	4
6.5	329	215	1.7	KF 57R37	4
7.2	294	192	1.9	KA 57R37	4
8.4	254	166	2.2	KAF57R37	4
9.9	216	141	2.6		
11	193	126	2.9		
13	165	108	3.4		
15	145	95	3.9		
4.2	536	154.02	2.7	K 77	8
4.8	471	135.28	3.1	KF 77	8
5.0	447	128.52	3.3	KA 77	8
5.7	395	113.56	3.7	KAF77	8
4.4	507	192.18	2.9	K 77	6
4.7	474	179.37	3.1	KF 77	6
5.5	407	154.02	3.6	KA 77	6
6.3	357	135.28	4.1	KAF77	6

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.25kW					
5.2	430	123.54	1.8	K 67	8
6.0	376	108.03	2.1	KF 67	8
6.3	357	102.62	2.2	KA 67	8
7.2	313	90.04	2.5	KAF67	8
5.9	382	144.79	2.0	K 67	6
6.9	326	123.54	2.4	KF 67	6
7.9	285	108.03	2.7	KA 67	6
8.3	271	102.62	2.8	KAF67	6
9.6	234	144.79	3.3	K 67	4
11	199	123.54	3.9	KF 67	4
13	174	108.03	4.4	KA 67	4
14	166	102.62	4.7	KAF67	4
5.9	383	145.14	1.5		
6.9	327	123.85	1.7	K 57	6
7.8	286	108.29	2.0	KF 57	6
8.3	272	102.88	2.1	KA 57	6
9.4	238	90.26	2.4	KAF57	6
11	202	76.56	2.8		
9.6	234	145.14	2.4		
11	200	123.85	2.8	K 57	4
13	175	108.29	3.2	KF 57	4
14	166	102.88	3.4	KA 57	4
15	146	90.26	3.9	KAF57	4
18	124	76.56	4.6		
6.4	348	131.87	1.08		
7.0	321	121.48	1.17	K 47	6
8.1	276	104.37	1.36	KF 47	6
9.4	240	90.86	1.57	KA 47	6
10	225	85.12	1.67	KAF47	6
11	213	131.87	1.77		
11	196	121.48	1.92	K 47	4
13	169	104.37	2.2	KF 47	4
15	147	90.86	2.6	KA 47	4
16	137	85.12	2.7	KAF47	4
10	221	83.69	0.9		
12	192	72.54	1.0	K 37	6
13	179	67.80	1.1	KF 37	6
15	155	58.60	1.2	KA 37	6
17	131	49.79	1.4	KAF37	6
13	172	106.38	1.1		
14	158	97.81	1.2		
17	135	83.69	1.4		
19	117	72.54	1.6		
21	109	67.80	1.7		
24	95	58.60	2.0		
28	80	49.79	2.3		
31	72	44.46	2.6		
37	61	37.97	3.1		
39	57	35.57	3.3	K 37	4
46	48	29.96	3.9	KF 37	4
48	47	28.83	4.0	KA 37	4
56	40	24.99	4.7	KAF37	4
60	38	23.36	4.9		
69	33	20.19	5.3		
81	28	17.15	6.1		
91	25	15.31	6.7		
106	21	13.08	7.3		
114	20	12.14	7.7		
133	17	10.49	8.9		
156	14	8.91	10		
175	13	7.96	11		
204	11	6.80	13		
218	10	6.37	13		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.37kW					
0.19	16930	7483	0.72		
0.21	14853	6565	0.82		
0.24	13131	5804	0.93	K 127R77	4
0.28	11373	5027	1.07	KF 127R77	4
0.31	10007	4423	1.22	KA 127R77	4
0.37	8600	3801	1.42	KAF127R77	4
0.43	7324	3237	1.67		
0.72	4357	1926	2.80		
0.79	3975	1757	3.07		
0.90	3486	1541	3.51		
0.37	8500	3757	0.88		
0.43	7321	3236	1.03		
0.48	6491	2869	1.16		
0.56	5665	2504	1.33	K 107R77	4
0.63	4984	2203	1.51	KF 107R77	4
0.74	4229	1869	1.78	KA 107R77	4
0.82	3821	1689	1.97	KAF107R77	4
0.91	3468	1533	2.2		
1.06	2980	1317	2.5		
1.21	2602	1150	2.9		
0.65	4803	2123	0.84		
0.75	4199	1856	0.96		
0.86	3676	1625	1.10		
0.97	3235	1430	1.25	K 97R57	4
1.1	2853	1261	1.42	KF 97R57	4
1.3	2493	1102	1.62	KA 97R57	4
1.5	2165	957	1.87	KAF97R57	4
1.6	1934	855	2.1		
1.9	1681	743	2.4		
2.1	1473	651	2.7		
2.4	1296	573	3.1		
1.0	3201	1415	0.79		
1.1	2781	1229	0.91		
1.3	2439	1078	1.04		
1.5	2152	951	1.18	K 87R57	4
1.7	1894	837	1.34	KF 87R57	4
1.9	1643	726	1.55	KA 87R57	4
2.2	1443	638	1.76	KAF87R57	4
2.5	1272	562	2.0		
2.9	1072	474	2.4		
3.3	964	426	2.6		
3.7	844	373	3.0		
1.7	1844	815	0.79		
2.0	1604	709	0.91		
2.2	1407	622	1.04		
2.5	1249	552	1.17	K 77R37	4
2.9	1097	485	1.33	KF 77R37	4
3.2	968	428	1.50	KA 77R37	4
3.9	810	358	1.80	KAF77R37	4
4.3	724	320	2.0		
4.9	640	283	2.3		
5.7	557	246	2.6		
6.4	489	216	3.0		
7.3	432	191	3.4		
8.2	385	170	3.8		
9.3	339	150	4.3		
3.3	950	420	0.81		
3.9	817	361	0.94		
4.3	731	323	1.05		
5.1	615	272	1.25	K 67R37	4
5.8	543	240	1.42	KF 67R37	4
6.4	491	217	1.57	KA 67R37	4
7.3	432	191	1.78	KAF67R37	4
8.4	376	166	2.05		
9.7	326	144	2.37		
12	269	119	2.86		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.37kW					
5.1	618	273	0.91		
5.8	543	240	1.04		
6.5	486	215	1.16	K 57R37	4
7.2	434	192	1.30	KF 57R37	4
8.4	376	166	1.50	KA 57R37	4
9.9	319	141	1.77	KAF57R37	4
11	285	126	1.98		
13	244	108	2.3		
15	215	95	2.6		
3.8	868	174.99	2.9	K 87	8
4.1	813	164.05	3.1	KF 87	8
4.6	729	147.09	3.5	KA 87	8
				KAF87	8
4.5	740	197.27	3.4	K 87	6
5.1	657	174.99	3.9	KF 87	6
				KA 87	6
				KAF87	6
5.0	671	135.28	2.2	K 77	8
5.2	637	128.52	2.3	KF 77	8
5.9	563	113.56	2.6	KA 77	8
6.9	481	97.05	3.0	KAF77	8
5.7	578	154.02	2.5	K 77	6
6.5	508	135.28	2.9	KF 77	6
6.9	482	128.52	3.0	KA 77	6
7.8	426	113.56	3.4	KAF77	6
7.23	459	192.18	3.2	K 77	4
7.75	429	179.37	3.4	KF 77	4
9.02	368	154.02	4.0	KA 77	4
				KAF77	4
6.2	536	108.03	1.44	K 67	8
6.5	509	102.62	1.52	KF 67	8
7.4	446	90.04	1.73	KA 67	8
				KAF67	8
7.2	464	123.54	1.66	K 67	6
8.2	405	108.03	1.90	KF 67	6
8.6	385	102.62	2.0	KA 67	6
9.8	338	90.04	2.3	KAF67	6
9.6	346	144.79	2.2	K 67	4
11	295	123.54	2.6	KF 67	4
13	258	108.03	3.0	KA 67	4
15	215	90.04	3.6	KAF67	4
18	182	76.37	4.2		
7.1	465	123.85	1.2		
8.2	406	108.29	1.4	K 57	6
8.6	386	102.88	1.5	KF 57	6
10	339	90.26	1.7	KA 57	6
12	287	76.56	2.0	KAF57	6
13	259	69.12	2.2		
9.6	347	145.14	1.6		
11	296	123.85	1.9	K 57	4
13	259	108.29	2.2	KF 57	4
14	246	102.88	2.3	KA 57	4
15	216	90.26	2.6	KAF57	4
18	183	76.56	3.1		
20	165	69.12	3.4		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.37kW					
8.5	392	104.37	0.96	K 47	6
9.7	341	90.86	1.10	KF 47	6
10	319	85.12	1.18	KA 47	6
12	282	75.2	1.33	KAF47	6
11	315	131.87	1.19		
12	290	121.48	1.30		
13	249	104.37	1.51	K 47	4
15	217	90.86	1.73	KF 47	4
16	203	85.12	1.85	KA 47	4
18	180	75.20	2.1	KAF47	4
20	167	69.84	2.3		
22	151	63.30	2.5		
14	234	97.81	0.80		
17	200	83.69	0.94		
19	173	72.54	1.08		
21	162	67.80	1.16		
24	140	58.60	1.34		
28	119	49.79	1.58		
31	106	44.46	1.77		
37	91	37.97	2.07		
39	85	35.57	2.21	K 37	4
46	72	29.96	2.63	KF 37	4
48	69	28.83	2.73	KA 37	4
56	60	24.99	3.15	KAF37	4
60	56	23.36	3.28		
69	48	20.19	3.60		
81	41	17.15	4.13		
91	37	15.31	4.5		
106	31	13.08	5.0		
114	29	12.14	5.2		
133	25	10.49	6.0		
156	21	8.91	7.1		
175	19	7.96	7.7		
204	16	6.80	8.7		
218	15	6.37	9.0		
259	13	5.56	10		
0.55kW					
0.08	57099	16978	0.82		
0.10	47998	14272	0.98	K 187R97	4
0.11	44111	13116	1.07	KA 187R97	4
0.12	39170	11647	1.20		
0.19	24662	7333	1.9		
0.12	38783	11532	0.78		
0.14	34395	10227	0.87		
0.16	28913	8597	1.04	K 167R97	4
0.21	21988	6538	1.37	KA 167R97	4
0.26	18046	5366	1.67		
0.34	13651	4059	2.2		
0.20	23142	6881	0.73	K 157R97	4
0.23	19947	5931	0.85	KF 157R97	4
0.35	13365	3974	1.27	KA 157R97	4
0.46	10247	3047	1.65	KAF157R97	4
0.31	14875	4423	0.82		
0.37	12783	3801	0.96		
0.43	10886	3237	1.12		
0.47	9891	2941	1.24		
0.55	8569	2548	1.43	K 127R77	4
0.72	6477	1926	1.89	KF 127R77	4
0.79	5909	1757	2.1	KA 127R77	4
0.90	5183	1541	2.4	KAF127R77	4
1.0	4513	1342	2.7		
1.2	3958	1177	3.1		
1.4	3447	1025	3.5		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.55kW					
0.48	9649	2869	0.78		
0.56	8421	2504	0.89		
0.63	7409	2203	1.01		
0.74	6286	1869	1.20		
0.82	5680	1689	1.32	K 107R77	4
0.91	5156	1533	1.46	KF 107R77	4
1.1	4429	1317	1.70	KA 107R77	4
1.2	3868	1150	1.94	KAF107R77	4
1.4	3414	1015	2.2		
1.6	2929	871	2.6		
1.8	2630	782	2.9		
2.0	2307	686	3.3		
2.3	2038	606	3.7		
1.0	4809	1430	0.8		
1.1	4241	1261	1.0		
1.3	3706	1102	1.1		
1.5	3218	957	1.3		
1.6	2875	855	1.4	K 97R57	4
1.9	2499	743	1.6	KF 97R57	4
2.1	2189	651	1.8	KA 97R57	4
2.4	1927	573	2.1	KAF97R57	4
2.8	1695	504	2.4		
3.2	1470	437	2.8		
3.6	1285	382	3.1		
4.6	1026	305	3.9		
1.5	3198	951	0.79		
1.7	2815	837	0.90		
1.9	2442	726	1.04		
2.2	2146	638	1.18		
2.5	1890	562	1.34		
2.9	1594	474	1.59	K 87R57	4
3.3	1433	426	1.77	KF 87R57	4
3.7	1254	373	2.0	KA 87R57	4
4.2	1110	330	2.3	KAF87R57	4
4.7	985	293	2.6		
5.6	841	250	3.0		
5.9	794	236	3.2		
6.9	676	201	3.8		
2.5	1856	552	0.78		
2.9	1631	485	0.89		
3.2	1439	428	1.01		
3.9	1204	358	1.21	K 77R37	4
4.3	1076	320	1.35	KF 77R37	4
4.9	952	283	1.53	KA 77R37	4
5.7	827	246	1.76	KAF77R37	4
6.4	726	216	2.0		
7.3	642	191	2.3		
8.2	572	170	2.5		
9.3	504	150	2.9		
5.1	915	272	0.84		
5.8	807	240	0.95		
6.4	730	217	1.1	K 67R37	4
7.3	642	191	1.2	KF 67R37	4
8.4	558	166	1.4	KA 67R37	4
9.7	484	144	1.6	KAF67R37	4
12	400	119	1.9		
7.2	646	192	0.87		
8.4	558	166	1.0	K 57R37	4
9.9	474	141	1.2	KF 57R37	4
11	424	126	1.3	KA 57R37	4
13	363	108	1.6	KAF57R37	4
15	319	95	1.8		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.55kW					
3.8	1290	174.99	2.0	K 87	8
4.1	1209	164.05	2.1	KF 87	8
4.5	1084	147.09	2.3	KA 87	8
				KAF87	8
4.5	1101	197.27	2.3	K 87	6
5.1	976	174.99	2.6	KF 87	6
5.4	915	164.05	2.8	KA 87	6
6.0	821	147.09	3.1	KAF87	6
6.5	755	135.28	1.9	K 77	8
6.9	717	128.52	2.0	KF 77	8
7.8	634	113.56	2.3	KA 77	8
9.1	541	97.05	2.7	KAF77	8
5.7	859	154.02	1.70	K 77	6
6.5	755	135.28	1.93	KF 77	6
6.9	717	128.52	2.0	KA 77	6
7.8	634	113.56	2.3	KAF77	6
9.0	547	154.02	2.7	K 77	4
10	481	135.28	3.0	KF 77	4
11	457	128.52	3.2	KA 77	4
12	403	113.56	3.6	KAF77	4
14	345	97.05	4.2		
7.2	689	123.54	1.12	K 67	6
8.2	603	108.03	1.28	KF 67	6
8.6	573	102.62	1.35	KA 67	6
10	502	90.04	1.53	KAF67	6
12	426	76.37	1.81		
11	439	123.54	1.76	K 67	4
13	384	108.03	2.0	KF 67	4
15	320	90.04	2.4	KA 67	4
18	271	76.37	2.8	KAF67	4
8.2	604	108.29	0.93		
8.6	574	102.88	0.98		
9.8	504	90.26	1.12	K 57	6
12	427	76.56	1.32	KF 57	6
13	386	69.12	1.46	KA 57	6
14	339	60.81	1.66	KAF57	6
15	320	57.42	1.76		
11	440	123.85	1.28		
13	385	108.29	1.47		
14	365	102.88	1.54	K 57	4
15	321	90.26	1.76	KF 57	4
18	272	76.56	2.1	KA 57	4
20	246	69.12	2.3	KAF57	4
23	216	60.81	2.6		
24	204	57.42	2.8		
13	371	104.37	1.01		
15	323	90.86	1.17		
16	302	85.12	1.24	K 47	4
18	267	75.20	1.41	KF 47	4
20	248	69.84	1.52	KA 47	4
22	225	63.30	1.67	KAF47	4
24	202	56.83	1.86		
28	174	48.95	2.2		
30	164	46.03	2.3		
24	208	58.6	0.90	K 37	4
28	177	49.79	1.06	KF 37	4
31	158	44.46	1.19	KA 37	4
37	135	37.97	1.39	KAF37	4

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.55kW					
39	126	35.57	1.49		
46	106	29.96	1.77		
48	102	28.83	1.84		
56	89	24.99	2.1	K 37	4
60	83	23.36	2.2	KF 37	4
69	72	20.19	2.4	KA 37	4
81	61	17.15	2.8	KAF37	4
91	54	15.31	3.0		
106	46	13.08	3.3		
114	43	12.14	3.5		
133	37	10.49	4.0		
156	32	8.91	4.8		
175	28	7.96	5.2		
204	24	6.80	5.8		
218	23	6.37	6.0		
259	19	5.36	6.9		
0.75kW					
0.11	60151	13116	0.78		
0.12	53414	11647	0.88	K 187R97	4
0.19	33630	7333	1.40	KA 187R97	4
0.21	30901	6738	1.52		
0.23	27443	5984	1.71		
0.16	39426	8597	0.76		
0.21	29984	6538	1.00	K 167R97	4
0.26	24609	5366	1.22	KA 167R97	4
0.34	18615	4059	1.62		
0.41	15405	3359	1.95		
0.35	18225	3974	0.93	K 157R97	4
0.46	13974	3047	1.21	KF 157R97	4
0.83	7705	1680	2.2	KA 157R97	4
1.02	6260	1365	2.7	KAF157R97	4
0.43	14845	3237	0.82		
0.47	13488	2941	0.91		
0.55	11685	2548	1.05		
0.72	8833	1926	1.38	K 127R77	4
0.79	8058	1757	1.52	KF 127R77	4
0.90	7067	1541	1.73	KA 127R77	4
1.0	6154	1342	1.99	KAF127R77	4
1.2	5398	1177	2.3		
1.4	4701	1025	2.6		
1.5	4123	899	3.0		
0.82	7746	1689	0.97		
0.91	7030	1533	1.07		
1.1	6040	1317	1.25	K 107R77	4
1.2	5274	1150	1.43	KF 107R77	4
1.4	4655	1015	1.62	KA 107R77	4
1.6	3994	871	1.88	KAF107R77	4
1.8	3586	782	2.1		
2.0	3146	686	2.4		
2.3	2779	606	2.7		
1.3	5054	1102	0.8		
1.5	4389	957	0.9		
1.6	3921	855	1.0		
1.9	3407	743	1.2	K 97R57	4
2.1	2986	651	1.4	KF 97R57	4
2.4	2628	573	1.5	KA 97R57	4
2.8	2311	504	1.7	KAF97R57	4
3.2	2004	437	2.0		
3.6	1752	382	2.3		
4.6	1399	305	2.9		
5.4	1183	258	3.4		
6.0	1064	232	3.8		
7.0	913	199	4.4		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.75kW					
1.9	3329	726	0.76		
2.2	2926	638	0.87		
2.5	2577	562	0.98		
2.9	2174	474	1.17	K 87R57	4
3.3	1954	426	1.30	KF 87R57	4
3.7	1711	373	1.48	KA 87R57	4
4.2	1513	330	1.68	KAF87R57	4
4.7	1344	293	1.89		
5.6	1147	250	2.2		
5.9	1082	236	2.3		
6.9	922	201	2.8		
3.9	1642	358	0.89		
4.3	1468	320	0.99	K 77R37	4
4.9	1298	283	1.12	KF 77R37	4
5.7	1128	246	1.29	KA 77R37	4
6.4	991	216	1.47	KAF77R37	4
3.9	1737	175.47	2.3	K 97	8
4.4	1508	152.31	2.7	KF 97	8
4.8	1389	140.28	2.9	KA 97	8
				KAF97	8
4.6	1456	147.09	1.7	K 87	8
5.4	1254	126.68	2.0	KF 87	8
5.9	1140	115.16	2.2	KA 87	8
6.6	1017	102.71	2.5	KAF87	8
5.2	1295	174.99	2.0	K 87	6
5.5	1214	164.05	2.1	KF 87	6
6.2	1088	147.09	2.3	KA 87	6
7.2	937	126.68	2.7	KAF87	6
7.0	956	197.27	2.7	K 87	4
8.0	848	174.99	3.0	KF 87	4
8.5	795	164.05	3.2	KA 87	4
9.4	712	147.09	3.6	KAF87	4
6.7	1001	135.28	1.46		
7.1	951	128.52	1.53	K 77	6
8.0	840	113.56	1.73	KF 77	6
9.4	718	97.05	2.0	KA 77	6
10	658	88.97	2.2	KAF77	6
9.0	746	154.02	1.95		
10	655	135.28	2.2	K 77	4
11	623	128.52	2.3	KF 77	4
12	550	113.56	2.6	KA 77	4
14	470	97.05	3.1	KAF77	4
11	598	123.54	1.29		
13	523	108.03	1.47	K 67	4
15	436	90.04	1.77	KF 67	4
18	370	76.37	2.1	KA 67	4
20	334	68.95	2.3	KAF67	4
23	294	60.66	2.6		
24	277	57.28	2.8		
11	600	123.85	0.9		
13	525	108.29	1.1		
14	498	102.88	1.1		
15	437	90.26	1.3	K 57	4
18	371	76.56	1.5	KF 57	4
20	335	69.12	1.7	KA 57	4
23	295	60.81	1.9	KAF57	4
24	278	57.42	2.0		
28	237	48.89	2.4		
31	215	44.43	2.6		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
0.75kW					
18	364	75.2	1.03		
20	338	69.84	1.11		
22	307	63.30	1.23	K 47	4
24	275	56.83	1.37	KF 47	4
28	237	48.95	1.59	KA 47	4
30	223	46.03	1.69	KAF47	4
35	192	39.61	1.96		
39	171	35.39	2.2		
45	151	31.19	2.5		
31	215	44.46	0.87		
37	184	37.97	1.02		
39	172	35.57	1.09		
46	145	29.96	1.30		
48	140	28.83	1.35		
56	121	24.99	1.55		
60	113	23.36	1.62		
69	98	20.19	1.78	K 37	4
81	83	17.15	2.0	KF 37	4
91	74	15.31	2.2	KA 37	4
106	63	13.08	2.4	KAF37	4
114	59	12.14	2.6		
133	51	10.49	3.0		
156	43	8.91	3.5		
175	39	7.96	3.8		
204	33	6.80	4.3		
218	31	6.37	4.4		
259	26	5.36	5.1		
1.1kW					
0.15	62528	9363	0.75		
0.17	54267	8126	0.87		
0.19	48971	7333	0.96	K 187R97	4
0.21	44998	6738	1.04	KA 187R97	4
0.23	39962	5984	1.18		
0.26	35728	5350	1.32		
0.29	32122	4810	1.46		
0.32	29144	4364	1.61		
0.26	35835	5366	0.84		
0.29	32042	4798	0.94		
0.34	27107	4059	1.11		
0.42	22432	3359	1.34	K 167R97	4
0.51	18305	2741	1.64	KA 167R97	4
0.64	14518	2174	2.1		
0.82	11340	1698	2.7		
1.00	9363	1402	3.2		
1.08	8622	1291	3.5		
0.40	23480	3516	0.72		
0.46	20375	3051	0.83		
0.54	17430	2610	0.97		
0.60	15507	2322	1.09	K 157R97	4
0.83	11219	1680	1.51	KF 157R97	4
1.0	9116	1365	1.86	KA 157R97	4
1.1	8207	1229	2.1	KAF157R97	4
1.3	7299	1093	2.3		
1.5	6291	942	2.7		
1.6	5703	854	3.0		
0.72	12955	1926	0.9		
0.79	11818	1757	1.0	K 127R77	4
0.90	10365	1541	1.2	KF 127R77	4
1.0	9027	1342	1.4	KA 127R77	4
1.2	7917	1177	1.5	KAF127R77	4
1.4	6894	1025	1.8		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
1.1kW					
1.5	6047	899	2.0		
1.8	5314	790	2.3	K 127R77	4
2.0	4641	690	2.6	KF 127R77	4
2.3	4029	599	3.0	KA 127R77	4
2.6	3625	539	3.4	KAF127R77	4
3.0	3148	468	3.9		
1.2	7735	1150	1.0		
1.4	6827	1015	1.1		
1.6	5859	871	1.3		
1.8	5260	782	1.4	K 107R77	4
2.0	4614	686	1.6	KF 107R77	4
2.3	4076	606	1.8	KA 107R77	4
2.7	3464	515	2.2	KAF107R77	4
3.1	3060	455	2.5		
3.5	2704	402	2.8		
4.0	2361	351	3.2		
4.5	2065	307	3.6		
1.9	4998	743	0.81		
2.1	4379	651	0.92		
2.4	3854	573	1.05	K 97R57	4
2.8	3390	504	1.19	KF 97R57	4
3.2	2939	437	1.38	KA 97R57	4
3.6	2569	382	1.57	KAF97R57	4
4.1	2300	342	1.76		
2.9	3188	474	0.80		
3.3	2865	426	0.89		
3.7	2509	373	1.01	K 87R57	4
4.2	2220	330	1.14	KF 87R57	4
4.7	1971	293	1.29	KA 87R57	4
5.6	1682	250	1.51	KAF87R57	4
5.9	1587	236	1.60		
6.9	1352	201	1.88		
3.9	2548	175.47	1.6	K 97	8
4.4	2212	152.31	1.8	KF 97	8
4.8	2037	140.28	2.0	KA 97	8
5.5	1810	124.61	2.2	KAF97	8
5.2	1904	175.47	2.1	K 97	6
5.9	1653	152.31	2.4	KF 97	6
6.5	1522	140.28	2.7	KA 97	6
7.3	1352	124.61	3.0	KAF97	6
8.0	1238	175.47	3.3	K 97	4
9.1	1074	152.31	3.7	KF 97	4
10	989	140.28	4.1	KA 97	4
				KAF97	4
5.2	1899	174.99	1.34	K 87	6
5.5	1780	164.05	1.42	KF 87	6
6.2	1596	147.09	1.59	KA 87	6
7.2	1375	126.68	1.84	KAF87	6
8.0	1234	174.99	2.1	K 87	4
8.5	1157	164.05	2.2	KF 87	4
9.5	1037	147.09	2.4	KA 87	4
11	894	126.68	2.8	KAF87	4
12	812	115.16	3.1		
6.7	1468	135.28	0.99	K 77	6
7.1	1395	128.52	1.04	KF 77	6
8.0	1232	113.56	1.18	KA 77	6
9.4	1053	97.05	1.38	KAF77	6

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
1.1kW					
10	954	135.28	1.53		
11	906	128.52	1.61	K 77	4
12	801	113.56	1.82	KF 77	4
14	685	97.05	2.1	KA 77	4
16	628	88.97	2.3	KAF77	4
18	551	78.07	2.6		
19	522	73.99	2.8		
13	762	108.03	1.01		
14	724	102.62	1.06		
16	635	90.04	1.21		
18	539	76.37	1.43	K 67	4
20	486	68.95	1.58	KF 67	4
23	428	60.66	1.80	KA 67	4
24	404	57.28	1.91	KAF67	4
29	344	48.77	2.2		
32	313	44.32	2.5		
36	271	38.39	2.8		
16	637	90.26	0.89		
18	540	76.56	1.04		
20	488	69.12	1.16		
23	429	60.81	1.31		
24	405	57.42	1.39		
29	345	48.89	1.64		
32	313	44.43	1.80		
36	271	38.49	2.1		
39	252	35.70	2.2		
46	214	30.28	2.6		
51	193	27.34	2.9	K 57	4
58	170	24.05	3.3	KF 57	4
62	160	22.71	3.5	KA 57	4
72	136	19.34	4.0	KAF57	4
80	124	17.57	4.2		
92	107	15.22	4.6		
106	93	13.25	4.7		
117	84	11.92	4.9		
124	79	11.26	5.1		
146	68	9.59	5.6		
161	61	8.71	6.0		
185	53	7.55	6.4		
213	46	6.57	7.0		
25	401	56.83	0.94		
29	345	48.95	1.09		
30	325	46.03	1.16	K 47	4
35	279	39.61	1.35	KF 47	4
40	250	35.39	1.51	KA 47	4
45	220	31.19	1.71	KAF47	4
48	207	29.32	1.82		
54	183	25.91	2.1		
64	154	21.81	2.4		
72	138	19.58	2.7		
47	211	29.96	0.89		
56	176	24.99	1.07		
60	165	23.36	1.11		
69	142	20.19	1.22		
82	121	17.15	1.40		
91	108	15.31	1.52	K 37	4
107	92	13.08	1.68	KF 37	4
115	86	12.14	1.76	KA 37	4
133	74	10.49	2.0	KAF37	4
157	63	8.91	2.4		
176	56	7.96	2.6		
206	48	6.80	2.9		
220	45	6.37	3.0		
261	38	5.36	3.5		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
1.5kW					
0.21	61360	6738	0.77		
0.23	54494	5984	0.86		
0.26	48720	5350	0.96		
0.29	43803	4810	1.07	K 187R97	4
0.32	39741	4364	1.18	KA 187R97	4
0.39	32866	3609	1.43		
0.46	27884	3062	1.69		
0.56	22940	2519	2.0		
0.62	20654	2268	2.3		
0.34	36964	4059	0.81		
0.42	30589	3359	0.98		
0.51	24961	2741	1.21		
0.64	19798	2174	1.52	K 167R97	4
0.82	15463	1698	1.95	KA 167R97	4
1.0	12767	1402	2.4		
1.1	11757	1291	2.6		
0.6	21118	2319	0.8		
0.8	15299	1680	1.1		
1.0	12431	1365	1.4	K 157R97	4
1.1	11192	1229	1.5	KF 157R97	4
1.3	9954	1093	1.7	KA 157R97	4
1.5	8578	942	2.0	KAF157R97	4
1.6	7777	854	2.2		
2.5	5145	565	3.3		
2.8	4581	503	3.7		
2.6	4881	536	2.5	K 127R87	4
3.3	3807	418	3.2	KF 127R87	4
3.8	3342	367	3.7	KA 127R87	4
				KAF127R87	4
0.80	16000	1757	0.76		
0.91	14033	1541	0.87		
1.0	12221	1342	1.00		
1.2	10718	1177	1.14		
1.4	9334	1025	1.31	K 127R77	4
1.6	8187	899	1.49	KF 127R77	4
1.8	7194	790	1.70	KA 127R77	4
2.0	6284	690	1.94	KAF127R77	4
2.3	5455	599	2.2		
2.6	4908	539	2.5		
3.0	4262	468	2.9		
3.4	3734	410	3.3		
1.4	9243	1015	0.8		
1.6	7932	871	0.9		
1.8	7121	782	1.1		
2.0	6247	686	1.2	K 107R77	4
2.3	5519	606	1.4	KF 107R77	4
2.7	4690	515	1.6	KA 107R77	4
3.1	4144	455	1.8	KAF107R77	4
3.5	3661	402	2.1		
4.0	3196	351	2.4		
4.6	2796	307	2.7		
2.4	5218	573	0.8		
2.8	4590	504	0.9		
3.2	3980	437	1.0		
3.7	3479	382	1.2	K 97R57	4
4.1	3114	342	1.3	KF 97R57	4
4.6	2778	305	1.5	KA 97R57	4
5.4	2350	258	1.7	KAF97R57	4
6.0	2113	232	1.9		
7.0	1812	199	2.2		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
1.5kW					
4.2	3005	330	0.84	K 87R57	4
4.8	2668	293	0.95	KF 87R57	4
5.6	2277	250	1.11	KA 87R57	4
5.9	2149	236	1.18	KAF87R57	4
7.0	1830	201	1.39		
7.7	1667	183	1.52		
4.9	2770	141.93	2.7	K 107	8
5.8	2334	119.58	3.2	KF 107	8
6.2	2163	110.83	3.5	KA 107	8
				KAF107	8
4.5	2972	152.31	1.36	K 97	8
4.9	2738	140.28	1.48	KF 97	8
5.5	2432	124.61	1.66	KA 97	8
				KAF97	8
5.2	2569	175.47	1.57	K 97	6
6.0	2229	152.31	1.81	KF 97	6
6.6	2053	140.28	1.97	KA 97	6
7.4	1824	124.61	2.2	KAF97	6
8.0	1688	175.47	2.4	K 97	4
9.2	1465	152.31	2.7	KF 97	4
10	1349	140.28	3.0	KA 97	4
11	1199	124.61	3.4	KAF97	4
6.3	2153	147.09	1.18	K 87	6
7.2	1854	126.68	1.37	KF 87	6
7.9	1686	115.16	1.50	KA 87	6
9.0	1503	102.71	1.69	KAF87	6
8.0	1683	174.99	1.51		
8.5	1578	164.05	1.61		
9.5	1415	147.09	1.79	K 87	4
11	1218	126.68	2.1	KF 87	4
12	1108	115.16	2.3	KA 87	4
14	988	102.71	2.6	KAF87	4
16	830	86.34	3.1		
8.0	1680	113.56	0.87	K 77	6
9.4	1436	97.05	1.01	KF 77	6
10	1317	88.97	1.11	KA 77	6
12	1155	78.07	1.26	KAF77	6
10	1301	135.28	1.12		
11	1236	128.52	1.18		
12	1092	113.56	1.33		
14	933	97.05	1.56	K 77	4
16	856	88.97	1.70	KF 77	4
18	751	78.07	1.94	KA 77	4
19	712	73.99	2.0	KAF77	4
22	623	64.75	2.3		
24	561	58.34	2.6		
27	492	51.18	3.0		
31	434	45.16	3.4		
35	385	40.04	3.8		
16	866	90.04	0.89		
18	735	76.37	1.05		
20	663	68.95	1.16		
23	583	60.66	1.32	K 67	4
24	551	57.28	1.40	KF 67	4
29	469	48.77	1.64	KA 67	4
32	426	44.32	1.81	KAF67	4
36	369	38.39	2.1		
39	343	35.62	2.2		
46	291	30.22	2.7		
51	262	27.28	2.9		
58	231	24.00	3.3		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
1.5kW					
23	585	60.81	0.96		
24	552	57.42	1.02		
29	470	48.89	1.20		
32	427	44.43	1.32	K 57	4
36	370	38.49	1.52	KF 57	4
39	343	35.70	1.64	KA 57	4
46	291	30.28	1.94	KAF57	4
51	263	27.34	2.1		
58	231	24.05	2.4		
62	218	22.71	2.6		
72	186	19.34	2.9		
35	381	39.61	0.99		
40	340	35.39	1.10		
45	300	31.19	1.25		
48	282	29.32	1.33	K 47	4
54	249	25.91	1.51	KF 47	4
64	210	21.81	1.79	KA 47	4
72	188	19.58	2.0	KAF47	4
83	162	16.86	2.2		
88	153	15.86	2.3		
103	131	13.65	2.6		
115	117	12.19	2.8		
119	113	11.77	3.0		
60	225	23.36	0.82		
69	194	20.19	0.90		
82	165	17.15	1.03		
91	147	15.31	1.12	K 37	4
107	126	13.08	1.23	KF 37	4
115	117	12.14	1.29	KA 37	4
133	101	10.49	1.49	KAF37	4
157	86	8.91	1.75		
176	77	7.96	1.90		
206	65	6.80	2.2		
220	61	6.37	2.2		
261	52	5.36	2.6		
2.2kW					
0.33	57466	4364	0.82		
0.39	47524	3609	0.99		
0.46	40321	3062	1.17		
0.50	37108	2818	1.27		
0.56	33171	2519	1.42	K 187R97	4
0.63	29866	2268	1.57	KA 187R97	4
0.69	27048	2054	1.74		
0.78	23979	1821	1.96		
0.88	21135	1605	2.2		
0.52	36094	2741	0.83		
0.63	29655	2252	1.01		
0.65	28628	2174	1.05	K 167R97	4
0.84	22360	1698	1.35	KA 167R97	4
1.0	18462	1402	1.63		
1.1	17000	1291	1.77		
1.3	14498	1101	2.1		
1.5	12431	944	2.4		
0.85	22123	1680	0.76		
1.0	17975	1365	0.94	K 157R97	4
1.2	16184	1229	1.05	KF 157R97	4
1.3	14393	1093	1.18	KA 157R97	4
1.5	12404	942	1.36	KAF157R97	4
1.7	11246	854	1.50		
1.9	9955	756	1.70		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
2.2kW					
2.6	7058	536	1.73	K 127R87	4
3.0	6229	473	1.96	KF 127R87	4
3.4	5504	418	2.2	KA 127R87	4
3.9	4833	367	2.5	KAF127R87	4
4.3	4346	330	2.8		
1.4	13497	1025	0.91		
1.6	11838	899	1.03		
1.8	10403	790	1.17	K 127R77	4
2.1	9086	690	1.34	KF 127R77	4
2.4	7888	599	1.55	KA 127R77	4
2.6	7098	539	1.72	KAF127R77	4
3.0	6163	468	1.98		
3.5	5399	410	2.3		
2.3	7980	606	0.94		
2.8	6782	515	1.11		
3.1	5992	455	1.26	K 107R77	4
3.5	5294	402	1.42	KF 107R77	4
4.0	4622	351	1.63	KA 107R77	4
4.6	4043	307	1.86	KAF107R77	4
5.1	3648	277	2.1		
5.8	3200	243	2.4		
3.7	5030	382	0.80		
4.2	4504	342	0.90	K 97R57	4
4.7	4016	305	1.01	KF 97R57	4
5.5	3397	258	1.19	KA 97R57	4
6.1	3055	232	1.32	KAF97R57	4
7.1	2620	199	1.54		
5.0	3948	141.93	1.90	K 107	8
5.9	3326	119.58	2.3	KF 107	8
6.4	3083	110.83	2.4	KA 107	8
7.1	2763	99.34	2.7	KAF107	8
6.1	3200	152.31	1.26	K 97	6
6.7	2947	140.28	1.37	KF 97	6
7.5	2618	124.61	1.54	KA 97	6
14	1443	103.78	2.80	KAF97	6
8.1	2440	175.47	1.66		
9.3	2118	152.31	1.91	K 97	4
10	1951	140.28	2.1	KF 97	4
11	1733	124.61	2.3	KA 97	4
14	1443	103.78	2.8	KAF97	4
15	1346	96.80	3.0		
9.7	2046	147.09	1.24		
11	1762	126.68	1.44		
12	1602	115.16	1.58	K 87	4
14	1428	102.71	1.78	KF 87	4
16	1201	86.34	2.1	KA 87	4
18	1103	79.34	2.3	KAF87	4
20	980	70.46	2.6		
23	876	63.00	2.9		
13	1579	113.56	0.9		
15	1350	97.05	1.08		
16	1237	88.97	1.18		
18	1086	78.07	1.34		
19	1029	73.99	1.42	K 77	4
22	901	64.75	1.62	KF 77	4
24	811	58.34	1.80	KA 77	4
28	712	51.18	2.0	KAF77	4
31	628	45.16	2.3		
35	557	40.04	2.6		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
2.2kW					
40	490	35.20	3.0	K 77	4
46	430	30.89	3.4	KF 77	4
49	407	29.27	3.6	KA 77	4
55	356	25.62	4.1	KAF77	4
23	844	60.66	0.91		
25	797	57.28	0.97		
29	678	48.77	1.14		
32	616	44.32	1.25		
37	534	38.39	1.44		
40	495	35.62	1.56		
47	420	30.22	1.83		
52	379	27.28	2.0		
59	334	24.00	2.3	K 67	4
63	315	22.66	2.3	KF 67	4
74	268	19.30	2.7	KA 67	4
81	244	17.54	2.9	KAF67	4
93	211	15.19	3.1		
107	184	13.22	3.4		
116	170	12.24	2.9		
136	145	10.42	3.2		
150	132	9.47	3.4		
173	114	8.20	3.6		
199	99	7.14	4.0		
32	618	44.43	0.91		
37	535	38.49	1.05		
40	497	35.70	1.14		
47	421	30.28	1.34		
52	380	27.34	1.48	K 57	4
59	334	24.05	1.69	KF 57	4
63	316	22.71	1.79	KA 57	4
73	269	19.34	2.0	KAF57	4
81	244	17.57	2.1		
93	212	15.22	2.4		
107	184	13.25	2.3		
119	166	11.92	2.4		
126	157	11.26	2.5		
55	360	25.91	1.04		
65	303	21.81	1.24		
73	272	19.58	1.38	K 47	4
84	234	16.86	1.52	KF 47	4
90	221	15.86	1.62	KA 47	4
104	190	13.65	1.78	KAF47	4
116	170	12.19	1.94		
121	164	11.77	1.61		
134	147	10.56	1.79		
156	127	9.10	2.1		
109	182	13.08	0.85		
135	146	10.49	1.03	K 37	4
159	124	8.91	1.21	KF 37	4
178	111	7.96	1.32	KA 37	4
209	95	6.80	1.49	KAF37	4
223	89	6.37	1.54		
265	75	5.36	1.77		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
3.0kW					
0.46	54983	3062	0.85		
0.5	50602	2818	0.93		
0.56	45233	2519	1.04		
0.63	40726	2268	1.15	K 187R97	4
0.69	36883	2054	1.27	KA 187R97	4
0.78	32699	1821	1.44		
0.88	28820	1605	1.63		
1.0	25050	1395	1.88		
1.2	21476	1196	2.2		
0.84	30490	1698	0.99		
1.0	25175	1402	1.2		
1.1	23182	1291	1.3	K 167R97	4
1.3	19770	1101	1.52	KF 167R97	4
1.5	16951	944	1.77	KA 167R97	4
1.7	15137	843	1.99	KAF167R97	4
1.9	13593	757	2.2		
1.2	22069	1229	0.77		
1.3	19627	1093	0.86		
1.5	16915	942	1.00	K 157R97	4
1.7	15335	854	1.10	KF 157R97	4
1.9	13575	756	1.25	KA 157R97	4
2.5	10146	565	1.67	KAF157R97	4
2.8	9032	503	1.87		
2.6	9625	536	1.27		
3.0	8494	473	1.44	K 127R87	4
3.4	7506	418	1.63	KF 127R87	4
3.9	6590	367	1.85	KA 127R87	4
4.3	5926	330	2.1	KAF127R87	4
4.9	5207	290	2.3		
1.8	14186	790	0.86		
2.1	12390	690	0.99	K 127R77	4
2.4	10756	599	1.14	KF 127R77	4
2.6	9679	539	1.26	KA 127R77	4
3.0	8404	468	1.45	KAF127R77	4
3.5	7362	410	1.66		
3.1	8170	455	0.92		
3.5	7219	402	1.04		
4.0	6303	351	1.19		
4.6	5513	307	1.36	K 107R77	4
5.1	4974	277	1.51	KF 107R77	4
5.8	4363	243	1.72	KA 107R77	4
6.6	3861	215	1.95	KAF107R77	4
7.5	3394	189	2.2		
8.5	3017	168	2.5		
9.5	2676	149	2.8		
10	2496	139	3.0		
5.5	4893	258	0.83	K 97R57	4
6.1	4400	232	0.92	KF 97R57	4
7.1	3774	199	1.07	KA 97R57	4
				KAF97R57	4
5.0	5366	141.46	1.40		
5.9	4543	119.76	1.66	K 107	8
6.4	4204	110.83	1.79	KF 107	8
7.1	3768	99.34	2.0	KA 107	8
7.9	3402	89.68	2.2	KAF107	8
6.8	3968	141.46	1.9	K 107	6
8.0	3360	119.76	2.2	KF 107	6
8.7	3109	110.83	2.4	KA 107	6
9.7	2787	99.34	2.7	KAF107	6

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
3.0kW					
				K 107	4
10	2692	141.93	2.8	KF 107	4
12	2268	119.58	3.3	KA 107	4
				KAF107	4
7.7	3496	124.61	1.16	K 97	6
9.3	2911	103.78	1.39	KF 97	6
9.9	2716	96.80	1.49	KA 97	6
11	2427	86.52	1.67	KAF97	6
8.1	3328	175.47	1.21		
9.3	2889	152.31	1.40		
10	2660	140.28	1.52		
11	2363	124.61	1.71		
14	1968	103.78	2.05	K 97	4
15	1836	96.80	2.20	KF 97	4
16	1646	86.52	2.46	KA 97	4
18	1477	77.89	2.74	KAF97	4
20	1338	70.54	3.02		
23	1186	62.55	3.41		
25	1072	56.55	3.77		
9.6	2790	147.09	0.91		
11	2403	126.68	1.06		
12	2184	115.16	1.16		
14	1948	102.71	1.30		
16	1637	86.34	1.55	K 87	4
18	1505	79.34	1.69	KF 87	4
20	1336	70.46	1.90	KA 87	4
23	1195	63.00	2.1	KAF87	4
25	1074	56.64	2.4		
29	932	49.16	2.7		
32	835	44.02	2.9		
39	693	36.52	3.4		
16	1687	88.97	0.86		
18	1481	78.07	0.98		
19	1403	73.99	1.04		
22	1228	64.75	1.19	K 77	4
24	1106	58.34	1.32	KF 77	4
28	971	51.18	1.50	KA 77	4
31	856	45.16	1.70	KAF77	4
35	759	40.04	1.92		
40	668	35.20	2.2		
46	586	30.89	2.5		
32	841	44.32	0.92		
37	728	38.39	1.06		
40	676	35.62	1.14		
47	573	30.22	1.34		
52	517	27.28	1.49		
59	455	24.00	1.65	K 67	4
63	430	22.66	1.71	KF 67	4
74	366	19.30	1.95	KA 67	4
81	333	17.54	2.1	KAF67	4
93	288	15.19	2.3		
107	251	13.22	2.5		
116	232	12.24	2.1		
136	198	10.42	2.4		
150	180	9.47	2.5		
47	574	30.28	0.98		
52	519	27.34	1.09	K 57	4
59	456	24.05	1.24	KF 57	4
63	431	22.71	1.31	KA 57	4
73	367	19.34	1.47	KAF57	4
81	333	17.57	1.57		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
3.0kW					
93	289	15.22	1.74	K 57	4
107	251	13.25	1.9	KF 57	4
119	226	11.92	1.7	KA 57	4
126	214	11.26	1.8	KAF57	4
148	182	9.59	2.1		
163	165	8.71	2.2		
188	143	7.55	2.4		
216	125	6.57	2.6		
73	371	19.58	1.01	K 47	4
84	320	16.86	1.12	KF 47	4
90	301	15.86	1.19	KA 47	4
104	259	13.65	1.31	KAF47	4
116	231	12.19	1.42		
121	223	11.77	1.18		
134	200	10.56	1.31		
156	173	9.1	1.53		
166	162	8.56	1.56		
193	140	7.36	1.68		
216	125	6.58	1.81		
244	110	5.81	1.96		
159	169	8.91	0.89	K 37	4
178	151	7.96	0.97	KF 37	4
209	129	6.8	1.09	KA 37	4
223	121	6.37	1.13	KAF37	4
265	102	5.36	1.29		
4.0kW					
1.7	19697	825	2.4	K 187R107	4
2.8	12272	514	3.8	KA 187R107	4
0.57	59473	2510	0.79	K 187R97	4
0.63	53547	2268	0.88	KA 187R97	4
0.70	48494	2054	0.97		
0.79	42993	1821	1.09		
0.90	37894	1605	1.24		
1.0	32936	1395	1.43		
1.2	28237	1196	1.66		
1.4	24696	1046	1.90		
1.5	22240	942	2.1		
1.0	33101	1402	0.91	K 167R97	4
1.1	30480	1291	0.99	KA 167R97	4
1.3	25994	1101	1.16		
1.5	22288	944	1.35		
1.7	19903	843	1.51		
1.9	17873	757	1.68		
2.3	14874	630	2.0		
1.7	20163	854	0.84	K 157R97	4
1.9	17849	756	0.95	KF 157R97	4
2.5	13339	565	1.27	KA 157R97	4
2.9	11876	503	1.42	KAF157R97	4
3.3	10223	433	1.66		
2.7	12655	536	0.97	K 127R87	4
3.0	11167	473	1.09	KF 127R87	4
3.4	9869	418	1.24	KA 127R87	4
3.9	8665	367	1.41	KAF127R87	4
4.3	7901	330	1.55		
4.9	6943	290	1.76		
5.6	6057	253	2.0		
2.4	14341	599	0.85	K 127R77	4
2.6	12905	539	0.95	KF 127R77	4
3.0	11205	468	1.09	KA 127R77	4
3.5	9816	410	1.24	KAF127R77	4

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
4.0kW					
4.0	8404	351	0.89	K 107R77	4
4.6	7350	307	1.02	KF 107R77	4
5.1	6632	277	1.13	KA 107R77	4
5.8	5818	243	1.29	KAF107R77	4
6.6	5148	215	1.46		
7.5	4525	189	1.66		
8.5	4022	168	1.68		
9.5	3567	149	1.9		
11	3232	135	2.1		
7.1	5032	199	0.80	K 97R57	4
				KF 97R57	4
				KA 97R57	4
				KAF97R57	4
5.3	6825	134.94	1.8	K 127	8
5.8	6202	122.60	2.0	KF 127	8
6.4	5570	110.13	2.2	KA 127	8
				KAF127	8
6.6	5464	146.07	2.2	K 127	6
7.1	5047	134.94	2.4	KF 127	6
7.8	4587	122.60	2.7	KA 127	6
8.7	4119	110.13	3.0	KAF127	6
6.4	5605	110.83	1.34	K 107	8
7.1	5024	99.34	1.50	KF 107	8
7.9	4536	89.68	1.66	KA 107	8
8.7	4120	81.46	1.83	KAF107	8
6.8	5309	141.93	1.42	K 107	6
8.0	4473	119.58	1.68	KF 107	6
8.7	4146	110.83	1.81	KA 107	6
9.7	3716	99.34	2.0	KAF107	6
11	3354	89.68	2.2		
10	3527	141.46	2.1	K 107	4
12	2986	119.76	2.5	KF 107	4
13	2764	110.83	2.7	KA 107	4
14	2477	99.34	3.0	KAF107	4
16	2236	89.68	3.4		
18	2031	81.46	3.7		
20	1802	72.27	4.2		
10	3498	140.28	1.16	K 97	4
12	3107	124.61	1.30	KF 97	4
14	2588	103.78	1.56	KA 97	4
15	2414	96.80	1.67	KAF97	4
17	2157	86.52	1.87		
18	1942	77.89	2.1		
20	1759	70.54	2.3		
13	2872	115.16	0.88	K 87	4
14	2561	102.71	0.99	KF 87	4
17	2153	86.34	1.18	KA 87	4
18	1978	79.34	1.28	KAF87	4
20	1757	70.46	1.44		
23	1571	63.00	1.62		
25	1412	56.64	1.80		
29	1226	49.16	2.1		
33	1098	44.02	2.3		
39	911	36.52	2.8		

Output speed	Output torque	Ratio	Service factor	Type	Pole
r/min	Nm	i	f_B	Type	p
4.0kW					
22	1615	64.75	0.90		
25	1455	58.34	1.00		
28	1276	51.18	1.14		
32	1126	45.16	1.29	K 77	4
36	998	40.04	1.46	KF 77	4
38	957	38.39	1.52	KA 77	4
41	878	35.20	1.66	KAF77	4
47	770	30.89	1.89		
49	730	29.27	2.0		
56	639	25.62	2.3		
62	576	23.08	2.5		
71	505	20.25	2.9		
48	754	30.22	1.02		
53	680	27.28	1.13		
60	598	24.00	1.26		
64	565	22.66	1.30		
75	481	19.30	1.48	K 67	4
82	437	17.54	1.59	KF 67	4
95	379	15.19	1.74	KA 67	4
109	330	13.22	1.91	KAF67	4
118	305	12.24	1.63		
138	260	10.42	1.81		
152	236	9.47	1.91		
176	204	8.20	2.02		
202	178	7.14	2.2		
60	600	24.05	0.94		
63	566	22.71	1.00		
74	482	19.34	1.12		
82	438	17.57	1.19		
95	380	15.22	1.33	K 57	4
109	330	13.25	1.45	KF 57	4
121	297	11.92	1.31	KA 57	4
128	281	11.26	1.39	KAF57	4
150	239	9.59	1.59		
165	217	8.71	1.69		
191	188	7.55	1.82		
219	164	6.57	1.98		
5.5kW					
0.79	59116	1821	0.80		
0.90	52104	1605	0.90		
1.0	45286	1395	1.04	K 187R97	4
1.2	38826	1196	1.21	KA 187R97	4
1.4	33957	1046	1.38		
1.5	30580	942	1.54		
2.0	23926	737	2.0		
2.3	20095	619	2.3		
1.31	35742	1101	0.84		
1.5	30645	944	0.98		
1.7	27367	843	1.10		
1.9	24575	757	1.22	K 167R97	4
2.3	20452	630	1.47	KA 167R97	4
2.6	18212	561	1.65		
3.0	15550	479	1.93		
3.4	13700	422	2.2		
2.2	21458	661	0.79		
2.5	18342	565	0.92	K 157R97	4
2.9	16329	503	1.04	KF 157R97	4
3.3	14057	433	1.20	KA 157R97	4
3.8	12271	378	1.38	KAF157R97	4
4.3	10778	332	1.57		

Output speed	Output torque	Ratio	Service factor	Type	Pole
r/min	Nm	i	f_B	Type	p
5.5kW					
3.4	13570	418	0.90		
3.9	11914	367	1.03		
4.4	10713	330	1.14	K 127R87	4
5.0	9414	290	1.30	KF 127R87	4
5.7	8213	253	1.49	KA 127R87	4
6.7	6980	215	1.75	KAF127R87	4
7.1	6590	203	1.71		
8.6	5454	168	2.1		
9.7	4805	148	2.3		
6.7	6980	215	1.08		
7.6	6136	189	1.23	K 107R77	4
8.6	5454	168	1.38	KF 107R77	4
9.7	4837	149	1.55	KA 107R77	4
11	4383	135	1.72	KAF107R77	4
4.8	10288	150.03	1.64	K 157	8
5.9	8423	122.83	2.0	KF 157	8
7.2	6833	99.65	2.5	KA 157	8
7.8	6338	92.42	2.7	KAF157	8
5.3	9253	134.94	1.3	K 127	8
5.9	8399	122.60	1.5	KF 127	8
6.5	7556	110.13	1.6	KA 127	8
8.1	6143	89.43	2.0	KAF127	8
7.1	6940	134.94	1.76	K 127	6
7.8	6299	122.60	1.94	KF 127	6
8.7	5667	110.13	2.2	KA 127	6
11	4599	89.43	2.7	KAF127	6
8.7	5700	110.83	1.32	K 107	6
9.7	5109	99.34	1.47	KF 107	6
11	4612	89.68	1.63	KA 107	6
12	4190	81.46	1.79	KAF107	6
10	4866	141.93	1.55		
12	4100	119.58	1.83	K 107	4
13	3800	110.83	1.98	KF 107	4
14	3406	99.34	2.2	KA 107	4
16	3075	89.68	2.4	KAF107	4
18	2793	81.46	2.7		
12	4273	124.61	0.95		
14	3558	103.78	1.1		
15	3319	96.80	1.2	K 97	4
17	2967	86.52	1.35	KF 97	4
18	2671	77.89	1.5	KA 97	4
20	2419	70.54	1.65	KAF97	4
23	2145	62.55	1.85		
25	1939	56.55	2.1		
30	1643	47.93	2.4		
17	2960	86.34	0.85		
18	2720	79.34	0.95		
20	2416	70.46	1.05		
23	2160	63.00	1.15	K 87	4
25	1942	56.64	1.3	KF 87	4
29	1686	49.16	1.5	KA 87	4
33	1509	44.02	1.6	KAF87	4
39	1252	36.52	1.85		
46	1076	31.39	2.3		
52	956	27.88	2.5		
32	1548	45.16	0.94		
36	1373	40.04	1.06	K 77	4
47	1059	30.89	1.38	KF 77	4
49	1004	29.27	1.45	KA 77	4
56	878	25.62	1.66	KAF77	4

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
5.5kW					
62	791	23.08	1.84		
71	694	20.25	2.0		
81	613	17.87	2.2	K 77	4
91	543	15.84	2.4	KF 77	4
107	464	13.52	2.5	KA 77	4
117	424	12.36	2.6	KAF77	4
133	371	10.81	2.7		
60	823	24.00	0.91		
64	777	22.66	0.94		
75	662	19.30	1.08		
82	601	17.54	1.16		
95	521	15.19	1.26	K 67	4
109	453	13.22	1.39	KF 67	4
118	420	12.24	1.39	KA 67	4
138	357	10.42	1.32	KAF67	4
152	325	9.47	1.39		
176	281	8.20	1.47		
202	245	7.14	1.61		
82	602	17.57	0.87		
95	522	15.22	0.96		
109	454	13.25	0.97	K 57	4
121	409	11.92	1.01	KF 57	4
128	386	11.26	1.06	KA 57	4
150	329	9.59	1.16	KAF57	4
165	299	8.71	1.23		
191	259	7.55	1.33		
219	225	6.57	1.44		
7.5kW					
1.8	36021	825	1.30	K 187R107	4
2.0	31437	720	1.50	KA 187R107	4
2.4	26808	614	1.75		
1.2	52220	1196	0.90		
1.4	45670	1046	1.03		
1.5	41129	942	1.14	K 187R97	4
2.0	32179	737	1.46	KA 187R97	4
2.4	27027	619	1.74		
2.8	22879	524	2.1		
1.7	36807	843	0.82		
1.9	33052	757	0.91	K 167R97	4
2.3	27507	630	1.09	KF 167R97	4
2.6	24494	561	1.23	KA 167R97	4
3.0	20914	479	1.44	KAF167R97	4
3.5	18425	422	1.63		
4.0	16024	367	1.88		
3.4	18906	433	0.89	K 157R97	4
3.9	16504	378	1.03	KF 157R97	4
4.4	14496	332	1.17	KA 157R97	4
5.0	12662	290	1.34	KAF157R97	4
4.4	14408	330	0.85		
5.0	12662	290	0.97	K 127R87	4
5.8	11046	253	1.11	KF 127R87	4
6.8	9387	215	1.30	KA 127R87	4
7.2	8863	203	1.38	KAF127R87	4
8.7	7335	168	1.67		
9.9	6462	148	1.89		
4.4	15382	164.44	2.0	K 167	8
5.3	12623	135.38	2.4	KA 167	8
5.8	11537	164.44	2.61	K 167	6
7.1	9467	135.38	3.18	KA 167	6

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
7.5kW					
6.4	10522	150.03	1.6		
7.8	8614	122.83	2.0	K 157	6
9.6	6989	99.65	2.4	KF 157	6
10	6482	92.42	2.6	KA 157	6
12	5593	79.75	3.0	KAF157	6
7.1	9464	134.94	1.29	K 127	6
7.8	8590	122.48	1.42	KF 127	6
8.7	7727	110.18	1.58	KA 127	6
11	6272	89.43	1.95	KAF127	6
10	6736	146.07	1.81		
11	6223	134.94	1.96		
12	5648	122.60	2.2	K 127	4
13	5081	110.13	2.4	KF 127	4
16	4124	89.43	3.0	KA 127	4
18	3805	82.52	3.2	KAF127	4
21	3272	70.95	3.7		
10	6545	141.93	1.15		
12	5514	119.58	1.36		
13	5111	110.83	1.47		
15	4581	99.34	1.64		
16	4136	89.68	1.82	K 107	4
18	3757	81.46	2.00	KF 107	4
20	3333	72.27	2.3	KA 107	4
22	3024	65.58	2.5	KAF107	4
26	2599	56.37	2.9		
30	2269	49.20	3.2		
35	1925	41.74	3.6		
40	1682	36.48	4.0		
15	4464	96.80	0.91		
17	3990	86.52	1.01		
19	3592	77.89	1.13		
21	3253	70.54	1.24	K 97	4
23	2884	62.55	1.40	KF 97	4
26	2608	56.55	1.55	KA 97	4
30	2210	47.93	1.83	KAF97	4
35	1931	41.87	2.1		
38	1766	38.30	2.3		
43	1579	34.23	2.6		
23	2905	63.00	0.87		
26	2612	56.64	0.97		
30	2267	49.16	1.12		
33	2030	44.02	1.20		
40	1684	36.52	1.40		
47	1448	31.39	1.75	K 87	4
52	1286	27.88	1.90	KF 87	4
59	1149	24.92	2.0	KA 87	4
65	1033	22.41	2.1	KAF87	4
75	897	19.45	2.4		
84	803	17.42	2.6		
92	736	15.95	2.3		
101	666	14.45	3.0		
47	1424	30.89	1.02		
50	1350	29.27	1.08		
57	1181	25.62	1.23		
63	1064	23.08	1.37		
72	934	20.25	1.56	K 77	4
82	824	17.87	1.65	KF 77	4
92	730	15.84	1.80	KA 77	4
108	623	13.52	1.82	KAF77	4
118	570	12.36	1.89		
135	499	10.81	1.95		
153	440	9.54	2.0		
173	390	8.46	2.1		
202	333	7.22	2.3		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
11kW					
1.8	52831	825	0.89		
2.0	46107	720	1.02	K 187R107	4
2.4	39319	614	1.20	KA 187R107	4
2.8	32915	514	1.43		
3.3	28753	449	1.63		
4.0	23374	365	2.0		
2.0	47196	737	1.00	K 187R97	4
2.4	39639	619	1.19	KA 187R97	4
2.8	33556	524	1.40		
4.7	20044	313	1.50		
5.3	17482	273	1.72	K 167R107	4
5.8	16009	250	1.88	KA 167R107	4
6.7	13960	218	2.2		
7.2	13000	203	2.3		
2.6	35925	561	0.84		
3.0	30674	479	0.98	K 167R97	4
3.5	27024	422	1.11	KA 167R97	4
4.0	23502	367	1.28		
				K 157R97	4
4.4	21260	332	0.80	KF 157R97	4
5.0	18571	290	0.91	KA 157R97	4
				KAF157R97	4
6.8	13768	215	0.89	K 127R87	4
7.2	13000	203	0.94	KF 127R87	4
8.7	10758	168	1.14	KA 127R87	4
9.9	9478	148	1.29	KAF127R87	4
5.4	18313	135.38	1.64	K 167	8
6.6	14932	110.38	2.0	KA 167	8
5.9	16740	164.44	1.80	K 167	6
7.2	13782	135.38	2.2	KA 167	6
8.9	11122	164.44	2.7	K 167	4
11	9158	135.38	3.3	KA 167	4
5.9	16615	122.83	1.02	K 157	8
7.3	13480	99.65	1.26	KF 157	8
7.9	12502	92.42	1.35	KA 157	8
9.1	10788	79.75	1.57	KAF157	8
6.5	15273	150.03	1.11	K 157	6
7.9	12504	122.83	1.35	KF 157	6
9.7	10144	99.65	1.67	KA 157	6
10	9408	92.42	1.80	KAF157	6
12	8119	79.75	2.1		
9.7	10147	150.03	1.67	K 157	4
12	8308	122.83	2.0	KF 157	4
15	6740	99.65	2.5	KA 157	4
16	6251	92.42	2.7	KAF157	4
11	9127	134.94	1.34		
12	8295	122.60	1.47	K 127	4
13	7449	110.13	1.64	KF 127	4
16	6049	89.43	2.0	KA 127	4
18	5581	82.52	2.2	KAF127	4
21	4799	70.95	2.5		
13	7496	110.83	1.00	K 107	4
15	6719	99.34	1.12	KF 107	4
16	6066	89.68	1.24	KA 107	4
18	5510	81.46	1.36	KAF107	4

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
11kW					
20	4888	72.27	1.54		
22	4435	65.58	1.70	K 107	4
26	3813	56.37	1.97	KF 107	4
30	3328	49.2	2.2	KA 107	4
35	2823	41.74	2.5	KAF107	4
40	2467	36.48	2.7		
21	4771	70.54	0.85		
23	4231	62.55	0.96		
26	3825	56.55	1.06		
30	3242	47.93	1.25	K 97	4
35	2832	41.87	1.43	KF 97	4
38	2590	38.3	1.56	KA 97	4
43	2315	34.23	1.75	KAF97	4
47	2085	30.82	1.94		
52	1888	27.91	2.1		
59	1674	24.75	2.4		
65	1513	22.37	2.7		
33	2977	44.02	0.82		
40	2470	36.52	0.95		
47	2123	31.39	1.20		
52	1886	27.88	1.30		
59	1685	24.92	1.39		
65	1516	22.41	1.43	K 87	4
75	1315	19.45	1.64	KF 87	4
84	1178	17.42	1.76	KA 87	4
92	1079	15.95	1.57	KAF87	4
101	977	14.45	1.9		
116	849	12.56	2.0		
131	753	11.13	2.1		
147	674	9.96	2.2		
177	559	8.27	2.4		
203	486	7.19	2.5		
63	1561	23.08	0.93		
72	1370	20.25	1.03		
82	1209	17.87	1.13		
92	1071	15.84	1.23	K 77	4
108	914	13.52	1.38	KF 77	4
118	836	12.36	1.12	KA 77	4
135	731	10.81	1.27	KAF77	4
153	645	9.54	1.37		
173	572	8.46	1.46		
202	488	7.22	1.57		
15kW					
2.4	53617	614	0.88		
2.8	44884	514	1.05	K 187R107	4
3.3	39208	449	1.20	KA 187R107	4
4.0	31873	365	1.47		
5.4	23403	268	2.0		
4.7	27332	313	1.10		
5.3	23839	273	1.26		
5.8	21831	250	1.38		
6.7	19037	218	1.58	K 167R107	4
7.2	17727	203	1.70	KA 167R107	4
7.9	16155	185	1.86		
9.0	14234	163	2.1		
6.2	20696	237	0.82		
7.0	18338	210	0.92	K 157R107	4
7.9	16068	184	1.05	KF 157R107	4
9.4	13535	155	1.25	KA 157R107	4
12	11003	126	1.54	KAF157R107	4
13	9606	110	1.76		

K

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
15kW					
5.4	25096	180.78	1.87	K 187	6
6.0	22285	160.53	2.1	KA 187	6
7.2	18793	135.38	1.60	K 167	6
8.8	15324	110.39	1.96	KA 167	6
8.9	15166	164.44	1.12	K 167	4
11	12486	135.38	1.36	KA 167	4
7.9	16990	122.39	1.00	K 157	6
9.7	13833	99.65	1.22	KF 157	6
10	12830	92.42	1.32	KA 157	6
12	11071	79.75	1.53	KAF157	6
14	9770	70.35	1.73		
9.7	13837	150.03	1.22	K 157	4
12	11329	122.83	1.49	KF 157	4
15	9191	99.65	1.84	KA 157	4
16	8524	92.42	2.0	KAF157	4
18	7355	79.75	2.3		
11	12445	134.94	0.97	K 127	4
12	11307	122.60	1.08	KF 127	4
13	10157	110.13	1.20	KA 127	4
16	8248	89.43	1.48	KAF127	4
18	7611	82.52	1.61		
21	6544	70.95	1.87		
23	5774	62.60	2.1		
27	4987	54.07	2.5		
31	4410	47.82	2.8		
16	8271	89.68	0.91	K 107	4
18	7513	81.46	1.00	KF 107	4
20	6665	72.27	1.13	KA 107	4
22	6048	65.58	1.24	KAF107	4
26	5199	56.37	1.45		
30	4538	49.2	1.62		
35	3850	41.74	1.80		
40	3365	36.48	2.0		
45	2972	32.22	2.2		
47	2844	30.84	2.3		
51	2637	28.59	2.6		
30	4421	47.93	0.91	K 97	4
35	3862	41.87	1.05	KF 97	4
38	3532	38.3	1.14	KA 97	4
43	3157	34.23	1.28	KAF97	4
47	2843	30.82	1.42		
52	2574	27.91	1.57		
59	2283	24.75	1.77		
65	2063	22.37	1.96		
77	1749	18.96	2.3		
88	1527	16.56	2.6		
47	2895	31.39	0.88	K 87	4
52	2571	27.88	0.99	KF 87	4
59	2298	24.92	1.10	KA 87	4
65	2067	22.41	1.23	KAF87	4
75	1794	19.45	1.37		
84	1607	17.42	1.41		
92	1471	15.95	1.48		
101	1333	14.45	1.5		
116	1158	12.56	1.53		
131	1027	11.13	1.58		
147	919	9.96	1.73		
177	763	8.27	1.84		
203	663	7.19	2.2		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
18.5kW					
2.9	54981	514	0.85		
3.3	48028	449	0.98	K 187R107	4
4.0	39043	365	1.20	KA 187R107	4
5.5	28667	268	1.64		
6.5	24281	227	1.9		
4.7	33481	313	0.90		
5.4	29202	273	1.03		
5.9	26742	250	1.12		
6.7	23319	218	1.29	K 167R107	4
7.2	21714	203	1.39	KA 167R107	4
7.9	19789	185	1.52		
9.0	17436	163	1.73		
11	14868	139	2.0		
12	12943	121	2.3		
8.0	19682	184	0.86	K 157R107	4
9.5	16580	155	1.02	KF 157R107	4
12	13478	126	1.26	KA 157R107	4
13	11766	110	1.44	KAF157R107	4
5.4	30951	180.78	1.52		
6.0	27484	160.53	1.71	K 187	6
6.7	24745	144.53	1.9	KA 187	6
7.4	22317	130.35	2.1		
8.1	20424	180.78	2.3		
9.2	18136	160.53	2.6	K 187	4
10	16328	144.53	2.9	KA 187	4
11	14726	130.35	3.2		
11	15195	134.5	1.98	K 167	4
13	12471	110.39	2.4	KA 167	4
17	9851	87.20	3.1		
10	17061	99.65	0.99	K 157	6
11	15823	92.42	1.08	KF 157	6
12	13654	79.75	1.24	KA 157	6
14	12050	70.38	1.4	KAF157	6
12	13827	122.39	1.22		
15	11258	99.65	1.50		
16	10441	92.42	1.62	K 157	4
18	9010	79.75	1.88	KF 157	4
21	7951	70.38	2.1	KA 157	4
24	6894	61.02	2.5	KAF157	4
27	6133	54.29	2.8		
31	5286	46.79	3.2		
39	4295	38.02	3.9		
13	12442	110.13	0.98		
16	10103	89.43	1.21		
18	9323	82.52	1.31		
21	8016	70.95	1.52	K 127	4
23	7072	62.60	1.73	KF 127	4
27	6109	54.07	2.0	KA 127	4
31	5403	47.82	2.3	KAF127	4
37	4540	40.19	2.7		
41	4121	36.48	3.0		
47	3544	31.36	3.4		
53	3127	27.67	3.9		
20	8165	72.27	0.92		
22	7409	65.58	1.01	K 107	4
26	6368	56.37	1.18	KF 107	4
30	5558	49.2	1.35	KA 107	4
35	4716	41.74	1.47	KAF107	4
40	4121	36.48	1.64		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
18.5kW					
46	3640	32.22	1.86		
48	3484	30.84	1.88	K 107	4
51	3230	28.59	2.1	KF 107	4
57	2931	25.94	2.3	KA 107	4
66	2519	22.30	2.7	KAF107	4
76	2199	19.46	3.1		
89	1865	16.51	3.6		
35	4730	41.87	0.85		
48	3482	30.82	1.16		
53	3153	27.91	1.28	K 97	4
59	2796	24.75	1.45	KF 97	4
66	2527	22.37	1.60	KA 97	4
78	2142	18.96	1.9	KAF97	4
89	1871	16.56	2.2		
106	1565	13.85	2.6		
123	1355	11.99	2.7		
59	2815	24.92	0.83		
66	2532	22.41	0.85		
76	2197	19.45	0.98		
84	1968	17.42	1.05	K 87	4
102	1633	14.45	1.12	KF 87	4
117	1419	12.56	1.21	KA 87	4
132	1257	11.13	1.25	KAF87	4
148	1125	9.96	1.32		
178	934	8.27	1.41		
204	812	7.19	1.50		
22kW					
3.3	57114	449	0.82		
4.0	46429	365	1.01		
5.5	34091	268	1.38	K 187R107	4
6.5	28875	227	1.63	KA 187R107	4
7.4	25313	199	1.86		
8.8	21370	168	2.2		
5.4	34727	273	0.87		
5.9	31801	250	0.95		
6.7	27730	218	1.08	K 167R107	4
7.2	25822	203	1.16	KA 167R107	4
7.9	23533	185	1.28		
9.0	20734	163	1.45		
11	17681	139	1.70		
12	15392	121	2.0		
9.5	19717	155	0.86	K 157R107	4
12	16028	126	1.06	KF 157R107	4
13	13992	110	1.21	KA 157R107	4
				KAF157R107	4
5.4	36807	180.78	1.28		
6.0	32684	160.53	1.44	K 187	6
6.7	29427	144.53	1.60	KA 187	6
7.4	26540	130.35	1.77		
8.6	23044	113.18	2.0		
8.1	24288	180.78	1.94		
9.2	21567	160.53	2.2	K 187	4
10	19418	144.53	2.4	KA 187	4
11	17512	130.35	2.7		
11	18070	134.5	1.66		
13	14831	110.39	2.0	K 167	4
17	11715	87.20	2.6	KA 167	4
19	10460	77.86	2.9		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
22kW					
9.7	20289	99.65	0.83	K 157	6
11	18817	92.42	0.90	KF 157	6
12	16237	79.75	1.04	KA 157	6
14	14330	70.38	1.18	KAF157	6
16	12424	61.02	1.36		
12	16502	122.83	1.03		
15	13388	99.65	1.26		
16	12417	92.42	1.36		
18	10714	79.75	1.58	K 157	4
21	9456	70.38	1.79	KF 157	4
24	8198	61.02	2.1	KA 157	4
27	7294	54.29	2.3	KAF157	4
31	6286	46.79	2.7		
39	5108	38.02	3.3		
16	12015	89.43	1.02		
18	11087	82.52	1.10		
21	9532	70.95	1.28		
23	8410	62.60	1.45		
27	7264	54.07	1.68	K 127	4
31	6425	47.82	1.90	KF 127	4
37	5400	40.19	2.3	KA 127	4
40	4901	36.48	2.5	KAF127	4
47	4215	31.36	2.9		
53	3719	27.67	3.3		
61	3212	23.90	3.8		
70	2841	21.14	4.3		
26	7573	56.37	0.99		
30	6610	49.20	1.11		
35	5608	41.74	1.23		
40	4901	36.48	1.38		
46	4329	32.22	1.56		
48	4143	30.84	1.54	K 107	4
51	3841	28.59	1.76	KF 107	4
57	3485	25.94	1.94	KA 107	4
66	2996	22.30	2.2	KAF107	4
76	2614	19.46	2.3		
89	2218	16.51	2.6		
102	1939	14.43	2.6		
109	1815	13.51	2.9		
125	1584	11.79	3.0		
147	1343	10	3.3		
48	4141	30.82	0.98		
53	3750	27.91	1.08		
59	3325	24.75	1.22		
66	3005	22.37	1.34	K 97	4
78	2547	18.96	1.59	KF 97	4
89	2225	16.56	1.82	KA 97	4
106	1861	13.85	1.87	KAF97	4
123	1611	11.99	2.1		
137	1439	10.71	2.2		
164	1202	8.95	2.3		
76	2613	19.45	0.83		
84	2340	17.42	0.88		
102	1941	14.45	0.94	K 87	4
117	1687	12.56	1.02	KF 87	4
132	1495	11.13	1.05	KA 87	4
148	1338	9.96	1.11	KAF87	4
178	1111	8.27	1.18		
204	966	7.19	1.27		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
30kW					
5.5	49099	268	0.96	K 187R107	4
6.5	41587	227	1.13	KA 187R107	4
7.4	36458	199	1.29		
8.8	30778	168	1.5		
6.7	39938	218	0.75		
7.2	37190	203	0.81		
7.9	33893	185	0.89	K 167R107	4
9.0	29862	163	1.01	KA 167R107	4
11	25465	139	1.18		
12	22168	121	1.36		
8.1	33120	180.78	1.42		
8.9	30423	166.06	1.54		
10	26478	144.53	1.78	K 187	4
11	23996	130.98	1.96	KA 187	4
13	20735	113.18	2.3		
14	18813	102.69	2.5		
17	16206	88.46	2.9		
13	20048	109.43	1.50		
17	15975	87.20	1.88	K 167	4
19	14554	79.44	2.1	KA 167	4
22	12427	67.83	2.4		
24	11088	60.52	2.7		
15	18256	99.65	0.93		
16	16932	92.42	1.00		
18	14611	79.75	1.16		
21	12894	70.38	1.31	K 157	4
24	11179	61.02	1.51	KF 157	4
27	9946	54.29	1.70	KA 157	4
31	8572	46.79	1.97	KAF157	4
39	6965	38.02	2.4		
47	5734	31.30	3.0		
21	12998	70.95	0.94		
23	11469	62.60	1.07		
27	9906	54.07	1.23	K 127	4
31	8761	47.82	1.39	KF 127	4
37	7363	40.19	1.66	KA 127	4
40	6683	36.48	1.83	KAF127	4
47	5747	31.36	2.1		
53	5071	27.67	2.4		
61	4380	23.90	2.8		
35	7647	41.74	0.90		
40	6683	36.48	1.01		
46	5903	32.22	1.08		
51	5238	28.59	1.29		
57	4752	25.94	1.42	K 107	4
66	4085	22.30	1.63	KF 107	4
76	3565	19.46	1.66	KA 107	4
89	3025	16.51	1.87	KAF107	4
102	2644	14.43	1.90		
109	2475	13.51	2.15		
125	2160	11.79	2.19		
147	1832	10.00	2.39		
168	1601	8.74	2.45		
59	4534	24.75	0.89		
66	4098	22.37	0.99		
78	3474	18.96	1.16	K 97	4
89	3034	16.56	1.33	KF 97	4
106	2537	13.85	1.59	KA 97	4
123	2197	11.99	1.66	KAF97	4
137	1962	10.71	1.37		
164	1640	8.95	1.52		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
37kW					
5.5	56947	268	0.83		
6.5	48235	227	0.97	K 187R107	4
7.4	42285	199	1.11	KA 187R107	4
8.8	35698	168	1.32		
8.0	39310	185	0.77		
9.1	34635	163	0.87	K 167R107	4
11	29536	139	1.02	KA 167R107	4
12	25711	121	1.17		
8.2	40572	180.78	1.16		
8.9	37268	166.06	1.26		
10	32436	144.53	1.45	K 187	4
11	29395	130.98	1.60	KA 187	4
13	25400	113.18	1.85		
14	23046	102.69	2.0		
17	19853	88.46	2.4		
14	24559	109.43	1.22		
17	19646	87.54	1.53		
19	17828	78.44	1.69	K 167	4
22	15301	68.18	2.0	KA 167	4
24	13582	60.52	2.2		
35	9592	42.74	3.1		
16	20741	92.42	0.82		
19	17898	79.75	0.95		
21	15795	70.38	1.07	K 157	4
24	13694	61.02	1.24	KF 157	4
27	12184	54.29	1.39	KA 157	4
32	10501	46.79	1.61	KAF157	4
39	8533	38.02	1.98		
47	7025	31.30	2.4		
24	14049	62.60	0.87		
27	12135	54.07	1.01		
31	10732	47.82	1.14		
37	9020	40.19	1.35		
41	8187	36.48	1.49		
47	7040	31.36	1.74	K 127	4
53	6212	27.67	1.97	KF 127	4
62	5366	23.90	2.3	KA 127	4
70	4747	21.14	2.6	KAF127	4
83	3988	17.77	2.8		
103	3220	14.35	3.1		
116	2870	12.78	3.1		
138	2410	10.74	3.5		
171	1948	8.68	3.5		
41	8187	36.48	0.83		
48	6921	30.84	0.92		
52	6416	28.59	1.05		
57	5822	25.94	1.16		
66	5005	22.3	1.33	K 107	4
76	4367	19.46	1.35	KF 107	4
90	3705	16.51	1.53	KA 107	4
103	3238	14.43	1.55	KAF107	4
110	3032	13.51	1.75		
126	2646	11.79	1.79		
148	2244	10.00	1.82		
169	1961	8.74	1.95		

Output speed	Output torque	Ratio	Service factor	Type	Pole
r/min	Nm	i	f_B	Type	p
45kW					
6.5	58664	227	0.80	K 187R107	4
7.4	51428	199	0.91	KA 187R107	4
8.8	43416	168	1.08		
11	35922	139	0.84	K 167R107	4
12	31270	121	0.96	KA 167R107	4
8.2	49344	180.78	0.95		
8.9	45326	166.06	1.04		
10	39449	144.53	1.19		
11	35751	130.98	1.31	K 187	4
13	30892	113.18	1.52	KA 187	4
14	28029	102.69	1.68		
17	24145	88.46	1.9		
20	20291	74.34	2.3		
14	29869	109.43	1.01		
17	23894	87.54	1.26		
19	21683	79.44	1.42	K 167	4
22	18610	68.18	1.62	KA 167	4
24	16519	60.52	1.82		
29	14079	51.58	2.1		
35	11666	42.74	2.6		
21	19210	70.38	0.88		
24	16655	61.02	1.02		
27	14818	54.29	1.14		
32	12771	46.79	1.32	K 157	4
39	10378	38.02	1.63	KF 157	4
47	8543	31.30	2.0	KA 157	4
54	7539	27.62	2.2	KAF157	4
62	6537	23.95	2.6		
69	5817	21.31	2.9		
81	5014	18.37	3.4		
31	13052	47.82	0.94		
37	10970	40.19	1.11		
41	9957	36.48	1.23		
47	8562	31.36	1.43		
53	7555	27.67	1.62	K 127	4
62	6526	23.90	1.87	KF 127	4
70	5773	21.14	2.1	KA 127	4
83	4850	17.77	2.3	KAF127	4
103	3917	14.35	2.5		
116	3491	12.78	2.6		
138	2931	10.74	2.8		
171	2369	8.68	2.9		
52	7804	28.59	0.87		
57	7080	25.94	0.96		
66	6087	22.30	1.10		
76	5312	19.46	1.11	K 107	4
90	4506	16.51	1.26	KF 107	4
103	3939	14.43	1.44	KA 107	4
110	3688	13.51	1.47	KAF107	4
126	3218	11.79	1.55		
148	2729	10.00	1.60		
169	2386	8.74	1.64		
55kW					
10	45904	145.33	1.02		
11	41371	130.98	1.14		
13	36261	114.80	1.30	K 187	4
14	32436	102.69	1.45	KA 187	4
17	29511	88.46	1.59		
20	24800	74.34	1.90		
23	21474	64.37	2.19		

Output speed	Output torque	Ratio	Service factor	Type	Pole
r/min	Nm	i	f_B	Type	p
55kW					
17	29204	87.54	1.03		
19	25974	77.86	1.16		
22	22745	68.18	1.32	K 167	4
24	20263	60.74	1.48	KA 167	4
29	17207	51.58	1.75		
35	14258	42.74	2.1		
41	12170	36.48	2.5		
24	20357	61.02	0.83		
27	18111	54.29	0.93		
32	15609	46.79	1.08		
39	12684	38.02	1.33		
47	10442	31.30	1.62	K 157	4
54	9214	27.62	1.84	KF 157	4
62	7990	23.95	2.1	KA 157	4
69	7109	21.31	2.4	KAF157	4
81	6128	18.37	2.8		
99	4977	14.92	3.4		
117	4220	12.65	3.8		
37	13408	40.19	0.91		
47	10465	31.36	1.17		
53	9234	27.67	1.32		
62	7976	23.90	1.53	K 127	4
70	7056	21.14	1.73	KF 127	4
83	5928	17.77	2.06	KA 127	4
103	4787	14.35	2.38	KAF127	4
116	4267	12.78	1.88		
138	3583	10.74	2.1		
171	2896	8.68	2.3		
75kW					
11	59298	130.35	0.79		
13	52224	114.80	0.90		
14	47016	103.35	1.00	K 187	4
17	40242	88.46	1.17	KA 187	4
20	33818	74.34	1.39		
23	29283	64.37	1.61		
28	24402	53.64	1.9		
32	20803	45.73	2.3		
19	35420	77.86	0.85		
22	30857	67.83	0.97		
24	27531	60.52	1.09		
29	23496	51.65	1.28		
34	19598	43.08	1.53	K 167	4
41	16595	36.48	1.81	KA 167	4
46	14616	32.13	2.1		
52	13042	28.67	2.3		
61	11114	24.43	2.7		
39	17296	38.02	0.98		
47	14239	31.30	1.19		
54	12565	27.62	1.35	K 157	4
62	10895	23.95	1.55	KF 157	4
69	9694	21.31	1.75	KA 157	4
81	8357	18.37	2.0	KAF157	4
99	6787	14.92	2.5		
117	5755	12.65	2.9		
47	14271	31.36	0.86		
53	12592	27.67	0.97		
62	10877	23.90	1.12	K 127	4
70	9621	21.14	1.27	KF 127	4
83	8084	17.77	1.36	KA 127	4
103	6528	14.35	1.51	KAF127	4
114	5900	12.78	1.54		
138	4886	10.74	1.72		
171	3949	8.68	1.74		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
90kW					
14	56058	102.69	0.84		
16	51134	93.67	0.92		
19	42242	77.38	1.11		
23	35139	64.37	1.34	K 187	4
28	29282	53.64	1.61	KA 187	4
31	26427	48.41	1.8		
34	23796	43.59	2.0		
38	21170	38.78	2.2		
22	37028	67.83	0.81		
24	33038	60.52	0.91		
29	28157	51.58	1.07		
35	23332	42.74	1.29		
40	19953	36.55	1.51	K 167	4
45	17807	32.62	1.69	KA 167	4
52	15651	28.67	1.92		
61	13336	24.43	2.3		
73	11054	20.25	2.7		
86	9433	17.28	3.2		
39	20755	38.02	0.82		
47	17087	31.30	0.99		
54	15078	27.62	1.12	K 157	4
62	13074	23.95	1.29	KF 157	4
69	11633	21.31	1.45	KA 157	4
81	10028	18.37	1.69	KAF157	4
99	8145	14.92	2.1		
117	6906	12.65	2.5		
62	13052	23.90	0.94		
70	11546	21.14	1.06		
83	9701	17.77	1.15	K 127	4
103	7834	14.35	1.26	KF 127	4
116	6982	12.78	1.28	KA 127	4
138	5863	10.74	1.43	KAF127	4
171	4738	8.68	1.45		
110kW					
17	58625	88.46	0.80		
20	49267	74.34	0.95		
21	46173	69.67	1.02		
24	41853	63.14	1.12	K 187	4
33	30307	45.73	1.55	KA 187	4
35	28332	42.75	1.66		
38	26178	39.50	1.80		
42	23441	35.37	2.0		
53	18610	28.08	2.5		
29	34184	51.58	0.88		
35	28325	42.74	1.06		
41	24176	36.48	1.24		
46	21618	32.62	1.39	K 167	4
54	18378	27.73	1.64	KA 167	4
61	16191	24.43	1.86		
74	13420	20.25	2.2		
86	11452	17.28	2.6		
60	15872	23.95	1.07	K 157	4
70	14123	21.31	1.20	KF 157	4
81	12174	18.37	1.39	KA 157	4
100	9888	14.92	1.71	KAF157	4
118	8384	12.65	2.0		

Output speed r/min	Output torque Nm	Ratio i	Service factor f_B	Type Type	Pole p
132kW					
20	59121	74.34	0.79		
23	51192	64.37	0.92		
28	42659	53.64	1.10		
31	38499	48.41	1.22		
34	34666	43.59	1.36	K 187	4
38	30841	38.78	1.52	KA 187	4
45	26570	33.41	1.77		
53	22331	28.08	2.1		
61	19333	24.31	2.3		
74	16112	20.26	2.6		
86	13734	17.27	2.8		
35	33990	42.74	0.88		
41	29012	36.48	1.04		
46	25942	32.62	1.16	K 167	4
54	22053	27.73	1.36	KA 167	4
61	19429	24.43	1.55		
74	16104	20.25	1.87		
86	13742	17.28	2.2		
62	19047	23.95	0.89		
70	16947	21.31	1.00	K 157	4
81	14609	18.37	1.16	KF 157	4
100	11866	14.92	1.43	KA 157	4
118	10060	12.65	1.59	KAF157	4
160kW					
28	51708	53.64	0.91		
33	44082	45.73	1.07		
42	34096	35.37	1.38		
47	30693	31.84	1.53	K 187	4
61	23434	24.31	1.9	KA 187	4
74	19530	20.26	2.1		
86	16648	17.27	2.3		
41	35166	36.48	0.86		
62	23338	24.21	1.29	K 167	4
73	19800	20.54	1.52	KA 167	4
86	16657	17.28	1.81		
81	17708	18.37	0.96	K 157	4
100	14382	14.92	1.18	KF 157	4
118	12194	12.65	1.39	KA 157	4
				KAF157	4
200kW					
33	55103	45.73	0.85		
45	40258	33.41	1.17	K 187	4
47	38366	31.84	1.23	KA 187	4
59	30618	25.41	1.54		
74	24413	20.26	1.69		
86	20810	17.27	1.87		
61	29437	24.43	1.02	K 167	4
73	24750	20.54	1.22	KA 167	4
86	20906	17.35	1.44		
100	17978	14.92	0.94	K 157	4
118	15243	12.65	1.05	KF 157	4
				KA 157	4
				KAF157	4

Permissible torque Nm	Output speed r/min	Ratio i	Type Type	Power kW/4p
200	5.0 5.2 5.9 6.8	279 267 234 205	K 37R17 KF 37R17 KA 37R17 KAF37R17	0.18
	7.7 8.7 10 11	181 160 136 127		0.25
	13 14	110 96		0.37
400	2.5 2.8 3.3	552 495 416	K 47R37 KF 47R37 KA 47R37 KAF47R37	0.18
	3.7 4.3 4.8	375 326 289		0.25
	5.6 6.3 7.2	250 219 193		0.37
	8.3 9.3 11	167 149 128		0.55
600	1.5 1.7 2.0 2.3	906 806 699 615	K 57R37 KF 57R37 KA 57R37 KAF57R37	0.18
	2.6 2.9 3.3	544 473 421		0.25
	3.8 4.4 5.1	362 319 273		0.37
	5.8 6.5 7.2	240 215 192		0.55
	8.4 9.9 11	166 141 126		0.75
	13 15	108 95		1.10
820	1.2 1.3 1.5 1.8	1171 1034 903 793	K 67R37 KF 67R37 KA 67R37 KAF67R37	0.18
	2.0 2.3 2.6	697 613 542		0.25
	3.0 3.3	471 420		0.37
	3.9 4.3 5.1 5.8	361 323 272 240		0.55
	6.4 7.3	217 191		0.75
1550	0.59 0.68 0.78 0.92	2370 2050 1772 1514	K 77R37 KF 77R37 KA 77R37 KAF77R37	0.18

Permissible torque Nm	Output speed r/min	Ratio i	Type Type	Power kW/4p
1550	1.0 1.1 1.3	1388 1218 1053	K 77R37 KF 77R37 KA 77R37 KAF77R37	0.25
	1.5 1.7 2.0	924 815 709		0.37
	2.2 2.5 2.9	622 552 485		0.55
	3.2 3.9	428 358		0.75
	4.3 4.9 5.7	320 283 246		1.1
2700	0.34 0.39 0.45 0.51	4037 3609 3107 2728	K 87R57 KF 87R57 KA 87R57 KAF87R57	0.18
	0.59 0.67 0.75	2371 2088 1854		0.25
	0.84 0.98 1.1	1658 1415 1229		0.37
	1.3 1.5 1.7	1078 951 837		0.55
	1.9 2.2	726 638		0.75
	2.5 3.0 3.3	562 474 426		1.1
	3.8 4.2	373 330		1.5
	4.8 5.6 5.9 7.0	293 250 236 201		2.2
4300	0.23 0.26 0.30 0.34	6027 5392 4669 4082	K 97R57 KF 97R57 KA 97R57 KAF97R57	0.18
	0.39 0.45	3583 3108		0.25
	0.51 0.58 0.66	2757 2419 2123		0.37
	0.75 0.86 0.98 1.1	1856 1625 1430 1261		0.55
	1.3 1.5	1102 957		0.75
	1.6 1.9 2.1	855 743 651		1.1
	2.4 2.8	573 504		1.5
	3.2 3.6 4.1	437 382 342		2.2

All gear units are overloaded in above table. Determination of operating torque should not higher than the gearunit's nominal torque.

Permissible torque Nm	Output speed r/min	Ratio i	Type Type	Power kW/4p
4300	4.6	305	K 97R57 KF 97R57 KA 97R57 KAF97R57	3.0
	5.4	258		
	6.0	232		
	7.1	199		4.0
8000	0.13	10528	K 107R77 KF 107R77 KA 107R77 KAF107R77	0.18
	0.15	9391		
	0.17	8211		
	0.19	7167		0.25
	0.23	6097		
	0.25	5582		
	0.27	5065		0.37
	0.32	4299		
	0.37	3757		
	0.43	3236		0.55
	0.48	2869		
	0.56	2504		
	0.63	2203		0.75
	0.74	1869		
	0.83	1689		1.1
	0.91	1533		
	1.1	1317		
	1.2	1150		1.5
	1.4	1015		
	1.6	871		
	1.8	782		2.2
	2.0	686		
	2.3	606		
	2.7	515		3.0
	3.1	455		
	3.6	402		4.0
	4.1	351		
	4.7	307		5.5
	5.2	277		
	5.9	243		
13000	0.08	17550	K 127R77 KF 127R77 KA 127R77 KAF127R77	0.18
	0.09	16006		
	0.10	14975		
	0.11	12440		
	0.13	10914		0.25
	0.14	9819		
	0.16	8443		0.37
	0.19	7483		
	0.21	6565		
	0.24	5804		0.55
	0.28	5027		
	0.31	4423		
	0.37	3801		
	0.43	3237		0.75
	0.47	2941		
	0.55	2548		1.1
	0.63	2218		
	0.72	1926		
	0.79	1757		1.5
	0.90	1541		
	1.0	1342		2.2
	1.2	1177		
	1.4	1025		

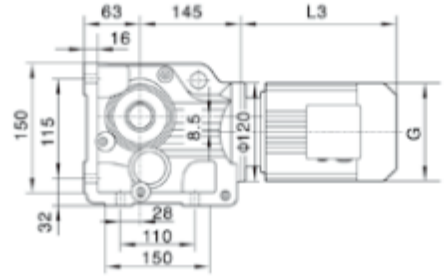
Permissible torque Nm	Output speed r/min	Ratio i	Type Type	Power kW/4p
13000	1.5	899	K 127R77 KF 127R77 KA 127R77 KAF127R77	3.0
	1.8	790		
	2.0	690		
	2.3	599		4.0
	2.6	539		
	3.0	468		5.5
	3.4	410		
	2.6	536	K 127R87 KF 127R87 KA 127R87 KAF127R87	4.0
	2.9	473		5.5
	3.3	418		
	3.8	367		7.5
	4.2	330		
	4.8	290		
18000	0.08	17679	K 157R97 KF 157R97 KA 157R97 KAF157R97	0.55
	0.09	15729		
	0.10	14721		
	0.11	13097		
	0.12	11368		
	0.14	10114		
	0.16	8718		
	0.18	7734		
	0.27	5074		1.1
	0.31	4514		
	0.35	3974		
	0.40	3516		
	0.46	3047		
	0.48	2899		1.5
	0.60	2319		
	0.69	2026		2.2
	0.77	1802		
	0.83	1680		
	1.0	1365		
	1.1	1229		3.0
	1.3	1093		
	1.5	942		4.0
	1.6	854		
	1.8	756		
	2.1	661		5.5
	2.5	565		
	2.9	503		7.5
	3.3	433		
	5.0	290		11
	4.8	307	K 157R107 KF 157R107 KA 157R107 KAF157R107	11
	5.6	260		15
	6.2	237		
	7.0	210		
32000	0.07	19653	K 167R97 KA 167R97	0.55
	0.08	17345		
	0.09	14945		
	0.11	13190		
	0.12	11532		
	0.14	10227		
	0.16	8597		0.75
	0.21	6538		1.1
	0.26	5366		
	0.29	4798		1.5
	0.34	4059		

All gear units are overloaded in above table. Determination of operating torqueshould not higher than the gearunit's nominal torque.

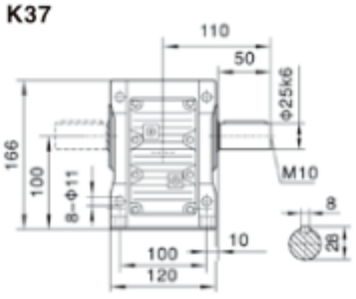
Permissible torque Nm	Output speed r/min	Ratio i	Type Type	Power kW/4p
32000	0.42	3359	K 167R97 KA 167R97	2.2
	0.52	2741		
	0.63	2252		3
	0.65	2174		
	0.85	1698		4
	1.0	1402		
	1.1	1291		5.5
	1.3	1101		
	1.5	944		7.5
	1.7	843		
	1.9	757		
	2.6	561		11
	3.0	479		
	3.4	422		15
	3.9	367		
	4.7	313	K 167R107 KA 167R107	18.5
	5.4	273		22
	5.9	250		
	6.7	218		30
	7.2	203		
	7.9	185		
	9.0	163		37
	11	139		45
	12	121		
50000	0.04	32625	K 187R97 KA 187R97	0.55
	0.05	27165		
	0.06	24353		
	0.07	19144		
	0.08	16978		
	0.10	14272		0.75
	0.11	13116		
	0.12	11647		
	0.13	10413		1.1
	0.15	9363		
	0.17	8126		
	0.19	7333		1.5
	0.21	6738		
	0.24	5984		
	0.27	5350		2.2
	0.30	4810		
	0.33	4364		
	0.39	3609		3
	0.46	3062		
	0.56	2519		4
	0.63	2268		
	0.69	2054		
	0.78	1821		5.5
	0.88	1605		
	1.0	1395		7.5
	1.2	1196		
	2.0	737		15
	2.4	619		
	2.8	524		18.5

Permissible torque Nm	Output speed r/min	Ratio i	Type Type	Power kW/4p
50000	2.0	720	K 187R107 KA 187R107	15
	2.4	614		
	2.9	514		18.5
	3.3	449		
	4.0	365		30
	5.5	268		37
	6.5	227		45
	7.4	199		
	8.8	168		

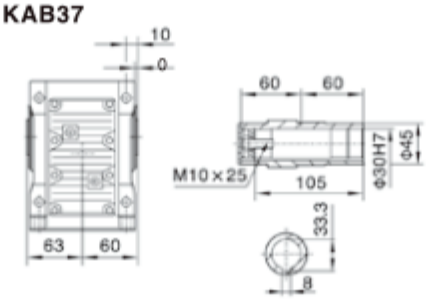
All gear units are overloaded in above table. Determination of operating torque should not higher than the gearunit's nominal torque.

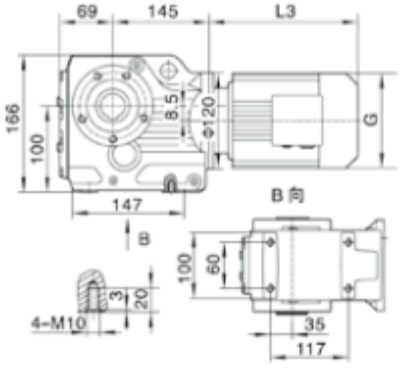


K37

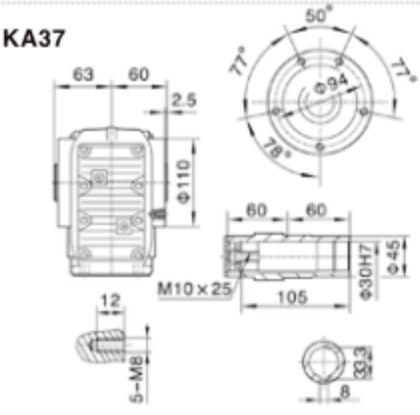


KAB37

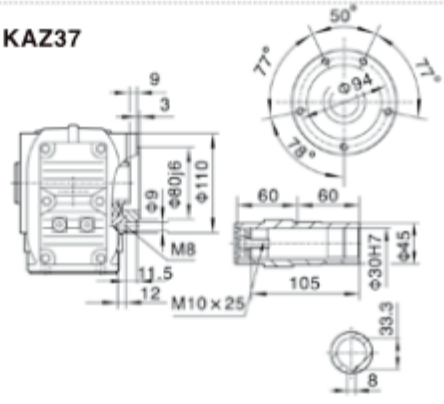


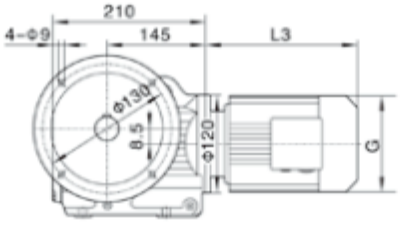


KA37

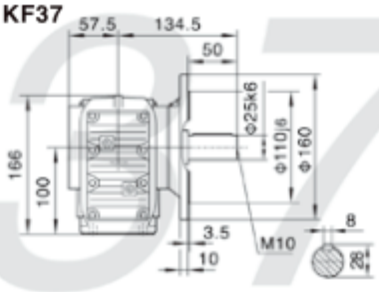


KAZ37

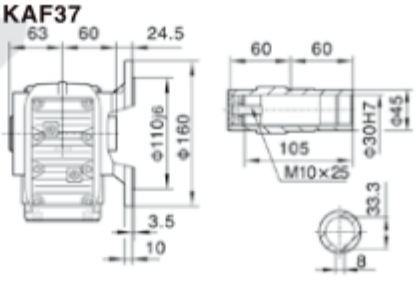




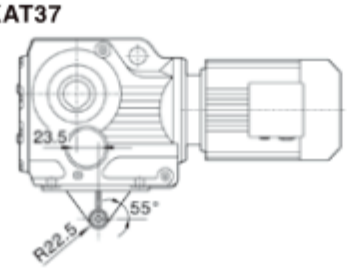
KF37

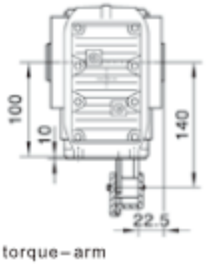


KAF37

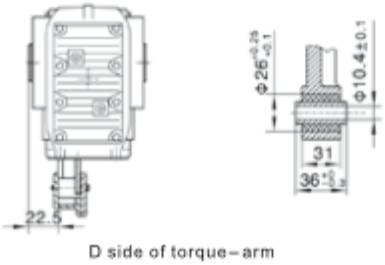


KAT37



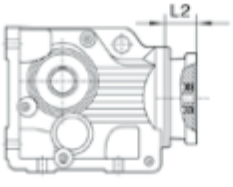


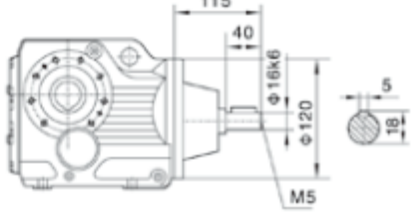
C side of torque-arm



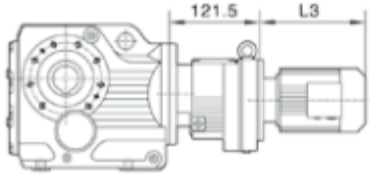
D side of torque-arm

K..S37





K..37R17



Note: For other values please refer to relevant structure.

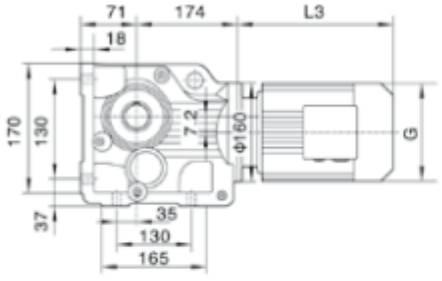
Customers provide the motor by themselves need connected flange.

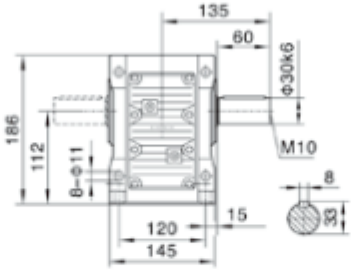
Motor size	63	71		80		90S	90L	100						
Power/(kW)	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3.0					
L3	235	245		278		304	328	340						
G	130	145		175		195	195	215						
L2	71	71		71		71	71	93						

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

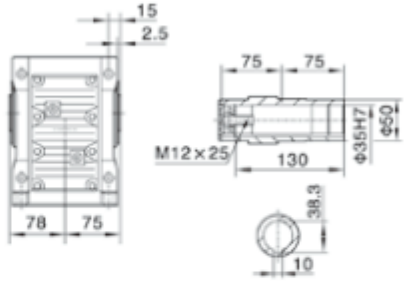
K

K47

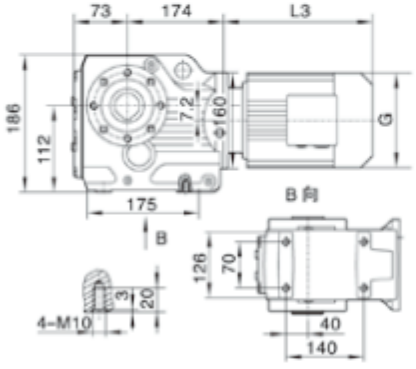


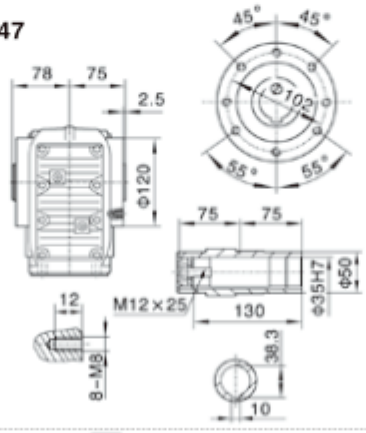


KAB47

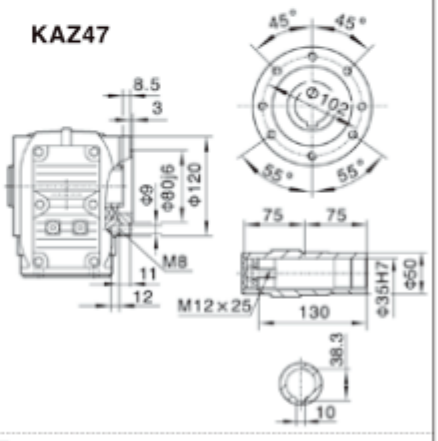


KA47

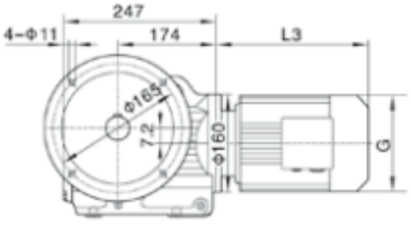


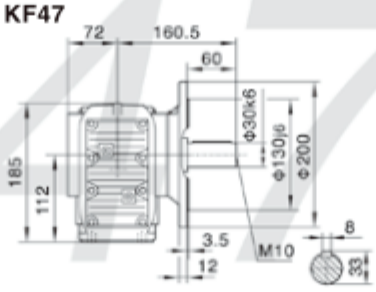


KAZ47

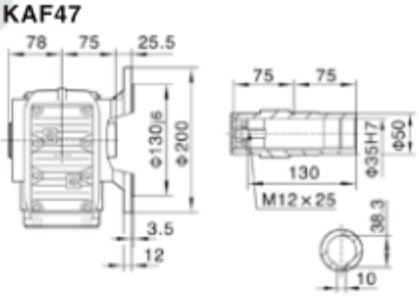


KF47

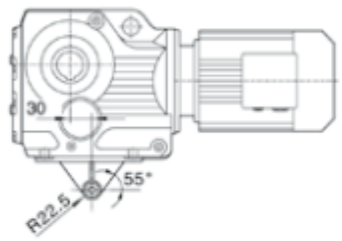


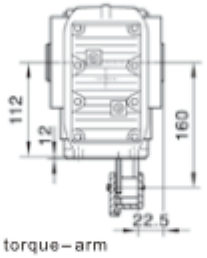


KAF47

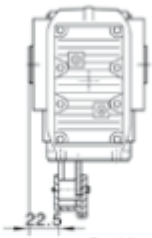


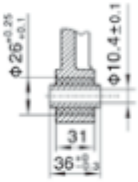
KAT47





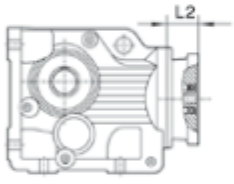
C side of torque-arm

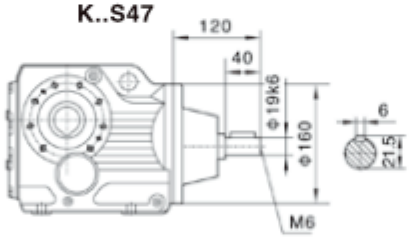




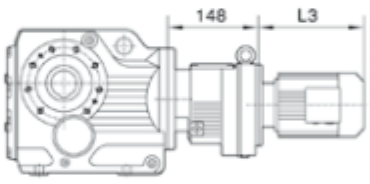
D side of torque-arm

K..S47





K..47R37



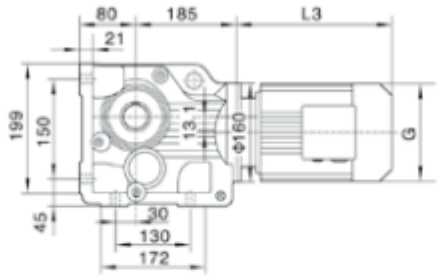
Note: For other values please refer to relevant structure.

Customers provide the motor by themselves need connected flange.

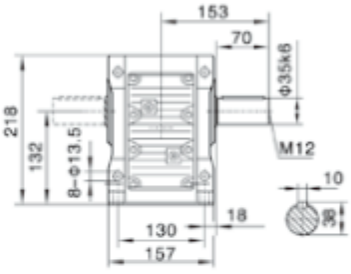
Motor size	63	71		80		90S	90L	100		112M	132S		
Power/(kW)	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3.0	4.0	5.5		
L3	223	245		278		304	328	350		383	428		
G	130	145		175		195	195	215		240	275		
L2	81	81		81		81	81	93		68	72		

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

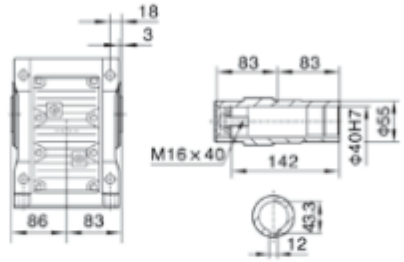
K

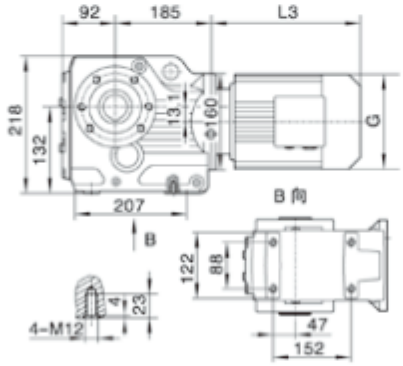


K57

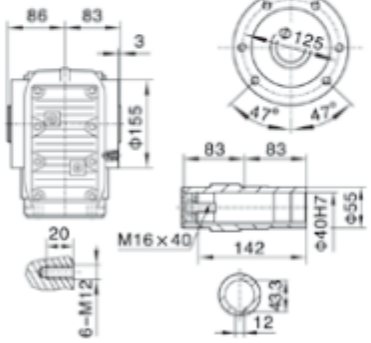


KAB57

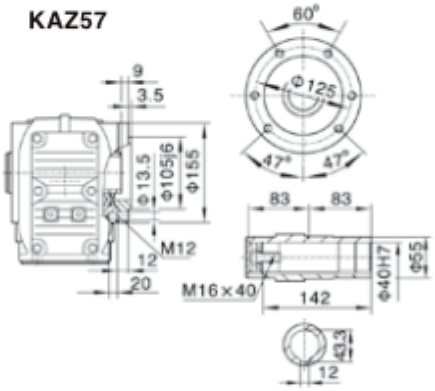


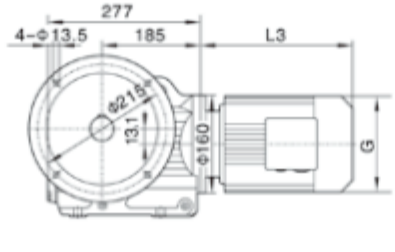


KA57

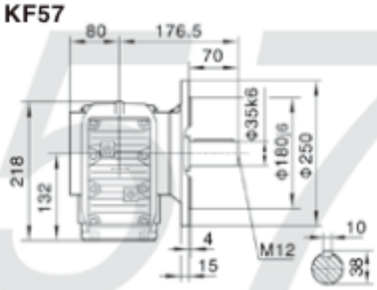


KAZ57

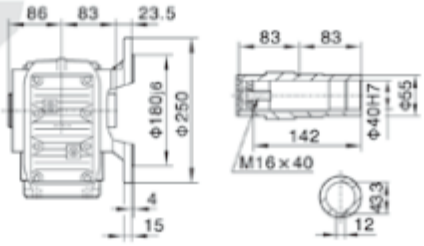




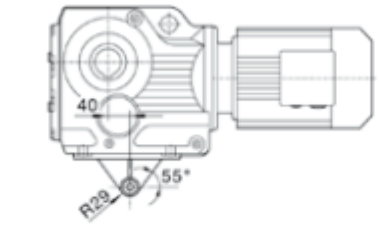
KF57

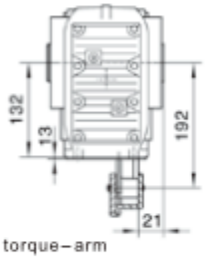


KAF57

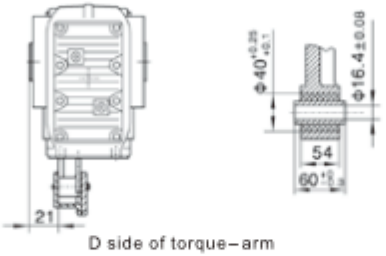


KAT57

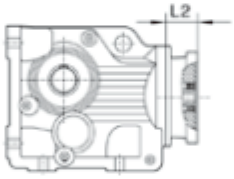




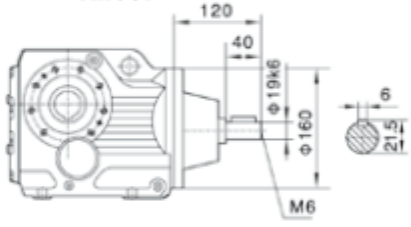
C side of torque-arm



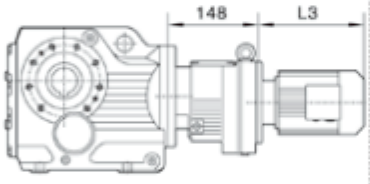
D side of torque-arm



K..S57



K..57R37



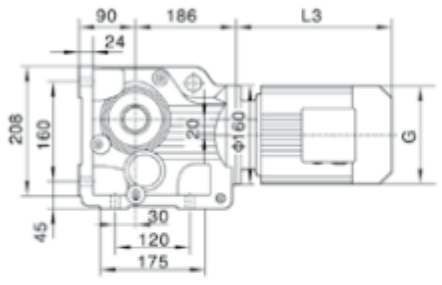
Note: For other values please refer to relevant structure.

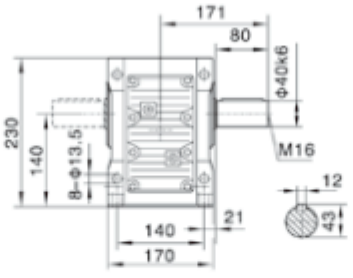
Customers provide the motor by themselves need connected flange.

Motor size	63	71		80		90S	90L	100		112M	132S		
Power/(kW)	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3.0	4.0	5.5		
L3	223	245		278		304	328	350		380	425		
G	130	145		175		195	195	215		240	275		
L2	81	81		81		81	81	93		93	101		

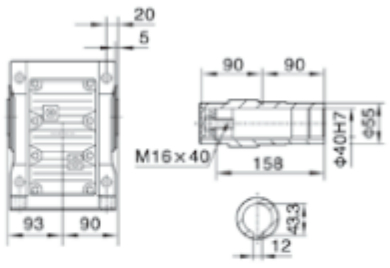
Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

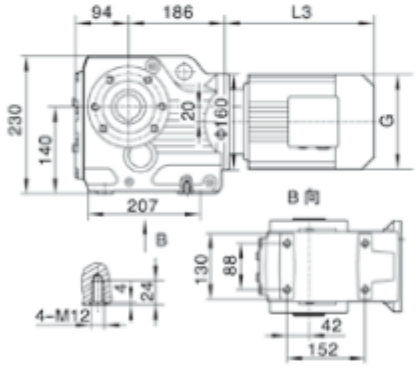
K67



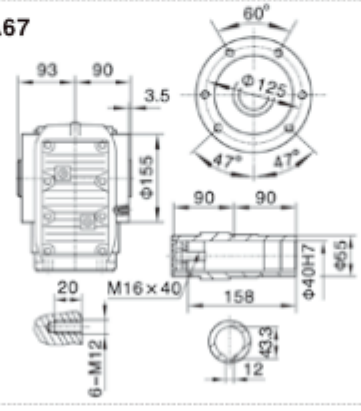


KAB67

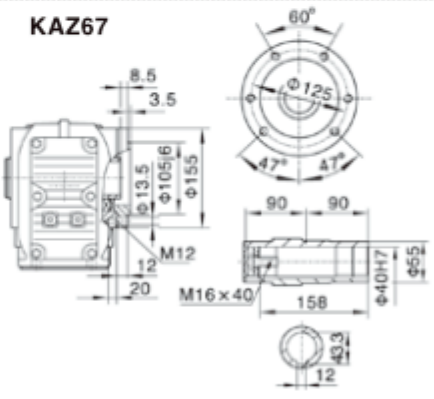




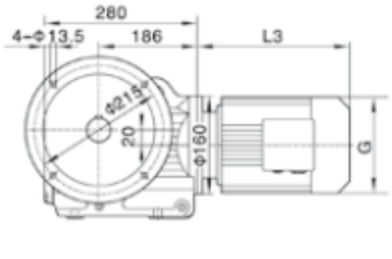
KA67

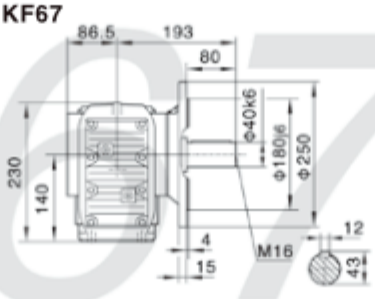


KAZ67

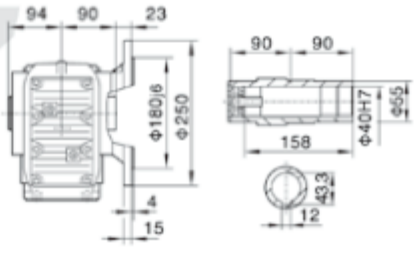


KF67

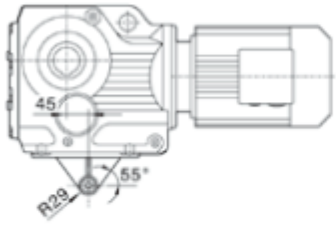


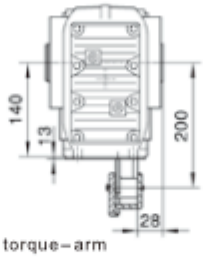


KAF67

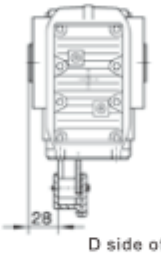


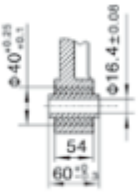
KAT67





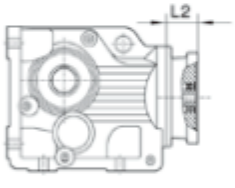
C side of torque-arm

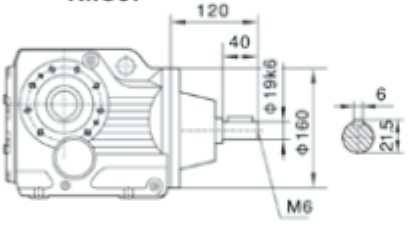




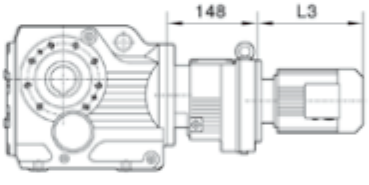
D side of torque-arm

K..S67





K..67R37



Note: For other values please refer to relevant structure.

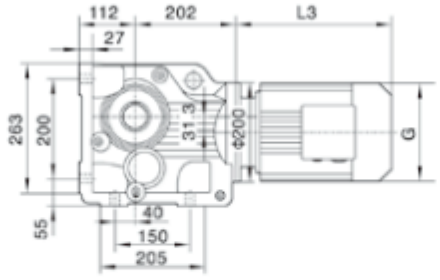
Customers provide the motor by themselves need connected flange.

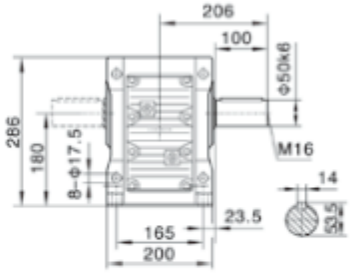
Motor size	63	71		80		90S	90L	100		112M	132S		
Power/(kW)	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3.0	4.0	5.5		
L3	223	245		278		304	328	350		380	425		
G	130	145		175		195	195	215		240	275		
L2	81	81		81		81	81	93		93	101		

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

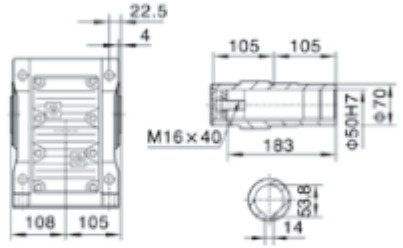
K

K77

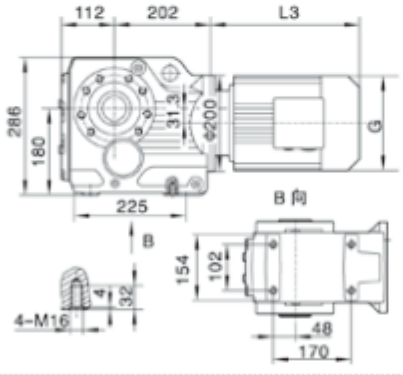


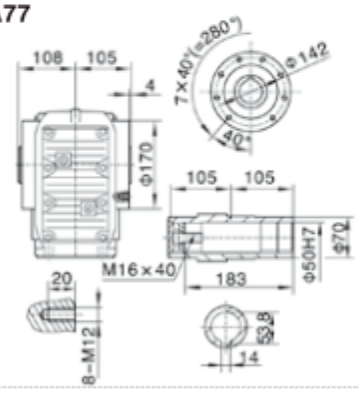


KAB77

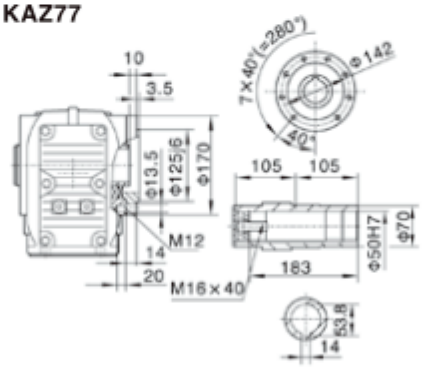


KA77

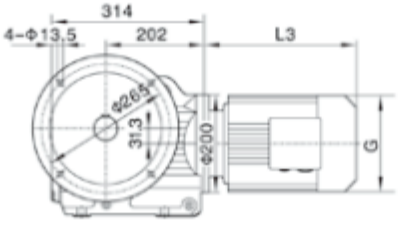


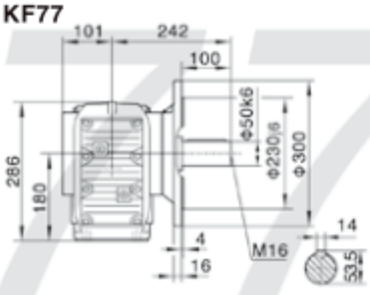


KAZ77

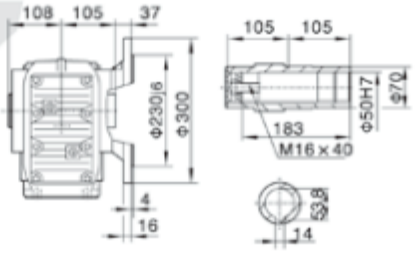


KF77

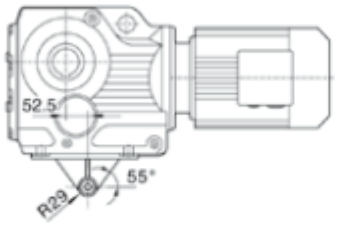


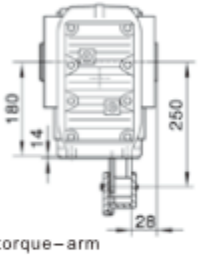


KAF77

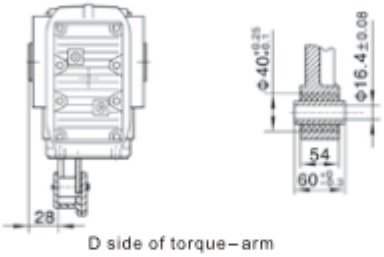


KAT77



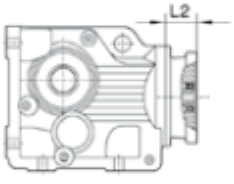


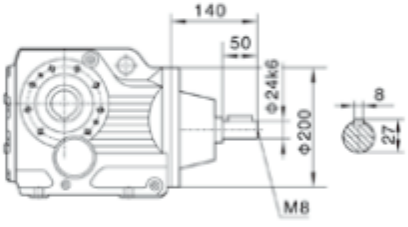
C side of torque-arm



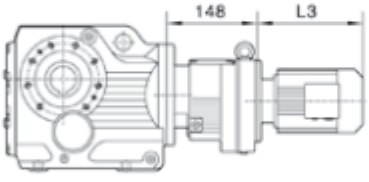
D side of torque-arm

K..S77





K..77R37



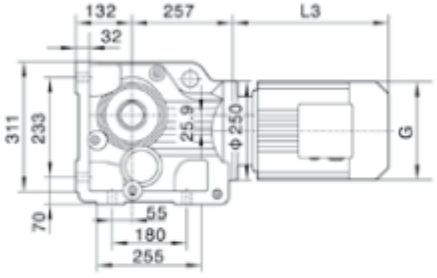
Note: For other values please refer to relevant structure.

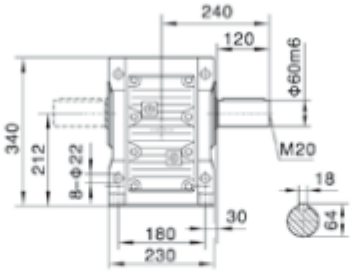
Customers provide the motor by themselves need connected flange.

Motor size	71	80		90S	90L	100		112M	132S	132M	160M	
Power/(kW)	0.37	0.55	0.75	1.1	1.5	2.2	3.0	4.0	5.5	7.5	11	
L3	233	278		304	328	350		380	425	461	524	
G	145	175		195	195	215		240	275	275	330	
L2	81	81		81	81	93		93	101	101	126	

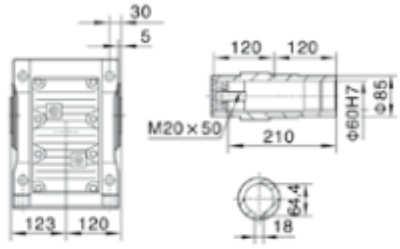
Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

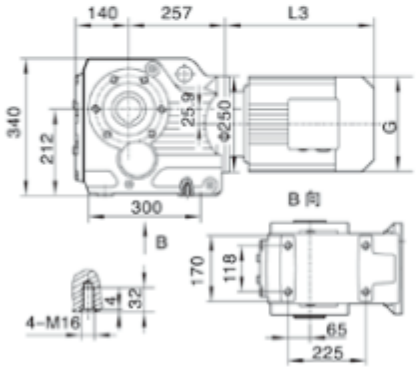
K87



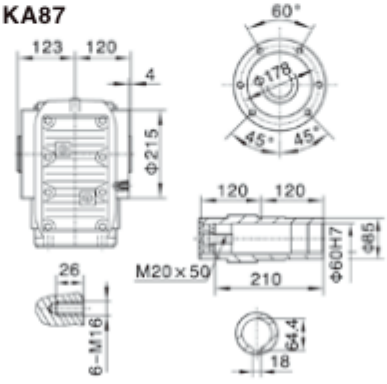


KAB87

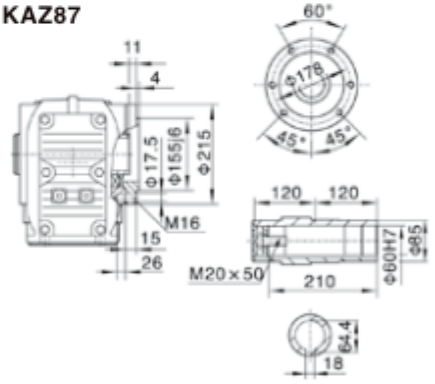




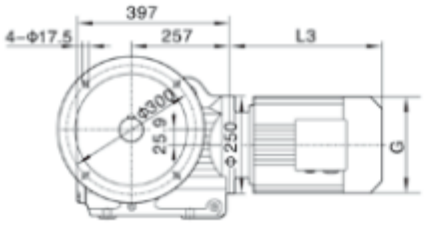
KA87

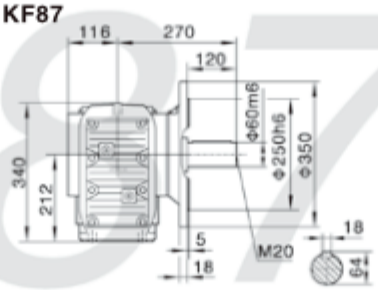


KAZ87

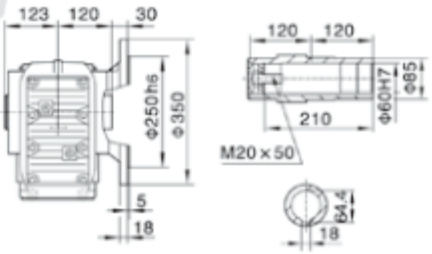


KF87

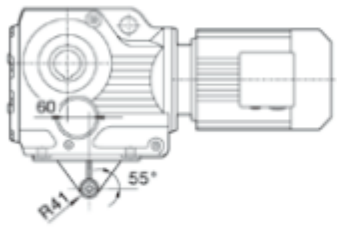


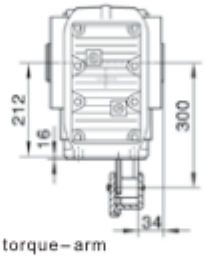


KAF87

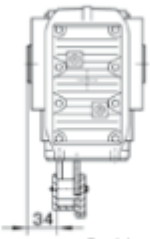


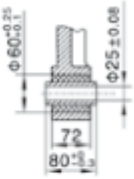
KAT87





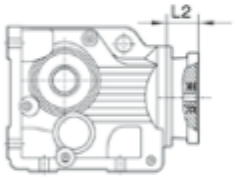
C side of torque-arm

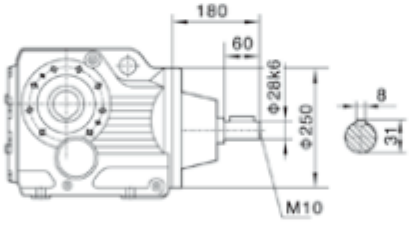




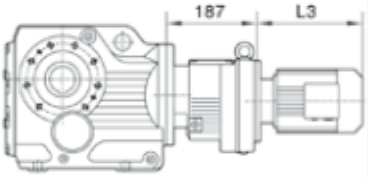
D side of torque-arm

K..S87





K..87R57



Note: For other values please refer to relevant structure.

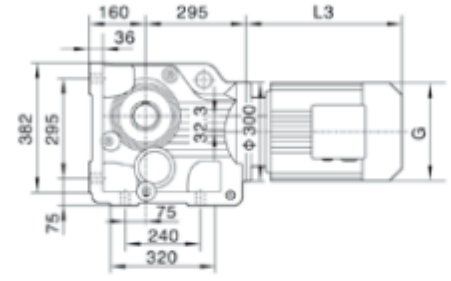
Customers provide the motor by themselves need connected flange.

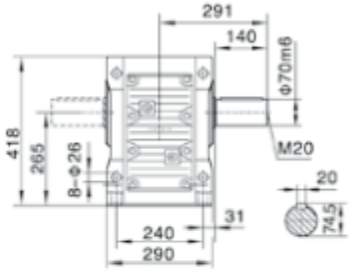
Motor size	80	90S	90L	100	112M	132S	132M	160M	160L	180M	180L
Power/(kW)	0.75	1.1	1.5	2.2 3.0	4.0	5.5	7.5	11	15	18.5	22
L3	246	280	304	350	380	425	461	524	547	583	616
G	175	195	195	215	240	275	275	330	330	380	380
L2	86	86	86	71	71	101	101	126	126	126	126

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

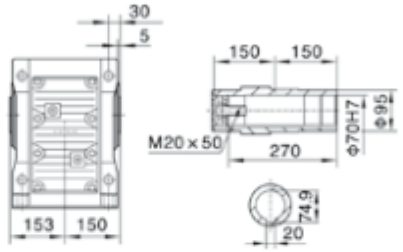
K

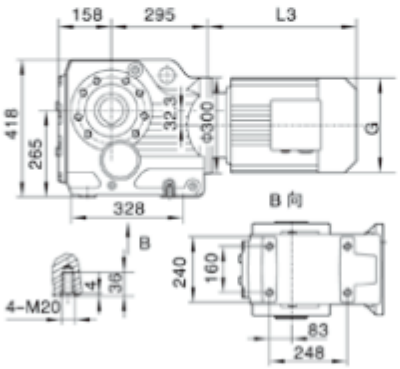
K97



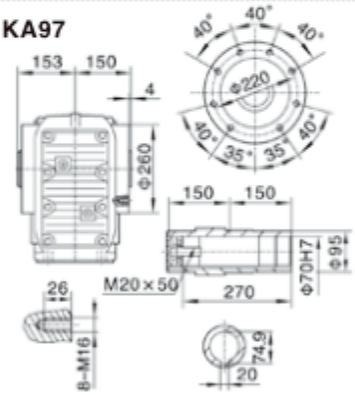


KAB97

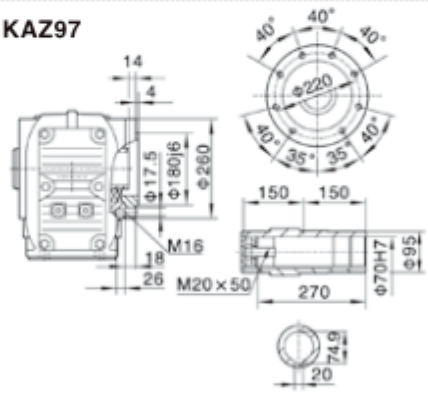




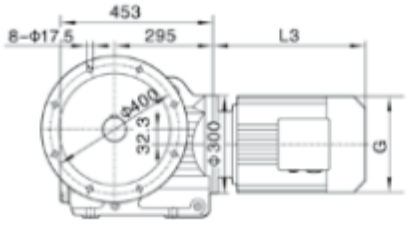
KA97

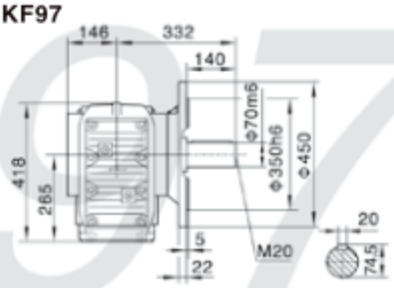


KAZ97

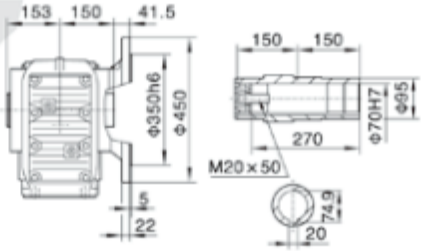


KF97

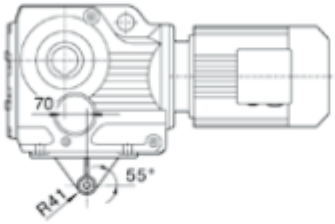


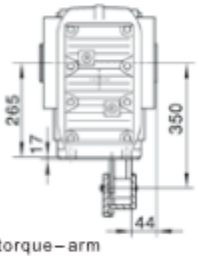


KAF97

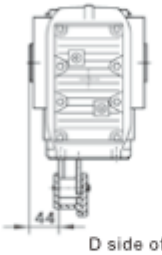


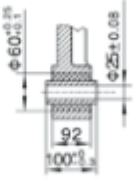
KAT97





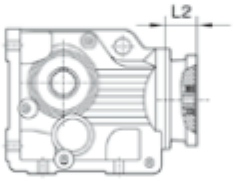
C side of torque-arm

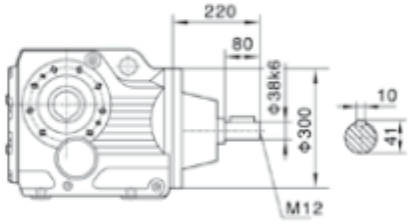




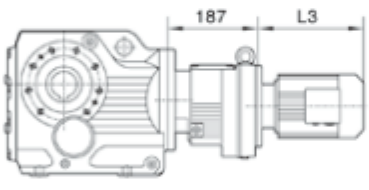
D side of torque-arm

K..S97





K..97R57



Customers provide the motor by themselves need connected flange.

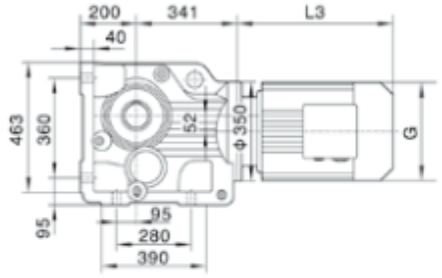
Note: For other values please refer to relevant structure.

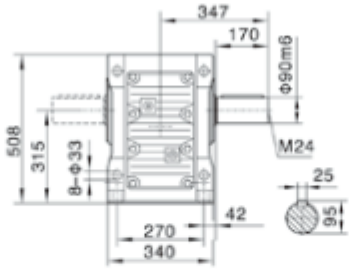
Motor size	90S	90L	100	112M	132S	132M	160M	160L	180M	180L	200
Power/(kW)	1.1	1.5	2.2 / 3.0	4.0	5.5	7.5	11	15	18.5	22	30
L3	280	304	315	334	425	461	524	547	555	588	652
G	195	195	215	240	275	275	330	330	380	380	420
L2	86	86	101	101	101	101	126	126	126	126	132

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

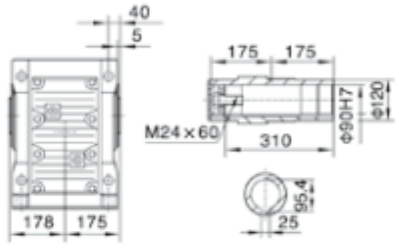
K

K107

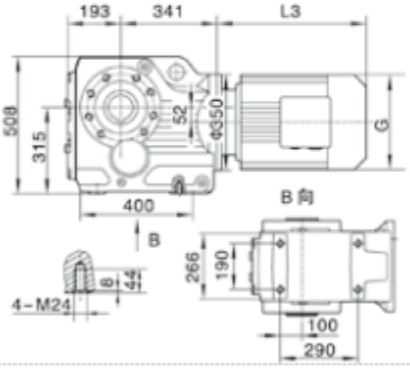


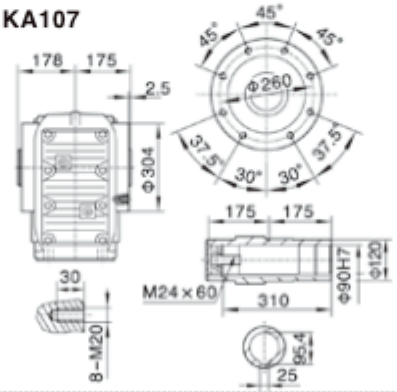


KAB107

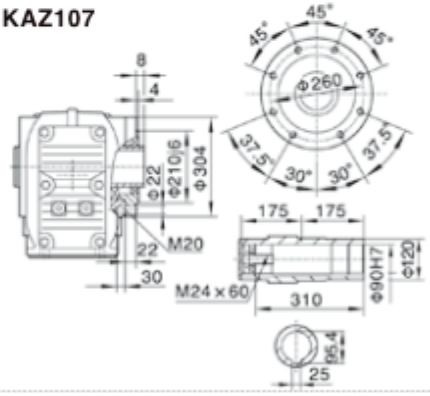


KA107

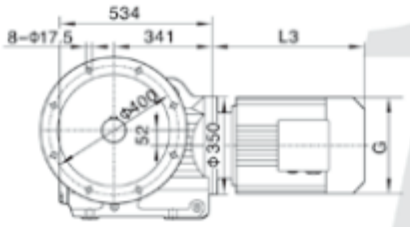


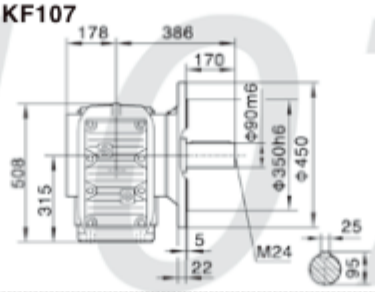


KAZ107

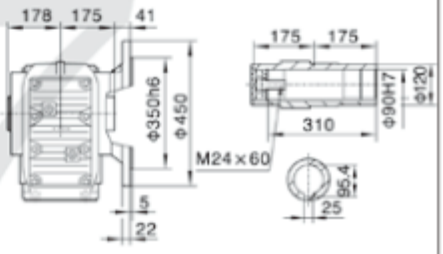


KF107

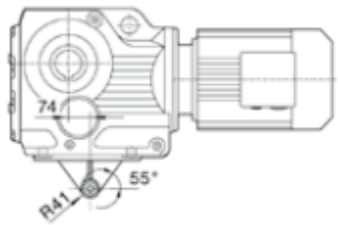


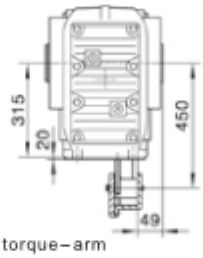


KAF107

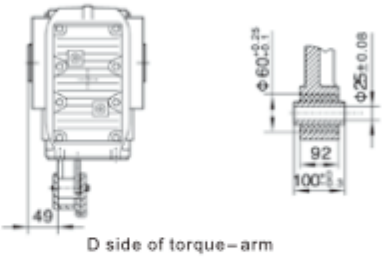


KAT107



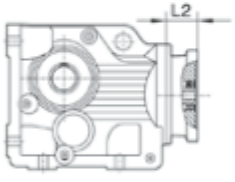


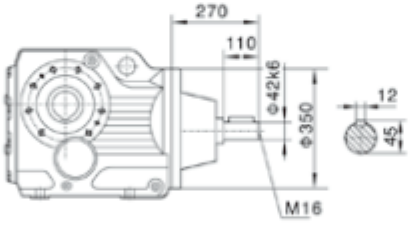
C side of torque-arm



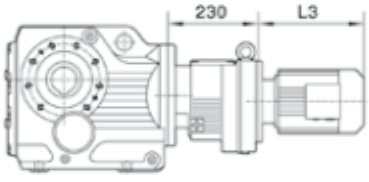
D side of torque-arm

K..S107





K..107R77

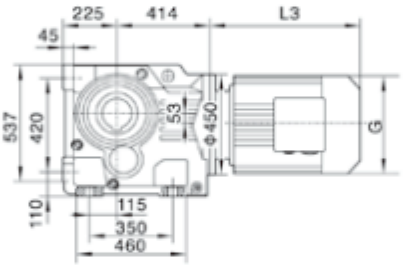


Note: For other values please refer to relevant structure.

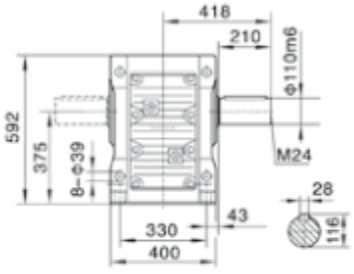
Customers provide the motor by themselves need connected flange.

Motor size	100	112M	132S	132M	160M	160L	180M	180L	200	225S	225M
Power/(kW)	3.0	4.0	5.5	7.5	11	15	18.5	22	30	37	45
L3	318	334	386	422	504	519	555	588	654	680	702
G	215	240	275	275	330	330	380	380	420	470	470
L2	101	101	101	101	126	126	126	126	132	132	132

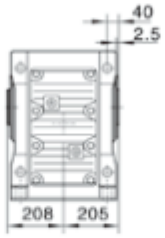
Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.



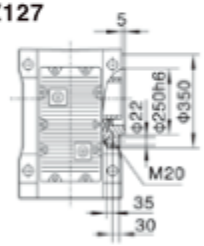
K127

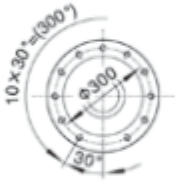


KA(KAB)127

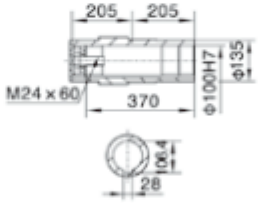


KAZ127

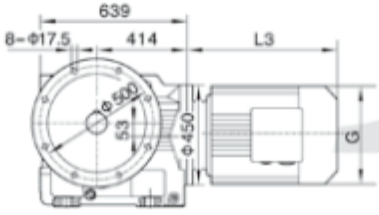


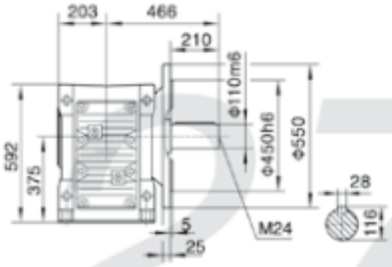


KA127/KAF127/KAZ127
空心轴/Hollow shaft

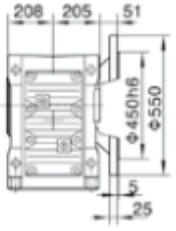


KF127

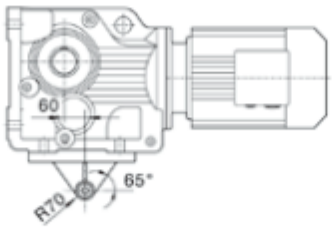


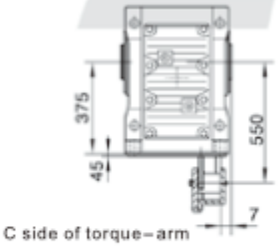


KAF127



KAT127

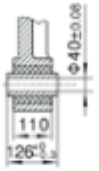




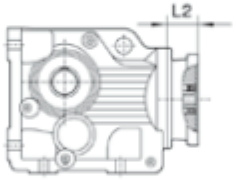
C side of torque-arm

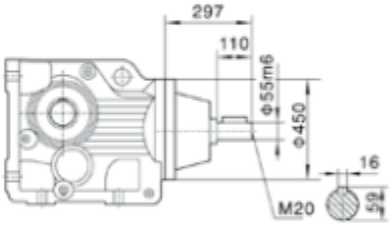


D side of torque-arm

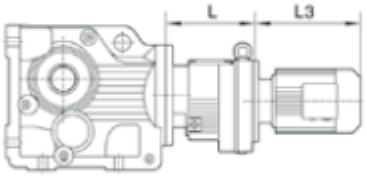


K..S127





K..127R77(R87)



Note: For other values please refer to relevant structure.

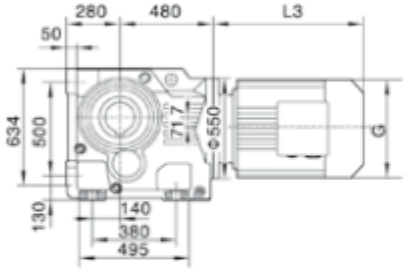
Customers provide the motor by themselves need connected flange.

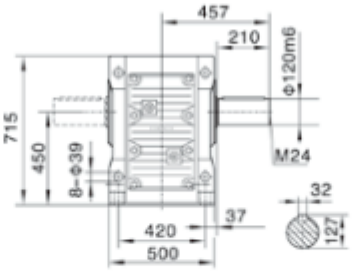
	K..127R77	K..127R87
L	232	275

Motor size	132M	160M	160L	180M	180L	200	225S	225M	250	280S	280M
Power/(kW)	7.5	11	15	18.5	22	30	37	45	55	75	90
L3	424	567	602	583	616	654	674	696	775	847	847
G	275	330	330	380	380	420	470	470	510	580	580
L2	132	132	132	132	132	132	143	143	174	174	174

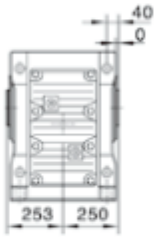
Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

K157

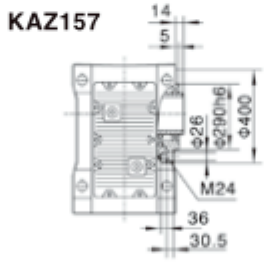




KA(KAB)157

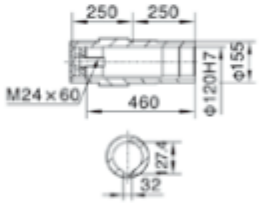


KAZ157

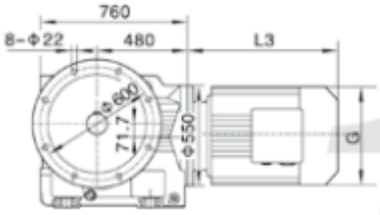


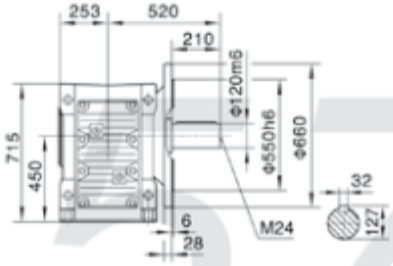


KA157/KAF157/KAZ157 Hollow shaft

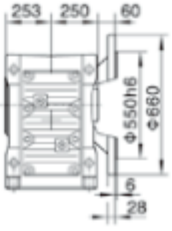


KF157

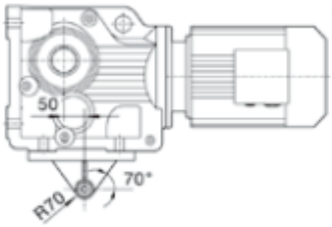


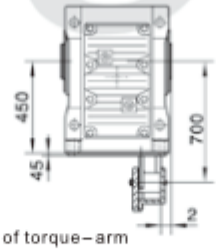


KAF157

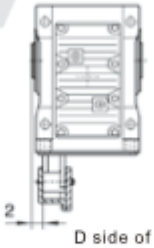


KAT157

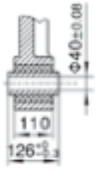




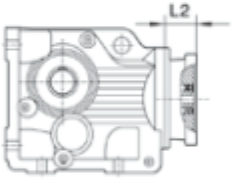
C side of torque-arm

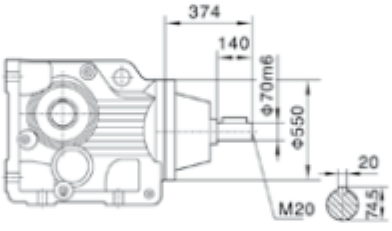


D side of torque-arm

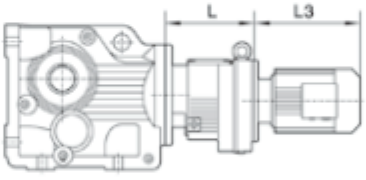


K..S157





K..157R97(R107)



Note: For other values please refer to relevant structure.

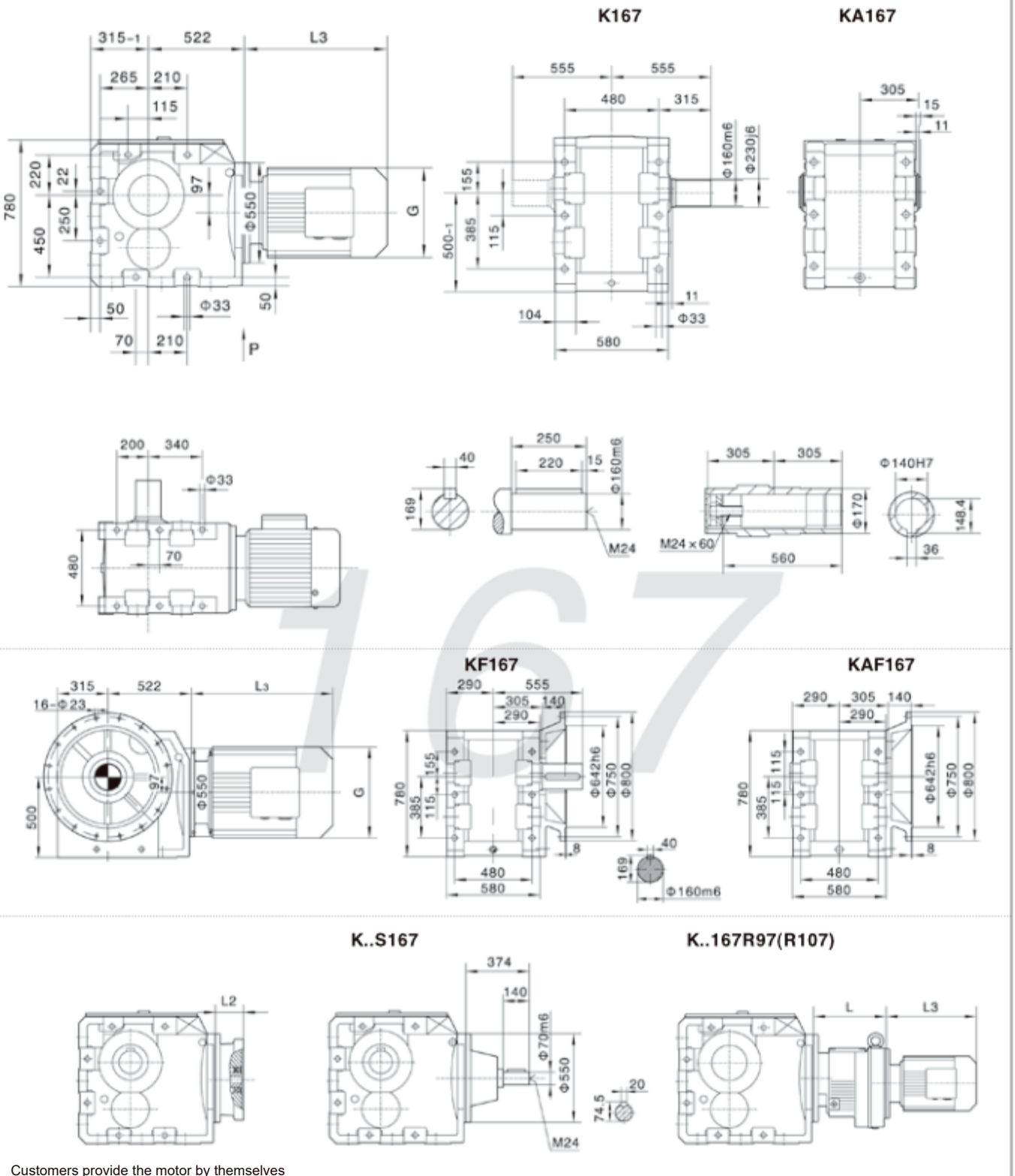
Customers provide the motor by themselves need connected flange.

	K..157R97	K..157R107
L	320	370

Motor size	160M	160L	180M	180L	200	225S	225M	250	280S	280M	315S	315M	315L
Power/(kW)	11	15	18.5	22	30	37	45	55	75	90	110	132	160
L3	567	602	635	666	642	669	691	770	828	879	1100	1180	1270
G	330	330	380	380	420	470	470	510	580	580	645	645	645
L2	143	143	143	143	143	143	143	143	143	143	145	145	145

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

K



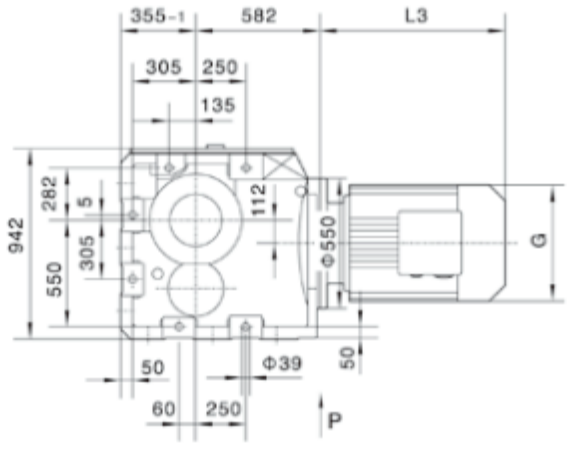
Customers provide the motor by themselves need connected flange.

Note: For other values please refer to relevant structure.

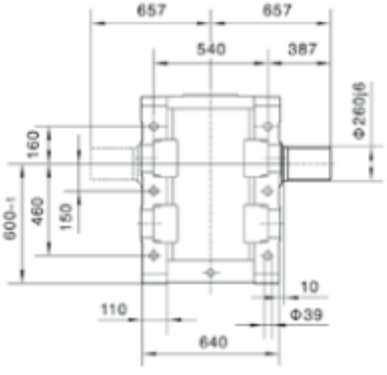
	K..167R97	K..167R107
L	320	370

Motor size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
Power/(kW)	11	15	18.5	22	30	37	45	55	75	90	110	132	160 200
L3	492	537	593	633	646	673	698	779	847	847	1100	1180	1270
G	330	330	380	380	420	470	470	510	580	580	645	645	645
L2	76	76	76	76	76	98	98	103	103	103	132	132	132

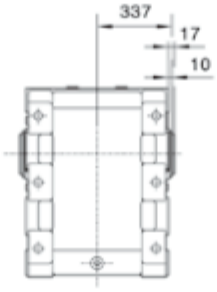
Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.



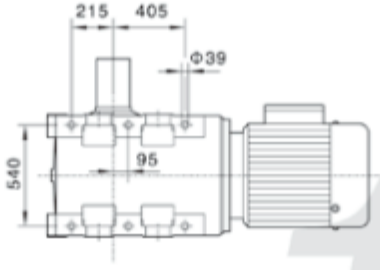
K187

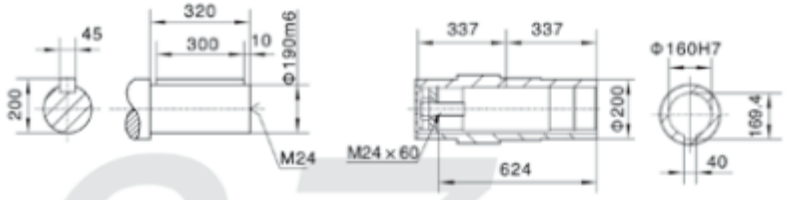


KA187

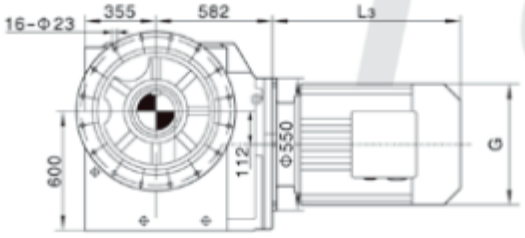


P向

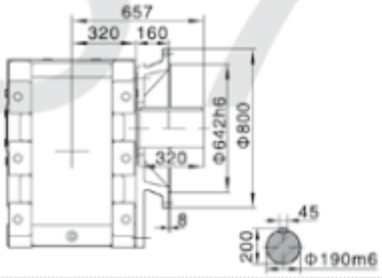




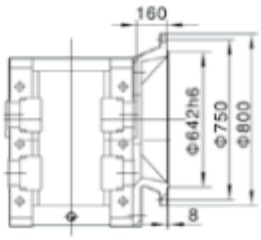
K



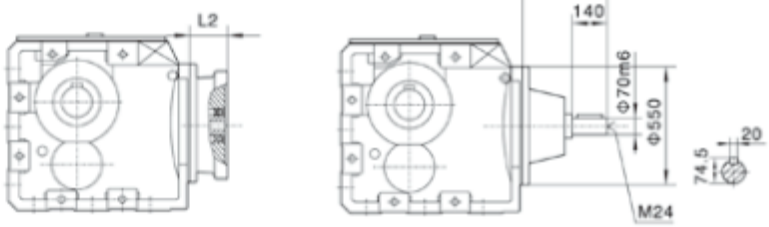
KF187



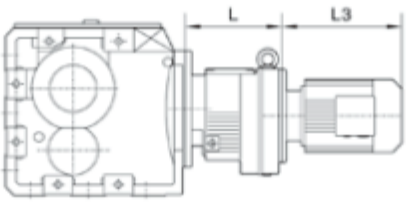
KAF187



K..S187



K..187R97(R107)



Customers provide the motor by themselves need connected flange.

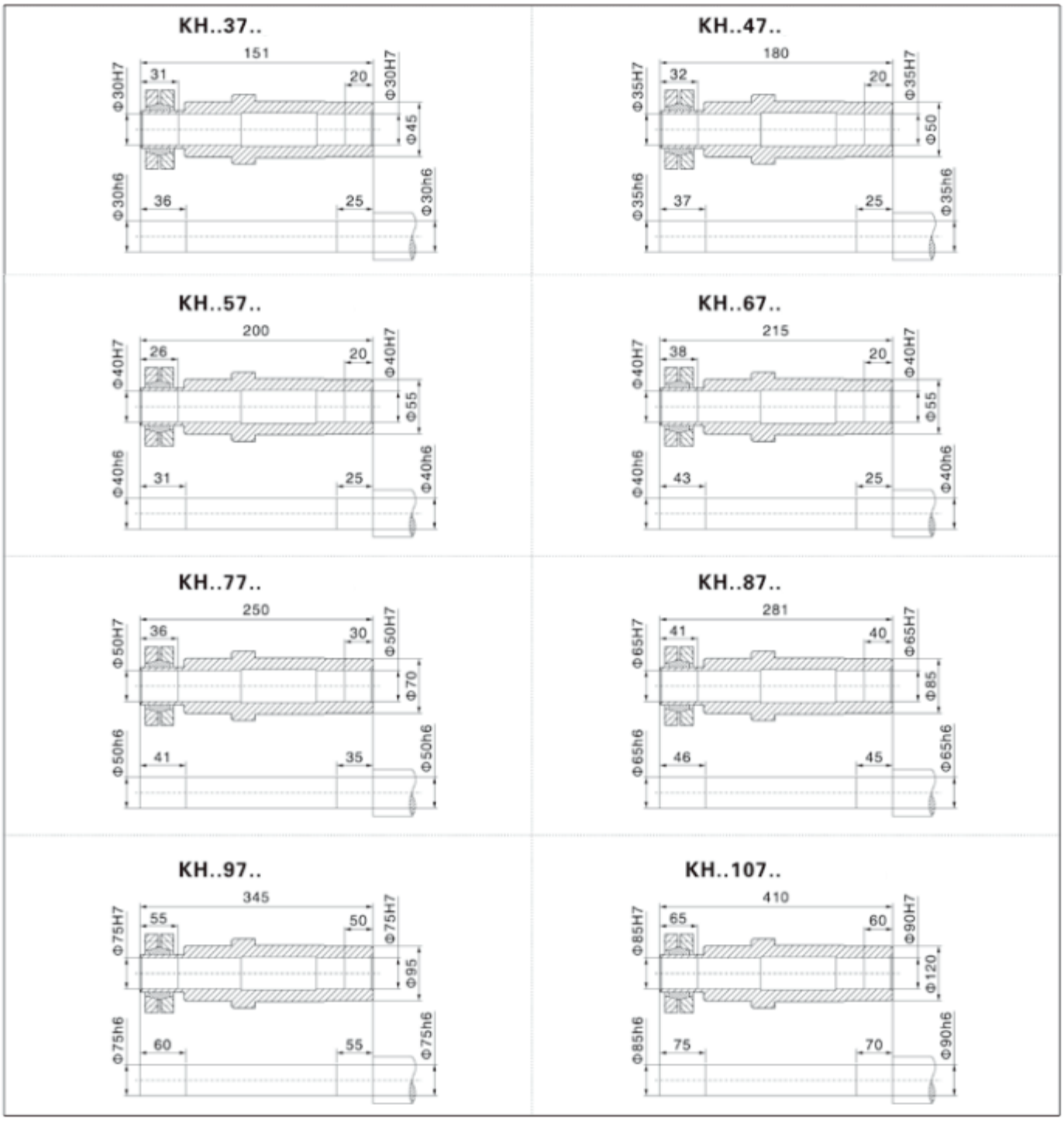
Note: For other values please refer to relevant structure.

	K..187R97	K..187R107
L	320	370

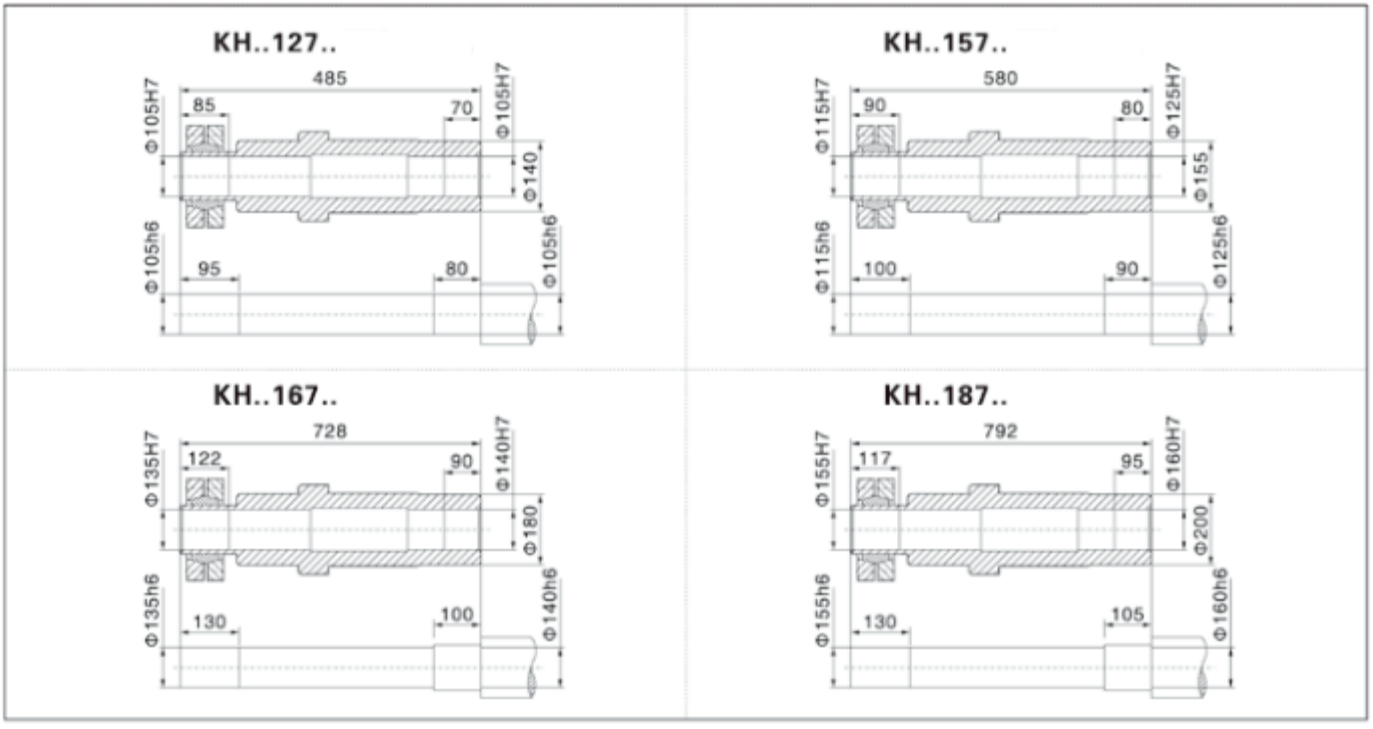
Motor size	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
Power/(kW)	11	15	18.5	22	30	37	45	55	75	90	110	132	160 200
L3	492	537	593	633	646	673	698	779	847	847	1100	1180	1270
G	330	330	380	380	420	470	470	510	580	580	645	645	645
L2	76	76	76	76	76	98	98	103	103	103	132	132	132

Note:1.The housings of KA、KF、KAF、KAZ are common parts.The mounting dimensions may consult each other. 2. "K..." means K, KA, KF, KAF, KAZ, KAB.

Dimensions of shrink disc



Dimensions of shrink disc



SMC
(주)신명전기

(주) 신명전기

(우)10049 경기도 김포시 양촌읍 삼도로 44

Tel: +82-31-988-4102 Fax: 82-31-988-4101

Web: www.smec.co.kr