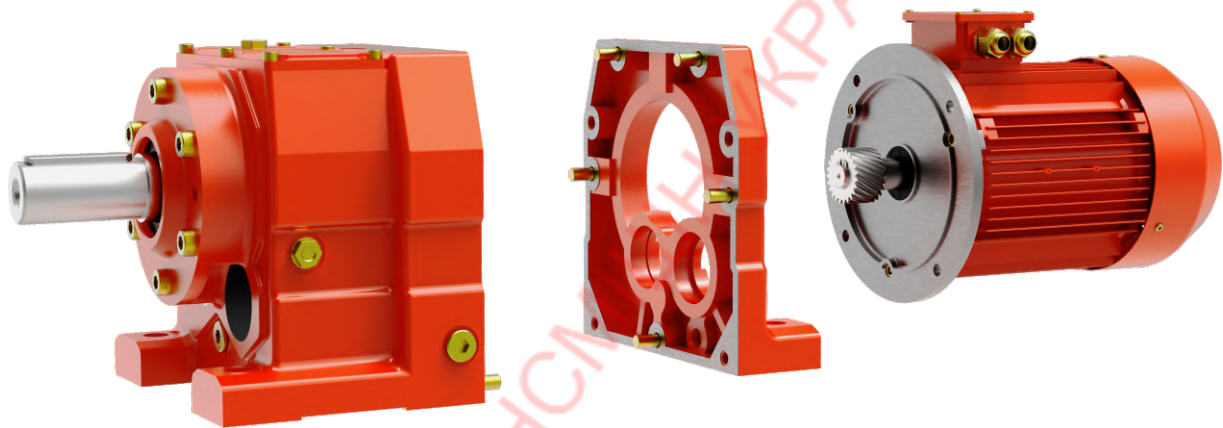


MR Series

Modular Helical Gearbox

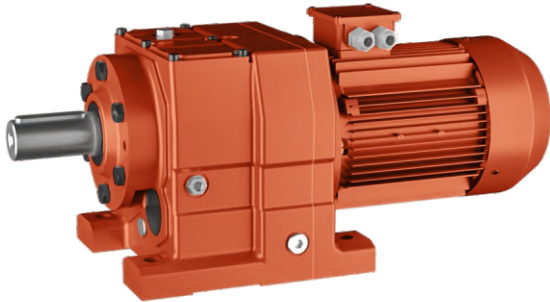
- Based on design of the traditional helical gearbox, as well as to meet strong market demand, combines the European advanced technical experience, after three years research and development, MR series modular gearbox access to market successfully.



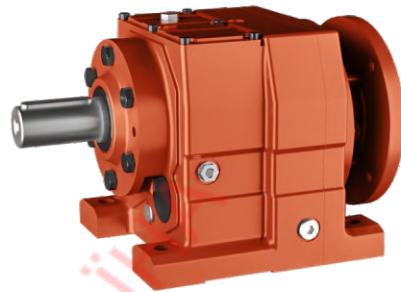
Characteristics

- Saving the inventory investment and warehouse space.
- High transmission efficiency, the single machine can reach as much as 96%.
- Modularity allows distributors create any new ratio quickly and flexibly by themselves to shorten the lead time greatly.
- Modular design can provide various kinds of ratio combination only through the simple transformation of high speed gears.

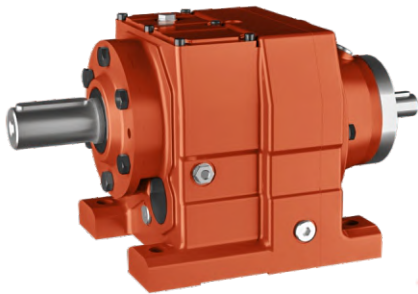
The product structure



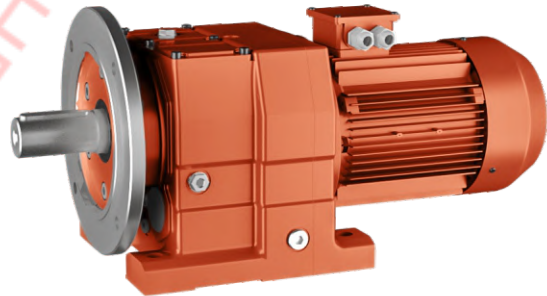
MR Series



MR with IEC input flange
B5/B14 input flange



MR..S Series

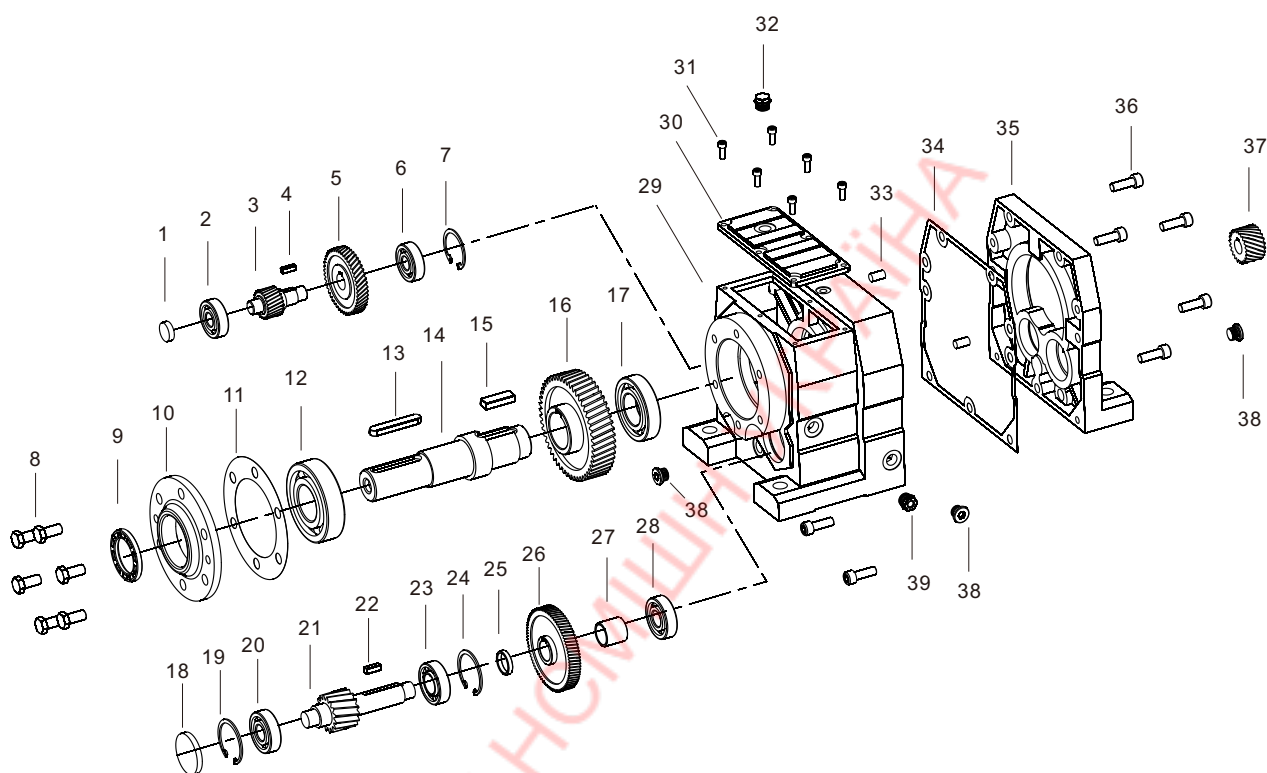


MRF Series

Working Environment

- Without industry limitation.
- Suitable for normal-reverse rotation.
- The working place should be lower than 1,000 meters above sea-level.
- Please consult our technical supporting department for other circumstances.
- Working temperature: -40°C~50°C (The lubrication should be heated until above 0°C if temperature below 0°C.)
- The input speed should be less than 3,000 r/m, the circumferential speed of the gear should not exceed 20m/s.

Product Disassembly Graph



1 Seal cover	11 Seal paper	21 Bevel gear shaft	31 Screws
2 Bearing	12 Bearing	22 Key	32 Breather plug
3 Gear shaft	13 Key	23 Bearing	33 Round nut
4 Key	14 Output shaft	24 Circlip for hole	34 Paper seal
5 Gear	15 Key	25 Adjusting ring	35 Housing
6 Bearing	16 Gear	26 Gear	36 Screws
7 Circlip for hole	17 Bearing	27 Adjusting ring	37 Gear
8 Screws	18 Seal cover	28 Bearing	38 Oil plug
9 Oil seal	19 Circlip for hole	29 Housing	39 Oil mirror
10 Output cover	20 Bearing	30 Housing cover	

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole		
0.12KW						0.12KW							
0.18	4500	7583	0.95	MR107 MR77 MRF107MR77	4P	4.5	255	199.81	2.4	MR67 MRF67	6P		
0.20	3850	6743	1.10			4.9	235	184.07	2.6				
0.23	3660	5914	1.20			5.7	200	158.14	3.0				
0.27	2950	5168	1.45			6.5	175	137.67	3.4				
0.31	2600	4435	1.65			7.0	164	128.97	3.7				
0.35	2310	3896	1.85			7.9	145	113.94	4.1				
0.45	1880	3039	2.3			6.9	166	199.81	3.6	MR67 MRF67	4P		
0.35	2670	3918	1.6			7.5	153	184.07	3.9				
0.41	2240	3343	1.9			5.1	225	176.88	1.35	MR47 MRF47	6P		
0.45	2030	3034	2.1			5.5	210	162.94	1.45				
0.52	1750	2653	2.5	6.4	178	139.99	1.70						
0.61	1500	2280	2.9	7.4	155	121.87	1.95						
0.67	1300	2067	3.3										
0.97	950	1430	0.85	MR77 MR37 MRF77 MR37	4P	7.8	147	176.88	2.0	MR47 MRF47	4P		
1.1	900	1303	0.90			8.5	135	162.94	2.2				
1.2	770	1124	1.05			9.9	116	139.99	2.6				
1.3	715	1047	1.15			11	101	121.87	3.0				
1.5	615	915	1.35			12	95	114.17	3.2				
0.99	940	1394	0.85			14	84	100.86	3.6				
1.1	785	1218	1.05			15	78	93.68	3.9				
1.3	710	1084	1.15			6.7	172	134.82	1.15	MR37 MRF37	6P		
1.5	635	940	1.30			7.3	157	123.66	1.25				
1.7	505	821	1.60			8.6	134	105.28	1.50				
1.9	460	731	1.80			9.9	116	90.77	1.75				
2.1	440	646	1.85			11	108	84.61	1.85				
2.7	365	520	2.3			12	94	73.96	2.1				
3.1	310	451	2.6										
3.3	290	422	2.8										
3.8	245	365	3.3										
1.4	655	956	0.90	MR67 MR37 MRF67 MR37	4P	10	112	134.82	1.80	MR37 MRF37	4P		
1.5	605	891	1.00			11	103	123.66	1.95				
1.9	490	730	1.25			13	87	105.28	2.3				
2.1	425	644	1.40			15	75	90.77	2.7				
2.4	375	571	1.60			16	70	84.61	2.8				
2.8	315	486	1.90			19	61	73.96	3.3				
1.6	565	836	1.05			0.18KW							
1.8	475	750	1.25			0.30	4510	4435	0.95	MR107 MR77 MRF107MR77	4P		
2.1	420	646	1.40			0.34	3990	3896	1.10				
2.4	380	574	1.55			0.43	3190	3039	1.35				
2.8	330	495	1.80			0.34	4380	3918	1.00				
3.2	275	438	2.2			0.39	3700	3343	1.15				
2.4	375	572	0.80	0.44	3360	3034	1.30						
2.7	330	510	0.90	0.50	2910	2653	1.50						
3.2	275	436	1.10	0.58	2500	2280	1.70						
3.4	255	408	1.15	0.64	2200	2067	1.95						
4.0	210	344	1.40	0.66	2050	1987	2.1						
2.8	355	502	0.85	0.72	1840	1827	2.3						
3.2	300	429	1.00	0.83	1580	1599	2.7						
3.7	255	372	1.15	0.94	1410	1400	3.1						
4.0	240	348	1.25	1.1	1210	1226	3.6						
4.6	205	301	1.50										
5.4	169	255	1.75										
6.1	150	228	2.0										
7.1	125	195	2.4										
4.6	250	195.24	3.3	MR77 MRF77	6P	1.5	950	858	0.85	MR77 MR37 MRF77 MR37	4P		
5.4	210	166.59	3.9			1.7	830	575	1.00				
6.2	186	145.67	4.4			2.0	735	671	1.10				
				2.3	620	571	1.35						
				1.6	870	821	0.95						
				1.8	780	731	1.05						
				2.0	720	646	1.15						
				2.4	625	560	1.30						

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole
0.18KW						0.18KW					
2.7	530	488	1.55	MR77 MR37 MRF77 MR37	4P	7.0	245	123.66	0.80	MR37 MRF37	6P
3.0	470	436	1.75			8.3	210	105.28	0.95		
3.5	405	373	2.0			9.6	179	90.77	1.10		
4.0	355	327	2.3			10	167	84.61	1.20		
4.6	320	289	2.6								
2.3	625	571	0.95	MR67 MR37 MRF67 MR37	4P	9.8	176	134.82	1.15	MR37 MRF37	4P
2.7	525	486	1.15			11	161	123.66	1.25		
2.3	635	574	0.95			13	137	105.28	1.45		
2.7	545	495	1.10			15	118	90.77	1.70		
3.0	465	438	1.30			16	110	84.61	1.80		
3.4	415	388	1.45			18	96	73.96	2.1		
3.8	380	344	1.60			19	90	69.33	2.2		
4.5	310	294	1.95			22	80	61.18	2.5		
5.1	280	261	2.1			24	73	55.76	2.8		
						27	63	48.08	3.2		
4.4	335	301	0.90	MR47 MR37 MRF47 MR37	4P	0.25KW					
5.2	285	255	1.05			0.43	4670	13039	0.90	MR107 MR77 MRF107MR77	4P
5.8	250	228	1.20			0.43	4860	3034	0.90		
6.8	210	195	1.40			0.65	3030	1987	1.40		
4.5	385	195.24	2.1	0.71	2740	1827	1.55				
5.2	330	166.59	2.5	0.81	2370	1599	1.8				
6.0	290	145.67	2.8	0.93	2100	1400	2.0				
6.3	275	138.39	3.0	1.1	1810	1226	2.4				
7.2	240	121.42	3.4	1.4	1410	939	3.0				
				1.6	1220	822	3.5				
6.8	255	195.24	3.2	MR77 MRF77	4P	2.3	900	571	0.90	MR77 MR37 MRF77 MR37	4P
7.9	215	166.59	3.8			2.3	900	560	0.90		
9.1	190	145.67	4.3			2.7	775	488	1.05		
9.5	180	138.39	4.6			3.0	690	436	1.20		
4.3	395	199.81	1.50	MR67 MRF67	6P	3.5	590	373	1.40		
4.7	365	184.07	1.65			4.0	520	327	1.60		
5.5	310	158.14	1.90			4.5	460	289	1.80		
6.3	270	137.67	2.2			5.0	410	260	2.0		
6.8	255	128.97	2.3			5.8	345	224	2.4		
6.8	225	113.94	2.7			3.3	605	388	1.00		
7.6	210	105.83	2.9			3.8	550	344	1.10		
8.2	190	95.91	3.2			4.4	455	294	1.30		
9.1	170	86.11	3.5			5.0	410	261	1.45		
9.1	147	74.17	4.1			5.6	370	234	1.60		
10	138	69.75	4.3			6.5	315	200	1.90		
6.6	260	199.81	2.3	MR67 MRF67	4P	7.4	270	176	2.2		
7.2	240	184.07	2.5			8.2	245	158	2.5		
8.4	205	158.14	2.9			3.4	630	384	0.95		
9.6	179	137.67	3.3			3.6	585	359	1.05		
10	168	128.97	3.6			4.2	505	310	1.20		
12	148	113.94	4.0			4.9	425	264	1.40		
12	138	105.83	4.3			5.5	375	235	1.60		
						6.5	320	201	1.90		
7.5	230	176.88	1.30	MR47 MRF47	4P	7.2	290	181	2.1		
8.1	210	162.94	1.40			5.7	365	228	0.80		
9.4	182	139.99	1.65			6.7	310	195	0.95		
11	159	121.87	1.90			7.1	290	182	1.05		
12	149	114.17	2.0			8.5	240	154	1.25		
13	131	100.86	2.3								
14	122	93.68	2.5								
16	111	84.90	2.7								
17	99	76.23	3.0								

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole					
0.25KW						0.25KW										
2.3	1020	289.74	3.0	MR97 MRF97	8P	9.6	250	134.82	0.80	MR37 MRF37	4P					
2.7	900	255.71	3.3			11	225	123.66	0.90							
2.8	850	241.25	3.5			12	193	105.28	1.05							
3.1	760	216.28	4.0			14	167	90.77	1.20							
						15	155	84.61	1.30							
2.8	870	246.54	1.80	MR87 MRF87	8P	18	136	73.96	1.45							
3.1	760	216.54	2.0			19	127	69.33	1.55							
3.3	720	205.71	2.2			21	112	61.18	1.80							
3.7	640	181.77	2.4			23	102	55.76	1.95							
						27	88	48.08	2.3							
4.1	585	166.49	1.40	MR77 MRF77	8P	29	82	44.81	2.4							
4.7	510	145.67	1.60			33	72	39.17	2.8							
4.9	485	138.39	1.70			35	67	36.72	3.0							
5.6	425	121.42	1.90			40	60	32.40	3.4							
						0.37KW										
4.5	530	195.24	1.55	MR77 MRF77	6P	0.67	4610	2067	0.95	MR107 MRF107	MR77 MRF77	4P				
5.3	450	166.59	1.80			0.82	3760	1693	1.15							
6.0	395	145.67	2.1			0.89	3410	1550	1.25							
						0.98	3090	1407	1.40							
6.7	360	195.24	2.3	MR77 MRF77	4P	1.1	2660	1209	1.60							
7.8	305	166.59	2.7			1.3	2320	1055	1.85							
8.9	270	15.67	3.1			0.69	4370	1987	1.00							
9.4	255	138.39	3.2			0.76	3970	1827	1.10							
11	225	121.42	3.7	MR67 MRF67	8P	0.86	3440	1599	1.25							
						0.99	3040	1400	1.40							
4.3	555	158.14	1.10			1.1	2640	1226	1.65							
4.9	485	137.67	1.25			1.5	2040	939	2.1							
5.3	455	128.97	1.35	MR67 MRF67	8P	1.7	1770	822	2.4							
6.0	400	113.94	1.50													
4.4	540	199.81	1.10			3.2	980	436	0.85				MR77 MRF77	MR37 MRF37	4P	
4.8	500	184.07	1.20			3.7	840	373	0.95							
5.6	430	158.14	1.40			4.2	740	327	1.10							
6.4	375	137.67	1.60			4.8	655	289	1.25							
6.8	350	128.97	1.70	5.3	585	260	1.40									
7.7	310	113.94	1.95	6.2	500	224	1.65									
8.3	285	105.83	2.1	7.0	435	197	1.90									
						8.1	380	169	2.2							
6.5	365	199.81	1.65	MR67 MRF67	4P	9.3	335	149	2.5							
7.1	340	184.07	1.80													
8.2	290	158.14	2.1			4.7	650	294	0.90	MR67 MRF67	MR37 MRF37	4P				
9.4	255	137.67	2.4			5.3	585	261	1.00							
10	235	128.97	2.5			5.9	525	234	1.15							
11	210	113.94	2.9			6.9	450	200	1.35							
12	194	105.83	3.1													
14	176	95.91	3.4			2.7	1330	255.71	2.3	MR97 MRF97		8P				
15	158	86.11	3.8	2.8	1250	241.25	2.4									
						3.1	1120	216.28	2.7							
7.3	325	176.88	0.90	3.7	970	186.30	3.1									
8.0	300	162.94	1.00													
9.3	255	139.99	1.15	3.1	1140	289.74	2.6	MR97 MRF97		6P						
11	225	121.87	1.35	3.5	1000	255.71	3.0									
11	210	114.17	1.45	3.7	950	241.25	3.2									
13	185	100.86	1.60	4.2	850	216.28	3.5									
14	172	93.68	1.75	MR47 MRF47	4P											
15	156	84.90	1.90			3.1	1130	216.54	1.40	MR87 MRF87		8P				
17	140	76.23	2.1			3.3	1070	205.71	1.45							
19	126	68.54	2.4			3.7	940	181.77	1.65							
20	118	64.21	2.5													
23	104	56.73	2.9													
25	97	52.69	3.1													
27	88	47.75	3.4													

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole								
0.37KW						0.37KW													
3.7	970	246.54	1.60	MR87 MRF87	6P	15	230	90.77	0.85	MR37 MRF37	4P								
4.2	850	216.54	1.80			16	215	84.61	0.90										
4.4	810	205.71	1.90			19	189	73.96	1.05										
4.9	715	181.77	2.2			20	178	69.33	1.15										
5.8	610	155.34	2.5			23	157	61.18	1.30										
6.3	560	142.41	2.8			25	143	55.76	1.40										
4.7	755	145.67	1.10	MR77 MRF77	8P	29	123	48.08	1.60										
4.9	720	138.39	1.15			31	115	44.81	1.75										
5.6	630	121.42	1.30			35	100	39.17	2.0										
5.4	655	166.59	1.25	MR77 MRF77	6P	38	94	36.72	2.1										
6.2	570	145.67	1.45			43	83	32.40	2.4										
6.5	545	138.39	1.50			48	74	28.73	2.7										
7.1	500	195.24	1.65			57	63	24.42	3.2										
8.3	425	166.59	1.90			49	73	28.32	2.8										
9.5	375	145.67	2.2			53	67	26.03	2.8										
10	355	138.39	2.3	MR77 MRF77	4P	62	57	22.27	3.5										
11	310	121.42	2.6			71	49	19.31	4.1										
13	265	102.99	3.1			76	46	18.05	4.3										
15	240	92.97	3.5			88	40	15.60	5.0										
5.7	620	158.14	0.95			MR67 MRF67	6P	104	34									13.25	5.6
6.5	540	137.67	1.10					117	30									11.83	6.0
7.0	505	128.97	1.20	0.55KW															
7.9	445	113.94	1.35	0.97	4790			1407	0.90	MR107 MRF107	MR77 MR77							4P	
6.9	510	199.81	1.15	1.1	4120			1209	1.05										
7.5	470	184.07	1.25	1.3	3590			1055	1.20										
8.7	405	158.14	1.50	1.5	3140	979	1.35												
10	355	137.67	1.70	1.7	2790	815	1.55												
11	330	128.97	1.80	1.9	2450	717	1.75												
12	290	113.94	2.1	2.2	2140	626	2.0												
13	270	105.83	2.2	0.97	4730	1400	0.90	MR77 MRF77	MR37 MR37			4P							
14	245	95.91	2.4	1.1	4120	1226	1.05												
16	220	86.11	2.7	1.2	3690	1104	1.15												
19	190	74.17	3.2	1.5	3170	939	1.35												
20	179	69.75	3.4	1.7	2760	822	1.55												
23	157	61.26	3.8	4.9	970	276	0.85			MR77 MRF77	MR37 MR37		4P						
24	146	56.89	4.1	5.8	830	236	1.00												
9.9	360	139.99	0.85	6.2	775	221	1.05												
11	310	121.87	0.95	7.3	650	186	1.25												
12	290	114.17	1.05	MR47 MRF47	4P	2.7	1980			255.71	1.50		MR97 MRF97	8P					
14	260	100.86	1.15			2.8	1860			241.25	1.60								
15	240	93.68	1.25			3.1	1670			216.28	1.80								
16	215	84.90	1.40			3.1	1690	289.74	1.75	MR97 MRF97	6P								
18	195	76.23	1.55			3.5	1490	255.71	2.0										
20	176	68.54	1.70			3.7	1410	241.25	2.1										
21	164	64.21	1.80			4.2	1260	216.28	2.4										
24	145	56.73	2.1			4.7	1120	289.74	2.7	MR97 MRF97	4P								
26	135	52.69	2.2			5.3	990	255.71	3.0										
29	122	47.75	2.5			5.6	930	241.25	3.2										
32	110	42.87	2.7			6.3	840	216.28	3.6										
37	95	36.93	3.2			MR87 MRF87	6P	3.7	1440	246.54	1.10								
40	89	34.73	3.4					4.2	1260	216.54	1.25								
41	87	33.79	2.8					4.4	1200	205.71	1.30								
44	80	31.12	2.8					4.9	1060	181.77	1.45								
52	69	26.74	4.4					5.8	910	155.34	1.70								
59	60	13.28	5.0																
63	56	21.81	5.4																

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole
0.55KW						0.75KW					
5.5	950	246.54	1.65	MR87 MRF87	4P	1.3	4890	1055	0.9	MR107 MRF107	MR77 MRF77 4P
6.3	840	216.54	1.85			1.5	4270	919	1.00		
6.6	795	205.71	1.95			1.7	3800	815	1.15		
7.5	700	181.77	2.2			1.2	5050	1104	0.85		
8.8	600	155.34	2.6			1.5	4330	939	1.00		
9.6	550	142.41	2.8			1.7	3770	822	1.15		
11	485	124.97	3.2			3.7	1690	369	2.5		
11	455	118.43	3.4			4.3	1470	323	2.9		
13	400	103.65	3.9								
8.2	645	166.59	1.25	MR77 MRF77	4P	2.8	2610	251.15	1.65	MR107 MRF107	8P
9.3	565	145.67	1.45			3.0	2390	229.95	1.80		
9.8	535	138.39	1.55			3.4	2110	203.16	2.0		
11	470	121.42	1.75			3.2	2240	216.28	1.35	MR97 MRF97	8P
13	400	102.99	2.1			3.7	1930	186.30	1.55		
15	360	92.97	2.3			4.1	1760	170.02	1.70		
17	315	81.80	2.6								
18	300	77.24	2.8			3.5	2030	255.71	1.45	MR97 MRF97	6P
21	255	65.77	3.2			3.7	1920	241.25	1.55		
						4.2	1720	216.28	1.75		
8.6	610	158.14	1.00	MR67 MRF67	4P	4.8	1500	289.74	2.0	MR97 MRF97	4P
9.9	530	137.67	1.15			5.4	1330	255.71	2.3		
11	500	128.97	1.20			5.7	1250	241.25	2.4		
12	440	113.94	1.35			6.4	1120	216.28	2.7		
13	410	105.83	1.45			7.4	970	186.30	3.1		
14	370	95.91	1.60			8.1	880	170.02	3.4		
16	335	86.11	1.80								
18	285	74.17	2.1								
20	270	69.75	2.2	MR67 MRF67	4P	4.2	1720	216.54	0.90	MR87 MRF87	6P
22	235	61.26	2.5			4.4	1640	205.71	0.95		
24	220	56.89	2.7			4.9	1450	181.77	1.05		
						5.8	1240	155.34	1.25		
15	360	93.68	0.85	MR47 MRF47	4P	6.3	1130	142.41	1.35		
16	330	84.90	0.90			5.6	1280	246.54	1.20	MR87 MRF87	4P
18	295	76.23	1.00			6.4	1120	216.54	1.40		
20	265	68.54	1.15			6.7	1070	205.71	1.45		
21	250	64.21	1.20			7.6	940	181.77	1.65		
24	220	56.73	1.35			8.9	810	155.34	1.90		
26	205	52.69	1.45			9.7	740	142.41	2.1		
28	184	47.75	1.65			11	650	124.97	2.4		
32	166	42.87	1.80			12	615	118.43	2.5		
37	143	36.93	2.1			13	540	103.65	2.9		
39	134	34.73	2.2			15	485	93.38	3.2		
46	115	29.88	2.6								
51	103	26.74	2.9			8.3	860	166.59	0.95	MR77 MRF77	4P
58	90	23.28	3.3			9.5	755	145.67	1.10		
62	84	21.81	3.6			10	720	138.39	1.15		
22	235	61.18	0.85	MR37 MRF37	4P	11	630	121.42	1.30		
24	215	55.76	0.95			13	535	102.99	1.55		
28	186	48.08	1.10			15	485	92.97	1.70		
30	173	44.81	1.15			17	425	81.80	1.95		
35	151	39.17	1.30			18	400	77.24	2.0		
37	142	36.72	1.40			21	340	65.77	2.4		
42	125	32.40	1.60			24	300	57.68	2.7		
47	111	28.73	1.80			27	270	52.07	3.0		
56	94	24.42	2.1			30	240	45.81	3.5		
61	86	22.27	2.3			32	225	43.26	3.7		
70	75	19.31	2.7								
75	70	18.05	2.9								
87	60	15.60	3.3								
103	51	13.25	3.7								
115	46	11.83	4.0								

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole				
0.75KW						1.1KW									
11	670	128.97	0.90	MR67 MRF67	4P	3.6	2920	255.71	1.05	MR97 MRF97	6P				
12	590	113.94	1.00			3.8	2750	241.25	1.10						
13	550	105.83	1.10			4.2	2470	216.28	1.20						
14	500	95.91	1.20			4.9	2130	186.30	1.40						
16	445	86.11	1.35			MR97 MRF97	4P	5.5	1920	255.71	1.55				
19	385	74.17	1.55					5.8	1810	241.25	1.65				
20	360	69.75	1.65					6.5	1620	216.28	1.85				
23	320	61.26	1.90					7.5	1400	186.30	2.2				
24	295	56.89	2.0					8.2	1280	170.02	2.3				
27	270	51.56	2.2					9.3	1130	150.78	2.7				
30	240	46.29	2.5	11	950			126.75	3.2						
				12	870			116.48	3.4						
20	355	68.54	0.85	MR47 MRF47	4P	6.5	1620	216.54	0.95	MR87 MRF87	4P				
21	335	64.21	0.90			6.8	150	205.71	1.00						
24	295	56.73	1.00			7.7	1360	181.77	1.15						
26	275	52.69	1.10			9.0	1170	155.34	1.35						
29	250	47.75	1.20			9.8	1070	142.41	1.45						
32	225	42.87	1.35			11	940	124.97	1.65						
37	192	36.93	1.55			12	890	118.43	1.75						
40	180	34.73	1.65			14	450	103.65	2.0						
46	155	29.88	1.95			15	700	93.38	2.2						
52	139	26.70	2.2			17	615	81.92	2.5						
58	122	23.59	2.5			19	545	72.57	2.8						
52	139	26.74	2.2			22	480	63.68	3.2						
59	121	23.28	2.5			23	455	60.35	3.4						
63	113	21.81	2.7			27	395	52.82	3.9						
72	100	19.27	3.0												
77	93	17.89	3.1												
85	84	16.22	3.3												
29	250	48.08	0.80	MR37 MRF37	4P	12	910	121.42	0.90	MR77 MRF77	4P				
31	235	44.81	0.85			14	775	102.99	1.05						
35	205	39.17	1.00			15	700	92.97	1.20						
38	191	36.72	1.05			17	615	81.80	1.35						
43	168	32.40	1.20			18	580	77.24	1.40						
48	149	28.73	1.35			21	495	65.77	1.65						
57	127	24.42	1.60			24	435	57.68	1.90						
62	116	22.27	1.75			27	390	52.07	2.1						
71	100	19.31	2.0			31	345	45.81	2.4						
76	94	18.05	2.1			32	325	43.26	2.5						
88	81	15.60	2.5			38	275	36.83	3.0						
104	69	13.25	2.8			42	250	33.47	3.3						
117	61	11.83	3.0												
137	53	10.11	3.2												
146	49	9.47	3.4												
1.1KW						16	645	86.11	0.95	MR67 MRF67	4P				
2.0	4870	717	0.90			19	555	74.17	1.10						
2.3	4100	614	1.05	20	525	69.75	1.15								
2.6	3630	544	1.20	23	460	61.26	1.30								
2.8	3280	492	1.30	25	425	56.89	1.40								
3.3	2780	417	1.55	27	385	51.89	1.55								
3.8	2480	369	1.75	30	345	46.29	1.75								
4.3	2170	323	2.0	35	300	39.88	1.95								
4.9	1910	285	2.2	37	280	37.50	2.0								
5.5	1690	253	2.5	43	240	32.27	2.2								
				49	215	28.83	2.4								
				50	210	28.13	2.6								
				52	200	26.72	2.7								
				60	176	23.44	3.2								
				70	149	19.89	4.0								
2.7	3880	251.15	1.10	MR107 MRF107	8P	29	360	47.75	0.85	MR47 MRF47	4P				
3.0	3550	229.95	1.20			33	320	42.87	0.95						
3.3	3140	203.16	1.35			38	275	36.93	1.10						
4.0	2660	172.34	1.60			40	260	34.73	1.15						
						47	225	29.88	1.35						

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole
1.1KW						1.5KW					
52	200	26.70	1.50	MR47 MRF47	4P	19	735	72.57	2.1	MR87 MRF87	4P
59	177	23.59	1.70			22	645	63.68	2.4		
60	175	23.28	1.70			23	615	60.35	2.5		
64	164	21.81	1.85			27	535	52.82	2.9		
73	145	19.27	2.0			30	485	47.58	3.2		
78	134	17.89	2.2			34	425	41.74	3.7		
86	122	16.22	2.3			38	375	36.84	4.1		
96	109	14.56	2.4			15	940	92.97	0.85	MR77 MRF77	4P
112	94	12.54	2.7			17	830	81.80	1.00		
119	89	11.79	2.8			18	785	77.24	1.05		
138	76	10.15	3.0			21	670	65.77	1.25		
154	68	9.07	3.2			24	585	57.68	1.40		
43	245	32.40	0.80	MR37 MRF37	4P	27	530	52.07	1.55		
49	215	28.73	0.95			31	465	45.81	1.75		
57	183	24.42	1.10			33	440	43.26	1.85		
73	145	19.31	1.40			38	375	36.83	2.2		
78	135	18.05	1.50			42	340	33.47	2.4		
90	117	15.60	1.70			49	295	29.00	2.8		
106	99	13.25	1.90			56	255	25.23	3.0		
118	89	11.83	2.1			60	240	23.37	3.5		
139	76	10.11	2.2			66	220	21.43	3.8		
148	71	9.47	2.3			75	191	18.80	4.1		
176	60	7.97	2.6	MR107 MRF107	8P	23	620	61.26	0.95	MR67 MRF67	4P
210	50	6.67	2.9			25	580	56.89	1.05		
247	43	5.67	3.3			27	525	51.56	1.15		
277	38	5.06	3.5			30	470	46.29	1.30		
2.7	4860	528	0.90	MR107 MRF107	4P	35	405	39.88	1.45		
2.6	4970	544	0.85			38	380	37.50	1.50		
2.9	4490	492	0.95			44	330	32.37	1.65		
3.4	3810	417	1.15			49	295	28.83	1.80		
3.8	3390	369	1.25			50	285	28.13	1.90		
4.4	2960	323	1.45			53	270	26.72	2.0		
3.0	4410	469	1.00			60	240	23.44	2.3		
3.0	4710	229.95	0.90			71	200	19.89	3.0		
3.5	4160	203.15	1.05			79	182	17.95	3.2		
4.1	3530	172.34	1.20			38	375	36.93	0.80	MR47 MRF47	4P
4.4	3250	158.68	1.30			41	355	34.73	0.85		
5.5	2600	255.71	1.15	MR97 MRF97	4P	47	305	29.88	1.00		
5.8	2450	241.25	1.20			53	270	26.77	1.10		
6.5	2200	216.28	1.35			60	240	23.59	1.25		
7.6	1890	186.30	1.60			61	235	23.28	1.25		
8.3	1730	170.02	1.75			65	220	21.81	1.35		
9.4	1530	150.78	1.95			73	196	19.27	1.50		
11	1290	126.75	2.3			79	182	17.89	1.60		
12	1180	116.48	2.5			87	165	16.22	1.65		
14	1050	403.44	2.8			97	148	14.56	1.80		
15	940	92.48	3.2			112	127	12.54	1.95		
7.8	1850	181.77	0.85	MR87 MRF87	4P	120	120	11.79	2.0		
9.1	1580	155.34	1.00			139	103	10.15	2.2		
9.9	1450	142.41	1.05			155	92	9.07	2.4		
11	1270	124.97	1.20			176	81	8.01	2.5		
12	1200	118.43	1.30			182	79	7.76	2.1		
14	1050	103.65	1.45			203	71	6.96	2.2		
15	950	93.38	1.65			235	61	6.00	2.6		
17	830	81.92	1.85			250	57	5.64	2.7		
						291	49	4.85	3.0		
						325	44	4.34	3.3		
						368	39	3.83	3.7		

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole
1.5KW						2.2KW					
73	196	19.31	1.00	MR37 MRF37	4P	11	1860	124.97	0.85	MR87 MRF87	4P
78	183	18.05	1.10			12	1760	118.43	0.90		
90	159	15.60	1.25			14	1540	103.65	1.00		
106	135	13.25	1.40			15	1390	93.38	1.10		
119	120	11.83	1.50			17	1220	81.92	1.25		
140	103	10.11	1.65			19	1080	72.57	1.45		
149	96	9.47	1.75			22	950	63.68	1.65		
177	81	7.97	1.95			23	900	60.35	1.70		
211	68	6.67	2.1			27	785	52.82	1.95		
249	58	5.67	2.5			30	710	47.58	2.2		
279	51	5.06	2.6			34	620	41.74	2.5		
326	44	4.32	2.9			38	550	36.84	2.8		
348	41	4.05	3.0	43	485	32.66	3.2				
414	35	3.41	3.2	41	515	34.40	2.9				
				45	470	31.40	3.3				
204	70	13.25	2.7	MR37 MRF37	2P	51	415	27.84	3.7		
228	63	11.83	2.9			60	350	23.40	4.4		
267	54	10.11	3.2			66	320	21.51	4.7		
285	50	9.47	3.3								
339	42	7.97	3.7								
2.2KW						21	980	65.77	0.85	MR77 MRF77	4P
3.8	5010	369	0.85	24	860	57.68	0.95				
4.4	4390	323	1.00	27	775	52.07	1.05				
4.9	3860	285	1.10	31	685	45.81	1.20				
5.6	3420	253	1.25	33	645	43.26	1.25				
6.6	2900	214	1.50	38	550	36.83	1.50				
4.3	4480	325	0.95	42	500	33.47	1.65				
				49	430	29.00	1.90				
4.6	4540	203.16	0.95	56	375	25.23	2.1				
5.4	3850	172.34	1.10	60	350	23.37	2.3				
5.9	3550	158.68	1.20	66	320	21.43	2.6				
6.6	3170	141.83	0.35	75	280	18.80	2.8				
				79	265	17.82	2.9				
5.6	3740	251.15	1.15	90	230	15.60	3.2				
6.1	3430	229.95	1.25	100	210	14.05	3.4				
6.9	3030	203.16	1.40								
8.2	2570	172.34	1.65	35	595	39.88	1.00				
8.9	2360	158.68	1.80	38	560	37.50	1.00				
9.9	2110	141.83	2.0	44	480	32.27	1.10				
11	1900	127.68	2.3	49	430	28.83	1.20				
12	1720	115.63	2.5	60	350	23.44	1.60				
14	1530	102.53	2.8	71	295	19.89	2.0				
15	1380	92.70	3.1	79	270	17.95	2.2				
				89	235	15.79	2.4				
6.5	3220	216.28	0.95	95	220	14.91	2.5				
7.6	2780	186.30	1.10	111	189	12.70	2.8				
8.3	2530	170.02	1.20	122	172	11.54	2.9				
9.4	2250	150.78	1.35	141	149	10.00	3.2				
11	1890	126.75	1.60	162	130	8.70	3.4				
12	1740	116.48	1.75	181	116	7.79	3.3				
14	1540	103.44	1.95								
15	1380	92.48	2.2	73	285	19.27	1.05				
17	1240	83.15	2.4	87	240	16.22	1.15				
20	1080	72.17	2.8	97	215	14.56	1.20				
22	970	65.21	3.1	112	187	12.54	1.35				
24	890	59.92	3.4	120	176	11.79	1.40				
27	795	53.21	3.8	139	151	10.15	1.50				
30	710	47.58	4.2	155	135	9.07	1.65				
				176	119	8.01	1.70				
				182	116	7.76	1.40				
				203	104	6.96	1.55				
				235	89	6.00	1.75				
				250	84	5.64	1.85				

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole		
2.2KW						3.0KW							
291	72	4.85	2.1	MR47 MRF47	4P	9.3	3090	150.78	0.95	MR97 MRF97	4P		
325	65	4.34	2.3			11	2590	126.75	1.15				
368	57	3.83	2.5			12	2380	116.48	1.25				
117	179	23.28	1.70	MR47 MRF47	2P	14	2120	103.44	1.40				
125	168	21.81	1.80			15	1890	92.48	1.60				
142	148	19.27	2.0			17	1700	83.15	1.75				
153	138	17.89	2.1			19	1480	72.17	2.0				
168	125	16.22	2.2			21	1330	65.21	2.2				
187	112	14.56	2.4			23	1230	59.92	2.5				
218	97	12.54	2.6			26	1090	53.21	2.8				
231	91	11.79	2.7			29	970	47.58	3.1				
269	78	10.15	2.9			33	880	42.78	3.4				
301	70	9.07	3.2			38	760	37.13	4.0				
341	62	8.01	3.3			42	680	33.25	4.2				
90	230	15.60	0.85	MR37 MRF37	4P	15	1910	93.38	0.80	MR87 MRF87	4P		
106	198	13.25	0.95			17	1680	81.92	0.90				
119	176	11.83	1.05			19	1490	72.57	1.05				
140	151	10.11	1.15			22	1300	63.68	1.20				
149	141	9.47	1.20			23	1230	60.35	1.25				
177	119	7.97	1.30			27	1080	52.82	1.45				
211	99	6.67	1.45			29	970	47.58	1.60				
249	84	5.67	1.70			34	850	41.74	1.80				
279	75	5.06	1.80			38	755	36.84	2.1				
326	64	4.32	1.95			43	670	32.66	2.3				
348	60	4.05	2.0			50	570	27.88	2.6				
414	51	3.41	2.2	41	705	34.40	2.1						
141	149	19.31	1.35	MR37 MRF37	2P	45	640	31.40	2.4			MR77 MRF77	4P
151	139	18.05	1.45			50	570	27.84	2.7				
175	120	15.60	1.65			60	480	23.40	3.2				
206	102	13.25	1.85			65	440	21.51	3.4				
231	91	11.83	2.0			73	390	19.10	3.7				
270	78	10.11	2.2			82	350	17.08	4.0				
288	73	9.47	2.3			91	315	15.35	4.3				
342	61	7.97	2.5			31	940	45.81	0.85				
409	51	6.67	2.8			32	890	43.26	0.95				
482	44	5.67	3.3			38	755	36.83	1.10				
540	39	5.06	3.5			42	685	33.47	1.20				
632	33	4.32	3.8	48	595	29.00	1.40						
675	31	4.05	3.9	55	515	25.23	1.50						
801	26	3.41	4.3	60	480	23.37	1.70						
3.0KW						65	440	21.43	1.85	MR77 MRF77	4P		
5.5	4730	253	0.90	74	385	18.80	2.0						
6.5	4010	214	1.05	79	365	17.82	2.1						
7.5	3500	187	1.25	90	320	15.60	2.3						
5.5	4870	256	0.90	100	290	14.05	2.5						
5.9	4840	158.68	0.90	114	250	12.33	2.7						
6.6	4320	141.83	1.00	129	225	10.88	3.0						
7.4	3890	127.68	1.10	145	197	9.64	3.2						
6.1	4710	229.95	0.90	163	176	8.59	3.6						
6.9	4160	203.16	1.05	181	158	7.74	3.8						
8.1	3530	172.34	1.20	206	139	6.79	4.2						
8.8	3250	158.68	1.30	60	480	23.44	1.15	MR67 MRF67	4P				
9.9	2900	141.83	1.50	70	405	19.89	1.45						
11	2610	127.68	1.65	78	365	17.95	1.60						
12	2370	115.63	1.80	89	325	15.79	1.75						
14	2100	102.53	2.0	94	305	14.91	1.80						
15	1900	92.70	2.3	110	260	12.70	2.0						
18	1610	78.57	2.7	121	235	11.54	2.1						
19	1490	72.88	2.9	140	205	10.00	2.3						

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole
3.0KW						4.0KW					
86	330	16.22	0.85	MR47 MRF47	4P	19	1960	72.88	2.2	MR107 MRF107	4P
96	300	14.56	0.90			22	1760	65.60	2.4		
112	255	12.54	0.95			24	1600	59.41	2.7		
119	240	11.79	1.00			27	1420	52.68	3.0		
138	210	10.15	1.10								
154	186	9.07	1.20			12	3130	116.48	0.95	MR97 MRF97	4P
175	164	8.01	1.25			14	2780	103.44	1.10		
181	159	7.76	1.05			15	2490	92.48	1.20		
201	143	6.96	1.10			17	2240	83.15	1.35		
233	123	6.00	1.25			20	1940	72.17	1.55		
248	115	5.64	1.35			22	1750	65.21	1.70		
288	99	4.85	1.50			24	1610	59.92	1.85		
323	89	4.34	1.65			27	1430	53.21	2.1		
365	78	3.83	1.85			30	1280	47.58	2.3		
				33	1150	42.78	2.6				
237	121	11.79	2.0	38	1000	37.13	3.0				
276	104	10.15	2.2	43	890	33.25	3.2				
309	93	9.07	2.4	44	860	32.05	3.0				
349	82	8.01	2.5	52	730	27.19	3.5				
361	79	7.76	2.1	57	675	25.03	4.2				
402	71	6.96	2.2	63	600	22.37	4.5				
467	61	6.00	2.5	71	540	20.14	4.8				
496	58	5.64	2.7								
577	50	4.85	3.0	22	1710	63.68	0.90	MR87 MRF87	4P		
646	44	4.34	3.3	24	1620	60.35	0.95				
731	39	3.83	3.7	27	1420	52.82	1.10				
				30	1280	47.58	1.20				
139	205	10.11	0.80	34	1120	41.74	1.40				
148	194	9.47	0.85	39	990	36.84	1.55				
176	163	7.97	0.95	43	880	32.66	1.75				
210	137	6.67	1.05	51	750	27.88	2.0				
247	116	5.67	1.25	41	930	34.40	1.6				
277	104	5.06	1.30	45	840	31.40	1.85				
324	88	4.32	1.45	51	750	27.84	2.1				
346	83	4.05	1.45	61	630	23.40	2.5				
411	70	3.41	1.60	66	580	21.51	2.6				
				74	515	19.10	2.8				
277	103	10.11	1.65	83	460	17.08	3.0				
296	97	9.47	1.70	92	415	15.35	3.2				
351	82	7.97	1.90	107	360	13.33	3.6				
420	68	6.67	2.1	119	320	11.93	3.8				
494	58	5.67	2.5								
553	52	5.06	2.6	39	990	36.83	0.85	MR77 MRF77	4P		
648	44	4.32	2.8	42	900	33.47	0.90				
692	41	4.05	3.0	49	780	29.00	1.05				
821	35	3.41	3.2	56	680	25.23	1.15				
4.0KW						61	630			23.37	1.30
7.6	4620	187	0.95	MR107 MR77 MRF107MR77	4P	66	575			21.43	1.40
7.3	4840	193	0.90			76	505			18.80	1.55
8.2	4330	172	1.00			80	480			17.82	1.65
						91	420			15.60	1.75
						101	380			14.05	1.90
8.2	4640	172.34	0.95	115	330	12.33	2.1			MR77 MRF77	4P
8.9	4270	158.68	1.00	131	295	10.88	2.3				
10	3820	141.83	1.15	147	260	9.64	2.4				
11	3430	127.68	1.25	165	230	8.59	2.7				
12	3110	115.63	1.40	183	210	7.74	2.9				
14	2760	102.53	1.55	209	183	6.79	3.2				
15	2490	92.70	1.70	237	161	5.99	3.3				
18	2110	78.57	2.0	267	143	5.31	3.6				

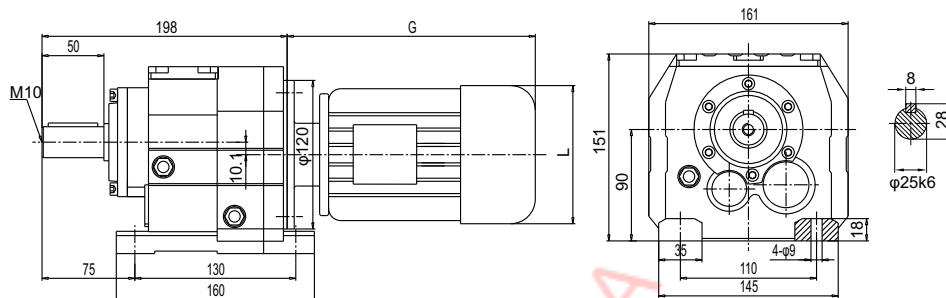
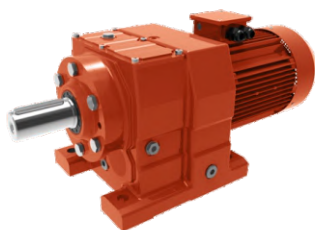
Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole				
4.0KW						5.5KW									
71	535	19.89	1.10	MR67 MRF67	4P	43	1220	33.25	2.4	MR97 MRF97	4P				
79	485	17.95	1.20			52	1010	27.58	2.6						
90	425	15.79	1.30			45	1180	32.05	2.2						
95	400	14.91	1.35			53	1000	27.19	2.6						
112	340	12.70	1.50			57	920	25.03	3.1						
123	310	11.54	1.60			64	820	22.37	3.3						
142	270	10.00	1.75			71	740	20.14	3.5						
163	235	8.70	1.90			78	670	18.24	3.7						
182	210	7.79	1.80			88	595	16.17	4.0						
193	198	7.36	1.85												
227	169	6.27	1.95												
249	153	5.70	2.0												
288	133	4.93	2.2												
331	116	4.29	2.3												
140	275	10.15	0.85	MR47 MRF47	4P	30	1750	47.58	0.90	MR87 MRF87	4P				
157	245	9.07	0.90			34	1530	41.74	1.00						
177	215	8.01	0.95			39	1350	36.84	1.15						
204	187	6.96	0.85			44	1200	32.66	1.30						
237	161	6.00	0.95			51	1020	27.88	1.45						
252	152	5.64	1.00			51	1020	27.84	1.50						
293	131	4.85	1.15			61	860	23.40	1.80						
327	117	4.34	1.25			66	790	21.51	1.90						
371	103	3.83	1.40			75	700	19.10	2.0						
						84	625	17.08	2.2						
						93	565	15.35	2.4						
						107	490	13.33	2.6						
						120	440	11.93	2.8						
						144	365	9.90	3.2						
				156	335	9.14	3.6								
				174	300	8.22	3.8								
				200	260	7.13	4.1								
176	215	16.22	1.25	MR47 MRF47	2P	76	690	18.80	1.15	MR77 MRF77	4P				
196	195	14.56	1.35			80	655	17.82	1.20						
228	168	12.54	1.50			92	575	15.60	1.30						
242	158	11.79	1.55			102	515	14.05	1.40						
282	136	10.15	1.70			116	455	12.33	1.50						
315	121	9.07	1.80			131	400	10.88	1.65						
357	107	8.01	1.90			148	355	9.64	1.80						
369	104	7.76	1.55			166	315	8.59	2.0						
411	93	6.96	1.70			185	285	7.74	2.2						
477	80	6.00	1.95			211	250	6.79	2.3						
507	75	5.64	2.1			239	220	5.99	2.5						
589	65	4.85	2.3			269	195	5.31	2.6						
660	58	4.34	2.5												
746	51	3.83	2.8												
5.5KW						5.5KW									
11	4690	127.68	0.90	MR107 MRF107	4P	91	580	15.79	0.95	MR67 MRF67	4P				
12	4250	115.63	1.00			96	550	14.91	1.00						
14	3770	102.53	1.15			113	465	12.70	1.10						
15	3400	92.70	1.25			124	425	11.54	1.20						
18	2890	78.57	1.50			143	365	10.00	1.30						
20	2680	72.88	1.60			164	320	8.70	1.40						
22	2410	65.60	1.80			183	285	7.79	1.35						
24	2180	59.41	1.95			194	270	7.36	1.35						
27	1930	52.68	2.2			228	230	6.27	1.45						
30	1750	47.63	2.5			251	210	5.70	1.50						
35	1480	40.37	2.9			290	181	4.93	1.60						
						333	158	4.29	1.70						
17	3050	83.15	1.00			MR97 MRF97	4P	331	159			8.70	2.8	MR67 MRF67	6P
20	2650	72.17	1.15					369	142			7.79	2.7		
22	2390	65.21	1.25	391	134			7.36	2.8						
24	2200	59.92	1.35	460	114			6.27	2.9						
27	1950	53.21	1.55	506	104			5.70	3.0						
30	1750	47.58	1.70	584	90			4.93	3.2						
33	1570	42.78	1.90	671	78			4.29	3.5						
39	1360	37.13	2.2												

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole		
5.5KW						7.5KW							
295	178	4.85	0.85	MR47 MRF47	4P	76	940	18.80	0.85	MR77 MRF77	4P		
330	159	4.34	0.90			80	890	17.82	0.85				
373	141	3.83	1.00			92	780	15.60	0.95				
230	230	12.54	1.10	MR47 MRF47	2P	102	705	14.05	1.00				
244	215	11.79	1.15			116	615	12.33	1.10				
284	185	10.15	1.25			131	545	10.88	1.20				
318	165	9.07	1.35			148	485	9.64	1.30				
359	146	8.01	1.40			166	430	8.59	1.45				
480	109	6.00	1.45			185	390	7.74	1.55				
511	103	5.64	1.50			211	340	6.79	1.70				
593	89	4.85	1.70			239	300	5.99	1.80				
664	79	4.34	1.85			269	265	5.31	1.90				
752	70	3.83	2.1										
7.5KW						11KW							
15	4640	92.70	0.95	MR107 MRF107	4P	113	635	12.70	0.80	MR67 MRF67	4P		
18	3940	78.57	1.10			124	580	11.54	0.85				
20	3650	72.88	1.20			143	500	10.00	0.95				
22	3290	65.60	1.30			164	435	8.70	1.00				
24	2980	59.41	1.45			183	390	7.79	0.95				
27	2640	52.68	1.65			194	370	7.36	1.00				
30	2390	47.63	1.80			228	315	6.27	1.05				
35	2020	40.37	2.1			251	285	5.70	1.10				
41	1770	35.26	2.4			290	245	4.93	1.15				
48	1480	29.49	2.9			333	215	4.29	1.25				
46	1540	30.77	2.8										
52	1380	27.58	3.1			22	4790	65.60	0.90				
57	1250	24.90	3.5			24	4330	59.41	1.00				
63	1130	22.62	3.8			27	3840	52.68	1.10				
24	3000	59.92	1.00	MR107 MRF107	4P	30	3470	47.63	1.25				
27	2670	53.21	1.15			36	2940	40.37	1.45				
30	2380	47.58	1.25			41	2570	35.26	1.65				
33	2140	42.78	1.40			49	2150	29.49	2.0				
39	1860	37.13	1.60			47	2240	30.77	1.90				
43	1670	33.25	1.75			52	2010	27.58	2.1				
52	1380	27.58	1.95			58	1820	24.90	2.4				
45	1610	32.05	1.60			64	1650	22.62	2.6				
53	1360	27.19	1.90			72	1460	20.07	2.9				
57	1250	25.03	2.3			79	1330	18.21	3.2				
64	1120	22.37	2.4										
71	1010	20.14	2.6			34	3120	42.78	0.95				
78	910	18.24	2.7			39	2710	37.13	1.10				
39	1840	36.84	0.85			MR97 MRF97	4P	43	2430	33.25	1.20		
44	1640	32.66	0.95					52	2010	27.58	1.35		
51	1400	27.88	1.05					58	1830	25.03	1.55		
51	1390	27.84	1.10					64	1630	22.37	1.65		
61	1170	23.40	1.30	71	1470			20.14	1.80				
66	1080	21.51	1.40	79	1330			18.24	1.90				
75	960	19.10	1.50	89	1180			16.17	2.0				
84	860	17.08	1.65	98	1070			14.62	2.2				
93	770	15.35	1.75	116	900			12.39	2.4				
107	670	13.33	1.90	133	790			10.83	2.7				
120	600	11.93	2.1	155	675			9.29	3.0				
144	495	9.90	2.4	172	610			8.39	3.3				
156	460	9.14	2.6	202	520			7.12	3.8				
174	410	8.22	2.8	232	455			6.21	4.2				
200	355	7.13	3.0										
224	320	6.39	3.2	67	1570			21.51	0.95				
270	265	5.30	3.4	75	1390			19.10	1.05				
				84	1250			17.08	1.10				
				94	1120			15.35	1.20				
				108	970			13.33	1.30				

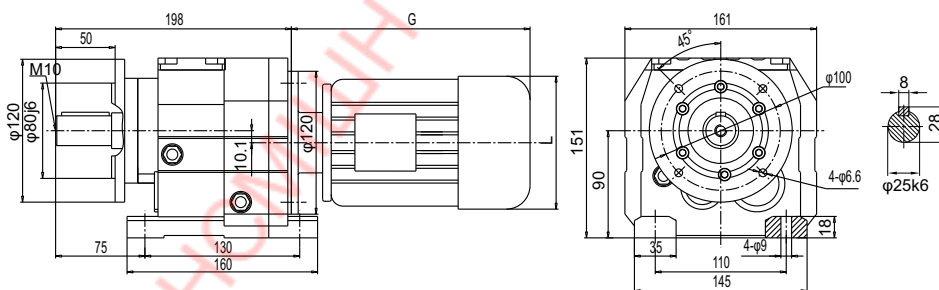
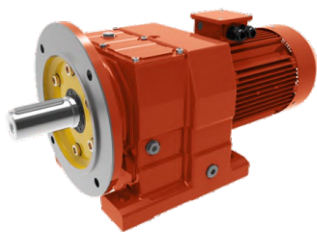
Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole	Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole				
11KW						18.5KW									
121	870	11.93	1.40	MR87 MRF87	4P	73	2420	20.07	1.80	MR107 MRF107	4P				
145	720	9.90	1.65			80	2200	18.21	1.95						
158	665	9.14	1.80			94	1890	15.65	2.3						
175	600	8.22	1.95			107	1650	13.66	2.6						
202	520	7.13	2.1			126	1400	11.59	3.1						
225	465	6.39	2.2			145	1220	10.13	3.5						
272	385	5.30	2.3			186	950	7.86	3.1						
						220	800	6.66	3.7						
132	795	10.88	0.85	MR77 MRF77	4P	73	2430	20.14	1.05	MR97 MRF97	4P				
149	705	9.64	0.90			80	2200	18.24	1.15						
186	565	7.74	1.10			91	1950	16.17	1.25						
212	495	6.79	1.15			100	1760	14.62	1.30						
240	435	5.99	1.25			118	1490	12.39	1.45						
271	390	5.31	1.30			135	1310	10.83	1.60						
15KW						158	1120	9.29	1.80						
31	4670	47.63	0.90	MR107 MRF107	4P	175	1010	8.39	2.0						
36	3960	40.37	1.10			206	860	7.12	2.3						
41	3460	35.26	1.25			236	750	6.21	2.5						
50	2890	29.49	1.50			282	625	5.20	2.8						
47	3020	30.77	1.40			326	545	4.50	3.0						
53	2710	27.58	1.60			22KW									
59	2440	24.90	1.75			110	1610	13.33	0.80	MR87 MRF87	4P				
65	2220	22.62	1.95			123	1440	11.93	0.85						
73	1970	20.07	2.2			148	1190	9.90	1.00						
80	1790	18.21	2.4			160	1100	9.14	1.10						
93	1540	15.65	2.8			178	990	8.22	1.15						
107	1340	13.66	3.2			205	860	7.13	1.25						
				229	770	6.39	1.30								
				276	640	5.30	1.40								
53	2710	27.58	1.00	MR97 MRF97	4P	22KW									
58	2460	25.03	1.15			42	5060	35.26	0.85			MR107 MRF107	4P		
65	2200	22.37	1.25			50	4230	29.49	1.00						
72	1980	20.14	1.30			59	3570	24.90	1.20						
80	1790	18.24	1.40			65	3240	22.62	1.35						
90	1590	16.17	1.50			73	2880	20.07	1.50						
100	1430	14.62	1.60			80	2610	18.21	1.65						
118	1220	12.39	1.80			94	2240	15.65	1.90						
135	1060	10.83	1.95			107	1960	13.66	2.2						
157	910	9.29	2.2			126	1660	11.59	2.6						
174	820	8.39	2.5			145	1450	10.13	3.0						
205	700	7.12	2.9			171	1230	8.56	3.5						
235	610	6.21	3.1			186	1130	7.86	2.6						
				220	960	6.66	3.1								
				252	840	5.82	3.6								
85	1680	17.08	0.85	MR87 MRF87	4P	73	2890	20.14	0.90	MR97 MRF97	4P				
95	1510	15.35	0.90			80	2620	18.24	0.95						
110	1310	13.33	1.00			91	2320	16.17	1.05						
122	1170	11.93	1.05			100	2100	14.62	1.10						
147	970	9.90	1.20			118	1780	12.39	1.25						
160	900	9.14	1.35			135	1550	10.83	1.35						
178	810	8.22	1.45			158	1330	9.29	1.50						
205	700	7.13	1.55			175	1200	8.39	1.70						
229	625	6.39	1.65			206	1020	7.12	1.95						
275	520	5.30	1.75			236	890	6.21	2.1						
						282	745	5.20	2.4						
18.5KW						326	645	4.50	2.5						
36	4870	40.37	0.90	MR107 MRF107	4P	18.5KW									
42	4250	35.26	1.00			73	2890	20.14	0.90	MR97 MRF97	4P				
50	3560	29.49	1.20			80	2620	18.24	0.95						
59	3000	24.90	1.45			91	2320	16.17	1.05						
65	2730	22.62	1.60			100	2100	14.62	1.10						

Output speed (r/min)	Output torque (N.M)	Ratio (i)	Service Factor (fs)	Type	Motor Pole
22KW					
148	1420	9.90	0.85	MR87 MRF87	4P
160	1310	9.14	0.90		
178	1180	8.22	1.00		
205	1020	7.13	1.05		
229	920	6.39	1.10		
276	760	5.30	1.20		
30KW					
73	3910	20.07	1.10	MR107 MRF107	4P
81	3550	18.21	1.20		
94	3050	15.65	1.40		
108	2660	13.66	1.60		
127	2260	11.59	1.90		
145	1970	10.13	2.2		
172	1670	8.56	2.6		
187	1530	7.86	1.95		
221	1300	6.66	2.3		
252	1140	5.82	2.6		
299	960	4.92	3.0		
101	2850	14.62	0.80	MR97 MRF97	4P
119	2420	12.39	0.90		
136	2110	10.83	1.00		
158	1810	9.29	1.10		
175	1640	8.39	1.25		
207	1390	7.12	1.45		
237	1210	6.21	1.55		
283	1010	5.20	1.75		
327	880	4.50	1.85		
37KW					
73	4820	20.07	0.90	MR107 MRF107	4P
81	4380	18.21	1.00		
94	3760	15.65	1.15		
108	3280	13.66	1.30		
127	2790	11.59	1.55		
145	2430	10.13	1.75		
172	2060	8.56	2.1		
187	1890	7.86	1.55		
221	1600	6.66	1.85		
252	1400	5.82	2.1		
299	1180	4.92	2.5		
45KW					
94	4580	15.65	0.95	MR107 MRF107	4P
108	3990	13.66	1.10		
127	3390	11.59	1.25		
145	2960	10.13	1.45		
172	2500	8.56	1.70		
187	2300	7.86	1.30		
221	1950	6.66	1.50		
252	1700	5.82	1.78		
299	1440	4.92	2.0		

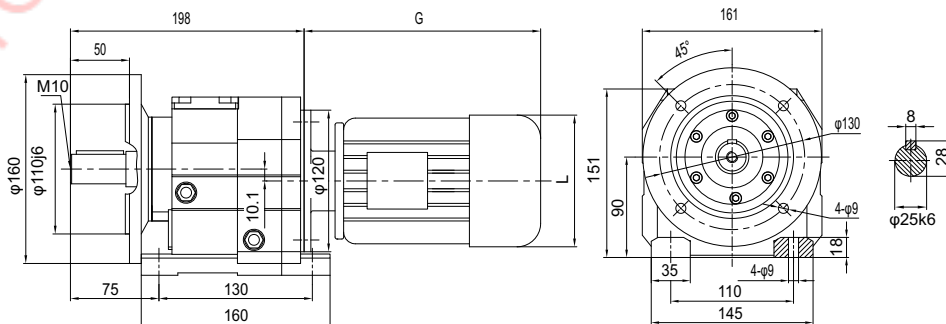
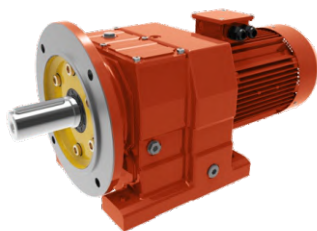
MR37

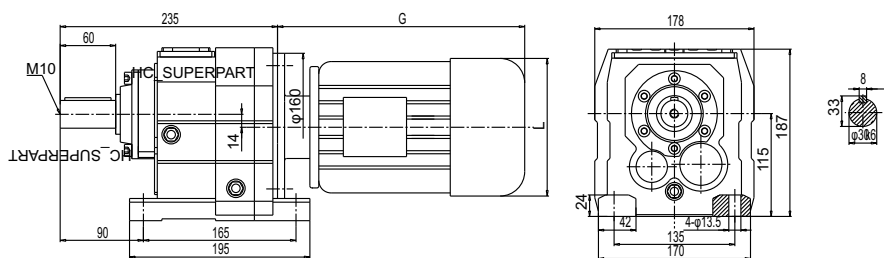
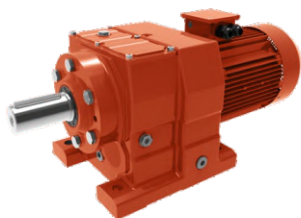
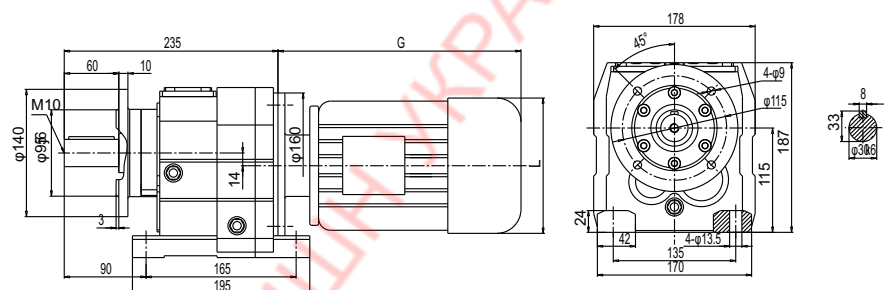
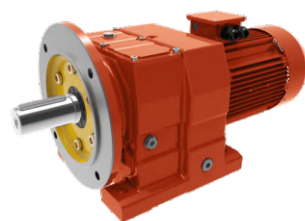
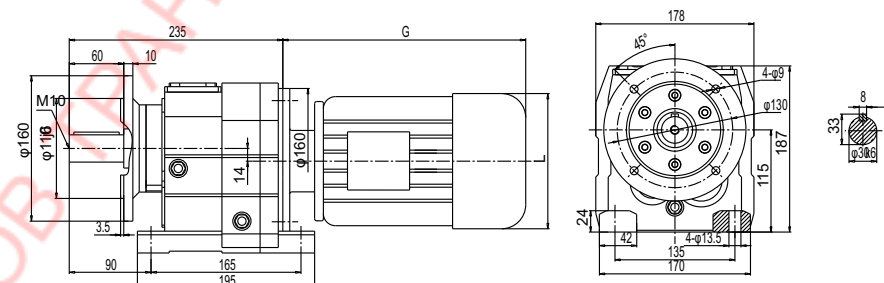
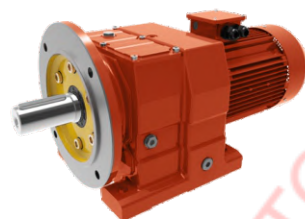
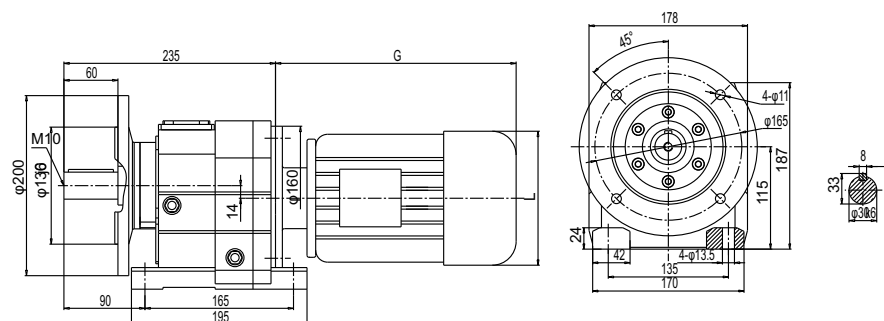
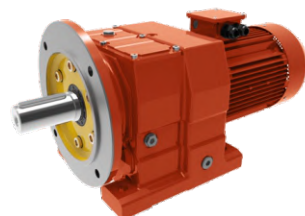


MRF37 ($\phi 120$)

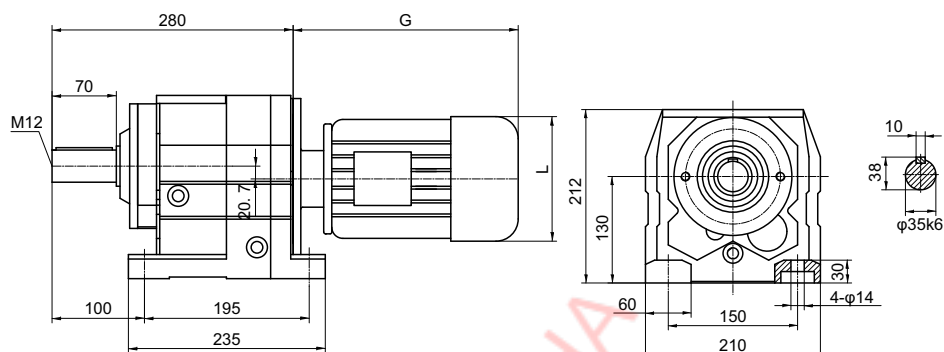
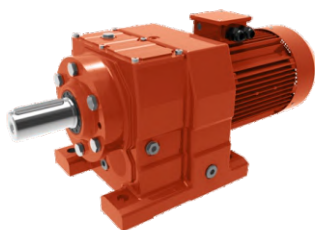


MRF37 ($\phi 160$)

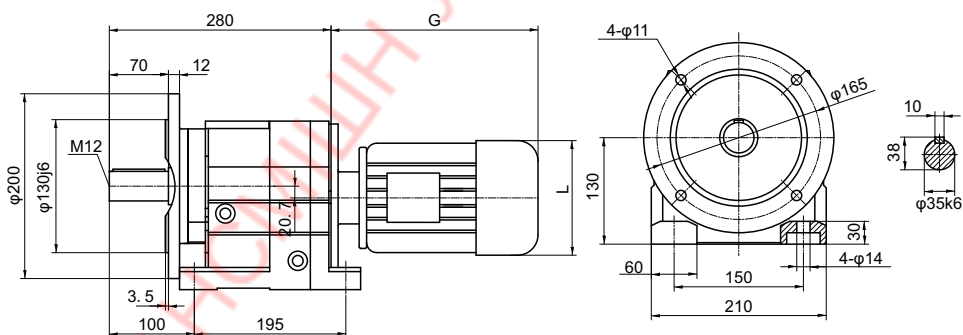
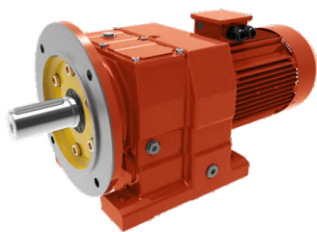


MR47**MRF47**
($\Phi 140$)**MRF47**
($\Phi 160$)**MRF47**
($\Phi 200$)

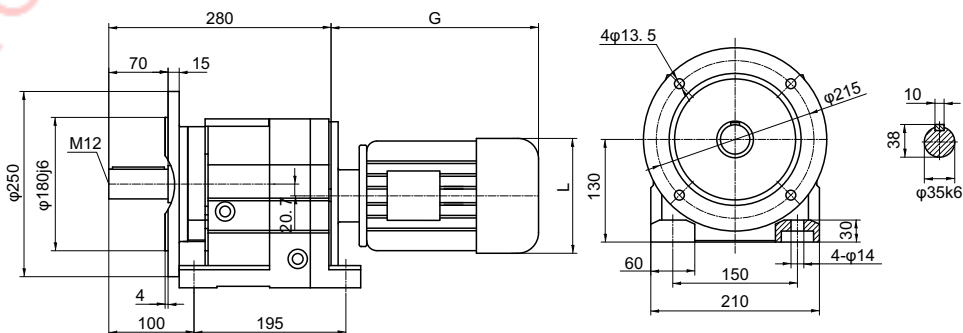
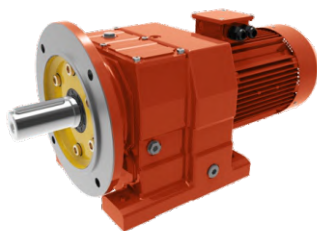
MR67

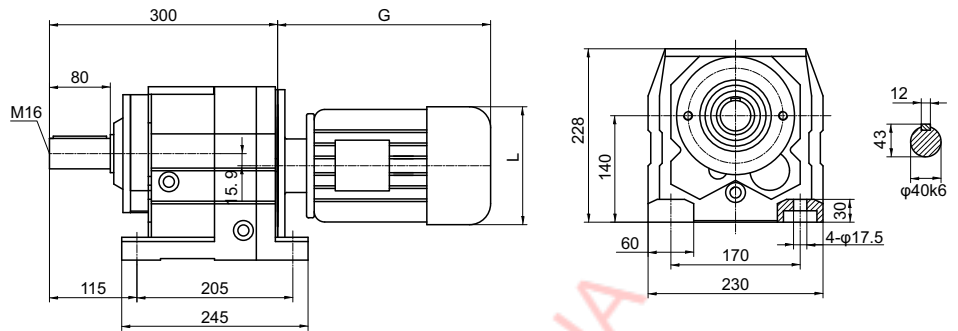
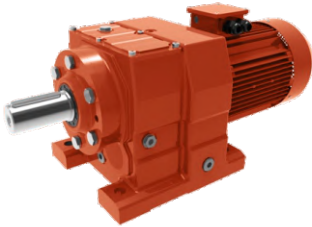
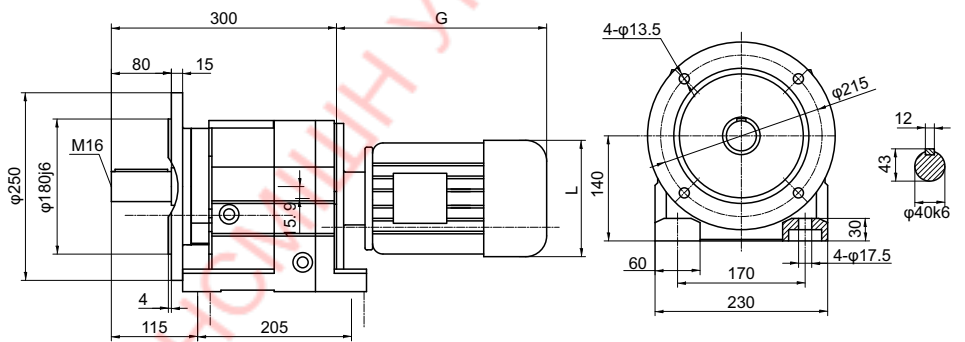
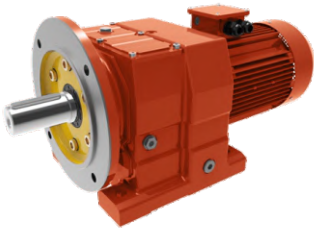
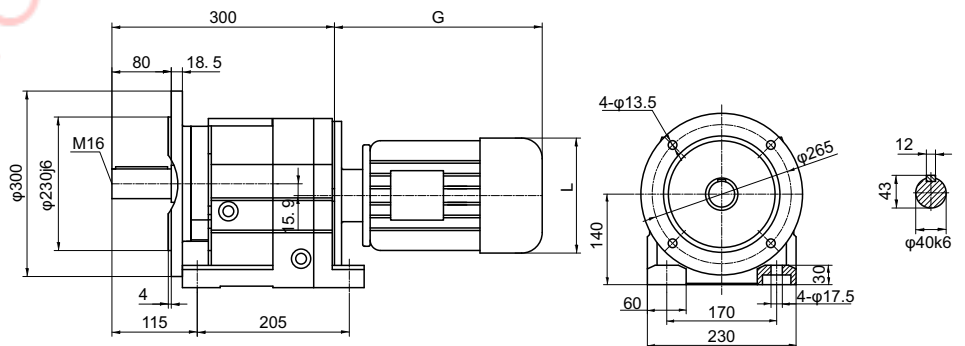
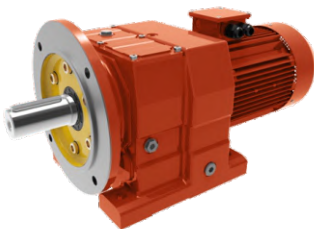


MRF67 (Φ200)

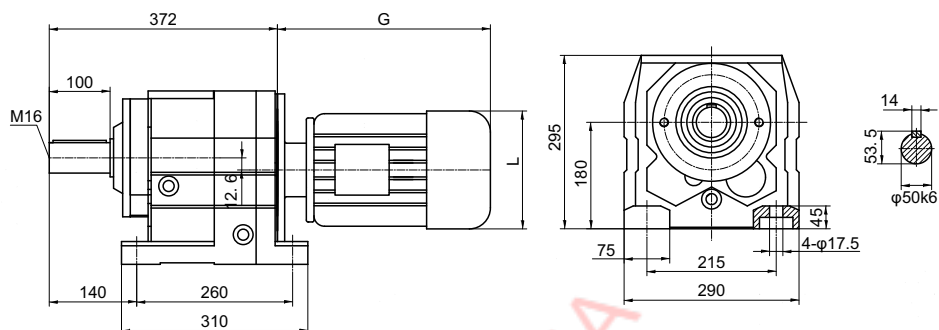
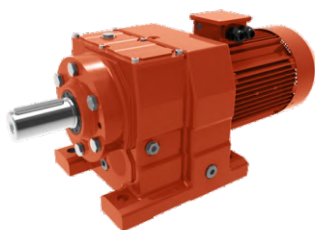


MRF67 (Φ250)

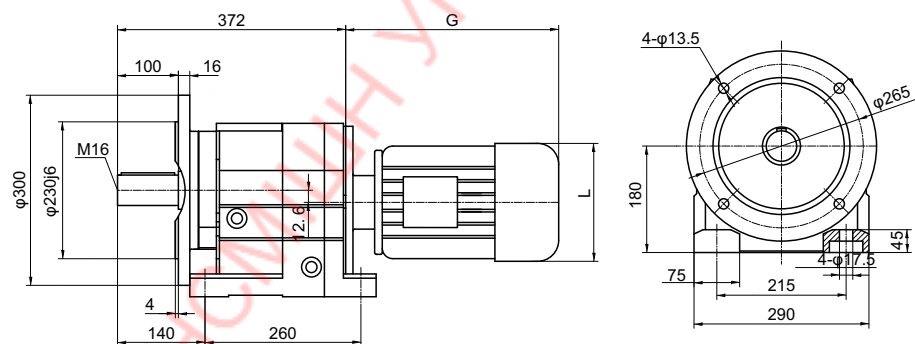
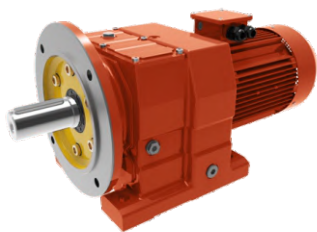


MR77**MRF77**
($\phi 250$)**MRF77**
($\phi 300$)

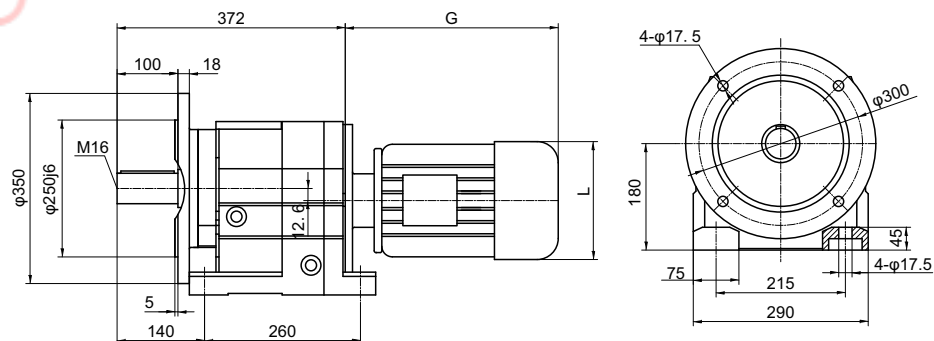
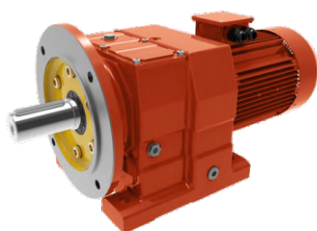
MR87

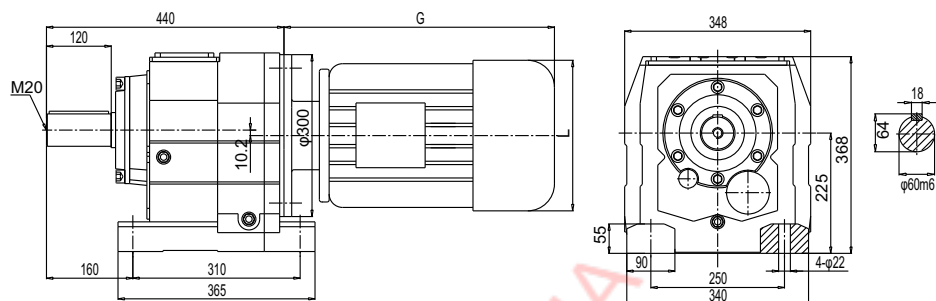
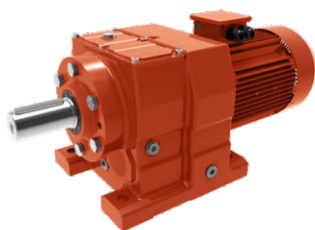
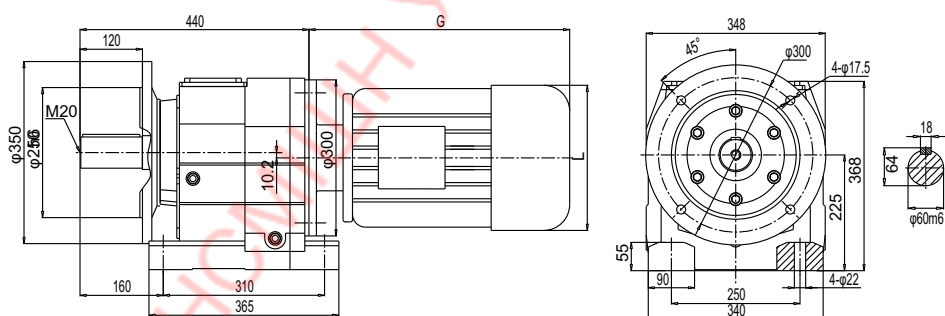
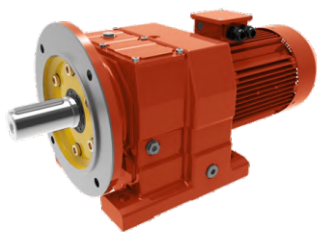
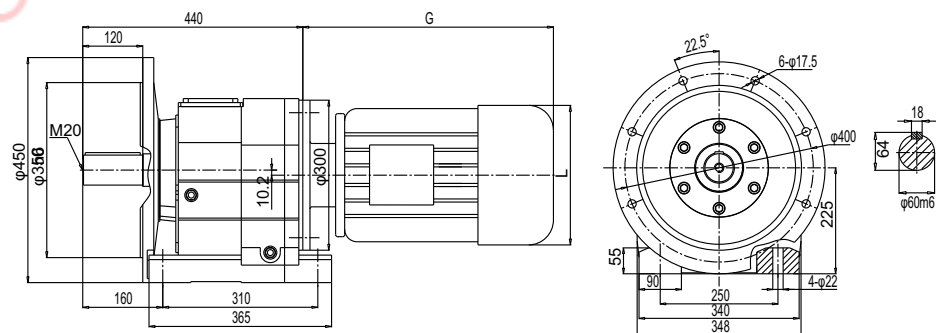
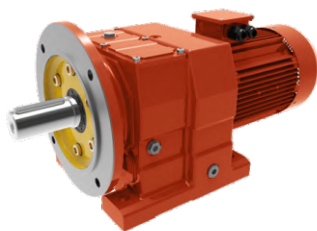


MRF87 ($\phi 300$)

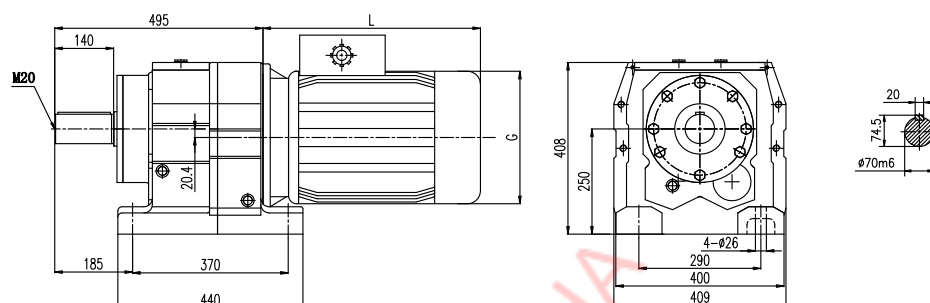
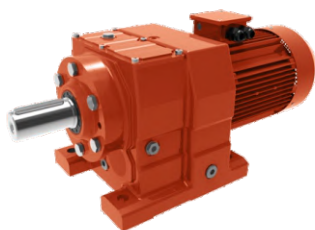


MRF87 ($\phi 350$)

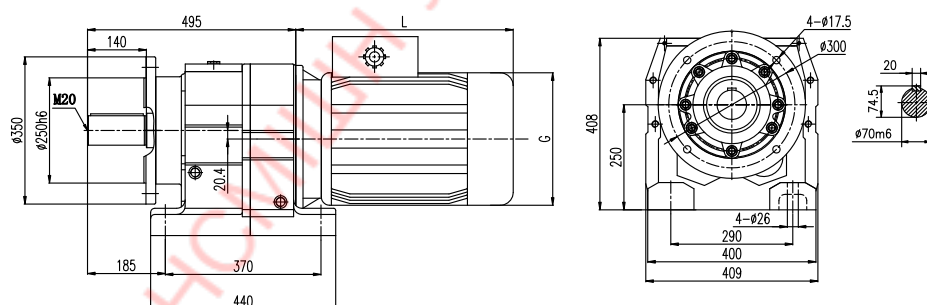
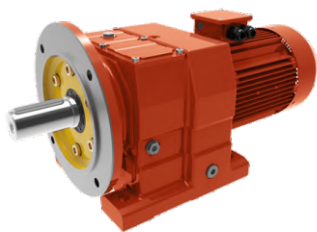


MR97**MRF97**
($\Phi 350$)**MRF97**
($\Phi 450$)

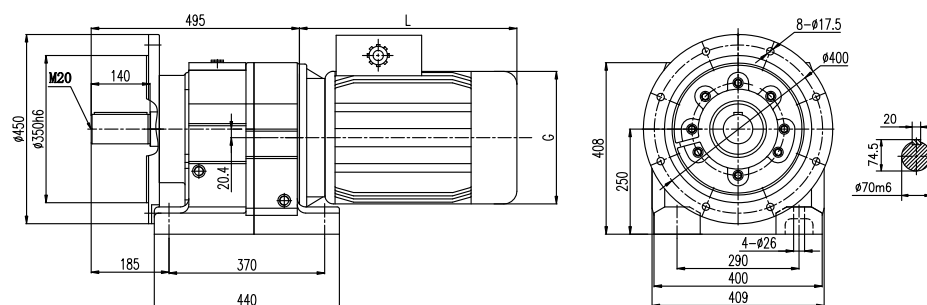
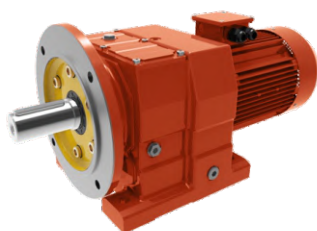
MR107



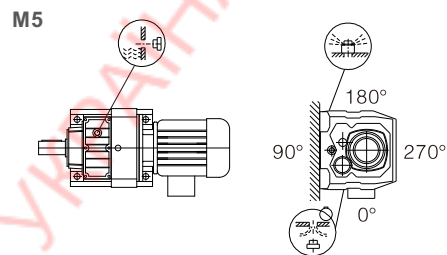
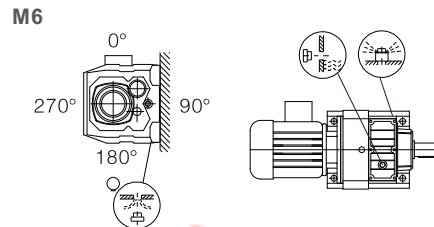
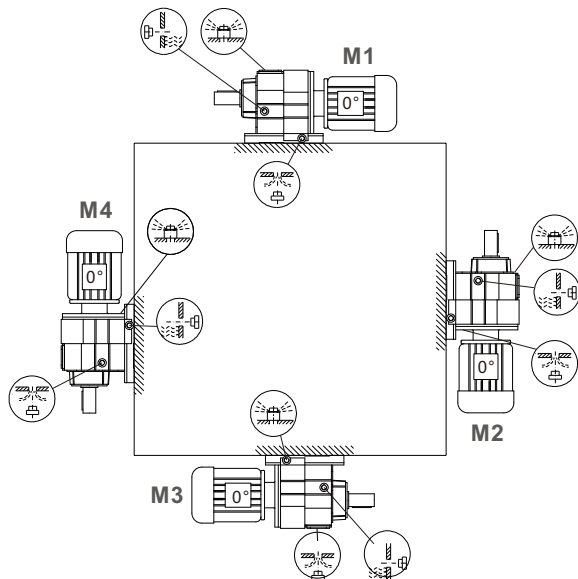
MRF107 (Φ350)



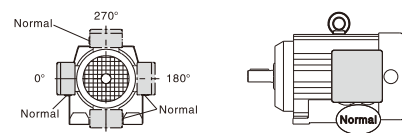
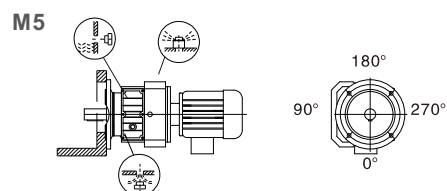
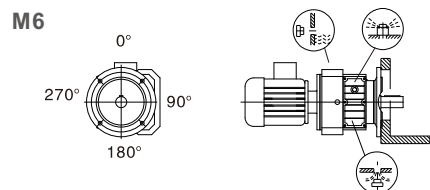
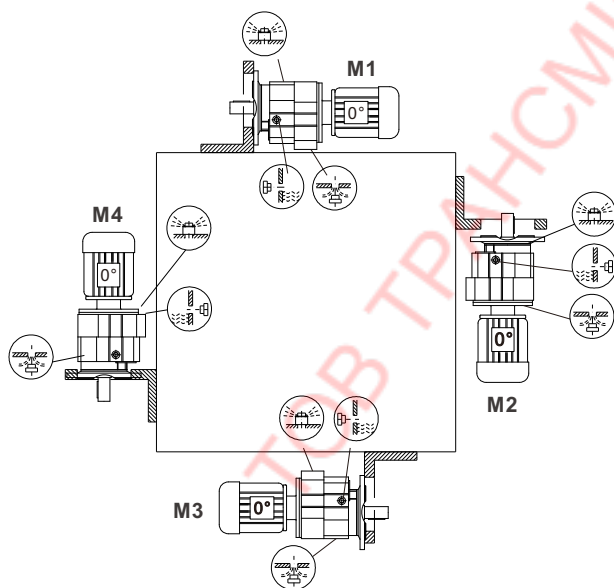
MRF107 (Φ450)



MR37-MR107 Mounting Position Example



MRF37-MRF107 Mounting Position Example



MR Series Oil Capacity Table (Unit:L)

Mounting Position Model	M1	M2	M3	M4	M5	M6
MR37	0.8	0.8	1.0	1.1	0.8	1.0
MR47	1.0	1.6	1.5	1.7	1.5	1.5
MR67	2.0	2.4	2.8	3.7	2.2	2.2
MR77	2.2	3.8	3.6	4.1	3.4	3.4
MR87	5.6	7.8	7.2	8.3	7.5	7.5
MR97	4.5	10.9	10.7	12.5	10.3	10.6