

SPLOŠNE INFORMACIJE

Pri nameščanju reduktorja vedno poskrbite, da:

- podatki na imenski tablici ustrezajo podatkom naročenega artikla
- ohišje in gredi so čiste ter nepoškodovane
- je površina, na katero se pritrdi reduktor ravna in dovolj močna
- se reduktor in gred elektromotorja dobro prilegata
- če obstaja možnost vibracij ali zatikanja, je potrebno namestiti omejevalnik navora
- rotacijski deli so prekriti s plastični pokrovi
- napravo, ki se uporablja na prostem, mora biti ustrezno vremensko zaščitena
- obratovalni pogoji ne povzročajo korozije (razen, če je predhodno tako dorečeno in sta reduktor in elektromotor pravilno pripravljena)
- zobniki, zobniki gredi, vhodna / izhodna gred so pravilno pritrjeni, da ne postanejo radialne ali aksialne obremenitve, ki ne presegajo največje dovoljene meje
- vse sklopke so premazane z antikorozijskim sredstvom, da se prepreči oksidacija ob stiku
- vsi pritrdilni vijaki morajo biti varno priviti
- nog ohišja in montažnih prirobnic ne zategujte med seboj in poskrbite, da boste upoštevali dovoljeno radialno in aksialno obremenitev.
- Pred začetkom preverite nivo olja, ki je priporočeno za montirano pozicijo. Kontrolni in izpustni vijak za olje ter odzračevalni ventil so prosto dostopni.
- Jermenic, sklopk, zobnik itd. nikoli ne pritiskajte na konec gredi, tako, da udarjate s kladivom. S tem poškodujete ležaj, ohišje in gred.



V spodnji tabeli so prikazana maziva za ležaje proti trenju, ki so dovoljena za uporabo ERC reduktorjev.

-20°C ~ +60°C	Mobil	Mobilux EP 2
-40°C ~ +80°C	Mobil	Mobiltemp SHC 100
-20°C ~ +80°C	Esso	Unirex EQ3
-20°C ~ +60°C	Shell	Alvania RL3
-45°C ~ +25°C	Shell	Aero Shell Grease 16

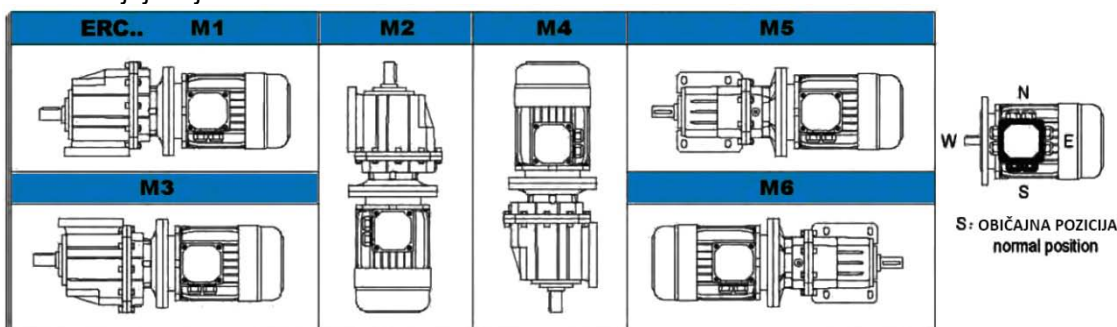
Potrebne količine maziva za:

Hitro delovanje ležajev (vhodni del motorja in reduktor): Vdolbine med kotalnimi elementi napolnite do ene tretjine z mazivom.

Počasno delovanje ležajev (v reduktorjih in na izhodnem koncu reduktorja): Vdolbine med kotalnimi elementi napolnite do dveh tretjin z mazivom.

POLOŽAJ NAMESTITVE REDUKTOR IN ELEKTROMOTOR TER MAZANJE

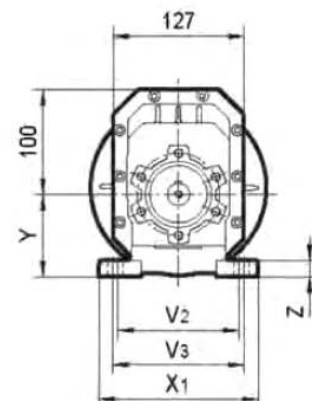
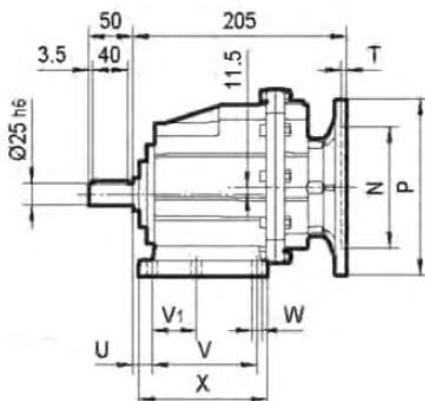
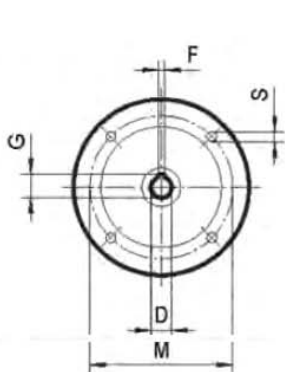
Količina polnjenja v tabeli se nanaša na točno določeno vrednost, ki ustreza razmerju. Vsi reduktorji ERC vsebujejo olje.



TIP REDUKTORJA Gear units	KOLIČINA V LITRIH ZA RAZLIČNE POZICIJE / Fill quantity in liters						ENOTA [l] / unit (L)
	M1	M2	M3	M4	M5	M6	
ERC..01..	0.4	0.6	0.4	0.3	0.3	0.3	
ERC..02..	0.5	0.7	0.5	0.4	0.4	0.4	
ERC..03..	0.8	1.1	0.8	0.6	0.6	0.6	
ERC..04..	1.2	1.6	1.0	1.0	0.9	0.9	

ERC	Standard -10 -20 -30 -40	+40 +25 +10 -20	ISO	SHELL	MOBIL	BP	Tip maziva / lubrication type
			VG 220	Shell Omala 220	Mobilgear 630	BP Energol GR-XP 220	Mineralno olje Mineral oil
			VG 150 VG 100	Shell Omala 100	Mobilgear 627	BP Energol GR-XP 100	
			VG 68-46 VG 32	Shell Tellus T 32	Mobil D.T.E. 13M		
			VG 22 VG 15	Shell Tellus T 15	Mobil D.T.E. 11M	BP Energol HLP-HM 15	
			VG 220	Shell Omala HD 220	Mobil SHC 630		Sintetično olje Synthetic oil
			VG 150	Shell Omala HD 150	Mobil SHC 629		
			VG 32		Mobil SHC 624		

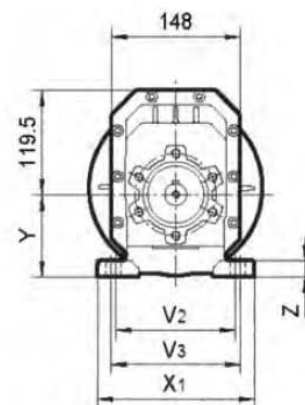
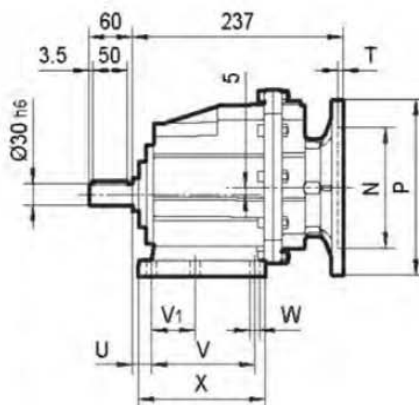
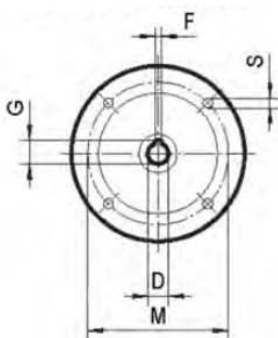
ERC 02 reduktor:



IEC	D	F	G	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	7	4

	U	V	V1	V2	V3	W	X	X1	Y	Z
B02	18	107.5	60	—	130	11	136	155	100	17

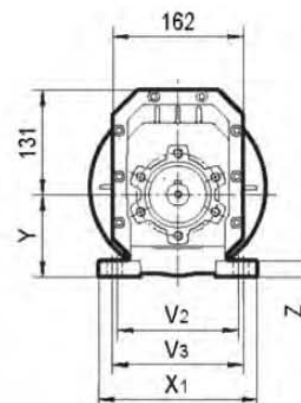
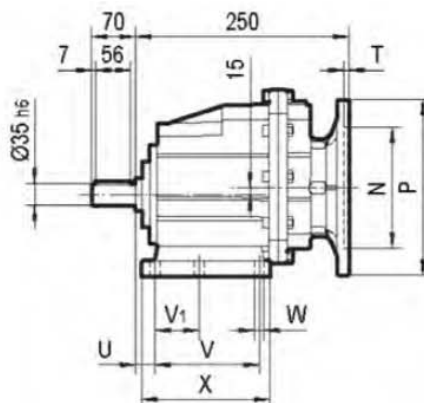
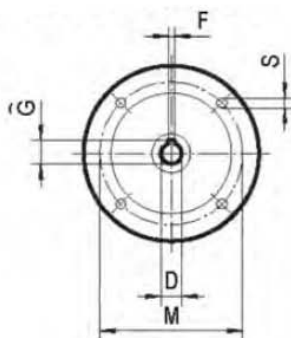
ERC 03 reduktor:



IEC	D	F	G	P	M	N	S	T
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	4

	U	V	V1	V2	V3	W	X	X1	Y	Z
B03	18	130	70	—	160	11	156	190	110	20

ERC04 reduktor:

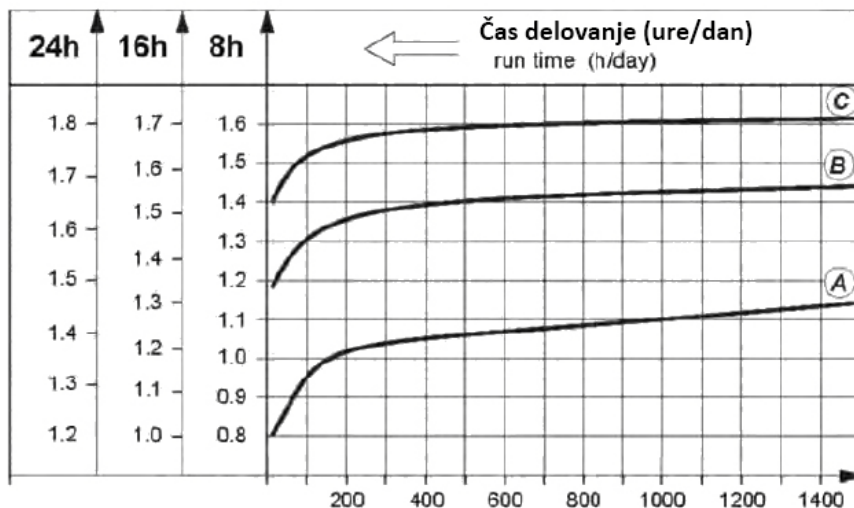


IEC	D	F	G	P	M	N	S	T
100/112B5	28	8	31.3	250	215	180	13.5	4.5
100/112B14	28	8	31.3	160	130	110	9	4.5

	U	V	V1	V2	V3	W	X	X1	Y	Z
M04	35	110	—	170	185	14	150	230	120	20

VARNOSTNI FAKTOR

Vpliv pogonskega stroja na zobnik je upoštevan z zadostno stopnjo natančnosti varnostnega faktorja. Varnostni faktor se določi glede na dnevni obratovalni čas in zagonsko frekvenco. Glede na faktor pospeška mase, se upoštevajo tri kalibracije obremenitve. Prikaz varnostnega faktorja:




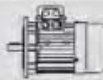
FREKVENCA ZAGONA = 1/uro (vključuje vse zagonske in zavorne procedure)


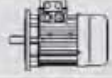
Frequency of start up = 1/h (include all starting and braking procedures)


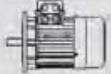
A: Enakomerna obremenitev


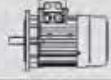
B: Zmerna udarna obremenitev



C: Velika udarna obremenitev



P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	fs			Page
0.37	16.7	204	54.00*	1.0	ERC02	80B5/B14	8016
	19.4	175	46.46*	1.1	ERCF02	80B5/B14	8016
	22.2	153	40.60*	1.3	ERCZ02	80B5/B14	8016
	25.1	135	35.91*	1.5			
	31.2	109	28.88*	1.8			
	25.9	131	54.00*	1.5	ERC02	71B5/B14	7124
	30.1	113	46.46*	1.8	ERCF02	71B5/B14	7124
	34.5	98	40.60*	2.0	ERCZ02	71B5/B14	7124
	39.0	87	35.91*	2.3			
	48.5	70	28.88*	2.9			
	58.7	58	23.85*	3.5			
	81.9	41	17.10	3.9			
	17.5	193	51.30*	1.6	ERC03	80B5/B14	8016
	20.4	167	44.18*	1.8	ERCF03	80B5/B14	8016
	23.3	146	38.63	2.1	ERCZ03	80B5/B14	8016
	26.3	129	34.20*	2.3			
	29.4	116	30.57	2.6			
	27.3	124	51.30*	2.4	ERC03	71B5	7124
	31.7	107	44.18*	2.8	ERCF03	71B5	7124
	36.2	94	38.63	3.2	ERCZ03	71B5	7124
40.9	83	34.20*	3.6				
0.55	31.6	160	28.50	0.75	ERC01	80B5/B14	8026
	38.2	132	23.56	0.91	ERCF01	80B5/B14	8026
	45.4	111	19.83	1.1	ERCZ01	80B5/B14	8026
	34.9	144	40.10	0.8	ERC01	80B5/B14	8014
	39.5	128	35.47	0.9	ERCF01	80B5/B14	8014
	49.1	103	28.50	1.2	ERCZ01	80B5/B14	8014
	59.4	85	23.56	1.4			
	70.6	71	19.83	1.7			
	78.4	64	17.86	1.6			
	95.8	53	14.62	2.3			
	101	50	13.80*	2.0			
	118	43	11.90	2.8			
	143	35	9.81	2.8			
	153	33	9.17	2.4			
	181	28	7.72	2.9			
	246	20	5.69	2.9			
	302	17	4.63	3.6			
	366	14	3.82	4.4			
	19.4	260	46.46*	0.77	ERC02	80B5/B14	8026
	22.2	227	40.60*	0.88	ERCF02	80B5/B14	8026
25.1	201	35.91*	1.0	ERCZ02	80B5/B14	8026	
31.2	162	28.88*	1.2				
37.7	134	23.85*	1.5				
25.9	194	54.00*	1.0	ERC02	80B5/B14	8014	
30.1	167	46.46*	1.2	ERCF02	80B5/B14	8014	
34.5	146	40.60*	1.4	ERCZ02	80B5/B14	8014	
39.0	129	35.91*	1.5				
48.5	104	28.88*	1.9				
58.7	86	23.85*	2.3				



P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
0.55	69.7	72	20.08*	2.8	ERC02	80B5/B14	8014
	81.9	62	17.10	2.6	ERCF02	80B5/B14	8014
	94.5	53	14.81*	3.7	ERCZ02	80B5/B14	8014
	17.5	287	51.30*	1.0	ERC03	80B5/B14	8026
	20.4	248	44.18*	1.2	ERCF03	80B5/B14	8026
	23.3	216	38.63	1.4	ERCZ03	80B5/B14	8026
	26.3	192	34.20*	1.6			
	29.4	171	30.57	1.8			
	27.3	185	51.30*	1.6	ERC03	80B5/B14	8014
	31.7	159	44.18*	1.9	ERCF03	80B5/B14	8014
	36.2	139	38.63	2.2	ERCZ03	80B5/B14	8014
	40.9	123	34.20*	2.4			
	45.8	110	30.57	2.7			
	56.0	90	24.99	3.3			
	0.75	49.1	140	28.50	0.86	ERC01	80B5/B14
59.4		116	23.56	1.0	ERCF01	80B5/B14	8024
70.6		97	19.83	1.2	ERCZ01	80B5/B14	8024
78.4		88	17.86	1.1			
95.8		72	14.62	1.7			
101		68	13.80*	1.5			
118		58	11.90	2.1			
143		48	9.81	2.1			
153		45	9.17	1.8			
181		38	7.72	2.1			
246		28	5.69	2.1			
302		23	4.63	2.6			
366		19	3.82	3.2			
31.2		221	28.88*	0.91	ERC02	90B5/B14	90S6
37.7		182	23.85*	1.1	ERCF02	90B5/B14	90S6
44.8		153	20.08*	1.3	ERCZ02	90B5/B14	90S6
30.1		228	46.46*	0.88	ERC02	80B5/B14	8024
34.5		199	40.60*	1.0	ERCF02	80B5/B14	8024
39.0		176	35.91*	1.1	ERCZ02	80B5/B14	8024
48.5		142	28.88*	1.4			
58.7		117	23.85*	1.7			
69.7		99	20.08*	2.0			
81.9		84	17.10	1.9			
94.5		73	14.81*	2.7			
106		65	13.21	2.5			
116.2		59	12.05	3.4			
141		49	9.93	3.3			
159		43	8.78	2.8			
189		36	7.39	3.3			
257		27	5.45	3.7			
97.0		71	28.88*	2.8	ERC02	80B5/B14	8012
117.4		59	23.85*	3.4	ERCF02	80B5/B14	8012
139.4		49	20.08*	4.1	ERCZ02	80B5/B14	8012
163.7	42	17.10	3.8				

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	l	f_s			Page	
0.75	17.5	392	51.30*	0.77	ERC03	90B5/B14	90S6	
	20.4	338	44.18*	0.89	ERCF03	90B5/B14	90S6	
	23.3	295	38.63	1.0	ERCZ03	90B5/B14	90S6	
	26.3	261	34.20*	1.1				
	29.4	234	30.57	1.3				
	36.0	191	24.99	1.6				
	27.3	252	51.30*	1.2	ERC03	80B5/B14	8024	
	31.7	217	44.18*	1.4	ERCF03	80B5/B14	8024	
	36.2	190	38.63	1.6	ERCZ03	80B5/B14	8024	
	40.9	168	34.20*	1.8				
	45.8	150	30.57	2.0				
	56.0	123	24.99	2.4				
	66.2	104	21.15*	2.7				
	72.8	94	19.24*	3.0				
	76.9	89	18.21*	3.1				
	91.5	75	15.30*	3.7				
	105	65	13.30*	3.8				
	111	62	12.60	4.0				
	1.1	17.5	392	51.30*	1.3	ERC04	90B5/B14	90S6
		20.4	338	44.18*	1.5	ERCF04	90B5/B14	90S6
23.3		295	38.63	1.7	ERCZ04	90B5/B14	90S6	
26.3		261	34.20*	1.8				
29.4		234	30.57	2.1				
27.3		252	51.30*	2.0	ERC04	80B5/B14	8024	
31.7		217	44.18*	2.3	ERCF04	80B5/B14	8024	
36.2		190	38.63	2.6	ERCZ04	80B5/B14	8024	
40.9		168	34.20*	2.9				
45.8		150	30.57	3.2				
56.0		123	24.99	3.9				
66.2		104	21.15*	4.0				
70.6		143	19.83	0.84	ERC01	90B5/B14	90S4	
78.4		129	17.86	0.78	ERCF01	90B5/B14	90S4	
95.8		105	14.62	1.1	ERCZ01	90B5/B14	90S4	
101		99	13.80*	1.0				
118		86	11.90	1.4				
143		71	9.81	1.4				
153		66	9.17	1.2				
181		56	7.72	1.4				
246	41	5.69	1.5					
302	33	4.63	1.8					
366	28	3.82	2.2					
285	35	9.81	2.8	ERC01	80B5/B14	8022		
305	33	9.17	2.4	ERCF01	80B5/B14	8022		
363	28	7.72	2.9	ERCZ01	80B5/B14	8022		
492	20	5.69	2.9					
605	17	4.63	3.6					
733	14	3.82	4.4					
39.0	259	35.91*	0.77	ERC02	90B5/B14	90S4		
48.5	208	28.88*	1.0	ERCF02	90B5/B14	90S4		
58.7	172	23.85*	1.2	ERCZ02	90B5/B14	90S4		
69.7	145	20.08*	1.4					
81.9	123	17.10	1.3					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
1.1	94.5	107	14.81*	1.9	ERC02	90B5/B14	90S4
	106	95	13.21	1.7	ERCF02	90B5/B14	90S4
	116	87	12.05	2.3	ERCZ02	90B5/B14	90S4
	141	72	9.93	2.2			
	159	63	8.78	1.9			
	189	53	7.39	2.3			
	257	39	5.45	2.5			
	316	32	4.43	3.1			
	383	26	3.66	3.8			
	27.3	370	51.30*	0.81	ERC03	90B5/B14	90S4
	31.7	318	44.18*	0.94	ERCF03	90B5/B14	90S4
	36.2	278	38.63	1.1	ERCZ03	90B5/B14	90S4
	40.9	246	34.20*	1.2			
	45.8	220	30.57	1.4			
	56.0	180	24.99	1.7			
	66.2	152	21.15*	1.8			
	72.8	139	19.24*	2.0			
	76.9	131	18.21*	2.1			
	91.5	110	15.30*	2.5			
	72.5	139	38.63	2.2	ERC03	80B5/B14	8022
	81.9	123	34.20*	2.4	ERCF03	80B5/B14	8022
	91.6	110	30.57	2.7	ERCZ03	80B5/B14	8022
	112.0	90	24.99	3.3			
	132.4	76	21.15*	3.7			
	145.5	69	19.24*	4.0			
	153.8	66	18.21*	4.3			
	27.3	370	51.30*	1.4	ERC04	90B5/B14	90S4
	31.7	318	44.18*	1.6	ERCF04	90B5/B14	90S4
	36.2	278	38.63	1.8	ERCZ04	90B5/B14	90S4
	40.9	246	34.20*	1.9			
45.8	220	30.57	2.2				
56.0	180	24.99	2.7				
66.2	152	21.15*	2.8				
72.8	139	19.24*	3.0				
76.9	131	18.21*	3.2				
91.5	110	15.30*	3.8				
105	96	13.30*	3.7				
1.5	118	117	11.90	1.0	ERC01	90B5/B14	90L4
	143	96	9.81	1.0	ERCF01	90B5/B14	90L4
	153	90	9.17	0.9	ERCZ01	90B5/B14	90L4
	181	76	7.72	1.1			
	246	56	5.69	1.1			
	302	45	4.63	1.3			
	366	38	3.82	1.6			
	305	45	9.17	1.8	ERC01	90B5/B14	90S2
	363	38	7.72	2.1	ERCF01	90B5/B14	90S2
	492	28	5.69	2.1	ERCZ01	90B5/B14	90S2
	605	23	4.63	2.6			
	733	19	3.82	3.2			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
1.5	58.7	234	23.85*	0.85	ERC02	90B5/B14	90L4
	69.7	197	20.08*	1.0	ERCF02	90B5/B14	90L4
	81.9	168	17.10	1.0	ERCZ02	90B5/B14	90L4
	94.5	145	14.81*	1.4			
	106	130	13.21	1.2			
	116	118	12.05	1.7			
	141	98	9.93	1.6			
	159	86	8.78	1.4			
	189	73	7.39	1.7			
	257	54	5.45	1.9			
	316	44	4.43	2.3			
	383	36	3.66	2.8			
	212	65	13.21	2.5	ERC02	90B5/B14	90S2
	232	59	12.05	3.4	ERCF02	90B5/B14	90S2
	282	49	9.93	3.3	ERCZ02	90B5/B14	90S2
	319	43	8.78	2.8			
	379	36	7.39	3.3			
	514	27	5.45	3.7			
	40.9	336	34.20*	0.89	ERC03	90B5/B14	90L4
	45.8	300	30.57	1.0	ERCF03	90B5/B14	90L4
	56.0	245	24.99	1.2	ERCZ03	90B5/B14	90L4
	66.2	208	21.15*	1.3			
	72.8	189	19.24*	1.5			
	76.9	179	18.21*	1.6			
	91.5	150	15.30*	1.9			
	105	131	13.30*	1.9			
	111	124	12.60	2.0			
	128	107	10.93*	1.7			
	154	89	9.08	2.0			
	177	78	7.93*	2.3			
	222	62	6.31	2.9			
	255	54	5.48	2.8			
	311	44	4.50	3.4			
	374	37	3.74	4.1			
	256	54	10.93*	3.4	ERC03	90B5/B14	90S2
	308	45	9.08	4.0	ERCF03	90B5/B14	90S2
	353	39	7.93*	4.6	ERCZ03	90B5/B14	90S2
	26.3	523	34.20*	0.92	ERC04	100B5/B14	100L6
	29.4	467	30.57	1.0	ERCF04	100B5/B14	100L6
	36.0	382	24.99	1.3	ERCZ04	100B5/B14	100L6
	27.3	504	51.30*	1.0	ERC04	90B5/B14	90L4
	31.7	434	44.18*	1.2	ERCF04	90B5/B14	90L4
	36.2	379	38.63	1.3	ERCZ04	90B5/B14	90L4
	40.9	336	34.20*	1.4			
	45.8	300	30.57	1.6			
	56.0	245	24.99	2.0			
	66.2	208	21.15*	2.0			
	72.8	189	19.24*	2.2			
	76.9	179	18.21*	2.3			
	91.5	150	15.30*	2.8			
	105	131	13.30*	2.7			
	111	124	12.60	2.8			
	128	107	10.93*	2.6			
	154	89	9.08	3.1			
	177	78	7.93*	3.3			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
2.2	72.8	277	19.24*	1.0	ERC03	100B5/B14	100LA4
	91.5	220	15.30*	1.1	ERCF03	100B5/B14	100LA4
	105	192	13.30*	1.3	ERCZ03	100B5/B14	100LA4
	111	182	12.60	1.4			
	128	157	10.93*	1.1			
	154	131	9.08	1.4			
	177	114	7.93*	1.6			
	222	91	6.31	2.0			
	255	79	5.48	1.9			
	311	65	4.50	2.3			
	374	54	3.74	2.8			
	308	65	9.08	2.8	ERC03	90B5/B14	90L2
	353	57	7.93*	3.2	ERCF03	90B5/B14	90L2
	444	45	6.31	4.0	ERCZ03	90B5/B14	90L2
	511	39	5.48	3.8			
	38.0	560	24.99	0.88	ERC04	112B5/B14	112M6
	46.8	431	19.24*	1.0	ERCF04	112B5/B14	112M6
					ERCZ04	112B5/B14	112M6
	40.9	493	34.20*	1.0	ERC04	100B5/B14	100LA4
	45.8	440	30.57	1.1	ERCF04	100B5/B14	100LA4
	56.0	360	24.99	1.3	ERCZ04	100B5/B14	100LA4
	72.8	277	19.24*	1.5			
	91.5	220	15.30*	1.9			
	105	192	13.30*	1.8			
	111	182	12.60	1.9			
	128	157	10.93*	1.8			
	154	131	9.08	2.1			
	177	114	7.93*	2.3			
	222	91	6.31	2.9			
	255	79	5.48	2.9			
	311	65	4.50	3.5			
	374	54	3.74	4.3			
	3	91.5	301	15.30*	0.93	ERC03	100B5/B14
105		261	13.30*	1.0	ERCF03	100B5/B14	100LB4
111		248	12.60	1.0	ERCZ03	100B5/B14	100LB4
128		215	10.93*	0.8			
154		178	9.08	1.0			
177		156	7.93*	1.2			
222		124	6.31	1.5			
255		108	5.48	1.4			
311		88	4.50	1.7			
374		73	3.74	2.0			
45.8		601	30.57	0.80	ERC04	100B5/B14	100LB4
56.0		491	24.99	1.0	ERCF04	100B5/B14	100LB4
72.8		378	10.24*	1.1	ERCZ04	100B5/B14	100LB4
91.5		301	15.30*	1.4			
105		261	13.30*	1.3			
111		248	12.60	1.4			
128		215	10.93*	1.3			
154		178	9.08	1.6			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
3	177	156	7.93*	1.7	ERC04	100B5/B14	100LB4
	222	124	6.31	2.1	ERCF04	100B5/B14	100LB4
	255	108	5.48	2.1	ERCZ04	100B5/B14	100LB4
	311	88	4.50	2.6			
	374	73	3.74	3.1			
	308	89	9.08	3.1	ERC04	100B5/B14	100L2
	353	78	7.93*	3.3	ERCF04	100B5/B14	100L2
	444	62	6.31	4.2	ERCZ04	100B5/B14	100L2
	511	54	5.48	4.3			
	511	54	5.48	4.3			
4	177	208	7.93*	0.87	ERC03	112B5/B14	112M4
	222	165	6.31	1.1	ERCF03	112B5/B14	112M4
	255	144	5.48	1.0	ERCZ03	112B5/B14	112M4
	311	118	4.50	1.3			
	374	98	3.74	1.5			
	105	348	13.30*	1.0	ERC04	112B5/B14	112M4
	111	330	12.60	1.1	ERCF04	112B5/B14	112M4
	128	286	10.93*	1.0	ERCZ04	112B5/B14	112M4
	154	238	9.08	1.2			
	177	208	7.93*	1.3			
	222	165	6.31	1.6			
	255	144	5.48	1.6			
	311	118	4.50	2.0			
	374	98	3.74	2.3			
	308	119	9.08	2.4	ERC04	112B5/B14	112M2
	353	104	7.93*	2.5	ERCF04	112B5/B14	112M2
	444	83	6.31	3.1	ERCZ04	112B5/B14	112M2
	511	72	5.48	3.2			
	622	59	4.50	3.9			