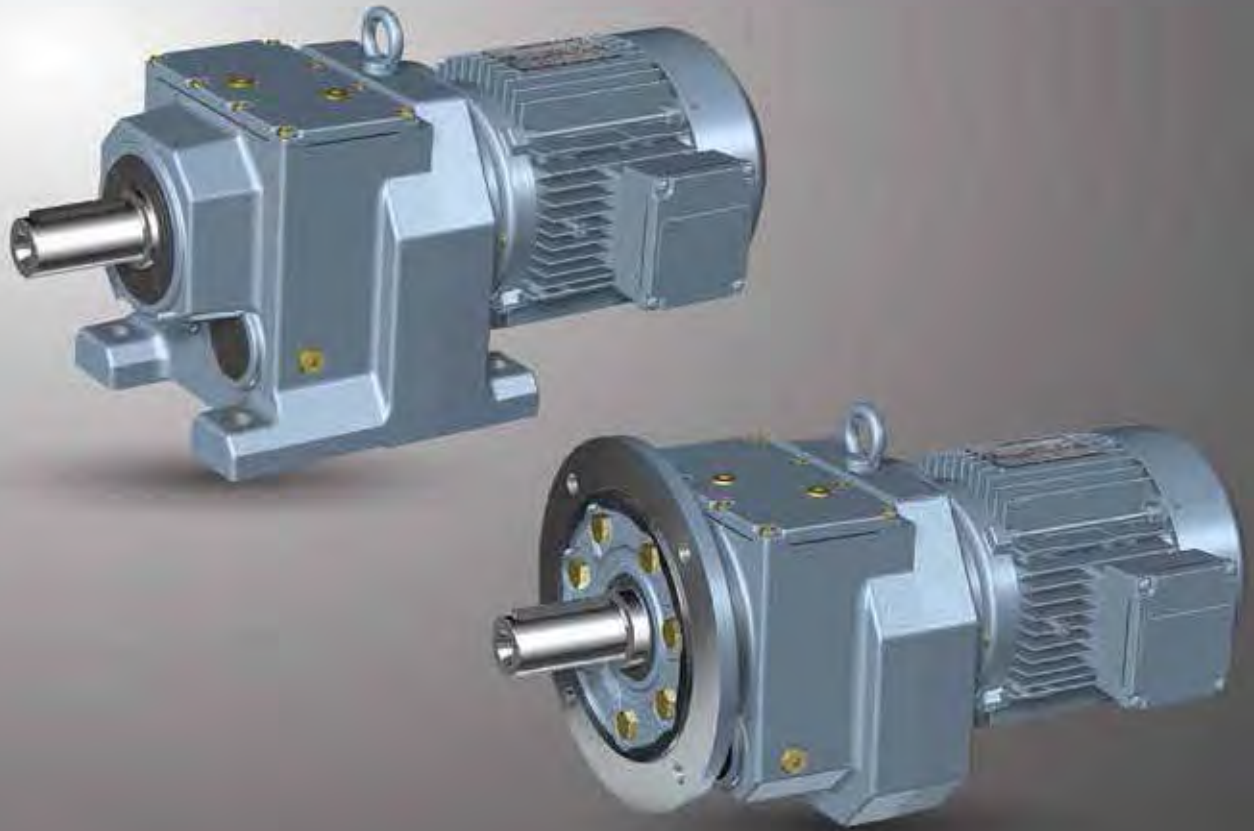




TR Helical Gear Motor

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1. SUMMARIZE

TR Series helical gearmotor is a new generation mechanic-electrical integrated product, which designed basing on the modular system. It can be connected respectively with motors such as normal motor, brake motor, explosion-proof motor, frequency conversion motor, servo motor, **IEC** motor and so on. It can be mounted discretionary six orientation in solid space. This kind of product is widely used in drive fields such as textile, foodstuff, beverage, chemical industry, automatic arm ladder, automatic storage equipment, metallurgy, tobacco, environment-protection, logistics and so on.

1.1 PERFORMANCE CHARACTERISTICS

1. Transmission ratio with fine stage covers a wide range;
2. Compact structure takes up small room;
3. low vibration; low noise; low energy dissipation;
4. Refined design; reliable and wearable; wide usage;
5. Modular, multistructure, can be combined in many forms to meet needs of all kinds of transmission conditions.

TR Series helical gearmotor of 1-stage, 2-stage or 3-stage helical gears unit and motor. The helical gear which use the material of high quality alloy steel with the surface hardened takes shape through processing of high-precision equipment. Except the **TR..28** housing with aluminum alloy, all are cast iron housing. housing is exactly processed to ensure the shape and position precision. And it reaches advantageous performance such as: strong bearing capacity, long service-life; small volume; big ratio; light weight, high efficiency, low noise.

TR Series helical gearmotor has more than ten models. Combined with TRF series, the multi-stage gear reduction can be achieved. Power 0.12-160KW; Ratio 1.3-27001; Torque 69-18000Nm. It can connect (foot, flange) discretionary and use multi-mounting positions according to customers' requirements.



2. PRODUCT PICTURE



TR..MY..



TRF..MY..



TR..F..MY..



TRZ..MY..



TRX..MY..



TRXF..MY..



TR../TRF..MY..



TRF../TRF..MY..



TR..AM(IEC)..



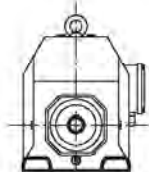
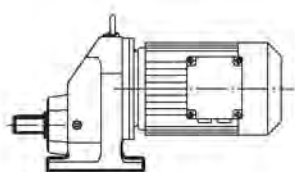
TRF..AM(IEC)..



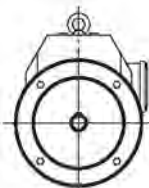
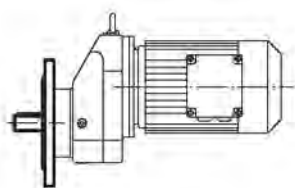
TR..AD..



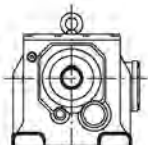
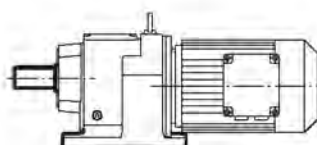
TRF..AD..

2.2 designs**TRX..MY..**

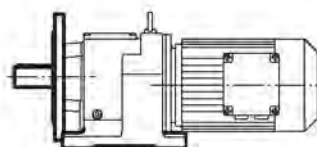
Single-stage foot-mounted helical geared motor

**TRXF..MY..**

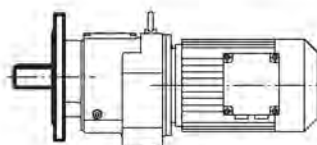
Single-stage flange-mounted helical geared motor

**TR..MY..**

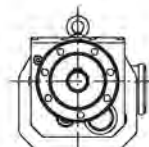
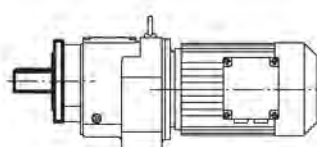
Foot-mounted helical geared motor

**TR..F MY..**

Foot and flange-mounted helical geared motor

**TRF..MY..**

Flange-mounted helical geared motor

**TRZ..MY..**

B14 flange-mounted helical geared motor

3. MODEL ILLUMINATE

TR F 88 II - MY 112 M 4 / BMG / HF / TF - 27.88 - M6 / 270°

1
2
3
4
5
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12
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14

No	Comments
1	TR : code for gear units series
2	1). no code means foot-mounted 2). F : B5 flange mounted 3). Z : B14 flange mounted 4). X : single-stage foot-mounted 5). XF : single-stage flange-mounted
3	specification code of gear units 28, 38... ..
4	1) no code means foot-mounted, no flange 2) F : foot-mounted, B5 output flange 3) I, II, III : B5 output flange specification, default I not to write out is ok
5	1). MY : motor code 2). AM : IEC input couplings
6	specification code of motor (high in motor centre)
7	length code of stator core D, K, L, M, ML, N, S
8	pole number of motor 2, 4, 6, 8
9	1). no code means no brake 2). BMG : brake
10	1). no code means no manual release device 2). HF : manual release device with self-locking function 3). HR : manual release device with outself-locking function
11	1). no code means no motor heat-protection device 2). TF : motor heat- protection device
12	transmission ratio of gear units i
13	M1 : mounting positio, default mounting position M1 not to write out is ok
14	Position diagram for motor terminal box default position 0° (R) not to write out is ok

Example: **TR48 - MY71D4 - 121.87**
TRF58III - AM80 - 80.55
TRXF68 - MY90S4 / BMG - 1.86 - M1 / R

4. RELEVANT PARAMETER

4.1 Power P

$$P_1 = \frac{P_2}{\eta} \text{ [kW]}$$

$$P_{1n} \geq P_1 \cdot f_s \text{ [kW]}$$

P_1	Input power
P_2	Output power
P_{1n}	Rated power driving motor
f_s	Service factor
η	Transmission efficiency

The efficiency of TR Series gear units varies with the number of gear stages, between **94 % (3-stage)**, **96%(2-stage)** and **98 % (1-stage)**.

4.2 Rotation speed n

n_1	Gear units input speed
n_2	Gear units output speed

If driven by the external gearing, 1400r/min or lower rotation speed is suggested so as to optimize the working conditions and prolong the service life. Higher input rotation speed is permitted, but in this situation, the rated torque M_2 will be reduced.

4.3 Transmission ratio i

$$i = \frac{n_1}{n_2}$$

Usually transmission ratio is decimal fraction with 2 radix point tagged in selection tables.

4.4 Torque M

$$M_2 = \frac{9550 \cdot P_1 \cdot \eta}{n_2} \text{ [Nm]}$$

$$M_{2n} \geq M_2 \cdot f_s \text{ [Nm]}$$

M_2	Output torque
M_{2n}	Selected output torque
P_1	Input power
η	Transmission efficiency
f_s	Service factor

4.5 Service factor f_s

The effect of the driven machine on the gear unit is taken into account to a sufficient level of accuracy using the service factor f_s . The service factor is determined according to the daily operating time and the starting frequency Z .

RELEVANT PARAMETER

Three load classifications are considered depending on the mass acceleration factor. You can read off the service factor applicable to your application in following Figure. The service factor selected using this diagram must be less than or equal to the service factor as given in the performance parameter table.

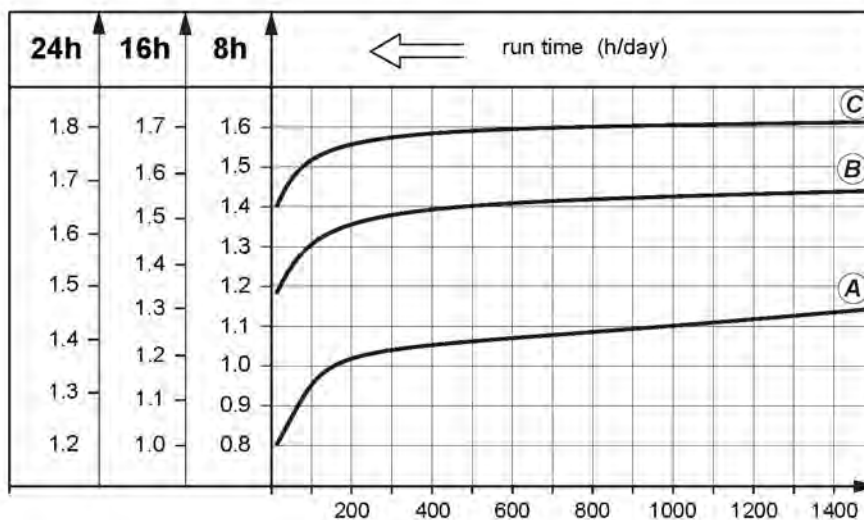


Fig: Service factor (f_s)

start up frequency Z (1/h) #

starting frequency Z : The cycles include all starting and braking procedures as well as change overs from low to high speed.

4.5.1 load classifications

- (A) Uniform, permitted mass acceleration factor $f_a \leq 0.2$
- (B) Moderate shock load, permitted mass acceleration factor $f_a \leq 3$
- (C) Heavy shock load, permitted mass acceleration factor $f_a \leq 10$

Load classifications see the addendum

4.5.2 Mass acceleration factor

The mass acceleration factor is calculated as follows:

$$f_a = \frac{J_c}{J_m}$$

f_a Mass acceleration factor

J_c All external mass moments of inertia (kgm^2)

J_m Mass moment of inertia on the motor end (kgm^2)

If mass acceleration factors $f_a > 10$, please call our Technical Service.

To keep the service-life of gear units, the use factor f_s selected from the catalogue must be equal or slightly higher than the calculated use factor f_s .

Example:

Mass acceleration factor 2.5 (load classification **B**), 14 hours/day operating time (read off at 16 h/d) and 300 cycles/hour result in a service factor $f_s = 1.48$.

4.6 Radial loads F_r

When determining the resulting radial loads, the type of transmission elements, mounted on the shaft end must be considered. Various transmission elements are corresponding with following transmission element factors f_z :

Transmission element	Transmission element factor f_z	Comments
Gears	1.00	≥ 17 teeth
	1.15	< 17 teeth
Chain sprockets	1.00	≥ 20 teeth
	1.25	< 20 teeth
	1.40	< 13 teeth
Narrow V-belt pulleys	1.75	Influence of the tensile force
Flat belt pulleys	2.50	Influence of the tensile force
Toothed belt pulleys	2.50	Influence of the tensile force

The overhung loads exerted on the motor or gear shaft is then calculated as follows:

$$F_r = \frac{M \cdot 2000 \cdot f_z}{d_0} \text{ [N]}$$

F_r Resulting radial load [N]

M Torque on the shaft [Nm]

d_0 Mean diameter of the mounted transmission element in [mm]

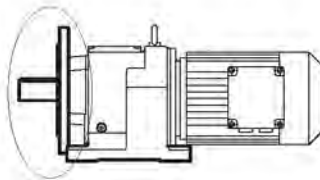
f_z Transmission element factor

The basis for determining the permitted radial loads is the computation of the rated service life L_{10h} of the bearings (according to **ISO281**). For special operating conditions, the permitted radial loads can be determined with regard to the modified service life L_{na} . The permitted radial loads F_{r2} for the output shafts of foot-mounted gear units with a solid shaft are listed in the selection tables. Contact our company in case of other versions.

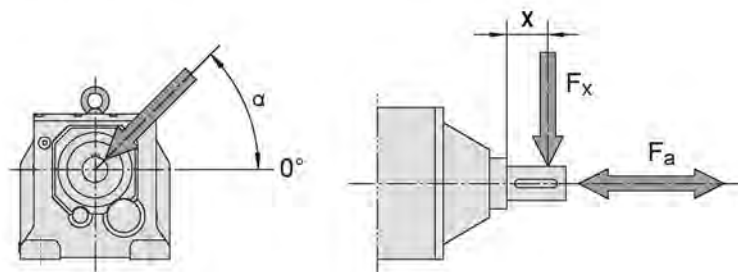


The data refer to the radial force acting midway on the shaft end. Worst case conditions have been assumed for the force application angle α and the direction of rotation.

Foot and flange-mounted helical gear units (TR..F): A maximum of 50 % of the overhung load F_{r2} specified in the selection tables for torque transmission via flange mounting are permitted.



Force application is defined according to the following figure:



F_x = Permitted overhung load at point X [N]

F_a = Permitted axial force [N]

4.6.2 Permitted axial forces F_a

If there is no overhung load, then an axial force F_a (tension or compression) amounting to 50% of the overhung load given in the selection tables is permitted. This applies to the following geared motors:

- Helical geared motors except for TR..138... to TR..168...;

Contact us for all other types of gear units and in the event of significantly greater axial forces or combinations of overhung load and axial force.

The permitted radial loads given in the selection tables must be calculated using the following formula in the event of force application not in the center of the shaft end. The smaller of the two values F_{xL} (according to bearing service life) and F_{xW} (according to shaft strength) is the permitted value for the radial load at point x. Note that the calculations apply to $M_{2 \max}$.

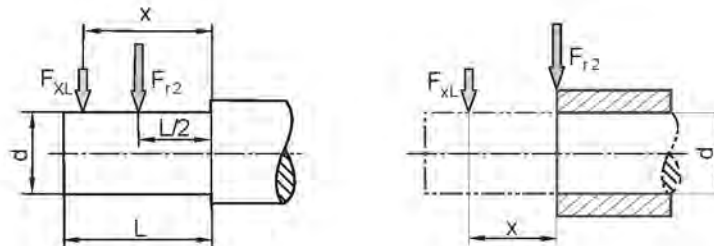
F_{xL} according to bearing service life:

$$F_{xL} = F_{r2} \cdot \frac{a}{b + x} \text{ [N]}$$

F_{xW} from the shaft strength:

$$F_{xW} = \frac{c}{f + x} \text{ [N]}$$

- Fr2** Permitted overhung load ($x = L/2$) for foot-mounted gear units according to the selection tables in [N]
- x** Distance from the shaft shoulder to the force application point in [mm]
- a, b, f** Gear unit constant for overhung load conversion [mm]
- c** Gear unit constant for overhung load conversion [Nmm]



Gear unit constants for overhung load conversion

Gear unit type	a [mm]	b [mm]	c [Nmm]	f [mm]	d [mm]	L [mm]	Gear unit type	a [mm]	b [mm]	c [Nmm]	f [mm]	d [mm]	L [mm]
TRX58	43.5	23.5	1.51×10^5	34.2	20	40	TR58	147.5	112.5	3.77×10^5	18	35	70
TRX68	52.5	27.5	2.42×10^5	39.7	25	50	TR68	168.5	133.5	2.51×10^5	0	35	70
TRX78	60.5	30.5	1.95×10^5	0	30	60	TR78	173.7	133.7	3.97×10^5	0	40	80
TRX88	73.5	33.5	7.69×10^5	48.9	40	80	TR88	216.7	166.7	8.47×10^5	0	50	100
TRX98	86.5	36.5	1.43×10^6	53.9	50	100	TR98	255.5	195.5	1.19×10^6	0	60	120
TRX108	102.5	42.5	2.47×10^6	62.3	60	120	TR108	285.5	215.5	2.06×10^6	0	70	140
TR28	106.5	81.5	1.56×10^5	11.8	25	50	TR138	343.5	258.5	6.14×10^6	30	90	170
TR38	118	93	1.24×10^5	0	25	50	TR148	402	297	8.65×10^6	33	110	210
TR48	137	107	2.44×10^5	15	30	60	TR168	450	345	1.26×10^7	0	120	210

4.7 Selection tables comments



Combination with the motor in the header row is possible



Combination with the motor in the header row is not possible

*

Finite gear unit reduction ratio;

P_{1n}

Rated power driving motor [kW];

n₂

Output speed [r/min];

M_{2n}

Output torque [Nm];

M_{2 max}

Max. permissible output torque [Nm]

Fr2

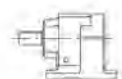
Permissible overhung load output side [N]

i

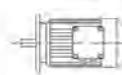
Gear unit ratio;

f_s

Service factor;



Gear unit type;

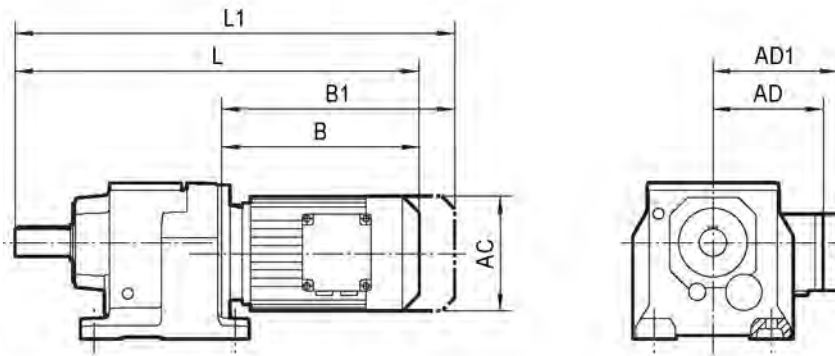


Motor type;

Page

Dimension sheet page no;

SELECTION EXAMPLE



- L** Total length of gearmotor;
- L1** Total length of gearmotor including brake;
- B** Length of motor;
- B1** Length of brake motor;
- AC** Diameter of motor;
- AD** Center of motor shaft to top part of terminal box;
- AD1** Center of brake motor shaft to top part of terminal box.

5. SELECTION EXAMPLE

5.1 Gear motor

Example: Required power 16kW on driven machine, work for 8h/day, moderate shock load, so $f_s=1.3$, **M6** foot-mounted, $n_2=61.9$ r/min

$$i = \frac{n_1}{n_2} = \frac{1400}{61.9} = 22.62$$

$$P_{1n} \geq P_1 \cdot f_s = \frac{P_2}{\eta} \cdot f_s = \frac{16}{0.96} \times 1.3 = 21.67 \text{ [kW]}$$

Choose type:

TR108 - MY180L4 - 22.62 - M6

5.2 Gear units

Example: Required torque 480Nm on driven machine, work 6h/day, uniform load, so $f_s=1.1$, flange-mounted, $n_2=2.5$ r/min, choose TR../TRF..

$$i = \frac{n_1}{n_2} = \frac{1400}{2.5} = 560$$

$$M_{2n} \geq M_2 \cdot f_s = 480 \times 1.1 = 528 \text{ [Nm]}$$

$$P_{1n} \geq P_1 \cdot f_s = \frac{M_2 \cdot n_1}{9550 \cdot \eta \cdot i} \cdot f_s = \frac{480 \times 1400}{9550 \times 0.94 \times 0.96 \times 560} \times 1.1 = 0.153 \text{ [kW]}$$

Choose type:

TRF78 / TRF38 - MY63M4 - 560

6. GEAR UNIT SELECTION TABLES

6.1 Possible geometrical combinations

TRX..58

 $n_1 = 1400 \text{ r/min}$
69Nm

n_2 [r/min]	$M_2 \text{ max}$ [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM / MY132S AM / MY132M
255	39	3100	5.50*						
276	36	3030	5.07						
322	68	2640	4.35						
369	69	2480	3.79						
394	69	2420	3.55*						
446	65	2320	3.14						
481	67	2170	2.91						
530	69	1810	2.64*						
591	69	1500	2.37						
686	69	1070	2.04						
729	69	890	1.92*						
848	69	430	1.65						
946	68	112	1.48						
1075	63	132	1.30						

TRX..68

 $n_1 = 1400 \text{ r/min}$
134Nm

n_2 [r/min]	$M_2 \text{ max}$ [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM / MY132S AM / MY132M
231	43	4010	6.07						
270	75	3580	5.18						
309	82	3350	4.53						
326	80	3300	4.30*						
371	87	3090	3.77						
438	100	2800	3.20*						
484	106	2640	2.89						
551	118	2000	2.54						
583	123	1530	2.40*						
686	134	230	2.04						
753	126	225	1.86						
870	114	245	1.61						
1000	104	205	1.40*						

TRX..78

 $n_1 = 1400 \text{ r/min}$
215Nm

n_2 [r/min]	$M_2 \text{ max}$ [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M
175	57	6330	8.00*							
187	53	6200	7.47							
218	103	5600	6.41							
249	110	5300	5.63							
262	103	5240	5.35*							
296	123	4900	4.73							
347	143	4500	4.04*							
378	153	4290	3.70							
431	182	3200	3.25*							
455	193	2560	3.08*							
519	215	1110	2.70							
576	215	510	2.43							
657	200	435	2.13							
745	187	335	1.88*							
838	173	315	1.67							
986	155	315	1.42							

TRX..88 $n_1=1400$ r/min**405Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180
162	139	7890	8.65							
183	149	7490	7.63							
194	140	7380	7.20*							
217	192	6850	6.45							
252	225	6320	5.56*							
276	250	5980	5.07							
311	290	5500	4.50*							
370	305	5030	3.78							
402	405	2730	3.48							
453	405	1950	3.09							
507	405	1200	2.76*							
565	405	470	2.48							
651	385	42	2.15							
725	355	185	1.93							
875	315	74	1.60*							
1005	290	74	1.39							

TRX..98 $n_1=1400$ r/min**595Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY226M AM/MY226S
170	225	9560	8.23								
196	260	8950	7.16*								
213	300	8500	6.56								
242	420	7630	5.79								
285	395	7220	4.91								
310	595	6180	4.52								
347	595	5380	4.04								
385	595	4530	3.64*								
424	595	3730	3.30								
479	595	2810	2.92								
530	595	1980	2.64								
625	595	495	2.24*								
714	570	19	1.96								
854	505	51	1.64								
986	455	132	1.42								

TRX..108 $n_1=1400$ r/min**830Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M
211	460	9700	6.63*						
250	455	9080	5.61						
270	695	7850	5.19						
301	695	7450	4.65						
333	830	6420	4.20*						
367	830	5550	3.81						
414	830	4490	3.38						
456	830	3600	3.07						
530	830	2170	2.64*						
609	830	900	2.30						
718	765	555	1.95						
819	705	480	1.71						
972	645	315	1.44						

TR..18 $n_1=1400$ r/min**85Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80
3Stage					
17	85	1770	81.64		
20	85	1770	70.39		
21	85	1770	65.61		
24	85	1770	57.35		
26	85	1770	53.76		
30	85	1770	47.44		
32	85	1770	44.18		
36	85	1770	38.61		
39	85	1770	36.20		
44	85	1770	31.94		
49	85	1770	28.32		
58	85	1650	24.07		
2Stage					
55	85	1690	25.23		
60	85	1620	23.15		
71	85	1500	19.71		
82	85	1400	16.99		
88	85	1350	15.84		
101	85	1270	13.84		
108	85	1230	12.98		
122	81	1180	11.45		
138	77	1140	10.15		
162	72	1090	8.63		
185	56	1040	7.55		
199	55	1010	7.04		
228	54	950	6.15		
243	53	930	5.76		
275	51	890	5.09		
310	48	870	4.51		
366	45	830	3.83		

TR..28 $n_1=1400$ r/min**130Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100
3Stage							
10	130	4230	135.09				
11	130	4230	123.91				
13	130	4230	105.49				
15	130	4230	90.96				
17	130	4230	84.78				
19	130	4230	74.11				
20	130	4180	69.47				
23	130	3980	61.3				
25	130	3840	55.87				
29	130	3630	48.17				
31	130	3530	44.9				
36	130	3350	39.25				
38	130	3260	36.79				
43	130	3100	32.47				
49	130	2950	28.78				
57	130	2770	24.47				
2Stage							
49	130	2940	28.37				
54	130	2840	26.09				
63	130	2660	22.32				
72	130	2510	19.35				
77	130	2440	18.08				
90	130	2290	15.63				
105	130	2140	13.28*				
118	129	1990	11.86				
138	122	1890	10.13				
149	122	900	9.41				
172	116	870	8.16				
183	112	900	7.63*				
212	106	880	6.59				
250	99	880	5.60*				
280	95	860	5.00*				
328	87	920	4.27				
350	85	910	4.00*				
415	79	900	3.37				

TR..28/TRF18 $n_1=1400$ r/min**130Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80
3Stage / 3Stage					
0.16	130	4230	8612		
0.19	130	4230	7425		
0.20	130	4230	6921		
0.23	130	4230	6050		
0.27	130	4230	5217		
0.30	130	4230	4661		
0.34	130	4230	4073		
0.40	130	4230	3516		
0.44	130	4230	3160		
0.51	130	4230	2763		
0.58	130	4230	2414		
0.66	130	4230	2110		
0.75	130	4230	1862		

TR..28/TRF18 $n_1=1400$ r/min**130Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80
3Stage / 3Stage					
0.86	130	4230	1625		
0.98	130	4230	1434		
1.1	130	4230	1254		
2Stage / 3Stage					
0.77	130	4230	1822		
0.89	130	4230	1580		
0.96	130	4230	1464		
1.1	130	4230	1270		
1.3	130	4230	1100		
1.4	130	4230	972		
1.7	130	4230	840		
1.9	130	4230	741		
2.1	130	4230	654		
2.5	130	4230	566		
2.8	130	4230	499		
3Stage / 2Stage					
1.3	130	4230	1101		
1.5	130	4230	962		
1.7	130	4230	848		
1.9	130	4230	743		
2.2	130	4230	649		
2.5	130	4230	567		
2.8	130	4230	509		
3.2	130	4230	432		
3.6	130	4230	387		
4.1	130	4230	339		
4.7	130	4230	296		
5.4	130	4230	259		
6.1	130	4230	229		
7.0	130	4230	200		
7.9	130	4230	177		
8.4	130	4230	166		
9.3	130	4230	150		
9.9	130	4230	141		
11	130	4230	124		
13	130	4230	110		
15	130	4230	94		
2Stage / 2Stage					
3.2	130	4230	440		
3.7	130	4230	381		
4.3	130	4230	329		
4.8	130	4230	290		
5.5	130	4230	256		
6.2	130	4230	227		
6.9	130	4230	203		
7.8	130	4230	179		
9.0	130	4230	156		
10	130	4230	135		
12	130	4230	118		
13	130	4230	104		
16	130	4230	90		

TR..38 $n_1=1400$ r/min**200Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100
3Stage							
10	200	4950	134.82				
11	200	4950	123.66				
13	200	4950	105.28				
15	200	4950	90.77				
17	200	4950	84.61				
19	200	4950	73.96				
20	200	4950	69.33				
23	200	4950	61.18				
25	200	4950	55.76				
29	200	4950	48.08				
31	200	4950	44.81				
36	200	4760	39.17				
38	200	4540	36.72				
43	200	4120	32.40				
49	200	3740	28.73				
57	200	3240	24.42				
2Stage							
49	200	3690	28.32				
54	185	3860	26.03				
63	200	2970	22.27				
73	200	2570	19.31				
78	200	2390	18.05				
90	200	2010	15.60				
106	190	1880	13.25				
118	183	1810	11.83				
138	170	1820	10.11				
148	167	1760	9.47				
176	156	1720	7.97				
210	144	1000	6.67				
247	142	760	5.67				
277	135	790	5.06				
324	126	820	4.32				
346	122	850	4.05				
411	112	900	3.41				

TR..38/TRF18 $n_1=1400$ r/min**200Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80
3Stage / 3Stage					
0.16	200	4950	8595		
0.19	200	4950	7411		
0.20	200	4950	6907		
0.23	200	4950	6038		
0.27	200	4950	5206		
0.30	200	4950	4651		
0.34	200	4950	4065		
0.38	200	4950	3658		
0.44	200	4950	3154		
0.51	200	4950	2757		
0.58	200	4950	2409		
0.66	200	4950	2106		
0.75	200	4950	1856		
0.86	200	4950	1622		

TR..38/TRF18 $n_1=1400$ r/min**200Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80
3Stage / 3Stage					
0.98	200	4950	1431		
1.1	200	4950	1251		
2Stage / 3Stage					
0.77	200	4950	1818		
0.89	200	4950	1576		
1.0	200	4950	1359		
1.1	200	4950	1267		
1.3	200	4950	1098		
1.4	200	4950	970		
1.7	200	4950	839		
1.9	200	4950	740		
2.1	200	4950	653		
2.4	200	4950	577		
2.8	200	4950	498		
3Stage / 2Stage					
1.3	200	4950	1099		
1.5	200	4950	960		
1.7	200	4950	847		
1.9	200	4950	741		
2.2	200	4950	647		
2.5	200	4950	566		
2.8	200	4950	508		
3.2	200	4950	431		
3.6	200	4950	387		
4.1	200	4950	338		
4.7	200	4950	296		
5.4	200	4950	259		
6.1	200	4950	228		
7.0	200	4950	199		
8.1	200	4950	172		
9.3	200	4950	150		
11	200	4950	130		
11	200	4950	124		
13	200	4950	110		
15	200	4950	94		
2Stage / 2Stage					
3.2	200	4950	439		
3.7	200	4950	378		
4.3	200	4950	328		
4.8	200	4950	289		
5.3	200	4950	265		
6.2	200	4950	226		
6.9	200	4950	202		
7.8	200	4950	179		
9.0	200	4950	156		
10	200	4950	135		
11	200	4950	127		
13	200	4950	104		
16	200	4950	90		

TR..48 $n_1=1400$ r/min**300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M
3Stage									
7.9	300	5420	176.88						
8.6	300	5420	162.94						
10	300	5420	139.99						
11	300	5420	121.87						
12	300	5420	114.17						
14	300	5420	100.86						
15	300	5420	93.68						
16	300	5420	84.90						
18	300	5420	76.23						
20	300	5420	68.54						
22	300	5420	64.21						
25	300	5420	56.73						
27	300	5350	52.69						
29	300	5150	47.75						
33	300	4930	42.87						
38	300	4630	36.93						
40	300	4520	34.73						
47	300	4240	29.88						
52	300	4050	26.70						
59	300	3840	23.59						
2Stage									
41	240	4690	33.79						
45	220	4610	31.12						
52	300	4050	26.74						
60	300	3820	23.28						
64	300	3710	21.81						
73	295	3530	19.27						
78	290	3390	17.89						
86	275	3350	16.22						
96	265	3230	14.56						
112	250	3080	12.54						
119	245	3020	11.79						
138	230	2890	10.15						
154	220	2780	9.07						
175	205	2690	8.01						
180	163	2720	7.76*						
201	159	2620	6.96						
233	156	2470	6.00						
248	155	2410	5.64*						
289	150	2280	4.85						
323	146	2190	4.34						
366	144	2090	3.83						

TR..48/TRF38 $n_1=1400$ r/min**300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
3Stage / 3Stage							
0.10	300	5420	13598				
0.11	300	5420	12472				
0.13	300	5420	10619				
0.15	300	5420	9155				
0.16	300	5420	8534				
0.19	300	5420	7460				

TR..48/TRF38 $n_1=1400$ r/min**300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
3Stage / 3Stage							
0.20	300	5420	6993				
0.23	300	5420	6171				
0.25	300	5420	5624				
0.29	300	5420	4849				
0.31	300	5420	4520				
0.35	300	5420	3951				
0.38	300	5420	3704				
0.43	300	5420	3268				
0.48	300	5420	2898				
0.57	300	5420	2463				
2Stage / 3Stage							
0.54	300	5420	2598				
0.59	300	5420	2383				
0.69	300	5420	2029				
0.80	300	5420	1749				
0.86	300	5420	1630				
0.98	300	5420	1425				
1.0	300	5420	1336				
1.2	300	5420	1179				
1.3	300	5420	1074				
1.5	300	5420	927				
1.6	300	5420	863				
1.9	300	5420	755				
2.0	300	5420	708				
2.2	300	5420	624				
2.5	300	5420	554				
3.0	300	5420	471				
3Stage / 2Stage							
0.49	300	5420	2856				
0.53	300	5420	2625				
0.62	300	5420	2246				
0.72	300	5420	1948				
0.77	300	5420	1821				
0.89	300	5420	1573				
1.20	300	5420	1193				
1.40	300	5420	1020				
1.50	300	5420	955				
1.70	300	5420	804				
2.1	300	5420	673				
2.4	300	5420	572				
2.7	300	5420	510				
3.2	300	5420	436				
3.4	300	5420	408				
4.1	300	5420	344				
2Stage / 2Stage							
2.6	300	5420	546				
2.8	300	5420	502				
3.3	300	5420	429				
3.8	300	5420	372				
4.0	300	5420	348				
4.7	300	5420	301				
5.5	300	5420	255				
6.1	300	5420	228				
7.2	300	5420	195				
7.7	300	5420	182				

TR..48/TRF38 $n_1=1400$ r/min**300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
2Stage / 2Stage							
9.1	300	5420	154				
11	300	5420	129				
13	300	5420	109				
14	300	5420	98				

TR..58 $n_1=1400$ r/min**450Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M
3Stage									
7.5	450	7110	186.89						
8.1	450	7110	172.17						
9.5	450	7110	147.92						
11	450	7110	128.77						
12	450	7110	120.63						
13	450	7110	106.58						
14	450	7110	98.99						
16	450	7110	89.71						
17	450	7110	80.55						
20	450	7110	69.23						
22	450	6980	64.85						
24	450	6630	57.29						
26	450	6430	53.22						
29	450	6170	48.23						
32	450	5900	43.30						
38	450	5530	37.30*						
40	450	5390	35.07						
46	450	5050	30.18						
52	450	4800	26.97						
2Stage									
53	450	4750	26.31						
56	450	4640	24.99*						
64	450	4370	21.93						
75	450	4050	18.60*						
83	450	3860	16.79						
95	435	3690	14.77*						
100	430	3610	13.95*						
118	405	3430	11.88						
130	390	3330	10.79						
150	370	3180	9.35						
155	375	2010	9.06						
176	355	2020	7.97						
186	350	1950	7.53						
218	335	1770	6.41						
241	320	1820	5.82						
277	305	1730	5.05						
319	280	1900	4.39						

TR..58/TRF38 $n_1=1400$ r/min**450Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
3Stage / 3Stage							
0.10	450	7110	14369				
0.12	450	7110	12095				
0.13	450	7110	10860				
0.15	450	7110	9445				
0.17	450	7110	8480				
0.19	450	7110	7312				
0.21	450	7110	6521				
0.25	450	7110	5585				
0.28	450	7110	4928				
0.32	450	7110	4378				
0.36	450	7110	3873				
0.42	450	7110	3344				
0.48	450	7110	2907				
0.55	450	7110	2567				
0.62	450	7110	2244				
0.71	450	7110	1967				
2Stage / 3Stage							
0.47	450	7110	2957				
0.56	450	7110	2508				
0.61	450	7110	2309				
0.70	450	7110	1991				
0.79	450	7110	1768				
0.92	450	7110	1520				
1.0	450	7110	1342				
1.2	450	7110	1164				
1.4	450	7110	1027				
1.6	450	7110	894				
1.7	450	7110	805				
2.0	450	7110	683				
2.3	450	7110	603				
2.6	450	7110	534				
3.1	450	7110	454				
3.4	450	7110	410				
3Stage / 2Stage							
0.81	450	7110	1732				
0.90	450	7110	1555				
1.0	450	7110	1399				
1.2	450	7110	1189				
1.4	450	7110	1034				
1.8	450	7110	782				
2.1	450	7110	678				
2.3	450	7110	604				
2.6	450	7110	537				
3.0	450	7110	471				
3.9	450	7110	357				
4.4	450	7110	319				
5.1	450	7110	273				
5.8	450	7110	241				
6.5	450	7110	215				
7.5	450	7110	187				
8.5	450	7110	164				
9.9	450	7110	142				
2Stage / 2Stage							
3.9	450	7110	359				
4.3	450	7110	324				

TR..58/TRF38 $n_1=1400$ r/min**450Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
2Stage / 2Stage							
4.8	450	7110	290				
5.3	450	7110	262				
5.7	450	7110	246				
6.4	450	7110	220				
7.4	450	7110	188				
8.8	450	7110	159				
9.6	450	7110	146				
10	450	7110	134				

TR..68 $n_1=1400$ r/min**600Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M
3Stage									
7.0	600	7560	199.81						
7.6	600	7560	184.07						
8.9	600	7560	158.14						
10	600	7560	137.67						
11	600	7560	128.97						
12	600	7560	113.94						
13	600	7560	105.83						
15	600	7560	95.91						
16	600	7560	86.11						
19	600	7560	74.17						
20	600	7560	69.75						
23	600	7560	61.26						
25	600	7560	56.89						
27	600	7560	51.56						
30	600	7560	46.29						
35	580	7790	39.88*						
37	570	7900	37.50						
43	540	8210	32.27						
49	520	8400	28.83						
2Stage									
50	540	8210	28.13						
52	540	8210	26.72						
60	560	8010	23.44						
70	600	7560	19.89						
78	590	7330	17.95						
89	560	7130	15.79						
94	550	6980	14.91						
110	520	6650	12.70						
121	500	6500	11.54						
140	470	6220	10.00						
161	440	5960	8.70*						
180	380	5830	7.79						
190	370	5790	7.36*						
223	330	5590	6.27						
246	310	5450	5.70						
284	290	5210	4.93						
326	270	5000	4.29						

TR..68/TRF38 $n_1=1400$ r/min**600Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
3Stage / 3Stage							
0.09	600	7560	15361				
0.11	600	7560	12931				
0.12	600	7560	11996				
0.14	600	7560	10097				
0.15	600	7560	9066				
0.18	600	7560	7816				
0.21	600	7560	6732				
0.23	600	7560	5970				
0.27	600	7560	5268				
0.30	600	7560	4680				
0.34	600	7560	4136				
0.39	600	7560	3566				
0.45	600	7560	3125				
0.51	600	7560	2745				
0.58	600	7560	2403				
2Stage / 3Stage							
0.52	600	7560	2682				
0.57	600	7560	2460				
0.67	600	7560	2094				
0.78	600	7560	1805				
0.86	600	7560	1629				
0.95	600	7560	1471				
1.0	600	7560	1379				
1.3	600	7560	1109				
1.5	600	7560	956				
1.6	600	7560	891				
1.9	600	7560	730				
2.2	600	7560	644				
2.5	600	7560	571				
2.9	600	7560	486				
3Stage / 2Stage							
0.66	600	7560	2136				
0.76	600	7560	1852				
0.85	600	7560	1652				
0.98	600	7560	1432				
1.1	600	7560	1259				
1.3	600	7560	1106				
1.7	600	7560	836				
1.9	600	7560	750				
2.2	600	7560	646				
2.4	600	7560	574				
2.8	600	7560	495				
3.2	600	7560	438				
3.6	600	7560	388				
4.1	600	7560	344				
4.8	600	7560	294				
5.4	600	7560	261				
6.0	600	7560	234				
7.0	600	7560	200				
8.0	600	7560	176				
8.9	600	7560	158				
2Stage / 2Stage							
3.2	600	7560	443				
3.6	600	7560	384				

TR..68/TRF38 $n_1=1400$ r/min**600Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
2Stage / 2Stage							
4.5	600	7560	310				
5.3	600	7560	264				
6.0	600	7560	235				
7.0	600	7560	201				
7.7	600	7560	181				
8.8	600	7560	159				

TR..78 $n_1=1400$ r/min**820Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY63 AM/MY71	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M
3Stage										
7.2	820	9920	195.24*							
8.4	820	9920	166.59							
9.6	820	9920	145.67							
10	820	9920	138.39							
12	820	9920	121.42							
14	820	9920	102.99							
15	820	9920	92.97							
17	820	9920	81.80							
18	820	9920	77.24							
21	820	9920	65.77							
24	820	9920	57.68							
27	820	9920	52.07							
31	820	9920	45.81							
32	820	9920	43.26							
38	820	9920	36.83							
42	820	9920	33.47							
48	820	9920	29.00							
55	780	10100	25.23							
2Stage										
60	820	8870	23.37							
65	820	8250	21.43							
74	780	7980	18.80							
79	780	7620	17.82*							
90	740	7390	15.60							
100	720	7050	14.05							
114	690	6740	12.33							
129	660	6490	10.88							
145	630	6300	9.64							
163	630	4110	8.59							
181	610	3940	7.74							
206	580	3850	6.79							
234	540	3990	5.99*							
264	510	3990	5.31*							

TR..78/TRF38 $n_1=1400$ r/min**820Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
3Stage / 3Stage							
0.09	820	9920	16370				
0.09	820	9920	15015				
0.10	820	9920	13885				
0.11	820	9920	12783				
0.13	820	9920	11021				
0.14	820	9920	9788				
0.16	820	9920	8714				
0.18	820	9920	7617				
0.21	820	9920	6770				
0.24	820	9920	5838				
0.27	820	9920	5184				
0.31	820	9920	4470				
0.35	820	9920	3999				
0.40	820	9920	3488				
0.46	820	9920	3053				
0.52	820	9920	2671				
2Stage / 3Stage							
0.44	820	9920	3151				
0.48	820	9920	2890				
0.57	820	9920	2460				
0.66	820	9920	2121				
0.71	820	9920	1977				
0.81	820	9920	1728				
0.86	820	9920	1620				
0.98	820	9920	1430				
1.1	820	9920	1303				
1.2	820	9920	1124				
1.3	820	9920	1047				
1.5	820	9920	915				
1.6	820	9920	858				
1.8	820	9920	757				
2.1	820	9920	671				
2.5	820	9920	571				
3Stage / 2Stage							
0.60	820	9920	2345				
0.68	820	9920	2070				
0.77	820	9920	1822				
0.89	820	9920	1580				
1.0	820	9920	1394				
1.1	820	9920	1218				
1.3	820	9920	1084				
1.5	820	9920	940				
1.7	820	9920	821				
1.9	820	9920	731				
2.2	820	9920	646				
2.5	820	9920	560				
2.9	820	9920	488				
3.2	820	9920	436				
3.8	820	9920	373				
4.3	820	9920	327				
4.8	820	9920	289				
5.4	820	9920	260				
6.2	820	9920	224				
7.1	820	9920	197				
8.3	820	9920	169				

TR..78/TRF38 $n_1=1400$ r/min**820Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100
3Stage / 2Stage							
9.4	820	9920	149				
2Stage / 2Stage							
2.7	820	9920	520				
3.1	820	9920	451				
3.3	820	9920	422				
3.8	820	9920	365				
4.5	820	9920	310				
5.1	820	9920	276				
5.9	820	9920	236				
6.3	820	9920	221				
7.5	820	9920	186				

TR..88 $n_1=1400$ r/min**1550Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M	AM180 MY180
3Stage										
5.7	1550	16900	246.54							
6.5	1550	16900	216.54							
6.8	1550	16900	205.71							
7.7	1550	16900	181.77							
9.0	1550	16900	155.34							
9.8	1550	16900	142.41							
11	1550	16900	124.97							
12	1550	16900	118.43*							
14	1550	16900	103.65							
15	1550	16900	93.38							
17	1550	16900	81.92							
19	1550	16900	72.57							
22	1550	15800	63.68*							
23	1550	15200	60.35							
27	1550	13500	52.82							
29	1550	16900	47.58							
34	1550	16900	41.74							
38	1550	16800	36.84*							
43	1550	16000	32.66*							
50	1500	15100	27.88							
2Stage										
41	1500	9480	34.4*							
45	1550	7820	31.40							
50	1550	15000	27.84*							
60	1550	13900	23.40							
65	1500	13600	21.51							
73	1440	13000	19.10							
82	1390	12600	17.08*							
91	1340	12100	15.35							
105	1280	11600	13.33							
117	1230	11200	11.93							
141	1180	10400	9.90*							
153	1210	10500	9.14*							
170	1160	10200	8.22							
196	1070	9780	7.13							
219	1020	9450	6.39							
264	910	8980	5.30*							

POSSIBLE GEOMETRICAL COMBINATIONS

TR..88/TRF58

$n_1=1400$ r/min

1550Nm

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M
3Stage / 3Stage									
0.08	1550	16900	17452						
0.09	1550	16900	15310						
0.10	1550	16900	13813						
0.12	1550	16900	12025						
0.13	1550	16900	10549						
0.15	1550	16900	9244						
0.17	1550	16900	8109						
0.20	1550	16900	7038						
0.23	1550	16900	6174						
0.26	1550	16900	5449						
0.29	1550	16900	4831						
0.33	1550	16900	4206						
0.37	1550	16900	3744						
0.43	1550	16900	3233						
0.49	1550	16900	2873						
0.56	1550	16900	2518						
0.63	1550	16900	2209						
0.71	1550	16900	1961						
1.4	1550	16900	994						
1.6	1550	16900	881						
2Stage / 3Stage									
0.35	1550	16900	4020						
0.38	1550	16900	3703						
0.44	1550	16900	3182						
0.51	1550	16900	2770						
0.54	1550	16900	2595						
0.66	1550	16900	2129						
0.73	1550	16900	1930						
0.81	1550	16900	1733						
0.94	1550	16900	1489						
1.0	1550	16900	1395						
1.1	1550	16900	1232						
1.2	1550	16900	1145						
1.4	1550	16900	1037						
1.5	1550	16900	931						
1.7	1550	16900	802						
1.9	1550	16900	754						
2.2	1550	16900	649						
2.4	1550	16900	580						
3Stage / 2Stage									
0.81	1550	16900	1737						
0.92	1550	16900	1524						
1.1	1550	16900	1303						
1.2	1550	16900	1143						
1.4	1550	16900	1008						
1.6	1550	16900	885						
1.8	1550	16900	776						
2.0	1550	16900	685						
2.3	1550	16900	599						
2.7	1550	16900	525						
3.1	1550	16900	456						
3.5	1550	16900	398						
4.0	1550	16900	352						
4.6	1550	16900	305						
5.2	1550	16900	268						

TR..88/TRF58 $n_1=1400$ r/min**1550Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M
3Stage / 2Stage									
5.9	1550	16900	236						
6.7	1550	16900	209						
2Stage / 2Stage									
2.6	1550	16900	538						
3.0	1550	16900	472						
3.5	1550	16900	400						
3.9	1550	16900	361						
4.7	1550	16900	300						
5.5	1550	16900	256						
6.0	1550	16900	232						
7.2	1550	16900	195						

TR..98 $n_1=1400$ r/min**3000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M	AM180 MY180	AM200 MY200
3Stage											
4.8	3000	19800	289.74								
5.5	3000	19800	255.71								
5.8	3000	19800	241.25								
6.5	3000	19800	216.28								
7.5	3000	19800	186.3								
8.2	3000	19800	170.02								
9.3	3000	19800	150.78								
11	3000	19800	126.75								
12	3000	19800	116.48								
14	3000	19800	103.44								
15	3000	19800	92.48								
17	3000	19800	83.15								
19	3000	18000	72.17								
21	3000	19800	65.21								
23	3000	19800	59.92								
26	3000	19800	53.21								
29	3000	19800	47.58								
33	3000	19800	42.78								
38	3000	18600	37.13								
42	2890	17900	33.25								
51	2670	16900	27.58								
2Stage											
44	2560	10600	32.05								
51	2560	8380	27.19								
56	2830	15900	25.03								
63	2720	15300	22.37								
70	2610	14800	20.14								
77	2500	14400	18.24								
87	2400	13800	16.17								
96	2300	13400	14.62								
113	2190	12700	12.39								
129	2090	12100	10.83								
151	2030	12200	9.29								
167	2030	11700	8.39								
197	2000	10900	7.12								

TR..98 $n_1 = 1400$ r/min**3000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM80 MY80	AM90 MY90	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M	AM180 MY180	AM200 MY200
2Stage											
225	1890	10500	6.21								
269	1780	9850	5.20								
311	1630	9500	4.50*								

TR..98/TRF58 $n_1 = 1400$ r/min**3000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M
3Stage / 3Stage									
0.06	3000	19800	21769						
0.07	3000	19800	19332						
0.08	3000	19800	17230						
0.09	3000	19800	14999						
0.11	3000	19800	13320						
0.13	3000	19800	11156						
0.14	3000	19800	10030						
0.16	3000	19800	8706						
0.18	3000	19800	7692						
0.21	3000	19800	6708						
0.24	3000	19800	5931						
0.27	3000	19800	5161						
0.31	3000	19800	4559						
0.35	3000	19800	4004						
0.40	3000	19800	3481						
2Stage / 3Stage									
0.30	3000	19800	4678						
0.32	3000	19800	4309						
0.38	3000	19800	3702						
0.46	3000	19800	3019						
0.52	3000	19800	2668						
0.62	3000	19800	2245						
0.69	3000	19800	2016						
0.81	3000	19800	1733						
0.86	3000	19800	1623						
0.98	3000	19800	1434						
1.2	3000	19800	1207						
1.3	3000	19800	1084						
1.5	3000	19800	934						
1.6	3000	19800	878						
1.9	3000	19800	755						
3Stage / 2Stage									
0.46	3000	19800	3065						
0.51	3000	19800	2722						
0.61	3000	19800	2311						
0.67	3000	19800	2078						
0.77	3000	19800	1823						
0.88	3000	19800	1583						
1.0	3000	19800	1396						
1.1	3000	19800	1228						
1.3	3000	19800	1069						
1.5	3000	19800	938						
1.7	3000	19800	824						
1.9	3000	19800	737						

TR..98/TRF58 $n_1=1400$ r/min**3000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M
3Stage / 2Stage									
2.2	3000	19800	632						
2.5	3000	19800	560						
2.9	3000	19800	484						
3.2	3000	19800	431						
3.7	3000	19800	379						
4.2	3000	19800	336						
4.7	3000	19800	296						
5.6	3000	19800	249						
6.0	3000	19800	234						
6.7	3000	19800	209						
2Stage / 2Stage									
2.2	3000	19800	625						
2.6	3000	19800	549						
3.0	3000	19800	466						
3.3	3000	19800	420						
3.8	3000	19800	370						
4.0	3000	19800	349						
4.7	3000	19800	297						
5.2	3000	19800	270						
6.2	3000	19800	227						

TR..108 $n_1=1400$ r/min**4300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M
3Stage									
5.6	4300	29500	251.15						
6.1	4300	29500	229.95						
6.9	4300	29500	203.16						
8.1	4300	29500	172.34						
8.8	4300	29500	158.68						
9.9	4300	29500	141.83						
11	4300	29500	127.68						
12	4300	29500	115.63						
14	4300	29500	102.53						
15	4300	29500	92.70						
18	4300	29500	78.57						
19	4300	29500	72.88						
21	4300	29200	65.60*						
24	4300	28000	59.41						
27	4300	26600	52.68						
29	4300	25500	47.63						
35	4300	23800	40.37*						
40	4300	22400	35.26						
47	4300	20700	29.49						
2Stage									
45	4300	21100	30.77						
51	4300	20100	27.58						
56	4300	19200	24.90*						
62	4300	18300	22.62						
70	4300	17300	20.07						
77	4300	16600	18.21						

TR..108 $n_1 = 1400$ r/min**4300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM100 MY100	AM112 MY112	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M	AM180 MY180	AM/MY200 AM/MY226S AM/MY226M
2Stage									
89	4300	15400	15.65						
102	4300	14400	13.66						
121	4300	13300	11.59						
138	4300	12400	10.13						
164	4300	11300	8.56						
178	2970	13800	7.86						
210	2970	12800	6.66						
241	2970	12100	5.82						
285	2900	11300	4.92						

TR..108/TRF78 $n_1 = 1400$ r/min**4300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M	MY132ML MY160M
3Stage / 3Stage										
0.07	4300	29500	20018							
0.08	4300	29500	17080							
0.09	4300	29500	14936							
0.11	4300	29500	12829							
0.12	4300	29500	11256							
0.15	4300	29500	9547							
0.16	4300	29500	8618							
0.18	4300	29500	7583							
0.21	4300	29500	6743							
0.24	4300	29500	5914							
0.27	4300	29500	5168							
0.32	4300	29500	4435							
0.36	4300	29500	3896							
0.41	4300	29500	3432							
0.46	4300	29500	3039							
0.52	4300	29500	2688							
0.60	4300	29500	2339							
2Stage / 3Stage										
0.36	4300	29500	3918							
0.42	4300	29500	3343							
0.46	4300	29500	3034							
0.53	4300	29500	2653							
0.61	4300	29500	2280							
0.68	4300	29500	2067							
0.83	4300	29500	1693							
0.90	4300	29500	1550							
1.0	4300	29500	1407							
1.2	4300	29500	1209							
1.3	4300	29500	1055							
1.5	4300	29500	919							
1.7	4300	29500	815							
2.0	4300	29500	717							
2.2	4300	29500	626							
2.7	4300	29500	528							
3Stage / 2Stage										
0.70	4300	29500	1987							
0.77	4300	29500	1827							
0.88	4300	29500	1599							

TR..108/TRF78 $n_1=1400$ r/min**4300Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M	MY132ML MY160M
3Stage / 2Stage										
1.0	4300	29500	1400							
1.1	4300	29500	1226							
1.3	4300	29500	1104							
1.5	4300	29500	939							
1.7	4300	29500	822							
2.3	4300	29500	614							
2.6	4300	29500	544							
2.8	4300	29500	492							
3.4	4300	29500	417							
3.8	4300	29500	369							
4.3	4300	29500	323							
4.9	4300	29500	285							
5.5	4300	29500	253							
6.5	4300	29500	214							
7.5	4300	29500	187							
2Stage / 2Stage										
3.0	4300	29500	469							
3.3	4300	29500	426							
3.7	4300	29500	377							
4.3	4300	29500	325							
4.9	4300	29500	284							
5.5	4300	29500	256							
6.4	4300	29500	220							
7.3	4300	29500	193							
8.1	4300	29500	172							

TR..138 $n_1=1400$ r/min**8000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M	AM/MY250M AM/MY280S AM/MY280
3Stage								
6.3	8000	53400	222.60					
7.4	8000	53400	188.45					
8.0	8000	53400	174.40*					
9.0	8000	53400	156.31					
9.9	8000	53400	141.12*					
11	8000	53400	128.18					
12	8000	53400	113.72					
14	8000	53400	103.20*					
16	8000	53400	88.70*					
17	8000	53400	80.91*					
19	8000	53400	73.49					
21	8000	53400	65.20					
24	8000	53400	59.17*					
28	8000	53400	50.86*					
32	8000	53400	44.39					
37	8000	53400	37.65					
43	8000	53400	32.91					
50	7680	54100	27.83					

TR..138 $n_1 = 1400$ r/min**8000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY132S AM/MY132M	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M	AM/MY250M AM/MY280S AM/MY280
2Stage								
47	7780	53900	29.57*					
58	8000	49400	24.12					
64	8000	47100	22.00*					
74	8000	43500	19.04*					
83	8000	40600	16.80*					
96	8000	37300	14.51					
109	8000	34700	12.83					
130	8000	31100	10.79					
161	7840	27600	8.71					
184	5110	39000	7.59					
219	5110	35900	6.38					
272	4600	34500	5.15					

TR..138/TRF78 $n_1 = 1400$ r/min**8000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M	MY132ML MY160M
3Stage / 3Stage										
0.06	8000	53400	22203							
0.07	8000	53400	18945							
0.08	8000	53400	16566							
0.09	8000	53400	14777							
0.11	8000	53400	12921							
0.12	8000	53400	11712							
0.13	8000	53400	10573							
0.16	8000	53400	8784							
0.19	8000	53400	7479							
0.21	8000	53400	6559							
0.24	8000	53400	5834							
0.27	8000	53400	5116							
0.31	8000	53400	4464							
0.36	8000	53400	3928							
0.41	8000	53400	3454							
0.47	8000	53400	2993							
2Stage / 3Stage										
0.30	8000	53400	4709							
0.35	8000	53400	4018							
0.40	8000	53400	3514							
0.42	8000	53400	3338							
0.48	8000	53400	2929							
0.56	8000	53400	2484							
0.62	8000	53400	2242							
0.75	8000	53400	1863							
0.88	8000	53400	1586							
1.0	8000	53400	1391							
1.1	8000	53400	1256							
1.3	8000	53400	1105							
1.3	8000	53400	1043							
1.6	8000	53400	888							
2.0	8000	53400	699							
2.3	8000	53400	609							

TR..138/TRF78 $n_1=1400$ r/min**8000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M	MY132ML MY160M
3Stage / 2Stage										
0.53	8000	53400	2658							
0.58	8000	53400	2412							
0.68	8000	53400	2073							
0.76	8000	53400	1839							
0.88	8000	53400	1598							
1.0	8000	53400	1397							
1.1	8000	53400	1226							
1.3	8000	53400	1090							
1.5	8000	53400	951							
1.7	8000	53400	831							
1.9	8000	53400	730							
2.2	8000	53400	629							
2.5	8000	53400	560							
2.9	8000	53400	490							
3.3	8000	53400	428							
3.7	8000	53400	381							
4.3	8000	53400	323							
4.8	8000	53400	291							
5.5	8000	53400	255							
6.3	8000	53400	223							
7.1	8000	53400	197							
8.0	8000	53400	175							
2Stage / 2Stage										
2.5	8000	53400	564							
2.7	8000	53400	517							
3.1	8000	53400	453							
3.7	8000	53400	376							
4.1	8000	53400	339							
4.7	8000	53400	297							

TR..148 $n_1=1400$ r/min**13000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M	AM/MY250M AM/MY280	AM/MY315M AM/MY315S
3Stage								
8.6	13000	62700	163.31					
9.5	13000	62700	146.91					
12	13000	62700	119.86					
13	13000	62700	109.31					
15	13000	62700	94.60*					
17	13000	62700	83.47					
19	13000	62700	72.09					
21	13000	62700	66.99					
23	13000	62700	61.09					
26	13000	62700	52.87					
30	13000	62700	46.65					
35	13000	62700	40.29					
39	13000	62700	35.64					
47	13000	62700	29.95					
58	11900	64700	24.19					

TR..148 $n_1 = 1400$ r/min**13000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M	AM/MY250M AM/MY280	AM/MY315M AM/MY315S
2 Stage								
68	12000	64600	20.44					
78	10500	67000	18.04					
90	13000	62700	15.64					
101	12600	63400	13.91					
117	13000	60400	11.99					
144	13000	54400	9.74					
169	13000	49900	8.26					
193	8670	58400	7.25					
238	8670	53200	5.89					
280	8670	49300	5.00					

TR..148/TRF78 $n_1 = 1400$ r/min**13000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY63 MY71	MY80	MY90	MY100	MY112	MY132S MY132M	MY132ML MY160M
3Stage / 3Stage										
0.06	13000	62700	23401							
0.07	13000	62700	21342							
0.08	13000	62700	18210							
0.09	13000	62700	15923							
0.10	13000	62700	14075							
0.11	13000	62700	12344							
0.13	13000	62700	11143							
0.14	13000	62700	9743							
0.17	13000	62700	8443							
0.19	13000	62700	7307							
0.22	13000	62700	6447							
0.25	13000	62700	5568							
0.28	13000	62700	4926							
0.32	13000	62700	4325							
0.37	13000	62700	3754							
0.42	13000	62700	3302							
0.48	13000	62700	2898							
3Stage / 2Stage										
0.55	13000	62700	2555							
0.63	13000	62700	2211							
0.72	13000	62700	1951							
0.82	13000	62700	1705							
0.91	13000	62700	1536							
1.1	13000	62700	1329							
1.2	13000	62700	1166							
1.4	13000	62700	1029							
1.6	13000	62700	889							
1.8	13000	62700	784							
2.0	13000	62700	695							
2.3	13000	62700	619							
2.5	13000	62700	558							
2.9	13000	62700	489							
3.4	13000	62700	415							

TR..148/TRF88 $n_1=1400$ r/min**13000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY90	AM100	AM112	MY132S MY132M	MY132ML MY160M	MY180
3Stage / 2Stage									
2.6	13000	62700	533						
3.0	13000	62700	462						
3.3	13000	62700	426						
3.8	13000	62700	368						
4.3	13000	62700	326						
5.0	13000	62700	280						
5.7	13000	62700	247						
6.5	13000	62700	214						
7.4	13000	62700	189						
8.8	13000	62700	159						

TR..168 $n_1=1400$ r/min**18000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	AM/MY132ML AM/MY160M AM/MY160L	AM180 MY180	AM/MY200 AM/MY225S AM/MY225M	AM/MY250M AM/MY280	AM/MY315M AM/MY315S	AM/MY316M_A AM/MY316M_B
3 Stage									
6.1	18000	120000	229.71						
7.5	18000	120000	186.93*						
9.1	18000	120000	153.07						
10	18000	120000	139.98						
11	18000	120000	121.81*						
13	18000	120000	107.49						
15	18000	120000	93.19						
17	18000	120000	82.91*						
19	18000	120000	73.70*						
21	18000	120000	67.40						
24	18000	120000	58.65						
27	18000	120000	51.76						
31	18000	120000	44.87						
35	18000	120000	39.92						
41	18000	120000	34.41						
50	18000	120000	27.96						
59	18000	116500	23.71						
2 Stage									
30	7000	120000	46.00						
37	9000	120000	37.74						
46	10000	120000	30.71						
57	14000	120000	24.57						
64	13000	120000	21.85						
74	16000	111400	19.03						
82	15000	108900	16.98						
97	18000	93800	14.48						
117	17000	88700	11.99						
137	17000	82500	10.24						

TR..168/TRF98 $n_1=1400$ r/min**18000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY80	MY90	MY100	MY112	MY132S MY132M	MY132ML MY160M	MY180	MY200
3Stage / 3Stage											
0.05	18000	120000	27001								
0.06	18000	120000	22482								
0.07	18000	120000	20002								
0.08	18000	120000	17361								
0.09	18000	120000	15446								
0.10	18000	120000	14051								
0.12	18000	120000	11812								
0.13	18000	120000	10509								
0.15	18000	120000	9631								
0.18	18000	120000	7749								
0.20	18000	120000	6894								
0.23	18000	120000	6077								
0.26	18000	120000	5407								
0.30	18000	120000	4650								
0.34	18000	120000	4129								
0.38	18000	120000	3692								
0.45	18000	120000	3099								
3Stage / 2Stage											
0.53	18000	120000	2657								
0.60	18000	120000	2333								
0.67	18000	120000	2085								
0.75	18000	120000	1877								
0.84	18000	120000	1670								
1.0	18000	120000	1438								
1.1	18000	120000	1279								
1.2	18000	120000	1123								
1.4	18000	120000	999								
1.6	18000	120000	861								
1.8	18000	120000	760								
2.1	18000	120000	656								
2.4	18000	120000	579								
2.8	18000	120000	503								
3.2	18000	120000	432								
3.7	18000	120000	376								
4.2	18000	120000	335								
4.6	18000	120000	303								
5.0	18000	120000	279								

TR..168/TRF108 $n_1=1400$ r/min**18000Nm**

n_2 [r/min]	M_2 max [Nm]	Fr_2 [N]	i	MY100	MY112	MY132S MY132M	MY132ML MY160M	MY180	MY200 MY225S MY225M
3Stage / 3Stage									
0.38	18000	120000	3637						
0.42	18000	120000	3330						
0.51	18000	120000	2757						
0.57	18000	120000	2436						
0.61	18000	120000	2298						
0.68	18000	120000	2066						
0.76	18000	120000	1849						
0.84	18000	120000	1674						
0.94	18000	120000	1485						
1.0	18000	120000	1342						
1.1	18000	120000	1229						
1.3	18000	120000	1111						
1.5	18000	120000	950						
1.6	18000	120000	860						
1.8	18000	120000	763						
2.0	18000	120000	690						
2.4	18000	120000	585						
2.7	18000	120000	511						
3Stage / 2Stage									
4.0	18000	120000	349						
4.7	18000	120000	295						
5.2	18000	120000	270						
6.1	18000	120000	229						
7.0	18000	120000	200						
8.3	18000	120000	169						
2Stage / 2Stage									
3.1	18000	120000	446						
3.5	18000	120000	399						
3.9	18000	120000	361						
4.3	18000	120000	328						
4.8	18000	120000	291						
5.3	18000	120000	264						
6.2	18000	120000	227						
7.1	18000	120000	198						
8.3	18000	120000	168						

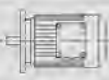
6.2 TR..MY.. Performance parameter

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s		Page
0.12	0.06	13300	21342	62000	1.00	TR 148 / TRF78	MY 63S4 166
	0.08	11400	18210	65700	1.15	TRF 148 / TRF78	MY 63S4 166
	0.09	9930	15923	67900	1.30		
	0.10	8780	14075	69400	1.50		
	0.11	7650	12344	70700	1.70		
	0.12	6740	11143	71600	1.95		
	0.14	6040	9743	72200	2.2		
	0.16	4830	8443	73100	2.7		
	0.19	4180	7307	73400	3.1		
	0.21	3690	6447	73700	3.5		
	0.25	3190	5568	73900	4.1		
	0.11	8060	12921	53300	1.00	TR 138 / TRF78	MY 63S4 166
	0.12	7260	11712	54900	1.10	TRF 138 / TRF78	MY 63S4 166
	0.13	6390	10573	56400	1.25		
	0.16	5030	8784	58400	1.60		
	0.18	4090	7479	59400	1.95		
	0.21	4060	6559	59400	1.95		
	0.24	3190	5834	60200	2.5		
	0.27	3170	5116	60200	2.5		
	0.18	4410	7583	28800	0.95	TR 108 / TRF78	MY 63S4 166
	0.20	3690	6743	32400	1.15	TRF 108 / TRF78	MY 63S4 166
	0.23	3660	5914	32500	1.15		
	0.27	2830	5168	35500	1.50		
	0.31	2540	4435	36100	1.70		
	0.35	2270	3896	36500	1.90		
	0.45	1880	3039	36900	2.3		
	0.35	2470	3918	36200	1.75	TR 108 / TRF78	MY 63S4 166
	0.41	2110	3343	36700	2.0	TRF 108 / TRF78	MY 63S4 166
	0.45	1910	3034	36900	2.3		
	0.52	1670	2653	37100	2.6		
	0.61	1440	2280	37300	3.0		
	0.67	1300	2067	37400	3.3		
	0.30	3050	4559	17700	1.00	TR 98 / TRF58	MY 63S4 166
	0.34	2570	4004	23700	1.15	TRF 98 / TRF58	MY 63S4 166
	0.40	2270	3481	25200	1.30		
	0.29	3240	4678	18400	0.95	TR 98 / TRF58	MY 63S4 166
	0.32	2980	4309	20400	1.00	TRF 98 / TRF58	MY 63S4 166
	0.37	2560	3702	23700	1.15		
	0.46	2080	3019	26100	1.45		
	0.52	1810	2668	27100	1.65		
	0.61	1480	2245	27700	2.0		
	0.68	1310	2016	27900	2.3		
	0.80	1200	1733	28000	2.5		
	0.45	2120	3065	25900	1.40	TR 98 / TRF58	MY 63S4 166
	0.51	1880	2722	26800	1.60	TRF 98 / TRF58	MY 63S4 166
	0.60	1590	2311	27500	1.90		
	0.66	1430	2078	27700	2.1		
	0.76	1240	1823	28000	2.4		
	0.87	1070	1583	28200	2.8		
	0.99	910	1396	28300	3.3		
	1.10	775	1228	28400	3.9		
	0.48	1770	2873	15200	0.90	TR 88 / TRF58	MY 63S4 166
	0.70	1300	1961	18500	1.20	TRF 88 / TRF58	MY 63S4 166
	0.53	1790	2595	15000	0.85	TR 88 / TRF58	MY 63S4 166
	0.65	1430	2129	17700	1.10	TRF 88 / TRF58	MY 63S4 166

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
0.12	0.72	1270	1930	18600	1.20	TR 88 / TRF58	MY 63S4 166
	0.80	1120	1733	19300	1.40	TRF 88 / TRF58	MY 63S4 166
	0.79	1150	1737	19200	1.35	TR 88 / TRF58	MY 63S4 166
	0.91	1010	1524	19800	1.55	TRF 88 / TRF58	MY 63S4 166
	1.1	810	1303	20000	1.90		
	1.2	710	1143	20000	2.2		
	1.6	585	885	20000	2.7		
	1.8	515	776	20000	3.0		
	2.0	450	685	20000	3.4		
	2.3	360	599	20000	4.3		
	1.1	940	1303	8660	0.85	TR 78 / TRF38	MY 63S4 166
	1.2	800	1124	10100	1.05	TRF 78 / TRF38	MY 63S4 166
	1.3	740	1047	10600	1.10		
	1.5	640	915	11300	1.30		
	1.1	820	1218	9910	1.00	TR 78 / TRF38	MY 63S4 166
	1.3	740	1084	10600	1.10	TRF 78 / TRF38	MY 63S4 166
	1.5	665	940	11200	1.25		
	1.7	525	821	12000	1.55		
	1.9	480	731	12200	1.70		
	2.1	460	646	12300	1.80		
	2.6	380	520	12600	2.2	TR 78 / TRF38	MY 63S4 166
	3.1	325	451	12700	2.5	TRF 78 / TRF38	MY 63S4 166
	3.3	300	422	12800	2.7		
	3.8	255	365	12900	3.2		
	1.6	630	891	7190	0.95	TR 68 / TRF38	MY 63S4 166
	1.9	505	730	8530	1.20	TRF 68 / TRF38	MY 63S4 166
	2.1	440	644	9060	1.35		
	2.4	385	571	9430	1.55		
	2.8	320	486	9790	1.85		
	1.7	590	836	7670	1.00	TR 68 / TRF38	MY 63S4 166
	1.8	495	750	8630	1.20	TRF 68 / TRF38	MY 63S4 166
	2.1	440	646	9050	1.35		
	2.4	400	574	9330	1.50		
	2.8	345	495	9660	1.75		
	3.1	285	438	9940	2.1		
	1.8	550	782	4650	0.80	TR 58 / TRF38	MY 63S4 166
	2.0	455	678	7070	1.00	TRF 58 / TRF38	MY 63S4 166
	2.3	415	604	7260	1.10		
	2.6	375	537	7400	1.20		
	2.9	330	471	7550	1.35		
	3.9	245	357	7770	1.85		
	4.3	215	319	7830	2.10		
	3.8	260	359	7730	1.75	TR 58 / TRF38	MY 63S4 166
	4.3	235	324	7790	1.95	TRF 58 / TRF38	MY 63S4 166
	4.8	205	290	7840	2.2		
	5.3	185	262	7880	2.4		
	5.6	171	246	7900	2.6		
	6.3	150	220	7930	3.0		
	2.7	345	510	4360	0.85	TR 48 / TRF38	MY 63S4 166
	3.2	285	436	5490	1.05	TRF 48 / TRF38	MY 63S4 166
	3.4	265	408	5590	1.10		
	4.0	220	344	5790	1.35		
	2.8	365	502	3020	0.80	TR 48 / TRF38	MY 63S4 166
	3.2	315	429	5350	0.95	TRF 48 / TRF38	MY 63S4 166
	3.7	270	372	5580	1.10		
	4.0	250	348	5670	1.20		
	4.6	210	301	5810	1.40		
	5.4	177	255	5930	1.70		
	6.0	156	228	5980	1.95		
	7.1	130	195	6040	2.3		

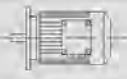
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page		
0.12	4.1	225	338	4570	0.90	TR	38 / TRF18	MY 63S4	166
	4.7	210	296	4790	0.95	TR F	38 / TRF18	MY 63S4	166
	5.3	184	259	5130	1.10				
	6.0	163	228	5360	1.25				
	6.9	140	199	5550	1.40				
	8.0	123	172	5680	1.65				
	4.2	240	328	3730	0.85	TR	38 / TRF18	MY 63S4	166
	4.8	205	289	4880	1.00	TR F	38 / TRF18	MY 63S4	166
	5.2	192	265	5040	1.05				
	6.1	156	226	5410	1.30				
	6.8	144	202	5530	1.40				
	7.7	125	179	5660	1.60				
	6.0	158	229	4090	0.80	TR	28 / TRF18	MY 63S4	166
	6.9	138	200	4200	0.95	TR F	28 / TRF18	MY 63S4	166
	7.8	121	177	4270	1.05				
	8.3	116	166	4290	1.10				
	6.1	157	227	4100	0.85	TR	28 / TRF18	MY 63S4	166
	6.8	144	203	4170	0.90	TR F	28 / TRF18	MY 63S4	166
	7.7	125	179	4260	1.05				
	8.8	106	156	4330	1.25				
	4.6	250	195.24*	12900	3.3	TR	78	MY 63M6	150
	5.4	210	166.59	13000	3.9	TRF	78	MY 63M6	151
	6.2	186	145.67	13000	4.4				
	4.5	255	199.81	10100	2.4	TR	68	MY 63M6	147
	4.9	235	184.07	10100	2.6	TRF	68	MY 63M6	148
	5.7	200	158.14	10300	3.0				
	6.5	175	137.67	10300	3.4				
	7.0	164	128.97	10400	3.7				
	7.9	145	113.94	10400	4.1				
	6.9	166	199.81	10300	3.6	TR	68	MY 63S4	147
	7.5	153	184.07	10400	3.9	TRF	68	MY 63S4	148
	4.8	240	186.89	7780	1.9	TR	58	MY 63M6	144
	5.2	220	172.17	7820	2.1	TRF	58	MY 63M6	145
	6.1	188	147.92	7870	2.4				
	7.0	164	128.77	7910	2.7				
	7.5	154	120.63	7920	2.9				
	8.4	136	106.58	7950	3.3				
	9.1	126	98.99	7960	3.6				
	7.4	155	186.89	7920	2.9	TR	58	MY 63S4	144
	8.0	143	172.17	7940	3.2	TRF	58	MY 63S4	145
	9.3	123	147.92	7960	3.7				
	11	107	128.77	7980	4.2				
	5.1	225	176.88	5760	1.35	TR	48	MY 63M6	141
	5.5	210	162.94	5830	1.45	TRF	48	MY 63M6	142
	6.4	178	139.99	5920	1.70				
	7.4	155	121.87	5980	1.95				
	7.8	147	176.88	6000	2.0	TR	48	MY 63M6	141
	8.5	135	162.94	6030	2.2	TRF	48	MY 63M6	142
	9.9	116	139.99	6070	2.6				
	11	101	121.87	6100	3.0				
	12	95	114.17	6110	3.2				
	14	84	100.86	6120	3.6				
	15	78	93.68	6130	3.9				
	6.7	172	134.82	5270	1.15	TR	38	MY 63M6	138
	7.3	157	123.66	5410	1.25	TRF	38	MY 63M6	139
	8.6	134	105.28	5600	1.50				
	9.9	116	90.77	5730	1.75				
	11	108	84.61	5770	1.85				
	12	94	73.96	5850	2.1				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
0.12	10	112	134.82	5750	1.80	TR	38	MY	63M6	138
	11	103	123.66	5800	1.95	TRF	38	MY	63M6	139
	13	87	105.28	5880	2.3					
	15	75	90.77	5930	2.7					
	16	70	84.61	5950	2.8					
	19	61	73.96	5980	3.3					
	7.3	158	123.91	4090	0.80	TR	28	MY	63M6	135
	8.5	134	105.49	4210	0.95	TRF	28	MY	63M6	136
	9.9	116	90.96	4300	1.10					
	11	108	84.78	4330	1.20					
	12	94	74.11	4370	1.40					
	10	112	135.09	4310	1.15	TR	28	MY	63S4	135
	11	103	123.91	4340	1.25	TRF	28	MY	63S4	136
	13	88	105.49	4390	1.50					
	15	76	90.96	4430	1.70					
	16	70	84.78	4440	1.85					
	19	62	74.11	4460	2.1					
	20	58	69.47	4470	2.3					
	23	51	61.30	4400	2.6	TR	28	MY	63S4	135
	25	46	55.87	4280	2.8	TRF	28	MY	63S4	136
	29	40	48.17	4090	3.3					
	31	37	44.90	4000	3.5					
	11	104	81.64	300	0.80	TR	18	MY	63M4	132
	13	90	70.39	1470	0.95	TRF	18	MY	63M4	133
	14	84	65.61	1860	1.00					
	16	73	57.35	2430	1.15					
	17	68	53.76	2500	1.25					
	19	60	47.44	2500	1.40					
	17	68	81.64	2500	1.25	TR	18	MY	63S4	132
	20	58	70.39	2500	1.45	TRF	18	MY	63S4	133
	21	55	65.61	2500	1.55					
	24	48	57.35	2500	1.80					
	26	45	53.76	2500	1.90					
	29	39	47.44	2500	2.2					
	31	37	44.18	2500	2.3					
	36	32	38.61	2430	2.7					
	38	30	36.20	2390	2.8					
	43	27	31.94	2310	3.2					
	49	24	28.32	2230	3.6					
	57	20	24.07	2130	4.3					
	227	5.0	6.07	4270	8.6	TRX	68	MY	63S4	122
	267	4.3	5.18	4050	17	TRXF	68	MY	63S4	123
	305	3.8	4.53	3870	22					
	321	3.6	4.30*	3810	22					
	251	4.6	5.50*	3360	8.5	TRX	58	MY	63S4	120
	272	4.2	5.07	3270	8.6	TRXF	58	MY	63S4	121
	317	3.6	4.35	3120	19					
	364	3.1	3.79	2980	22					
	389	2.9	3.55*	2910	24					
	440	2.6	3.14	2800	25					
	474	2.4	2.91	2730	28					
	523	2.2	2.64*	2640	31					
	582	2.0	2.37	2550	35					
	676	1.7	2.04	2430	41					
	719	1.6	1.92*	2380	43					
	835	1.4	1.65	2260	49					
0.18	0.09	15000	14075	50900	0.85	TR	148 / TRF78	MY	63M4	166
	0.11	13100	12344	62500	1.00	TRF	148 / TRF78	MY	63M4	166
	0.12	11600	11143	65200	1.10					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page	
0.18	0.14	10300	9743	67300	1.25	TR	148 / TRF78	MY 63M4	166
	0.16	8550	8443	69700	1.50	TRF	148 / TRF78	MY 63M4	166
	0.18	7400	7307	70900	1.75				
	0.20	6530	6447	71800	2.0				
	0.24	5640	5568	72500	2.3				
	0.27	5150	4926	72800	2.5				
	0.31	4420	4325	73300	2.9				
	0.35	3920	3754	73600	3.3				
	0.40	3380	3302	73800	3.9				
	0.15	8900	8784	50100	0.90	TR	138 / TRF78	MY 63M4	166
	0.18	7390	7479	54600	1.10	TRF	138 / TRF78	MY 63M4	166
	0.20	6950	6559	55500	1.15				
	0.23	5770	5834	57400	1.40				
	0.26	5420	5116	57900	1.50				
	0.30	4520	4464	59000	1.75				
	0.34	3980	3928	59500	2.0				
	0.28	5060	4709	58300	1.60	TR	138 / TRF78	MY 63M4	166
	0.33	4320	4018	59200	1.85	TRF	138 / TRF78	MY 63M4	166
	0.38	3780	3514	59700	2.1				
	0.40	3590	3338	59900	2.2				
	0.45	3150	2929	60200	2.5				
	0.30	4490	4435	28400	0.95	TR	108 / TRF78	MY 63M4	166
	0.34	3980	3896	31100	1.10	TRF	108 / TRF78	MY 63M4	166
	0.43	3220	3039	34200	1.35				
	0.34	4210	3918	29900	1.00	TR	108 / TRF78	MY 63M4	166
	0.39	3590	3343	32800	1.20	TRF	108 / TRF78	MY 63M4	166
	0.44	3260	3034	34100	1.30				
	0.50	2850	2653	35400	1.50				
	0.58	2450	2280	36200	1.75				
	0.64	2220	2067	36500	1.95				
	0.66	2100	1987	36700	2.1				
	0.72	1870	1827	36900	2.3				
	0.83	1600	1599	37200	2.7				
	0.94	1440	1400	37300	3.0				
	1.10	1230	1226	37400	3.5				
	0.49	3000	2668	20000	1.00	TR	98 / TRF58	MY 63M4	166
	0.59	2480	2245	24200	1.20	TRF	98 / TRF58	MY 63M4	166
	0.65	2210	2016	25500	1.35				
	0.76	1970	1733	26500	1.50				
	0.81	1840	1623	27000	1.65				
	0.92	1610	1434	27500	1.85				
	1.1	1330	1207	27900	2.3				
	1.2	1190	1084	28000	2.5				
	1.4	1000	934	28200	3.0				
	1.5	940	878	28300	3.2				
	1.8	790	755	28400	3.8				
	0.49	3090	2722	15900	0.95	TR	98 / TRF58	MY 63M4	166
	0.57	2620	2311	23400	1.15	TRF	98 / TRF58	MY 63M4	166
	0.64	2360	2078	24800	1.25				
	0.89	1690	1489	15900	0.90	TR	88 / TRF58	MY 63M4	166
	0.95	1580	1395	16700	1.00	TRF	88 / TRF58	MY 63M4	166
	1.1	1380	1232	18000	1.10				
	1.2	1280	1145	18600	1.20				
	1.3	1150	1037	19200	1.35				
	1.4	1020	931	19800	1.50				
	1.7	860	802	20000	1.80				
	0.87	1680	1524	15900	0.90	TR	88 / TRF58	MY 63M4	166
	1.0	1390	1303	17900	1.10	TRF	88 / TRF58	MY 63M4	166
	1.2	1220	1143	18900	1.25				
	1.5	980	885	19900	1.60	TR	88 / TRF58	MY 63M4	166
	1.7	860	776	20000	1.80	TRF	88 / TRF58	MY 63M4	166

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
0.18	1.5	980	858	5830	0.85	TR	78 / TRF38	MY	63M4	166
	1.7	850	757	9590	0.95	TRF	78 / TRF38	MY	63M4	166
	2.0	750	671	10500	1.10					
	2.3	630	571	11400	1.30					
	1.6	890	821	9230	0.90	TR	78 / TRF38	MY	63M4	166
	1.8	800	731	10100	1.00	TRF	78 / TRF38	MY	63M4	166
	2.0	745	646	10500	1.10					
	2.4	645	560	11300	1.25					
	2.7	550	488	11800	1.50					
	3.0	490	436	12100	1.70					
	3.5	420	373	12400	1.95					
	4.0	370	327	12600	2.2					
	4.6	330	289	12700	2.5					
	2.3	640	571	7060	0.95	TR	68 / TRF38	MY	63M4	166
	2.7	535	486	8250	1.10	TRF	68 / TRF38	MY	63M4	166
	2.3	655	574	5820	0.90	TR	68 / TRF38	MY	63M4	166
	2.7	565	495	7950	1.05	TRF	68 / TRF38	MY	63M4	166
	3.0	480	438	8740	1.25					
	3.4	425	388	9160	1.40					
	3.8	395	344	9380	1.55					
	4.5	320	294	9800	1.90					
	5.1	290	261	9920	2.1					
	2.9	500	454	6650	0.90	TR	58 / TRF38	MY	63M4	166
	3.2	455	410	7090	1.00	TRF	58 / TRF38	MY	63M4	166
	2.8	540	471	5250	0.85	TR	58 / TRF38	MY	63M4	166
	3.7	405	357	7300	1.10	TRF	58 / TRF38	MY	63M4	166
	4.1	355	319	7460	1.25					
	4.8	300	273	7630	1.50					
	5.5	260	241	7730	1.75					
	6.1	235	215	7790	1.95					
	3.7	420	359	7230	1.05	TR	58 / TRF38	MY	63M4	166
	4.1	380	324	7380	1.20	TRF	58 / TRF38	MY	63M4	166
	4.5	335	290	7530	1.35					
	5.0	305	262	7620	1.50					
	5.4	280	246	7680	1.60					
	6.0	250	220	7750	1.80					
	7.0	210	188	7830	2.1					
	8.3	177	159	7890	2.6					
	4.4	350	301	4150	0.85	TR	48 / TRF38	MY	63M4	166
	5.2	290	255	5460	1.05	TRF	48 / TRF38	MY	63M4	166
	5.8	260	228	5630	1.15					
	6.8	220	195	5790	1.40					
	6.6	230	199	4510	0.85	TR	38 / TRF18	MY	63S4	166
	7.7	199	172	4960	1.00	TR F	38 / TRF18	MY	63S4	166
	8.8	173	150	5260	1.15					
	6.5	235	202	4050	0.85	TR	38 / TRF18	MY	63S4	166
	7.4	205	179	4870	0.95	TR F	38 / TRF18	MY	63S4	166
	8.5	176	156	5230	1.15					
	9.4	157	141	4100	0.85	TR	28 / TRF18	MY	63S4	166
	11	139	124	4190	0.95	TR F	28 / TRF18	MY	63S4	166
	12	125	110	4260	1.05					
	14	105	94	4340	1.25					
	9.8	152	135	4120	0.85	TR	28 / TRF18	MY	63S4	166
	11	139	118	4190	0.95	TR F	28 / TRF18	MY	63S4	166
	13	121	104	4270	1.10					
	15	105	90	4340	1.25					
	4.5	385	195.24*	12500	2.1	TR	78	MY	63L6	150
	5.2	330	166.59	12700	2.5	TRF	78	MY	63L6	151
	6.0	290	145.67	12800	2.9					
	6.3	275	138.39	12900	3.0					
	7.2	240	121.42	12900	3.4					

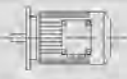
P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s		Page	
0.18	6.8	255	195.24*	12900	3.2	TR 78	MY 63M4	150
	7.9	215	166.59	13000	3.8	TRF 78	MY 63M4	151
	9.1	190	145.67	13000	4.3			
	9.5	180	138.39	13000	4.6			
	4.4	395	199.81	9370	1.50	TR 68	MY 63L6	147
	4.7	365	184.07	9560	1.65	TRF 68	MY 63L6	148
	5.5	310	158.14	9830	1.90			
	6.3	270	137.67	10000	2.2			
	6.8	255	128.97	10100	2.4			
	7.6	225	113.94	10200	2.7			
	8.2	210	105.83	10200	2.9			
	9.1	190	95.91	10300	3.2			
	10	170	86.11	10300	3.5			
	12	147	74.17	10400	4.1			
	12	138	69.75	10400	4.4			
	6.6	260	199.81	10100	2.3	TR 68	MY 63M4	147
	7.2	240	184.07	10100	2.5	TRF 68	MY 63M4	148
	8.3	205	158.14	10200	2.9			
	9.6	179	137.67	10300	3.4			
	10	168	128.97	10300	3.6			
	12	148	113.94	10400	4.0			
	12	138	105.83	10400	4.4			
	4.7	370	186.89	7420	1.20	TR 58	MY 63L6	144
	5.0	340	172.17	7510	1.30	TRF 58	MY 63L6	145
	5.9	290	147.92	7650	1.55			
	6.8	255	128.77	7740	1.75			
	7.2	240	120.63	7780	1.90			
	7.1	245	186.89	7770	1.85	TR 58	MY 63M4	144
	7.7	225	172.17	7810	2.0	TRF 58	MY 63M4	145
	8.9	193	147.92	7870	2.3			
	10	168	128.77	7900	2.7			
	11	157	120.63	7920	2.9			
	12	139	106.58	7940	3.2			
	13	129	98.99	7950	3.5			
	15	117	89.71	7970	3.9			
	7.5	230	176.88	5740	1.30	TR 48	MY 63M4	141
	8.1	210	162.94	5810	1.40	TRF 48	MY 63M4	142
	9.4	182	139.99	5910	1.65			
	11	159	121.87	5980	1.90			
	12	149	114.17	6000	2.0			
	13	131	100.86	6040	2.3	TR 48	MY 63M4	141
	14	122	93.68	6060	2.5	TRF 48	MY 63M4	142
	16	111	84.90	6080	2.7			
	17	99	76.23	6100	3.0			
	7.0	245	123.66	3060	0.80	TR 38	MY 63L6	138
	8.3	210	105.28	4840	0.95	TRF 38	MY 63L6	139
	9.6	179	90.77	5190	1.10			
	10	167	84.61	5310	1.20			
	9.8	176	134.82	5230	1.15	TR 38	MY 63M4	138
	11	161	123.66	5370	1.25	TRF 38	MY 63M4	139
	13	137	105.28	5580	1.45			
	15	118	90.77	5710	1.70			
	16	110	84.61	5760	1.80			
	18	96	73.96	5840	2.1			
	19	90	69.33	5870	2.2	TR 38	MY 63M4	138
	22	80	61.18	5920	2.5	TRF 38	MY 63M4	139
	24	73	55.76	5940	2.8			
	27	63	48.08	5960	3.2			
	11	161	123.91	4070	0.80	TR 28	MY 63M4	135
	13	137	105.49	4200	0.95	TRF 28	MY 63M4	136

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s					Page
0.18	15	118	90.96	4280	1.10	TR	28	MY	63M4	135
	16	110	84.78	4320	1.20	TRF	28	MY	63M4	136
	18	97	74.11	4370	1.35					
	19	91	69.47	4380	1.45					
	22	80	61.30	4320	1.65					
	24	73	55.87	4210	1.80					
	27	63	48.17	4040	2.1					
	29	59	44.90	3960	2.2					
	34	51	39.25	3810	2.5					
	36	48	36.79	3740	2.7					
	41	42	32.47	3610	3.1					
	46	38	28.78	3480	3.5					
	54	32	24.47	3310	4.1					
	47	37	28.37	3470	3.5	TR	28	MY	63M4	135
	51	34	26.09	3380	3.8	TRF	28	MY	63M4	136
	59	29	22.32	3220	4.5					
	68	25	19.35	3090	5.2					
	73	24	18.08	3020	5.5	TR	28	MY	63M4	135
	84	20	15.63	2890	6.4	TRF	28	MY	63M4	136
	99	17	13.28*	2750	7.5					
	16	106	81.64	46	0.80	TR	18	MY	63M4	132
	19	92	70.39	1330	0.95	TRF	18	MY	63M4	133
	20	85	65.61	1740	1.00					
	23	75	57.35	2350	1.15					
	25	70	53.76	2500	1.20					
	28	62	47.44	2450	1.40					
	30	58	44.18	2410	1.50					
	34	50	38.61	2340	1.70					
	36	47	36.20	2300	1.80					
	41	42	31.94	2240	2.0					
	47	37	28.32	2170	2.3					
	55	31	24.07	2080	2.7					
	52	33	25.23	2110	2.6					
	57	30	23.15	2060	2.8					
	67	26	19.71	1970	3.3					
	78	22	16.99	1890	3.9					
	143	12	6.07	4940	3.6	TRX	68	MY	63L6	122
	168	10	5.18	4690	7.4	TRXF	68	MY	63L6	123
	192	8.9	4.53	4490	9.2					
	202	8.5	4.30*	4410	9.4					
	218	7.9	6.07	4310	5.4	TRX	68	MY	63M4	122
	255	6.7	5.18	4090	11	TRXF	68	MY	63M4	123
	292	5.9	4.53	3920	14					
	307	5.6	4.30*	3850	14					
	350	4.9	3.77	3690	18					
	413	4.2	3.20*	3500	24					
	457	3.8	2.89	3380	28					
	519	3.3	2.54	3240	36					
	550	3.1	2.40*	3180	40					
	646	2.7	2.04	3020	50					
	158	11	5.50*	3880	3.6	TRX	58	MY	63L6	120
	172	10	5.07	3780	3.6	TRXF	58	MY	63L6	121
	200	8.6	4.35	3600	7.9					
	230	7.5	3.79	3440	9.2	TRX	58	MY	63M4	120
	240	7.2	5.50*	3400	5.4	TRXF	58	MY	63M4	121
	261	6.6	5.07	3310	5.5					
	303	5.7	4.35	3150	12					
	348	4.9	3.79	3010	14					
	372	4.6	3.55*	2950	15					
	421	4.1	3.14	2830	16					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s		Page
0.18	453	3.8	2.91	2760	18	TRX 58	MY 63M4 120
	500	3.4	2.64*	2670	20	TRXF 58	MY 63M4 121
	557	3.1	2.37	2580	22		
	647	2.7	2.04	2460	26		
	688	2.5	1.92*	2410	28		
	799	2.2	1.65	2290	31		
0.25	0.13	15200	9743	48200	0.85	TR 148 / TRF78	MY 63L4 166
	0.15	12800	8443	63100	1.00	TRF 148 / TRF78	MY 63L4 166
	0.18	11000	7307	66200	1.20		
	0.20	9740	6447	68100	1.35		
	0.23	8410	5568	69800	1.55		
	0.26	7600	4926	70700	1.70		
	0.30	6570	4325	71700	2.0	TR 148 / TRF78	MY 63L4 166
	0.35	5790	3754	72400	2.3	TRF 148 / TRF78	MY 63L4 166
	0.39	5020	3302	72900	2.6		
	0.45	4380	2898	73300	3.0		
	0.22	8670	5834	51100	0.90	TR 138 / TRF78	MY 63L4 166
	0.25	7970	5116	53500	1.00	TRF 138 / TRF78	MY 63L4 166
	0.29	6740	4464	55800	1.20		
	0.33	5930	3928	57100	1.35		
	0.28	7430	4709	54600	1.10	TR 138 / TRF78	MY 63L4 166
	0.32	6340	4018	56500	1.25	TRF 138 / TRF78	MY 63L4 166
	0.37	5550	3514	57700	1.45		
	0.39	5270	3338	58100	1.50		
	0.44	4620	2929	58900	1.75		
	0.49	4190	2658	59300	1.90	TR 138 / TRF78	MY 63L4 166
	0.54	3800	2412	59700	2.1	TRF 138 / TRF78	MY 63L4 166
	0.63	3270	2073	60100	2.5		
	0.71	2810	1839	60500	2.8		
	0.93	2180	1397	60800	3.7		
	1.1	1890	1226	61000	4.2		
	0.43	4730	3039	25600	0.90	TR 108 / TRF78	MY 63L4 166
	0.43	4790	3034	23600	0.90	TRF 108 / TRF78	MY 63L4 166
	0.65	3100	1987	34600	1.40	TR 108 / TRF78	MY 63L4 166
	0.71	2790	1827	35600	1.55	TRF 108 / TRF78	MY 63L4 166
	0.81	2410	1599	36300	1.80		
	0.93	2140	1400	36600	2.0		
	1.1	1840	1226	36900	2.3		
	1.4	1440	939	37300	3.0	TR 108 / TRF78	MY 63L4 166
	1.6	1240	822	37400	3.5	TRF 108 / TRF78	MY 63L4 166
	0.75	2840	1733	22000	1.05	TR 98 / TRF58	MY 63L4 166
	0.80	2660	1623	23200	1.15	TRF 98 / TRF58	MY 63L4 166
	0.71	2960	1823	21100	1.00	TR 98 / TRF58	MY 63L4 166
	0.82	2570	1583	23700	1.15	TRF 98 / TRF58	MY 63L4 166
	0.93	2230	1396	25400	1.35		
	1.1	1940	1228	26600	1.55		
	1.2	1750	1069	27300	1.70		
	1.4	1530	938	27600	1.95		
	1.6	1300	824	27900	2.3		
	1.8	1160	737	28100	2.6		
	2.1	1000	632	28200	3.0		
	1.1	1850	1145	10700	0.85	TR 88 / TRF58	MY 63L4 166
	1.2	1670	1037	16000	0.95	TRF 88 / TRF58	MY 63L4 166
	1.4	1490	931	17400	1.05		
	1.6	1270	802	18600	1.20		
	1.1	1800	1143	14700	0.85	TR 88 / TRF58	MY 63L4 166
	1.5	1420	885	17800	1.10	TRF 88 / TRF58	MY 63L4 166
	1.7	1250	776	18700	1.25		
	1.9	1100	685	19400	1.40		

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page	
0.25	2.2	930	599	20000	1.65	TR	88 / TRF58	MY	63L4	166	
	2.5	820	525	20000	1.90	TRF	88 / TRF58	MY	63L4	166	
	2.9	715	456	20000	2.2						
	4.9	415	268	20000	3.7						
	2.3	920	571	8910	0.90	TR	78 / TRF38	MY	63L4	166	
						TRF	78 / TRF38	MY	63L4	166	
	2.3	930	560	8780	0.90	TR	78 / TRF38	MY	63L4	166	
	2.7	795	488	10100	1.05	TRF	78 / TRF38	MY	63L4	166	
	3.0	705	436	10900	1.15						
	3.5	610	373	11500	1.35						
	4.0	535	327	11900	1.55						
	4.5	475	289	12200	1.75						
	5.0	425	260	12400	1.95						
	5.8	355	224	12600	2.3						
		3.4	620	388	7290	0.95	TR	68 / TRF38	MY	63L4	166
		3.8	565	344	7950	1.05	TRF	68 / TRF38	MY	63L4	166
4.4		465	294	8870	1.30						
5.0		425	261	9180	1.40						
5.5		380	234	9460	1.60						
6.5		320	200	9780	1.85						
7.4		280	176	9980	2.2						
8.2		250	158	10100	2.4						
	3.4	645	384	6960	0.95	TR	68 / TRF38	MY	63L4	166	
	3.6	600	359	7550	1.00	TRF	68 / TRF38	MY	63L4	166	
	4.2	515	310	8430	1.15						
	4.9	435	264	9100	1.40						
	5.5	385	235	9420	1.55						
	6.5	325	201	9750	1.85						
	7.2	295	181	9910	2.0						
	4.1	520	319	6050	0.85	TR	58 / TRF38	MY	63L4	166	
	4.8	440	273	7160	1.05	TRF	58 / TRF38	MY	63L4	166	
	5.4	380	241	7380	1.20						
	6.0	340	215	7510	1.30						
	7.0	300	187	7630	1.50						
	7.9	260	164	7730	1.75						
	9.2	225	142	7800	2.0						
		4.0	545	324	4980	0.85	TR	58 / TRF38	MY	63L4	166
4.5		485	290	6950	0.95	TRF	58 / TRF38	MY	63L4	166	
5.0		435	262	7160	1.05						
5.3		405	246	7280	1.10						
5.9		360	220	7450	1.25						
		5.7	375	228	2440	0.80	TR	48 / TRF38	MY	63L4	166
	6.7	315	195	5320	0.95	TRF	48 / TRF38	MY	63L4	166	
	7.1	295	182	5440	1.00						
	8.5	245	154	5680	1.20						
	8.7	250	150	2540	0.80	TR	38 / TRF18	MY	63S4	166	
	10	210	130	4790	0.95	TR F	38 / TRF18	MY	63S4	166	
	10	200	124	4930	1.00						
	12	178	110	5200	1.10						
	14	152	94	5460	1.30						
		9.7	220	135	4660	0.90	TR	38 / TRF18	MY	63S4	166
10		215	127	4770	0.95	TR F	38 / TRF18	MY	63S4	166	
13		174	104	5250	1.15						
14		150	90	5470	1.35						
	2.4	1020	289.74	28200	3.0	TR	98	MY	80N8	156	
	2.7	900	255.71	28300	3.3	TRF	98	MY	80N8	157	
	2.8	850	241.25	28400	3.5						
	3.1	760	216.28	28400	4.0						
	2.8	870	246.54	20000	1.80	TR	88	MY	80N8	153	
	3.1	760	216.54	20000	2.0	TRF	88	MY	80N8	154	

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs					Page
0.25	3.3	720	205.71	20000	2.2	TR	88	MY 80N8	153	
	3.7	640	181.77	20000	2.4	TRF	88	MY 80N8	154	
	4.1	585	166.59	11600	1.40	TR	78	MY 80N8	150	
	4.7	510	145.67	12000	1.60	TRF	78	MY 80N8	151	
	4.9	485	138.39	12100	1.70					
	5.6	425	121.42	12400	1.90					
	4.5	530	195.24*	11900	1.55	TR	78	MY 71D6	150	
	5.3	450	166.59	12300	1.80	TRF	78	MY 71D6	151	
	6.0	395	145.67	12500	2.1					
	6.7	360	195.24*	12600	2.3	TR	78	MY 63L4	150	
	7.8	305	166.59	12800	2.7	TRF	78	MY 63L4	151	
	8.9	270	145.67	12900	3.1					
	9.4	255	138.39	12900	3.2					
	11	225	121.42	13000	3.7					
	4.3	555	158.14	8060	1.10	TR	68	MY 80N8	147	
	4.9	485	137.67	8730	1.25	TRF	68	MY 80N8	148	
	5.3	455	128.97	8970	1.35					
	6.0	400	113.94	9340	1.50					
	4.4	540	199.81	8190	1.10	TR	68	MY 71D6	147	
	4.8	500	184.07	8590	1.20	TRF	68	MY 71D6	148	
	5.6	430	158.14	9140	1.40					
	6.4	375	137.67	9500	1.60					
	6.8	350	128.97	9630	1.70					
	7.7	310	113.94	9840	1.95					
	8.3	285	105.83	9940	2.1					
	6.5	365	199.81	9540	1.65	TR	68	MY 63L4	147	
	7.1	340	184.07	9700	1.80	TRF	68	MY 63L4	148	
	8.2	290	158.14	9930	2.1					
	9.4	255	137.67	10100	2.4					
	10	235	128.97	10100	2.5					
	11	210	113.94	10200	2.9					
	12	194	105.83	10300	3.1					
	14	176	95.91	10300	3.4					
	15	158	86.11	10400	3.8					
	4.7	505	186.89	6450	0.90	TR	58	MY 71D6	144	
	5.1	465	172.17	7030	0.95	TRF	58	MY 71D6	145	
	6.0	400	147.92	7300	1.10					
	6.8	350	128.77	7480	1.30					
	7.3	325	120.63	7550	1.35					
	8.3	290	106.58	7660	1.55					
	8.9	270	98.99	7710	1.70					
	7.0	345	186.89	7500	1.30	TR	58	MY 63L4	144	
	7.5	315	172.17	7590	1.40	TRF	58	MY 63L4	145	
	8.8	270	147.92	7700	1.65					
	10	235	128.77	7780	1.90					
	11	220	120.63	7810	2.0					
	12	196	106.58	7860	2.3					
	13	182	98.99	7880	2.5					
	14	165	89.71	7910	2.7					
	16	148	80.55	7930	3.0	TR	58	MY 63L4	144	
	19	127	69.23	7960	3.5	TRF	58	MY 63L4	145	
	7.4	325	176.88	5280	0.90	TR	48	MY 63L4	141	
	8.0	300	162.94	5420	1.00	TRF	48	MY 63L4	142	
	9.3	255	139.99	5630	1.15					
	11	225	121.87	5770	1.35					
	11	210	114.17	5820	1.45	TR	48	MY 63L4	141	
	13	185	100.86	5900	1.60	TRF	48	MY 63L4	142	
	14	172	93.68	5940	1.75					
	15	156	84.90	5980	1.90					
	17	140	76.23	6020	2.1					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs					Page
0.25	19	126	68.54	6050	2.4	TR	48	MY	63L4	141
	20	118	64.21	6070	2.5	TRF	48	MY	63L4	142
	23	104	56.73	6090	2.9					
	25	97	52.69	6100	3.1					
	27	88	47.75	6080	3.4					
	9.6	250	134.82	2630	0.80	TR	38	MY	63L4	138
	11	225	123.66	4560	0.90	TRF	38	MY	63L4	139
	12	193	105.28	5030	1.05					
	14	167	90.77	5320	1.20					
	15	155	84.61	5420	1.30					
	18	136	73.96	5590	1.45					
	19	127	69.33	5650	1.55					
	21	112	61.18	5750	1.80					
	23	102	55.76	5800	1.95					
	27	88	48.08	5870	2.3					
	29	82	44.81	5760	2.4					
	33	72	39.17	5540	2.8					
	35	67	36.72	5430	3.0					
	40	60	32.40	5230	3.4					
	15	156	84.78	4100	0.85	TR	28	MY	63L4	135
	18	136	74.11	4210	0.95	TRF	28	MY	63L4	136
	19	128	69.47	4250	1.00					
	21	113	61.30	4190	1.15					
	23	103	55.87	4090	1.25					
	27	89	48.17	3940	1.45					
	29	83	44.90	3870	1.60					
	33	72	39.25	3730	1.80					
	35	68	36.79	3670	1.90					
	40	60	32.47	3540	2.2					
	45	53	28.78	3420	2.5					
	53	45	24.47	3270	2.9					
	46	52	28.37	3410	2.5	TR	28	MY	63L4	135
	50	48	26.09	3330	2.7	TRF	28	MY	63L4	136
	58	41	22.32	3180	3.2					
	67	36	19.35	3050	3.7					
	72	33	18.08	2990	3.9					
	83	29	15.63	2860	4.5					
	98	24	13.28*	2730	5.3					
	110	22	11.86	2630	5.9					
	128	19	10.13	2510	6.6					
	138	17	9.41	2440	7.1					
	159	15	8.16	2330	7.7					
	170	14	7.63*	2290	8.0					
	197	12	6.59	2180	8.8					
	232	10	5.60*	2080	9.6					
	260	9.2	5.00*	2000	10					
	304	7.8	4.27	1910	11					
	325	7.3	4.00*	1870	12					
	386	6.2	3.37	1770	13					
	23	105	57.35	156	0.80	TR	18	MY	63L4	132
	24	99	53.76	785	0.85	TRF	18	MY	63L4	133
	27	87	47.44	1630	1.00					
	29	81	44.18	2000	1.05					
	34	71	38.61	2200	1.20					
	36	67	36.20	2180	1.30					
	41	59	31.94	2130	1.45					
	46	52	28.32	2070	1.65					
	54	44	24.07	2000	1.90					
	52	46	25.23	2020	1.85					
	56	43	23.15	1980	2.0					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s		Page	
0.25	66	36	19.71	1910	2.4	TR 18	MY 63L4 132	
	77	31	16.99	1840	2.7	TRF 18	MY 63L4 133	
	82	29	15.84	1810	2.9			
	94	25	13.84	1750	3.4			
	100	24	12.98	1720	3.6			
	114	21	11.45	1660	3.9			
	145	17	6.07	4890	2.6	TRX 68	MY 71D6 122	
	170	14	5.18	4650	5.4	TRXF 68	MY 71D6 123	
	194	12	4.53	4450	6.7			
	205	12	4.30*	4380	6.8			
	214	11	6.07	4310	3.9	TRX 68	MY 63L4 122	
	251	9.5	5.18	4100	7.9	TRXF 68	MY 63L4 123	
	287	8.3	4.53	3920	9.9			
	302	7.9	4.30*	3860	10			
	345	6.9	3.77	3700	13			
	406	5.9	3.20*	3500	17			
	450	5.3	2.89	3390	20			
	511	4.7	2.54	3250	25			
	542	4.4	2.40*	3190	28			
	636	3.8	2.04	3020	35			
	160	15	5.50*	3840	2.6	TRX 58	MY 71D6 120	
	174	14	5.07	3740	2.6	TRXF 58	MY 71D6 121	
	202	12	4.35	3560	5.8			
	232	10	3.79	3410	6.7			
	236	10	5.50*	3390	3.9	TRX 58	MY 63L4 120	
	257	9.3	5.07	3300	3.9	TRXF 58	MY 63L4 121	
	299	8.0	4.35	3150	8.5			
	343	7.0	3.79	3010	9.9			
	366	6.5	3.55*	2950	11			
	414	5.8	3.14	2830	11			
	446	5.3	2.91	2760	13			
	492	4.8	2.64*	2680	14			
	548	4.4	2.37	2580	16			
	637	3.7	2.04	2460	19			
	677	3.5	1.92*	2410	20			
	787	3.0	1.65	2300	23			
	0.37	0.19	15900	7307	37500	0.80	TR 148 / TRF78	MY 71D4 166
		0.21	14100	6447	60400	0.90	TRF 148 / TRF78	MY 71D4 166
		0.25	12100	5568	64300	1.05		
		0.28	10900	4926	66400	1.20		
		0.32	9480	4325	68500	1.35		
		0.37	8310	3754	70000	1.55		
		0.42	7240	3302	71100	1.80		
		0.48	6320	2898	71900	2.1		
0.31		9740	4464	39400	0.80	TR 138 / TRF78	MY 71D4 166	
0.35		8570	3928	51500	0.95	TRF 138 / TRF78	MY 71D4 166	
0.34		9080	4018	49200	0.90	TR 138 / TRF78	MY 71D4 166	
0.39		7940	3514	53500	1.00	TRF 138 / TRF78	MY 71D4 166	
0.41		7540	3338	54300	1.05	TR 138 / TRF78	MY 71D4 166	
0.47		6620	2929	56000	1.20	TRF 138 / TRF78	MY 71D4 166	
0.56		5600	2484	57600	1.45			
0.62		5030	2242	58400	1.60			
0.52		6000	2658	57000	1.35	TR 138 / TRF78	MY 71D4 166	
0.57		5440	2412	57800	1.45	TRF 138 / TRF78	MY 71D4 166	
0.67		4680	2073	58800	1.70			
0.75		4060	1839	59400	1.95			
0.99		3130	1397	60200	2.6			
1.1		2720	1226	60500	2.9			
1.3		2440	1090	60700	3.3			
1.4		2130	951	60900	3.8			

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
0.37	0.67	4660	2067	27300	0.90	TR 108 / TRF78	MY 71D4 166
	0.82	3790	1693	31900	1.15	TRF 108 / TRF78	MY 71D4 166
	0.89	3420	1550	33500	1.25		
	0.98	3110	1407	34600	1.40		
	1.1	2670	1209	35900	1.60		
	1.3	2330	1055	36400	1.85		
	0.69	4450	1987	28600	0.95	TR 108 / TRF78	MY 71D4 166
	0.76	4030	1827	30800	1.05	TRF 108 / TRF78	MY 71D4 166
	0.86	3490	1599	33200	1.25		
	0.99	3090	1400	34600	1.40		
	1.1	2670	1226	35900	1.60		
	1.5	2070	939	36700	2.1		
	1.7	1790	822	37000	2.4		
	1.1	2760	1207	22500	1.10	TR 98 / TRF58	MY 71D4 166
	1.3	2470	1084	24300	1.20	TRF 98 / TRF58	MY 71D4 166
	1	3180	1396	10800	0.95	TR 98 / TRF58	MY 71D4 166
	1.1	2780	1228	22500	1.10	TRF 98 / TRF58	MY 71D4 166
	1.3	2480	1069	24200	1.20		
	1.5	2160	938	25700	1.40		
	1.7	1860	824	26900	1.60		
	1.9	1670	737	27400	1.80		
	2.2	1430	632	27700	2.1		
	3.2	980	431	28200	3.1		
	3.6	860	379	28300	3.5		
	4.1	765	336	28400	3.9		
	1.7	1810	802	13800	0.85	TR 88 / TRF58	MY 71D4 166
	1.8	1700	754	15800	0.90	TRF 88 / TRF58	MY 71D4 166
	2.1	1450	649	17600	1.05		
	1.8	1780	776	15100	0.85	TR 88 / TRF58	MY 71D4 166
	2.0	1570	685	16800	1.00	TRF 88 / TRF58	MY 71D4 166
	2.3	1340	599	18300	1.15		
	2.6	1170	525	19100	1.30		
	3.0	1030	456	19700	1.50		
	5.2	595	268	20000	2.6		
	5.9	525	236	20000	2.9		
	2.6	1260	538	18700	1.25	TR 88 / TRF58	MY 71D4 166
	2.9	1100	472	19400	1.40	TRF 88 / TRF58	MY 71D4 166
	3.5	930	400	20000	1.65		
	3.8	830	361	20000	1.85		
	3.7	860	373	9520	0.95	TR 78 / TRF38	MY 71D4 166
	4.2	755	327	10500	1.10	TRF 78 / TRF38	MY 71D4 166
	4.8	670	289	11100	1.20		
	5.3	600	260	11600	1.35		
	6.2	510	224	12000	1.60		
	7.0	445	197	12300	1.85		
	8.2	390	169	12500	2.1		
	9.3	340	149	12700	2.4		
	4.7	665	294	4670	0.90	TR 68 / TRF38	MY 71D4 166
	5.3	600	261	7550	1.00	TRF 68 / TRF38	MY 71D4 166
	5.9	540	234	8220	1.10		
	6.9	460	200	8930	1.30		
	2.7	1330	255.71	27900	2.3	TR 98	MY 90S8 156
	2.8	1250	241.25	28000	2.4	TRF 98	MY 90S8 157
	3.1	1120	216.28	28100	2.7		
	3.6	970	186.30	28300	3.1		
	3.1	1140	289.74	28100	2.6	TR 98	MY 80K6 156
	3.5	1000	255.71	28200	3.0	TRF 98	MY 80K6 157
	3.7	950	241.25	28300	3.2		
	4.2	850	216.28	28400	3.5		

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs					Page
0.37	3.1	1130	216.54	19300	1.40	TR	88	MY 90S8	153	
	3.3	1070	205.71	19600	1.45	TRF	88	MY 90S8	154	
	3.7	940	181.77	20000	1.65					
	3.6	970	246.54	20000	1.60	TR	88	MY 80K6	153	
	4.2	850	216.54	20000	1.80	TRF	88	MY 80K6	154	
	4.4	810	205.71	20000	1.90					
	5.0	715	181.77	20000	2.2					
	5.8	610	155.34	20000	2.5					
	6.3	560	142.41	20000	2.8					
	4.7	755	145.67	10500	1.10	TR	78	MY 90S8	150	
	4.9	720	138.39	10800	1.15	TRF	78	MY 90S8	151	
	5.6	630	121.42	11400	1.30					
	5.4	655	166.59	11200	1.25	TR	78	MY 80K6	150	
	6.2	570	145.67	11700	1.45	TRF	78	MY 80K6	151	
	6.5	545	138.39	11900	1.50					
	7.1	500	195.24*	12100	1.65	TR	78	MY 71D4	150	
	8.3	425	166.59	12400	1.90	TRF	78	MY 71D4	151	
	9.5	375	145.67	12600	2.2					
	10	355	138.39	12600	2.3					
	11	310	121.42	12800	2.6					
	13	265	102.99	12900	3.1					
	15	240	92.97	12900	3.5					
	5.7	620	158.14	7300	0.95	TR	68	MY 80K6	147	
	6.5	540	137.67	8210	1.10	TRF	68	MY 80K6	148	
	7.0	505	128.97	8530	1.20					
	7.9	445	113.94	9010	1.35					
	6.9	510	199.81	8480	1.15	TR	68	MY 71D4	147	
	7.5	470	184.07	8820	1.25	TRF	68	MY 71D4	148	
	8.7	405	158.14	9310	1.50					
	10	355	137.67	9620	1.70					
	11	330	128.97	9740	1.80					
	12	290	113.94	9920	2.1					
	13	270	105.83	10000	2.2					
	14	245	95.91	10100	2.4					
	16	220	86.11	10200	2.7					
	19	190	74.17	10300	3.2	TR	68	MY 71D4	147	
	20	179	69.75	10300	3.4	TRF	68	MY 71D4	148	
	23	157	61.26	10400	3.8					
	24	146	56.89	10400	4.1					
	7.0	505	128.77	6510	0.90	TR	58	MY 80K6	144	
	7.5	475	120.63	7000	0.95	TRF	58	MY 80K6	145	
	8.4	420	106.58	7240	1.10					
	9.1	390	98.99	7350	1.15					
	7.4	480	186.89	6980	0.95	TR	58	MY 71D4	144	
	8.0	440	172.17	7140	1.00	TRF	58	MY 71D4	145	
	9.3	380	147.92	7390	1.20					
	11	330	128.77	7550	1.35					
	11	310	120.63	7610	1.45	TR	58	MY 71D4	144	
	13	275	106.58	7700	1.65	TRF	58	MY 71D4	145	
	14	255	98.99	7750	1.80					
	15	230	89.71	7800	1.95					
	17	205	80.55	7840	2.2					
	20	177	69.23	7890	2.5					
	21	166	64.85	7910	2.7					
	24	147	57.29	7760	3.1					
	26	136	53.22	7600	3.3					
	29	124	48.23	7380	3.6					
	10	360	139.99	3490	0.85	TR	48	MY 71D4	141	
	11	310	121.87	5350	0.95	TRF	48	MY 71D4	142	
	12	290	114.17	5460	1.05					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s			Page	
0.37	14	260	100.86	5630	1.15	TR	48	MY 71D4	141
	15	240	93.68	5700	1.25	TRF	48	MY 71D4	142
	16	215	84.90	5790	1.40				
	18	195	76.23	5870	1.55				
	20	176	68.54	5930	1.70				
	21	164	64.21	5960	1.80				
	24	145	56.73	6010	2.1				
	26	135	52.69	5990	2.2				
	29	122	47.75	5820	2.5				
	32	110	42.87	5650	2.7				
	37	95	36.93	5410	3.2				
	40	89	34.73	5310	3.4				
	41	87	33.79	5270	2.8	TR	48	MY 71D4	141
	44	80	31.12	5150	2.8	TRF	48	MY 71D4	142
	52	69	26.74	4920	4.4				
	59	60	23.28	4720	5.0				
	63	56	21.81	4620	5.4				
	15	230	90.77	4250	0.85	TR	38	MY 71D4	138
	16	215	84.61	4720	0.90	TRF	38	MY 71D4	139
	19	189	73.96	5070	1.05				
	20	178	69.33	5210	1.15	TR	38	MY 71D4	138
	23	157	61.18	5410	1.30	TRF	38	MY 71D4	139
	25	143	55.76	5530	1.40				
	29	123	48.08	5590	1.60				
	31	115	44.81	5480	1.75				
	35	100	39.17	5290	2.0				
	38	94	36.72	5190	2.1				
	43	83	32.40	5010	2.4				
	48	74	28.73	4850	2.7				
	57	63	24.42	4620	3.2				
	49	73	28.32	4830	2.8	TR	38	MY 71D4	138
	53	67	26.03	4710	2.8	TRF	38	MY 71D4	139
	62	57	22.27	4500	3.5				
	71	49	19.31	4320	4.1				
	76	46	18.05	4230	4.3				
	88	40	15.60	4050	5.0				
	104	34	13.25	3850	5.6				
	117	30	11.83	3720	6.0				
	23	157	61.30	3870	0.85	TR	28	MY 71D4	135
	25	143	55.87	3800	0.90	TRF	28	MY 71D4	136
	29	123	48.17	3680	1.05				
	31	115	44.90	3620	1.15				
	35	101	39.25	3510	1.30				
	38	94	36.79	3460	1.40				
	43	83	32.47	3350	1.55				
	48	74	28.78	3250	1.75				
	56	63	24.47	3110	2.10				
	49	73	28.37	3240	1.80	TR	28	MY 71D4	135
	53	67	26.09	3170	1.95	TRF	28	MY 71D4	136
	62	57	22.32	3040	2.3				
	71	50	19.35	2920	2.6				
	76	46	18.08	2860	2.8				
	88	40	15.63	2750	3.3				
	104	34	13.28*	2620	3.8				
	36	99	38.61	770	0.85	TR	18	MY 71D4	132
	38	93	36.20	1260	0.90	TRF	18	MY 71D4	133
	43	82	31.94	1910	1.05				
	49	73	28.32	1880	1.15				
	57	62	24.07	1830	1.40				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs				Page
0.37	55	65	25.23	1840	1.30	TR	18	MY 71D4	132
	60	59	23.15	1820	1.45	TRF	18	MY 71D4	133
	70	51	19.71	1760	1.70				
	81	44	16.99	1710	1.95				
	87	41	15.84	1680	2.1				
	100	35	13.84	1630	2.4				
	106	33	12.98	1610	2.6				
	121	29	11.45	1560	2.8				
	136	26	10.15	1520	3.0				
	160	22	8.63	1460	3.3				
	183	19	7.55	1370	2.9				
	196	18	7.04	1350	3.1				
	224	16	6.15	1300	3.4				
	239	15	5.76	1280	3.6				
	271	13	5.09	1240	3.9				
	306	12	4.51	1200	4.2				
	360	9.8	3.83	1150	4.6				
	174	20	5.18	4570	3.7	TRX	68	MY 80K6	122
	199	18	4.53	4380	4.6	TRXF	68	MY 80K6	123
	209	17	4.30*	4310	4.7				
	239	15	3.77	4130	5.9				
	227	16	6.07	4200	2.8	TRX	68	MY 71D4	122
	267	13	5.18	3990	5.6	TRXF	68	MY 71D4	123
	305	12	4.53	3820	7.1				
	321	11	4.30*	3760	7.3				
	366	9.7	3.77	3610	9.0				
	431	8.2	3.20*	3420	12	TRX	68	MY 71D4	122
	478	7.4	2.89	3310	14	TRXF	68	MY 71D4	123
	543	6.5	2.54	3170	18				
	575	6.1	2.40*	3110	20				
	675	5.2	2.04	2950	26				
	207	17	4.35	3500	4.0	TRX	58	MY 80K6	120
	238	15	3.79	3350	4.6	TRXF	58	MY 80K6	121
	254	14	3.55*	3280	5.0				
	251	14	5.50*	3300	2.8	TRX	58	MY 71D4	120
	272	13	5.07	3210	2.8	TRXF	58	MY 71D4	121
	317	11	4.35	3060	6.1				
	364	9.7	3.79	2930	7.1				
	389	9.1	3.55*	2870	7.6				
	440	8.0	3.14	2760	8.1				
	474	7.5	2.91	2690	8.9				
	523	6.8	2.64*	2610	10				
	582	6.1	2.37	2520	11				
	676	5.2	2.04	2400	13				
	719	4.9	1.92*	2350	14				
	835	4.2	1.65	2240	16				
0.55	0.22	19800	6077	120000	0.90	TR	168 / TRF98	MY 80K4	166
	0.25	17600	5407	120000	1.00	TRF	168 / TRF98	MY 80K4	166
	0.29	15000	4650	120000	1.20				
	0.33	13100	4129	120000	1.35				
	0.28	16900	4926	22000	0.75	TR	148 / TRF78	MY 80K4	166
	0.31	14700	4325	53900	0.90	TRF	148 / TRF78	MY 80K4	166
	0.36	12900	3754	62900	1.00				
	0.41	11200	3302	65900	1.15				
	0.47	9830	2898	68000	1.30				
	0.53	8890	2555	69300	1.45	TR	148 / TRF78	MY 80K4	166
	0.62	7700	2211	70600	1.70	TRF	148 / TRF78	MY 80K4	166
	0.70	6790	1951	71500	1.90				
	0.80	5810	1705	72400	2.2				
	0.89	5210	1536	72800	2.5				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
0.55	1.00	4510	1329	73300	2.9	TR	148 / TRF78	MY	80K4	166
	1.20	3920	1166	73600	3.3	TRF	148 / TRF78	MY	80K4	166
	0.55	8650	2484	51200	0.90	TR	138 / TRF78	MY	80K4	166
						TRF	138 / TRF78	MY	80K4	166
	0.51	9250	2658	48400	0.85	TR	138 / TRF78	MY	80K4	166
	0.56	8400	2412	52300	0.95	TRF	138 / TRF78	MY	80K4	166
	0.66	7220	2073	55000	1.10					
	0.74	6320	1839	56500	1.25					
	0.85	5420	1598	57900	1.50					
	0.97	4840	1397	58600	1.65					
	1.1	4220	1226	59300	1.90					
	1.2	3780	1090	59700	2.1					
	1.4	3300	951	60100	2.4					
	1.6	2820	831	60500	2.8					
	1	4830	1407	21900	0.90	TR	108 / TRF78	MY	80K4	166
	1.1	4150	1209	30200	1.05	TRF	108 / TRF78	MY	80K4	166
	1.3	3620	1055	32700	1.20					
	1.5	3170	919	34400	1.35					
	1.7	2830	815	35500	1.50	TR	108 / TRF78	MY	80K4	166
	1.9	2470	717	36200	1.75	TRF	108 / TRF78	MY	80K4	166
	2.2	2160	626	36600	2.0					
	1.0	4810	1400	22800	0.90	TR	108 / TRF78	MY	80K4	166
	1.1	4180	1226	30100	1.05	TRF	108 / TRF78	MY	80K4	166
	1.2	3740	1104	32200	1.15					
	1.4	3220	939	34200	1.35					
	1.7	2800	822	35600	1.55					
	1.7	2870	824	21800	1.05	TR	98 / TRF58	MY	80K4	166
	1.8	2570	737	23700	1.15	TRF	98 / TRF58	MY	80K4	166
	2.1	2200	632	25500	1.35					
	2.4	1920	560	26700	1.55					
	2.8	1670	484	27400	1.80					
	3.1	1510	431	27600	2.0					
	3.6	1320	379	27900	2.3					
	4.0	1180	336	28000	2.6					
	4.6	1030	296	28200	2.9					
	5.5	860	249	28300	3.5					
	2.6	1820	525	13600	0.85	TR	88 / TRF58	MY	80K4	166
	3.0	1580	456	16700	1.00	TRF	88 / TRF58	MY	80K4	166
	3.4	1370	398	18100	1.15					
	3.9	1210	352	18900	1.30					
	4.5	1040	305	19700	1.50					
	2.9	1690	472	15900	0.90	TR	88 / TRF58	MY	80K4	166
	3.4	1420	400	17800	1.10	TRF	88 / TRF58	MY	80K4	166
	3.8	1280	361	18600	1.20					
	4.9	990	276	4510	0.85	TR	78 / TRF38	MY	80K4	166
	5.8	840	236	9730	1.00	TRF	78 / TRF38	MY	80K4	166
	6.2	785	221	10200	1.05					
	7.3	660	186	11200	1.25					
	2.7	1980	255.71	26500	1.50	TR	98	MY	90L8	156
	2.8	1860	241.25	26900	1.60	TRF	98	MY	90L8	157
	3.1	1670	216.28	27400	1.80					
	3.1	1690	289.74	27400	1.75	TR	98	MY	80N6	156
	3.5	1490	255.71	27700	2.0	TRF	98	MY	80N6	157
	3.7	1410	241.25	27800	2.1					
	4.2	1260	216.28	28000	2.4					
	4.7	1120	289.74	28100	2.7	TR	98	MY	80K4	156
	5.3	990	255.71	28200	3.0	TRF	98	MY	80K4	157
	5.6	930	241.25	28300	3.2					
	6.3	840	216.28	28400	3.6					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
0.55	3.6	1440	246.54	17700	1.10	TR	88	MY 80N6	153	
	4.2	1260	216.54	18700	1.25	TRF	88	MY 80N6	154	
	4.4	1200	205.71	19000	1.30					
	5.0	1060	181.77	19600	1.45					
	5.8	910	155.34	20000	1.70					
	5.5	950	246.54	20000	1.65	TR	88	MY 80K4	153	
	6.3	840	216.54	20000	1.85	TRF	88	MY 80K4	154	
	6.6	795	205.71	20000	1.95					
	7.5	700	181.77	20000	2.2					
	8.8	600	155.34	20000	2.6					
	9.6	550	142.41	20000	2.8					
	11	485	124.97	20000	3.2					
	11	455	118.43*	20000	3.4	TR	88	MY 80K4	153	
	13	400	103.65	20000	3.9	TRF	88	MY 80K4	154	
	8.2	645	166.59	11300	1.25	TR	78	MY 80K4	150	
	9.3	565	145.67	11800	1.45	TRF	78	MY 80K4	151	
	9.8	535	138.39	11900	1.55	TR	78	MY 80K4	150	
	11	470	121.42	12200	1.75	TRF	78	MY 80K4	151	
	13	400	102.99	12500	2.1					
	15	360	92.97	12600	2.3					
	17	315	81.80	12800	2.6					
	18	300	77.24	12800	2.8					
	21	255	65.77	12900	3.2					
	8.6	610	158.14	7430	1.00	TR	68	MY 80K4	147	
	9.9	530	137.67	8290	1.15	TRF	68	MY 80K4	148	
	11	500	128.97	8600	1.20					
	12	440	113.94	9060	1.35					
	13	410	105.83	9280	1.45					
	14	370	95.91	9520	1.60					
	16	335	86.11	9730	1.80					
	18	285	74.17	9940	2.1					
	20	270	69.75	10000	2.2					
	22	235	61.26	10100	2.5					
	24	220	56.89	10200	2.7					
	11	465	120.63	7030	0.95	TR	58	MY 80K4	144	
	13	410	106.58	7260	1.10	TRF	58	MY 80K4	145	
	14	380	98.99	7370	1.20					
	15	345	89.71	7490	1.30					
	17	310	80.55	7600	1.45					
	20	265	69.23	7710	1.70					
	21	250	64.85	7750	1.80					
	24	220	57.29	7530	2.0					
	26	205	53.22	7390	2.2					
	28	186	48.23	7190	2.4					
	31	167	43.30	6980	2.7					
	36	144	37.30*	6700	3.1	TR	58	MY 80K4	144	
	39	136	35.07	6580	3.3	TRF	58	MY 80K4	145	
	52	102	26.31	6060	4.4	TR	58	MY 80K4	144	
	54	97	24.99*	5970	4.7	TRF	58	MY 80K4	145	
	62	85	21.93	5740	5.3					
73	72	18.60*	5460	6.3						
15	360	93.68	3280	0.85	TR	48	MY 80K4	141		
16	330	84.90	5230	0.90	TRF	48	MY 80K4	142		
18	295	76.23	5450	1.00						
20	265	68.54	5600	1.15						
21	250	64.21	5670	1.20						
24	220	56.73	5790	1.35						
26	205	52.69	5770	1.45						
28	184	47.75	5630	1.65						
32	166	42.87	5470	1.80						

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
0.55	37	143	36.93	5260	2.1	TR	48	MY 80K4	141	
	39	134	34.73	5180	2.2	TRF	48	MY 80K4	142	
	46	115	29.88	4970	2.6					
	51	103	26.74	4820	2.9					
	58	90	23.28	4630	3.3					
	62	84	21.81	4550	3.6					
	22	235	61.18	3910	0.85	TR	38	MY 80K4	138	
	24	215	55.76	4740	0.95	TRF	38	MY 80K4	139	
	28	186	48.08	5120	1.10					
	30	173	44.81	5230	1.15					
	35	151	39.17	5070	1.30					
	37	142	36.72	4990	1.40	TR	38	MY 80K4	138	
	42	125	32.40	4840	1.60	TRF	38	MY 80K4	139	
	47	111	28.73	4700	1.80					
	56	94	24.42	4500	2.1					
	61	86	22.27	4390	2.3	TR	38	MY 80K4	138	
	70	75	19.31	4220	2.7	TRF	38	MY 80K4	139	
	75	70	18.05	4140	2.9					
	87	60	15.60	3970	3.3					
	103	51	13.25	3790	3.7					
	115	46	11.83	3670	4.0					
	35	152	39.25	3280	0.85	TR	28	MY 80K4	135	
	37	142	36.79	3240	0.90	TRF	28	MY 80K4	136	
	42	125	32.47	3160	1.05					
	47	111	28.78	3080	1.15					
	56	95	24.47	2970	1.40					
	61	86	22.32	2910	1.50	TR	28	MY 80K4	135	
	70	75	19.35	2810	1.75	TRF	28	MY 80K4	136	
	75	70	18.08	2760	1.85					
	87	60	15.63	2660	2.2					
	102	51	13.28*	2550	2.5					
	115	46	11.86	2470	2.8					
	134	39	10.13	2370	3.1					
	145	36	9.41	2290	3.4					
	167	32	8.16	2200	3.7					
	178	29	7.63*	2160	3.8					
	206	26	6.59	2070	4.2					
	243	22	5.60*	1980	4.6					
	272	19	5.00*	1910	4.9					
	318	17	4.27	1830	5.3					
	340	15	4.00*	1790	5.5					
	404	13	3.37	1700	6.1					
	50	105	53.76	235	0.80	TR	18	MY 80K4	132	
	57	92	47.44	1280	0.90	TRF	18	MY 80K4	133	
	61	86	44.18	1610	1.00					
	70	75	38.61	1590	1.15					
	69	76	19.71	1590	1.10	TR	18	MY 80K4	132	
	80	66	16.99	1560	1.30	TRF	18	MY 80K4	133	
	86	61	15.84	1550	1.40					
	98	54	13.84	1510	1.60					
	105	50	12.98	1500	1.70					
	119	44	11.45	1460	1.85					
	134	39	10.15	1430	1.95					
	158	33	8.63	1380	2.2					
	180	29	7.55	1290	1.9					
	193	27	7.04	1270	2.0					
	221	24	6.15	1240	2.3					
	236	22	5.76	1220	2.4					
	267	20	5.09	1190	2.6					
	302	17	4.51	1150	2.8					
	355	15	3.83	1110	3.0					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s					Page
0.55	313	17	8.63	1170	4.3	TR	18	MY 80K4	132	
	358	15	7.55	1100	3.8	TRF	18	MY 80K4	133	
	384	14	7.04	1080	4.0					
	439	12	6.15	1050	4.5					
	174	30	5.18	4510	2.5	TRX	68	MY 80N6	122	
	199	26	4.53	4320	3.1	TRXF	68	MY 80N6	123	
	209	25	4.30*	4260	3.2					
	239	22	3.77	4090	4.0					
	263	20	5.18	3970	3.8	TRX	68	MY 80K4	122	
	300	18	4.53	3800	4.7	TRXF	68	MY 80K4	123	
	316	17	4.30*	3740	4.8					
	360	15	3.77	3590	6.0					
	425	12	3.20*	3410	8.1					
	471	11	2.89	3300	9.5					
	535	9.8	2.54	3170	12					
	567	9.3	2.40*	3110	13					
	666	7.9	2.04	2950	17					
	732	7.2	1.86	2860	18					
	845	6.2	1.61	2730	18					
	207	25	4.35	3440	2.7	TRX	58	MY 80N6	120	
	238	22	3.79	3300	3.1	TRXF	58	MY 80N6	121	
	254	21	3.55*	3230	3.3					
	287	18	3.14	3110	3.6					
	309	17	2.91	3040	3.9					
	312	17	4.35	3040	4.1	TRX	58	MY 80K4	120	
	359	15	3.79	2910	4.7	TRXF	58	MY 80K4	121	
	383	14	3.55*	2850	5.0					
	434	12	3.14	2740	5.4					
	467	11	2.91	2680	6.0					
	515	10	2.64*	2600	6.8					
	574	9.2	2.37	2510	7.5	TRX	58	MY 80K4	120	
	666	7.9	2.04	2390	8.7	TRXF	58	MY 80K4	121	
	708	7.4	1.92*	2350	9.3					
	823	6.4	1.65	2230	11					
	921	5.7	1.48	2150	12					
	1045	5.0	1.30	2070	13					
	0.75	0.30	20700	4650	120000	0.85	TR	168 / TRF98	MY 80N4	166
		0.33	18200	4129	120000	1.00	TRF	168 / TRF98	MY 80N4	166
		0.52	12100	2657	120000	1.50	TR	168 / TRF98	MY 80N4	166
		0.59	10500	2333	120000	1.70	TRF	168 / TRF98	MY 80N4	166
		0.66	9300	2085	120000	2.0	TR	168 / TRF98	MY 80N4	166
		0.96	6550	1438	120000	2.8	TRF	168 / TRF98	MY 80N4	166
		0.42	15300	3302	46300	0.85	TR	148 / TRF78	MY 80N4	166
		0.48	13400	2898	61800	0.95	TRF	148 / TRF78	MY 80N4	166
		0.54	12100	2555	64400	1.10	TR	148 / TRF78	MY 80N4	166
		0.62	10500	2211	67100	1.25	TRF	148 / TRF78	MY 80N4	166
0.71		9230	1951	68800	1.40					
0.81		7940	1705	70400	1.65					
0.90		7130	1536	71200	1.80					
1.00		6170	1329	72100	2.1					
1.20		5380	1166	72700	2.4					
0.74		8730	1863	50900	0.90	TR	138 / TRF78	MY 80N4	166	
0.87		7390	1586	54600	1.10	TRF	138 / TRF78	MY 80N4	166	
0.99		6580	1391	56100	1.20					
1.10		5920	1256	57100	1.35					
0.67		9810	2073	37900	0.80	TR	138 / TRF78	MY 80N4	166	
0.75		8610	1839	51400	0.95	TRF	138 / TRF78	MY 80N4	166	
0.86		7410	1598	54600	1.10					
0.99		6590	1397	56100	1.20					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
0.75	1.1	5750	1226	57400	1.40	TR 138 / TRF78	MY 80N4 166
	1.3	5140	1090	58200	1.55	TRF 138 / TRF78	MY 80N4 166
	1.4	4490	951	59000	1.80		
	1.7	3860	831	59600	2.1		
	1.9	3360	730	60100	2.4		
	1.3	4940	1055	16400	0.85	TR 108 / TRF78	MY 80N4 166
	1.5	4310	919	29400	1.00	TRF 108 / TRF78	MY 80N4 166
	1.7	3840	815	31700	1.10		
	1.5	4400	939	28900	1.00	TR 108 / TRF78	MY 80N4 166
	1.7	3830	822	31800	1.10	TRF 108 / TRF78	MY 80N4 166
	3.7	1710	369	37100	2.5		
	4.3	1490	323	37200	2.9		
	2.2	2990	632	20100	1.00	TR 98 / TRF58	MY 80N4 166
	2.5	2620	560	23400	1.15	TRF 98 / TRF58	MY 80N4 166
	2.9	2270	484	25200	1.30	TR 98 / TRF58	MY 80N4 166
	3.2	2050	431	26200	1.45	TRF 98 / TRF58	MY 80N4 166
	3.6	1800	379	27100	1.65		
	4.1	1600	336	27500	1.90		
	4.7	1400	296	27800	2.1		
	5.5	1170	249	28100	2.6		
	3.5	1870	398	9720	0.85	TR 88 / TRF58	MY 80N4 166
	3.9	1650	352	16200	0.95	TRF 88 / TRF58	MY 80N4 166
	4.5	1430	305	17700	1.10		
	5.2	1260	268	18700	1.25		
	5.9	1110	236	19400	1.40		
	3.8	1740	361	15500	0.90	TR 88 / TRF58	MY 80N4 166
	4.6	1440	300	17700	1.10	TRF 88 / TRF58	MY 80N4 166
	5.4	1220	256	18900	1.25		
	2.8	2610	251.15	36000	1.65	TR 108	MY 100M8 158
	3.0	2390	229.95	36300	1.80	TRF 108	MY 100M8 159
	3.4	2110	203.16	36700	2.00		
	3.2	2240	216.28	25300	1.35	TR 98	MY 100M8 156
	3.7	1930	186.30	26600	1.55	TRF 98	MY 100M8 157
	4.1	1760	170.02	27200	1.70		
	3.5	2030	255.71	26200	1.45	TR 98	MY 90S6 156
	3.7	1920	241.25	26700	1.55	TRF 98	MY 90S6 157
	4.2	1720	216.28	27300	1.75		
	4.8	1500	289.74	27600	2.0	TR 98	MY 80N4 156
	5.4	1330	255.71	27900	2.3	TRF 98	MY 80N4 157
	5.7	1250	241.25	28000	2.4		
	6.4	1120	216.28	28100	2.7	TR 98	MY 80N4 156
	7.4	970	186.30	28300	3.1	TRF 98	MY 80N4 157
	8.1	880	170.02	28300	3.4		
	4.2	1720	216.54	15600	0.90	TR 88	MY 90S6 153
	4.4	1640	205.71	16300	0.95	TRF 88	MY 90S6 154
	5.0	1450	181.77	17600	1.05		
	5.8	1240	155.34	18800	1.25	TR 88	MY 90S6 153
	6.3	1130	142.41	19300	1.35	TRF 88	MY 90S6 154
	5.6	1280	246.54	18600	1.20	TR 88	MY 80N4 153
	6.4	1120	216.54	19300	1.40	TRF 88	MY 80N4 154
	6.7	1070	205.71	19600	1.45		
	7.6	940	181.77	20000	1.65		
	8.9	810	155.34	20000	1.90		
	9.7	740	142.41	20000	2.1		
	11	650	124.97	20000	2.4		
	12	615	118.43*	20000	2.5	TR 88	MY 80N4 153
	13	540	103.65	20000	2.9	TRF 88	MY 80N4 154
	15	485	93.38	20000	3.2		
	8.3	860	166.59	9490	0.95	TR 78	MY 80N4 150
	9.5	755	145.67	10500	1.10	TRF 78	MY 80N4 151
	10	720	138.39	10800	1.15		

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs		Page
0.75	11	630	121.42	11400	1.30	TR 78	MY 80N4 150
	13	535	102.99	11900	1.55	TRF 78	MY 80N4 151
	15	485	92.97	12200	1.70		
	17	425	81.80	12400	1.95		
	18	400	77.24	12500	2.1		
	21	340	65.77	12700	2.4		
	24	300	57.68	12800	2.7		
	27	270	52.07	12900	3.0		
	30	240	45.81	12900	3.5		
	32	225	43.26	13000	3.7		
	11	670	128.97	4040	0.90	TR 68	MY 80N4 147
	12	590	113.94	7660	1.00	TRF 68	MY 80N4 148
	13	550	105.83	8120	1.10		
	14	500	95.91	8600	1.20		
	16	445	86.11	9010	1.35		
	19	385	74.17	9430	1.55		
	20	360	69.75	9570	1.65		
	23	320	61.26	9800	1.90		
	24	295	56.89	9910	2.0		
	27	270	51.56	10000	2.2		
	30	240	46.29	10100	2.5		
	13	555	106.58	4610	0.80	TR 58	MY 80N4 144
	14	515	98.99	6200	0.90	TRF 58	MY 80N4 145
	15	465	89.71	7040	0.95		
	17	420	80.55	7240	1.10		
	20	360	69.23	7450	1.25		
	21	335	64.85	7430	1.35		
	24	295	57.29	7220	1.50		
	26	275	53.22	7090	1.65	TR 58	MY 80N4 144
	29	250	48.23	6930	1.80	TRF 58	MY 80N4 145
	32	225	43.30	6740	2.0		
	37	194	37.30*	6490	2.3		
	39	182	35.07	6380	2.5		
	46	157	30.18	6130	2.9		
	51	140	26.97	5940	3.2		
	52	137	26.31	5900	3.3	TR 58	MY 80N4 144
	55	130	24.99*	5820	3.5	TRF 58	MY 80N4 145
	63	114	21.93	5610	4.0	TR 58	MY 80N4 144
	74	97	18.60*	5350	4.7	TRF 58	MY 80N4 145
	20	355	68.54	3660	0.85	TR 48	MY 80N4 141
	21	335	64.21	4950	0.90	TRF 48	MY 80N4 142
	24	295	56.73	5450	1.00		
	26	275	52.69	5480	1.10	TR 48	MY 80N4 141
	29	250	47.75	5370	1.20	TRF 48	MY 80N4 142
	32	225	42.87	5240	1.35		
	37	192	36.93	5060	1.55		
	40	180	34.73	4980	1.65		
	46	155	29.88	4800	1.95		
	52	139	26.70	4660	2.2		
	58	122	23.59	4510	2.5		
	52	139	26.74	4660	2.2	TR 48	MY 80N4 141
	59	121	23.28	4490	2.5	TRF 48	MY 80N4 142
	63	113	21.81	4420	2.7		
	72	100	19.27	4270	3.0		
	77	93	17.89	4180	3.1		
	85	84	16.22	4070	3.3		
	29	250	48.08	2330	0.80	TR 38	MY 80N4 138
	31	235	44.81	4230	0.85	TRF 38	MY 80N4 139
	35	205	39.17	4720	1.00		

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs			Page	
0.75	38	191	36.72	4740	1.05	TR	38	MY 80N4	138
	43	168	32.40	4610	1.20	TRF	38	MY 80N4	139
	48	149	28.73	4490	1.35				
	57	127	24.42	4320	1.60				
	62	116	22.27	4230	1.75	TR	38	MY 80N4	138
	71	100	19.31	4080	2.0	TRF	38	MY 80N4	139
	76	94	18.05	4010	2.1				
	88	81	15.60	3850	2.5				
	104	69	13.25	3690	2.8				
	117	61	11.83	3570	3.0				
	137	53	10.11	3420	3.2				
	146	49	9.47	3360	3.4				
	48	149	28.78	2880	0.85	TR	28	MY 80N4	135
	56	127	24.47	2800	1.00	TRF	28	MY 80N4	136
	62	116	22.32	2750	1.10				
	71	100	19.35	2670	1.30				
	76	94	18.08	2630	1.40				
	88	81	15.63	2550	1.60				
	104	69	13.28*	2450	1.90				
	116	62	11.86	2380	2.1	TR	28	MY 80N4	135
	136	53	10.13	2290	2.3	TRF	28	MY 80N4	136
	147	49	9.41	2210	2.5				
	169	42	8.16	2130	2.7				
	181	40	7.63*	2090	2.8				
	209	34	6.59	2010	3.1				
	246	29	5.60*	1930	3.4				
	276	26	5.00*	1870	3.7				
	70	102	19.71	465	0.85	TR	18	MY 80N4	132
	81	88	16.99	1390	0.95	TRF	18	MY 80N4	133
	87	82	15.84	1380	1.05				
	100	72	13.84	1370	1.20				
	106	67	12.98	1360	1.25				
	121	59	11.45	1350	1.35				
	136	53	10.15	1320	1.45				
	160	45	8.63	1290	1.60				
	183	39	7.55	1200	1.45				
	196	37	7.04	1180	1.50				
	224	32	6.15	1160	1.70	TR	18	MY 80N4	132
	239	30	5.76	1150	1.75	TRF	18	MY 80N4	133
	271	26	5.09	1120	1.95				
	306	23	4.51	1090	2.1				
	360	20	3.83	1060	2.3				
	236	30	11.45	1200	2.7	TR	18	MY 80N4	132
	266	27	10.15	1170	2.9	TRF	18	MY 80N4	133
	313	23	8.63	1130	3.1				
	358	20	7.55	1060	2.8				
	384	19	7.04	1040	2.9	TR	18	MY 80N4	132
	439	16	6.15	1010	3.3	TRF	18	MY 80N4	133
	468	15	5.76	990	3.5				
	531	14	5.09	960	3.8				
	599	12	4.51	930	4.0				
	704	10	3.83	890	4.4				
	199	36	4.53	4260	2.3	TRX	68	MY 90S6	122
	209	34	4.30*	4200	2.3	TRXF	68	MY 90S6	123
	239	30	3.77	4040	2.9				
	281	26	3.20*	3840	3.9				
	267	27	5.18	3900	2.8	TRX	68	MY 80N4	122
	305	24	4.53	3750	3.5	TRXF	68	MY 80N4	123
	321	22	4.30*	3690	3.6				
	366	20	3.77	3540	4.4				

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s		Page
0.75	431	17	3.20*	3360	6.0	TRX 68	MY 80N4 122
	478	15	2.89	3260	7.1	TRXF 68	MY 80N4 123
	543	13	2.54	3130	8.9		
	575	13	2.40*	3070	9.8		
	675	11	2.04	2920	13		
	743	9.6	1.86	2830	13		
	858	8.3	1.61	2700	14		
	238	30	3.79	3240	2.3	TRX 58	MY 90S6 120
	254	28	3.55*	3180	2.4	TRXF 58	MY 90S6 121
	287	25	3.14	3060	2.6		
	309	23	2.91	3000	2.9		
	341	21	2.64*	2910	3.3		
	317	23	4.35	2980	3.0	TRX 58	MY 80N4 120
	364	20	3.79	2860	3.5	TRXF 58	MY 80N4 121
	389	18	3.55*	2800	3.8		
	440	16	3.14	2700	4.0		
	474	15	2.91	2630	4.4		
	523	14	2.64*	2560	5.0		
	582	12	2.37	2470	5.6		
	676	11	2.04	2360	6.5		
	719	10	1.92*	2310	6.9		
	835	8.6	1.65	2210	8.0		
	935	7.7	1.48	2130	8.8		
	1060	6.8	1.30	2050	9.3		
1.1	0.53	17900	2657	120000	1.00	TR 168 / TRF98	MY 90S4 166
	0.60	15600	2333	120000	1.15	TRF 168 / TRF98	MY 90S4 166
	0.67	13800	2085	120000	1.30		
	0.75	12300	1877	120000	1.45		
	0.84	11000	1670	120000	1.65		
	0.97	9680	1438	120000	1.85		
	1.1	8620	1279	120000	2.1		
	1.2	7510	1123	120000	2.4		
	0.63	15300	2211	46800	0.85	TR 148 / TRF78	MY 90S4 166
	0.72	13500	1951	61700	0.95	TRF 148 / TRF78	MY 90S4 166
	0.82	11700	1705	65200	1.10		
	0.91	10500	1536	67100	1.25		
	1.1	9060	1329	69000	1.45	TR 148 / TRF78	MY 90S4 166
	1.2	7920	1166	70400	1.65	TRF 148 / TRF78	MY 90S4 166
	1.4	6960	1029	71400	1.85		
	1.6	6030	889	72200	2.2		
	1.8	5300	784	72700	2.5		
	2.0	4680	695	73200	2.8		
	1.0	9610	1391	41900	0.85	TR 138 / TRF78	MY 90S4 166
	1.1	8660	1256	51200	0.90	TRF 138 / TRF78	MY 90S4 166
	1.3	7590	1105	54200	1.05		
	1.3	7160	1043	55100	1.10		
	1.6	6070	888	56900	1.30		
	1.0	9630	1397	41500	0.85	TR 138 / TRF78	MY 90S4 166
	1.1	8420	1226	52200	0.95	TRF 138 / TRF78	MY 90S4 166
	1.3	7510	1090	54400	1.05	TR 138 / TRF78	MY 90S4 166
	1.5	6560	951	56100	1.20	TRF 138 / TRF78	MY 90S4 166
	1.7	5670	831	57500	1.40		
	1.9	4950	730	58500	1.60		
	2.2	4230	629	59300	1.90		
	2.5	3830	560	59700	2.1		
	2.9	3300	490	60100	2.4		
	1.9	4930	717	17300	0.85	TR 108 / TRF78	MY 90S4 166
	2.3	4150	614	30200	1.05	TRF 108 / TRF78	MY 90S4 166
	2.6	3670	544	32500	1.15		
	2.8	3310	492	33900	1.30		

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
1.1	3.4	2810	417	35500	1.55	TR	108 / TRF78	MY 90S4	166	
	3.8	2510	369	36200	1.70	TRF	108 / TRF78	MY 90S4	166	
	4.3	2200	323	36600	1.95					
	4.9	1930	285	36800	2.2					
	5.5	1700	253	37100	2.5					
	3.2	2990	431	20300	1.00	TR	98 / TRF58	MY 90S4	166	
	3.7	2620	379	23400	1.15	TRF	98 / TRF58	MY 90S4	166	
	4.2	2330	336	24900	1.30					
	4.7	2050	296	26200	1.45					
	5.6	1710	249	27300	1.75					
	6.0	1590	234	27500	1.90					
	6.7	1430	209	27700	2.1					
	5.2	1840	268	11700	0.85	TR	88 / TRF58	MY 90S4	166	
	5.9	1630	236	16400	0.95	TRF	88 / TRF58	MY 90S4	166	
	6.7	1430	209	17700	1.10					
	5.5	1780	256	15100	0.85	TR	88 / TRF58	MY 90S4	166	
	6.0	1610	232	16500	0.95	TRF	88 / TRF58	MY 90S4	166	
	7.2	1370	195	18100	1.15					
	2.7	3940	251.15	31300	1.10	TR	108	MY 100L8	158	
	2.9	3610	229.95	32700	1.20	TRF	108	MY 100L8	159	
	3.3	3190	203.16	34300	1.35					
	3.9	2700	172.34	35800	1.60					
	3.6	2920	255.71	21500	1.05	TR	98	MY 90L6	156	
	3.8	2750	241.25	22600	1.10	TRF	98	MY 90L6	157	
	4.2	2470	216.28	24200	1.20					
	4.9	2130	186.30	25900	1.40					
	5.5	1920	255.71	26700	1.55	TR	98	MY 90S4	156	
	5.8	1810	241.25	27100	1.65	TRF	98	MY 90S4	157	
	6.5	1620	216.28	27500	1.85					
	7.5	1400	186.30	27800	2.2					
	8.2	1280	170.02	27900	2.4					
	9.3	1130	150.78	28100	2.7					
	11	950	126.75	28300	3.2					
	12	870	116.48	28300	3.4					
	6.5	1620	216.54	16400	0.95	TR	88	MY 90S4	153	
	6.8	1540	205.71	17000	1.00	TRF	88	MY 90S4	154	
	7.7	1360	181.77	18100	1.15					
	9.0	1170	155.34	19100	1.35	TR	88	MY 90S4	153	
	9.8	1070	142.41	19600	1.45	TRF	88	MY 90S4	154	
	11	940	124.97	20000	1.65					
	12	890	118.43*	20000	1.75					
	14	780	103.65	20000	2.0					
	15	700	93.38	20000	2.2					
	17	615	81.92	20000	2.5					
	19	545	72.57	20000	2.9					
	22	480	63.68*	20000	3.2					
	23	455	60.35*	20000	3.4					
	27	395	52.82	20000	3.9					
	12	910	121.42	8990	0.90	TR	78	MY 90S4	150	
	14	775	102.99	10300	1.05	TRF	78	MY 90S4	151	
	15	700	92.97	10900	1.20					
	17	615	81.80	11500	1.35	TR	78	MY 90S4	150	
	18	580	77.24	11700	1.40	TRF	78	MY 90S4	151	
	21	495	65.77	12100	1.65					
	24	435	57.68	12400	1.90					
	27	390	52.07	12500	2.1					
	31	345	45.81	12700	2.4					
	32	325	43.26	12700	2.5					
	38	275	36.83	12900	3.0					
	42	250	33.47	12900	3.3					

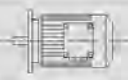
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
1.1	16	645	86.11	6820	0.95	TR	68	MY 90S4	147	
	19	555	74.17	8040	1.10	TRF	68	MY 90S4	148	
	20	525	69.75	8370	1.15					
	23	460	61.26	8920	1.30					
	25	425	56.89	9160	1.40					
	27	385	51.56	9420	1.55					
	30	345	46.29	9650	1.75					
	35	300	39.88*	9890	1.95					
	37	280	37.50	9970	2.0					
	43	240	32.27	10100	2.2					
	49	215	28.83	10200	2.4					
	50	210	28.13	10200	2.6	TR	68	MY 90S4	147	
	52	200	26.72	10100	2.7	TRF	68	MY 90S4	148	
	60	176	23.44	9730	3.2					
	70	149	19.89	9270	4.0					
	20	520	69.23	5990	0.85	TR	58	MY 90S4	144	
	22	485	64.85	6850	0.90	TRF	58	MY 90S4	145	
	24	430	57.29	6700	1.05					
	26	400	53.22	6610	1.15	TR	58	MY 90S4	144	
	29	360	48.23	6490	1.25	TRF	58	MY 90S4	145	
	32	325	43.30	6350	1.40					
	38	280	37.30*	6140	1.60					
	40	265	35.07	6060	1.70					
	46	225	30.18	5850	2.0					
	52	200	26.97	5690	2.2					
	53	197	26.31	5650	2.3	TR	58	MY 90S4	144	
	56	188	24.99*	5580	2.4	TRF	58	MY 90S4	145	
	64	165	21.93	5400	2.7					
	75	140	18.60*	5170	3.2					
	83	126	16.79	5030	3.6					
	29	360	47.75	3500	0.85	TR	48	MY 90S4	141	
	33	320	42.87	4850	0.95	TRF	48	MY 90S4	142	
	38	275	36.93	4720	1.10					
	40	260	34.73	4660	1.15	TR	48	MY 90S4	141	
	47	225	29.88	4520	1.35	TRF	48	MY 90S4	142	
	52	200	26.70	4410	1.50					
	59	177	23.59	4290	1.70					
	60	175	23.28	4270	1.70	TR	48	MY 90S4	141	
	64	164	21.81	4210	1.85	TRF	48	MY 90S4	142	
	73	145	19.27	4080	2.0					
	78	134	17.89	4010	2.2					
	86	122	16.22	3910	2.3					
	96	109	14.56	3800	2.4					
	112	94	12.54	3650	2.7					
	119	89	11.79	3590	2.8					
	138	76	10.15	3450	3.0					
	154	68	9.07	3340	3.2					
	43	245	32.40	2900	0.80	TR	38	MY 90S4	138	
	49	215	28.73	3300	0.95	TRF	38	MY 90S4	139	
	57	183	24.42	3720	1.10					
	73	145	19.31	3840	1.40					
	78	135	18.05	3790	1.50					
	90	117	15.60	3660	1.70					
	106	99	13.25	3520	1.90	TR	38	MY 90S4	138	
	118	89	11.83	3430	2.1	TRF	38	MY 90S4	139	
	139	76	10.11	3290	2.2					
	148	71	9.47	3230	2.4					
	176	60	7.97	3090	2.6					
	210	50	6.67	2920	2.9					
	247	43	5.67	2790	3.3					
	277	38	5.06	2700	3.6					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
1.1	72	145	19.35	2430	0.90	TR	28	MY 90S4	135	
	77	136	18.08	2410	0.95	TRF	28	MY 90S4	136	
	90	117	15.63	2360	1.10					
	105	100	13.28*	2290	1.30					
	118	89	11.86	2240	1.45					
	138	76	10.13	2160	1.60					
	172	61	8.16	2010	1.90					
	184	57	7.63*	1980	1.95					
	212	50	6.59	1920	2.1					
	250	42	5.60*	1840	2.4					
	280	38	5.00*	1790	2.5					
	328	32	4.27	1720	2.7					
	350	30	4.00*	1690	2.8					
	415	25	3.37	1610	3.1					
	203	52	13.28*	1980	2.5	TR	28	MY 80N2	135	
	228	46	11.86	1920	2.8	TRF	28	MY 80N2	136	
	267	39	10.13	1840	3.1					
	287	37	9.41	1780	3.3					
	331	32	8.16	1720	3.7					
	354	30	7.63*	1690	3.8					
	410	26	6.59	1620	4.1					
	482	22	5.60*	1550	4.5					
	540	20	5.00*	1500	4.9					
	632	17	4.27	1430	5.2					
	675	16	4.00*	1410	5.5					
	801	13	3.37	1340	6.0					
	137	77	19.71	1150	1.10	TR	18	MY 80N2	132	
	159	66	16.99	1140	1.30	TRF	18	MY 80N2	133	
	170	62	15.84	1140	1.40					
	195	54	13.84	1120	1.60					
	208	51	12.98	1120	1.70					
	236	45	11.45	1100	1.80	TR	18	MY 80N2	132	
	266	40	10.15	1080	1.95	TRF	18	MY 80N2	133	
	313	34	8.63	1050	2.1					
	358	29	7.55	970	1.90					
	384	27	7.04	960	2.0					
	439	24	6.15	940	2.3					
	468	22	5.76	930	2.4					
	531	20	5.09	910	2.6					
	599	18	4.51	880	2.7					
	704	15	3.83	850	3.0					
	249	42	5.63	5680	2.6	TRX	78	MY 90S4	124	
	262	40	5.35*	5590	2.6	TRXF	78	MY 90S4	125	
	296	36	4.73	5380	3.5					
	203	52	4.53	4130	1.60	TRX	68	MY 90L6	122	
	214	49	4.30*	4070	1.65	TRXF	68	MY 90L6	123	
	244	43	3.77	3920	2.0					
	309	34	4.53	3660	2.4	TRX	68	MY 90S4	122	
	326	32	4.30*	3610	2.5	TRXF	68	MY 90S4	123	
	371	28	3.77	3470	3.1					
	438	24	3.20*	3300	4.2					
	485	22	2.89	3200	4.9					
	551	19	2.54	3070	6.2					
	583	18	2.40*	3020	6.8					
	685	15	2.04	2870	8.8					
	754	14	1.86	2780	9.1					
	870	12	1.61	2660	9.4					
	1000	11	1.40*	2550	9.9					
	243	43	3.79	3120	1.60	TRX	58	MY 90L6	120	
	259	41	3.55*	3060	1.70	TRXF	58	MY 90L6	121	

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
1.1	293	36	3.14	2960	1.80	TRX	58	MY	90L6	120
	316	33	2.91	2900	2.0	TRXF	58	MY	90L6	121
	348	30	2.64*	2820	2.3					
	369	28	3.79	2780	2.4	TRX	58	MY	90S4	120
	394	27	3.55*	2730	2.6	TRXF	58	MY	90S4	121
	446	24	3.14	2630	2.8					
	481	22	2.91	2570	3.1					
	530	20	2.64*	2500	3.5					
	591	18	2.37	2420	3.9					
	686	15	2.04	2310	4.5					
	729	14	1.92*	2270	4.8					
	847	12	1.65	2160	5.6					
	948	11	1.48	2090	6.1					
	1075	9.8	1.30	2010	6.4					
1.5	0.60	21400	2333	120000	0.85	TR	168 / TRF98	MY	90L4	166
	0.68	19000	2085	120000	0.95	TRF	168 / TRF98	MY	90L4	166
	0.75	17000	1877	120000	1.05					
	0.84	15100	1670	120000	1.20					
	0.98	13300	1438	120000	1.35					
	1.1	11800	1279	120000	1.50					
	1.3	10300	1123	120000	1.75					
	1.4	9180	999	120000	1.95					
	3.3	3920	426	73600	3.3	TR	148 / TRF88	MY	90L4	166
	3.8	3380	368	73800	3.8	TRF	148 / TRF88	MY	90L4	166
	0.83	15900	1705	37900	0.80	TR	148 / TRF78	MY	90L4	166
	0.92	14300	1536	58600	0.90	TRF	148 / TRF78	MY	90L4	166
	1.1	12400	1329	63900	1.05					
	1.2	10800	1166	66500	1.20					
	1.4	9530	1029	68400	1.35					
	1.6	8250	889	70000	1.60					
	1.8	7260	784	71100	1.80	TR	148 / TRF78	MY	90L4	166
	2.0	6420	695	71900	2.0	TRF	148 / TRF78	MY	90L4	166
	2.3	5780	619	72400	2.3					
	2.5	5200	558	72800	2.5					
	1.4	9770	1043	38800	0.80	TR	138 / TRF78	MY	90L4	166
	1.6	8290	888	52700	0.95	TRF	138 / TRF78	MY	90L4	166
	2.0	6500	699	56200	1.25					
	2.3	5640	609	57600	1.40					
	1.3	10200	1090	26100	0.80	TR	138 / TRF78	MY	90L4	166
	1.5	8940	951	49900	0.90	TRF	138 / TRF78	MY	90L4	166
	1.7	7750	831	53900	1.05					
	1.9	6770	730	55800	1.20					
	2.2	5800	629	57300	1.40					
	2.5	5230	560	58100	1.55					
	2.9	4530	490	59000	1.75	TR	138 / TRF78	MY	90L4	166
	3.3	3950	428	59600	2.0	TRF	138 / TRF78	MY	90L4	166
	3.7	3560	381	59900	2.3					
	4.4	3020	323	60300	2.7					
	2.7	4900	528	18500	0.90	TR	108 / TRF78	MY	90L4	166
						TRF	108 / TRF78	MY	90L4	166
	2.6	5030	544	10400	0.85	TR	108 / TRF78	MY	90L4	166
	2.9	4550	492	28100	0.95	TRF	108 / TRF78	MY	90L4	166
	3.4	3850	417	31700	1.10					
	3.8	3440	369	33400	1.25					
	4.4	3000	323	34900	1.45					
	3.0	4470	469	28500	0.95					
	4.2	3170	336	11300	0.95	TR	98 / TRF58	MY	90L4	166
	4.8	2790	296	22400	1.10	TRF	98 / TRF58	MY	90L4	166
	5.7	2330	249	24900	1.30					
	6.0	2180	234	25600	1.40					
	6.8	1950	209	26600	1.55					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
1.5	3.0	4710	229.95	26500	0.90	TR 108	MY 112M8 158
	3.5	4160	203.16	30200	1.05	TRF 108	MY 112M8 159
	4.1	3530	172.34	33100	1.20		
	4.4	3250	158.68	34100	1.30		
	3.7	3910	251.15	31400	1.10	TR 108	MY 100M6 158
	4.0	3580	229.95	32900	1.20	TRF 108	MY 100M6 159
	4.5	3160	203.16	34400	1.35		
	5.3	2680	172.34	35900	1.60		
	5.8	2470	158.68	36200	1.75		
	6.5	2210	141.83	36500	1.95		
	5.5	2600	255.71	23500	1.15	TR 98	MY 90L4 156
	5.8	2450	241.25	24300	1.20	TRF 98	MY 90L4 157
	6.5	2200	216.28	25600	1.35		
	7.6	1890	186.30	26800	1.60		
	8.3	1730	170.02	27300	1.75		
	9.3	1530	150.78	27600	1.95		
	11	1290	126.75	27900	2.3	TR 98	MY 90L4 156
	12	1180	116.48	28000	2.5	TRF 98	MY 90L4 157
	14	1050	103.44	28200	2.9		
	15	940	92.48	28300	3.2		
	7.8	1850	181.77	11400	0.85	TR 88	MY 90L4 153
	9.1	1580	155.34	16700	1.00	TRF 88	MY 90L4 154
	9.9	1450	142.41	17600	1.05		
	11	1270	124.97	18600	1.20		
	12	1200	118.43*	19000	1.30		
	14	1050	103.65	19600	1.45		
	15	950	93.38	20000	1.65		
	17	830	81.92	20000	1.85		
	19	735	72.57	20000	2.1	TR 88	MY 90L4 153
	22	645	63.68*	20000	2.4	TRF 88	MY 90L4 154
	23	615	60.35*	20000	2.5		
	27	535	52.82	20000	2.9		
	30	485	47.58	20000	3.2		
	34	425	41.74	20000	3.7		
	38	375	36.84*	19600	4.1		
	15	940	92.97	8500	0.85	TR 78	MY 90L4 150
	17	830	81.80	9820	1.00	TRF 78	MY 90L4 151
	18	785	77.24	10200	1.05		
	21	670	65.77	11100	1.25		
	24	585	57.68	11600	1.40		
	27	530	52.07	11900	1.55	TR 78	MY 90L4 150
	31	465	45.81	12200	1.75	TRF 78	MY 90L4 151
	33	440	43.26	12300	1.85		
	38	375	36.83	12600	2.2		
	42	340	33.47	12700	2.4		
	49	295	29.00	12500	2.8		
	56	255	25.23	12000	3.0		
	60	240	23.37	11800	3.5	TR 78	MY 90L4 150
	66	220	21.43	11500	3.8	TRF 78	MY 90L4 151
	75	191	18.80	11000	4.1		
	23	620	61.26	7280	0.95	TR 68	MY 90L4 147
	25	580	56.89	7810	1.05	TRF 68	MY 90L4 148
	27	525	51.56	8370	1.15		
	30	470	46.29	8830	1.30		
	35	405	39.88*	9300	1.45		
	38	380	37.50	9460	1.50		
	44	330	32.27	9750	1.65		
	49	295	28.83	9920	1.80		
	50	285	28.13	9950	1.90		
	53	270	26.72	9850	2.0		

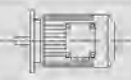
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
1.5	60	240	23.44	9500	2.4	TR	68	MY 90L4	147	
	71	200	19.89	9070	3.0	TRF	68	MY 90L4	148	
	79	182	17.95	8810	3.2					
	27	540	53.22	5140	0.85	TR	58	MY 90L4	144	
	29	490	48.23	6010	0.90	TRF	58	MY 90L4	145	
	33	440	43.30	5920	1.00					
	38	380	37.30*	5770	1.20	TR	58	MY 90L4	144	
	40	355	35.07	5710	1.25	TRF	58	MY 90L4	145	
	47	305	30.18	5540	1.45					
	52	275	26.97	5420	1.65					
	54	265	26.31	5390	1.70	TR	58	MY 90L4	144	
	56	255	24.99*	5330	1.75	TRF	58	MY 90L4	145	
	64	225	21.93	5170	2.0					
	76	189	18.60*	4980	2.4					
	84	171	16.79	4850	2.6					
	95	150	14.77*	4700	2.9					
	101	142	13.95*	4630	3.0					
	119	121	11.88	4440	3.4					
	38	375	36.93	2380	0.80	TR	48	MY 90L4	141	
	41	355	34.73	3840	0.85	TRF	48	MY 90L4	142	
	47	305	29.88	4220	1.00					
	53	270	26.70	4140	1.10					
	60	240	23.59	4050	1.25					
	61	235	23.28	4040	1.25					
	65	220	21.81	3990	1.35					
	73	196	19.27	3890	1.50					
	79	182	17.89	3830	1.60	TR	48	MY 90L4	141	
	87	165	16.22	3740	1.65	TRF	48	MY 90L4	142	
	97	148	14.56	3650	1.80					
	112	127	12.54	3520	1.95					
	120	120	11.79	3470	2.1					
	139	103	10.15	3340	2.2					
	155	92	9.07	3240	2.4					
	176	81	8.01	3140	2.5					
	182	79	7.76*	3060	2.1					
	203	71	6.96	2980	2.3					
	235	61	6.00	2860	2.6					
	250	57	5.64*	2810	2.7	TR	48	MY 90L4	141	
	291	49	4.85	2700	3.0	TRF	48	MY 90L4	142	
	325	44	4.34	2610	3.3					
	368	39	3.83	2520	3.7					
	73	196	19.31	2660	1.00	TR	38	MY 90L4	138	
	78	183	18.05	2840	1.10	TRF	38	MY 90L4	139	
	90	159	15.60	3160	1.25					
	106	135	13.25	3350	1.40					
	119	120	11.83	3270	1.50					
	140	103	10.11	3160	1.65					
	149	96	9.47	3110	1.75					
	177	81	7.97	2980	1.95					
	211	68	6.67	2820	2.1					
	249	58	5.67	2710	2.5					
	279	51	5.06	2630	2.6					
	326	44	4.32	2520	2.9					
	348	41	4.05	2470	3.0					
	414	35	3.41	2360	3.2					
	211	68	13.25	2850	2.8	TR	38	MY 90S2	138	
	237	61	11.83	2770	3.0	TRF	38	MY 90S2	139	
	277	52	10.11	2650	3.3					
	296	48	9.47	2610	3.5					
	351	41	7.97	2480	3.8					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s					Page
1.5	90	159	15.63	1700	0.80	TR	28	MY 90L4	135	
	106	135	13.28*	2020	0.95	TRF	28	MY 90L4	136	
	119	121	11.86	2080	1.05					
	139	103	10.13	2030	1.20					
	173	83	8.16	1880	1.40					
	185	78	7.63*	1860	1.45	TR	28	MY 90L4	135	
	214	67	6.59	1810	1.60	TRF	28	MY 90L4	136	
	252	57	5.60*	1750	1.75					
	282	51	5.00*	1710	1.85					
	330	43	4.27	1650	2.0					
	353	41	4.00*	1630	2.1					
	418	34	3.37	1560	2.3					
	236	61	11.86	1820	2.1	TR	28	MY 90S2	135	
	276	52	10.13	1760	2.4	TRF	28	MY 90S2	136	
	343	42	8.16	1640	2.8					
	367	39	7.63*	1610	2.9					
	425	34	6.59	1550	3.2					
	500	29	5.60*	1490	3.5					
	560	26	5.00*	1450	3.7					
	656	22	4.27	1390	4.0					
	700	21	4.00*	1360	4.2					
	831	17	3.37	1300	4.6					
	250	57	5.63	5580	1.90	TRX	78	MY 90L4	124	
	264	54	5.35*	5490	1.90	TRXF	78	MY 90L4	125	
	298	48	4.73	5300	2.6					
	349	41	4.04*	5050	3.5	TRX	78	MY 90L4	124	
	381	38	3.70	4920	4.1	TRXF	78	MY 90L4	125	
	434	33	3.25*	4720	5.5					
	458	31	3.08*	4650	6.2					
	523	27	2.70	4460	7.9					
	581	25	2.43	4310	8.7					
	312	46	4.53	3570	1.80	TRX	68	MY 90L4	122	
	328	44	4.30*	3520	1.85	TRXF	68	MY 90L4	123	
	374	38	3.77	3390	2.3					
	441	33	3.20*	3230	3.1	TRX	68	MY 90L4	122	
	488	29	2.89	3140	3.6	TRXF	68	MY 90L4	123	
	555	26	2.54	3020	4.6					
	588	24	2.40*	2970	5.0					
	690	21	2.04	2820	6.4					
	759	19	1.86	2740	6.7					
	876	16	1.61	2620	7.0					
	1005	14	1.40*	2510	7.3					
	372	39	3.79	2700	1.80	TRX	58	MY 90L4	120	
	397	36	3.55*	2650	1.90	TRXF	58	MY 90L4	121	
	450	32	3.14	2560	2.0					
	484	30	2.91	2510	2.3					
	534	27	2.64*	2440	2.6					
	595	24	2.37	2360	2.9					
	691	21	2.04	2260	3.3					
	734	20	1.92*	2220	3.5					
	853	17	1.65	2120	4.1					
	955	15	1.48	2050	4.5					
	1080	13	1.30	1980	4.7					
2.2	0.84	22600	1670	120000	0.80	TR	168 / TRF98	MY 100M4	166	
	0.98	19700	1438	120000	0.90	TRF	168 / TRF98	MY 100M4	166	
	1.1	17500	1279	120000	1.05					
	1.3	15300	1123	120000	1.15					
	1.4	13600	999	120000	1.30					
	1.6	11800	861	120000	1.55					
	1.9	10400	760	120000	1.75					
	2.1	8730	656	120000	2.1					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
2.2	2.6	7200	533	71100	1.80	TR 148 / TRF88	MY 100M4 166
	3.1	6190	462	72100	2.1	TRF 148 / TRF88	MY 100M4 166
	3.3	5820	426	72400	2.2		
	3.8	5030	368	72900	2.6		
	4.3	4450	326	73300	2.9		
	1.2	16000	1166	36000	0.80	TR 148 / TRF78	MY 100M4 166
	1.4	14100	1029	60300	0.90	TRF 148 / TRF78	MY 100M4 166
	1.6	12200	889	64200	1.05		
	1.8	10800	784	66600	1.20		
	2.0	9520	695	68500	1.35		
	2.3	8550	619	69700	1.50		
	2.5	7690	558	70600	1.70		
	2.9	6730	489	71600	1.95		
	2.0	9620	699	41800	0.85	TR 138 / TRF78	MY 100M4 166
	2.3	8350	609	52500	0.95	TRF 138 / TRF78	MY 100M4 166
	1.9	10000	730	33300	0.80	TR 138 / TRF78	MY 100M4 166
	2.2	8610	629	51400	0.95	TRF 138 / TRF78	MY 100M4 166
	2.5	7730	560	54000	1.05		
	2.9	6720	490	55900	1.20		
	3.3	5860	428	57200	1.35		
	3.7	5260	381	58100	1.50		
	4.4	4460	323	59000	1.80		
	4.8	4020	291	59500	2.0		
	5.5	3510	255	59900	2.3	TR 138 / TRF78	MY 100M4 166
	6.3	3070	223	60300	2.6	TRF 138 / TRF78	MY 100M4 166
	4.4	4450	323	28600	0.95	TR 108 / TRF78	MY 100M4 166
	4.9	3920	285	31400	1.10	TRF 108 / TRF78	MY 100M4 166
	5.6	3470	253	33300	1.25		
	6.6	2940	214	35100	1.45		
	4.4	4540	325	28100	0.95		
	6.8	2880	209	21800	1.05	TR 98 / TRF58	MY 100M4 166
						TRF 98 / TRF58	MY 100M4 166
	3.1	6680	222.60*	55900	1.20	TR 138	MY 132S8 160
	3.7	5660	188.45	57500	1.40	TRF 138	MY 132S8 161
	4.0	5230	174.40*	58100	1.55		
	4.5	4690	156.31	58800	1.70		
	5.0	4240	141.12*	59300	1.90		
	5.5	3850	128.18	59600	2.1	TR 138	MY 132S8 160
	6.2	3410	113.72	60000	2.3	TRF 138	MY 132S8 161
	6.8	3100	103.20*	60300	2.6		
	4.6	4540	203.16	28100	0.95	TR 108	MY 112M6 158
	5.5	3850	172.34	31700	1.10	TRF 108	MY 112M6 159
	5.9	3550	158.68	33000	1.20		
	6.6	3170	141.83	34400	1.35		
	5.6	3740	251.15	32200	1.15	TR 108	MY 100M4 158
	6.1	3430	229.95	33500	1.25	TRF 108	MY 100M4 159
	6.9	3030	203.16	34900	1.40		
	8.2	2570	172.34	36100	1.65	TR 108	MY 100M4 158
	8.9	2360	158.68	36300	1.80	TRF 108	MY 100M4 159
	9.9	2110	141.83	36600	2.0		
	11	1900	127.68	36900	2.3		
	12	1720	115.63	37000	2.5		
	14	1530	102.53	37200	2.8		
	15	1380	92.70	37300	3.1		
	6.5	3220	216.28	7030	0.95	TR 98	MY 100M4 156
	7.6	2780	186.30	22500	1.10	TRF 98	MY 100M4 157
	8.3	2530	170.02	23900	1.20		
	9.3	2250	150.78	25300	1.35	TR 98	MY 100M4 156
	11	1890	126.75	26800	1.60	TRF 98	MY 100M4 157
	12	1740	116.48	27300	1.75		

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page	
2.2	14	1540	103.44	27600	1.95	TR	98	MY 100M4	156
	15	1380	92.48	27800	2.2	TRF	98	MY 100M4	157
	17	1240	83.15	28000	2.4				
	20	1080	72.17	28200	2.8				
	22	970	65.21	27700	3.1				
	24	890	59.92	27000	3.4				
	27	795	53.21	26100	3.8				
	30	710	47.58	25300	4.2				
	11	1860	124.97	10100	0.85	TR	88	MY 100M4	153
	12	1760	118.43*	15200	0.90	TRF	88	MY 100M4	154
	14	1540	103.65	17000	1.00				
	15	1390	93.38	17900	1.10				
	17	1220	81.92	18900	1.25				
	19	1080	72.57	19500	1.45	TR	88	MY 100M4	153
	22	950	63.68*	20000	1.65	TRF	88	MY 100M4	154
	23	900	60.35*	20000	1.70				
	27	785	52.82	20000	1.95				
	30	710	47.58	20000	2.2				
	34	620	41.74	19900	2.5				
	38	550	36.84*	19200	2.8				
	43	485	32.66*	18500	3.2				
	41	515	34.40*	18800	2.9	TR	88	MY 100M4	153
	45	470	31.40	18300	3.3	TRF	88	MY 100M4	154
	51	415	27.84*	17700	3.7				
	60	350	23.40	16800	4.5				
	66	320	21.51	16400	4.7				
	21	980	65.77	5470	0.85	TR	78	MY 100M4	150
	24	860	57.68	9540	0.95	TRF	78	MY 100M4	151
	27	775	52.07	10300	1.05				
	31	685	45.81	11000	1.20				
	33	645	43.26	11300	1.25				
	38	550	36.83	11800	1.50				
	42	500	33.47	12100	1.65				
	49	430	29.00	12100	1.90				
	56	375	25.23	11700	2.1				
	60	350	23.37	11400	2.4				
	66	320	21.43	11200	2.6				
	75	280	18.80	10800	2.8				
	79	265	17.82*	10600	2.9				
	90	230	15.60	10200	3.2				
	100	210	14.05	9910	3.4				
	35	595	39.88*	7630	1.00	TR	68	MY 100M4	147
	38	560	37.50	8020	1.00	TRF	68	MY 100M4	148
	44	480	32.27	8750	1.10				
	49	430	28.83	9140	1.20				
	60	350	23.44	9140	1.60	TR	68	MY 100M4	147
	71	295	19.89	8760	2.0	TRF	68	MY 100M4	148
	79	270	17.95	8530	2.2				
	89	235	15.79	8240	2.4	TR	68	MY 100M4	147
	95	220	14.91	8110	2.5	TRF	68	MY 100M4	148
	111	189	12.70	7760	2.8				
	122	172	11.54	7560	2.9				
	141	149	10.00	7250	3.2				
	162	130	8.70*	6960	3.4				
	181	116	7.79	6760	3.3				
	38	555	37.30*	4490	0.80	TR	58	MY 100M4	144
	40	525	35.07	5110	0.85	TRF	58	MY 100M4	145
	47	450	30.18	5030	1.00				
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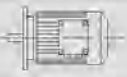
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2.2	64	325	21.93	4800	1.40	TR 58	MY 100M4 144
	76	275	18.60*	4660	1.60	TRF 58	MY 100M4 145
	84	250	16.79	4570	1.80		
	95	220	14.77*	4450	2.0		
	101	210	13.95*	4390	2.1		
	119	177	11.88	4230	2.3		
	131	161	10.79	4140	2.4		
	151	139	9.35	4000	2.7		
	156	135	9.06	3980	2.8		
	177	119	7.97	3850	3.0		
	107	197	26.31	4340	2.3	TR 58	MY 90L2 144
	112	187	24.99*	4290	2.4	TRF 58	MY 90L2 145
	128	164	21.93	4160	2.8		
	151	139	18.60*	3990	3.2	TR 58	MY 90L2 144
	167	126	16.79	3890	3.6	TRF 58	MY 90L2 145
	190	111	14.77*	3760	3.9		
	201	104	13.95*	3710	4.1		
	73	285	19.27	3550	1.05	TR 48	MY 100M4 141
	87	240	16.22	3460	1.15	TRF 48	MY 100M4 142
	97	215	14.56	3400	1.20		
	112	187	12.54	3310	1.35		
	120	176	11.79	3270	1.40	TR 48	MY 100M4 141
	139	151	10.15	3160	1.50	TRF 48	MY 100M4 142
	155	135	9.07	3090	1.65		
	176	119	8.01	3000	1.70		
	182	116	7.76*	2910	1.40		
	203	104	6.96	2840	1.55		
	235	89	6.00	2740	1.75		
	250	84	5.64*	2700	1.85		
	291	72	4.85	2600	2.1		
	325	65	4.34	2530	2.3		
	368	57	3.83	2440	2.5		
	121	174	23.28	3260	1.70	TR 48	MY 90L2 141
	129	163	21.81	3220	1.85	TRF 48	MY 90L2 142
	146	144	19.27	3130	2.1		
	157	134	17.89	3080	2.2		
	173	121	16.22	3010	2.3		
	193	109	14.56	2930	2.4		
	224	94	12.54	2830	2.7		
	238	88	11.79	2780	2.8		
	277	76	10.15	2680	3.0		
	310	68	9.07	2600	3.2		
	351	60	8.01	2510	3.4		
	90	230	15.60	1070	0.85	TR 38	MY 100M4 138
	106	198	13.25	1660	0.95	TRF 38	MY 100M4 139
	119	176	11.83	1990	1.05		
	140	151	10.11	2360	1.15		
	149	141	9.47	2480	1.20		
	177	119	7.97	2750	1.30		
	211	99	6.67	2470	1.45		
	249	84	5.67	2570	1.70		
	279	75	5.06	2500	1.80		
	326	64	4.32	2410	1.95		
	348	60	4.05	2370	2.0		
	414	51	3.41	2270	2.2		
	146	144	19.31	2440	1.40	TR 38	MY 90L2 138
	156	135	18.05	2560	1.50	TRF 38	MY 90L2 139
	180	117	15.60	2780	1.70		
	212	99	13.25	2700	1.90		
	237	89	11.83	2630	2.1		

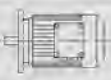
P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs			Page	
2.2	278	76	10.11	2540	2.3	TR	38	MY 90L2	138
	297	71	9.47	2500	2.4	TRF	38	MY 90L2	139
	352	60	7.97	2390	2.6				
	421	50	6.67	2260	2.9				
	496	42	5.67	2170	3.4				
	555	38	5.06	2100	3.6				
	650	32	4.32	2010	3.9				
	694	30	4.05	1980	4.0	TR	38	MY 90L2	138
	824	26	3.41	1880	4.4	TRF	38	MY 90L2	139
	139	151	10.13	1120	0.80	TR	28	MY 100M4	135
	214	98	6.59	1130	1.10	TRF	28	MY 100M4	136
	252	83	5.60*	1390	1.20				
	282	75	5.00*	1540	1.30				
	330	64	4.27	1540	1.35				
	353	60	4.00*	1520	1.45				
	418	50	3.37	1470	1.55				
	212	99	13.28*	1710	1.30	TR	28	MY 90L2	135
	237	89	11.86	1680	1.45	TRF	28	MY 90L2	136
	277	76	10.13	1640	1.60				
	344	61	8.16	1520	1.90	TR	28	MY 90L2	135
	369	57	7.63*	1500	1.95	TRF	28	MY 90L2	136
	426	49	6.59	1460	2.2				
	502	42	5.60*	1410	2.4				
	562	37	5.00*	1380	2.5				
	658	32	4.27	1330	2.7				
	703	30	4.00*	1310	2.8				
	834	25	3.37	1250	3.1				
	298	70	4.73	5180	1.75	TRX	78	MY 100M4	124
	349	60	4.04*	4950	2.4	TRXF	78	MY 100M4	125
	381	55	3.70	4820	2.8				
	434	48	3.25*	4640	3.8				
	458	46	3.08*	4560	4.2				
	523	40	2.70	4380	5.4				
	581	36	2.43	4250	5.9				
	662	32	2.13	4080	6.3				
	750	28	1.88*	3920	6.7				
	846	25	1.67	3780	7.0				
	991	21	1.42	3590	7.3				
	374	56	3.77	3280	1.55	TRX	68	MY 100M4	122
	441	48	3.20*	3130	2.1	TRXF	68	MY 100M4	123
	488	43	2.89	3050	2.5				
	555	38	2.54	2940	3.1				
	588	36	2.40*	2890	3.4				
	690	30	2.04	2760	4.4				
	759	28	1.86	2680	4.6				
	876	24	1.61	2570	4.8				
	1005	21	1.40*	2460	5.0				
	450	47	3.14	2450	1.40	TRX	58	MY 100M4	120
	534	39	2.64*	2340	1.75	TRXF	58	MY 100M4	121
	595	35	2.37	2280	1.95				
	691	30	2.04	2190	2.3				
	734	29	1.92*	2150	2.4				
	853	25	1.65	2060	2.8				
	955	22	1.48	1990	3.1				
	1080	19	1.30	1930	3.3				
3	1.2	21200	1123	120000	0.85	TR	168 / TRF98	MY 100L4	166
	1.4	18900	999	120000	0.95	TRF	168 / TRF98	MY 100L4	166
	1.6	16300	861	120000	1.10				
	1.8	14400	760	120000	1.25				
	2.1	12200	656	120000	1.50				
	2.8	9330	503	120000	1.95				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
3	2.6	9990	533	67800	1.30	TR	148 / TRF88	MY	100L4	166
	3.0	8610	462	69600	1.50	TRF	148 / TRF88	MY	100L4	166
	3.3	8060	426	70200	1.60					
	3.8	6960	368	71400	1.85					
	4.3	6150	326	72100	2.1					
	5.0	5230	280	72800	2.5					
	1.6	16900	889	21900	0.75	TR	148 / TRF78	MY	100L4	166
	1.8	14900	784	52000	0.85	TRF	148 / TRF78	MY	100L4	166
	2.0	13200	695	62300	1.00					
	2.3	11800	619	64900	1.10					
	2.5	10600	558	66900	1.20					
	2.9	9280	490	48100	0.85	TR	138 / TRF78	MY	100L4	166
	3.3	8100	428	53200	1.00	TRF	138 / TRF78	MY	100L4	166
	3.7	7260	381	54900	1.10					
	4.3	6160	323	56800	1.30					
	4.8	5540	291	57700	1.45					
	5.5	4840	255	58600	1.65					
	6.3	4240	223	59300	1.90					
	2.7	9990	517	34100	0.80	TR	138 / TRF78	MY	100L4	166
	3.1	8760	453	50700	0.90	TRF	138 / TRF78	MY	100L4	166
	5.5	4790	253	23500	0.90	TR	108 / TRF78	MY	100L4	166
	6.5	4060	214	30700	1.05	TRF	108 / TRF78	MY	100L4	166
	7.5	3550	187	33000	1.20					
	5.5	4930	256	17400	0.85	TR	108 / TRF78	MY	100L4	166
						TRF	108 / TRF78	MY	100L4	166
	3.2	8860	222.60*	50300	0.90	TR	138	MY	132M8	160
	3.8	7500	188.45	54400	1.05	TRF	138	MY	132M8	161
	4.1	6940	174.40*	55500	1.15					
	4.6	6220	156.31	56700	1.30					
	5.1	5620	141.12*	57600	1.40					
	5.6	5100	128.18	58300	1.55	TR	138	MY	132M8	160
	6.3	4520	113.72	59000	1.75	TRF	138	MY	132M8	161
	7.0	4110	103.20*	59400	1.95	TR	138	MY	132M8	160
	8.1	3530	88.70*	59900	2.3	TRF	138	MY	132M8	161
	4.2	6780	222.60*	55800	1.20	TR	138	MY	132S6	160
	5.0	5740	188.45	57400	1.40	TRF	138	MY	132S6	161
	5.4	5320	174.40*	58000	1.50					
	6.0	4760	156.31	58700	1.70					
	6.7	4300	141.12*	59200	1.85					
	7.3	3910	128.18	59600	2.1					
	8.3	3470	113.72	60000	2.3					
	9.1	3150	103.20*	60200	2.5					
	5.9	4840	158.68	21600	0.90	TR	108	MY	132S6	158
	6.6	4320	141.83	29300	1.00	TRF	108	MY	132S6	159
	7.4	3890	127.68	31500	1.10					
	6.1	4710	229.95	26500	0.90	TR	108	MY	100L4	158
	6.9	4160	203.16	30200	1.05	TRF	108	MY	100L4	159
	8.1	3530	172.34	33100	1.20					
	8.8	3250	158.68	34100	1.30					
	9.9	2900	141.83	35300	1.50					
	11	2610	127.68	36000	1.65					
	12	2370	115.63	36300	1.80					
	14	2100	102.53	36700	2.1					
	15	1900	92.70	36900	2.3					
	18	1610	78.57	35900	2.7					
	19	1490	72.88	35200	2.9					
	9.3	3090	150.78	16200	0.95	TR	98	MY	100L4	156
	11	2590	126.75	23600	1.15	TRF	98	MY	100L4	157
	12	2380	116.48	24700	1.25					
	14	2120	103.44	25900	1.40					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs			Page	
3	15	1890	92.48	26800	1.60	TR	98	MY 100L4	156
	17	1700	83.15	27300	1.75	TRF	98	MY 100L4	157
	19	1480	72.17	27700	2.0				
	21	1330	65.21	27000	2.3				
	23	1230	59.92	26400	2.5				
	26	1090	53.21	25600	2.8				
	29	970	47.58	24800	3.1				
	33	880	42.78	24000	3.4				
	38	760	37.13	23100	4.0				
	42	680	33.25	22400	4.3				
	15	1910	93.38	3630	0.80	TR	88	MY 100L4	153
	17	1680	81.92	16000	0.90	TRF	88	MY 100L4	154
	19	1490	72.57	17400	1.05				
	22	1300	63.68*	18400	1.20				
	23	1230	60.35*	18800	1.25	TR	88	MY 100L4	153
	27	1080	52.82	19500	1.45	TRF	88	MY 100L4	154
	29	970	47.58	19900	1.60				
	34	850	41.74	19400	1.80	TR	88	MY 100L4	153
	38	755	36.84*	18700	2.1	TRF	88	MY 100L4	154
	43	670	32.66*	18100	2.3				
	50	570	27.88	17400	2.6				
	41	705	34.40*	18400	2.1	TR	88	MY 100L4	153
	45	640	31.40	17900	2.4	TRF	88	MY 100L4	154
	50	570	27.84*	17400	2.7				
	60	480	23.40	16500	3.2				
	65	440	21.51	16100	3.4				
	73	390	19.10	15600	3.7				
	82	350	17.08*	15100	4.0	TR	88	MY 100L4	153
	91	315	15.35	14600	4.3	TRF	88	MY 100L4	154
	31	940	45.81	8670	0.85	TR	78	MY 100L4	150
	32	890	43.26	9270	0.95	TRF	78	MY 100L4	151
	38	755	36.83	10500	1.10				
	42	685	33.47	11000	1.20				
	48	595	29.00	11600	1.40	TR	78	MY 100L4	150
	55	515	25.23	11300	1.50	TRF	78	MY 100L4	151
	60	480	23.37	11100	1.70	TR	78	MY 100L4	150
	65	440	21.43	10800	1.85	TRF	78	MY 100L4	151
	74	385	18.80	10500	2.0				
	79	365	17.82*	10300	2.1				
	90	320	15.60	9980	2.3				
	100	290	14.05	9700	2.5				
	114	250	12.33	9350	2.7				
	129	225	10.88	9030	3.0				
	145	197	9.64	8720	3.2				
	163	176	8.59	8500	3.6				
	181	158	7.74	8240	3.9				
	206	139	6.79	7920	4.2				
	60	480	23.44	8730	1.15	TR	68	MY 100L4	147
	70	405	19.89	8420	1.45	TRF	68	MY 100L4	148
	78	365	17.95	8230	1.60				
	89	325	15.79	7980	1.75				
	94	305	14.91	7860	1.80				
	110	260	12.70	7550	2.0				
	121	235	11.54	7360	2.1				
	140	205	10.00	7090	2.3				
	52	550	26.97	4330	0.80	TR	58	MY 100L4	144
	64	450	21.93	4380	1.00	TRF	58	MY 100L4	145
	75	380	18.60*	4300	1.20				
	83	345	16.79	4250	1.30				
	95	300	14.77*	4160	1.45				

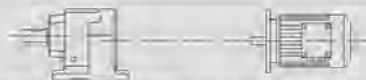
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
3	100	285	13.95*	4130	1.50	TR	58	MY	100L4	144
	118	245	11.88	4010	1.65	TRF	58	MY	100L4	145
	130	220	10.79	3940	1.75					
	150	191	9.35	3820	1.95					
	155	185	9.06	3810	2.0					
	176	163	7.97	3700	2.2					
	186	154	7.53	3650	2.3					
	218	131	6.41	3520	2.6					
	240	119	5.82	3430	2.7					
	277	103	5.05	3310	3.0					
	319	90	4.39	3190	3.1					
	128	225	21.93	3950	2.0	TR	58	MY	100M2	144
	151	190	18.60*	3820	2.4	TRF	58	MY	100M2	145
	167	172	16.79	3730	2.6					
	190	151	14.77*	3620	2.9					
	201	143	13.95*	3570	3.0					
	236	122	11.88	3440	3.3	TR	58	MY	100M2	144
	259	110	10.79	3360	3.5	TRF	58	MY	100M2	145
	86	330	16.22	2030	0.85	TR	48	MY	100L4	141
	96	300	14.56	2500	0.90	TRF	48	MY	100L4	142
	112	255	12.54	3040	0.95					
	119	240	11.79	3040	1.00					
	138	210	10.15	2970	1.10	TR	48	MY	100L4	141
	154	186	9.07	2910	1.20	TRF	48	MY	100L4	142
	175	164	8.01	2840	1.25					
	181	159	7.76*	2740	1.05					
	201	143	6.96	2680	1.10					
	233	123	6.00	2610	1.25					
	248	115	5.64*	2580	1.35					
	288	99	4.85	2490	1.50					
	323	89	4.34	2430	1.65					
	365	78	3.83	2360	1.85					
	237	121	11.79	2670	2.0	TR	48	MY	100M2	141
	276	104	10.15	2580	2.2	TRF	48	MY	100M2	142
	309	93	9.07	2510	2.4					
	349	82	8.01	2430	2.5					
	361	79	7.76*	2370	2.1					
	402	71	6.96	2310	2.2					
	467	61	6.00	2220	2.5					
	496	58	5.64*	2190	2.7					
	577	50	4.85	2100	3.0					
	646	44	4.34	2040	3.3					
	731	39	3.83	1970	3.7					
	139	205	10.11	780	0.80	TR	38	MY	100L4	138
	148	194	9.47	1010	0.85	TRF	38	MY	100L4	139
	176	163	7.97	1510	0.95					
	210	137	6.67	1250	1.05	TR	38	MY	100L4	138
	247	116	5.67	1630	1.25	TRF	38	MY	100L4	139
	277	104	5.06	1830	1.30					
	324	88	4.32	2070	1.45					
	346	83	4.05	2140	1.45					
	411	70	3.41	2180	1.60					
	277	103	10.11	2340	1.65	TR	38	MY	100M2	138
	296	97	9.47	2380	1.70	TRF	38	MY	100M2	139
	351	82	7.97	2290	1.90					
	420	68	6.67	2170	2.1					
	494	58	5.67	2090	2.5					
	553	52	5.06	2030	2.6					
	648	44	4.32	1950	2.9					
	692	41	4.05	1920	3.0					
	821	35	3.41	1840	3.2					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page	
3	250	115	5.60*	360	0.85	TR	28	MY 100L4	135
	280	102	5.00*	615	0.95	TRF	28	MY 100L4	136
	328	87	4.27	910	1.00				
	350	82	4.00*	1010	1.05				
	415	69	3.37	1230	1.15				
	425	67	6.59	1260	1.55	TR	28	MY 100M2	135
	500	57	5.60*	1330	1.75	TRF	28	MY 100M2	136
	560	51	5.00*	1300	1.85				
	656	44	4.27	1260	2.0				
	700	41	4.00*	1240	2.1				
	831	35	3.37	1200	2.3				
	217	132	6.45	7130	1.45	TRX	88	MY 100L4	126
	252	114	5.56*	6830	2.0	TRXF	88	MY 100L4	127
	276	104	5.07	6650	2.4				
	311	92	4.50*	6430	3.2	TRX	88	MY 100L4	126
	370	77	3.78	6100	3.9	TRXF	88	MY 100L4	127
	296	97	4.73	5050	1.25	TRX	78	MY 100L4	124
	347	83	4.04*	4830	1.75	TRXF	78	MY 100L4	125
	378	76	3.70	4720	2.0				
	431	67	3.25*	4550	2.7				
	455	63	3.08*	4480	3.1				
	371	77	3.77	3150	1.15	TRX	68	MY 100L4	122
	438	66	3.20*	3030	1.55	TRXF	68	MY 100L4	123
	485	59	2.89	2950	1.80				
	551	52	2.54	2850	2.3				
	583	49	2.40*	2810	2.5				
	685	42	2.04	2690	3.2				
	754	38	1.86	2610	3.3				
	870	33	1.61	2510	3.5				
	1000	29	1.40*	2410	3.6				
	446	64	3.14	2330	1.00	TRX	58	MY 100L4	120
	530	54	2.64*	2240	1.30	TRXF	58	MY 100L4	121
	591	49	2.37	2180	1.40				
	686	42	2.04	2100	1.65				
	729	39	1.92*	2070	1.75				
	847	34	1.65	1990	2.0				
	948	30	1.48	1930	2.3				
	1075	27	1.30	1870	2.4				
4	1.7	21500	861	120000	0.85	TR	168 / TRF98	MY 112M4	166
	1.9	19000	760	120000	0.95	TRF	168 / TRF98	MY 112M4	166
	2.2	16100	656	120000	1.10				
	2.8	12400	503	120000	1.45				
	3.8	9260	376	120000	1.95				
	4.2	8240	335	120000	2.2				
	2.7	13200	533	62200	1.00	TR	148 / TRF88	MY 112M4	166
	3.1	11400	462	65600	1.15	TRF	148 / TRF88	MY 112M4	166
	3.3	10600	426	66800	1.20				
	3.9	9190	368	68900	1.40				
	4.4	8130	326	70200	1.60				
	5.1	6920	280	71400	1.90				
	5.7	6110	247	72100	2.1				
	6.7	5280	214	72800	2.5				
	7.5	4670	189	73200	2.8				
	9.0	3920	159	73600	3.3				
	2.3	15500	619	43200	0.85	TR	148 / TRF78	MY 112M4	166
	2.5	14000	558	60500	0.95	TRF	148 / TRF78	MY 112M4	166
	2.9	12300	489	64100	1.05				
	3.4	10400	415	67200	1.25				
	3.7	9570	381	42700	0.85	TR	138 / TRF78	MY 112M4	166
	4.4	8120	323	53100	1.00	TRF	138 / TRF78	MY 112M4	166

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s			Page	
4	4.9	7310	291	54800	1.10	TR	138 / TRF78	MY 112M4	166
	5.6	6390	255	56400	1.25	TRF	138 / TRF78	MY 112M4	166
	6.4	5600	223	57600	1.45				
	3.8	9560	376	43000	0.85	TR	138 / TRF78	MY 112M4	166
	4.2	8600	339	51400	0.95	TRF	138 / TRF78	MY 112M4	166
	4.8	7540	297	54300	1.05				
	7.6	4680	187	27200	0.90	TR	108 / TRF78	MY 112M4	166
						TRF	108 / TRF78	MY 112M4	166
	7.3	4890	193	19000	0.90	TR	108 / TRF78	MY 112M4	166
	8.2	4380	172	29000	1.00	TRF	108 / TRF78	MY 112M4	166
	4.4	8660	163.31	69500	1.50	TR	148	MY 132ML8	162
	4.9	7790	146.91	70500	1.65	TRF	148	MY 132ML8	163
	6.0	6360	119.86	71900	2.0				
	6.6	5800	109.31	72400	2.2				
	4.1	9250	174.40*	48400	0.85	TR	138	MY 132ML8	160
	4.6	8290	156.31	52700	0.95	TRF	138	MY 132ML8	161
	5.1	7490	141.12*	54400	1.05				
	5.6	6800	128.18	55700	1.20				
	6.3	6030	113.72	57000	1.35				
	7.0	5470	103.20*	57800	1.45				
	4.3	8860	222.60*	50300	0.90	TR	138	MY 132M6	160
	5.1	7500	188.45	54400	1.05	TRF	138	MY 132M6	161
	5.5	6940	174.40*	55500	1.15				
	6.1	6220	156.31	56700	1.30				
	6.8	5620	141.12*	57600	1.40				
	7.5	5100	128.18	58300	1.55				
	8.4	4520	113.72	59000	1.75	TR	138	MY 132M6	160
	9.3	4110	103.20*	59400	1.95	TRF	138	MY 132M6	161
	11	3530	88.70*	59900	2.3				
	8.2	4640	172.34	27500	0.95	TR	108	MY 112M4	158
	9.0	4270	158.68	29600	1.00	TRF	108	MY 112M4	159
	10	3820	141.83	31900	1.15				
	11	3430	127.68	33400	1.25				
	12	3110	115.63	34600	1.40				
	14	2760	102.53	35700	1.55				
	15	2490	92.70	36200	1.70				
	18	2110	78.57	34900	2.0				
	19	1960	72.88	34200	2.2				
	22	1760	65.60*	33200	2.4				
	24	1600	59.41	32300	2.7				
	27	1420	52.68	31300	3.0				
	12	3130	116.48	13800	0.95	TR	98	MY 112M4	156
	14	2780	103.44	22400	1.10	TRF	98	MY 112M4	157
	15	2490	92.48	24100	1.20				
	17	2240	83.15	25400	1.35				
	20	1940	72.17	26600	1.55				
	22	1750	65.21	26000	1.70				
	24	1610	59.92	25500	1.85				
	27	1430	53.21	24700	2.1				
	30	1280	47.58	24000	2.3				
	33	1150	42.78	23400	2.6				
	38	1000	37.13	22500	3.0				
	43	890	33.25	21800	3.2				
	44	860	32.05	21600	3.0	TR	98	MY 112M4	156
	52	730	27.19	20600	3.5	TRF	98	MY 112M4	157
	57	675	25.03	20100	4.2				
	63	600	22.37	19500	4.5				
	71	540	20.14	18900	4.8				
	22	1710	63.68*	13300	0.90	TR	88	MY 112M4	153
	24	1620	60.35*	13900	0.95	TRF	88	MY 112M4	154
	27	1420	52.82	15200	1.10				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page	
4	30	1280	47.58	16000	1.20	TR	88	MY 112M4	153
	34	1120	41.74	16800	1.40	TRF	88	MY 112M4	154
	39	990	36.84*	17400	1.55				
	43	880	32.66*	17500	1.75				
	51	750	27.88	16800	2.0				
	41	930	34.40*	17600	1.60	TR	88	MY 112M4	153
	45	840	31.40	17400	1.85	TRF	88	MY 112M4	154
	51	750	27.84*	16800	2.1				
	61	630	23.40	16100	2.5				
	66	580	21.51	15700	2.6				
	74	515	19.10	15200	2.8				
	83	460	17.08*	14700	3.0				
	92	415	15.35	14300	3.2	TR	88	MY 112M4	153
	107	360	13.33	13700	3.6	TRF	88	MY 112M4	154
	119	320	11.93	13300	3.8				
	39	990	36.83	4070	0.85	TR	78	MY 112M4	150
	42	900	33.47	9100	0.90	TRF	78	MY 112M4	151
	49	780	29.00	10300	1.05				
	56	680	25.23	10800	1.15				
	61	630	23.37	10600	1.30	TR	78	MY 112M4	150
	66	575	21.43	10400	1.40	TRF	78	MY 112M4	151
	76	505	18.80	10100	1.55				
	80	480	17.82*	9950	1.65				
	91	420	15.60	9630	1.75				
	101	380	14.05	9380	1.90				
	115	330	12.33	9070	2.1				
	131	295	10.88	8780	2.3				
	147	260	9.64	8500	2.4				
	165	230	8.59	8320	2.7				
	183	210	7.74	8070	2.9				
	209	183	6.79	7770	3.2				
	237	161	5.99*	7490	3.4				
	267	143	5.31*	7230	3.6				
	71	535	19.89	7960	1.10	TR	68	MY 112M4	147
	79	485	17.95	7800	1.20	TRF	68	MY 112M4	148
	90	425	15.79	7600	1.30				
	95	400	14.91	7510	1.35				
	112	340	12.70	7240	1.50				
	123	310	11.54	7080	1.60				
	142	270	10.00	6840	1.75				
	163	235	8.70*	6600	1.90				
	182	210	7.79	6440	1.80				
	193	198	7.36*	6340	1.85				
	227	169	6.27	6070	1.95				
	249	153	5.70	5920	2.0				
	288	133	4.93	5680	2.2				
	331	116	4.29	5460	2.3				
	76	500	18.60*	3520	0.90	TR	58	MY 112M4	144
	85	450	16.79	3830	1.00	TRF	58	MY 112M4	145
	96	395	14.77*	3800	1.10				
	102	375	13.95*	3780	1.15				
	120	320	11.88	3710	1.25				
	132	290	10.79	3660	1.35				
	152	250	9.35	3580	1.45				
	157	245	9.06	3590	1.55				
	178	215	7.97	3500	1.65				
	189	205	7.53	3470	1.75				
	222	172	6.41	3350	1.95				
	244	157	5.82	3280	2.0				
	281	136	5.05	3180	2.3				
	323	118	4.39	3070	2.4				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
4	140	275	10.15	1960	0.85	TR	48	MY 112M4	141	
	157	245	9.07	2350	0.90	TRF	48	MY 112M4	142	
	177	215	8.01	2640	0.95					
	204	187	6.96	2480	0.85					
	237	161	6.00	2430	0.95					
	252	152	5.64*	2410	1.00					
	293	131	4.85	2350	1.15					
	327	117	4.34	2300	1.25					
	371	103	3.83	2250	1.40					
	176	215	16.22	2640	1.25	TR	48	MY 112M2	141	
	196	195	14.56	2600	1.35	TRF	48	MY 112M2	142	
	228	168	12.54	2540	1.50					
	242	158	11.79	2510	1.55					
	282	136	10.15	2440	1.70					
	315	121	9.07	2390	1.80					
	357	107	8.01	2320	1.90					
	369	104	7.76*	2250	1.55					
	411	93	6.96	2200	1.70					
	477	80	6.00	2130	1.95					
	507	75	5.64*	2100	2.1					
	589	65	4.85	2020	2.3					
	660	58	4.34	1970	2.5					
	746	51	3.83	1910	2.8					
	255	150	5.56*	6630	1.50	TRX	88	MY 112M4	126	
	280	137	5.07	6470	1.85	TRXF	88	MY 112M4	127	
	316	121	4.50*	6260	2.4					
	375	102	3.78	5960	3.0					
	351	109	4.04*	4670	1.30	TRX	78	MY 112M4	124	
	383	100	3.70	4560	1.55	TRXF	78	MY 112M4	125	
	437	87	3.25*	4410	2.1					
	461	83	3.08*	4350	2.3					
	527	73	2.70	4190	3.0					
	585	65	2.43	4070	3.3					
	667	57	2.13	3920	3.5					
	755	51	1.88*	3780	3.7					
	852	45	1.67	3650	3.9					
	998	38	1.42	3480	4.1					
	444	86	3.20*	2870	1.15	TRX	68	MY 112M4	122	
	492	78	2.89	2810	1.35	TRXF	68	MY 112M4	123	
	559	68	2.54	2730	1.75					
	592	65	2.40*	2690	1.90					
	695	55	2.04	2580	2.4					
	765	50	1.86	2520	2.5					
	883	43	1.61	2420	2.6					
	1015	38	1.40*	2330	2.8					
	538	71	2.64*	1670	0.95	TRX	58	MY 112M4	120	
	599	64	2.37	1780	1.10	TRXF	58	MY 112M4	121	
	696	55	2.04	1910	1.25					
	740	52	1.92*	1940	1.35					
	859	44	1.65	1900	1.55					
	962	40	1.48	1840	1.70					
	1090	35	1.30	1790	1.80					
5.5	2.2	22200	656	120000	0.80	TR	168 / TRF98	MY 132S4	166	
	2.5	19400	579	120000	0.95	TRF	168 / TRF98	MY 132S4	166	
	2.8	17000	503	120000	1.05					
	3.3	14500	432	120000	1.25	TR	168 / TRF98	MY 132S4	166	
	3.8	12700	376	120000	1.40	TRF	168 / TRF98	MY 132S4	166	
	4.3	11300	335	120000	1.60					
	4.7	10200	303	120000	1.75					
	5.1	9360	279	120000	1.90					

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
5.5	3.1	15700	462	41200	0.85	TR	148 / TRF88	MY	132S4	166
	3.4	14600	426	55400	0.90	TRF	148 / TRF88	MY	132S4	166
	3.9	12600	368	63500	1.05					
	4.4	11100	326	66000	1.15					
	5.1	9520	280	68500	1.35					
	5.8	8400	247	69900	1.55					
	6.7	7250	214	71100	1.80					
	7.6	6410	189	71900	2.0					
	3.1	17000	229.71	120000	1.05	TR	168	MY	160M8	164
	3.8	13800	186.93*	120000	1.30	TRF	168	MY	160M8	165
	4.6	11300	153.07	120000	1.60					
	5.1	10400	139.98	120000	1.75					
	5.8	9010	121.81*	120000	2.0					
	4.4	12100	163.31	64400	1.10	TR	148	MY	160M8	162
	4.8	10900	146.91	66500	1.20	TRF	148	MY	160M8	163
	5.9	8870	119.86	69300	1.45					
	6.5	8090	109.31	70200	1.60					
	5.9	8930	163.31	69200	1.45	TR	148	MY	132ML6	162
	6.5	8040	146.91	70300	1.60	TRF	148	MY	132ML6	163
	8.0	6560	119.86	71700	2.0					
	8.8	5980	109.31	72200	2.2	TR	148	MY	132ML6	162
	10	5180	94.60*	72800	2.5	TRF	148	MY	132ML6	163
	12	4570	83.47	73200	2.9					
	5.5	9480	128.18	44400	0.85	TR	138	MY	160M8	160
	6.2	8410	113.72	52200	0.95	TRF	138	MY	160M8	161
	6.9	7630	103.20*	54200	1.05					
	8.0	6560	88.70*	56100	1.20					
	5.5	9540	174.40*	43300	0.85	TR	138	MY	132ML6	160
	6.1	8550	156.31	51600	0.95	TRF	138	MY	132ML6	161
	6.8	7720	141.12*	54000	1.05					
	7.5	7010	128.18	55300	1.15					
	8.4	6220	113.72	56700	1.30					
	9.3	5650	103.20*	57600	1.40					
	6.4	8180	222.60*	53000	1.00	TR	138	MY	132S4	160
	7.6	6920	188.45	55500	1.15	TRF	138	MY	132S4	161
	8.2	6410	174.40*	56400	1.25					
	9.2	5740	156.31	57400	1.40					
	10	5180	141.12*	58200	1.55					
	11	4710	128.18	58800	1.70	TR	138	MY	132S4	160
	13	4180	113.72	59300	1.90	TRF	138	MY	132S4	161
	14	3790	103.20*	59700	2.1					
	16	3260	88.70*	60200	2.5					
	18	2970	80.91*	60400	2.7					
	19	2700	73.49	60500	3.0					
	22	2390	65.20	60700	3.3					
	24	2170	59.17*	60900	3.7					
	28	1870	50.86*	61000	4.3					
	11	4690	127.68	27100	0.90	TR	108	MY	132S4	158
	12	4250	115.63	29800	1.00	TRF	108	MY	132S4	159
	14	3770	102.53	32100	1.15					
	15	3400	92.70	33500	1.25	TR	108	MY	132S4	158
	18	2890	78.57	33500	1.50	TRF	108	MY	132S4	159
	20	2680	72.88	32900	1.60					
	22	2410	65.60*	32100	1.80					
	24	2180	59.41	31300	1.95					
	27	1930	52.68	30300	2.2					
	30	1750	47.63	29500	2.5					
	35	1480	40.37*	28200	2.9					
	17	3050	83.15	17600	1.00	TR	98	MY	132S4	156
	20	2650	72.17	21800	1.15	TRF	98	MY	132S4	157

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
5.5	22	2390	65.21	24600	1.25	TR	98	MY	132S4	156
	24	2200	59.92	24200	1.35	TRF	98	MY	132S4	157
	27	1950	53.21	23600	1.55					
	30	1750	47.58	23000	1.70					
	33	1570	42.78	22500	1.90					
	39	1360	37.13	21700	2.2					
	43	1220	33.25	21100	2.4					
	52	1010	27.58	20100	2.6					
	45	1180	32.05	20900	2.2	TR	98	MY	132S4	156
	53	1000	27.19	20000	2.6	TRF	98	MY	132S4	157
	57	920	25.03	19600	3.1					
	64	820	22.37	19000	3.3					
	71	740	20.14	18400	3.5					
	78	670	18.24	17900	3.7					
	88	595	16.17	17300	4.0					
	30	1750	47.58	15400	0.90	TR	88	MY	132S4	153
	34	1530	41.74	17000	1.00	TRF	88	MY	132S4	154
	39	1350	36.84*	17200	1.15					
	44	1200	32.66*	16700	1.30					
	51	1020	27.88	16100	1.45					
	51	1020	27.84*	16100	1.50	TR	88	MY	132S4	153
	61	860	23.40	15500	1.80	TRF	88	MY	132S4	154
	66	790	21.51	15200	1.90					
	75	700	19.10	14700	2.1					
	84	625	17.08*	14300	2.2					
	93	565	15.35	13900	2.4					
	107	490	13.33	13400	2.6					
	120	440	11.93	13000	2.8					
	144	365	9.90*	12300	3.3					
	156	335	9.14*	12200	3.6					
	174	300	8.22	11800	3.8					
	200	260	7.13	11300	4.1					
	76	690	18.80	9240	1.15	TR	78	MY	132S4	150
	80	655	17.82*	9400	1.20	TRF	78	MY	132S4	151
	92	575	15.60	9150	1.30					
	102	515	14.05	8950	1.40	TR	78	MY	132S4	150
	116	455	12.33	8690	1.50	TRF	78	MY	132S4	151
	131	400	10.88	8440	1.65					
	148	355	9.64	8190	1.80					
	166	315	8.59	8080	2.0					
	185	285	7.74	7860	2.2					
	211	250	6.79	7580	2.3					
	239	220	5.99*	7320	2.5					
	269	195	5.31*	7070	2.6					
	91	580	15.79	6610	0.95	TR	68	MY	132S4	147
	96	550	14.91	6900	1.00	TRF	68	MY	132S4	148
	113	465	12.70	6810	1.10					
	124	425	11.54	6690	1.20					
	143	365	10.00	6500	1.30					
	164	320	8.70*	6310	1.40					
	183	285	7.79	6180	1.35					
	194	270	7.36*	6100	1.35					
	228	230	6.27	5860	1.45					
	251	210	5.70	5720	1.50					
	290	181	4.93	5510	1.60					
	333	158	4.29	5310	1.70					
	331	159	8.70*	5300	2.8	TR	68	MY	132S2	147
	369	142	7.79	5160	2.7	TRF	68	MY	132S2	148
	391	134	7.36*	5080	2.8					
	460	114	6.27	4860	2.9					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s					Page
5.5	506	104	5.70	4730	3.0	TR	68	MY	132S2	147
	584	90	4.93	4540	3.2	TRF	68	MY	132S2	148
	671	78	4.29	4350	3.5					
	97	545	14.77*	1730	0.80	TR	58	MY	132S4	144
	103	510	13.95*	2070	0.85	TRF	58	MY	132S4	145
	120	435	11.88	2900	0.95					
	132	395	10.79	3270	1.00					
	153	345	9.35	3240	1.10	TR	58	MY	132S4	144
	179	295	7.97	3220	1.20	TRF	58	MY	132S4	145
	190	275	7.53	3200	1.25					
	223	235	6.41	3120	1.40					
	246	215	5.82	3080	1.50					
	283	185	5.05	3000	1.65					
	326	161	4.39	2920	1.75					
	308	171	9.35	2930	2.2	TR	58	MY	132S2	144
	361	145	7.97	2850	2.4	TRF	58	MY	132S2	145
	383	137	7.53	2820	2.6					
	449	117	6.41	2720	2.9					
	494	106	5.82	2660	3.0					
	571	92	5.05	2560	3.3					
	656	80	4.39	2470	3.5					
	295	178	4.85	1870	0.85	TR	48	MY	132S4	141
	330	159	4.34	2110	0.90	TRF	48	MY	132S4	142
	373	141	3.83	2080	1.00					
	230	230	12.54	1730	1.10	TR	48	MY	132S2	141
	244	215	11.79	1910	1.15	TRF	48	MY	132S2	142
	284	185	10.15	2250	1.25					
	318	165	9.07	2220	1.35					
	359	146	8.01	2170	1.40					
	480	109	6.00	2000	1.45					
	511	103	5.64*	1970	1.50					
	593	89	4.85	1920	1.70					
	664	79	4.34	1870	1.85	TR	48	MY	132S2	141
	752	70	3.83	1820	2.1	TRF	48	MY	132S2	142
	216	245	6.63*	10500	1.90	TRX	108	MY	132S4	130
	255	205	5.61	9980	2.2	TRXF	108	MY	132S4	131
	276	191	5.19	9760	3.7					
	307	171	4.65	9460	4.1					
	247	215	5.79	8380	1.95	TRX	98	MY	132S4	128
	291	180	4.91	8010	2.2	TRXF	98	MY	132S4	129
	316	166	4.52	7820	3.6					
	354	149	4.04	7580	4.0					
	393	134	3.64*	7350	4.5					
	434	121	3.30	7140	4.9					
	489	107	2.92	6890	5.5					
	541	97	2.64	6690	6.1					
	638	82	2.24*	6360	7.2					
	731	72	1.96	6110	7.9					
	874	60	1.64	5780	8.4					
	1010	52	1.42	5530	8.8					
	318	165	4.50*	6040	1.75	TRX	88	MY	132S4	126
	378	139	3.78	5770	2.2	TRXF	88	MY	132S4	127
	411	128	3.48	5640	3.2					
	463	113	3.09	5460	3.6					
	518	101	2.76*	5290	4.0					
	576	91	2.48	5130	4.5					
	664	79	2.15	4930	4.9					
	440	119	3.25*	4220	1.50	TRX	78	MY	132S4	124
	464	113	3.08*	4160	1.70	TRXF	78	MY	132S4	125
	530	99	2.70	4030	2.2					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs		Page
5.5	589	89	2.43	3920	2.4	TRX 78	MY 132S4 124
	671	78	2.13	3780	2.6	TRXF 78	MY 132S4 125
	761	69	1.88*	3660	2.7		
	858	61	1.67	3540	2.8		
	1005	52	1.42	3380	3.0		
	563	93	2.54	2550	1.25	TRX 68	MY 132S4 122
	596	88	2.40*	2520	1.40	TRXF 68	MY 132S4 123
	700	75	2.04	2430	1.80		
	770	68	1.86	2380	1.85		
	889	59	1.61	2300	1.95		
	1020	51	1.40*	2220	2.0		
	700	75	2.04	665	0.90	TRX 58	MY 132S4 120
	745	71	1.92*	755	1.00	TRXF 58	MY 132S4 121
	866	61	1.65	940	1.15		
	969	54	1.48	1020	1.25		
	1095	48	1.30	1160	1.30		
7.5	2.8	23400	503	120000	0.75	TR 168 / TRF98	MY 132M4 166
	3.3	19900	432	120000	0.90	TRF 168 / TRF98	MY 132M4 166
	3.8	17500	376	120000	1.05		
	4.3	15600	335	120000	1.15		
	4.7	14000	303	120000	1.30		
	5.1	12900	279	120000	1.40		
	4.4	15200	326	47300	0.85	TR 148 / TRF88	MY 132M4 166
	5.1	13000	280	62600	1.00	TRF 148 / TRF88	MY 132M4 166
	5.8	11500	247	65400	1.15		
	6.7	9940	214	67900	1.30		
	7.6	8790	189	69400	1.50		
	9.0	7390	159	71000	1.75		
	3.1	22900	229.71	120000	0.80	TR 168	MY 160L8 164
	3.9	18600	186.93*	120000	0.95	TRF 168	MY 160L8 165
	4.7	15200	153.07	120000	1.20		
	5.1	13900	139.98	120000	1.30		
	5.9	12100	121.81*	120000	1.50		
	4.2	17100	229.71	120000	1.05	TR 168	MY 160M6 164
	5.1	13900	186.93*	120000	1.30	TRF 168	MY 160M6 165
	6.3	11400	153.07	120000	1.60		
	6.9	10400	139.98	120000	1.70		
	7.9	9090	121.81*	120000	2.0		
	8.9	8020	107.49	120000	2.2		
	10	6950	93.19	120000	2.6		
	12	6190	82.91*	120000	2.9		
	13	5500	73.70*	120000	3.3		
	14	5030	67.40	120000	3.6		
	4.4	16200	163.31	32800	0.80	TR 148	MY 160L8 162
	4.9	14600	146.91	55100	0.90	TRF 148	MY 160L8 163
	6.0	11900	119.86	64700	1.10		
	6.6	10900	109.31	66500	1.20		
	5.9	12200	163.31	64200	1.05	TR 148	MY 160M6 162
	6.5	11000	146.91	66300	1.20	TRF 148	MY 160M6 163
	8.0	8940	119.86	69200	1.45		
	8.8	8150	109.31	70100	1.60		
	10	7060	94.60*	71300	1.85		
	12	6230	83.47	72000	2.1		
	7.6	9440	188.45	45300	0.85	TR 138	MY 132M4 160
	8.2	8730	174.40*	50800	0.90	TRF 138	MY 132M4 161
	9.2	7830	156.31	53700	1.00		
	10	7070	141.12*	55200	1.15		
	11	6420	128.18	56400	1.25	TR 138	MY 132M4 160
	13	5700	113.72	57500	1.40	TRF 138	MY 132M4 161
	14	5170	103.20*	58200	1.55		

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
7.5	16	4440	88.70*	59100	1.80	TR 138	160
	18	4050	80.91*	59500	1.95	TRF 138	161
	19	3680	73.49	59800	2.2		
	22	3270	65.20	60100	2.5		
	24	2960	59.17*	60400	2.7		
	28	2550	50.86*	60600	3.1		
	15	4640	92.70	27500	0.95	TR 108	158
	18	3940	78.57	31300	1.10	TRF 108	159
	20	3650	72.88	31300	1.20		
	22	3290	65.60*	30600	1.30		
	24	2980	59.41	30000	1.45		
	27	2640	52.68	29200	1.65		
	30	2390	47.63	28500	1.80		
	35	2020	40.37*	27300	2.1		
	41	1770	35.26	26400	2.4		
	48	1480	29.49	25200	2.9		
	46	1540	30.77	25500	2.8	TR 108	158
	52	1380	27.58	24700	3.1	TRF 108	159
	57	1250	24.90*	24100	3.5		
	63	1130	22.62	23400	3.8		
	24	3000	59.92	19700	1.00	TR 98	156
	27	2670	53.21	22200	1.15	TRF 98	157
	30	2380	47.58	21800	1.25		
	33	2140	42.78	21300	1.40		
	39	1860	37.13	20700	1.60		
	43	1670	33.25	20200	1.75	TR 98	156
	52	1380	27.58	19400	1.95	TRF 98	157
	45	1610	32.05	20000	1.60		
	53	1360	27.19	19300	1.90		
	57	1250	25.03	18900	2.3		
	64	1120	22.37	18400	2.4		
	71	1010	20.14	17900	2.6		
	78	910	18.24	17500	2.7		
	39	1840	36.84*	11500	0.85	TR 88	153
	44	1640	32.66*	15700	0.95	TRF 88	154
	51	1400	27.88	15200	1.05		
	51	1390	27.84*	15200	1.10	TR 88	153
	61	1170	23.40	14700	1.30	TRF 88	154
	66	1080	21.51	14500	1.40		
	75	960	19.10	14100	1.50		
	84	860	17.08*	13700	1.65		
	93	770	15.35	12500	1.75		
	107	670	13.33	12900	1.90		
	120	600	11.93	12600	2.1		
	144	495	9.90*	12000	2.4		
	156	460	9.14*	11900	2.6		
	174	410	8.22	11600	2.8		
	200	355	7.13	11100	3.0		
	224	320	6.39	10800	3.2		
	270	265	5.30*	10200	3.4		
	76	940	18.80	5310	0.85	TR 78	150
	80	890	17.82*	5720	0.85	TRF 78	151
	92	780	15.60	6610	0.95		
	102	705	14.05	7180	1.00		
	116	615	12.33	7750	1.10		
	131	545	10.88	8010	1.20		
	148	485	9.64	7810	1.30		
	166	430	8.59	7620	1.45		
	185	390	7.74	7590	1.55		
	211	340	6.79	7340	1.70		

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs			Page	
7.5	239	300	5.99*	7110	1.80	TR	78	MY 132M4	150
	269	265	5.31*	6890	1.90	TRF	78	MY 132M4	151
	113	635	12.70	4240	0.80	TR	68	MY 132M4	147
	124	580	11.54	4860	0.85	TRF	68	MY 132M4	148
	143	500	10.00	5620	0.95				
	164	435	8.70*	5930	1.00				
	183	390	7.79	5500	0.95				
	194	370	7.36*	5720	1.00				
	228	315	6.27	5600	1.05				
	251	285	5.70	5480	1.10				
	290	245	4.93	5300	1.15				
	333	215	4.29	5130	1.25				
	179	400	7.97	980	0.90	TR	58	MY 132M4	144
	190	375	7.53	1280	0.95	TRF	58	MY 132M4	145
	223	320	6.41	2020	1.05				
	246	290	5.82	2380	1.10				
	283	255	5.05	2760	1.20				
	326	220	4.39	2710	1.25				
	196	365	14.77*	2580	1.20	TR	58	MY 132M2	144
	208	345	13.95*	2780	1.25	TRF	58	MY 132M2	145
	244	295	11.88	2780	1.40				
	269	265	10.79	2750	1.45				
	310	230	9.35	2710	1.60	TR	58	MY 132M2	144
	364	197	7.97	2670	1.80	TRF	58	MY 132M2	145
	385	186	7.53	2640	1.90				
	452	158	6.41	2570	2.1				
	498	144	5.82	2520	2.2				
	575	125	5.05	2440	2.5				
	660	108	4.39	2370	2.6				
	216	330	6.63*	10100	1.40	TRX	108	MY 132M4	130
	255	280	5.61	9690	1.60	TRXF	108	MY 132M4	131
	276	260	5.19	9490	2.7				
	307	235	4.65	9210	3.0				
	340	210	4.20*	8950	3.9				
	247	290	5.79	8080	1.45	TRX	98	MY 132M4	128
	291	245	4.91	7750	1.60	TRXF	98	MY 132M4	129
	316	225	4.52	7580	2.6				
	354	205	4.04	7360	2.9				
	393	182	3.64*	7160	3.3				
	434	165	3.30	6960	3.6				
	489	146	2.92	6730	4.1				
	318	225	4.50*	5760	1.30	TRX	88	MY 132M4	126
	378	189	3.78	5530	1.60	TRXF	88	MY 132M4	127
	411	174	3.48	5420	2.3				
	463	155	3.09	5260	2.6				
	518	138	2.76*	5110	2.9				
	576	124	2.48	4970	3.3				
	664	108	2.15	4780	3.6				
	741	97	1.93	4640	3.7				
	894	80	1.60*	4400	3.9				
	1030	70	1.39	4230	4.2				
	440	163	3.25*	3820	1.10	TRX	78	MY 132M4	124
	464	154	3.08*	3890	1.25	TRXF	78	MY 132M4	125
	530	135	2.70	3820	1.60				
	589	122	2.43	3730	1.75				
	671	107	2.13	3620	1.85				
	761	94	1.88*	3510	2.0				
	858	84	1.67	3400	2.1				
	1005	71	1.42	3260	2.2				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
7.5	563	127	2.54	1500	0.95	TRX	68	MY	132M4	122
	596	120	2.40*	1610	1.00	TRXF	68	MY	132M4	123
	700	102	2.04	1810	1.30					
	770	93	1.86	1930	1.35					
	889	81	1.61	2060	1.40					
	1020	70	1.40*	2080	1.50					
9.2	3.8	21400	376	120000	0.85	TR	168 / TRF98	MY	132ML4	166
	4.3	19000	335	120000	0.95	TRF	168 / TRF98	MY	132ML4	166
	4.8	17100	303	120000	1.05					
	5.2	15700	279	120000	1.15					
	5.1	15900	280	37800	0.80	TR	148 / TRF88	MY	132ML4	166
	5.8	14000	247	60400	0.95	TRF	148 / TRF88	MY	132ML4	166
	6.7	12100	214	64300	1.05					
	7.6	10700	189	66700	1.20					
	9.1	9020	159	69100	1.45					
	8.8	9960	163.31	67800	1.30	TR	148	MY	132ML4	162
	9.8	8960	146.91	69200	1.45	TRF	148	MY	132ML4	163
	12	7310	119.86	71000	1.80					
	13	6670	109.31	71600	1.95	TR	148	MY	132ML4	162
	15	5770	94.60*	72400	2.3	TRF	148	MY	132ML4	163
	17	5090	83.47	72900	2.6					
	20	4400	72.09	73300	3.0					
	22	4090	66.99	73500	3.2					
	9.2	9540	156.31	43400	0.85	TR	138	MY	132ML4	160
	10	8610	141.12*	51400	0.95	TRF	138	MY	132ML4	161
	11	7820	128.18	53800	1.00					
	13	6940	113.72	55500	1.15					
	14	6300	103.20*	56600	1.25	TR	138	MY	132ML4	160
	16	5410	88.70*	57900	1.50	TRF	138	MY	132ML4	161
	18	4940	80.91*	58500	1.60					
	20	4480	73.49	59000	1.80					
	22	3980	65.20	59500	2.0					
	24	3610	59.17*	59900	2.2					
	28	3100	50.86*	60300	2.6					
	32	2710	44.39	60500	3.0					
	18	4790	78.57	23300	0.90	TR	108	MY	132ML4	158
	20	4450	72.88	28600	0.95	TRF	108	MY	132ML4	159
	22	4000	65.60*	29400	1.05					
	24	3620	59.41	28800	1.20					
	27	3210	52.68	28100	1.35					
	30	2910	47.63	27500	1.50					
	36	2460	40.37*	26500	1.75					
	41	2150	35.26	25700	2.0					
	49	1800	29.49	24600	2.4					
	47	1880	30.77	24900	2.3	TR	108	MY	132ML4	158
	52	1680	27.58	24200	2.6	TRF	108	MY	132ML4	159
	58	1520	24.90*	23500	2.8					
	64	1380	22.62	23000	3.1					
	72	1220	20.07	22200	3.5					
	27	3250	53.21	3280	0.90	TR	98	MY	132ML4	156
	30	2900	47.58	20600	1.05	TRF	98	MY	132ML4	157
	34	2610	42.78	20300	1.15					
	39	2270	37.13	19800	1.30					
	43	2030	33.25	19400	1.40					
	52	1680	27.58	18700	1.60					
	58	1530	25.03	18300	1.85					
	64	1370	22.37	17900	2.0					
	71	1230	20.14	17400	2.1					
	79	1110	18.24	17000	2.3					
	89	990	16.17	16500	2.4					

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s					Page
9.2	98	890	14.62	16100	2.6	TR	98	MY	132ML4	156
	116	755	12.39	15400	2.9	TRF	98	MY	132ML4	157
	67	1310	21.51	13900	1.15	TR	88	MY	132ML4	153
	75	1170	19.10	13600	1.25	TRF	88	MY	132ML4	154
	84	1040	17.08*	13200	1.35					
	94	940	15.35	13000	1.45					
	108	810	13.33	12600	1.55					
	121	730	11.93	12200	1.70					
	145	605	9.90*	11700	1.95					
	158	560	9.14*	11700	2.2					
	175	500	8.22	11400	2.3					
	202	435	7.13	10900	2.5					
	225	390	6.39	10600	2.6					
	102	860	14.05	4740	0.85	TR	78	MY	132ML4	150
	117	750	12.33	5610	0.90	TRF	78	MY	132ML4	151
	132	665	10.88	6280	1.00					
	149	590	9.64	6800	1.05					
	186	470	7.74	6300	1.30	TR	78	MY	132ML4	150
	212	415	6.79	6720	1.40	TRF	78	MY	132ML4	151
	240	365	5.99*	6920	1.50					
	271	325	5.31*	6720	1.55					
	277	315	5.19	9240	2.2	TRX	108	MY	132ML4	130
	310	285	4.65	8990	2.5	TRXF	108	MY	132ML4	131
	343	255	4.20*	8760	3.2					
	377	235	3.81	8540	3.6					
	425	205	3.38	8270	4.0					
	318	275	4.52	7370	2.2	TRX	98	MY	132ML4	128
	356	245	4.04	7170	2.4	TRXF	98	MY	132ML4	129
	396	220	3.64*	6980	2.7					
	437	200	3.30	6800	3.0					
	493	178	2.92	6590	3.3					
	545	161	2.64	6410	3.7					
	643	137	2.24*	6120	4.4					
	736	119	1.96	5890	4.8					
	880	100	1.64	5590	5.1					
	1015	86	1.42	5360	5.3					
	414	210	3.48	5220	1.90	TRX	88	MY	132ML4	126
	466	188	3.09	5080	2.2	TRXF	88	MY	132ML4	127
	522	168	2.76*	4950	2.4					
	580	151	2.48	4820	2.7					
	669	131	2.15	4650	2.9					
	747	118	1.93	4520	3.0					
	900	98	1.60*	4300	3.2					
	1035	85	1.39	4140	3.4					
	593	148	2.43	3010	1.45	TRX	78	MY	132ML4	124
	676	130	2.13	3160	1.55	TRXF	78	MY	132ML4	125
	766	115	1.88*	3260	1.65					
	864	102	1.67	3280	1.70					
	1010	87	1.42	3160	1.80					
11	4.9	19600	295	120000	0.90	TR	168	TRF108	MY 160M4	166
	5.3	18200	270	120000	1.00	TRF	168	TRF108	MY 160M4	166
	6.3	15400	229	120000	1.15					
	7.2	13400	200	120000	1.35					
	8.5	11300	169	120000	1.60					
	5	20000	291	120000	0.90					
	4.3	22800	335	120000	0.80	TR	168 / TRF98	MY 160M4	166	
	4.8	20500	303	120000	0.90	TRF	168 / TRF98	MY 160M4	166	
	5.2	18900	279	120000	0.95					
	5.8	16800	247	22800	0.75	TR	148 / TRF88	MY 160M4	166	
6.7	14500	214	56000	0.90	TRF	148 / TRF88	MY 160M4	166		

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs		Page
11	7.6	12900	189	63000	1.00	TR 148 / TRF88	MY 160M4 166
	9.1	10800	159	66600	1.20	TRF 148 / TRF88	MY 160M4 166
	5.1	20500	186.93*	120000	0.90	TR 168	MY 160L6 164
	6.3	16700	153.07	120000	1.05	TRF 168	MY 160L6 165
	6.9	15300	139.98	120000	1.20		
	7.9	13300	121.81*	120000	1.35		
	6.3	16800	229.71	120000	1.05	TR 168	MY 160M4 164
	7.7	13600	186.93*	120000	1.30	TRF 168	MY 160M4 165
	9.4	11200	153.07	120000	1.60	TR 168	MY 160M4 164
	10	10200	139.98	120000	1.75	TRF 168	MY 160M4 165
	12	8890	121.81*	120000	2.0		
	13	7840	107.49	120000	2.3		
	15	6800	93.19	120000	2.7		
	17	6050	82.91*	120000	3.0		
	6.5	16100	146.91	35400	0.80	TR 148	MY 160L6 162
	8.0	13100	119.86	62400	1.00	TRF 148	MY 160L6 163
	8.8	12000	109.31	64600	1.10		
	10	10400	94.60*	67300	1.25		
	12	9130	83.47	69000	1.40		
	8.8	11900	163.31	64700	1.10	TR 148	MY 160M4 162
	9.8	10700	146.91	66700	1.20	TRF 148	MY 160M4 163
	12	8740	119.86	69400	1.50		
	13	7970	109.31	70300	1.65		
	15	6900	94.60*	71400	1.90		
	17	6090	83.47	72100	2.1		
	20	5260	72.09	72800	2.5		
	22	4890	66.99	73000	2.7		
	24	4460	61.09	73300	2.9		
	27	3860	52.87	73600	3.4		
	10	10300	141.12*	23300	0.80	TR 138	MY 160M4 160
	11	9350	128.18	46900	0.85	TRF 138	MY 160M4 161
	13	8300	113.72	52700	0.95		
	14	7530	103.20*	54400	1.05		
	16	6470	88.70*	56300	1.25		
	18	5900	80.91*	57200	1.35		
	20	5360	73.49	57900	1.50		
	22	4760	65.20	58700	1.70		
	24	4320	59.17*	59200	1.85		
	28	3710	50.86*	59800	2.2		
	32	3240	44.39	60200	2.5		
	38	2750	37.65	60500	2.9		
	44	2400	32.91	60700	3.3		
	22	4790	65.60*	23700	0.90	TR 108	MY 160M4 158
	24	4330	59.41	27600	1.00	TRF 108	MY 160M4 159
	27	3840	52.68	27100	1.10		
	30	3470	47.63	26600	1.25		
	36	2940	40.37*	25700	1.45		
	41	2570	35.26	25000	1.65		
	49	2150	29.49	24000	2.0		
	47	2240	30.77	24200	1.90	TR 108	MY 160M4 158
	52	2010	27.58	23600	2.1	TRF 108	MY 160M4 159
	58	1820	24.90*	23100	2.4		
	64	1650	22.62	22500	2.6		
	72	1460	20.07	21800	2.9		
	79	1330	18.21	21300	3.2		
	34	3120	42.78	14500	0.95	TR 98	MY 160M4 156
	39	2710	37.13	18900	1.10	TRF 98	MY 160M4 157
	43	2430	33.25	18600	1.20		
	52	2010	27.58	18000	1.35		

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s					Page
11	58	1830	25.03	17700	1.55	TR	98	MY	160M4	156
	64	1630	22.37	17300	1.65	TRF	98	MY	160M4	157
	71	1470	20.14	16900	1.80					
	79	1330	18.24	16600	1.90	TR	98	MY	160M4	156
	89	1180	16.17	16100	2.0	TRF	98	MY	160M4	157
	98	1070	14.62	15700	2.2					
	116	900	12.39	15100	2.4					
	133	790	10.83	14600	2.7					
	155	675	9.29	14300	3.0					
	172	610	8.39	13900	3.3					
	202	520	7.12	13200	3.9					
	232	455	6.21	12700	4.2					
	67	1570	21.51	13200	0.95	TR	88	MY	160M4	153
	75	1390	19.10	13000	1.05	TRF	88	MY	160M4	154
	84	1250	17.08*	12800	1.10					
	94	1120	15.35	12500	1.20	TR	88	MY	160M4	153
	108	970	13.33	12200	1.30	TRF	88	MY	160M4	154
	121	870	11.93	11900	1.40					
	145	720	9.90*	11400	1.65					
	158	665	9.14*	11500	1.80					
	175	600	8.22	11200	1.95					
	202	520	7.13	10800	2.1					
	225	465	6.39	10400	2.2					
	272	385	5.30*	9910	2.4					
	132	795	10.88	4250	0.85	TR	78	MY	160M4	150
	149	705	9.64	5000	0.90	TRF	78	MY	160M4	151
	186	565	7.74	4630	1.10					
	212	495	6.79	5250	1.15					
	240	435	5.99*	5720	1.25					
	271	390	5.31*	6090	1.30					
	277	380	5.19	9000	1.85	TRX	108	MY	160M4	130
	310	340	4.65	8770	2.1	TRXF	108	MY	160M4	131
	343	305	4.20*	8560	2.7					
	377	280	3.81	8360	3.0					
	425	245	3.38	8100	3.4					
	469	225	3.07	7900	3.7					
	545	193	2.64*	7580	4.3					
	318	330	4.52	7150	1.80	TRX	98	MY	160M4	128
	356	295	4.04	6970	2.0	TRXF	98	MY	160M4	129
	396	265	3.64*	6800	2.2					
	437	240	3.30	6640	2.5					
	493	215	2.92	6440	2.8					
	545	193	2.64	6280	3.1					
	643	163	2.24*	6000	3.6					
	736	143	1.96	5790	4.0					
	880	119	1.64	5500	4.2					
	1015	103	1.42	5280	4.4					
	414	255	3.48	5030	1.60	TRX	88	MY	160M4	126
	466	225	3.09	4910	1.80	TRXF	88	MY	160M4	127
	522	200	2.76*	4790	2.0					
	580	181	2.48	4680	2.2					
	669	157	2.15	4530	2.5	TRX	88	MY	160M4	126
	747	141	1.93	4400	2.5	TRXF	88	MY	160M4	127
	900	117	1.60*	4200	2.7					
	1035	102	1.39	4050	2.9					
	593	177	2.43	1890	1.20	TRX	78	MY	160M4	124
	676	155	2.13	2140	1.30	TRXF	78	MY	160M4	125
	766	137	1.88*	2330	1.35					
	864	122	1.67	2460	1.40	TRX	78	MY	160M4	124
	1010	104	1.42	2580	1.50	TRXF	78	MY	160M4	125

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs					Page
15	6.4	20800	229	120000	0.85	TR	168	TRF108	MY 160L4	166
	7.3	18200	200	120000	1.00	TRF	168	TRF108	MY 160L4	166
	8.6	15300	169	120000	1.20					
	6.4	20900	227	120000	0.85	TR	168	TRF108	MY 160L4	166
	7.4	18200	198	120000	1.00	TRF	168	TRF108	MY 160L4	166
	6.3	22600	153.07	120000	0.80	TR	168		MY 180L6	164
	6.9	20700	139.98	120000	0.85	TRF	168		MY 180L6	165
	8.0	18000	121.81*	120000	1.00					
	9.0	15900	107.49	120000	1.15					
	6.4	22500	229.71	120000	0.80	TR	168		MY 160L4	164
	7.8	18300	186.93*	120000	1.00	TRF	168		MY 160L4	165
	9.5	15000	153.07	120000	1.20	TR	168		MY 160L4	164
	10	13700	139.98	120000	1.30	TRF	168		MY 160L4	165
	12	12000	121.81*	120000	1.50					
	14	10500	107.49	120000	1.70					
	16	9140	93.19	120000	1.95					
	18	8130	82.91*	120000	2.2					
	20	7230	73.70*	120000	2.5					
	22	6610	67.40	120000	2.7					
	8.9	16100	109.31	34400	0.80	TR	148		MY 180L6	162
	10	14000	94.60*	60600	0.95	TRF	148		MY 180L6	163
	12	12300	83.47	64000	1.05					
	13	10600	72.09	66800	1.20					
	14	9890	66.99	67900	1.30					
	8.9	16000	163.31	36200	0.80	TR	148		MY 160L4	162
	9.9	14400	146.91	57400	0.90	TRF	148		MY 160L4	163
	12	11800	119.86	65000	1.10					
	13	10700	109.31	66700	1.20					
	15	9280	94.60*	68800	1.40	TR	148		MY 160L4	162
	17	8190	83.47	70100	1.60	TRF	148		MY 160L4	163
	20	7070	72.09	71300	1.85					
	22	6570	66.99	71700	2.0					
	24	5990	61.09	72200	2.2					
	28	5190	52.87	72800	2.5					
	31	4580	46.65	73200	2.8					
	14	10100	103.20*	30700	0.80	TR	138		MY 160L4	160
	16	8700	88.70*	51000	0.90	TRF	138		MY 160L4	161
	18	7940	80.91*	53500	1.00					
	20	7210	73.49	55000	1.10					
	22	6400	65.20	56400	1.25	TR	138		MY 160L4	160
	25	5800	59.17*	57300	1.40	TRF	138		MY 160L4	161
	29	4990	50.86*	58400	1.60					
	33	4360	44.39	59100	1.85					
	39	3690	37.65	59800	2.2					
	44	3230	32.91	60200	2.5					
	52	2730	27.83	60500	2.8					
	31	4670	47.63	24500	0.90	TR	108		MY 160L4	158
	36	3960	40.37*	23900	1.10	TRF	108		MY 160L4	159
	41	3460	35.26	23400	1.25					
	50	2890	29.49	22600	1.50					
	47	3020	30.77	22800	1.40	TR	108		MY 160L4	158
	53	2710	27.58	22400	1.60	TRF	108		MY 160L4	159
	59	2440	24.90*	21900	1.75					
	65	2220	22.62	21400	1.95	TR	108		MY 160L4	158
	73	1970	20.07	20900	2.2	TRF	108		MY 160L4	159
	80	1790	18.21	20400	2.4					
	93	1540	15.65	19700	2.8					
	107	1340	13.66	19000	3.2					
	53	2710	27.58	16500	1.00	TR	98		MY 160L4	156
	58	2460	25.03	16300	1.15	TRF	98		MY 160L4	157

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page	
15	65	2200	22.37	16100	1.25	TR	98	MY 160L4	156
	72	1980	20.14	15800	1.30	TRF	98	MY 160L4	157
	80	1790	18.24	15600	1.40	TR	98	MY 160L4	156
	90	1590	16.17	15200	1.50	TRF	98	MY 160L4	157
	100	1430	14.62	14900	1.60				
	118	1220	12.39	14400	1.80				
	135	1060	10.83	14000	1.95				
	157	910	9.29	13800	2.2				
	174	820	8.39	13400	2.5				
	205	700	7.12	12800	2.9				
	235	610	6.21	12400	3.1				
	85	1680	17.08*	11600	0.85	TR	88	MY 160L4	153
	95	1510	15.35	11500	0.90	TRF	88	MY 160L4	154
	110	1310	13.33	11300	1.00				
	122	1170	11.93	11100	1.05				
	147	970	9.90*	10700	1.20	TR	88	MY 160L4	153
	160	900	9.14*	11000	1.35	TRF	88	MY 160L4	154
	178	810	8.22	10700	1.45				
	205	700	7.13	10300	1.55				
	229	625	6.39	10100	1.65				
	275	520	5.30*	9600	1.75				
	281	510	5.19	8440	1.35	TRX	108	MY 160L4	130
	314	455	4.65	8260	1.50	TRXF	108	MY 160L4	131
	348	410	4.20*	8100	2.0				
	383	375	3.81	7930	2.2				
	431	330	3.38	7720	2.5	TRX	108	MY 160L4	130
	475	300	3.07	7540	2.8	TRXF	108	MY 160L4	131
	553	260	2.64*	7260	3.2				
	634	225	2.30	7010	3.7				
	747	192	1.95	6710	4.0				
	855	168	1.71	6470	4.2				
	1010	142	1.44	6170	4.6				
	323	445	4.52	6660	1.35	TRX	98	MY 160L4	128
	361	395	4.04	6530	1.50	TRXF	98	MY 160L4	129
	401	355	3.64*	6400	1.65				
	443	325	3.30	6270	1.85				
	499	285	2.92	6110	2.1				
	552	260	2.64	5970	2.3				
	652	220	2.24*	5730	2.7				
	746	192	1.96	5550	3.0				
	892	161	1.64	5290	3.2				
	1030	139	1.42	5090	3.3				
	420	340	3.48	4260	1.20	TRX	88	MY 160L4	126
	473	305	3.09	4510	1.35	TRXF	88	MY 160L4	127
	529	270	2.76*	4430	1.50				
	588	245	2.48	4350	1.65				
	678	210	2.15	4230	1.80				
	757	189	1.93	4130	1.90	TRX	88	MY 160L4	126
	913	157	1.60*	3960	2.0	TRXF	88	MY 160L4	127
	1050	137	1.39	3840	2.1				
18.5	7.8	22500	186.93*	120000	0.80	TR	168	MY 180M4	164
	9.6	18500	153.07	120000	1.00	TRF	168	MY 180M4	165
	10	16900	139.98	120000	1.05				
	12	14700	121.81*	120000	1.25				
	14	13000	107.49	120000	1.40	TR	168	MY 180M4	164
	16	11200	93.19	120000	1.60	TRF	168	MY 180M4	165
	18	10000	82.91*	120000	1.80				
	20	8890	73.70*	120000	2.0				
	22	8130	67.40	120000	2.2				
	25	7070	58.65	120000	2.6				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page
18.5	12	14500	119.86	56900	0.90	TR 148	MY 180M4	162
	13	13200	109.31	62300	1.00	TRF 148	MY 180M4	163
	15	11400	94.60*	65600	1.15			
	18	10100	83.47	67700	1.30	TR 148	MY 180M4	162
	20	8690	72.09	69500	1.50	TRF 148	MY 180M4	163
	22	8080	66.99	70200	1.60			
	24	7370	61.09	71000	1.75			
	28	6380	52.87	71900	2.0			
	31	5630	46.65	72500	2.3			
	36	4860	40.29	73000	2.7			
	18	9760	80.91*	39000	0.80	TR 138	MY 180M4	160
	20	8860	73.49	50200	0.90	TRF 138	MY 180M4	161
	22	7860	65.20	53700	1.00			
	25	7140	59.17*	55100	1.10			
	29	6130	50.86*	56800	1.30	TR 138	MY 180M4	160
	33	5350	44.39	58000	1.50	TRF 138	MY 180M4	161
	39	4540	37.65	58900	1.75			
	45	3970	32.91	59500	2.0			
	53	3360	27.83	60100	2.3			
	50	3570	29.57*	59900	2.2	TR 138	MY 180M4	160
	61	2910	24.12	60400	2.8	TRF 138	MY 180M4	161
	67	2650	22.00*	60600	3.0			
	77	2300	19.04*	60800	3.5			
	87	2030	16.80*	60900	4.0			
	36	4870	40.37*	20200	0.90	TR 108	MY 180M4	158
	42	4250	35.26	22000	1.00	TRF 108	MY 180M4	159
	50	3560	29.49	21500	1.20			
	59	3000	24.90*	20900	1.45			
	65	2730	22.62	20600	1.60			
	73	2420	20.07	20100	1.80			
	80	2200	18.21	19700	1.95			
	94	1890	15.65	19100	2.3			
	107	1660	13.66	18500	2.6			
	126	1400	11.59	17800	3.1			
	145	1220	10.13	17200	3.5			
	186	950	7.86	16300	3.1			
	220	800	6.66	15600	3.7			
	73	2430	20.14	14900	1.05	TR 98	MY 180M4	156
	80	2200	18.24	14700	1.15	TRF 98	MY 180M4	157
	91	1950	16.17	14500	1.25			
	100	1760	14.62	14200	1.30			
	118	1490	12.39	13800	1.45			
	135	1310	10.83	13500	1.60	TR 98	MY 180M4	156
	158	1120	9.29	13400	1.80	TRF 98	MY 180M4	157
	175	1010	8.39	13100	2.0			
	206	860	7.12	12600	2.3			
	236	750	6.21	12100	2.5			
	282	625	5.20	11600	2.8			
	326	545	4.50*	11100	3.0			
	110	1610	13.33	10600	0.80	TR 88	MY 180M4	153
	123	1440	11.93	10400	0.85	TRF 88	MY 180M4	154
	148	1190	9.90*	10200	1.00			
	160	1100	9.14*	10600	1.10			
	178	990	8.22	10300	1.15			
	205	860	7.13	10000	1.25			
	229	770	6.39	9770	1.30			
	276	640	5.30*	9350	1.40			
	349	505	4.20*	7710	1.65	TRX 108	MY 180M4	130
	384	460	3.81	7580	1.80	TRXF 108	MY 180M4	131
	433	410	3.38	7400	2.0			
	477	370	3.07	7250	2.2			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
18.5	555	320	2.64*	7010	2.6	TRX 108	MY 180M4	130
	636	280	2.30	6780	3.0	TRXF 108	MY 180M4	131
	750	235	1.95	6510	3.3			
	858	205	1.71	6290	3.4			
	1015	174	1.44	6020	3.7			
	402	440	3.64*	6060	1.35	TRX 98	MY 180M4	128
	444	400	3.30	5960	1.50	TRXF 98	MY 180M4	129
	501	355	2.92	5830	1.70			
	554	320	2.64	5710	1.85			
	654	270	2.24*	5510	2.2			
	749	235	1.96	5350	2.4			
	895	197	1.64	5120	2.6			
	1035	171	1.42	4940	2.7			
	531	335	2.76*	3040	1.20	TRX 88	MY 180M4	126
	590	300	2.48	3340	1.35	TRXF 88	MY 180M4	127
	680	260	2.15	3630	1.50			
	760	235	1.93	3820	1.55			
	916	193	1.60*	3770	1.65			
	1055	168	1.39	3670	1.75			
22	9.6	22000	153.07	120000	0.80	TR 168	MY 180L4	164
	10	20100	139.98	120000	0.90	TRF 168	MY 180L4	165
	12	17500	121.81*	120000	1.05			
	14	15400	107.49	120000	1.15	TR 168	MY 180L4	164
	16	13400	93.19	120000	1.35	TRF 168	MY 180L4	165
	18	11900	82.91*	120000	1.50			
	20	10600	73.70*	120000	1.70			
	22	9670	67.40	120000	1.85			
	25	8410	58.65	120000	2.1			
	28	7420	51.76	120000	2.4			
	33	6430	44.87	120000	2.8			
	13	15700	109.31	41300	0.85	TR 148	MY 180L4	162
	15	13600	94.60*	61500	0.95	TRF 148	MY 180L4	163
	18	12000	83.47	64600	1.10			
	20	10300	72.09	67300	1.25			
	22	9610	66.99	68300	1.35	TR 148	MY 180L4	162
	24	8760	61.09	69400	1.50	TRF 148	MY 180L4	163
	28	7580	52.87	70800	1.70	TR 148	MY 180L4	162
	31	6690	46.65	71600	1.95	TRF 148	MY 180L4	163
	36	5780	40.29	72400	2.3			
	41	5110	35.64	72900	2.5			
	49	4300	29.95	73400	3.0			
	22	9350	65.20	46900	0.85	TR 138	MY 180L4	160
	25	8480	59.17*	51900	0.95	TRF 138	MY 180L4	161
	29	7290	50.86*	54800	1.10			
	33	6370	44.39	56500	1.25			
	39	5400	37.65	57900	1.50	TR 138	MY 180L4	160
	45	4720	32.91	58700	1.70	TRF 138	MY 180L4	161
	53	3990	27.83	59500	1.90			
	50	4240	29.57*	59300	1.85	TR 138	MY 180L4	160
	61	3460	24.12	60000	2.3	TRF 138	MY 180L4	161
	67	3150	22.00*	60200	2.5			
	77	2730	19.04*	60500	2.9			
	87	2410	16.80*	60700	3.3	TR 138	MY 180L4	160
	101	2080	14.51	60900	3.9	TRF 138	MY 180L4	161
	114	1840	12.83	61000	4.4			
	42	5060	35.26	7280	0.85	TR 108	MY 180L4	158
	50	4230	29.49	20400	1.00	TRF 108	MY 180L4	159
	59	3570	24.90*	20000	1.20	TR 108	MY 180L4	158
	65	3240	22.62	19700	1.35	TRF 108	MY 180L4	159
	73	2880	20.07	19300	1.50			

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page
22	80	2610	18.21	19000	1.85	TR 108	MY 180L4	158
	94	2240	15.65	18500	1.90	TRF 108	MY 180L4	159
	107	1960	13.65	18000	2.2			
	126	1660	11.59	17300	2.6			
	145	1450	10.13	16800	3.0			
	171	1230	8.56	16100	3.5			
	186	1130	7.96	16100	2.6			
	220	960	6.86	15400	3.1			
	252	840	5.82	14800	3.6			
	73	2890	20.14	14000	0.90	TR 98	MY 180L4	156
	80	2620	18.24	13900	0.95	TRF 98	MY 180L4	157
	91	2320	16.17	13700	1.05			
	100	2100	14.62	13600	1.10			
	118	1780	12.39	13200	1.25			
	135	1550	10.83	13000	1.35			
	158	1330	9.29	13100	1.50			
	175	1200	8.39	12800	1.70			
	206	1020	7.12	12300	1.95			
	236	890	6.21	11900	2.1			
	282	745	5.20	11400	2.4			
	326	645	4.50*	10900	2.5			
	148	1420	9.90*	9640	0.85	TR 88	MY 180L4	153
	160	1310	9.14*	10100	0.90	TRF 88	MY 180L4	154
	178	1180	8.22	9960	1.00			
	205	1020	7.13	9700	1.05			
	229	920	6.39	9490	1.10			
	276	760	5.30*	9110	1.20			
	349	600	4.20*	7330	1.40	TRX 108	MY 180L4	130
	384	545	3.81	7230	1.50	TRXF 108	MY 180L4	131
	433	485	3.38	7090	1.70			
	477	440	3.07	6960	1.90			
	556	380	2.64*	6760	2.2	TRX 108	MY 180L4	130
	636	330	2.30	6560	2.5	TRXF 108	MY 180L4	131
	750	280	1.95	6320	2.7			
	858	245	1.71	6120	2.9			
	1015	205	1.44	5870	3.1			
	402	520	3.64*	5720	1.15	TRX 98	MY 180L4	128
	444	475	3.30	5650	1.25	TRXF 98	MY 180L4	129
	501	420	2.92	5560	1.40			
	554	380	2.64	5460	1.55			
	654	320	2.24*	5300	1.85			
	749	280	1.96	5160	2.0			
	895	235	1.64	4960	2.2			
	1035	205	1.42	4790	2.2			
	531	395	2.76*	1270	1.00	TRX 88	MY 180L4	126
	590	355	2.48	1710	1.15	TRXF 88	MY 180L4	127
	680	310	2.15	2160	1.25			
	760	275	1.93	2450	1.30			
	916	230	1.60*	2750	1.35			
	1055	200	1.39	3030	1.45			
30	14	20900	107.49	120000	0.85	TR 168	MY 200L4	164
	16	18200	93.19	120000	1.00	TRF 168	MY 200L4	165
	18	16200	82.91*	120000	1.10			
	20	14400	73.70*	120000	1.25			
	22	13100	67.40	120000	1.35	TR 168	MY 200L4	164
	25	11400	58.65	120000	1.55	TRF 168	MY 200L4	165
	28	10100	51.76	120000	1.80			
	33	8740	44.87	120000	2.1			
	37	7780	39.92	120000	2.3			
	43	6710	34.41	120000	2.7			

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page	
30	53	5450	27.96	120000	3.3	TR	168	MY 200L4	164
	62	4620	23.71	120000	3.9	TRF	168	MY 200L4	165
	18	16300	83.47	32400	0.80	TR	148	MY 200L4	162
	20	14000	72.09	60400	0.95	TRF	148	MY 200L4	163
	22	13100	66.99	62500	1.00				
	24	11900	61.09	64700	1.10				
	28	10300	52.87	67300	1.25				
	32	9090	46.65	69000	1.45				
	36	7850	40.29	70500	1.65				
	41	6950	35.64	71400	1.85				
	49	5840	29.95	72300	2.2				
	61	4710	24.19	73100	2.5				
	72	3980	20.44	73600	3.0				
	82	3510	18.04	73800	3.0				
	94	3050	15.64	74000	4.3				
	29	9910	50.86*	35800	0.80	TR	138	MY 200L4	160
	33	8650	44.39	51200	0.90	TRF	138	MY 200L4	161
	39	7340	37.65	54700	1.10				
	45	6410	32.91	56400	1.25				
	53	5420	27.83	57900	1.40				
	61	4700	24.12	58800	1.70				
	67	4290	22.00*	59200	1.85				
	77	3710	19.04*	59800	2.2				
	88	3270	16.80*	60100	2.4				
	101	2830	14.51	59500	2.8	TR	138	MY 200L4	160
	115	2500	12.83	58400	3.2	TRF	138	MY 200L4	161
	136	2100	10.79	56600	3.8				
	194	1480	7.59	53300	3.5				
	230	1240	6.38	51300	4.1				
	73	3910	20.07	17600	1.10	TR	108	MY 200L4	158
	81	3550	18.21	17400	1.20	TRF	108	MY 200L4	159
	94	3050	15.65	17100	1.40				
	108	2660	13.66	16800	1.60				
	127	2260	11.59	16300	1.90				
	145	1970	10.13	15900	2.2				
	172	1670	8.56	15400	2.6				
	187	1530	7.86	15500	2.0				
	221	1300	6.66	14900	2.3				
	252	1140	5.82	14400	2.6				
	299	960	4.92	13700	3.0				
	101	2850	14.62	12000	0.80	TR	98	MY 200L4	156
	119	2420	12.39	11900	0.90	TRF	98	MY 200L4	157
	136	2110	10.83	11800	1.00				
	158	1810	9.29	12300	1.10				
	175	1640	8.39	12100	1.25				
	207	1390	7.12	11700	1.45				
	237	1210	6.21	11400	1.55				
	283	1010	5.20	10900	1.75	TR	98	MY 200L4	156
	327	880	4.50*	10500	1.85	TRF	98	MY 200L4	157
	434	660	3.38	6370	1.25	TRX	108	MY 200L4	130
	479	600	3.07	6310	1.40	TRXF	108	MY 200L4	131
	557	515	2.64*	6180	1.60				
	638	450	2.30	6050	1.85				
	752	380	1.95	5870	2.0	TRX	108	MY 200L4	130
	860	335	1.71	5720	2.1	TRXF	108	MY 200L4	131
	1020	280	1.44	5520	2.3				
	503	570	2.92	3120	1.05	TRX	98	MY 200L4	128
	556	515	2.64	3560	1.15	TRXF	98	MY 200L4	129
	656	435	2.24*	4050	1.35				
	751	380	1.96	4450	1.50				

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page
30	898	320	1.64	4580	1.60	TRX 98	MY 200L4	128
	1040	275	1.42	4450	1.65	TRXF 98	MY 200L4	129
37	16	22400	93.19	120000	0.80	TR 168	MY 225S4	164
	18	19900	82.91*	120000	0.90	TRF 168	MY 225S4	165
	20	17700	73.70*	120000	1.00			
	22	16200	67.40	120000	1.10			
	25	14100	58.65	120000	1.30			
	28	12400	51.76	120000	1.45			
	33	10800	44.87	120000	1.65			
	37	9600	39.92	120000	1.90			
	43	8270	34.41	120000	2.2			
	53	6720	27.96	120000	2.7			
	48	7380	30.71	120000	1.35	TR 168	MY 225S4	164
	60	5900	24.57	120000	2.4	TRF 168	MY 225S4	165
	67	5250	21.85	120000	2.5			
	77	4580	19.03	120000	3.5			
	87	4080	16.98	120000	3.7			
	22	16100	66.99	35000	0.80	TR 148	MY 225S4	162
	24	14700	61.09	54200	0.90	TRF 148	MY 225S4	163
	28	12700	52.87	63200	1.00			
	32	11200	46.65	65900	1.15	TR 148	MY 225S4	162
	36	9680	40.29	68200	1.35	TRF 148	MY 225S4	163
	41	8570	35.64	69700	1.50			
	49	7200	29.95	71100	1.80			
	61	5810	24.19	72400	2.1			
	72	4910	20.44	73000	2.4	TR 148	MY 225S4	162
	82	4340	18.04	73400	2.4	TRF 148	MY 225S4	163
	94	3760	15.64	73700	3.5			
	106	3340	13.91	73900	3.8	TR 148	MY 225S4	162
						TRF 148	MY 225S4	163
	39	9050	37.65	49400	0.90	TR 138	MY 225S4	160
	45	7910	32.91	53600	1.00	TRF 138	MY 225S4	161
	53	6690	27.83	55900	1.15			
	61	5800	24.12	57300	1.40	TR 138	MY 225S4	160
	67	5290	22.00*	58000	1.50	TRF 138	MY 225S4	161
	77	4580	19.04*	57800	1.75			
	88	4040	16.80*	57300	2.0			
	101	3490	14.51	56600	2.3	TR 138	MY 225S4	160
	115	3080	12.83	55800	2.6	TRF 138	MY 225S4	161
	136	2590	10.79	54400	3.1			
	169	2090	8.71	52600	3.7			
	194	1820	7.59	51900	2.8			
	230	1530	6.38	50100	3.3			
	285	1240	5.15	47800	3.7			
	73	4820	20.07	16100	0.90	TR 108	MY 225S4	158
	81	4380	18.21	16100	1.00	TRF 108	MY 225S4	159
	94	3760	15.65	15900	1.15			
	108	3280	13.66	15700	1.30			
	127	2790	11.59	15400	1.55			
	145	2430	10.13	15100	1.75			
	172	2060	8.56	14700	2.10			
	187	1890	7.86	15000	1.55			
	221	1600	6.66	14400	1.85			
	252	1400	5.82	14000	2.1	TR 108	MY 225S4	158
	299	1180	4.92	13400	2.5	TRF 108	MY 225S4	159
	434	810	3.38	4470	1.00	TRX 108	MY 225S4	130
	479	740	3.07	4950	1.10	TRXF 108	MY 225S4	131
	557	635	2.64*	5530	1.30			
	638	555	2.30	5610	1.50			
	752	470	1.95	5490	1.65			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
37	860	410	1.71	5370	1.70	TRX 108	MY 225S4	130
	1020	345	1.44	5220	1.85	TRXF 108	MY 225S4	131
45	20	21500	73.70*	120000	0.85	TR 168	MY 225M4	164
	22	19700	67.40	120000	0.90	TRF 168	MY 225M4	165
	25	17100	58.65	120000	1.05			
	28	15100	51.76	120000	1.20			
	33	13100	44.87	120000	1.35	TR 168	MY 225M4	164
	37	11700	39.92	120000	1.55	TRF 168	MY 225M4	165
	43	10100	34.41	120000	1.80			
	53	8170	27.96	120000	2.2			
	62	6930	23.71	120000	2.6			
	48	8980	30.71	120000	1.10	TR 168	MY 225M4	164
	60	7180	24.57	120000	1.95	TRF 168	MY 225M4	165
	67	6360	21.85	120000	2.0			
	77	5560	19.03	120000	2.9			
	87	4960	16.98	120000	3.0			
	28	15500	52.87	44400	0.85	TR 148	MY 225M4	162
	32	13600	46.65	61300	0.95	TRF 148	MY 225M4	163
	36	11800	40.29	65000	1.10			
	41	10400	35.64	67200	1.25			
	49	8760	29.95	69400	1.50			
	61	7070	24.19	71300	1.70			
	72	5970	20.44	72200	2.0			
	82	5270	18.04	72800	2.0			
	94	4570	15.64	73200	2.8			
	106	4070	13.91	73500	3.1			
	123	3510	11.99	73800	3.7			
	203	2120	7.25	74300	4.1			
	45	9620	32.91	41700	0.85	TR 138	MY 225M4	160
	53	8130	27.83	51200	0.95	TRF 138	MY 225M4	161
	61	7050	24.12	52400	1.15			
	67	6430	22.00*	52900	1.25			
	77	5670	19.04*	53300	1.45			
	88	4910	16.80*	53400	1.65			
	101	4240	14.51	53200	1.90			
	115	3750	12.83	52800	2.1			
	136	3150	10.79	51900	2.5			
	169	2550	8.71	50500	3.1			
	194	2220	7.59	50200	2.3			
	230	1860	6.38	48700	2.7			
	285	1510	5.15	46700	3.1			
	94	4580	15.65	14600	0.95	TR 108	MY 225M4	158
	108	3990	13.66	14600	1.10	TRF 108	MY 225M4	159
	127	3390	11.59	14400	1.25			
	145	2960	10.13	14300	1.45			
	172	2500	8.56	14000	1.70			
	187	2300	7.86	14400	1.30			
	221	1950	6.66	14000	1.50			
	252	1700	5.82	13600	1.75			
	299	1440	4.92	13100	2.0			
	434	990	3.38	1360	0.85	TRX 108	MY 225M4	130
	479	900	3.07	2080	0.90	TRXF 108	MY 225M4	131
	557	770	2.64*	2970	1.10	TRX 108	MY 225M4	130
	638	675	2.30	3640	1.25	TRXF 108	MY 225M4	131
	752	570	1.95	4200	1.35			
	860	500	1.71	4540	1.40			
	1020	420	1.44	4890	1.55			
55	25	20900	58.65	120000	0.85	TR 168	MY 250M4	164
	29	18400	51.76	120000	1.00	TRF 168	MY 250M4	165
	33	16000	44.87	120000	1.15			

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page
55	37	14200	39.92	120000	1.25	TR 168	MY 250M4	164
	43	12300	34.41	120000	1.45	TRF 168	MY 250M4	165
	53	9980	27.96	120000	1.80			
	62	8440	23.71	120000	2.1			
	60	8750	24.57	120000	1.60	TR 168	MY 250M4	164
	68	7780	21.85	120000	1.65	TRF 168	MY 250M4	165
	77	6790	19.03	120000	2.4			
	87	6050	16.98	120000	2.5			
	102	5150	14.48	120000	3.5			
	123	4270	11.99	120000	4.0			
	32	16600	46.65	26600	0.80	TR 148	MY 250M4	162
	37	14300	40.29	58200	0.90	TRF 148	MY 250M4	163
	41	12700	35.64	63300	1.00			
	49	10700	29.95	66800	1.20			
	61	8610	24.19	69600	1.40			
	72	7280	20.44	71100	1.65			
	82	6420	18.04	71900	1.65			
	94	5570	15.64	72500	2.3			
	106	4950	13.91	73000	2.5			
	123	4270	11.99	73400	3.0			
	151	3470	9.74	73800	3.8			
	203	2580	7.25	74200	3.4			
	250	2100	5.89	72500	4.1			
	77	6780	19.04*	47800	1.20	TR 138	MY 250M4	160
	88	5980	16.80*	48500	1.35	TRF 138	MY 250M4	161
	102	5170	14.51	48900	1.55			
	115	4570	12.83	49000	1.75	TR 138	MY 250M4	160
	137	3840	10.79	48800	2.1	TRF 138	MY 250M4	161
	169	3100	8.71	48000	2.5			
	194	2700	7.59	48100	1.90			
	231	2270	6.38	46900	2.3			
	286	1830	5.15	45200	2.5			
75	33	21700	44.87	120000	0.85	TR 168	MY 280S4	164
	37	19300	39.92	120000	0.95	TRF 168	MY 280S4	165
	43	16700	34.41	120000	1.10			
	53	13500	27.96	120000	1.35			
	62	11500	23.71	120000	1.55			
	60	11900	24.57	120000	1.20	TR 168	MY 280S4	164
	68	10600	21.85	120000	1.25	TRF 168	MY 280S4	165
	78	9210	19.03	120000	1.75			
	87	8220	16.98	120000	1.85			
	102	7000	14.48	120000	2.6			
	123	5800	11.99	116600	2.9			
	145	4950	10.24	112800	3.4			
	49	14500	29.95	56500	0.90	TR 148	MY 280S4	162
	61	11700	24.19	65100	1.00	TRF 148	MY 280S4	163
	72	9890	20.44	67900	1.20			
	82	8730	18.04	69500	1.20			
	95	7570	15.64	70800	1.70			
	106	6730	13.91	71600	1.85			
	123	5800	11.99	72400	2.2			
	152	4710	9.74	73100	2.8	TR 148	MY 280S4	162
	179	4000	8.26	73500	3.3	TRF 148	MY 280S4	163
	204	3510	7.25	73100	2.5			
	251	2850	5.89	70100	3.0			
	296	2420	5.00	67600	3.6			
90	37	23200	39.92	120000	0.80	TR 168	MY 280M4	164
	43	20000	34.41	120000	0.90	TRF 168	MY 280M4	165
	53	16200	27.96	120000	1.10			
	62	13800	23.71	120000	1.30			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
90	78	11100	19.03	120000	1.45	TR 168	MY 280M4	164
						TRF 168	MY 280M4	165
	87	9860	16.98	120000	1.50	TR 168	MY 280M4	164
	102	8410	14.48	117300	2.1	TRF 168	MY 280M4	165
	123	6960	11.99	113500	2.4			
	145	5940	10.24	110100	2.9			
	95	9090	15.64	69000	1.45	TR 148	MY 280M4	162
	106	8080	13.91	70200	1.55	TRF 148	MY 280M4	163
	123	6960	11.99	71400	1.85			
	152	5660	9.74	72500	2.3			
	179	4800	8.26	73000	2.7			
	204	4210	7.25	70900	2.1			
	251	3420	5.89	68300	2.5			
	296	2900	5.00	66100	3.0			
110	53	19800	27.96	117100	0.90	TR 168	MY 315S4	164
	63	16800	23.71	116900	1.05	TRF 168	MY 315S4	165
	78	13500	19.03	115500	1.20			
	87	12000	16.98	114300	1.25			
	103	10200	14.48	112200	1.75			
	124	8480	11.99	109300	2.0			
	145	7240	10.24	106500	2.4			
132	63	20100	23.71	107900	0.90	TR 168	MY 315M4	164
	78	16200	19.03	108300	1.00	TRF 168	MY 315M4	165
	87	14400	16.98	107800	1.05			
	103	12300	14.48	106700	1.45			
	124	10200	11.99	104700	1.65			
	145	8690	10.24	102600	1.95			
160	103	14900	14.48	99700	1.20	TR 168	MY 315M4A	164
	124	12300	11.99	98900	1.40	TRF 168	MY 315M4A	165
	145	10500	10.24	97600	1.60			

6.3 TR../TRF..MY.. Performance parameter

$M_2 \text{ max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]				Page
130	0.16	8612	4230	TR	28 / TRF18	MY 63S4	166
	0.19	7425	4230	TRF	28 / TRF18	MY 63S4	166
	0.20	6921	4230				
	0.23	6050	4230				
	0.26	5217	4230				
	0.30	4661	4230				
	0.34	4073	4230				
	0.39	3516	4230				
	0.44	3160	4230				
	0.50	2763	4230				
	0.57	2414	4230				
	0.65	2110	4230				
	0.76	1822	4230	TR	28 / TRF18	MY 63S4	166
	0.87	1580	4230	TRF	28 / TRF18	MY 63S4	166
	0.94	1464	4230				
	1.1	1270	4230				
	1.2	1100	4230				
	1.4	972	4230				
	1.6	840	4230				
	1.9	741	4230				
	2.1	654	4230				
	2.4	566	4230				
	2.8	499	4230				
	3.1	440	4230	TR	28 / TRF18	MY 63S4	166
	3.6	381	4230	TRF	28 / TRF18	MY 63S4	166
	4.2	329	4230				
	4.8	290	4230				
	5.4	256	4230				
	6.1	227	4230				
	6.8	203	4230				
	7.4	179	4230	TR	28 / TRF18	MY 63M4	166
	8.5	156	4230	TRF	28 / TRF18	MY 63M4	166
	9.8	135	4230				
	11	118	4230				
	12	104	4230	TR	28 / TRF18	MY 63L4	166
	14	90	4230	TRF	28 / TRF18	MY 63L4	166
200	0.16	8595	4950	TR	38 / TRF18	MY 63S4	166
	0.19	7411	4950	TRF	38 / TRF18	MY 63S4	166
	0.20	6907	4950				
	0.23	6038	4950				
	0.27	5206	4950				
	0.30	4651	4950				
	0.34	4065	4950				
	0.38	3658	4950				
	0.44	3154	4950				
	0.50	2757	4950				
	0.57	2409	4950				
	0.66	2106	4950				
	0.76	1818	4950	TR	38 / TRF18	MY 63S4	166
	0.88	1576	4950	TRF	38 / TRF18	MY 63S4	166
	1.0	1359	4950				
	1.1	1267	4950				
	1.3	1098	4950				
	1.4	970	4950				
	1.7	839	4950				
	1.9	740	4950				

$M_{2\max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]				Page
200	2.1	653	4950	TR	38 / TRF18	MY 63S4	166
	2.4	577	4950	TRF	38 / TRF18	MY 63S4	166
	2.8	496	4950				
	3.1	439	4950	TR	38 / TRF18	MY 63S4	166
	3.6	378	4950	TRF	38 / TRF18	MY 63S4	166
	4.2	328	4950				
	4.6	289	4950	TR	38 / TRF18	MY 63M4	166
	5.0	265	4950	TRF	38 / TRF18	MY 63M4	166
	5.8	226	4950				
	6.5	202	4950				
	7.3	179	4950	TR	38 / TRF18	MY 63L4	166
	8.3	156	4950	TRF	38 / TRF18	MY 63L4	166
	9.7	135	4950				
	10	127	4950				
	13	104	4950	TR	38 / TRF18	MY 71D4	166
	15	90	4950	TRF	38 / TRF18	MY 71D4	166
300	0.10	13598	5420	TR	48 / TRF38	MY 63S4	166
	0.11	12472	5420	TRF	48 / TRF38	MY 63S4	166
	0.13	10619	5420				
	0.15	9155	5420				
	0.16	8534	5420				
	0.18	7480	5420				
	0.20	6993	5420				
	0.22	6171	5420				
	0.25	5624	5420				
	0.28	4849	5420				
	0.31	4520	5420				
	0.35	3951	5420				
	0.37	3704	5420				
	0.42	3268	5420				
	0.48	2898	5420				
	0.56	2463	5420				
	0.53	2598	5420	TR	48 / TRF38	MY 63S4	166
	0.58	2383	5420	TRF	48 / TRF38	MY 63S4	166
	0.68	2029	5420				
	0.79	1749	5420				
	0.85	1630	5420				
	0.97	1425	5420				
	1.0	1336	5420				
	1.2	1179	5420				
	1.3	1074	5420				
	1.5	927	5420				
	1.6	863	5420				
	1.8	755	5420				
	2.5	546	5420	TR	48 / TRF38	MY 63S4	166
	2.8	502	5420	TRF	48 / TRF38	MY 63S4	166
	3.1	429	5420	TR	48 / TRF38	MY 63M4	166
	3.6	372	5420	TRF	48 / TRF38	MY 63M4	166
	3.8	348	5420				
	4.4	301	5420				
	5.1	255	5420	TR	48 / TRF38	MY 63L4	166
	5.7	228	5420	TRF	48 / TRF38	MY 63L4	166
450	0.10	14369	7110	TR	58 / TRF38	MY 63S4	166
	0.11	12095	7110	TRF	58 / TRF38	MY 63S4	166
	0.13	10860	7110				
	0.15	9445	7110				
	0.16	8480	7110				
	0.19	7312	7110				
	0.21	6521	7110	TR	58 / TRF38	MY 63S4	166
	0.25	5585	7110	TRF	58 / TRF38	MY 63S4	166

$M_{2,max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]			Page	
450	0.28	4926	7110	TR	58 / TRF38	MY 63S4	166
	0.32	4378	7110	TRF	58 / TRF38	MY 63S4	166
	0.36	3873	7110				
	0.41	3344	7110				
	0.47	2907	7110				
	0.54	2567	7110				
	0.61	2244	7110				
	0.70	1967	7110				
	0.80	1732	7110	TR	58 / TRF38	MY 63S4	166
	0.89	1555	7110	TRF	58 / TRF38	MY 63S4	166
	0.99	1399	7110				
	1.2	1189	7110				
	1.3	1034	7110				
	1.8	782	7110				
	1.9	678	7110	TR	58 / TRF38	MY 63M4	166
	2.2	604	7110	TRF	58 / TRF38	MY 63M4	166
	2.5	537	7110				
	2.8	471	7110				
	3.6	357	7110	TR	58 / TRF38	MY 63L4	166
	4.1	319	7110	TRF	58 / TRF38	MY 63L4	166
	5.1	273	7110	TR	58 / TRF38	MY 71D4	166
	5.7	241	7110	TRF	58 / TRF38	MY 71D4	166
600	0.09	15361	7560	TR	68 / TRF38	MY 63S4	166
	0.11	12931	7560	TRF	68 / TRF38	MY 63S4	166
	0.12	11996	7560				
	0.14	10097	7560				
	0.15	9066	7560				
	0.18	7816	7560				
	0.20	6732	7560				
	0.23	5970	7560				
	0.26	5268	7560				
	0.29	4680	7560				
	0.33	4136	7560				
	0.39	3566	7560				
	0.44	3125	7560				
	0.50	2745	7560				
	0.57	2403	7560				
	0.51	2682	7560	TR	68 / TRF38	MY 63S4	166
	0.56	2460	7560	TRF	68 / TRF38	MY 63S4	166
	0.66	2094	7560				
	0.76	1805	7560				
	0.85	1629	7560				
	0.94	1471	7560				
	1.0	1379	7560				
	1.8	730	7560	TR	68 / TRF38	MY 63M4	166
	2.3	571	7560	TRF	68 / TRF38	MY 63M4	166
	2.7	486	7560	TR	68 / TRF38	MY 63L4	166
				TRF	68 / TRF38	MY 63L4	166
	0.84	1652	7560	TR	68 / TRF38	MY 63S4	166
	0.96	1432	7560	TRF	68 / TRF38	MY 63S4	166
	1.1	1259	7560				
	1.2	1106	7560				
	1.6	836	7560	TR	68 / TRF38	MY 63M4	166
	1.8	750	7560	TRF	68 / TRF38	MY 63M4	166
	2.0	646	7560				
	2.3	574	7560				
	2.6	495	7560	TR	68 / TRF38	MY 63L4	166
	3.0	438	7560	TRF	68 / TRF38	MY 63L4	166
	3.4	388	7560				

$M_{2\max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]				Page
600	4.0	344	7560	TR	68 / TRF38	MY 71D4	166
	4.7	294	7560	TRF	68 / TRF38	MY 71D4	166
820	0.08	16370	9920	TR	78 / TRF38	MY 63S4	166
	0.09	15015	9920	TRF	78 / TRF38	MY 63S4	166
	0.10	13885	9920				
	0.11	12783	9920				
	0.13	11021	9920				
	0.14	9788	9920				
	0.16	8714	9920				
	0.18	7617	9920				
	0.20	6770	9920				
	0.24	5838	9920				
	0.27	5184	9920	TR	78 / TRF38	MY 63S4	166
	0.31	4470	9920	TRF	78 / TRF38	MY 63S4	166
	0.35	3999	9920				
	0.40	3488	9920				
	0.45	3053	9920				
	0.52	2671	9920				
	0.44	3151	9920	TR	78 / TRF38	MY 63S4	166
	0.48	2890	9920	TRF	78 / TRF38	MY 63S4	166
	0.56	2460	9920				
	0.65	2121	9920				
	0.70	1977	9920				
	0.80	1728	9920				
	0.85	1620	9920				
	0.97	1430	9920				
	1.1	1303	9920				
	1.2	1124	9920	TR	78 / TRF38	MY 63M4	166
	1.3	1047	9920	TRF	78 / TRF38	MY 63M4	166
	1.4	915	9920				
	1.5	858	9920				
	1.7	757	9920				
	1.9	671	9920	TR	78 / TRF38	MY 63L4	166
	2.3	571	9920	TRF	78 / TRF38	MY 63L4	166
	2.3	560	9920	TR	78 / TRF38	MY 63L4	166
				TRF	78 / TRF38	MY 63L4	166
	2.8	488	9920	TR	78 / TRF38	MY 71D4	166
	3.2	436	9920	TRF	78 / TRF38	MY 71D4	166
	3.7	373	9920				
	4.2	327	9920	TR	78 / TRF38	MY 80K4	166
	4.7	289	9920	TRF	78 / TRF38	MY 80K4	166
	5.2	260	9920				
1550	0.08	17452	16900	TR	88 / TRF58	MY 63S4	166
	0.09	15310	16900	TRF	88 / TRF58	MY 63S4	166
	0.10	13813	16900				
	0.11	12025	16900				
	0.13	10549	16900				
	0.15	9244	16900				
	0.17	8109	16900				
	0.20	7038	16900				
	0.22	6174	16900				
	0.25	5449	16900				
	0.29	4831	16900				
	0.33	4206	16900				
	0.37	3744	16900				
	0.43	3233	16900	TR	88 / TRF58	MY 63S4	166
	0.48	2873	16900	TRF	88 / TRF58	MY 63S4	166
	0.67	1961	16900	TR	88 / TRF58	MY 63M4	166
				TRF	88 / TRF58	MY 63M4	166

$M_{2,max}$ [Nm]	n_2 [r/min]	i	F_{r_2} [N]			Page	
1550	0.34	4020	16900	TR	88 / TRF58	MY 63S4	166
	0.43	3182	16900	TRF	88 / TRF58	MY 63S4	166
	0.50	2770	16900				
	0.53	2595	16900				
	0.62	2129	16900	TR	88 / TRF58	MY 63M4	166
	0.68	1930	16900	TRF	88 / TRF58	MY 63M4	166
	0.76	1733	16900				
	0.89	1489	16900				
	0.93	1395	16900	TR	88 / TRF58	MY 63L4	166
	1.1	1232	16900	TRF	88 / TRF58	MY 63L4	166
	1.1	1145	16900				
	1.2	1037	16900				
	1.7	802	16900	TR	88 / TRF58	MY 71D4	166
	1.8	754	16900	TRF	88 / TRF58	MY 71D4	166
	0.76	1737	16900	TR	88 / TRF58	MY 63M4	166
	0.87	1524	16900	TRF	88 / TRF58	MY 63M4	166
	1.0	1303	16900	TR	88 / TRF58	MY 63L4	166
				TRF	88 / TRF58	MY 63L4	166
	1.4	1008	16900	TR	88 / TRF58	MY 80K4	166
				TRF	88 / TRF58	MY 80K4	166
	1.6	885	16900	TR	88 / TRF58	MY 71D4	166
				TRF	88 / TRF58	MY 71D4	166
	2.0	685	16900	TR	88 / TRF58	MY 80K4	166
	2.3	599	16900	TRF	88 / TRF58	MY 80K4	166
	3.5	398	16900	TR	88 / TRF58	MY 80N4	166
	3.9	352	16900	TRF	88 / TRF58	MY 80N4	166
	4.6	305	16900	TR	88 / TRF58	MY 90S4	166
	5.2	268	16900	TRF	88 / TRF58	MY 90S4	166
	2.5	538	16900	TR	88 / TRF58	MY 80K4	166
	2.9	472	16900	TRF	88 / TRF58	MY 80K4	166
	3.5	400	16900	TR	88 / TRF58	MY 80N4	166
	3.8	361	16900	TRF	88 / TRF58	MY 80N4	166
	4.7	300	16900	TR	88 / TRF58	MY 90S4	166
	5.5	256	16900	TRF	88 / TRF58	MY 90S4	166
3000	0.06	21769	19800	TR	98 / TRF58	MY 63S4	166
	0.07	19332	19800	TRF	98 / TRF58	MY 63S4	166
	0.08	17230	19800				
	0.09	14999	19800				
	0.10	13320	19800				
	0.12	11156	19800				
	0.14	10030	19800				
	0.16	8706	19800				
	0.18	7692	19800				
	0.21	6708	19800				
	0.23	5931	19800				
	0.27	5161	19800				
	0.33	4004	19800	TR	98 / TRF58	MY 63M4	166
	0.38	3481	19800	TRF	98 / TRF58	MY 63M4	166
	0.29	4678	19800	TR	98 / TRF58	MY 63S4	166
				TRF	98 / TRF58	MY 63S4	166
	0.31	4309	19800	TR	98 / TRF58	MY 63M4	166
	0.36	3702	19800	TRF	98 / TRF58	MY 63M4	166
	0.44	3019	19800				
	0.49	2668	19800	TR	98 / TRF58	MY 63L4	166
	0.58	2245	19800	TRF	98 / TRF58	MY 63L4	166
	0.64	2016	19800				
	0.80	1733	19800	TR	98 / TRF58	MY 71D4	166
	0.85	1623	19800	TRF	98 / TRF58	MY 71D4	166
	0.96	1424	19800				

$M_{2\max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]				Page
3000	1.1	1207	19800	TR	98 / TRF58	MY 80K4	166
	1.2	1084	19800	TRF	98 / TRF58	MY 80K4	166
	1.5	934	19800				
	1.6	878	19800				
	1.8	755	19800	TR	98 / TRF58	MY 80N4	166
				TRF	98 / TRF58	MY 80N4	166
	0.76	1823	19800	TR	98 / TRF58	MY 71D4	166
	0.87	1583	19800	TRF	98 / TRF58	MY 71D4	166
	0.99	1396	19800				
	1.10	1228	19800	TR	98 / TRF58	MY 80K4	166
	1.3	1069	19800	TRF	98 / TRF58	MY 80K4	166
	1.4	938	19800				
	1.7	824	19800	TR	98 / TRF58	MY 80N4	166
	1.9	737	19800	TRF	98 / TRF58	MY 80N4	166
	2.2	632	19800	TR	98 / TRF58	MY 90S4	166
	2.5	560	19800	TRF	98 / TRF58	MY 90S4	166
	2.9	484	19800				
	3.3	431	19800	TR	98 / TRF58	MY 90L4	166
	3.7	379	19800	TRF	98 / TRF58	MY 90L4	166
	4.2	336	19800				
	4.8	296	19800	TR	98 / TRF58	MY 100M4	166
	5.7	249	19800	TRF	98 / TRF58	MY 100M4	166
	6.0	234	19800				
	2.2	625	19800	TR	98 / TRF58	MY 90S4	166
	2.6	549	19800	TRF	98 / TRF58	MY 90S4	166
	5.2	270	19800	TR	98 / TRF58	MY 100M4	166
	6.2	227	19800	TRF	98 / TRF58	MY 100M4	166
4300	0.07	20018	29500	TR	108 / TRF78	MY 63S4	166
	0.08	17080	29500	TRF	108 / TRF78	MY 63S4	166
	0.09	14936	29500				
	0.11	12829	29500	TR	108 / TRF78	MY 63S4	166
	0.12	11256	29500	TRF	108 / TRF78	MY 63S4	166
	0.14	9547	29500				
	0.16	8618	29500				
	0.18	7583	29500				
	0.20	6743	29500	TR	108 / TRF78	MY 63M4	166
	0.22	5914	29500	TRF	108 / TRF78	MY 63M4	166
	0.26	5168	29500				
	0.30	4435	29500				
	0.33	3896	29500	TR	108 / TRF78	MY 63L4	166
	0.43	3039	29500	TRF	108 / TRF78	MY 63L4	166
	0.34	3918	29500	TR	108 / TRF78	MY 63M4	166
				TRF	108 / TRF78	MY 63M4	166
	0.39	3343	29500	TR	108 / TRF78	MY 63L4	166
	0.43	3034	29500	TRF	108 / TRF78	MY 63L4	166
	0.52	2653	29500	TR	108 / TRF78	MY 71D4	166
	0.61	2280	29500	TRF	108 / TRF78	MY 71D4	166
	0.67	2067	29500				
	0.80	1693	29500	TR	108 / TRF78	MY 80K4	166
	0.88	1550	29500	TRF	108 / TRF78	MY 80K4	166
	0.97	1407	29500				
	1.1	1209	29500	TR	108 / TRF78	MY 80N4	166
	1.3	1055	29500	TRF	108 / TRF78	MY 80N4	166
	1.5	919	29500	TR	108 / TRF78	MY 90S4	166
	1.7	815	29500	TRF	108 / TRF78	MY 90S4	166
	1.9	717	29500				
	2.2	626	29500	TR	108 / TRF78	MY 90L4	166
	2.7	528	29500	TRF	108 / TRF78	MY 90L4	166
	0.69	1987	29500	TR	108 / TRF78	MY 71D4	166
				TRF	108 / TRF78	MY 71D4	166

$M_{2,max}$ [Nm]	n_2 [r/min]	i	F_{r_2} [N]			Page		
4300	0.74	1827	29500	TR	108 / TRF78	MY 80K4	166	
	0.85	1599	29500	TRF	108 / TRF78	MY 80K4	166	
	0.97	1400	29500					
	1.1	1226	29500	TR	108 / TRF78	MY 80N4	166	
	1.2	1104	29500	TRF	108 / TRF78	MY 80N4	166	
	1.5	939	29500					
	1.7	822	29500	TR	108 / TRF78	MY 90S4	166	
				TRF	108 / TRF78	MY 90S4	166	
	2.3	614	29500	TR	108 / TRF78	MY 90L4	166	
	2.6	544	29500	TRF	108 / TRF78	MY 90L4	166	
	2.9	492	29500					
	3.4	417	29500	TR	108 / TRF78	MY 100M4	166	
	3.8	369	29500	TRF	108 / TRF78	MY 100M4	166	
	4.4	323	29500					
	4.9	285	29500	TR	108 / TRF78	MY 100L4	166	
	5.5	253	29500	TRF	108 / TRF78	MY 100L4	166	
	6.6	214	29500	TR	108 / TRF78	MY 112M4	166	
	7.6	187	29500	TRF	108 / TRF78	MY 112M4	166	
	3.0	469	29500	TR	108 / TRF78	MY 90L4	166	
				TRF	108 / TRF78	MY 90L4	166	
	3.3	426	29500	TR	108 / TRF78	MY 100M4	166	
	3.7	377	29500	TRF	108 / TRF78	MY 100M4	166	
	4.4	325	29500					
	4.9	284	29500	TR	108 / TRF78	MY 100L4	166	
	5.5	256	29500	TRF	108 / TRF78	MY 100L4	166	
	6.5	220	29500	TR	108 / TRF78	MY 112M4	166	
	7.3	193	29500	TRF	108 / TRF78	MY 112M4	166	
	8.2	172	29500					
	8000	0.06	22203	53400	TR	138 / TRF78	MY 63S4	166
		0.07	18945	53400	TRF	138 / TRF78	MY 63S4	166
0.08		16586	53400					
0.09		14777	53400					
0.11		12921	53400					
0.11		11712	53400	TR	138 / TRF78	MY 63M4	166	
0.12		10573	53400	TRF	138 / TRF78	MY 63M4	166	
0.15		8784	53400					
0.17		7479	53400	TR	138 / TRF78	MY 63L4	166	
0.20		6589	53400	TRF	138 / TRF78	MY 63L4	166	
0.22		5834	53400					
0.27		5116	53400	TR	138 / TRF78	MY 71D4	166	
0.31		4464	53400	TRF	138 / TRF78	MY 71D4	166	
0.35		3928	53400					
0.39		3454	53400	TR	138 / TRF78	MY 80K4	166	
0.45		2993	53400	TRF	138 / TRF78	MY 80K4	166	
0.29		4709	53400	TR	138 / TRF78	MY 71D4	166	
0.34		4018	53400	TRF	138 / TRF78	MY 71D4	166	
0.39		3514	53400	TR	138 / TRF78	MY 80K4	166	
0.41		3338	53400	TRF	138 / TRF78	MY 80K4	166	
0.46		2929	53400					
0.55		2484	53400					
0.62		2242	53400	TR	138 / TRF78	MY 80N4	166	
0.74		1863	53400	TRF	138 / TRF78	MY 80N4	166	
0.88		1586	53400	TR	138 / TRF78	MY 90S4	166	
1.0		1391	53400	TRF	138 / TRF78	MY 90S4	166	
1.1		1256	53400					
1.3		1105	53400	TR	138 / TRF78	MY 90L4	166	
1.4		1043	53400	TRF	138 / TRF78	MY 90L4	166	
1.6		888	53400					
2.0	699	53400	TR	138 / TRF78	MY 100M4	166		
2.3	609	53400	TRF	138 / TRF78	MY 100M4	166		

$M_{2\max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]				Page
8000	0.51	2658	53400	TR	138 / TRF78	MY 80K4	166
	0.56	2412	53400	TRF	138 / TRF78	MY 80K4	166
	0.67	2073	53400	TR	138 / TRF78	MY 80N4	166
	0.75	1839	53400	TRF	138 / TRF78	MY 80N4	166
	0.88	1598	53400	TR	138 / TRF78	MY 90S4	166
	1.00	1397	53400	TRF	138 / TRF78	MY 90S4	166
	1.1	1226	53400				
	1.3	1090	53400	TR	138 / TRF78	MY 90L4	166
	1.5	951	53400	TRF	138 / TRF78	MY 90L4	166
	1.7	831	53400	TR	138 / TRF78	MY 100M4	166
	1.9	730	53400	TRF	138 / TRF78	MY 100M4	166
	2.2	629	53400				
	2.5	560	53400	TR	138 / TRF78	MY 100L4	166
	2.9	490	53400	TRF	138 / TRF78	MY 100L4	166
	3.3	428	53400	TR	138 / TRF78	MY 112M4	166
	3.7	381	53400	TRF	138 / TRF78	MY 112M4	166
	4.4	323	53400	TR	138 / TRF78	MY 132S4	166
	4.9	291	53400	TRF	138 / TRF78	MY 132S4	166
	5.6	255	53400				
	2.5	564	53400	TR	138 / TRF78	MY 100L4	166
	2.7	517	53400	TRF	138 / TRF78	MY 100L4	166
	3.1	453	53400				
	3.8	376	53400	TR	138 / TRF78	MY 112M4	166
	4.2	339	53400	TRF	138 / TRF78	MY 112M4	166
	4.8	297	53400	TR	138 / TRF78	MY 132S4	166
				TRF	138 / TRF78	MY 132S4	166
13000	0.06	23401	62700	TR	148 / TRF78	MY 63S4	166
	0.06	21342	62700	TRF	148 / TRF78	MY 63S4	166
	0.07	18210	62700	TR	148 / TRF78	MY 63M4	166
	0.08	15923	62700	TRF	148 / TRF78	MY 63M4	166
	0.09	14075	62700				
	0.11	12344	62700	TR	148 / TRF78	MY 63L4	166
	0.12	11143	62700	TRF	148 / TRF78	MY 63L4	166
	0.13	9743	62700				
	0.16	8443	62700	TR	148 / TRF78	MY 71D4	166
	0.19	7307	62700	TRF	148 / TRF78	MY 71D4	166
	0.21	6447	62700				
	0.24	5568	62700	TR	148 / TRF78	MY 80K4	166
	0.28	4926	62700	TRF	148 / TRF78	MY 80K4	166
	0.31	4325	62700				
	0.37	3754	62700	TR	148 / TRF78	MY 80N4	166
	0.42	3302	62700	TRF	148 / TRF78	MY 80N4	166
	0.48	2898	62700				
	0.55	2555	62700	TR	148 / TRF78	MY 90S4	166
	0.63	2211	62700	TRF	148 / TRF78	MY 90S4	166
	0.72	1951	62700				
	0.83	1705	62700	TR	148 / TRF78	MY 90L4	166
	0.92	1536	62700	TRF	148 / TRF78	MY 90L4	166
	1.1	1329	62700	TR	148 / TRF78	MY 100M4	166
	1.2	1166	62700	TRF	148 / TRF78	MY 100M4	166
	1.4	1029	62700				
	1.6	889	62700	TR	148 / TRF78	MY 100L4	166
	1.8	784	62700	TRF	148 / TRF78	MY 100L4	166
	2.0	695	62700	TR	148 / TRF78	MY 112M4	166
	2.3	619	62700	TRF	148 / TRF78	MY 112M4	166
	2.5	558	62700				
	2.9	489	62700	TR	148 / TRF78	MY 132S4	166
				TRF	148 / TRF78	MY 132S4	166

$M_{2,max}$ [Nm]	n_2 [r/min]	i	F_{r2} [N]			Page
13000	2.7	533	62700	TR 148 / TRF88	MY 112M4	166
				TRF 148 / TRF88	MY 112M4	166
	3.1	462	62700	TR 148 / TRF88	MY 132S4	166
	3.4	426	62700	TRF 148 / TRF88	MY 132S4	166
	3.9	366	62700	TR 148 / TRF88	MY 132M4	166
	4.4	326	62700	TRF 148 / TRF88	MY 132M4	166
	5.1	280	62700	TR 148 / TRF88	MY 132ML4	166
	5.8	247	62700	TRF 148 / TRF88	MY 132ML4	166
	6.7	214	62700	TR 148 / TRF88	MY 160M4	166
				TRF 148 / TRF88	MY 160M4	166
18000	0.05	27001	120000	TR 168 / TRF98	MY 80K4	166
	0.06	22482	120000	TRF 168 / TRF98	MY 80K4	166
	0.07	20002	120000			
	0.08	17361	120000			
	0.09	15446	120000			
	0.10	14051	120000	TR 168 / TRF98	MY 80K4	166
	0.12	11812	120000	TRF 168 / TRF98	MY 80K4	166
	0.13	10509	120000			
	0.14	9631	120000			
	0.18	7749	120000	TR 168 / TRF98	MY 90S4	166
	0.20	6894	120000	TRF 168 / TRF98	MY 90S4	166
	0.22	6077	120000	TR 168 / TRF98	MY 80K4	166
				TRF 168 / TRF98	MY 80K4	166
	0.26	5407	120000	TR 168 / TRF98	MY 80N4	166
	0.30	4650	120000	TRF 168 / TRF98	MY 80N4	166
	0.33	4129	120000			
	0.38	3692	120000	TR 168 / TRF98	MY 90S4	166
				TRF 168 / TRF98	MY 90S4	166
	0.53	2657	120000	TR 168 / TRF98	MY 90L4	166
	0.60	2333	120000	TRF 168 / TRF98	MY 90L4	166
	0.68	2085	120000			
	0.75	1877	120000	TR 168 / TRF98	MY 100M4	166
	0.84	1670	120000	TRF 168 / TRF98	MY 100M4	166
	0.98	1438	120000			
	1.1	1279	120000	TR 168 / TRF98	MY 100L4	166
	1.2	1123	120000	TRF 168 / TRF98	MY 100L4	166
	1.4	999	120000			
	1.7	861	120000	TR 168 / TRF98	MY 112M4	166
	1.9	760	120000	TRF 168 / TRF98	MY 112M4	166
	2.2	656	120000	TR 168 / TRF98	MY 132S4	166
	2.5	579	120000	TRF 168 / TRF98	MY 132S4	166
	2.8	503	120000	TR 168 / TRF98	MY 132M4	166
	3.3	432	120000	TRF 168 / TRF98	MY 132M4	166
	3.8	376	120000	TR 168 / TRF98	MY 132ML4	166
	4.3	335	120000	TRF 168 / TRF98	MY 132ML4	166
	4.8	303	120000	TR 168 / TRF98	MY 160M4	166
	5.2	279	120000	TRF 168 / TRF98	MY 160M4	166
	4.9	295	120000	TR 168 / TRF108	MY 160M4	166
	5.3	270	120000	TRF 168 / TRF108	MY 160M4	166
	6.4	229	120000	TR 168 / TRF108	MY 160L4	166
	7.3	200	120000	TRF 168 / TRF108	MY 160L4	166
	5.0	291	120000	TR 168 / TRF108	MY 160M4	166
				TRF 168 / TRF108	MY 160M4	166
	5.5	264	120000	TR 168 / TRF108	MY 160L4	166
	6.4	227	120000	TRF 168 / TRF108	MY 160L4	166
	7.4	198	120000			

6.4 TR.. AD.. Performance parameter

$M_{2\max}$ [Nm]	n_2 [r/min]	i	P_{tn} [kW]	F_{r2} [N]	F_{r1} [N]				Page
37	255	5.50*	1.0	3120	505	TRX	58	AD2	169
34	276	5.07	1.0	3050	635	TRXF	58	AD2	169
61	322	4.35	2.1	2690	1110	TRX	58	AD2	169
58	369	3.79	2.3	2560	1120	TRXF	58	AD2	169
55	394	3.55*	2.3	2520	1150				
65	446	3.14	3.1	2320	980				
49	481	2.91	2.5	2370	1190				
69	530	2.64*	4.0	1810	870				
69	591	2.37	4.4	1500	1860	TRX	58	AD3	169
69	686	2.04	5.1	1070	1810	TRXF	58	AD3	169
69	729	1.92*	5.4	890	1780				
69	847	1.65	6.3	430	1710				
68	948	1.48	7.0	112	1660				
63	1075	1.30	7.3	132	1700				
41	231	6.07	1.1	4020	625	TRX	68	AD2	169
75	270	5.18	2.2	3580	1090	TRXF	68	AD2	169
71	309	4.53	2.4	3420	1110	TRX	68	AD2	169
69	326	4.30*	2.4	3370	1130	TRXF	68	AD2	169
87	371	3.77	3.5	3090	880				
100	438	3.20*	4.7	2800	1700	TRX	68	AD3	169
105	485	2.89	5.5	2640	1600	TRXF	68	AD3	169
118	551	2.54	7.0	2000	1400				
123	583	2.40*	7.7	1530	1300				
114	685	2.04	8.3	1260	1310				
108	754	1.86	8.7	1180	1330				
99	870	1.61	9.2	1080	1370				
90	1000	1.40*	9.6	1030	1420				
54	175	8.00*	1.1	6350	535	TRX	78	AD2	169
50	188	7.47	1.0	6220	665	TRXF	78	AD2	169
101	218	6.41	2.4	5610	1050				
107	249	5.63	2.9	5320	970				
101	262	5.35*	2.9	5250	1020				
123	296	4.73	4.0	4900	1800	TRX	78	AD3	169
143	347	4.04*	5.3	4500	1570	TRXF	78	AD3	169
143	378	3.70	5.8	4350	1550				
182	431	3.25*	8.5	3200	3160	TRX	78	AD4	169
193	456	3.08*	9.5	2560	3040	TRXF	78	AD4	169
215	519	2.70	12.1	1110	2770				
215	576	2.43	13.4	510	2680				
200	657	2.13	14.2	435	2730				
187	745	1.88*	15.0	335	2770				
173	840	1.67	15.7	315	2820				
155	984	1.42	16.3	315	2890				
139	162	8.65	2.5	7890	1070	TRX	88	AD2	169
145	183	7.63	2.9	7510	1020	TRXF	88	AD2	169
136	194	7.20*	2.9	7390	1060				
192	217	6.45	4.5	6860	1640	TRX	88	AD3	169
225	252	5.56*	6.1	6320	1410	TRXF	88	AD3	169
215	276	5.07	6.4	6140	1440				
290	311	4.50*	9.7	5500	3010	TRX	88	AD4	169
305	370	3.78	12.2	5030	2840	TRXF	88	AD4	169
405	403	3.48	17.6	2730	5330	TRX	88	AD5	169
405	454	3.09	20	1950	5240	TRXF	88	AD5	169
405	507	2.76*	22	1200	5150				
405	564	2.48	25	470	5050				
385	650	2.15	27	42	5040				

M _{2 max} [Nm]	n ₂ [r/min]	i	P ₁₀ [kW]	Fr ₂ [N]	Fr ₁ [N]			Page	
355	726	1.93	28	185	5140	TRX	88	AD5	169
315	875	1.60*	29	74	5230	TRXF	88	AD5	169
290	1005	1.39	31	74	5300				
225	170	8.23	4.2	9560	1710	TRX	98	AD3	169
260	196	7.16*	5.5	8950	1520	TRXF	98	AD3	169
300	214	6.56	6.9	8500	1250				
420	242	5.79	11.0	7630	2770	TRX	98	AD4	169
395	285	4.91	12.2	7220	2820	TRXF	98	AD4	169
595	309	4.52	20	6180	4970	TRX	98	AD5	169
595	346	4.04	22	5380	4890	TRXF	98	AD5	169
595	385	3.64*	25	4530	4810				
595	425	3.30	27	3730	4720				
595	479	2.92	30	2810	4620				
595	530	2.64	34	1980	4510				
595	625	2.24*	40	495	4280				
570	716	1.96	44	19	4260				
505	856	1.64	46	51	4390				
455	988	1.42	48	132	7450	TRX	98	AD6	169
						TRXF	98	AD6	169
460	211	6.63*	10.5	9700	2710	TRX	108	AD4	169
455	250	5.61	12.3	9080	2660	TRXF	108	AD4	169
695	270	5.19	20	7850	4720	TRX	108	AD5	169
695	301	4.65	23	7450	4650	TRXF	108	AD5	169
830	333	4.20*	30	6420	3780				
830	367	3.81	33	5550	3590				
830	414	3.38	37	4490	3340				
830	456	3.07	40	3600	6550	TRX	108	AD6	169
830	530	2.64*	47	2170	6340	TRXF	108	AD6	169
830	608	2.30	54	900	6140				
730	716	1.95	56	1260	6400				
640	820	1.71	56	1840	6690				
540	969	1.44	56	2610	7070				
130	10	135.09	0.18	4230	750	TR	27	AD1	169
130	11	123.91	0.19	4230	745	TRF	27	AD1	169
130	13	105.49	0.22	4230	745				
130	15	90.96	0.25	4230	740				
130	17	84.78	0.27	4230	740				
130	19	74.11	0.30	4230	735	TR	27	AD1	169
130	20	69.47	0.32	4180	730	TRF	27	AD1	169
130	23	61.30	0.36	3980	720				
130	25	55.87	0.39	3840	560				
130	29	48.17	0.44	3630	540				
130	31	44.90	0.48	3530	530				
130	36	39.25	0.54	3350	510				
130	38	36.79	0.58	3260	500				
130	43	32.47	0.65	3100	480				
130	49	28.78	0.73	2950	450				
130	57	24.47	0.86	2770	420				
130	49	28.37	0.74	2940	1070	TR	27	AD2	169
130	54	26.09	0.79	2840	1050	TRF	27	AD2	169
130	63	22.32	0.93	2660	1000				
130	72	19.35	1.1	2510	1550				
130	77	18.08	1.1	2440	1540				
130	90	15.63	1.3	2290	1520				
130	105	13.28*	1.5	2140	1500				
129	118	11.86	1.7	1990	1490				
122	138	10.13	1.9	1890	1490				
122	149	9.41	2.0	900	1140				
116	172	8.16	2.2	870	1150				
112	184	7.63*	2.3	900	1160				

$M_{2\max}$ [Nm]	n_2 [r/min]	i	P_{to} [kW]	F_{r2} [N]	F_{r1} [N]				Page
106	212	6.59	2.5	880	1160	TR	27	AD2	169
99	250	5.60*	2.7	880	1180	TRF	27	AD2	169
95	280	5.00*	2.9	860	1180				
87	328	4.27	3.1	920	1200				
85	350	4.00*	3.3	910	1200				
79	415	3.37	3.6	900	1190				
200	10	134.82	0.26	4950	670	TR	37	AD1	169
200	11	123.66	0.28	4950	660	TRF	37	AD1	169
200	13	105.28	0.32	4950	650				
200	15	90.77	0.37	4950	635				
200	17	84.61	0.39	4950	625				
200	19	73.96	0.45	4950	610	TR	37	AD1	169
200	20	69.33	0.48	4950	600	TRF	37	AD1	169
200	23	61.18	0.54	4950	585				
200	25	55.76	0.58	4950	540				
200	29	48.08	0.69	4950	1500	TR	37	AD2	169
200	31	44.81	0.73	4950	1480	TRF	37	AD2	169
200	36	39.17	0.83	4760	1440				
200	38	36.72	0.89	4540	1420				
200	43	32.40	0.99	4120	1380				
200	49	28.73	1.1	3740	1640				
200	57	24.42	1.3	3240	1630				
189	49	28.32	1.1	4000	450	TR	37	AD2	169
173	54	26.03	1.0	4180	585	TRF	37	AD2	169
200	63	22.27	1.4	2970	1370				
200	73	19.31	1.6	2570	1340				
200	78	18.05	1.7	2390	1330				
200	90	15.60	2.0	2010	1300				
190	106	13.25	2.2	1880	1310				
183	118	11.83	2.4	1810	1310				
170	139	10.11	2.6	1820	1310				
167	148	9.47	2.7	1760	1310				
156	176	7.97	3.0	1720	1300				
144	210	6.67	3.3	1000	910				
142	247	5.67	3.8	760	880				
135	277	5.06	4.1	790	890				
126	324	4.32	4.5	820	900				
121	346	4.05	4.6	880	910				
107	411	3.41	4.8	1070	950				
300	7.9	176.88	0.30	5420	1780	TR	47	AD2	169
300	8.6	162.94	0.33	5420	1780	TRF	47	AD2	169
300	10	139.99	0.37	5420	1780				
300	11	121.87	0.42	5420	1770				
300	12	114.17	0.45	5420	1770	TR	47	AD2	169
300	15	93.68	0.54	5420	1760	TRF	47	AD2	169
300	16	84.90	0.60	5420	1760				
300	18	76.23	0.66	5420	1750				
300	20	68.54	0.72	5420	1440				
300	22	64.21	0.77	5420	1430				
300	25	56.73	0.86	5420	1400				
300	27	52.69	0.93	5350	1370				
300	29	47.75	1.0	5150	1350				
300	33	42.87	1.1	4930	1640				
300	38	36.93	1.3	4630	1620				
300	40	34.73	1.4	4520	1610				
300	47	29.88	1.6	4240	1600				
300	52	26.70	1.8	4050	1580				
300	59	23.59	2.0	3840	1560				
225	41	33.79	1.0	4740	510	TR	47	AD2	169
205	45	31.12	1.0	4660	650	TRF	47	AD2	169

M _{2 max} [Nm]	n ₂ [r/min]	i	P ₁₀ [kW]	Fr ₂ [N]	Fr ₁ [N]			Page	
300	52	26.74	1.7	4050	1270	TR	47	AD2	169
300	60	23.28	2.0	3820	1250	TRF	47	AD2	169
300	64	21.81	2.1	3710	1240				
295	73	19.27	2.4	3530	1220				
290	78	17.89	2.5	3390	1210				
275	86	16.22	2.6	3350	1240				
265	96	14.56	2.8	3230	1240				
250	112	12.54	3.1	3080	1240				
245	119	11.79	3.2	3020	1240				
230	138	10.15	3.5	2890	1240				
220	154	9.07	3.7	2780	1230				
205	175	8.01	3.9	2690	1250				
163	181	7.76*	3.2	2720	1080				
159	201	6.96	3.5	2620	1070				
156	233	6.00	4.0	2470	1040				
155	248	5.64*	4.2	2410	1020				
150	288	4.85	4.7	2280	990				
146	323	4.34	5.1	2190	970				
144	365	3.83	5.8	2090	1970	TR	47	AD3	169
						TRF	47	AD3	169
450	7.5	186.89	0.42	7110	1690	TR	58	AD2	169
450	8.1	172.17	0.45	7110	1680	TRF	58	AD2	169
450	9.5	147.92	0.51	7110	1660				
450	11	128.77	0.58	7110	1640				
450	12	120.63	0.62	7110	1630				
450	13	106.58	0.70	7110	1610				
450	14	98.99	0.75	7110	1580				
450	16	89.71	0.83	7110	1570				
450	17	80.55	0.91	7110	1540				
450	20	69.23	1.0	7110	1010				
450	22	64.85	1.1	6980	1560				
450	24	57.29	1.3	6630	1550				
450	26	53.22	1.3	6430	1540				
450	29	48.23	1.5	6170	1530				
450	32	43.30	1.6	5900	1520				
450	38	37.30*	1.9	5530	1500				
450	40	35.07	2.0	5390	1490				
450	46	30.18	2.4	5050	1460				
450	52	26.97	2.6	4800	1430				
420	53	26.31	2.5	4860	1100	TR	58	AD2	169
410	56	24.99*	2.5	4780	1120	TRF	58	AD2	169
450	64	21.93	3.2	4370	990				
450	75	18.60*	3.7	4050	950				
450	83	16.79	4.1	3860	920				
435	95	14.77*	4.5	3690	920				
430	100	13.95*	4.8	3610	1940	TR	58	AD3	169
405	118	11.88	5.3	3430	1930	TRF	58	AD3	169
380	130	10.79	5.6	3330	1930				
370	150	9.35	6.1	3180	1920				
335	155	9.06	5.6	2900	1580				
355	176	7.97	6.8	2020	1450				
350	186	7.53	7.1	1950	1450				
335	218	6.41	8.0	1770	1410				
320	240	5.82	8.4	1820	1420				
305	277	5.05	9.2	1730	1400				
280	319	4.39	9.7	1900	1430				
600	7	199.81	0.51	7560	1510	TR	68	AD2	169
600	7.6	184.07	0.54	7560	1490	TRF	68	AD2	169
600	8.8	158.14	0.63	7560	1470				

M _{2 max} [Nm]	n ₂ [r/min]	i	P ₁₀ [kW]	Fr ₂ [N]	Fr ₁ [N]			Page	
600	10	137.67	0.72	7560	1440	TR	68	AD2	169
600	11	128.97	0.77	7560	1430	TRF	68	AD2	169
600	12	113.94	0.86	7560	1400				
600	13	105.83	0.92	7560	1360				
600	15	95.91	1.0	7560	1350				
600	16	86.11	1.1	7560	1630				
600	19	74.17	1.3	7560	1620				
600	20	69.75	1.4	7560	1610				
600	23	61.26	1.5	7560	1450				
600	25	56.89	1.7	7560	1430				
600	27	51.56	1.8	7560	1420				
600	30	46.29	2.0	7560	1400				
580	35	39.88*	2.3	7790	1390				
570	37	37.50	2.4	7900	1390				
540	43	32.27	2.6	8210	1390				
520	49	28.83	2.8	8400	1380				
410	50	28.13	2.2	9270	1140	TR	68	AD2	169
400	52	26.72	2.3	9340	1160	TRF	68	AD2	169
560	60	23.44	3.6	8010	800				
600	70	19.89	4.7	7560	1700	TR	68	AD3	169
590	78	17.95	5.1	7330	1690	TRF	68	AD3	169
560	89	15.79	5.5	7130	1710				
550	94	14.91	5.7	6980	1710				
520	110	12.70	6.3	6650	1700				
500	121	11.54	6.6	6500	1700				
470	140	10.00	7.2	6220	1700				
440	161	8.70*	7.7	5960	1700				
380	180	7.79	7.4	5830	1270				
370	190	7.36*	7.7	5790	1280				
330	223	6.27	8.0	5590	1350				
310	246	5.70	8.3	5450	1390				
290	284	4.93	9.0	5210	1390				
270	326	4.29	9.6	5000	1400				
820	7.2	195.24*	0.69	9920	1310	TR	78	AD2	169
820	8.4	166.59	0.80	9920	1270	TRF	78	AD2	169
820	9.6	145.67	0.92	9920	1240				
820	10	138.39	0.96	9920	1240				
820	12	121.42	1.1	9920	1620				
820	14	102.99	1.3	9920	1610				
820	15	92.97	1.4	9920	1600				
820	17	81.80	1.6	9920	1590				
820	18	77.24	1.7	9920	1580				
820	21	65.77	2.0	9920	1560				
820	24	57.68	2.2	9920	1380				
820	27	52.07	2.5	9920	1360				
820	31	45.81	2.8	9920	1350				
820	32	43.26	3.0	9920	1330				
820	38	36.83	3.5	9920	1290				
820	42	33.47	3.8	9920	1260				
820	48	29.00	4.4	9920	1220				
780	55	25.23	4.8	10100	1210				
820	60	23.37	5.4	8870	1620	TR	78	AD3	169
820	65	21.43	5.8	8250	1600	TRF	78	AD3	169
780	74	18.80	6.3	7980	1620				
780	79	17.82*	6.7	7620	1600				
740	90	15.60	7.2	7390	1610				
720	100	14.05	7.8	7050	1580				
690	114	12.33	8.5	6740	1570				
660	129	10.88	9.3	6490	1560				
630	145	9.64	10.0	6300	1550				

M _{2 max} [Nm]	n ₂ [r/min]	i	P ₁₀ [kW]	Fr ₂ [N]	Fr ₁ [N]			Page	
630	163	8.59	11.2	4110	2960	TR	78	AD4	169
610	181	7.74	12.0	3940	2930	TRF	78	AD4	169
580	206	6.79	13.0	3850	2940				
540	234	5.99*	13.8	3990	2980				
510	264	5.31*	14.7	3990	2990				
1550	5.7	246.54	1.0	16900	1580	TR	88	AD2	169
1550	6.5	216.54	1.1	16900	1570	TRF	88	AD2	169
1550	6.8	205.71	1.2	16900	1570				
1550	7.7	181.77	1.4	16900	1540				
1550	9	155.34	1.6	16900	1530				
1550	9.8	142.41	1.7	16900	1520				
1550	11	124.97	2.0	16900	1510				
1550	12	118.43*	2.1	16900	1500				
1550	14	103.65	2.4	16900	1480				
1550	15	93.38	2.6	16900	1460				
1550	17	81.92	3.0	16900	1440				
1550	19	72.57	3.3	16900	1150				
1550	22	63.68*	3.8	15800	1130				
1550	23	60.35*	4.0	15200	1110				
1550	27	52.82	4.6	13500	1070				
1550	29	47.58	5.1	12300	1030				
1550	34	41.74	5.8	16900	1940	TR	88	AD3	169
1550	38	36.84*	6.6	16800	1890	TRF	88	AD3	169
1550	43	32.66*	7.4	16000	1840				
1500	50	27.88	8.4	15100	1800				
1360	41	34.40*	6.0	11500	1390	TR	88	AD3	169
1280	45	31.40	6.2	11700	1450	TRF	88	AD3	169
1550	50	27.84*	8.6	15000	3190	TR	88	AD4	169
1550	60	23.40	10.2	13900	3120	TRF	88	AD4	169
1500	65	21.51	10.8	13600	3120				
1440	73	19.10	11.5	13000	3120				
1390	82	17.08*	12.4	12600	3120				
1280	105	13.33	14.7	11600	3100				
1230	117	11.93	15.7	11200	3100				
1180	141	9.90*	18.2	10400	3010				
1210	153	9.14*	20	10500	5340	TR	88	AD5	169
1160	170	8.22	22	10200	5360	TRF	88	AD5	169
1070	196	7.13	23	9780	5430				
1020	219	6.39	24	9450	5440				
910	264	5.30*	26	8980	5500				
3000	6.5	216.28	2.2	19800	2210	TR	98	AD3	169
3000	7.5	186.30	2.6	19800	2200	TRF	98	AD3	169
3000	8.2	170.02	2.8	19800	2180				
3000	9.3	150.78	3.1	19800	2170				
3000	11	126.75	3.7	19800	2140				
3000	12	116.48	4.1	19800	2120				
3000	14	103.44	4.6	19800	2100				
3000	15	92.48	5.1	19800	2070				
3000	17	83.15	5.6	19800	2040				
3000	19	72.17	6.5	18000	2000				
3000	21	65.21	7.2	19800	1540				
3000	23	59.92	7.8	19800	1500				
3000	26	53.21	8.8	19800	1450				
3000	29	47.58	9.8	19800	3440	TR	98	AD4	169
3000	33	42.78	10.9	19800	3390	TRF	98	AD4	169
3000	38	37.13	12.6	18600	3310				
2890	42	33.25	13.6	17900	3300				
2670	51	27.58	15.1	16900	3290				
2560	44	32.05	12.2	10600	2340	TR	98	AD4	169
2430	52	27.19	13.7	9910	2460	TRF	98	AD4	169

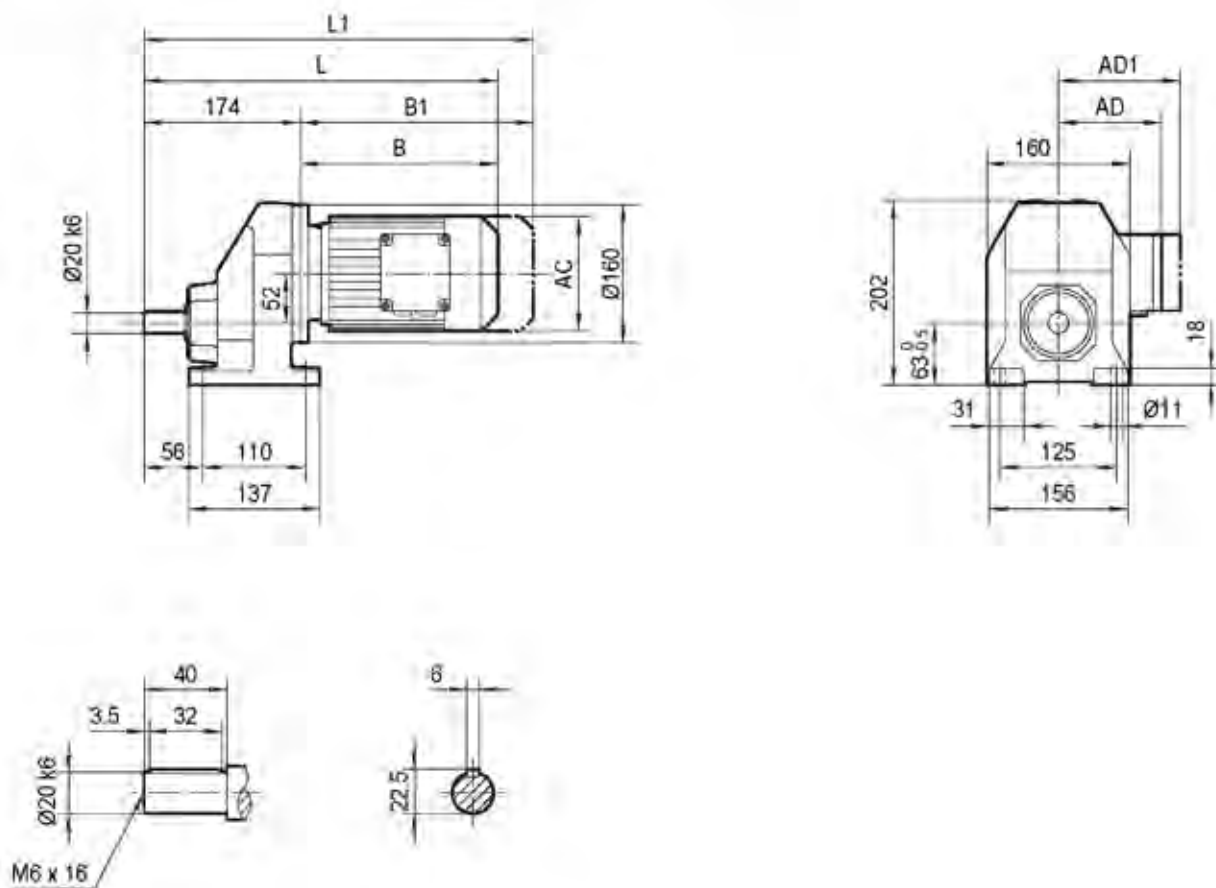
$M_{2\max}$ [Nm]	n_2 [r/min]	i	P_{in} [kW]	F_{r2} [N]	F_{r1} [N]				Page
2830	56	25.03	17.4	15900	5270	TR	98	AD5	169
2720	63	22.37	19	15300	5300	TRF	98	AD5	169
2610	70	20.14	20	14800	5340				
2500	77	18.24	21	14400	5370				
2400	87	16.17	23	13800	5390				
2300	96	14.62	24	13400	5420				
2190	113	12.39	27	12700	5370				
2090	129	10.83	29	12100	5370				
2030	151	9.29	33	12200	4250				
2030	167	8.39	37	11700	4120				
2000	197	7.12	43	10900	3760				
1890	225	6.21	46	10500	3890				
1780	269	5.20	52	9850	6860	TR	98	AD6	169
1630	311	4.50*	55	9500	6930	TRF	98	AD6	169
4300	5.6	251.15	2.7	29500	2160	TR	108	AD3	169
4300	6.1	229.95	3.0	29500	2150	TRF	108	AD3	169
4300	6.9	203.16	3.3	29500	2130				
4300	8.1	172.34	3.9	29500	2100				
4300	8.8	158.68	4.3	29500	2090				
4300	9.9	141.83	4.8	29500	2060				
4300	11	127.68	5.3	29500	2040				
4300	12	115.63	5.9	29500	2020				
4300	14	102.53	6.5	29500	1990				
4300	15	92.70	7.2	29500	1960				
4300	18	78.57	8.5	29500	1890				
4300	19	72.88	9.2	29500	1390				
4300	21	65.60*	10.2	29200	3390	TR	108	AD4	169
4300	24	59.41	11.3	28000	3350	TRF	108	AD4	169
4300	27	52.68	12.7	26600	3300				
4300	29	47.63	14.1	25500	3250				
4300	35	40.37*	16.6	23800	3140				
4300	40	35.26	19	22400	3060				
4300	47	29.49	23	20700	2920				
4300	46	30.77	21	21100	4790	TR	108	AD5	169
4300	51	27.58	24	20100	4710	TRF	108	AD5	169
4300	56	24.90*	26	19200	4580				
4300	62	22.62	29	18300	4490				
4300	70	20.07	33	17300	4390				
4300	77	18.21	36	16600	4280				
4300	89	15.65	42	15400	4030				
4300	102	13.66	48	14400	6880	TR	108	AD6	169
4280	121	11.59	56	13300	6630	TRF	108	AD6	169
3740	138	10.13	56	13300	6920				
3160	163	8.56	56	13200	7270				
2900	178	7.86	56	13900	6200				
2460	210	6.66	56	13500	6640				
2150	240	5.82	56	13200	6920				
2000	284	4.92	62	12500	6940				
8000	6.3	222.60*	5.7	53400	3730	TR	138	AD4	169
8000	7.4	188.45	6.7	53400	3690	TRF	138	AD4	169
8000	8	174.40*	7.2	53400	3660				
8000	9	156.31	8.1	53400	3630				
8000	9.9	141.12*	8.8	53400	3580				
8000	11	128.18	9.7	53400	3550				
8000	12	113.72	11.0	53400	3510				
8000	14	103.20*	12.1	53400	3470				
8000	16	88.70*	14.1	53400	3400				
8000	17	80.91*	15.4	53400	2760				
8000	19	73.49	17	53400	2700				
8000	21	65.20	19	53400	2640				
8000	24	59.17*	21	53400	2570				

M _{2 max} [Nm]	n ₂ [r/min]	i	P ₁₀ [kW]	Fr ₂ [N]	Fr ₁ [N]			Page	
8000	28	50.86*	25	53400	5660	TR	138	AD5	169
8000	32	44.39	28	53400	5550	TRF	138	AD5	169
8000	37	37.65	33	53400	5380				
8000	43	32.91	38	53400	5230				
7680	50	27.83	43	54100	5150				
7780	47	29.57*	40	53900	5130	TR	138	AD6	169
8000	58	24.12	51	49400	4260	TRF	138	AD6	169
8000	64	22.00*	56	47100	11600	TR	138	AD7	169
8000	74	19.04*	64	43500	10600	TRF	138	AD7	169
8000	83	16.80*	73	40600	9800				
8000	96	14.51	83	37300	8660				
7390	109	12.83	87	37400	9730				
7200	130	10.79	101	34700	8730				
6900	161	8.71	120	31900	7420				
4600	184	7.59	92	41100	8330				
4400	219	6.38	104	38900	7810				
4100	272	5.15	120	36600	7290				
13000	8.6	163.31	12.4	62700	2960	TR	148	AD4	169
13000	9.5	146.91	13.8	62700	2910	TRF	148	AD4	169
13000	12	119.86	16.9	62700	2770				
13000	13	109.31	19	62700	2720				
13000	15	94.60*	21	62700	2620				
13000	17	83.47	24	62700	2530				
13000	19	72.09	28	62700	5660	TR	148	AD5	169
13000	21	66.99	30	62700	4520	TRF	148	AD5	169
13000	23	61.09	33	62700	4440				
13000	26	52.87	38	62700	4280				
13000	30	46.65	43	62700	4150				
13000	35	40.29	50	62700	6940	TR	148	AD6	169
						TRF	148	AD6	169
13000	39	35.64	56	62700	16800	TR	148	AD7	169
13000	47	29.95	67	62700	16600	TRF	148	AD7	169
11900	58	24.19	76	64700	16500				
11700	69	20.44	87	65100	23700	TR	148	AD8	169
10300	78	18.04	87	67300	24200	TRF	148	AD8	169
13000	90	15.64	127	62700	22300				
12300	101	13.91	134	64000	22500				
10600	117	11.99	135	66900	23200				
8650	144	9.74	136	67500	23900				
7340	169	8.26	136	66900	24400				
6440	193	7.25	136	65300	23200				
5230	238	5.89	136	64000	23900				
4430	280	5.00	135	62600	24400				
18000	6.1	229.71	12.3	120000	6070	TR	168	AD5	169
18000	7.5	186.93*	15.0	120000	5990	TRF	168	AD5	169
18000	9.2	153.07	18.3	120000	5860				
18000	10	139.98	20	120000	5820				
18000	11	121.81*	23	120000	5740				
18000	13	107.49	26	120000	5660				
18000	15	93.19	30	120000	5550				
18000	17	82.91*	34	120000	5450				
18000	19	73.70*	38	120000	3300				
18000	21	67.40	41	120000	6660	TR	168	AD6	169
18000	24	58.65	47	120000	6500	TRF	168	AD6	169
18000	27	51.76	54	120000	6350				
18000	31	44.87	62	120000	15800	TR	168	AD7	169
18000	35	39.92	70	120000	15100	TRF	168	AD7	169
18000	41	34.41	81	120000	14300				
18000	50	27.96	99	120000	25500	TR	168	AD8	169
18000	59	23.71	117	116500	25100	TRF	168	AD8	169

M _{2 max} [Nm]	n ₂ [r/min]	i	P ₁₀ [kW]	Fr ₂ [N]	Fr ₁ [N]			Page	
7000	30	46.00	23	120000	4510	TR	168	AD5	169
						TRF	168	AD5	169
9000	37	37.74	36	120000	6220	TR	168	AD6	169
10000	46	30.71	50	120000	4480	TRF	168	AD6	169
14000	57	24.57	87	120000	23600	TR	168	AD8	169
13000	64	21.85	91	120000	23900	TRF	168	AD8	169
16000	74	19.03	128	111400	22200				
15000	82	16.98	134	108900	22400				
18000	97	14.48	188	93800	20300				
17000	117	11.99	214	88700	20100				
17000	137	10.24	251	82500	19300				

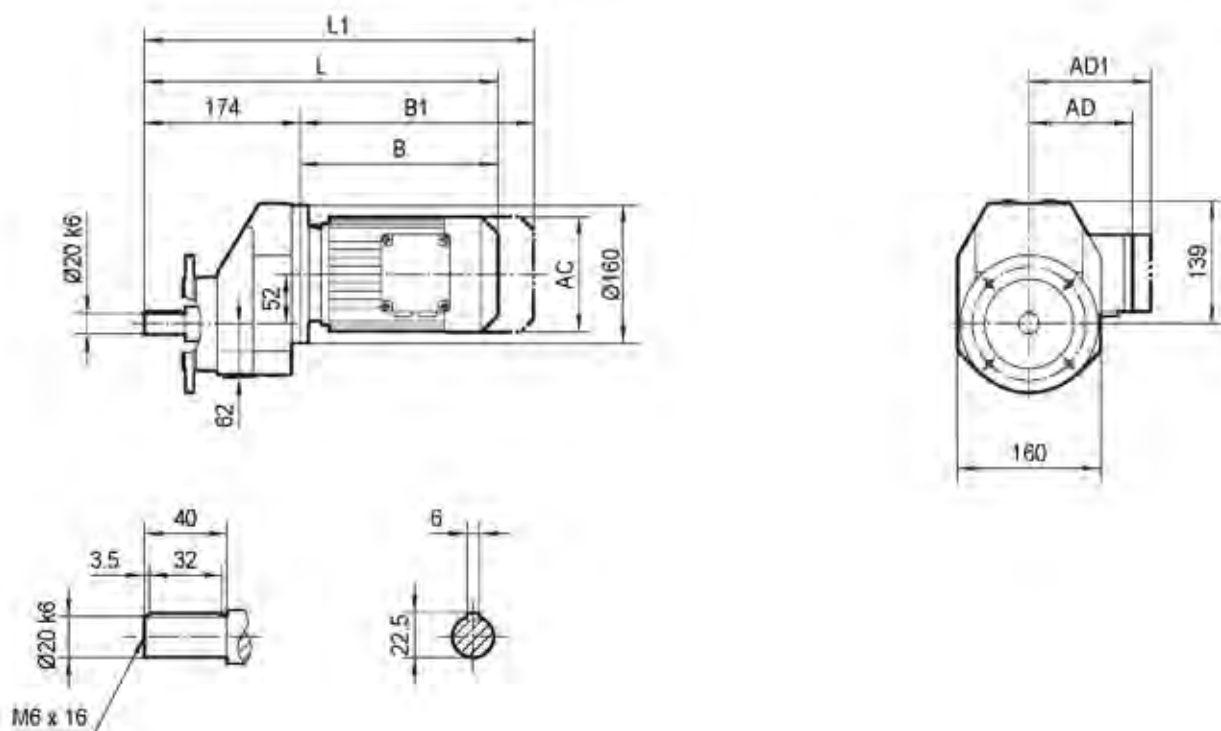
7. OUTLINE DIMENSION SHEET

7.1 TR.. Outline Dimension

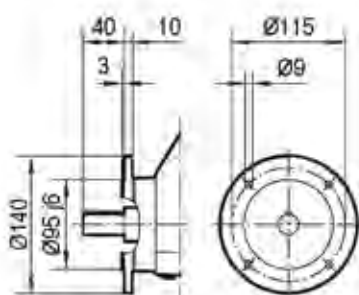
TRX58..

	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S			
AC	132	145	145	197	197	197	221	221			
AD	105	122	122	154	166	166	179	179			
AD1	105	127	127	161	166	166	182	182			
B	185	199	249	269	319	349	354	402			
B1	240	263	313	354	404	434	434	482			
L	359	373	423	443	493	523	528	576			
L1	414	437	487	528	578	608	608	656			

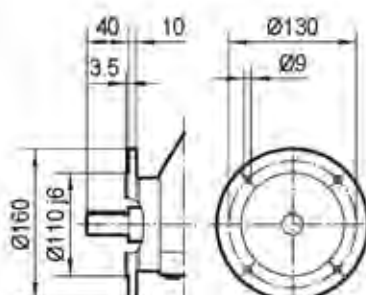
TRXF58..



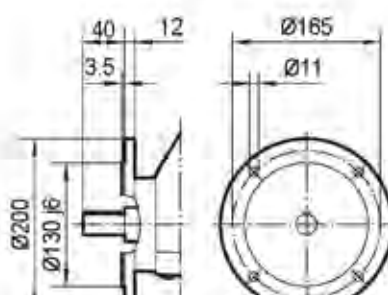
I
Ø140



II
Ø160

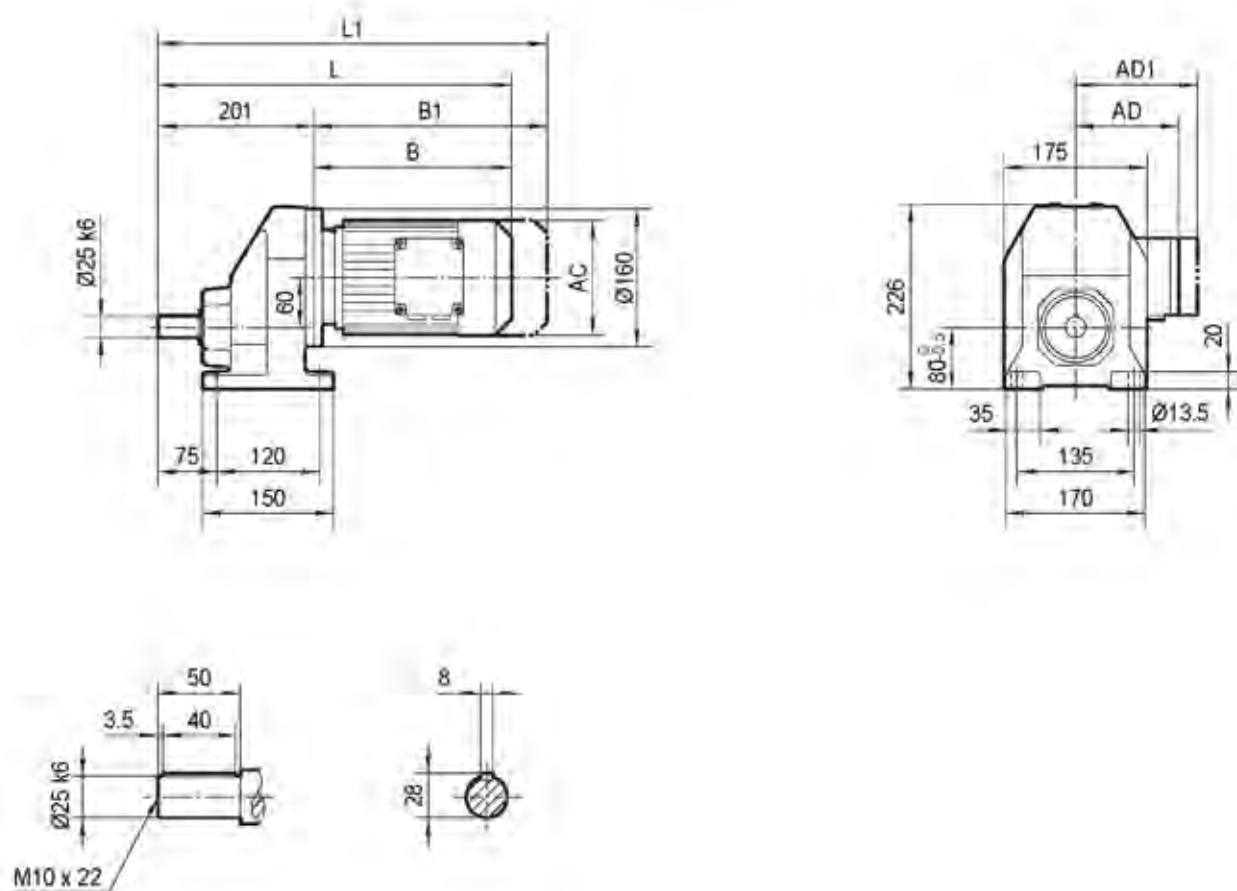


III
Ø200



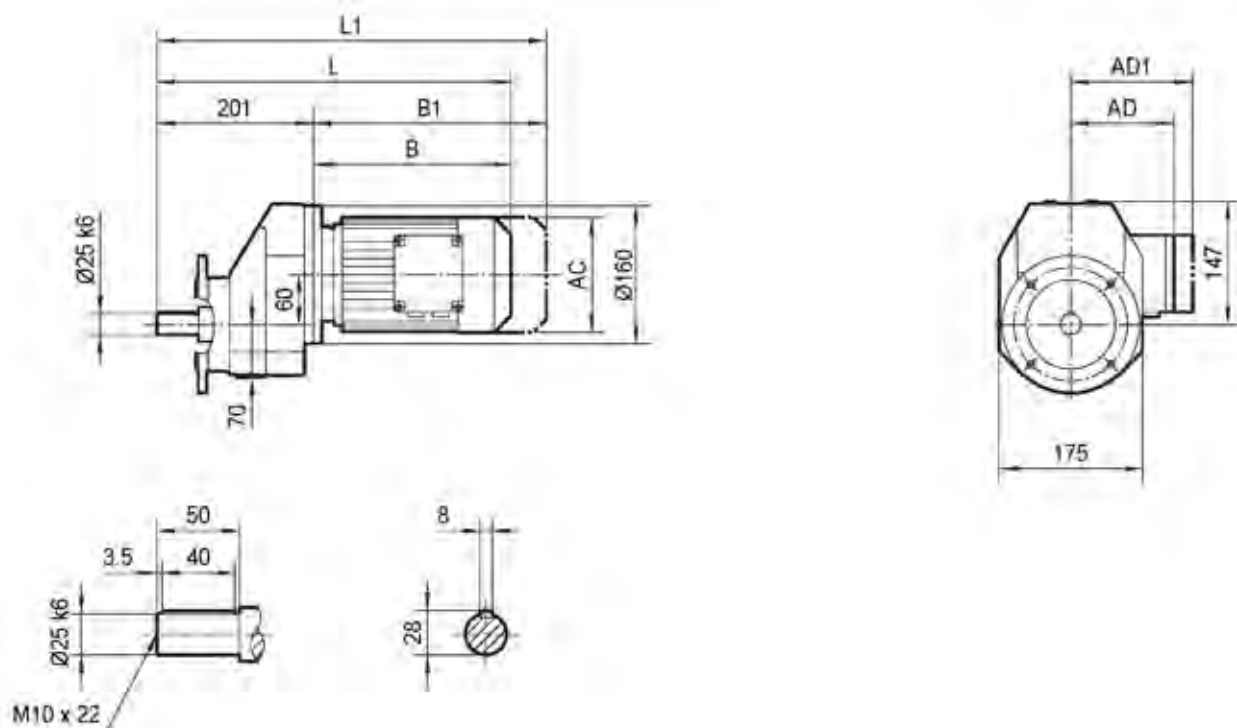
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S			
AC	132	145	145	197	197	197	221	221			
AD	105	122	122	154	166	166	179	179			
AD1	105	127	127	161	166	166	182	182			
B	185	199	249	269	319	349	354	402			
B1	240	263	313	354	404	434	434	482			
L	359	373	423	443	493	523	528	576			
L1	414	437	487	528	578	608	608	656			

TRX68..

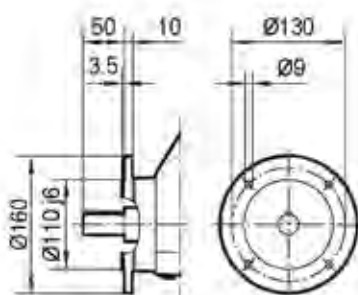


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	386	400	450	470	520	550	555	603	625		
L1	441	464	514	555	605	635	635	683	737		

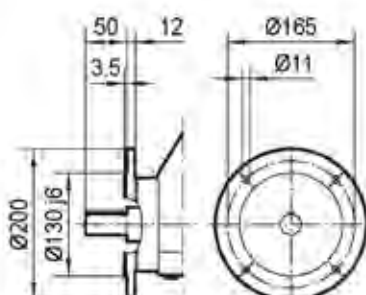
TRXF68..



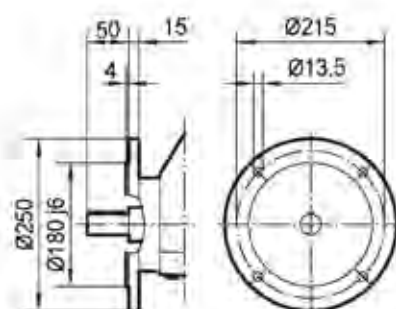
I
Ø160



II
Ø200

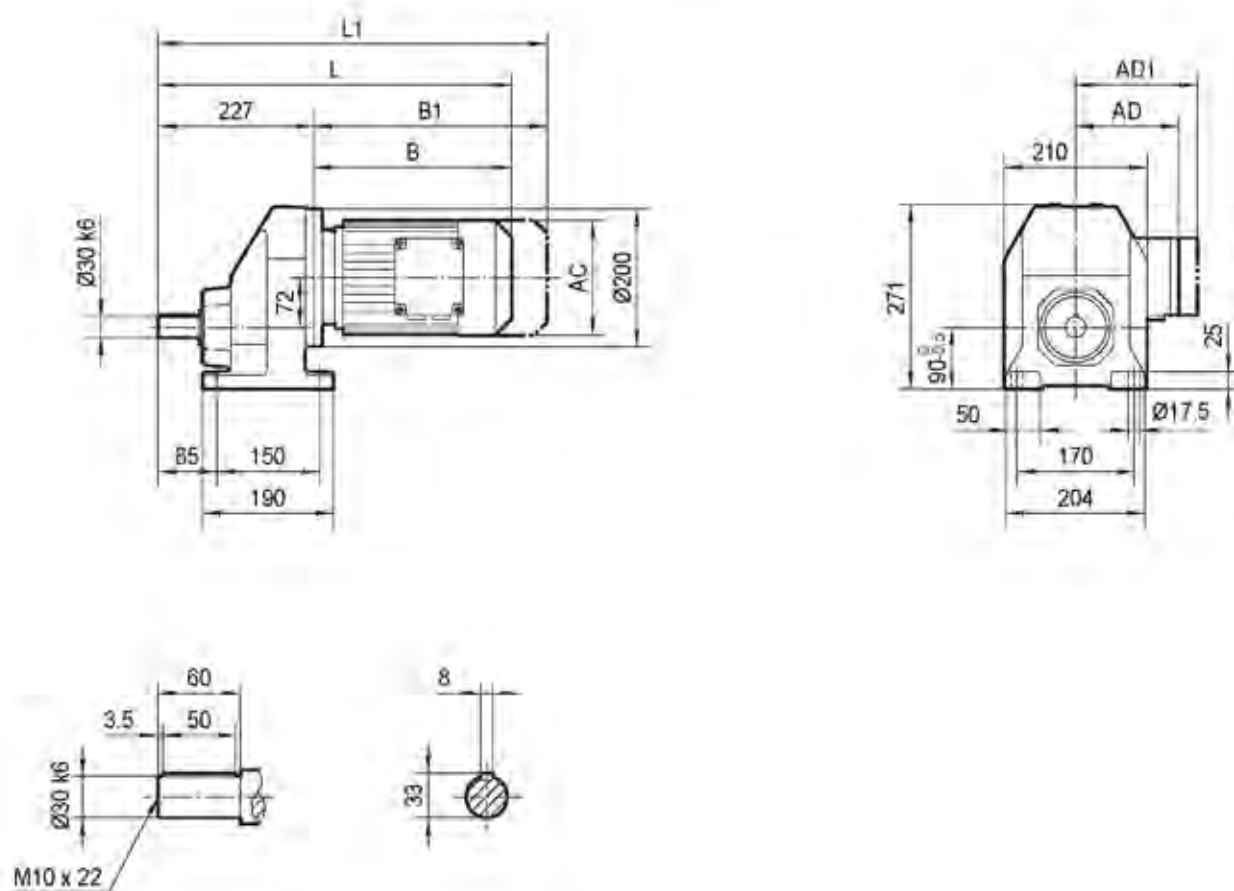


III
Ø250



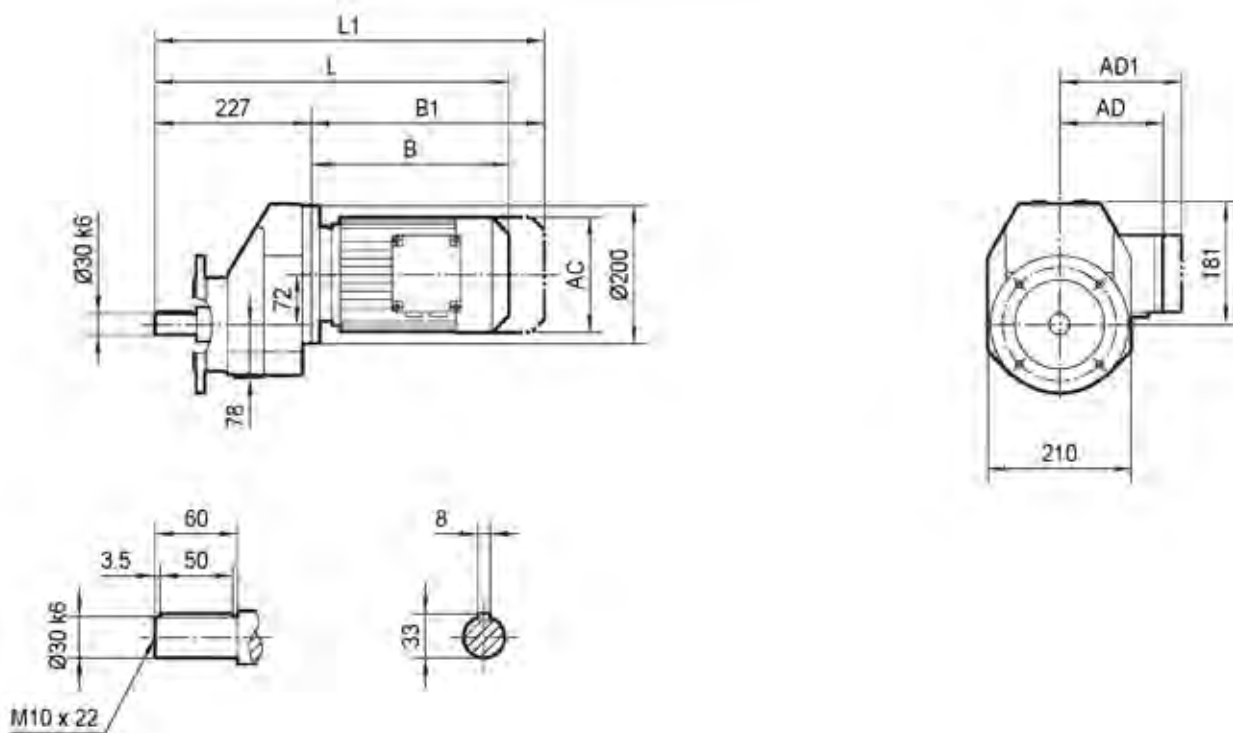
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	386	400	450	470	520	550	555	603	625		
L1	441	464	514	555	605	635	635	683	737		

TRX78..

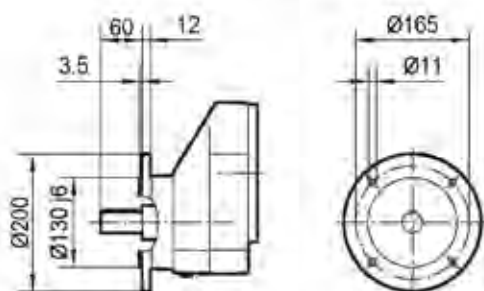


	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M			
AC	197	197	197	221	221	275	275	275			
AD	154	166	166	179	179	230	230	230			
AD1	161	166	166	182	182	230	230	230			
B	261	311	341	345	390	412	472	472			
B1	346	396	426	425	470	524	584	584			
L	488	538	568	572	617	639	699	699			
L1	573	623	653	652	697	751	811	811			

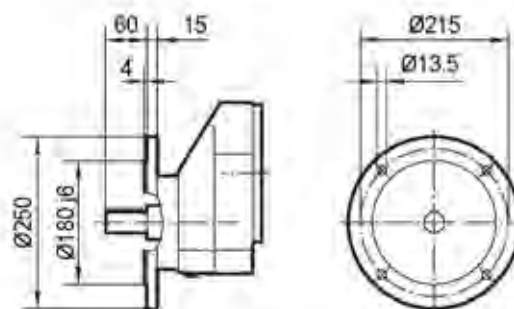
TRXF78..



I
Ø200

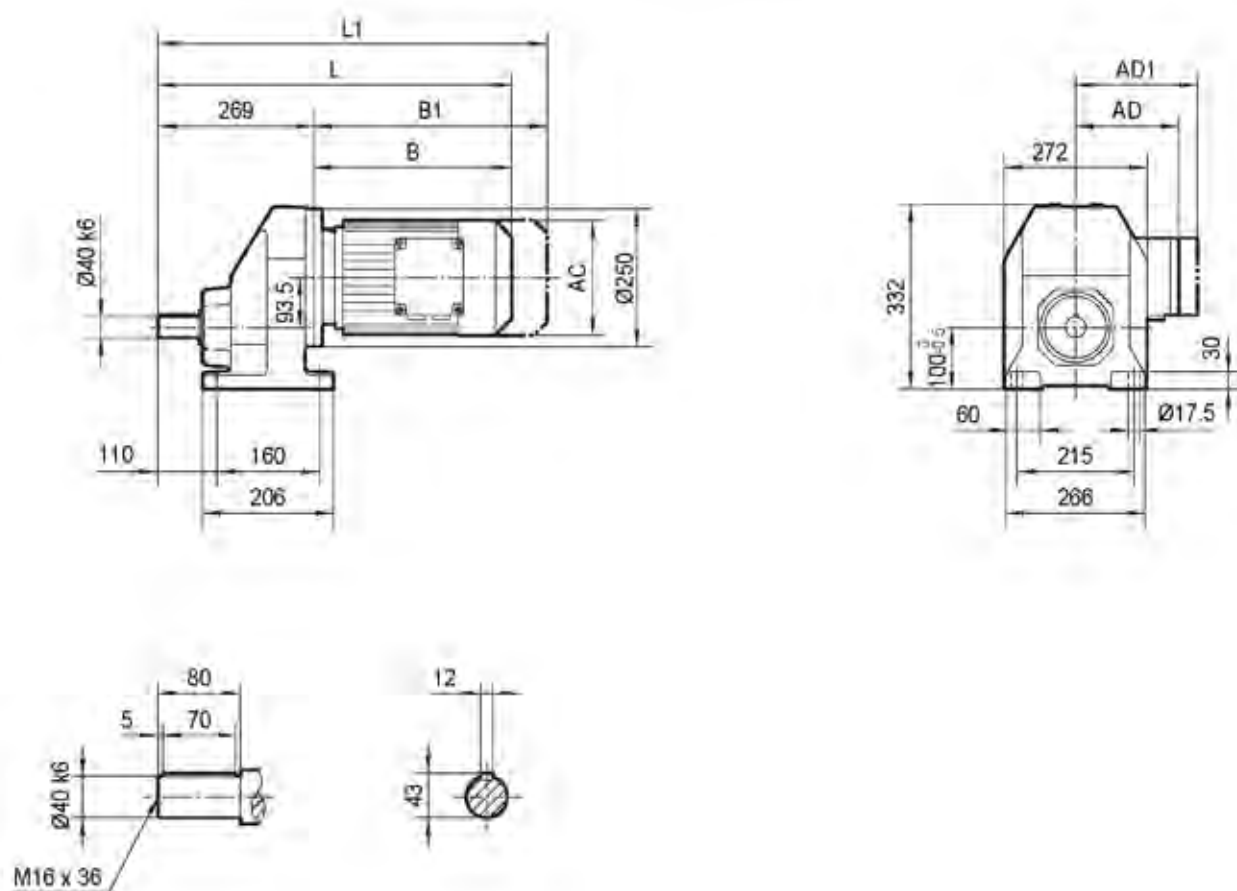


II
Ø250



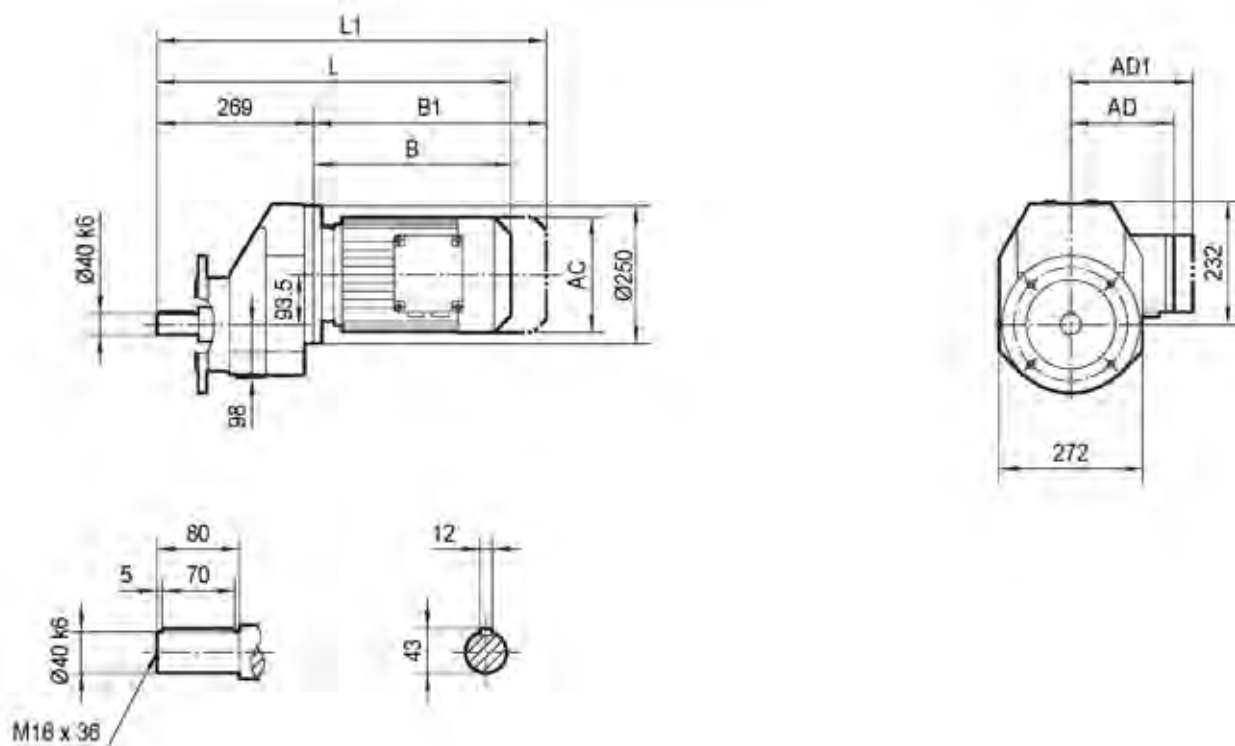
	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M			
AC	197	197	197	221	221	275	275	275			
AD	154	166	166	179	179	230	230	230			
AD1	161	166	166	182	182	230	230	230			
B	261	311	341	345	390	412	472	472			
B1	346	396	426	425	470	524	584	584			
L	458	538	568	572	617	638	699	699			
L1	573	623	653	652	697	751	811	811			

TRX88..

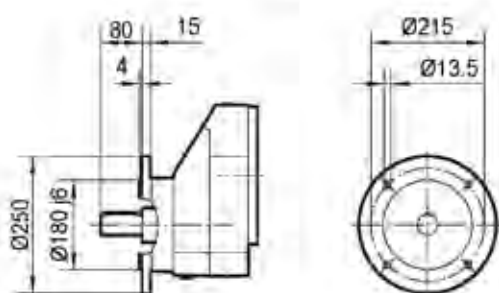


	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..			
AC	197	221	221	275	275	275	331	331			
AD	166	179	179	230	230	230	258	258			
AD1	166	182	182	230	230	230	258	258			
B	337	340	385	407	467	467	514	586			
B1	422	420	465	519	579	579	670	742			
L	606	609	654	676	736	736	783	855			
L1	691	689	734	788	848	848	939	1011			

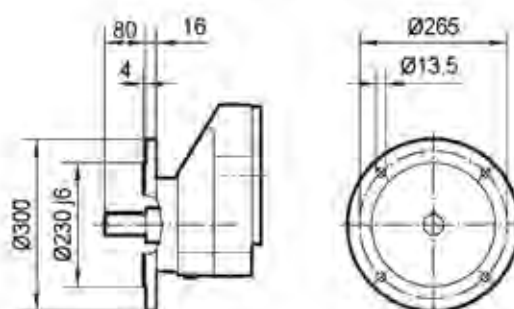
TRXF88..



I
Ø250

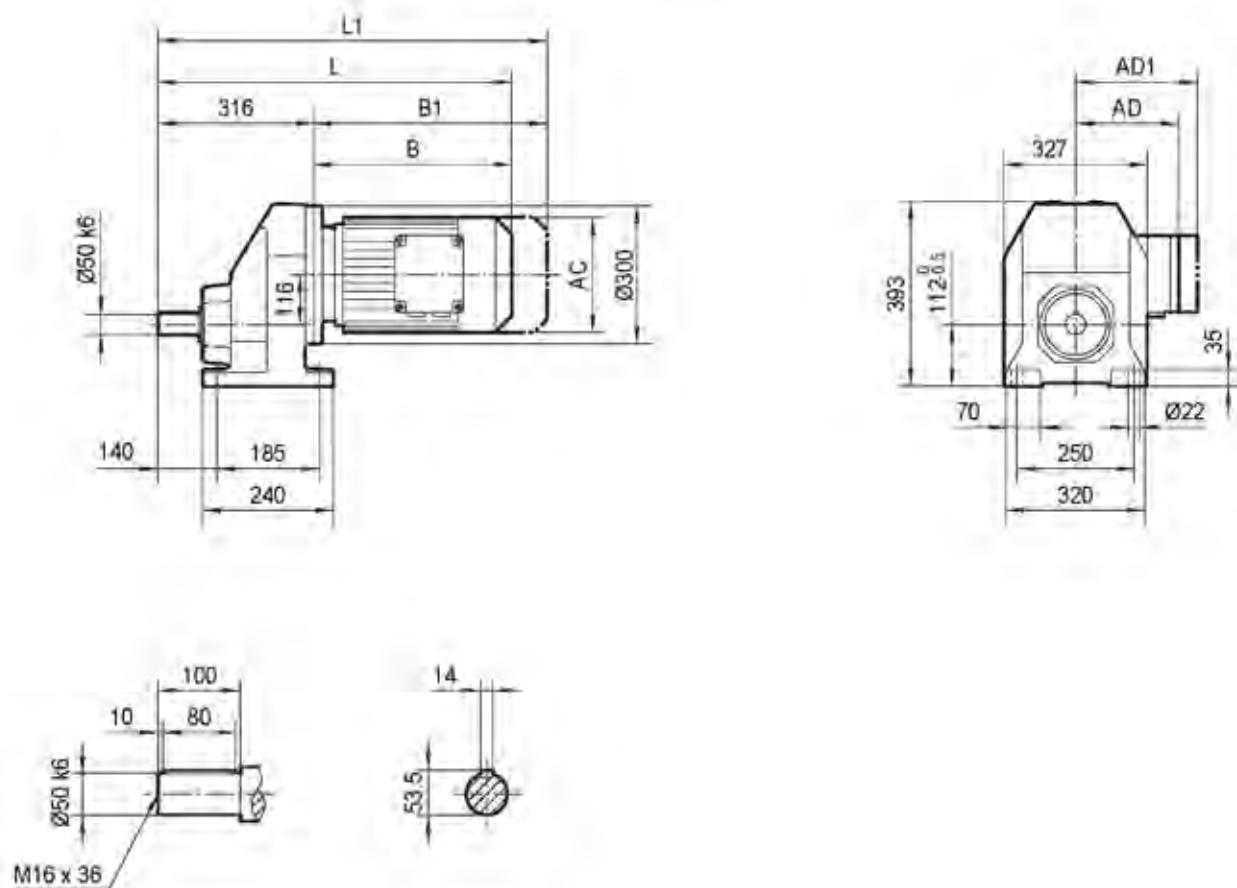


II
Ø300



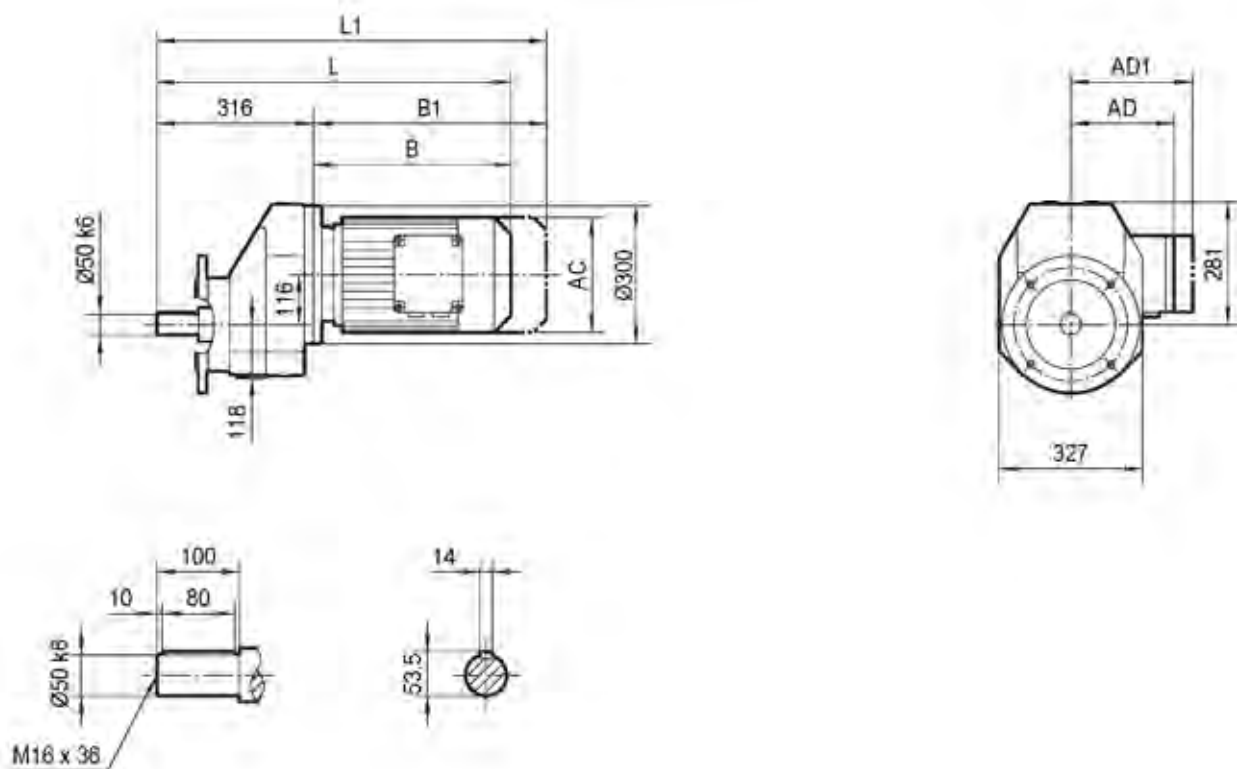
	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..			
AC	197	221	221	275	275	275	331	331			
AD	166	179	179	230	230	230	258	258			
AD1	166	182	182	230	230	230	258	258			
B	337	340	385	407	467	467	514	586			
B1	422	420	465	519	579	579	670	742			
L	606	609	654	676	736	736	783	855			
L1	691	689	734	788	848	848	939	1011			

TRX98..

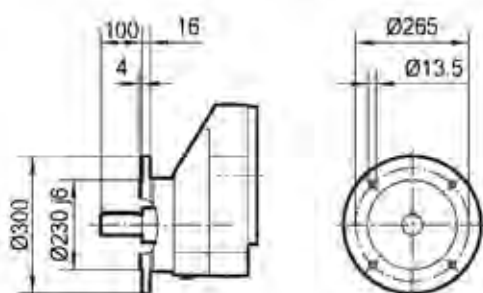


	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..				
AC	221	275	275	275	331	331	394				
AD	179	230	230	230	258	258	285				
AD1	182	230	230	230	258	258	285				
B	380	402	462	462	509	581	629				
B1	460	514	574	574	665	737	785				
L	696	718	778	778	825	897	945				
L1	776	830	890	890	981	1053	1101				

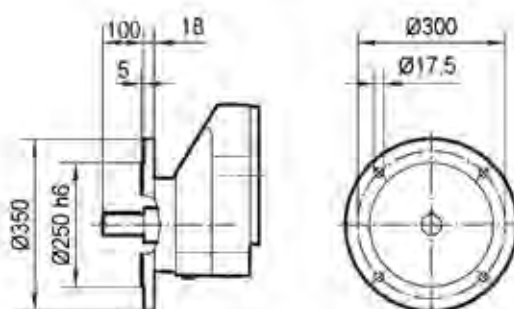
TRXF98..



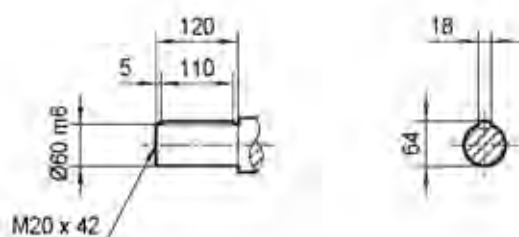
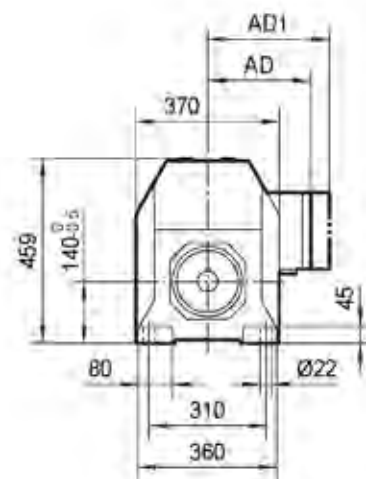
I
Ø300



II
Ø350

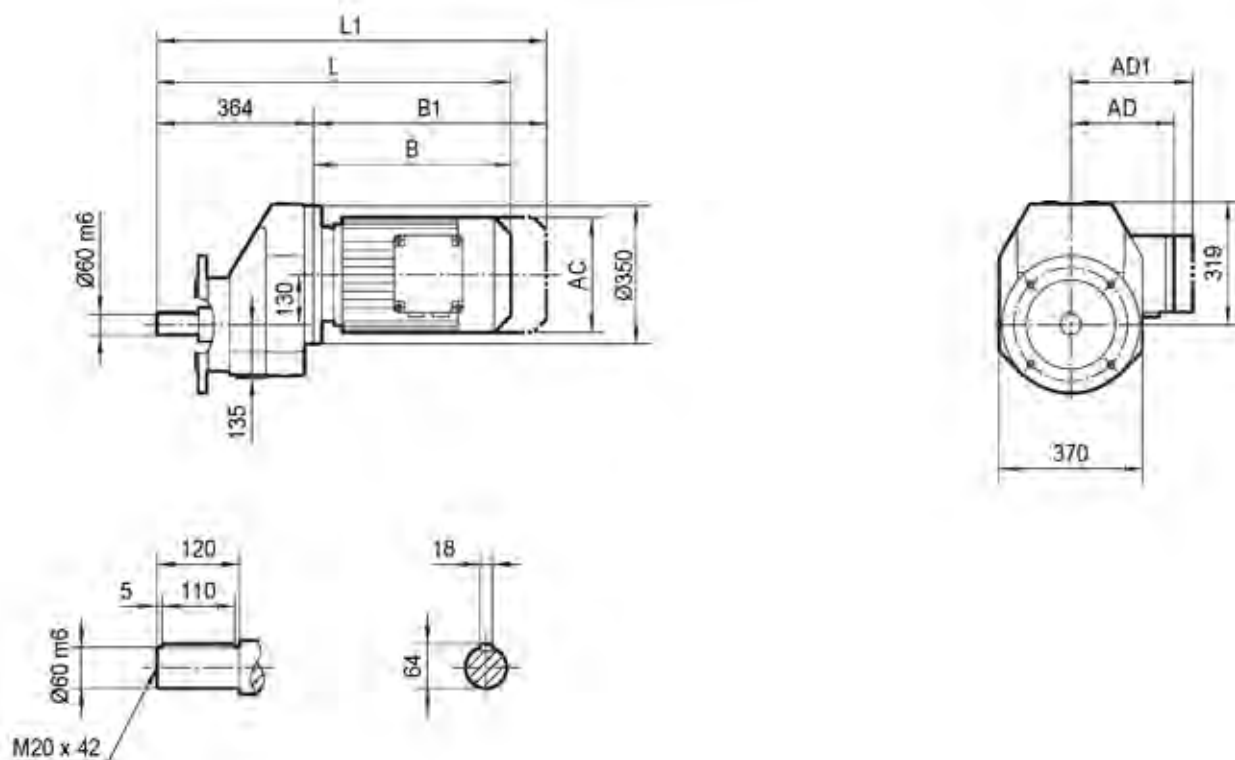


	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..				
AC	221	275	275	275	331	331	394				
AD	179	230	230	230	258	258	285				
AD1	182	230	230	230	258	258	285				
B	380	402	462	462	509	581	629				
B1	460	514	574	574	665	737	785				
L	696	718	778	778	825	897	945				
L1	776	830	890	890	981	1053	1101				

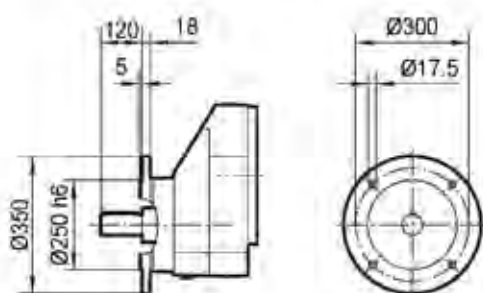


	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..			
AC	221	275	275	275	331	331	394	394			
AD	179	230	230	230	258	258	285	289			
AD1	182	230	230	230	258	258	285	289			
B	374	396	456	456	503	575	623	705			
B1	454	508	568	568	659	731	779	861			
L	738	760	820	820	867	939	987	1069			
L1	818	872	932	932	1023	1095	1143	1225			

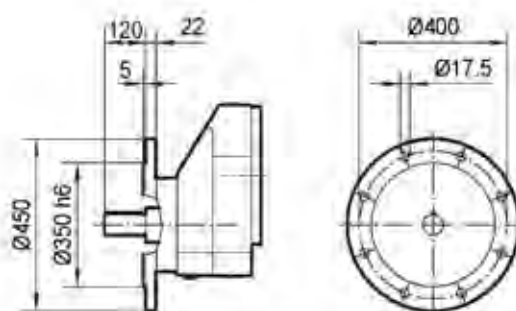
TRXF108..



I
Ø350

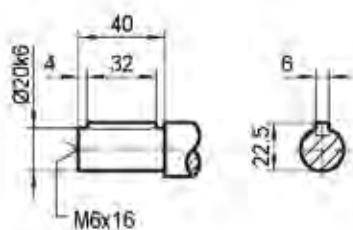
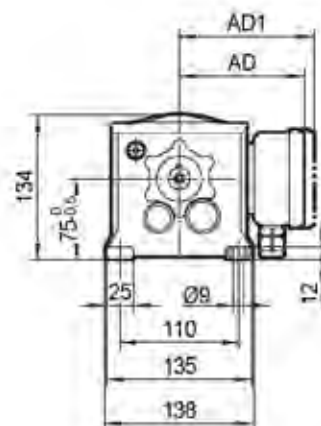
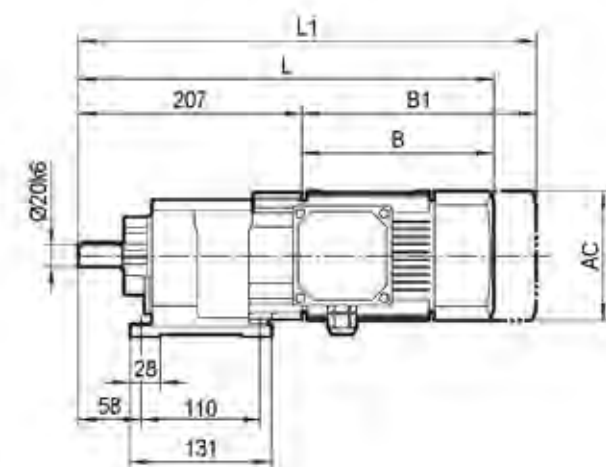


II
Ø450

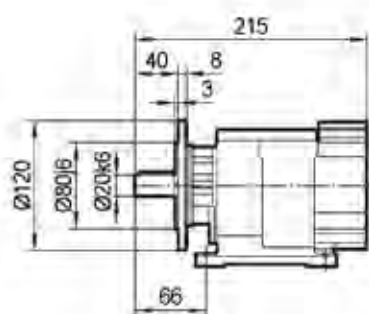


	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..			
AC	221	275	275	275	331	331	394	394			
AD	179	230	230	230	258	258	285	289			
AD1	182	230	230	230	258	258	285	289			
B	374	396	456	456	503	575	623	705			
B1	454	508	568	568	659	731	779	861			
L	738	760	820	820	867	938	987	1069			
L1	818	872	932	932	1023	1095	1143	1225			

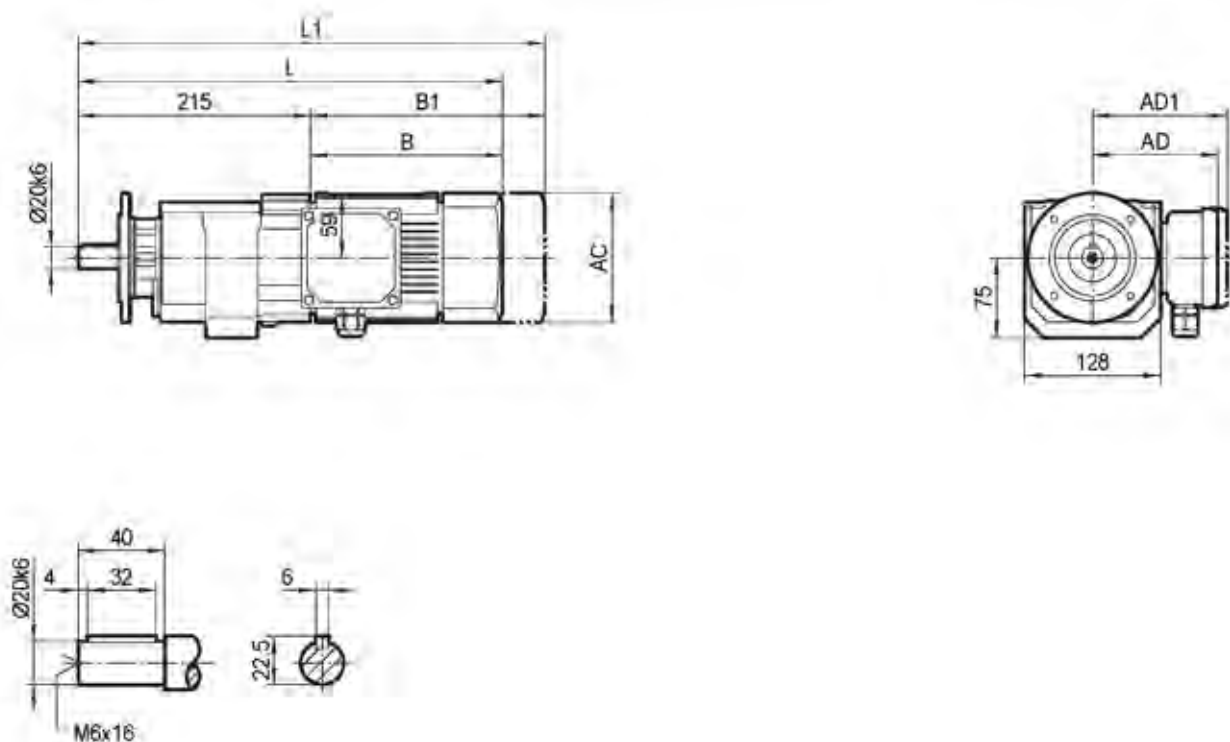
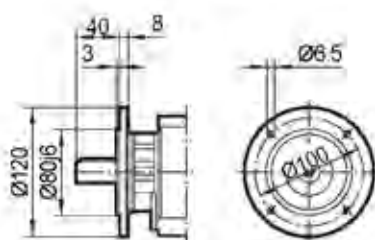
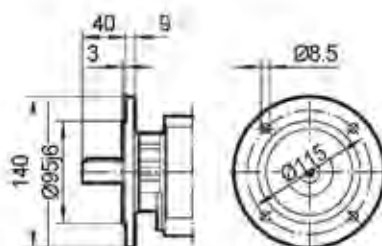
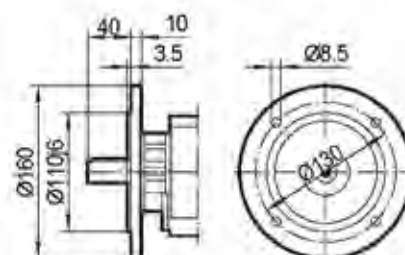
TR18..



TR18F..

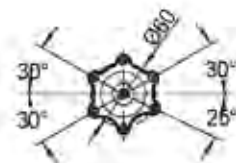
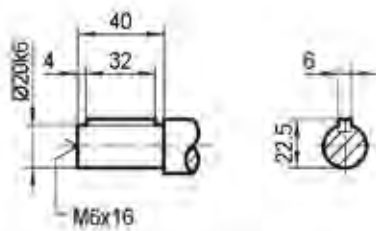
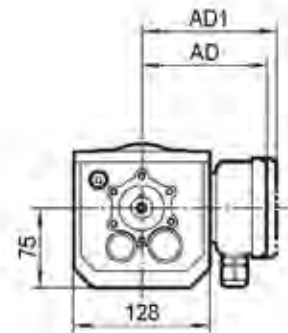
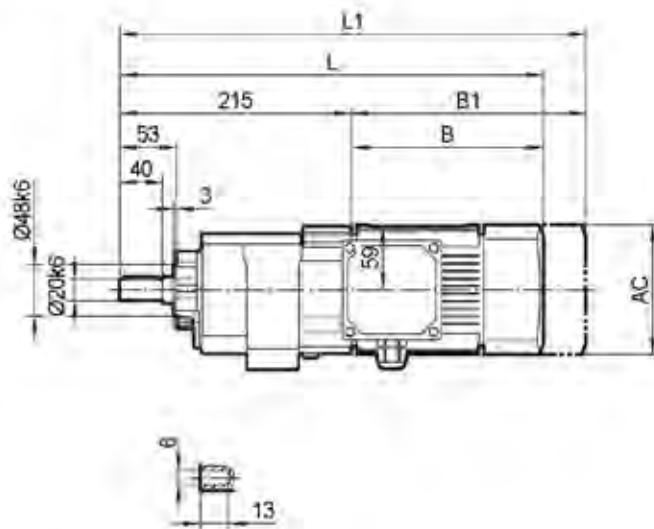


	MY63..	MY71D	MY80..							
AC	132	145	145							
AD	105	122	122							
AD1	105	127	127							
B	149	164	214							
B1	204	227	277							
L	356	371	421							
L1	411	434	484							

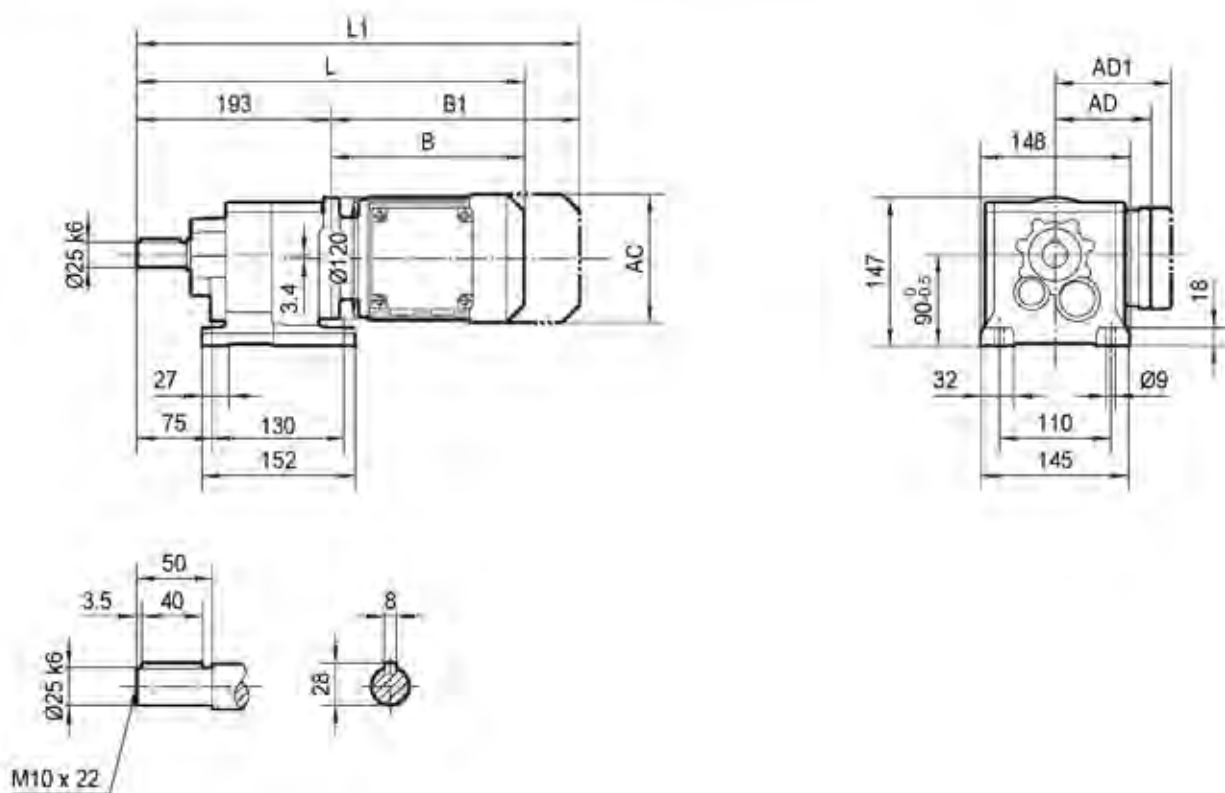
TRF18..**I**
Ø120**I**
Ø140**II**
Ø160

	MY63..	MY71D	MY80..							
AC	132	145	145							
AD	105	122	122							
AD1	105	127	127							
B	149	164	214							
B1	204	227	277							
L	364	379	429							
L1	419	442	492							

TRZ18..

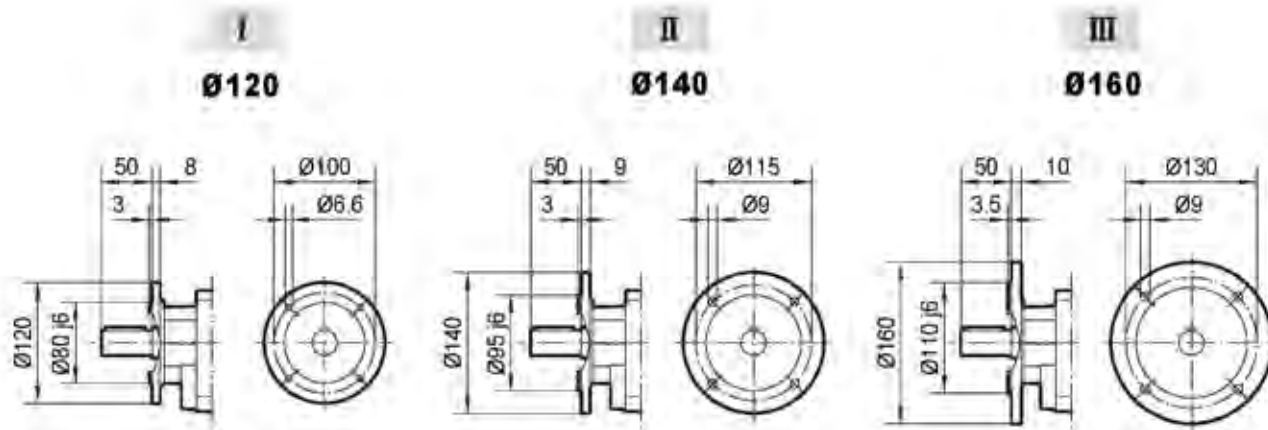
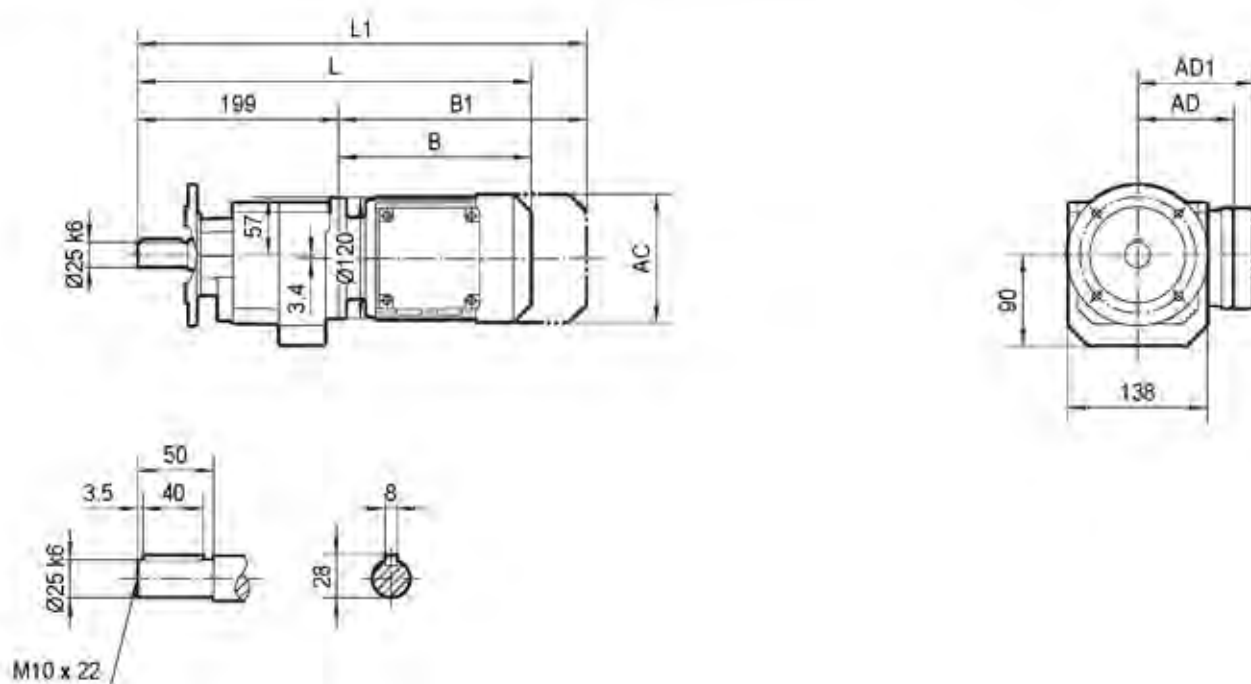


	MY63..	MY71D	MY80..							
AC	132	145	145							
AD	105	122	122							
AD1	105	127	127							
B	149	164	214							
B1	204	227	277							
L	364	379	429							
L1	419	442	492							

TR28..**TR28F..**

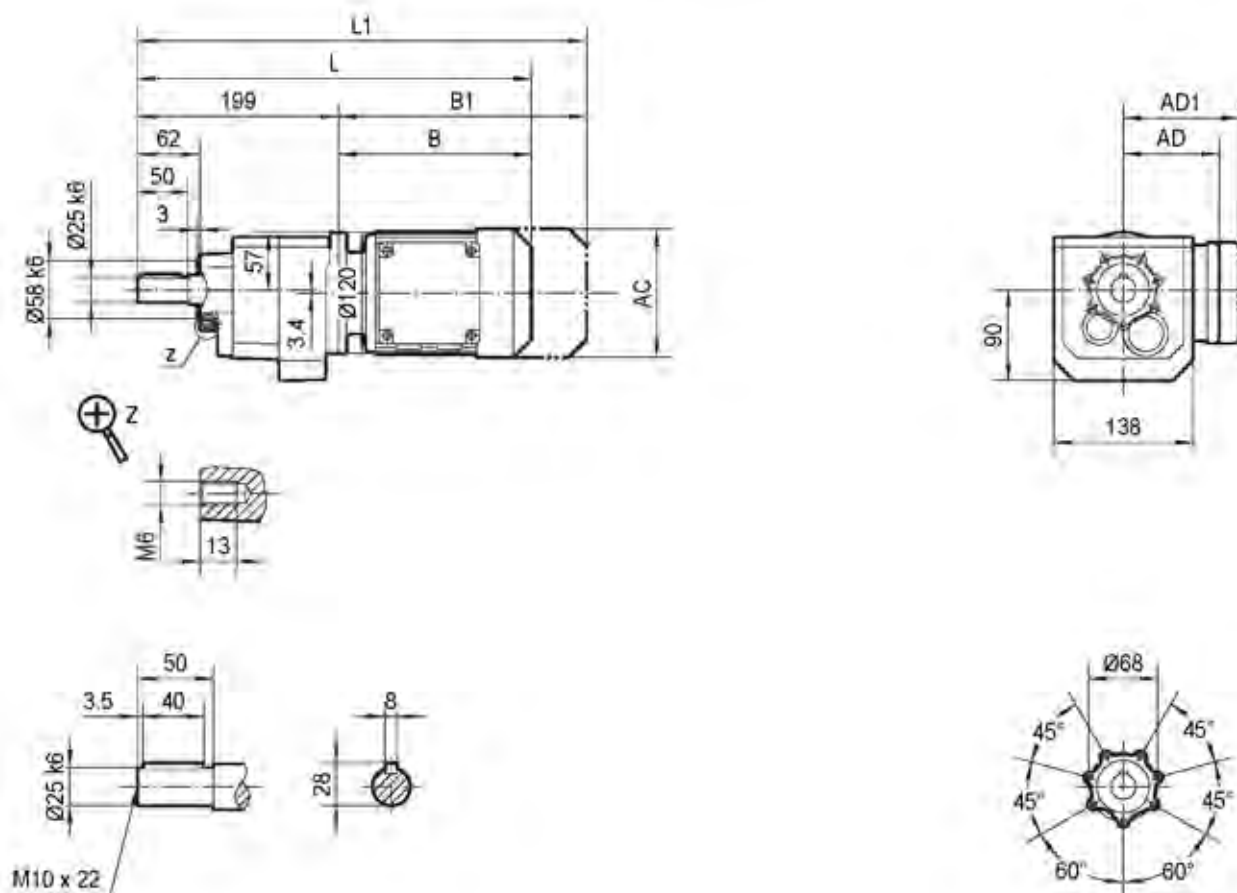
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L					
AC	132	145	145	197	197	197					
AD	105	122	122	154	166	166					
AD1	105	127	127	161	166	166					
B	192	206	256	276	328	358					
B1	246	269	319	361	413	443					
L	385	399	449	469	521	551					
L1	439	462	512	554	606	636					

TRF28..



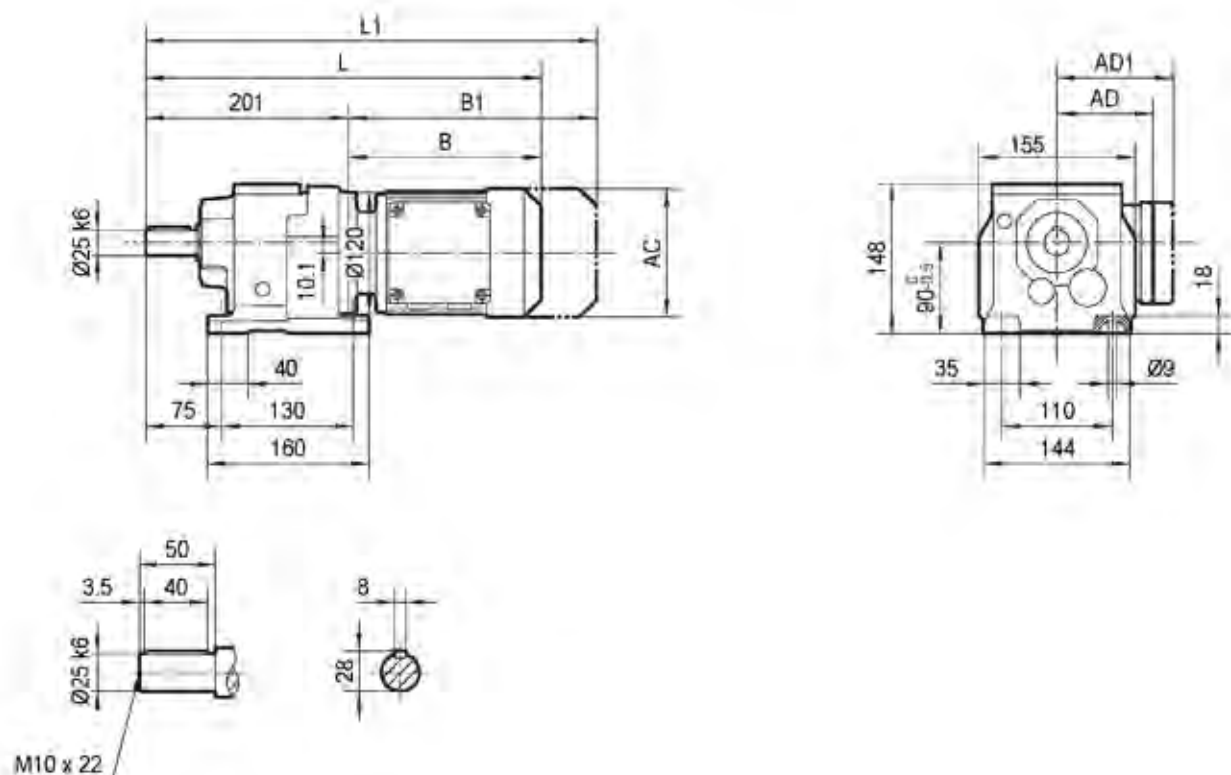
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L				
AC	132	145	145	197	197	197				
AD	105	122	122	154	166	166				
AD1	105	127	127	161	166	166				
B	192	206	256	276	328	358				
B1	246	269	319	361	413	443				
L	391	405	455	475	527	557				
L1	445	468	518	560	612	642				

TRZ28..



	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L					
AC	132	145	145	197	197	197					
AD	105	122	122	154	166	166					
AD1	105	127	127	161	166	166					
B	192	206	256	276	328	358					
B1	246	269	319	361	413	443					
L	391	405	455	475	527	557					
L1	445	468	518	560	612	642					

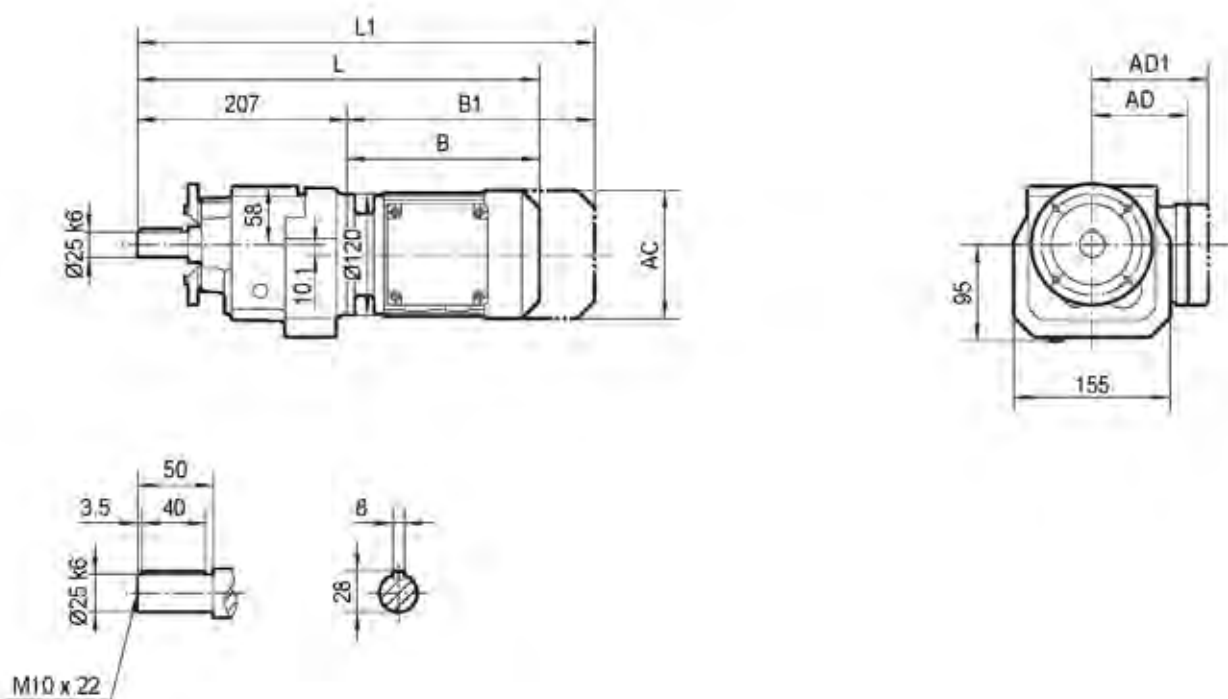
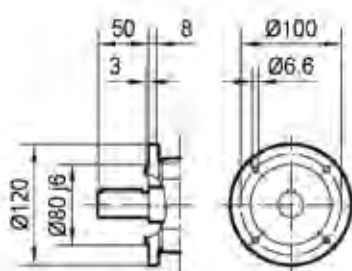
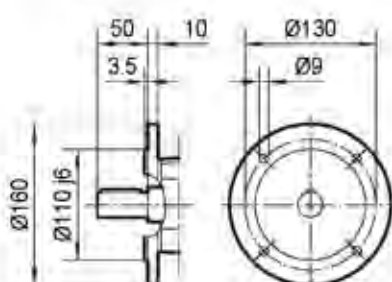
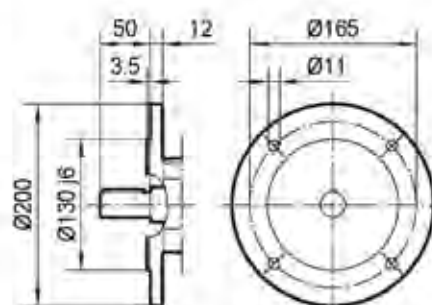
TR38..



TR38F..



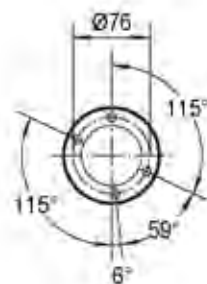
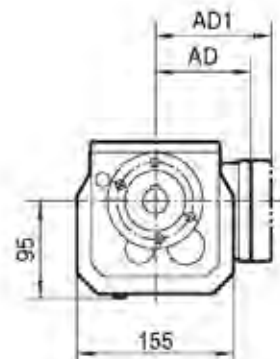
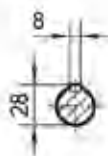
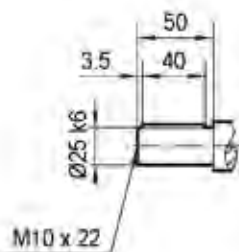
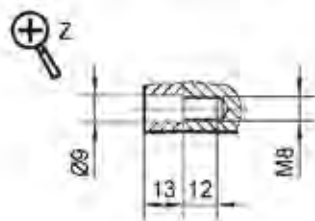
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L				
AC	132	145	145	197	197	197				
AD	105	122	122	154	166	166				
AD1	105	127	127	161	166	166				
B	192	206	256	276	328	358				
B1	246	269	319	361	413	443				
L	393	407	457	477	529	559				
L1	447	470	520	562	614	644				

TRF38..**I
Ø120****II
Ø160****III
Ø200**

	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L					
AC	132	145	145	197	197	197					
AD	105	122	122	154	166	166					
AD1	105	127	127	161	166	166					
B	192	206	256	276	328	358					
B1	246	269	319	361	413	443					
L	399	413	463	483	535	565					
L1	453	476	526	568	620	650					

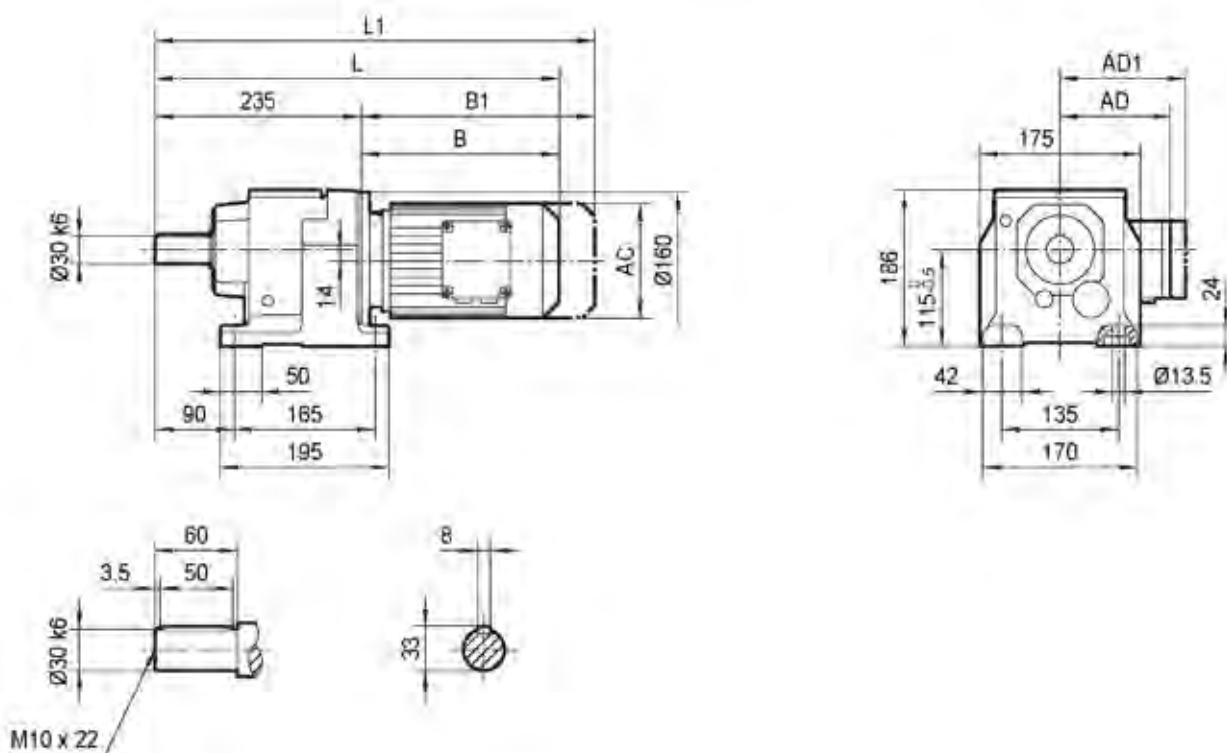
Technical drawing of the front view of a mechanical component. The drawing shows a cylindrical body with a central bore and a flange. Dimensions and tolerances are indicated as follows:

- Overall length: L_1
- Distance from the left end to the center of the bore: L
- Distance from the left end to the start of the bore: 207
- Distance from the center of the bore to the right end: 81
- Distance from the left end to the start of the bore: 50
- Distance from the center of the bore to the right end: B
- Distance from the left end to the start of the bore: 13
- Distance from the center of the bore to the right end: 2.5
- Distance from the left end to the start of the bore: $\varnothing 25 \text{ k6}$
- Distance from the left end to the start of the bore: $\varnothing 95$
- Distance from the left end to the start of the bore: $\varnothing 60 \text{ f6}$
- Distance from the left end to the start of the bore: 58
- Distance from the center of the bore to the right end: 10.1
- Distance from the center of the bore to the right end: $\varnothing 120$
- Distance from the left end to the start of the bore: AC



	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L					
AC	132	145	145	197	197	197					
AD	105	122	122	154	166	166					
AD1	105	127	127	161	166	166					
B	192	206	256	276	328	358					
B1	246	269	319	361	413	443					
L	399	413	463	483	535	565					
L1	453	476	526	568	620	650					

TR48..

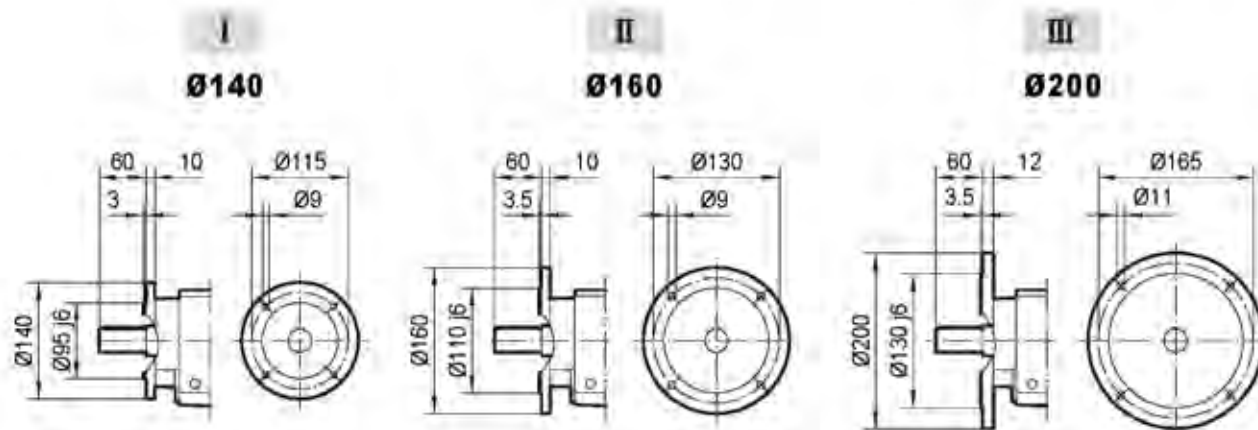
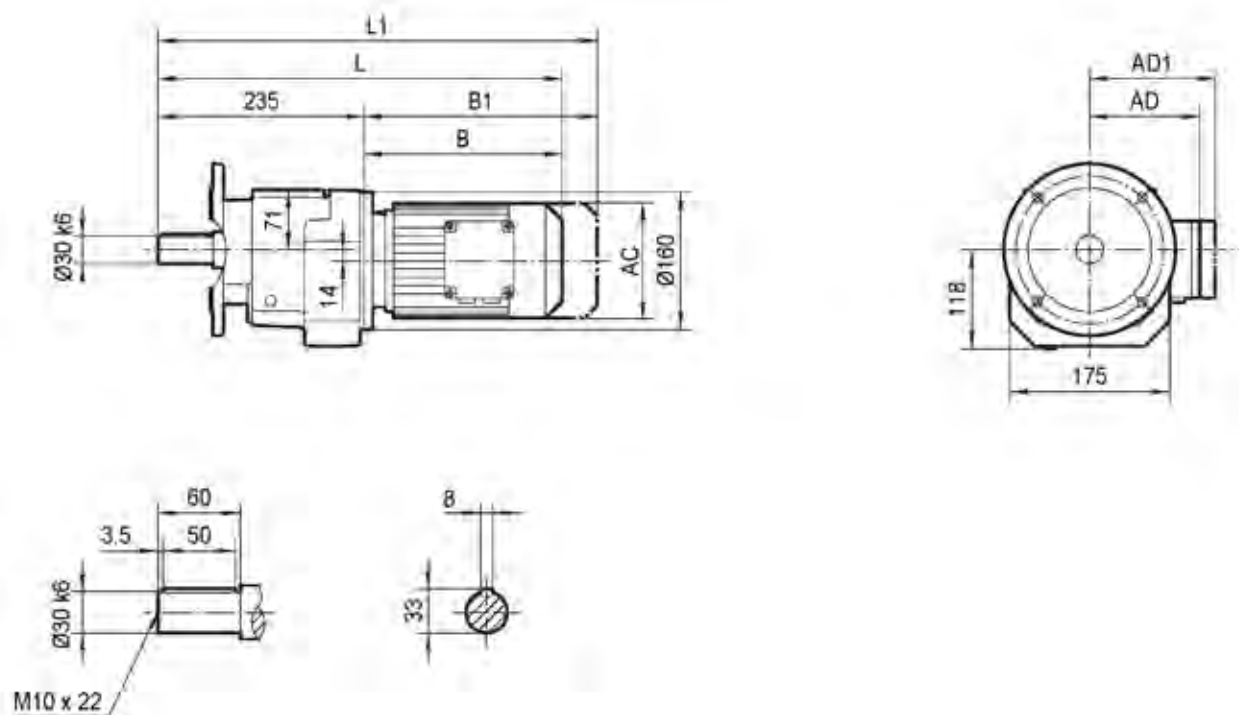


TR48F..



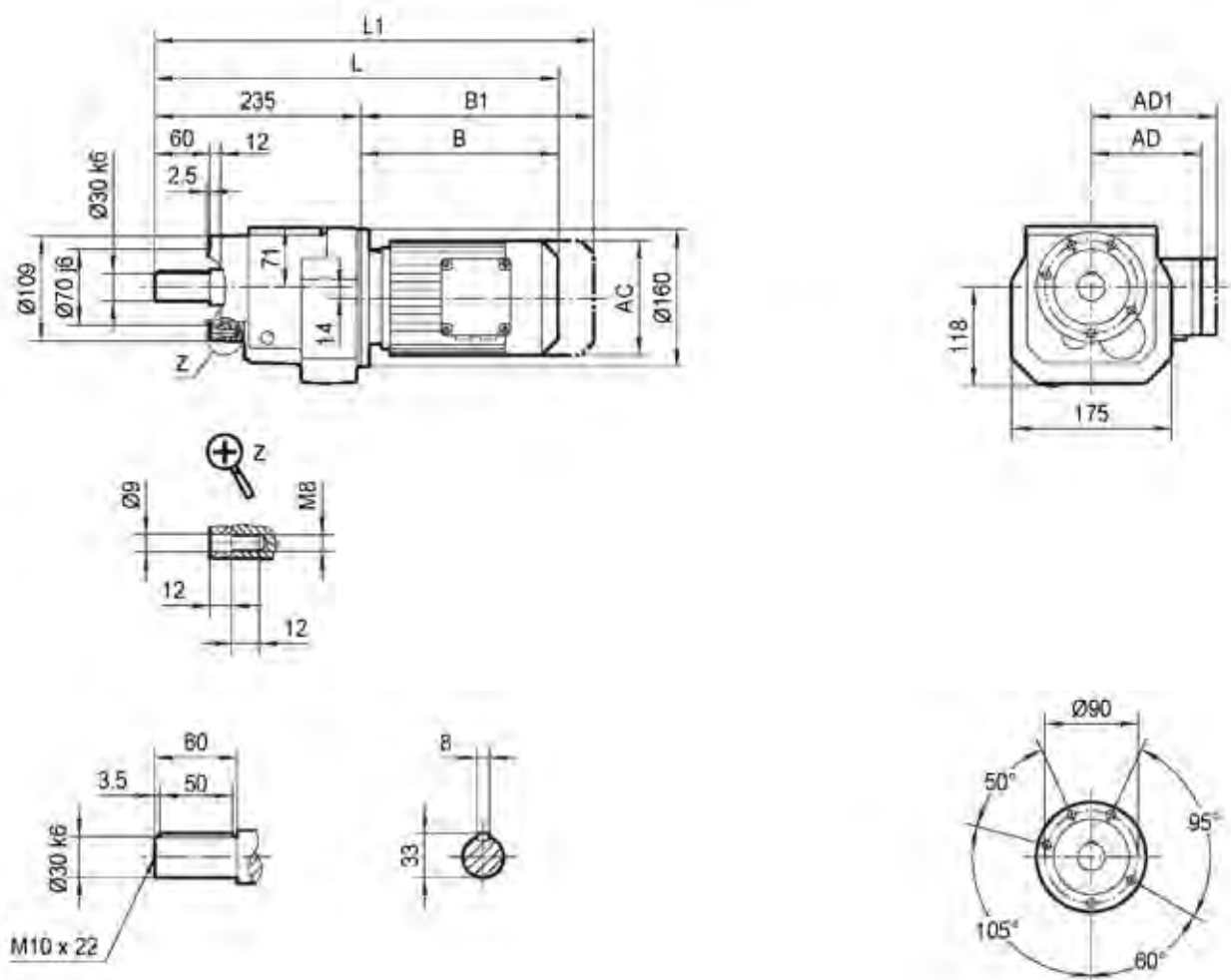
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S			
AC	132	145	145	197	197	197	221	221			
AD	105	122	122	154	166	166	179	179			
AD1	105	127	127	161	166	166	182	182			
B	185	199	249	269	319	349	354	402			
B1	240	263	313	354	404	434	434	482			
L	420	434	484	504	554	584	589	637			
L1	475	498	548	589	639	669	669	717			

TRF48..



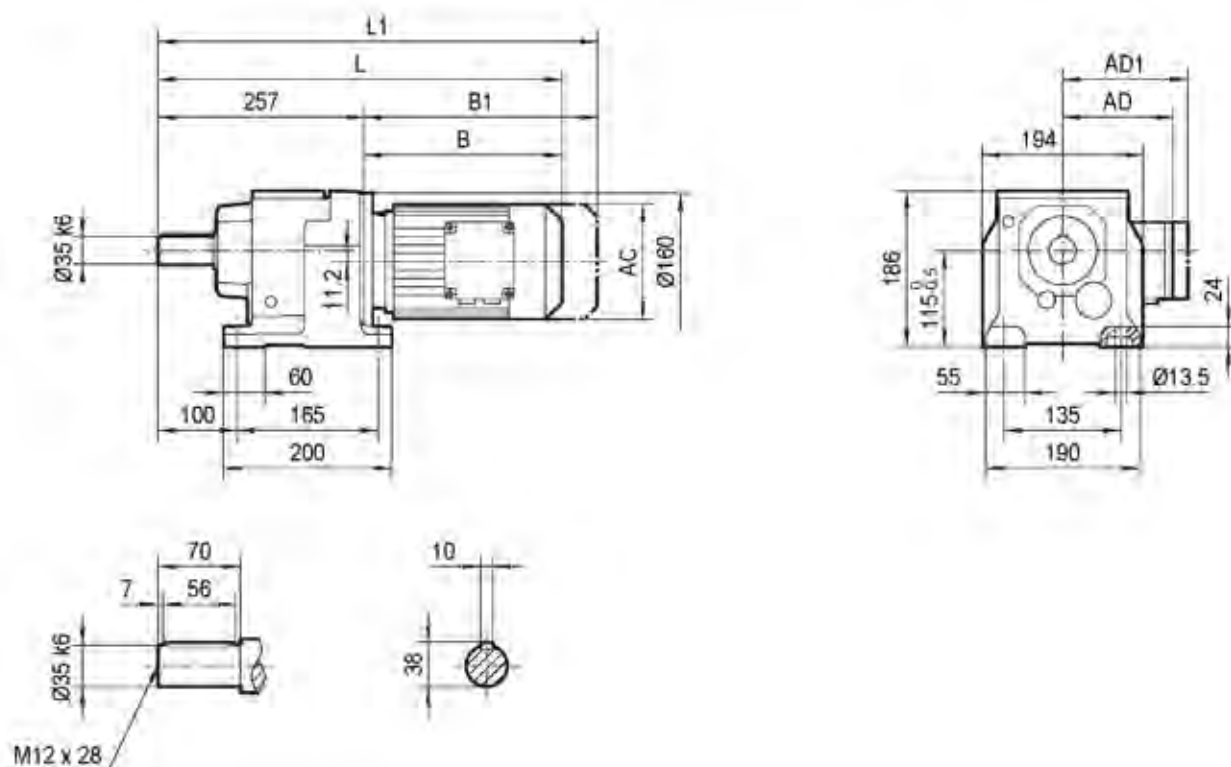
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S			
AC	132	145	145	197	197	197	221	221			
AD	105	122	122	154	166	166	179	179			
AD1	105	127	127	161	166	166	182	182			
B	185	199	249	269	319	349	354	402			
B1	240	263	313	354	404	434	434	482			
L	420	434	484	504	554	584	589	637			
L1	475	498	548	589	639	669	669	717			

TRZ48..



	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S			
AC	132	145	145	197	197	197	221	221			
AD	105	122	122	154	166	166	179	179			
AD1	105	127	127	161	166	166	182	182			
B	185	199	249	269	319	349	354	402			
B1	240	263	313	354	404	434	434	482			
L	420	434	484	504	554	584	589	637			
L1	475	498	548	589	639	669	669	717			

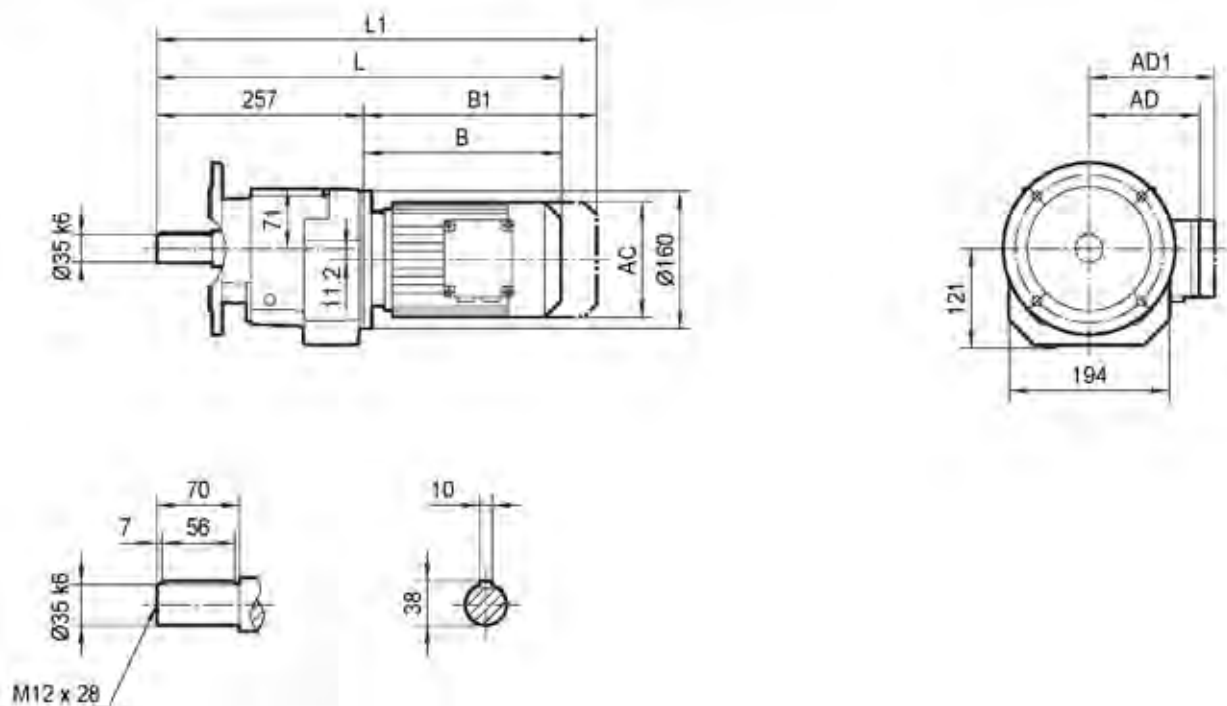
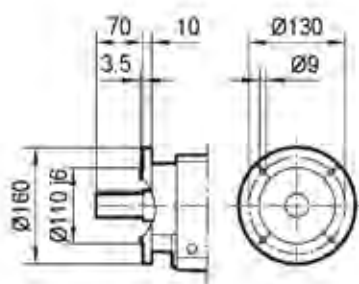
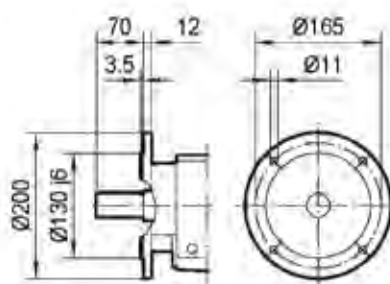
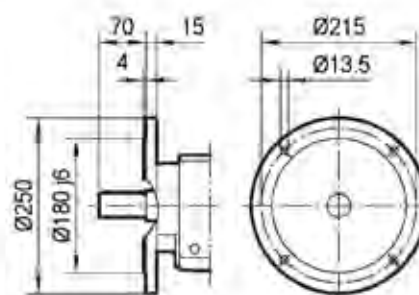
TR58..



TR58F..

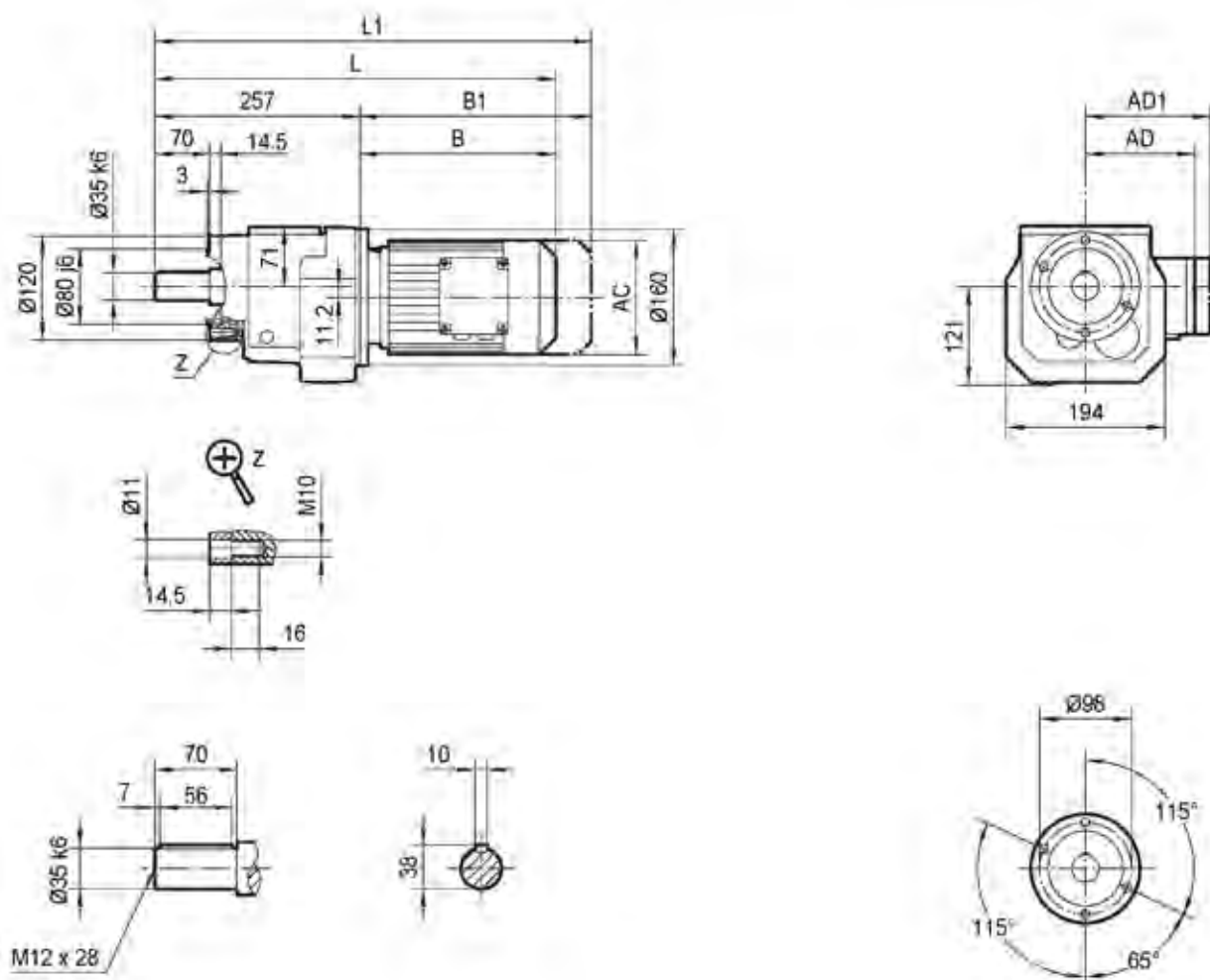


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	442	456	506	526	576	606	611	659	681		
L1	497	520	570	611	661	691	691	739	793		

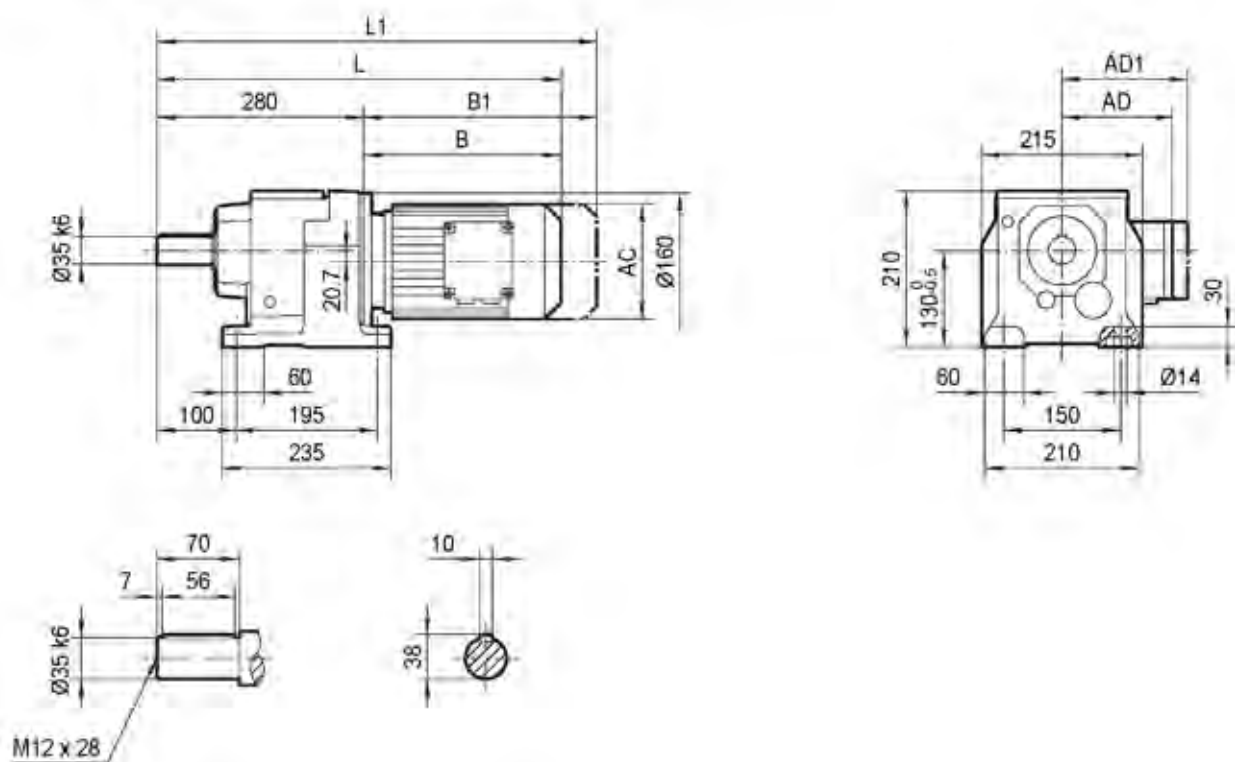
TRF58..**I
Ø160****II
Ø200****III
Ø250**

	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	442	456	506	526	576	606	611	659	681		
L1	497	520	570	611	661	691	691	739	793		

TRZ58..

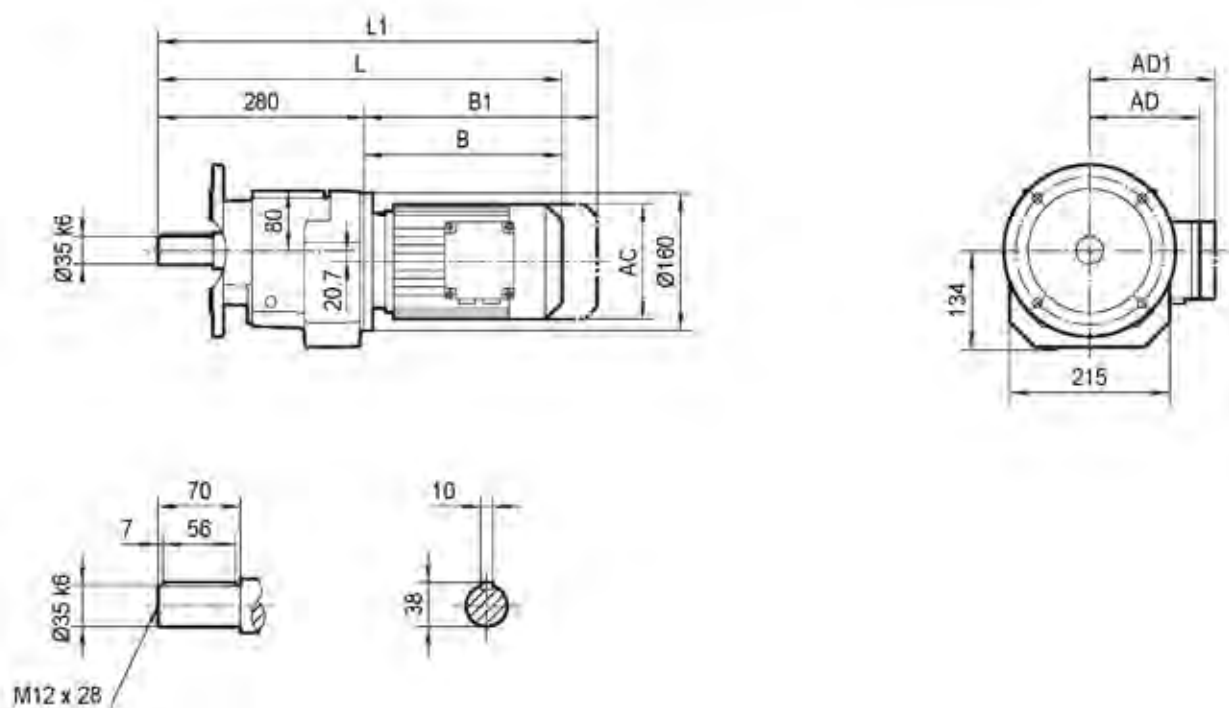


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	442	456	506	526	576	606	611	659	681		
L1	497	520	570	611	661	691	691	739	793		

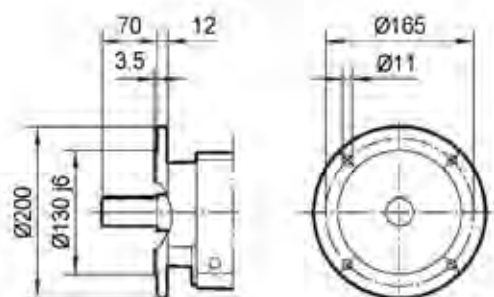
TR68..

TR68F..


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	465	479	529	549	599	629	634	682	704		
L1	520	543	593	634	684	714	714	762	816		

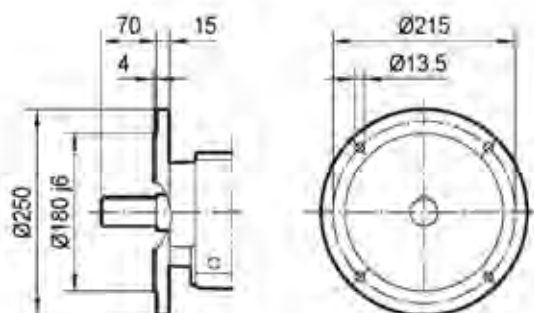
TRF68..



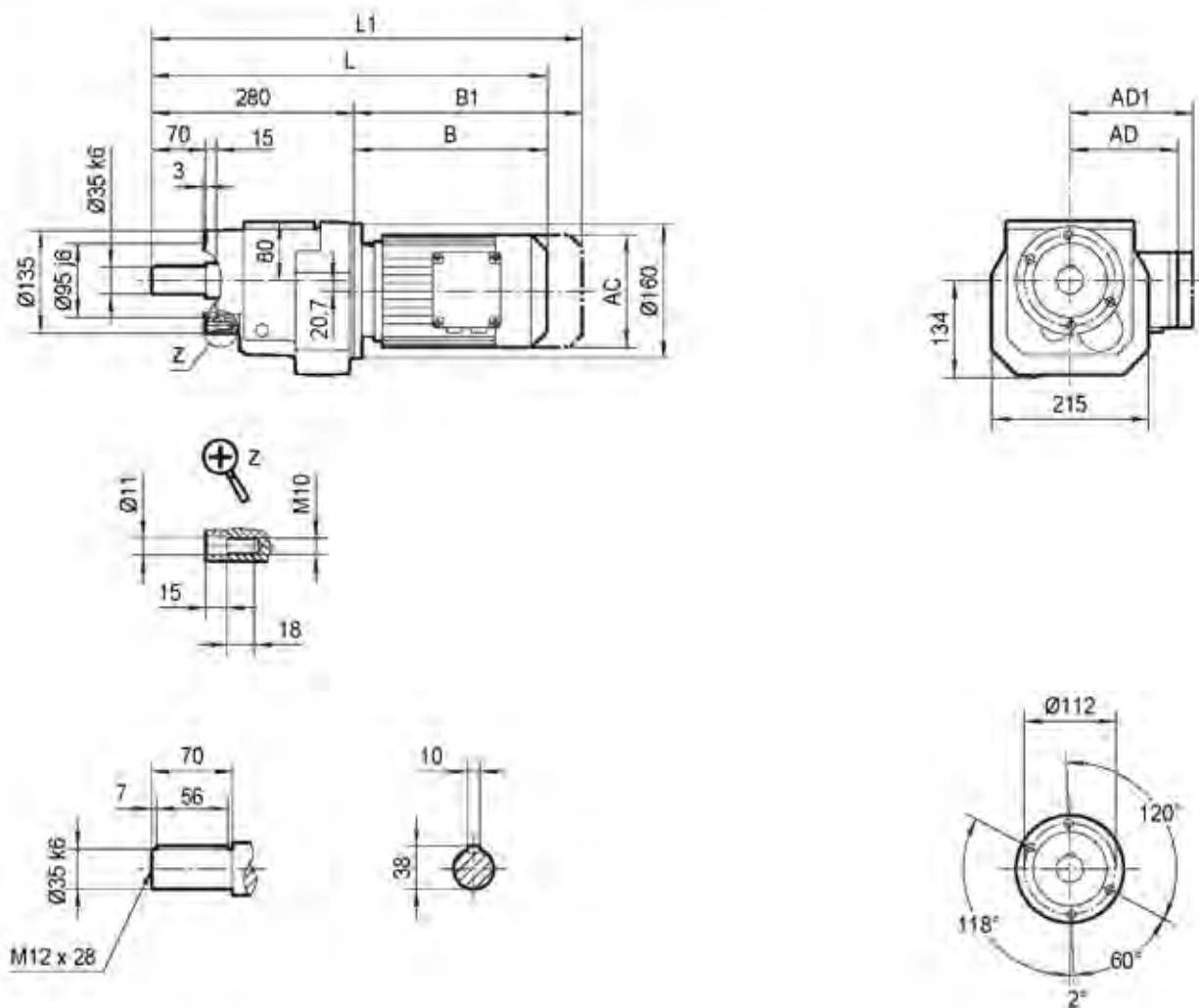
I
Ø200



II
Ø250

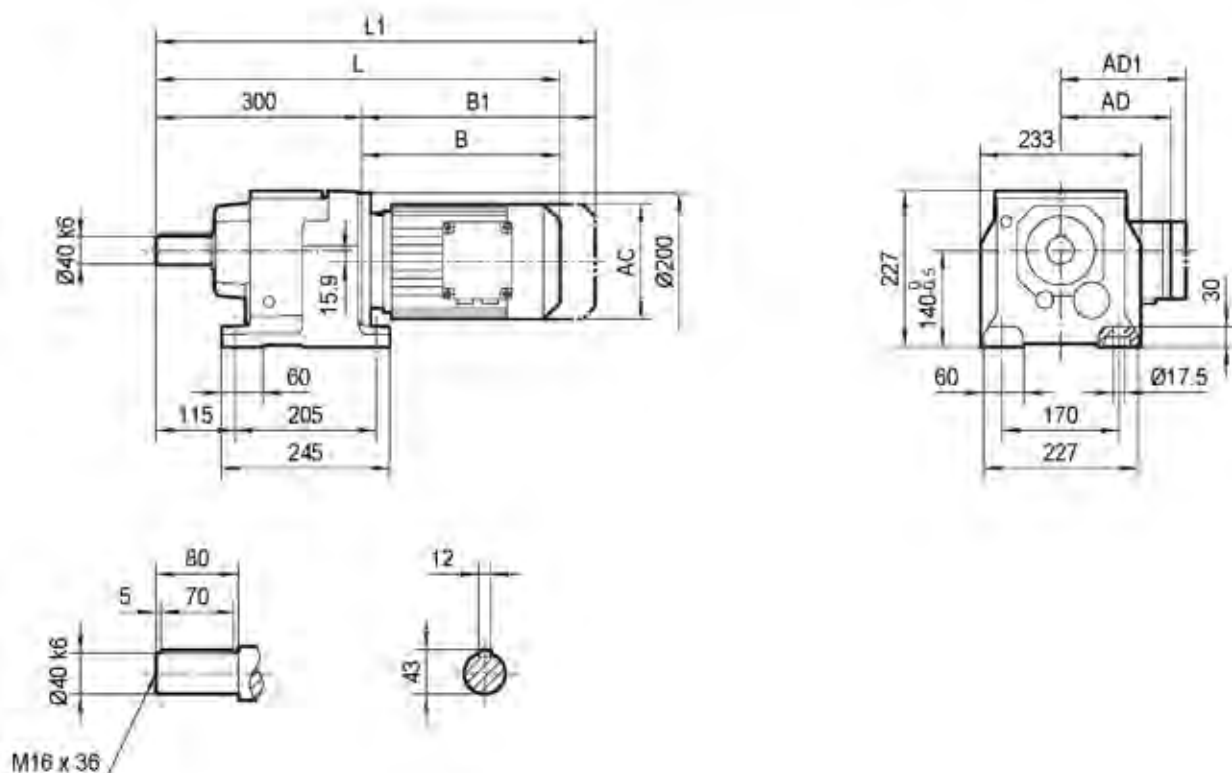


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	465	479	529	549	599	629	634	682	704		
L1	520	543	593	634	684	714	714	762	816		

TRZ68..


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M		
AC	132	145	145	197	197	197	221	221	275		
AD	105	122	122	154	166	166	179	179	230		
AD1	105	127	127	161	166	166	182	182	230		
B	185	199	249	269	319	349	354	402	424		
B1	240	263	313	354	404	434	434	482	536		
L	465	479	529	549	599	629	634	682	704		
L1	520	543	593	634	684	714	714	762	816		

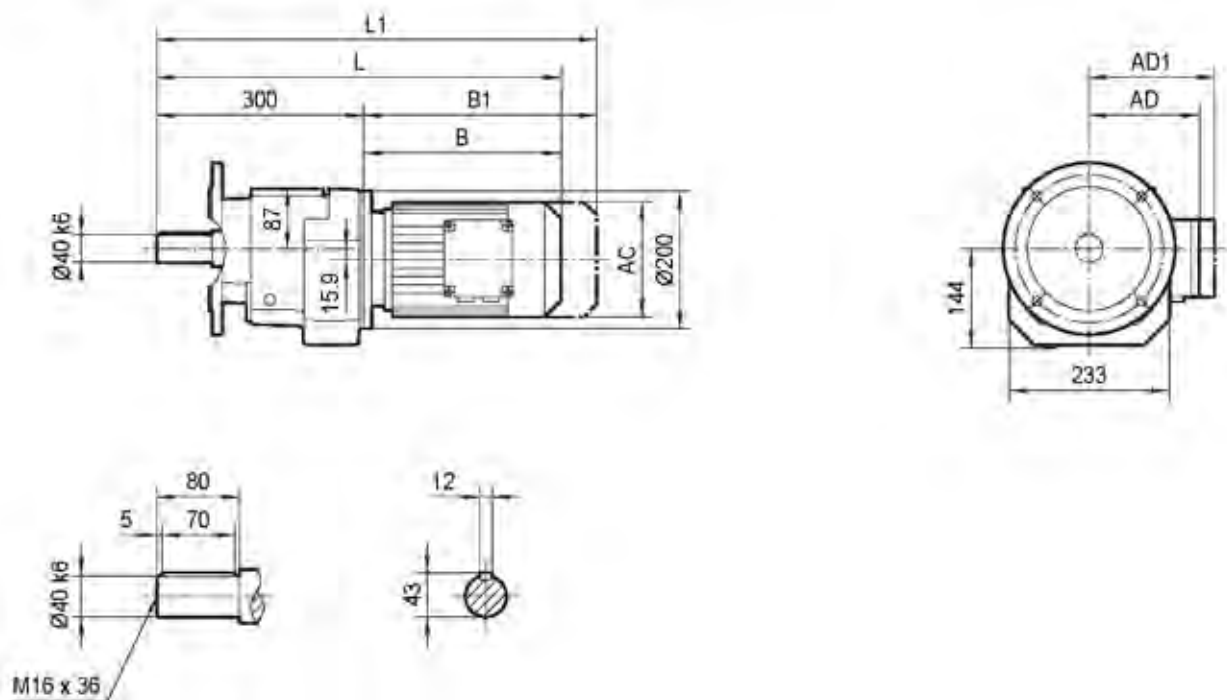
TR78..



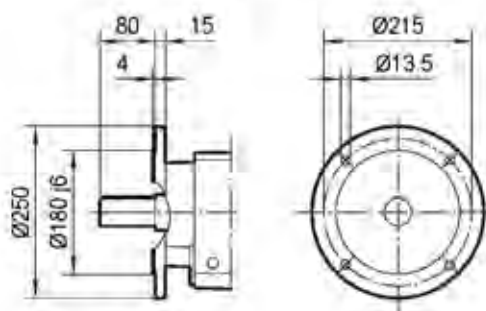
TR78F..



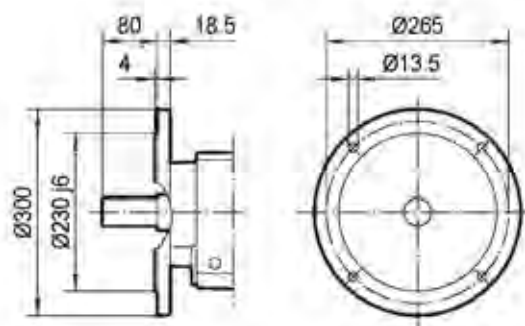
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M
AC	132	145	145	197	197	197	221	221	275	275	275
AD	105	122	122	154	166	166	179	179	230	230	230
AD1	105	127	127	161	166	166	182	182	230	230	230
B	179	193	243	261	311	341	345	390	412	472	472
B1	234	257	307	346	396	426	425	470	524	584	584
L	479	493	543	561	611	641	645	690	712	772	772
L1	534	557	607	646	696	726	725	770	824	884	884

TRF78..

I
Ø250

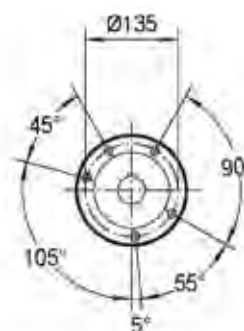
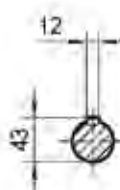
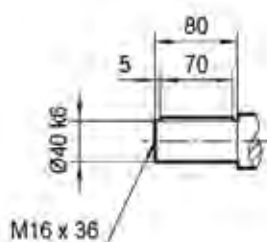
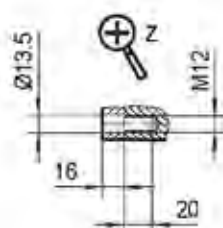
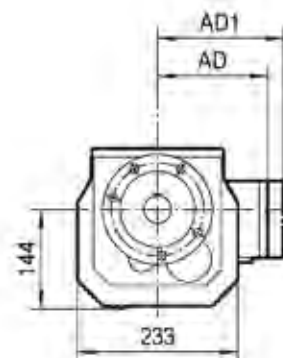
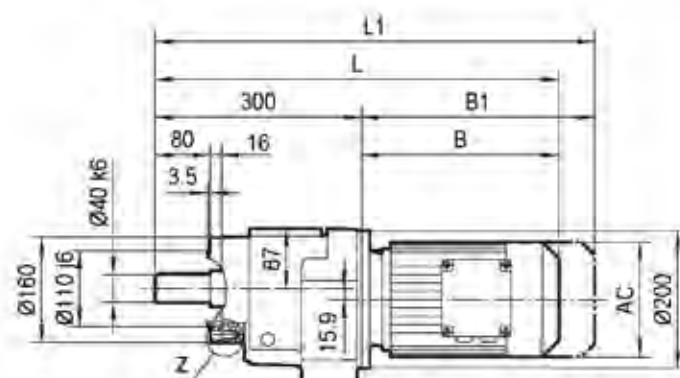


II
Ø300



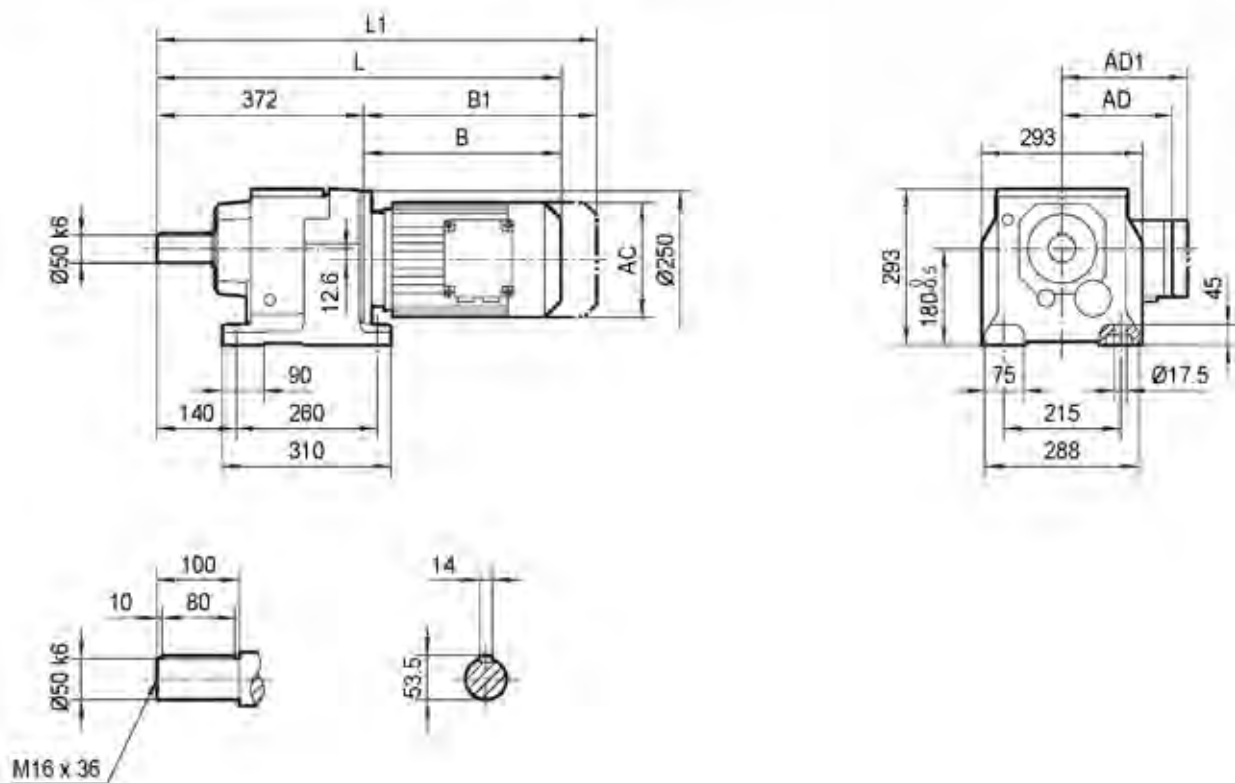
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M
AC	132	145	145	197	197	197	221	221	275	275	275
AD	105	122	122	154	166	166	179	179	230	230	230
AD1	105	127	127	161	166	166	182	182	230	230	230
B	179	193	243	261	311	341	345	390	412	472	472
B1	234	257	307	346	396	426	425	470	524	584	584
L	479	493	543	561	611	641	645	690	712	772	772
L1	534	557	607	646	696	726	725	770	824	884	884

TRZ78..



	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M
AC	132	145	145	197	197	197	221	221	275	275	275
AD	105	122	122	154	166	166	179	179	230	230	230
AD1	105	127	127	161	166	166	182	182	230	230	230
B	179	193	243	261	311	341	345	390	412	472	472
B1	234	257	307	346	396	426	425	470	524	584	584
L	479	493	543	561	611	641	645	690	712	772	772
L1	534	557	607	646	696	726	725	770	824	884	884

TR88..

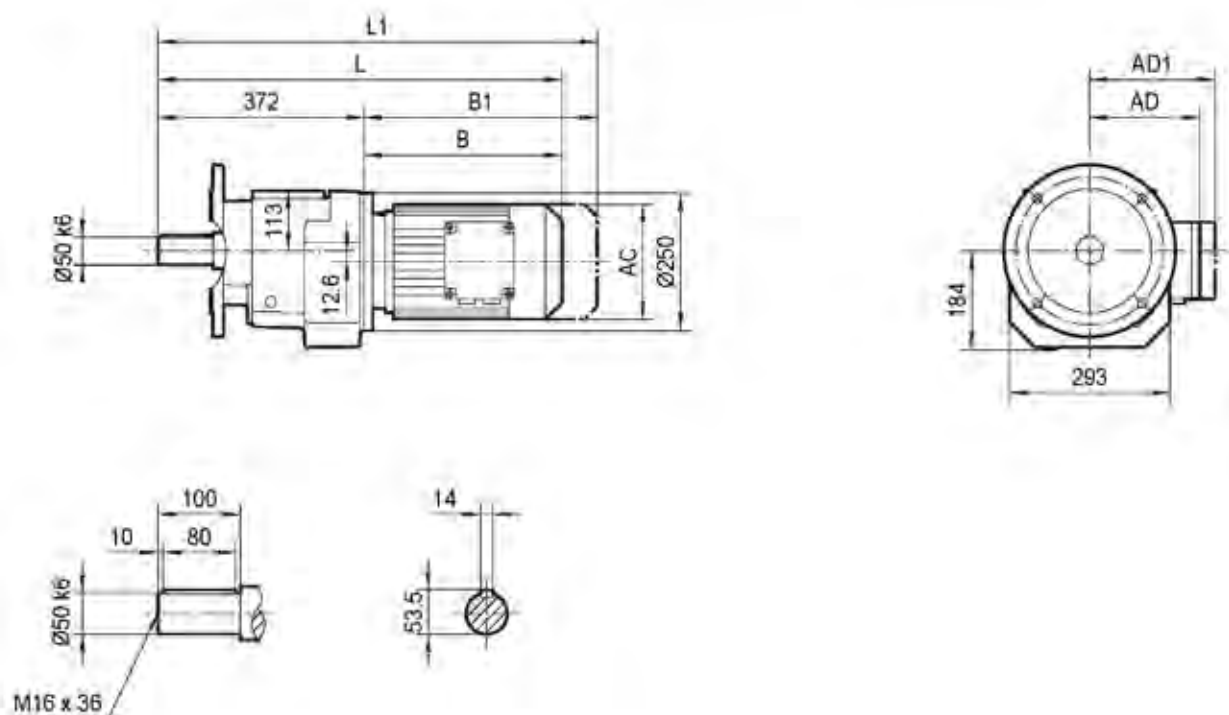


TR88F..

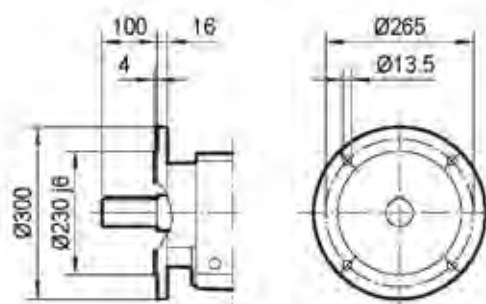


	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..
AC	145	197	197	197	221	221	275	275	275	331	331
AD	122	154	166	166	179	179	230	230	230	258	258
AD1	127	161	166	166	182	182	230	230	230	258	258
B	238	257	307	337	340	385	407	467	467	514	586
B1	302	342	392	422	420	465	519	579	579	670	742
L	610	629	679	709	712	757	779	839	839	886	958
L1	674	714	764	794	792	837	891	951	951	1042	1114

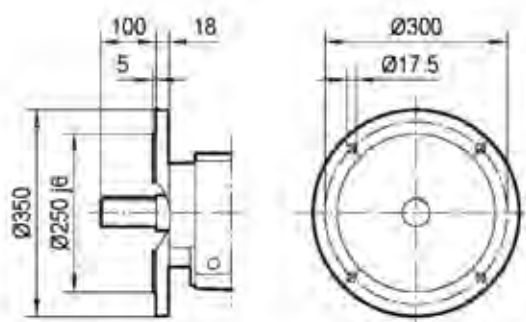
TRF88..



I
Ø300

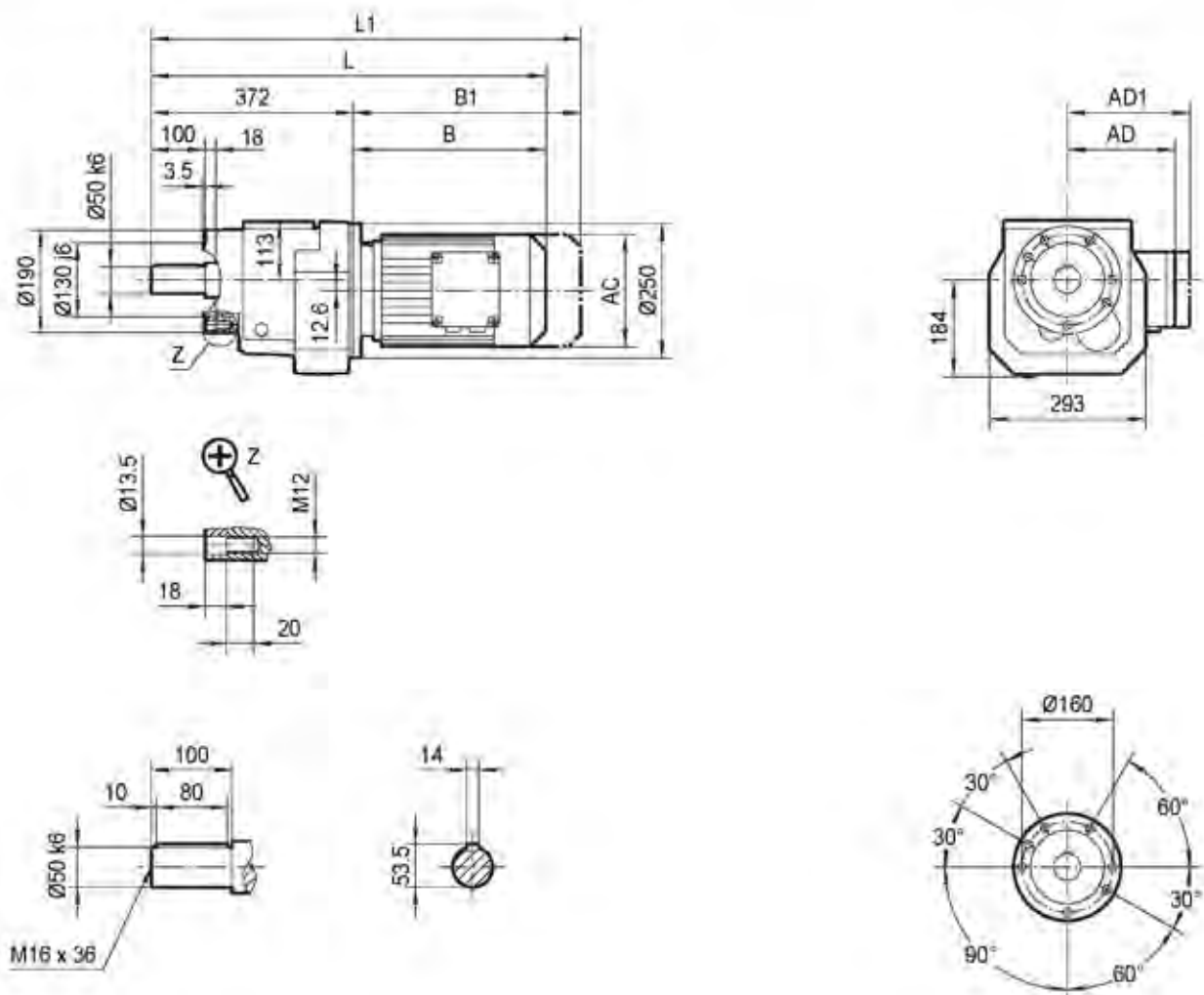


II
Ø350



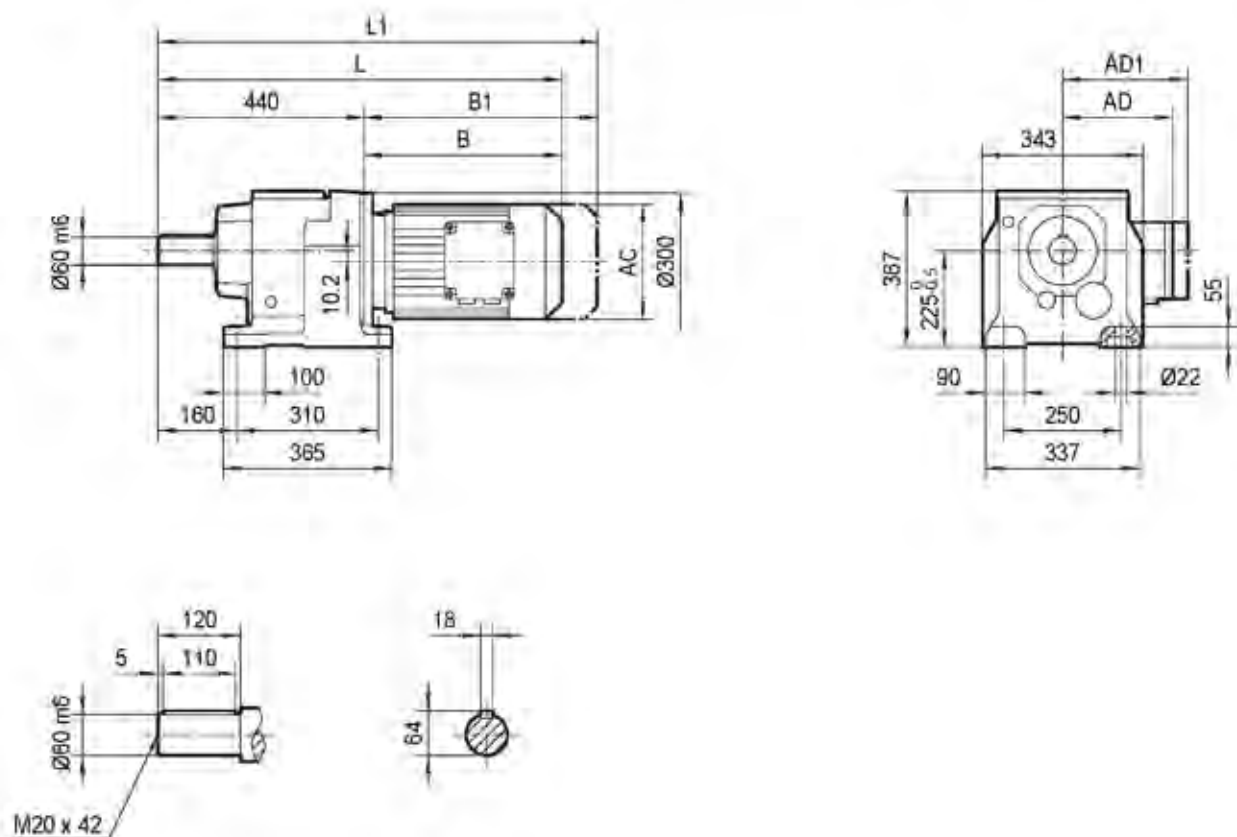
	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..
AC	145	197	197	197	221	221	275	275	275	331	331
AD	122	154	166	166	179	179	230	230	230	258	258
AD1	127	161	166	166	182	182	230	230	230	258	258
B	238	257	307	337	340	385	407	467	467	514	586
B1	302	342	392	422	420	465	519	579	579	670	742
L	610	629	679	709	712	757	779	839	839	886	958
L1	674	714	764	794	792	837	891	951	951	1042	1114

TRZ88..

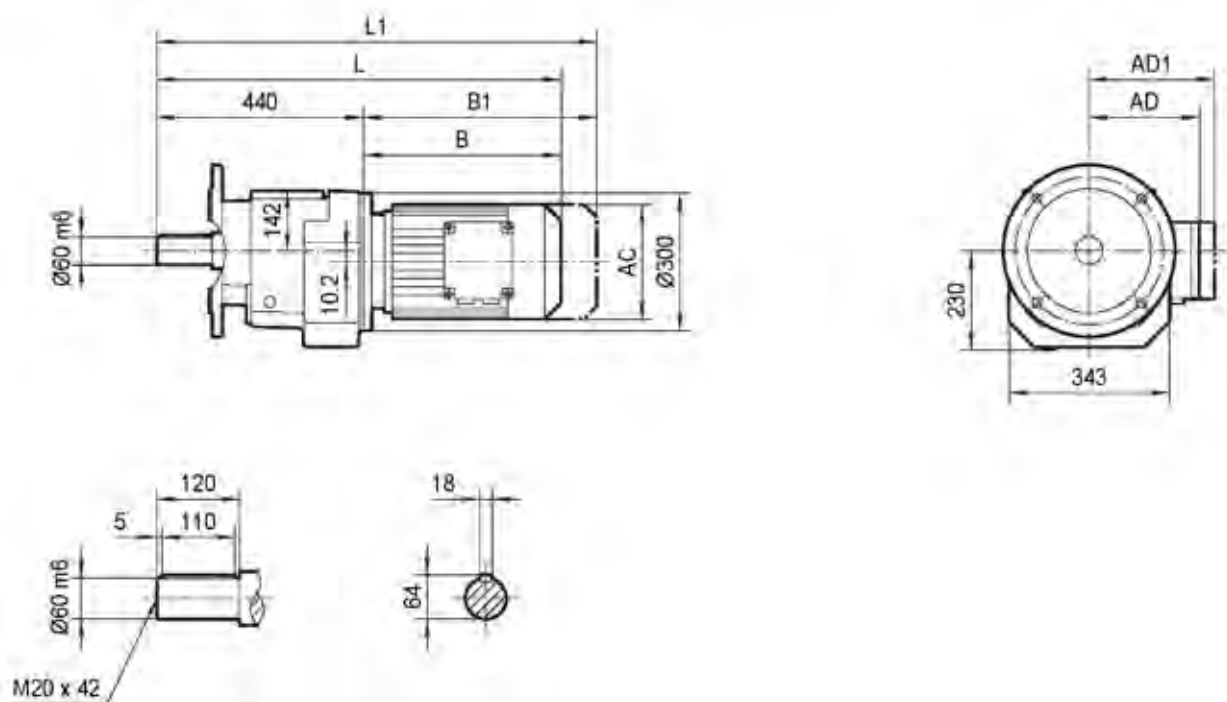
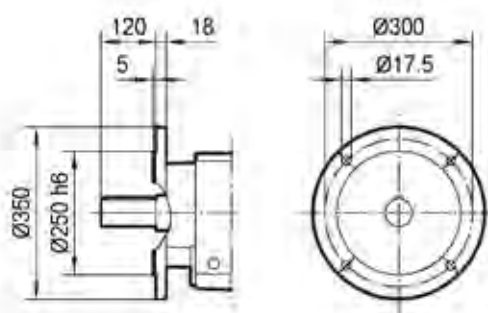
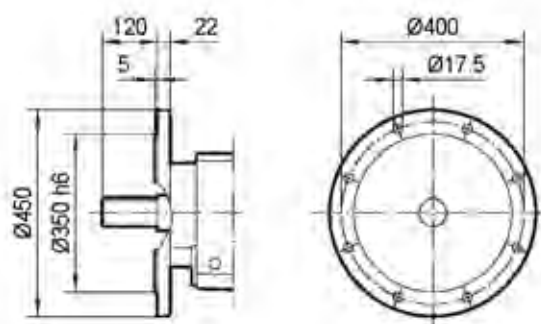


	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..
AC	145	197	197	197	221	221	275	275	275	331	331
AD	122	154	166	166	179	179	230	230	230	258	258
AD1	127	161	166	166	182	182	230	230	230	258	258
B	238	257	307	337	340	385	407	467	467	514	586
B1	302	342	392	422	420	465	519	579	579	670	742
L	610	629	679	709	712	757	779	839	839	886	958
L1	674	714	764	794	792	837	891	951	951	1042	1114

TR98..

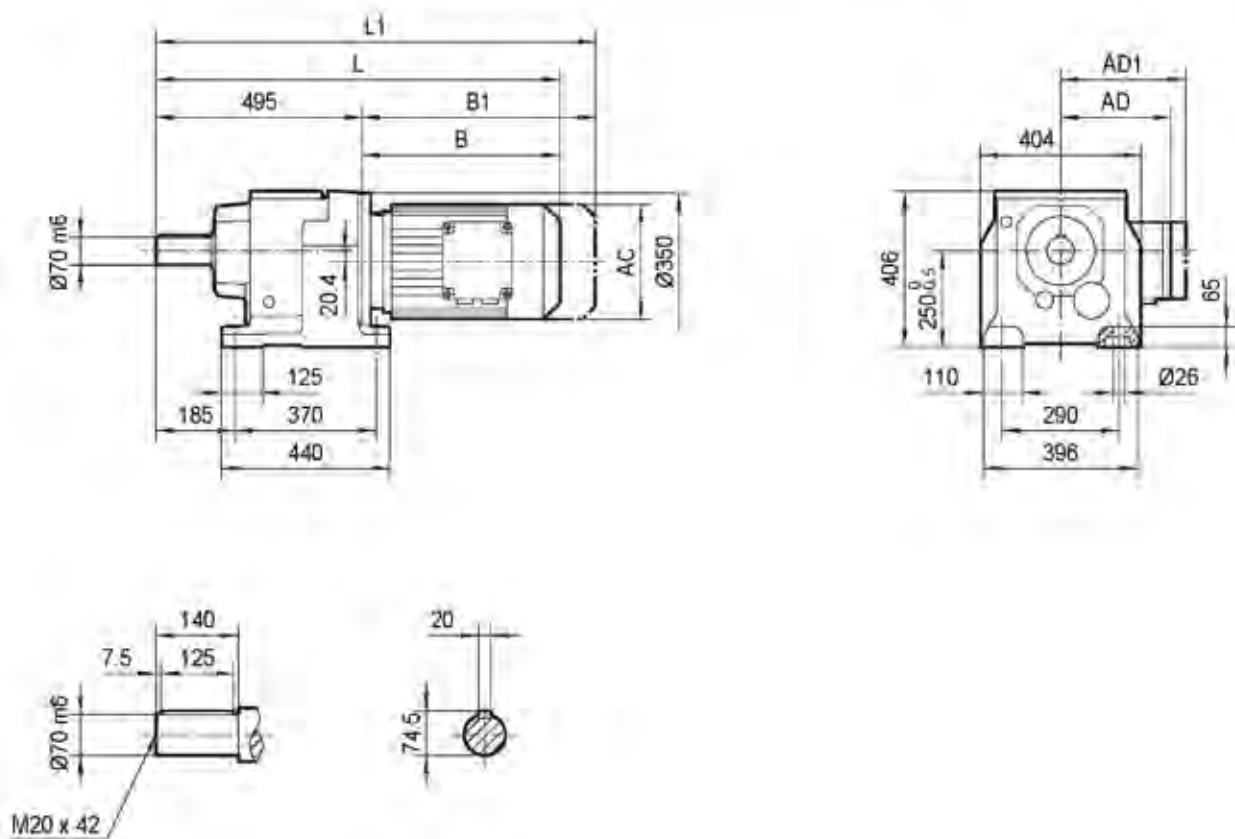


	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..
AC	145	197	197	197	221	221	275	275	275	331	331	394
AD	122	154	166	166	179	179	230	230	230	258	258	285
AD1	127	161	166	166	182	182	230	230	230	258	258	285
B	231	251	301	331	335	380	402	462	462	509	581	629
B1	295	336	386	416	415	460	514	574	574	665	737	785
L	671	691	741	771	775	820	842	902	902	949	1021	1069
L1	735	776	826	856	855	900	954	1014	1014	1105	1177	1225

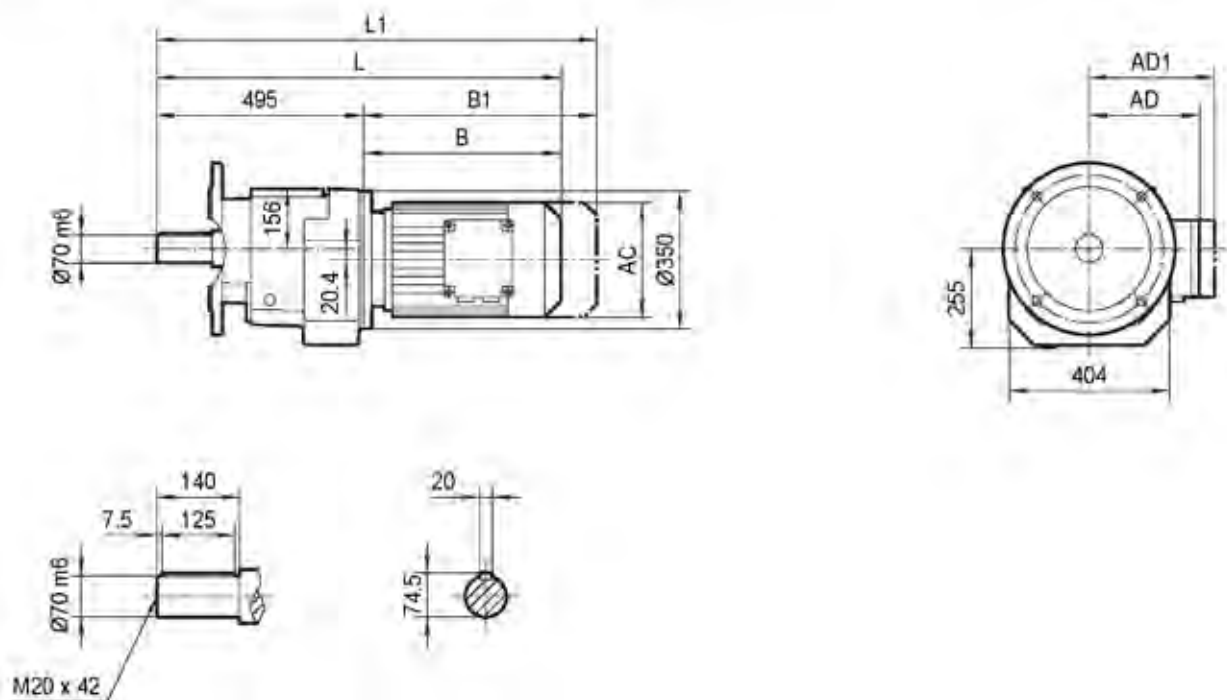
TRF98..**I
Ø350****II
Ø450**

	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..
AC	145	197	197	197	221	221	275	275	275	331	331	394
AD	122	154	166	166	179	179	230	230	230	258	258	285
AD1	127	161	166	166	182	182	230	230	230	258	258	285
B	231	251	301	331	335	380	402	462	462	509	581	629
B1	295	336	386	416	415	460	514	574	574	665	737	785
L	671	691	741	771	775	820	842	902	902	949	1021	1069
L1	735	776	826	856	855	900	954	1014	1014	1105	1177	1225

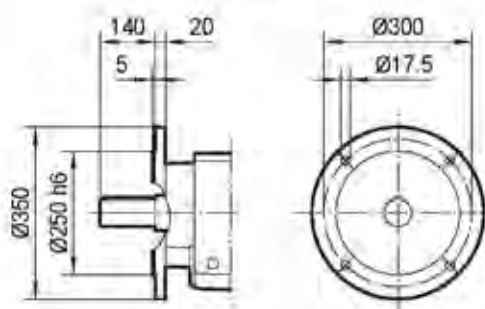
TR108..



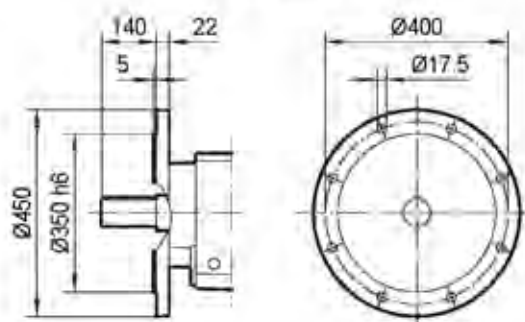
	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..
AC	197	197	221	221	275	275	275	331	331	394	394
AD	166	166	179	179	230	230	230	258	258	285	289
AD1	166	166	182	182	230	230	230	258	258	285	289
B	295	325	329	374	396	456	456	503	575	623	705
B1	380	410	409	454	508	568	568	659	731	779	861
L	790	820	824	869	891	951	951	998	1070	1118	1200
L1	875	905	904	949	1003	1063	1063	1154	1226	1274	1356

TRF108..

I
Ø350

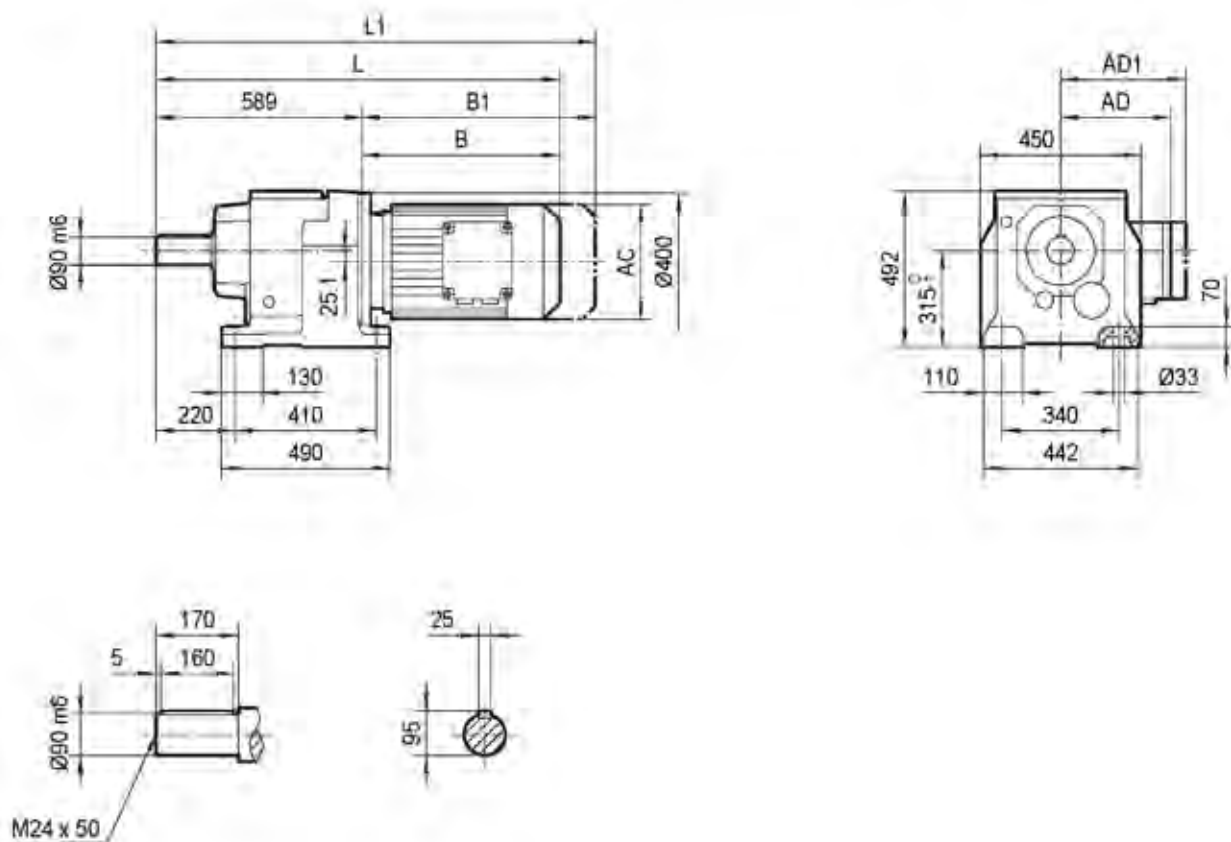


II
Ø450

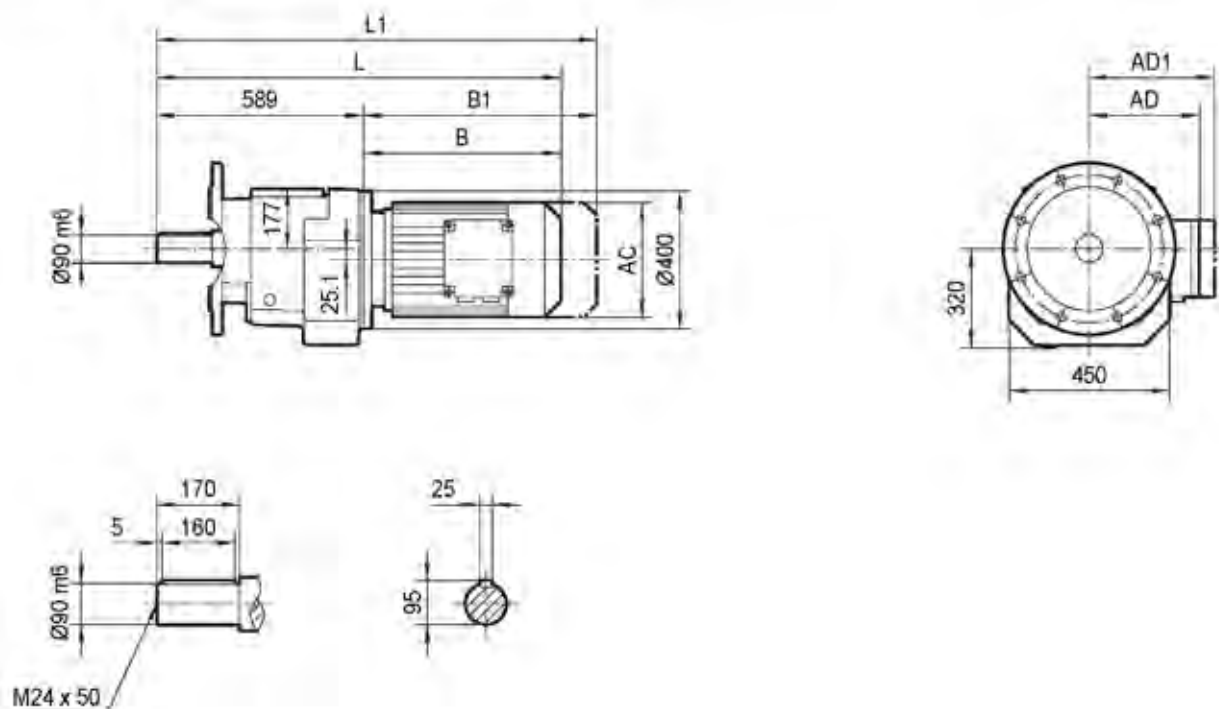
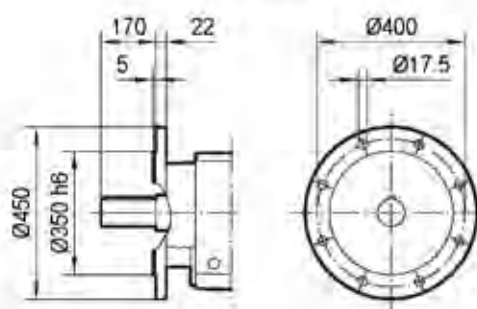
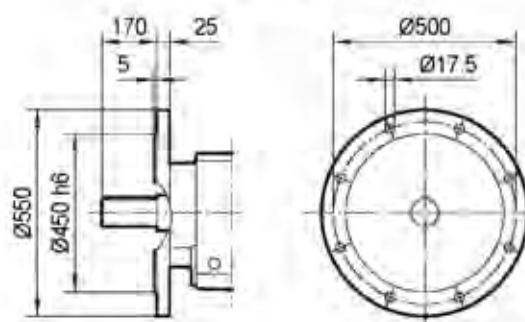


	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..
AC	197	197	221	221	275	275	275	331	331	394	394
AD	166	166	179	179	230	230	230	258	258	285	289
AD1	166	166	182	182	230	230	230	258	258	285	289
B	295	325	329	374	396	456	456	503	575	623	705
B1	380	410	409	454	508	568	568	659	731	779	861
L	790	820	824	869	891	951	951	998	1070	1118	1200
L1	875	905	904	949	1003	1063	1063	1154	1226	1274	1356

TR138..

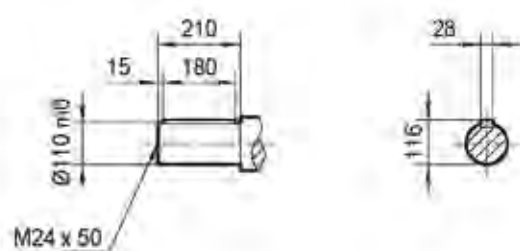
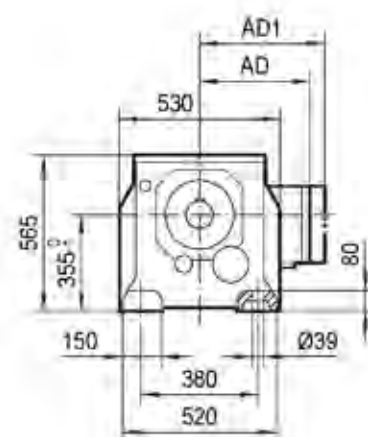


	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..	MY250M		
AC	221	275	275	275	331	331	394	394	510		
AD	179	230	230	230	258	258	285	289	397		
AD1	182	230	230	230	258	258	285	289	397		
B	367	389	449	449	496	568	616	698	789		
B1	447	501	561	561	652	724	772	854	974		
L	956	978	1038	1038	1085	1157	1205	1287	1378		
L1	1036	1090	1150	1150	1241	1313	1361	1443	1563		

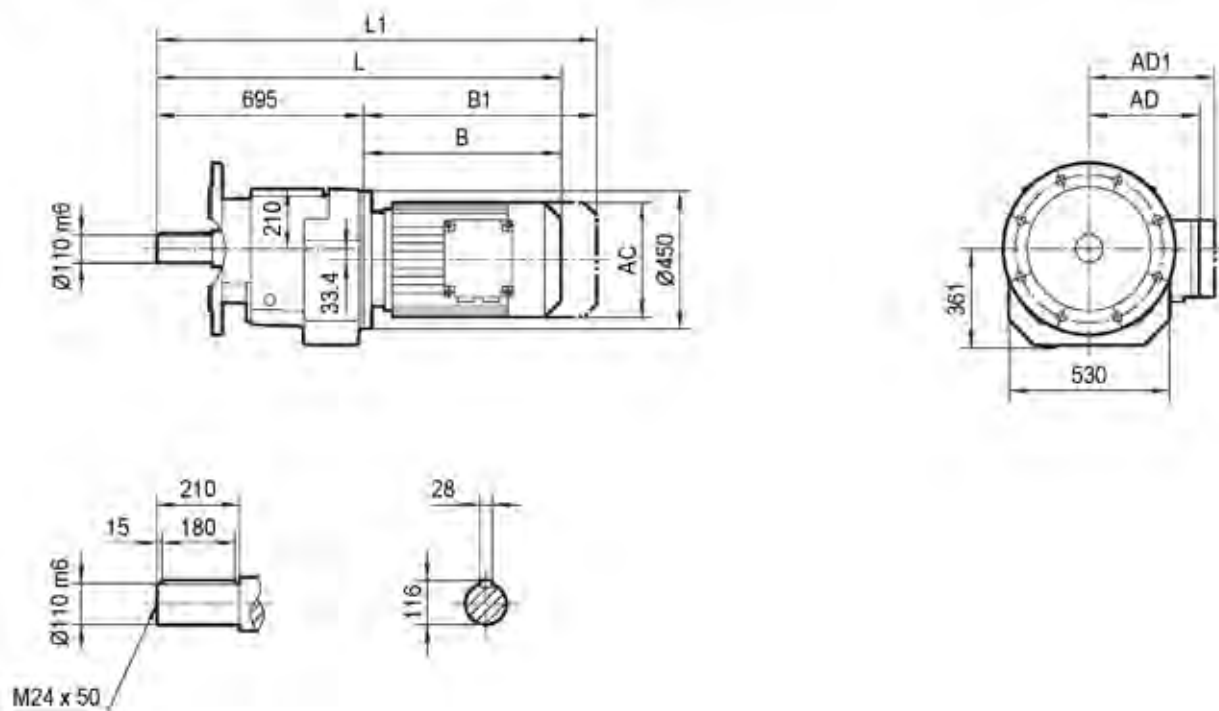
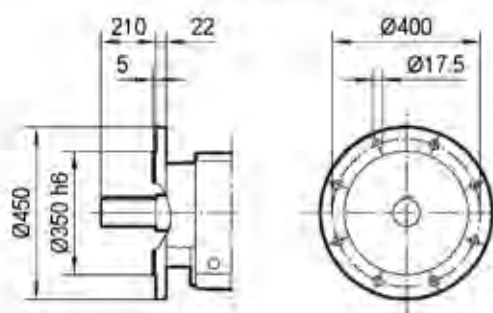
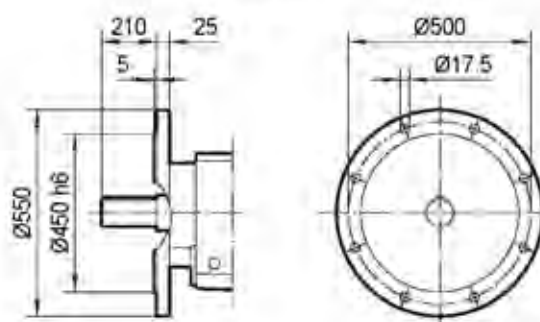
TRF138..**I
Ø450****II
Ø550**

	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..	MY250M		
AC	221	275	275	275	331	331	394	394	510		
AD	179	230	230	230	258	258	285	289	397		
AD1	182	230	230	230	258	258	285	289	397		
B	367	389	449	449	496	568	616	698	789		
B1	447	501	561	561	652	724	772	854	974		
L	956	978	1038	1038	1085	1157	1205	1287	1378		
L1	1036	1090	1150	1150	1241	1313	1361	1443	1563		

Technical drawing of the 1000 series motor showing dimensions in mm. The drawing includes a side view with dimensions L1, L, 695, B1, B, and AC. A detail view of the motor shaft shows a diameter of Ø110 m6 and a length of 33.4. The base dimensions are 150, 260, 500, and 590. The motor frame diameter is Ø450.

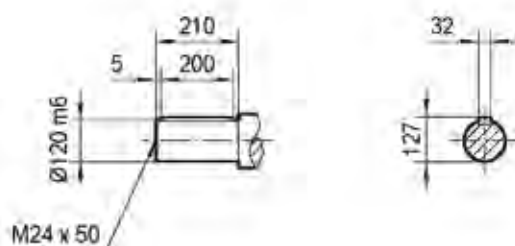
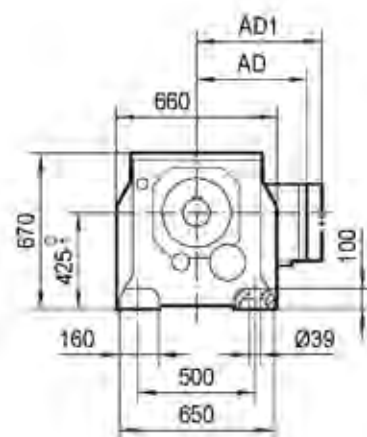


	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..	MY250M	MY280..			
AC	275	275	331	331	394	394	510	510			
AD	230	230	258	258	285	289	397	397			
AD1	230	230	258	258	285	289	397	397			
B	441	441	488	560	608	690	780	780			
B1	553	553	644	716	764	846	965	965			
L	1136	1136	1183	1255	1303	1385	1475	1475			
L1	1248	1248	1339	1411	1459	1541	1660	1660			

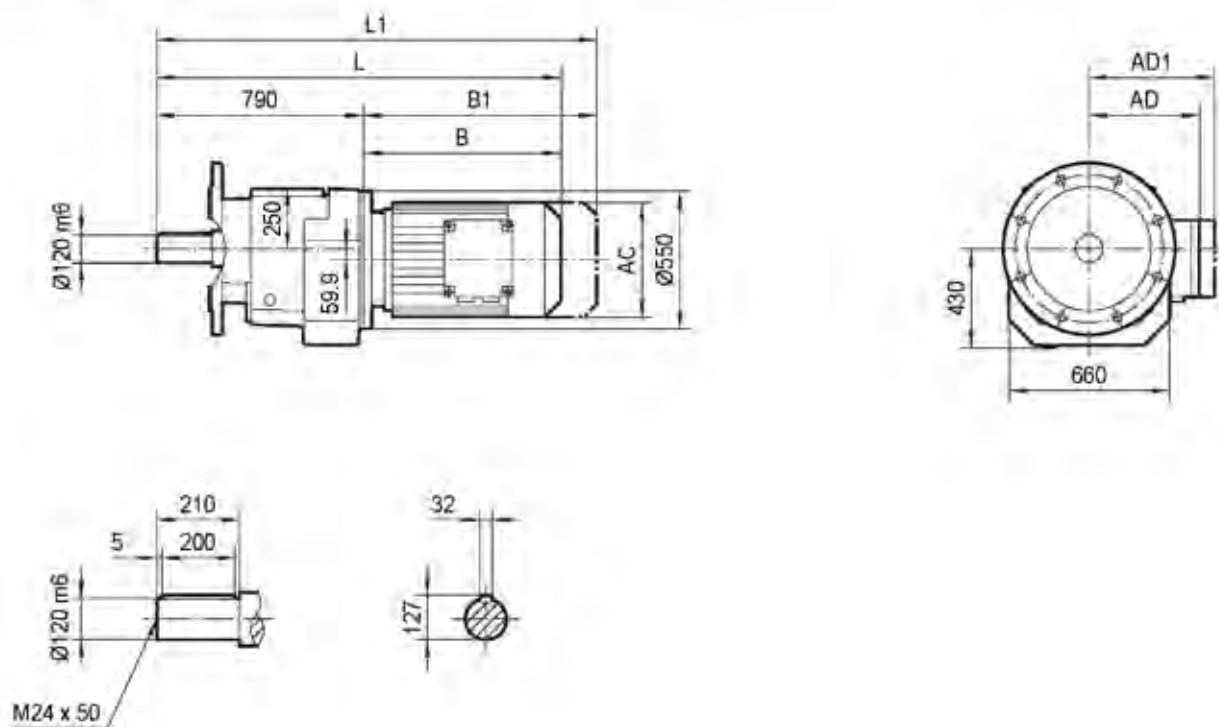
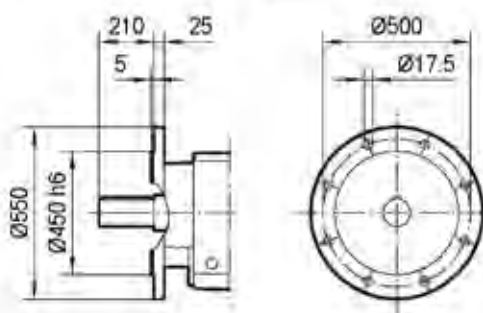
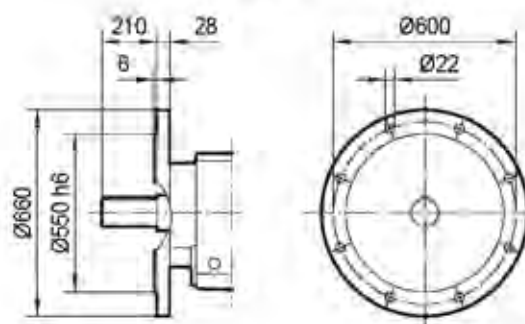
TRF148..**I
Ø450****II
Ø550**

	MY132ML	MY160M	MY160L	MY180..	MY200..	MY225..	MY250M	MY280..			
AC	275	275	331	331	394	394	510	510			
AD	230	230	258	258	285	289	397	397			
AD1	230	230	258	258	285	289	397	397			
B	441	441	488	560	608	690	780	780			
B1	553	553	644	716	764	846	965	965			
L	1136	1136	1183	1255	1303	1385	1475	1475			
L1	1248	1248	1339	1411	1459	1541	1660	1660			

Technical drawing of the 1000 series motor showing dimensions in mm. The drawing includes a side view with dimensions L1, L, B1, B, AC, and Ø550. A front view shows dimensions Ø120 m6, 59 g, 160, 270, 580, and 670.



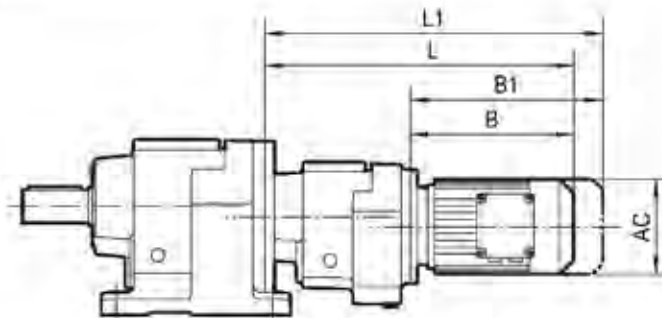
	MY160M	MY160L	MY180..	MY200..	MY225..	MY250M	MY280..	MY315S	MY315M		
AC	275	331	331	394	394	510	510	612	612		
AD	230	258	258	285	289	397	397	430	430		
AD1	230	258	258	285	289	397	397	430	430		
B	433	480	552	600	682	771	771	999	1050		
B1	545	636	708	756	838	956	956	1210	1261		
L	1223	1270	1342	1390	1472	1561	1561	1789	1840		
L1	1335	1426	1498	1546	1628	1746	1746	2000	2051		

TRF168..**I
Ø550****II
Ø660**

	MY160M	MY160L	MY180..	MY200..	MY225..	MY250M	MY280..	MY315S	MY315M		
AC	275	331	331	394	394	510	510	612	612		
AD	230	258	258	285	289	397	397	430	430		
AD1	230	258	258	285	289	397	397	430	430		
B	433	480	552	600	682	771	771	999	1050		
B1	545	636	708	756	838	956	956	1210	1261		
L	1223	1270	1342	1390	1472	1561	1561	1789	1840		
L1	1335	1426	1498	1546	1628	1746	1746	2000	2051		

7.2 TR../TRF.. Outline Dimension

TR../TRF..



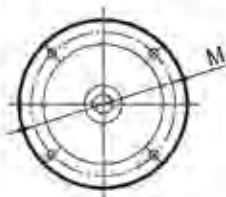
TR../TRF..	MY..	AC	B	B1	L	L1
TR..28 / TRF18	MY63	132	149	204	324	379
TR..38 / TRF18	MY71D	145	164	228	339	403
	MY80..	145	214	278	389	453
TR..48 / TRF38	MY63..	132	191	246	356	411
TR..58 / TRF38	MY71D	145	206	270	371	435
TR..68 / TRF38	MY80..	145	256	320	421	485
TR..78 / TRF38	MY63..	132	191	246	348	403
	MY71D	145	206	270	363	427
	MY80..	145	256	320	413	477
TR..88 / TRF58	MY90..	197	276	361	433	516
	MY63..	132	185	240	401	458
	MY71D	145	199	263	415	479
TR..98 / TRF58	MY80..	145	249	313	465	529
	MY90..	197	269	354	485	570
	MY63..	132	185	240	396	451
TR..108 / TRF78	MY71D	145	199	263	410	474
	MY80..	145	249	313	460	524
	MY90..	197	269	354	480	565
TR..108 / TRF78	MY100M	197	319	404	530	615
	MY100L	197	349	434	560	645
	MY63..	132	179	234	426	481
TR..108 / TRF78	MY71D	145	193	257	440	504
	MY80..	145	243	307	490	554
	MY90..	197	261	346	508	583
TR..108 / TRF78	MY100M	197	311	396	558	643
	MY100L	197	341	426	588	673
	MY112M	221	345	425	592	672
TR..108 / TRF78	MY132S	221	390	470	637	717
	MY132M	275	412	524	659	771
	MY132ML	275	472	584	719	831
TR..108 / TRF78	MY160M	275	472	584	719	831
	MY63..	132	179	234	419	474
TR..138 / TRF78	MY71D	145	193	257	433	497
	MY80..	145	243	307	483	547
	MY90..	197	261	346	501	586
TR..138 / TRF78	MY100M	197	311	396	551	636
	MY100L	197	341	426	581	666
	MY112M	221	345	425	585	665
TR..138 / TRF78	MY132S	221	390	470	630	710
	MY132M	275	412	524	652	764
	MY132ML	275	472	584	712	824
TR..138 / TRF78	MY160M	275	472	584	712	824

TR../TRF..	MY..	AC	B	B1	L	L1
TR..148 / TRF78	MY63..	132	179	234	411	466
	MY71D	145	193	257	425	489
	MY80..	145	243	307	475	539
	MY90..	197	261	346	493	578
	MY100M	197	311	396	543	628
	MY100L	197	341	426	573	658
	MY112M	221	345	425	577	657
	MY132S	221	390	470	622	702
	MY132M	275	412	524	644	756
	MY132ML	275	472	584	704	816
TR..148 / TRF88	MY160M	275	472	584	704	816
	MY90..	197	257	342	537	622
	MY100M	197	307	392	587	672
	MY100L	197	337	422	617	702
	MY112M	221	340	420	620	700
	MY132S	221	385	465	665	745
	MY132M	275	407	519	687	799
	MY132ML	275	467	579	747	859
	MY160M	275	467	579	747	859
	MY160L	331	514	670	794	950
TR..168 / TRF98	MY180..	331	586	742	866	1022
	MY80..	145	231	295	556	620
	MY90..	197	251	336	576	661
	MY100M	197	301	386	626	711
	MY100L	197	331	416	656	741
	MY112M	221	335	415	660	740
	MY132S	221	380	460	705	785
	MY132M	275	402	514	727	839
	MY132ML	275	462	574	787	899
	MY160M	275	462	574	787	899
TR..168 / TRF108	MY160L	331	509	665	834	990
	MY180..	331	581	737	906	1062
	MY100M	197	295	380	677	762
	MY100L	197	325	410	707	792
	MY112M	221	329	409	711	791
	MY132S	221	374	454	756	836
	MY132M	275	396	508	778	890
	MY132ML	275	456	568	838	950
	MY160M	275	456	568	838	950
	MY160L	331	503	659	885	1041
TR..168 / TRF108	MY180..	331	575	731	957	1113
	MY200..	394	623	779	1005	1161
TR..168 / TRF108	MY225..	394	705	861	1087	1243

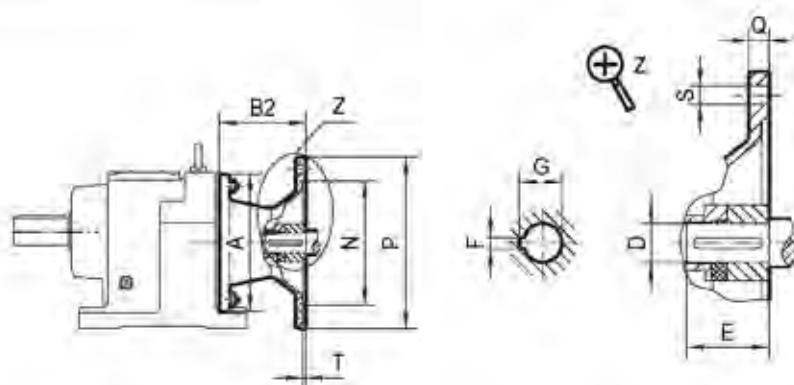
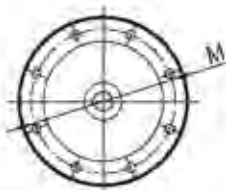
7.3 TR.. AM(IEC).. Outline Dimension

TR..AM(IEC)..

Flange.1



Flange.2



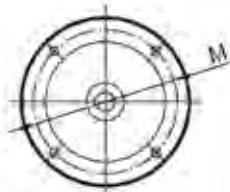
TR..	AM..	Flange.	A	B2	D	E	F	G	M	N	P	Q	S	T
TR..28 TR..38	AM63	1	120	72	11	23	4	12.8	115	95	140	10	4-Φ9	3.5
	AM71 1)				14	30	5	16.3	130	110	160			
	AM80 1)			106	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90 1)				24	50	8	27.3						
TR..48 2) TR..58 TR..68	AM63	1	160	66	11	23	4	12.8	115	95	140	10	4-Φ9	3.5
	AM71				14	30	5	16.3	130	110	160			
	AM80			99	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100 1)			134	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112 1)													
	AM132S/M 1)			191	38	80	10	41.3	265	230	300	16		
TR..78	AM63	1	200	60	11	23	4	12.8	115	95	140	10	4-Φ9	3.5
	AM71				14	30	5	16.3	130	110	160			
	AM80			92	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100 1)			126	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112 1)													
	AM132S/M 1)			179	38	80	10	41.3	265	230	300	16		
	AM132ML 1)													
TR..88	AM80	1	250	87	19	40	6	21.8	165	130	200	12	4-Φ11	4.5
	AM90				24	50	8	27.3						
	AM100			121	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			174	38	80	10	41.3	265	230	300	16		
	AM132ML													
	AM160 1)			232	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180 1)				48		14	51.8						

1) Dimension P/2 may protrude past foot mounting surface, please check.

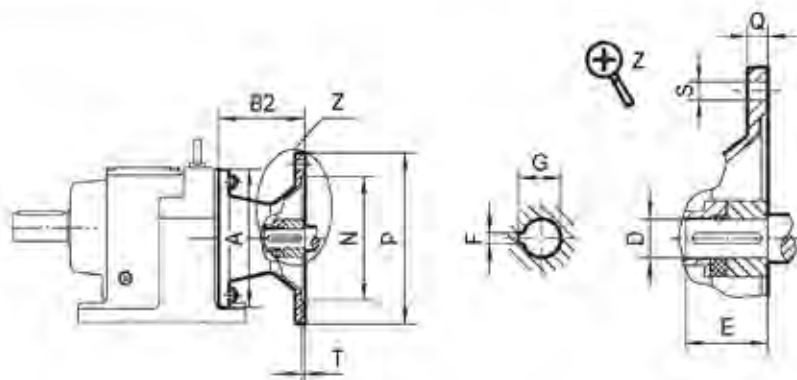
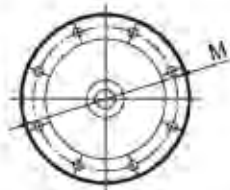
2) not with AM112.

TR..AM(IEC)..

Flange.1



Flange.2

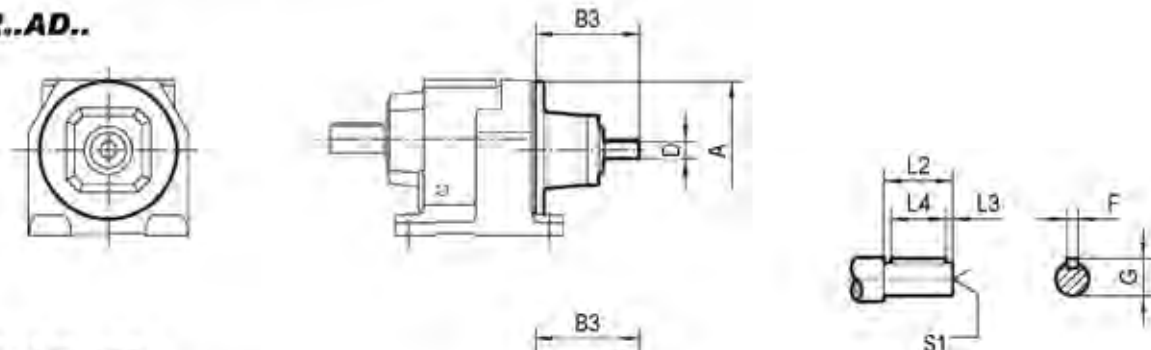


TR..	AM..	Flange.	A	B2	D	E	F	G	M	N	P	Q	S	T							
TR..98	AM100	1	300	116	28	60	8	31.3	215	180	250	15	4-Φ13.5	5							
	AM112			169	38	80	10	41.3	265	230	300	16									
	AM132S/M			227	42	110	12	45.3	300	250	350	18	4-Φ17.5	6							
	AM132ML				48		14	51.8													
	AM160			268	55		16	59.3	350	300	400	20	8-Φ17.5	7							
	AM180				55		16	59.3													
	AM200																				
TR..108	AM100	1	350	110	28	60	8	31.3	215	180	250	15	4-Φ13.5	5							
	AM112			163	38	80	10	41.3	265	230	300	16									
	AM132S/M			221	42	110	12	45.3	300	250	350	18	4-Φ17.5	6							
	AM132ML				48		14	51.8													
	AM160			262	55		16	59.3	350	300	400	20	8-Φ17.5	7							
	AM180				55		16	59.3													
	AM200			2		277	60	140	18	64.4	400	350	450	22	8-Φ17.5	7					
	AM225	277	60			140	18	64.4	400	350	450	22	8-Φ17.5	7							
TR..138	AM132S/M	1	400	148	38	80	10	41.3	265	230	300	16	4-Φ13.5	5							
	AM132ML			206	42	110	12	45.3	300	250	350	18	4-Φ17.5	6							
	AM160				48		14	51.8													
	AM180			247	55		16	59.3	350	300	400	20	8-Φ17.5	7							
	AM200				2			55							16	59.3					
	AM225	262	60	140	18	64.4	400	350	450	22	8-Φ17.5	7									
TR..148	AM132S/M	1	450	148	38	80	10	41.3	265	230	300	16	4-Φ13.5	5							
	AM132ML			206	42	110	12	45.3	300	250	350	18	4-Φ17.5	6							
	AM160				48		14	51.8													
	AM180			247	55		16	59.3	350	300	400	20	8-Φ17.5	7							
	AM200	2			55		16	59.3													
	AM225	2		262	60	140	18	64.4	500	450	550	25	8-Φ17.5	7							
	AM250			65	20		79.9														
	AM280			75	20		79.9														
TR..168	AM160	1	550	198	42	110	12	45.3	300	250	350	18	4-Φ17.5	6							
	AM180			239	48		14	51.8							350	300	400	20			
	AM200				55		16	59.3													
	AM225	2		254	60	140	18	64.4	400	350	450	22	8-Φ17.5	7							
	AM250			328	65		18	69.4							500	450	550	25			
	AM280				75		20	79.9													

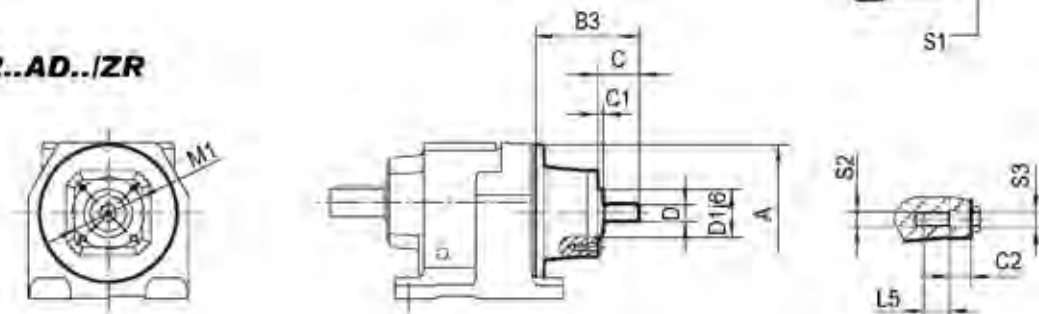
7.4 TR.. AD.. Outline Dimension

TR..AD..

TR..AD..



TR..AD../ZR

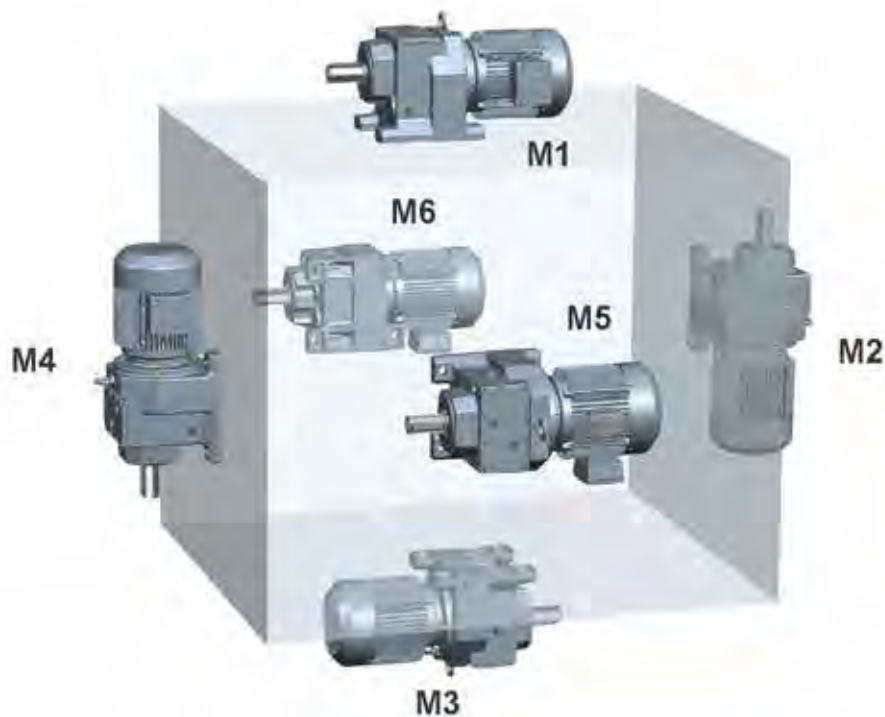


TR..	AD..	A	B3	C	C1	C2	D	D1	F	G	L2	L3	L4	L5	M1	S1	S2	S3
TR..28	AD1	120	102	-	-	-	16	-	5	18	40	4	32	-	-	M5X12.5	-	-
TR..38	AD2,AD2/ZR		130	50	8	13.5	19	55	8	21.5	40	4	32	12	80	M6X16	M8	9
TR..48	AD2,AD2/ZR	160	123	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6X16	M8	9
TR..58	AD3,AD3/ZR		159	60	8	15.5	24	70	8	27	50	5	40	16	105	M8X19	M10	11
TR..78	AD2,AD2/ZR	200	116	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6X16	M8	9
	AD3,AD3/ZR		151	60	8	15.5	24	70	8	27	50	5	40	16	105	M8X19	M10	11
	AD4,AD4/ZR		224	95.5	13	16	38	100	10	41	80	5	70	20	130	M12X28	M12	13.5
TR..88	AD2,AD2/ZR	250	111	50	8	13.5	19	55	6	21.5	40	4	32	12	80	M6X16	M8	9
	AD3,AD3/ZR		158	70	8	15.5	28	70	8	31	60	5	50	16	105	M8X19	M10	11
	AD4,AD4/ZR		219	95.5	13	16	38	100	10	41	80	5	70	20	130	M12X28	M12	13.5
	AD5,AD5/ZR		292	126	11	24	42	120	12	45	110	10	70	20	180	M16X36	M12	13.5
TR..98	AD3,AD3/ZR	300	151	70	8	15.5	28	70	8	31	60	5	50	16	105	M8X19	M10	11
	AD4,AD4/ZR		214	95.5	13	16	38	100	10	41	80	5	70	20	130	M12X28	M12	13.5
	AD5,AD5/ZR		287	126	11	24	42	120	12	45	110	10	70	20	180	M16X36	M12	13.5
	AD6,AD6/ZR		327	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16X36	M16	17.5
TR..108	AD3,AD3/ZR	350	145	70	8	15.5	28	70	8	31	60	5	50	16	105	M8X19	M10	11
	AD4,AD4/ZR		208	95.5	13	16	38	100	10	41	80	5	70	20	130	M12X28	M12	13.5
	AD5,AD5/ZR		281	126	11	24	42	120	12	45	110	10	70	20	180	M16X36	M12	13.5
	AD6,AD6/ZR		321	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16X36	M16	17.5
TR..138	AD4,AD4/ZR	400	201	95.5	13	16	38	100	10	41	80	5	70	20	130	M12X28	M12	13.5
	AD5,AD5/ZR		274	126	11	24	42	120	12	45	110	10	70	20	180	M16X36	M12	13.5
	AD6,AD6/ZR		314	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16X36	M16	17.5
	AD7,AD7/ZR		308	133	13	19	55	125	16	59	110	10	90	30	190	M20X42	M20	22
TR..148	AD4,AD4/ZR	450	193	95.5	13	16	38	100	10	41	80	5	70	20	130	M12X28	M12	13.5
	AD5,AD5/ZR		266	126	11	24	42	120	12	45	110	10	70	20	180	M16X36	M12	13.5
	AD6,AD6/ZR		306	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16X36	M16	17.5
	AD7,AD7/ZR		300	133	13	19	55	125	16	59	110	10	90	30	190	M20X42	M20	22
TR..168	AD8,AD8/ZR	550	383	155	5	22.5	70	120	20	74.5	140	15	110	19.5	210	M20X42	M12	13.5
	AD5,AD5/ZR		258	126	11	24	42	120	12	45	110	10	70	20	180	M16X36	M12	13.5
	AD6,AD6/ZR		298	130.5	11	22.5	48	130	14	51.5	110	10	80	26	200	M16X36	M16	17.5
	AD7,AD7/ZR		292	133	13	19	55	125	16	59	110	10	90	30	190	M20X42	M20	22
	AD8,AD8/ZR		374	155	5	22.5	70	120	20	74.5	140	15	110	19.5	210	M20X42	M12	13.5

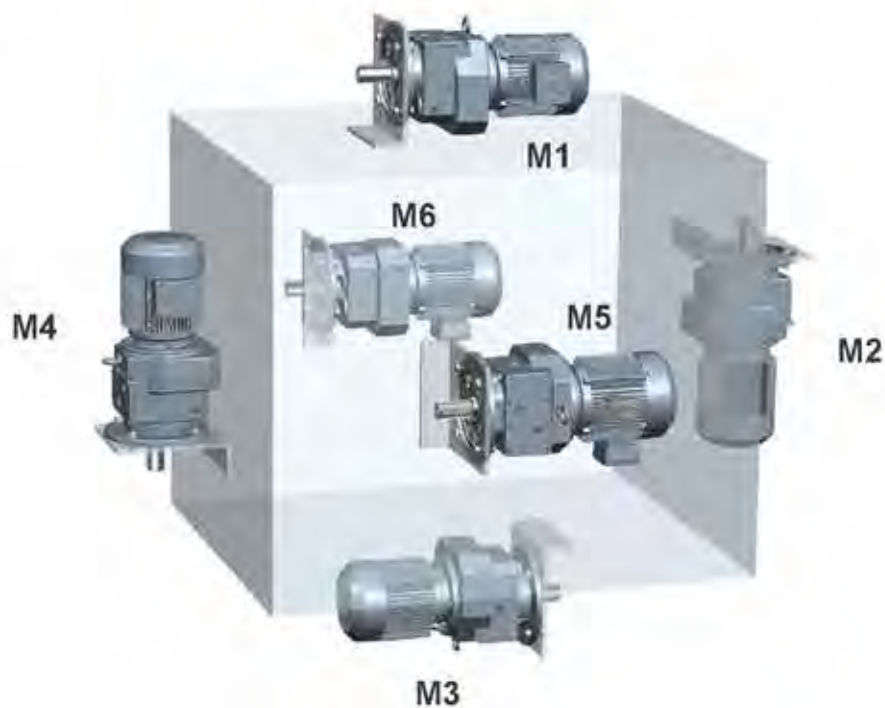
8. MOUNTING POSITIONS

8.1 Mounting position designation

Differentiates between six mounting positions M1 ... M6 for gear units. The following figure shows the spatial orientation of the gearmotor in mounting positions M1 ... M6.



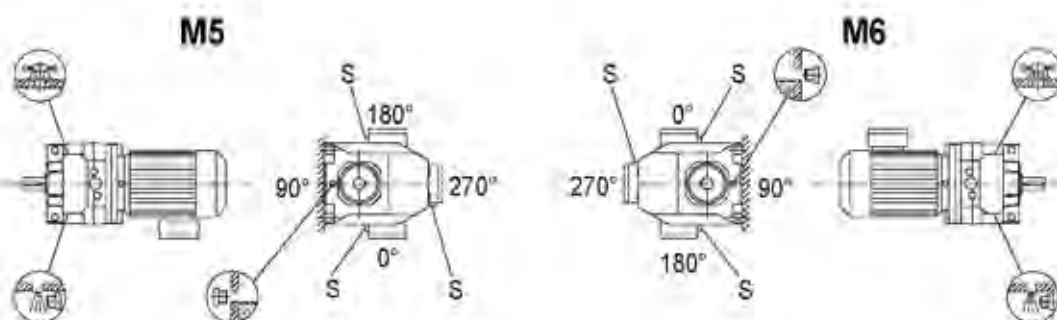
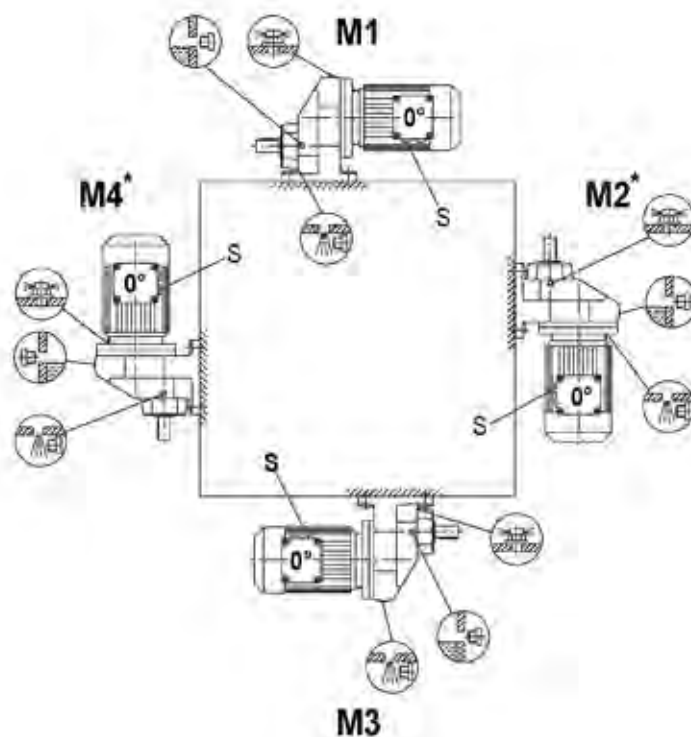
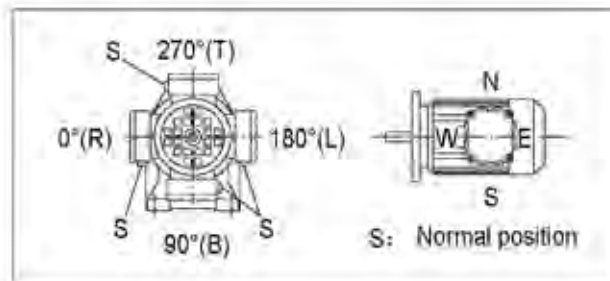
TR..



8.2 TRX.. Mounting positions for helical geared motors

TRX58 - TRX108

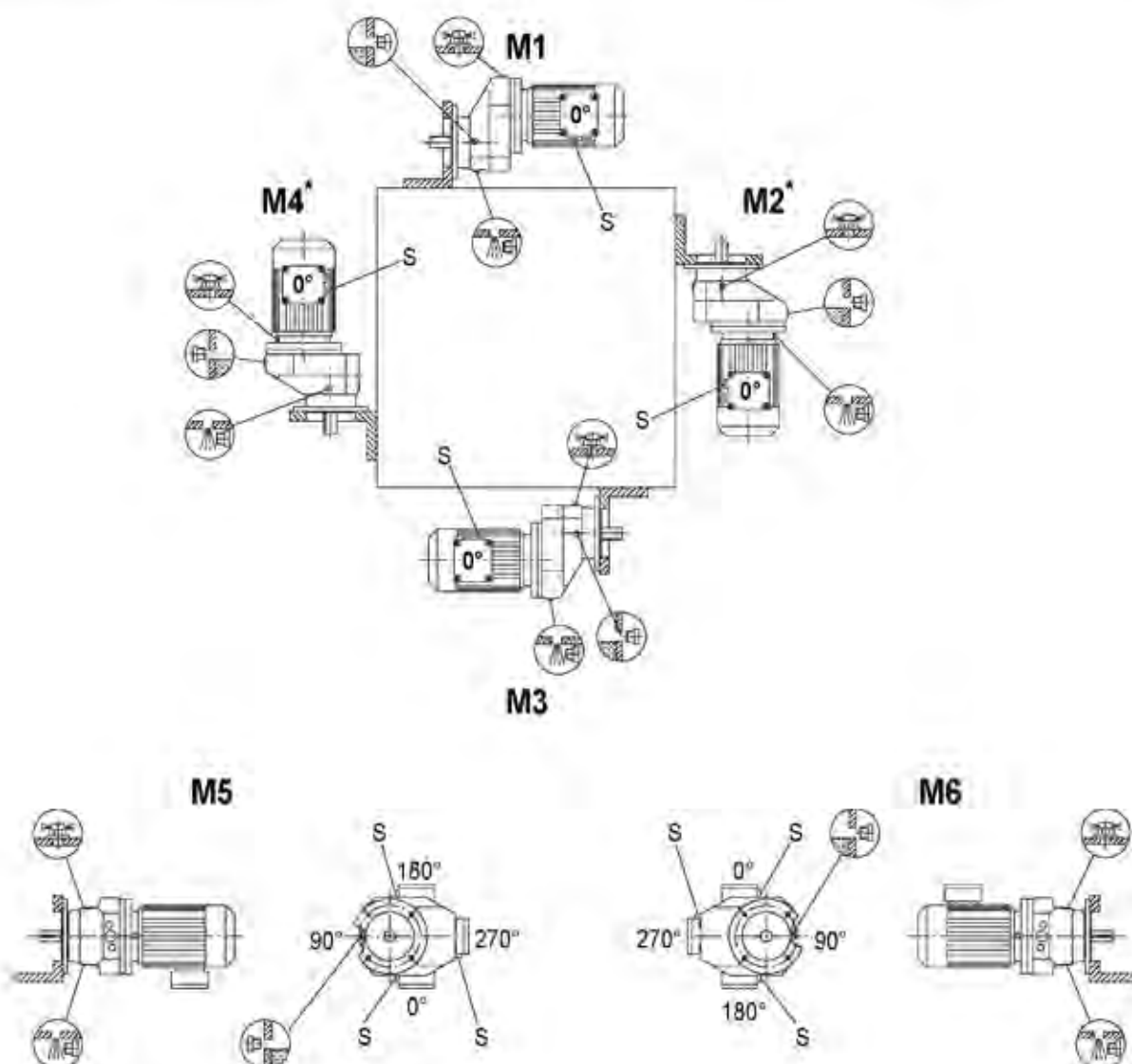
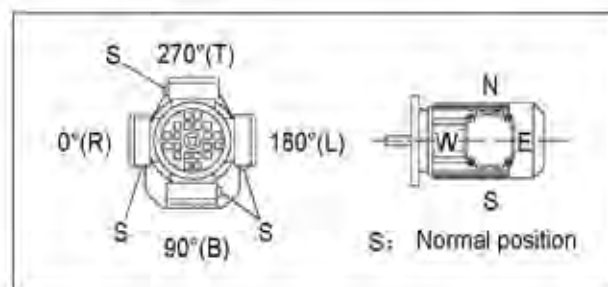
Symbol	Meaning
	Breather valve
	Oil level plug
	Oil drain plug



Important: Please refer to the **1** information in the 'Geared Motors' catalog, Sec(page 8).

TRXF58 - TRXF108

Symbol	Meaning
	Breather valve
	Oil level plug
	Oil drain plug

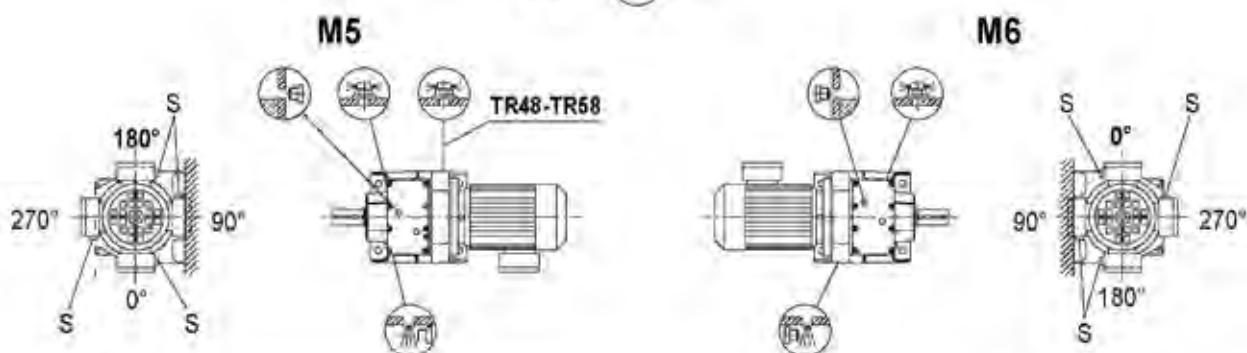
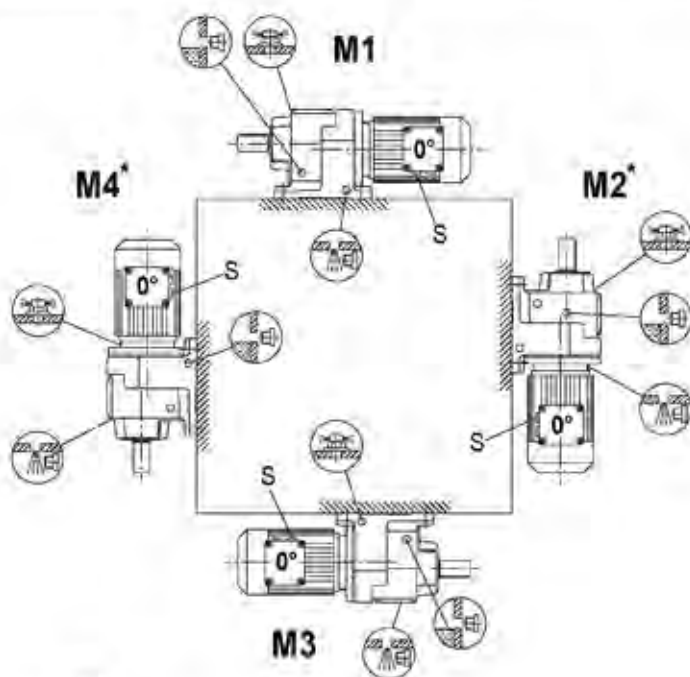
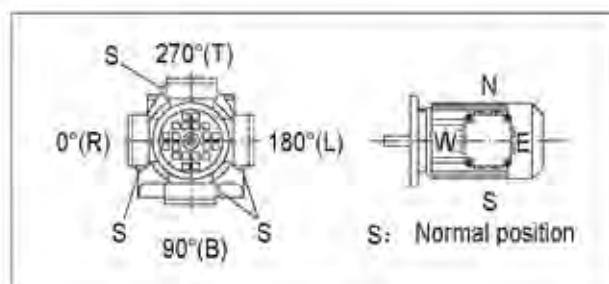


Important: Please refer to the  information in the 'Geared Motors' catalog, Sec(page 8)

8.3 TR.. Mounting positions for helical geared motors

TR18 - TR168

Symbol	Meaning
	Breather valve
	Oil level plug
	Oil drain plug



Mounting position	Gear unit size	Input speed [1/min]
M2*, M4*	98...108	>2500
	>108	>1500

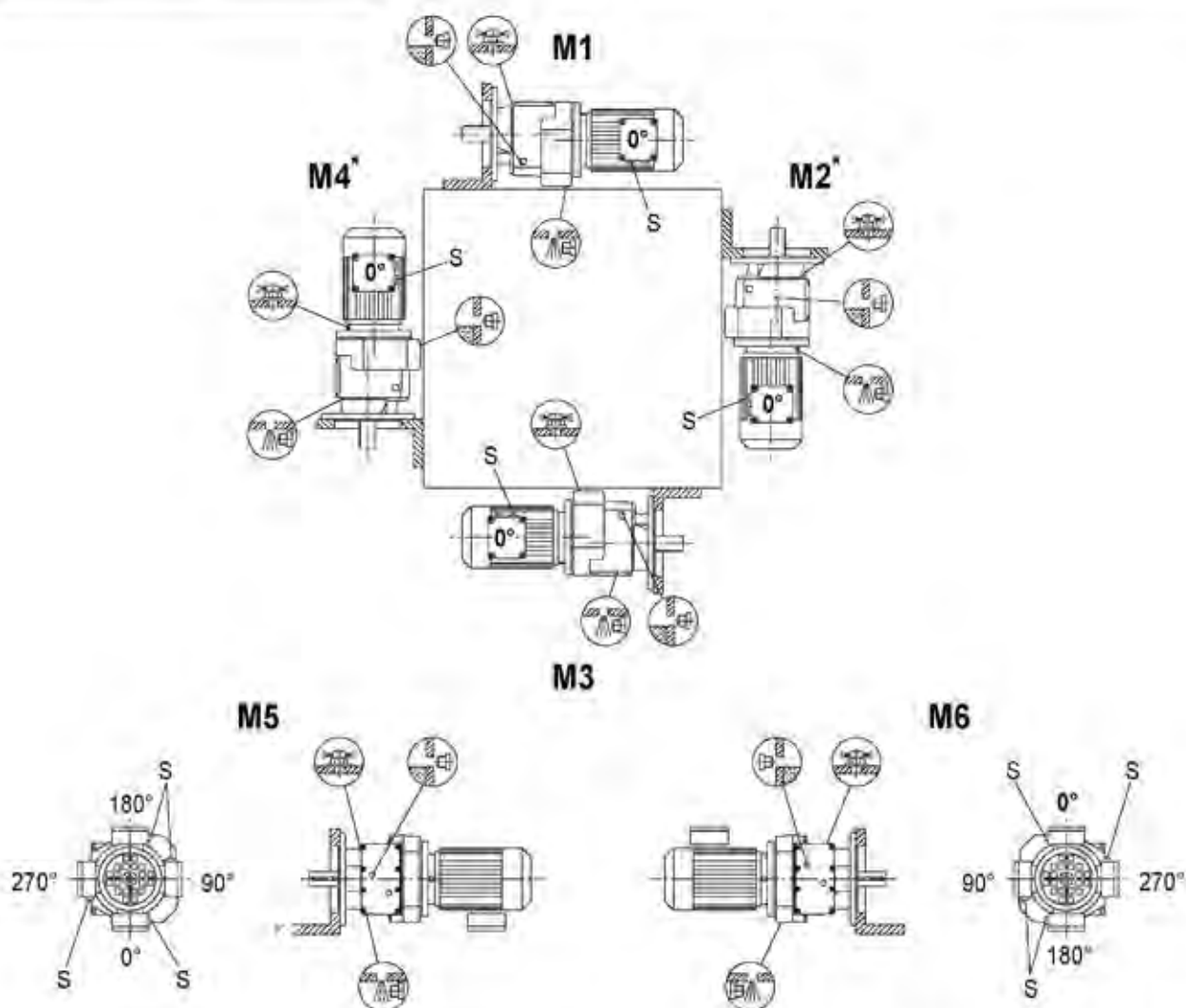
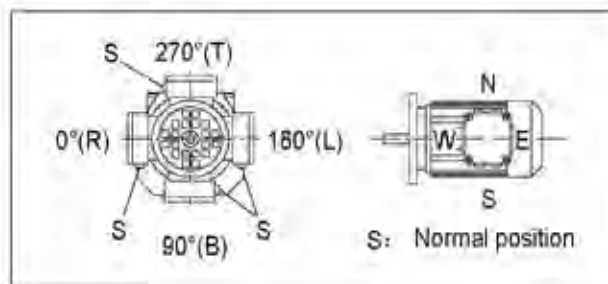
TR28		M1, M3, M5, M6
TR28		
TR48, TR58		M5

Increased churning losses may arise in some mounting positions. Contact us in case of the above-mentioned combinations.

Important: Please refer to the information in the 'Geared Motors' catalog, Sec(page 8).

TRF18 - TRF168

Symbol	Meaning
	Breather valve
	Oil level plug
	Oil drain plug



Mounting position	Gear unit size	Input speed [1/min]
M2*, M4*	98...108	>2500
	>108	>1500

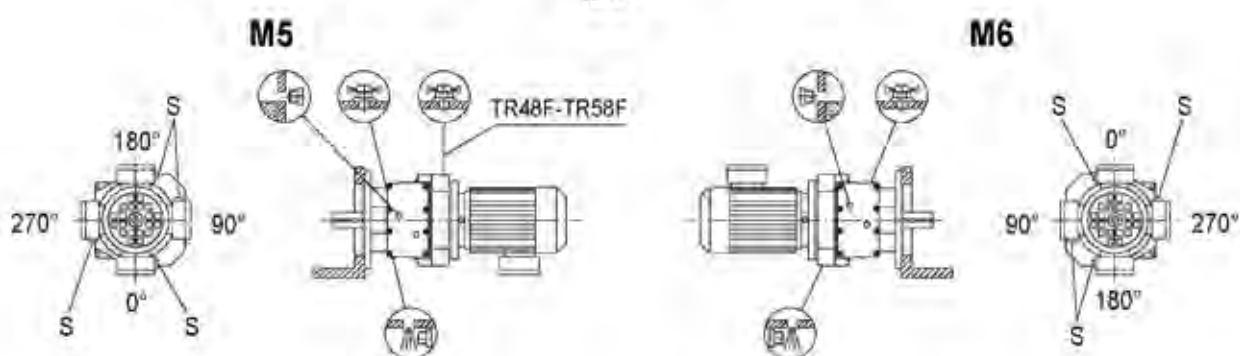
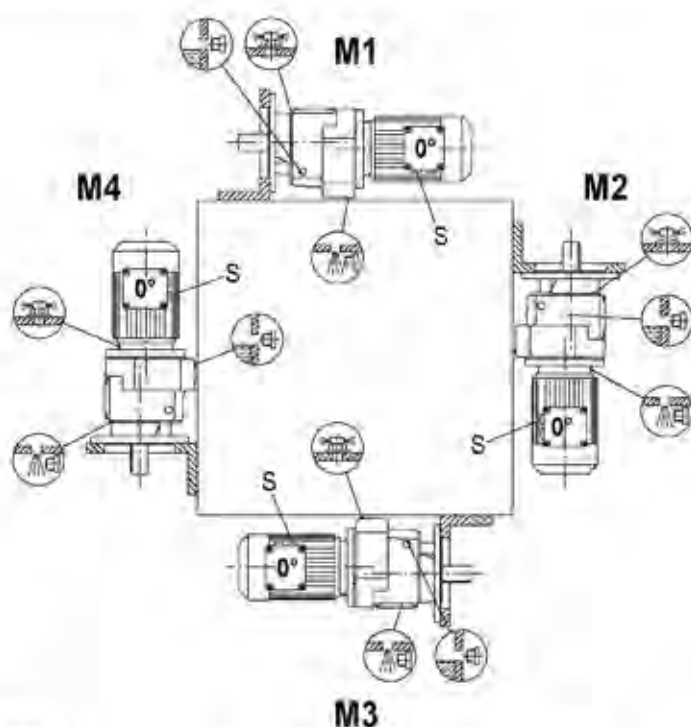
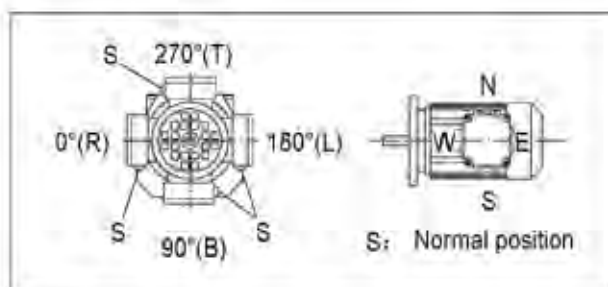
TRF28		M1, M3, M5, M6
TRF28	 	
TRF48, TRF58		M5

Increased churning losses may arise in some mounting positions. Contact us in case of the above-mentioned combinations.

Important: Please refer to the  information in the 'Geared Motors' catalog, Sec(page 8).

TR18F - TR88F

Symbol	Meaning
	Breather valve
	Oil level plug
	Oil drain plug



Important: Please refer to the **i** information in the 'Geared Motors' catalog, Sec(page 8)

TR28F

**M1, M3, M5, M6**

TR28F



TR48F, TR58F

**M5**

9. INSTALLATION METHODS

9.1. Preparation before the installation:

- a). Check if the data on the nameplates of the gearmotor matches the voltage supply system.
- b). Check if the drive has not been damaged during transportation and storage.
- c). For standard gear unit, the ambient temperature must be in accordance with the corresponding lubricant table.
- d). The drive must not be assembled in conditions such as oil, gas, vapors, acids, radiation and so on.
- e). Output shaft and flange surfaces must thoroughly cleaned to ensure they are free of anti-corrosion agents, contamination or similar. Use a commercially available solvent. Do not let the solvent come into contact with the sealing lip of the oil seals, or will damage the material!
- f). The supporting structure must have the following characteristics: level, vibration damping and torsionally rigid.
- g). So as to prevent the tolerance of fit of gear units from damaging, the parts assembled on the gear units must be worked as specified tolerance according to **ISOH7**.

9.2. the installation of the gear units:

- a). Do not tighten the housing legs and mounting flanges against one another and ensure that you comply with the permitted radial load and axial load.
- b). Never drive belt pulleys, couplings, pinions, etc. onto the shaft end by hitting them with a hammer. This will damage the bearing, housing and the shaft.
- c). When installing the **IEC** couplings, remove the key from the motor shaft and replace it with the supplied key. Secure key and coupling half using grub screw and tighten to the motor shaft. Seal the contact surface between the adapter and motor using a suitable sealing compound.
- d). Prior to startup, check that if the oil level is as specified for the mounting position. if the oil checking and drain screw and the breather valves are free accessible.

10. LUBRICATION

10.1 General information

Unless a special arrangement is made, We supplies the drives with a lubricant fill adapted for the specific gear unit and mounting position. The decisive factor is the mounting position (M1 ... M6, → Sec. "Mounting Positions and Important Order Information") specified when ordering the drive. You must adapt the lubricant fill in case of any subsequent changes made to the mounting position (→ Lubricant fill quantities).

10.2 Anti-friction bearing greases

The lubricant table on the following page shows the permitted lubricants for our gear units. Please note the following key to the lubricant table:

	Ambient temperature	Manufacturer	Type	Lubrication type
Anti-friction bearing in gear unit	-20°C ~ +60°C	Mobil	Mobilux EP 2	Mineral oil
	-40°C ~ +80°C	Mobil	Mobiltemp SHC 100	Synthetic oil
Anti-friction bearing in motor	-20°C ~ +80°C	Esso	Unirex EQ3	Mineral oil
	-20°C ~ +60°C	Shell	Alvania RL3	Mineral oil
	+80°C ~ +100°C	Klüber	Barrierta L55/2	Synthetic oil
	-45°C ~ -25°C	Shell	Aero Shell Grease 16	Synthetic oil

The following grease quantities are required:

- For fast-running bearings (motor and gear unit input end): Fill the cavities between the rolling elements one third full with grease.
- For slow-running bearings (in gear units and at gear unit output end): Fill the cavities between the rolling elements two thirds full with grease.

10.3 Types of lubrication

						lubrication type
TR..	Standard -10 +40	VG 220	Shell Omala 220	Mobilgear 630	BP Energol GR-XP 220	Mineral oil
	-20 +25	VG 150 VG 100	Shell Omala 100	Mobilgear 627	BP Energol GR-XP 100	
	-30 +10	VG 68-46 VG 32	Shell Tellus T 32	Mobil D.T.E. 13M		
	-40 -20	VG 22 VG 15	Shell Tellus T 15	Mobil D.T.E. 11M	BP Energol HLP-HM 15	
	-40 +80	VG 220	Shell Omala HD 220	Mobil SHC 630		Synthetic oil
	-40 +40	VG 150		Mobil SHC 629		
	-40 +10	VG 32		Mobil SHC 624		

10.4 Lubricant fill quantity

The specified fill quantities are recommended values. The precise values vary depending on the number of stages and gear ratio. When filling, it is essential to check the oil level plug since it indicates the precise oil capacity. The following tables show guide values for lubricant fill quantities in relation to the mounting position M1 ~ M6.

TRX..:

Gear units	Fill quantity in liters (L)					
	M1**	M2**	M3	M4	M5	M6
TRX58	0.60	0.80	1.30	1.30	0.90	0.90
TRX68	0.80	0.80	1.70	1.90	1.10	1.10
TRX78	1.10	1.50	2.60	2.70	1.60	1.60
TRX88	1.70	2.50	4.80	4.80	2.90	2.90
TRX98	2.10	3.40	7.40	7.00	4.80	4.80
TRX108	3.90	5.60	11.60	11.90	7.70	7.70

** The large gear unit of multi-stage gear units must be filled with the larger oil volume.

TRXF..B:

Gear units	Fill quantity in liters (L)					
	M1**	M2**	M3	M4	M5	M6
TRXF58	0.50	0.80	1.10	1.10	0.70	0.70
TRXF68	0.70	0.80	1.50	1.40	1.00	1.00
TRXF78	0.90	1.30	2.40	2.00	1.60	1.60
TRXF88	1.60	1.95	4.90	3.95	2.90	2.90
TRXF98	2.10	3.70	7.10	6.30	4.80	4.80
TRXF108	3.10	5.70	11.20	9.30	7.20	7.20

** The large gear unit of multi-stage gear units must be filled with the larger oil volume.

TR../TR..F:

Gear units	Fill quantity in liters (L)					
	M1**	M2**	M3	M4	M5	M6
TR28/TR28F	0.25/0.40	0.70	0.50	0.70	0.50	0.50
TR38/TR38F	0.30/0.95	0.85	0.95	1.05	0.75	0.95
TR48/TR48F	0.70/1.50	1.60	1.50	1.65	1.50	1.50
TR58/TR58F	0.80/1.70	1.90	1.70	2.10	1.70	1.70
TR68/TR68F	1.10/2.30	2.60/3.50	2.80	3.20	1.80	2.00
TR78/TR78F	1.20/3.00	3.80/4.10	3.60	4.10	2.50	3.40
TR88/TR88F	2.30/6.0	6.7/8.2	7.20	7.70	6.30	6.50
TR98	4.60/9.8	11.7/14.0	11.70	13.40	11.30	11.70
TR108	6.0/13.7	16.30	16.90	19.20	13.20	15.90
TR138	10.0/25.0	28.00	29.50	31.50	25.00	25.00
TR148	15.4/40.0	46.50	48.00	52.00	39.50	41.00
TR168	27.0/70.0	82.00	78.00	88.00	66.00	69.00

TRF../TRZ:

Gear units	Fill quantity in liters (L)					
	M1**	M2**	M3	M4	M5	M6
TRF/TRZ28	0.25/0.40	0.70	0.50	0.70	0.50	0.50
TRF/TRZ38	0.35/0.95	0.90	0.95	1.05	0.75	0.95
TRF/TRZ48	0.65/1.50	1.60	1.50	1.65	1.50	1.50
TRF/TRZ58	0.80/1.70	1.80	1.70	2.00	1.70	1.70
TRF/TRZ68	1.20/2.50	2.70/3.60	2.70	2.60	1.90	2.10
TRF/TRZ78	1.20/2.60	3.80/4.10	3.30	4.10	2.40	3.00
TRF/TRZ88	2.40/6.0	6.8/7.9	7.10	7.70	6.30	6.40
TRF98	5.1/10.2	11.9/14.0	11.20	14.00	11.20	11.80
TRF108	6.3/14.9	15.90	17.00	19.20	13.10	15.90
TRF138	9.5/25.0	27.00	29.00	32.50	25.00	25.00
TRF148	16.4/42.0	47.00	48.00	52.00	42.00	42.00
TRF168	26.0/70.0	82.00	78.00	88.00	65.00	71.00

11. MAINTENANCE

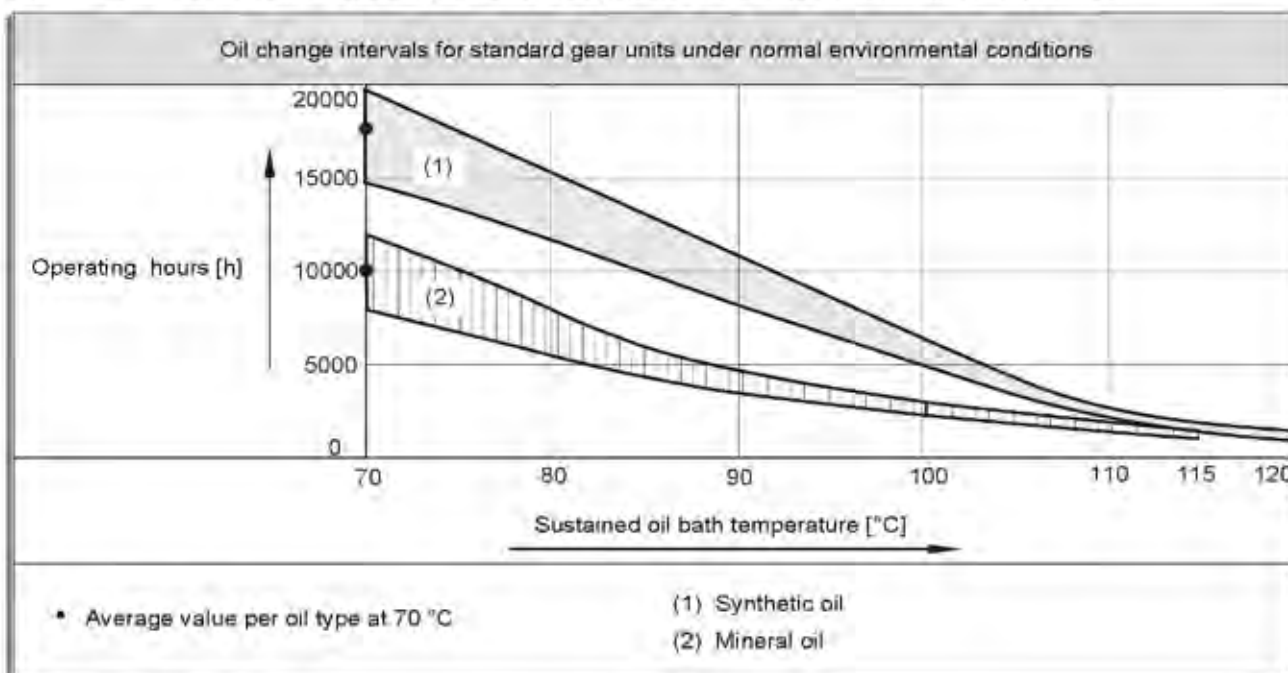
1). For gear units, first oil change should be after about 300 hours (run-in period). The right lotion is required to clean the gear units with care. Never mix the synthetic oil and mineral oil together.

2). Every 3000 working time, at least every 6 months, you have to check the oil and oil level, the seals visually for leakage. For IEC input gear units, the elastomer should be tested or replaced if necessary.

3). Depending on the operating conditions (see chart below), every 3 years at the latest for inspection is needed. Then change the mineral oil and replace the bearing grease.

4). Depending on the operating conditions, change the oil seals on output shaft.

5). Once the malfunctions appear, stop disassembling the parts, and firstly please contact the customer service (the information about specification, delivery date, series number, time used, name of machine, machine manufacturer, malfunction problems is required), then take the reasonable measures.



12. STORAGE

1). Under roof, protected against rain and snow, no shock loads.

2). Underlay the block and other material between the ground and equipment.

3). The opened but not used gear units should be added with the anti-corrosive oil on its surface, and then return to the packing containers timely.

4). Two years or more given regular inspections. Check for cleanliness and mechanical damage as part of the inspection, Check corrosion protection.

13. NOTICE FOR ORDER

Please offer the following information when place the orders:

1). the model mark of the gear units (type, ratio, power and mounting position).

2). gear units are available with "blue/gray" painting optionally. Unless specified, it offers the blue painting as standard.

3). quantity ordered.

4). other special requirements.

5). company, contact and telephone.

14. MALFUNCTIONS

14.1 Gear unit malfunctions

Problem	Possible cause	Remedy
Unusual, regular running noise	A. Meshing/grinding noise: Bearing damage. B. Knocking noise: Irregularity in the gearing	A. Check the oil, change bearings B. Contact customer service
Unusual, irregular running noise	Foreign bodies in the oil	• Check the oil • Stop the drive, contact customer service
Oil leaking ¹⁾ • From the gear cover plate • From the motor flange • From the motor oil seal • From the gear unit flange • From the output end oil seal	A. Rubber seal on the gear cover plate leaking B. Seal defective C. Gear unit not vented	A. Tighten the bolts on the gear cover plate and observe the gear unit. Oil still leaking: Contact customer service B. Contact customer service C. Vent the gear unit (see "Mounting Positions")
Oil leaking from breaking valve	A. Too much oil B. Drive operated in incorrect mounting position C. Frequent cold starts (oil foams) and/or high oil level	A. Correct the oil level (see Sec. "Inspection and Maintenance") B. Mount the breather valve correctly (see Sec. "Mounting Positions") and correct the oil level (see "Lubricants")
Output shaft does not turn although the motor is running or the input shaft is rotated	Connection between shaft and hub in gear unit interrupted	Send in the gear unit/gearmotor for repair

1) Short-term oil/grease leakage at the oil seal is possible in the run-in phase (24 hours running time).

14.2 IEC couplings malfunctions

Problem	Possible cause	Remedy
Unusual, regular running noise	Meshing/grinding noise; Bearing damage	Contact our company customer service
Oil leaking	Seal defective	Contact our company customer service
Output shaft does not turn although the motor is running or the input shaft is rotated	Connection between shaft and hub in gear unit interrupted	Send the gear unit to our company for repair.
Change in running noise and / or vibrations occur	A. Annular gear wear, short-term torque transfer through metal contact B. Bolts to secure hub axially are loose.	A. Change the annular gear B. Tighten the bolts
Premature wear in annular gear	A. Contact with aggressive fluids / oil; ozone influence; too high ambient temperatures etc, which can cause a change in the physical properties of the annular gear. B. Impermissibly high ambient/contact temperature for the annular gear; maximum permitted temperature: -20 °C to +80 °C. C. Overload	Contact our company customer service

15. Charge Characteristic Chart (for reference)

AIR BLOWERS		Hoist gear assembly	A
Air blower(axial or radial)	A	Derrick gear assembly	B
Fan of cooling tower	B	Steering gear assembly	B
Induced draught fan	B	Moving gear assembly	C
Rotary piston type fan	B	LAND DREDGER	
Turbo-fan	A	Drum-type coveyer	C
CONSTRUCTION MACHINERY		Drum-type rotation wheel	C
Concrete mixer	B	Dredger head	C
Hoist	B	Powered crab	B
Road building machinery	B	Pump	B
Boring mill	B	Pump turning gear assembly	B
CHEMICAL MACHINERY		Moving gear assembly (apron wheel)	C
Mixer (liquid)	A	Moving gear assembly (track)	B
Mixer (half liquid)	B	FOODSTUFF PROCESSING MACHINERY	
Centrifuge (heavy)	B	Placer or box filler	A
Centrifuge(light)	A	Cane crusher	A
** Cooling rolling drum	B	** Cane cutter	B
** Dry rolling drum	B	** Cane crasher	C
Mixer	B	Mixer	B
COMPRESSOR		Paste bucket	B
Piston type compressor	C	Packager	A
Turbo-compressor	B	Beet slicer	B
TRANSMISSION FREIGHTER		Beet washing machine	B
Pan conveyer	B	MOTOR AND CONVERSION EQUIPMENTS	
Balance lifter	B	Frequency converter	C
Trough conveyer	B	Motor	C
Ribbon conveyer (large piece)	C	Welding motor	C
Ribbon coveyer (small piece)	B	WASHING MACHINE	
Drum-type flour conveyer	A	Rolling drum	B
Chain conveyer	B	Washing machine	B
Ring type conveyer	B	METAL ROLLER MACHINE	
Lifter	B	** Steel cutter	C
Hoist	B	** Chain conveyer	B
Crank-connecting conveyer	B	** Cold mill	C
Lifter	B	Continuous casting equipments	B
Worm conveyer	B	** Cold bed	B
Steel-band conveyer	B	** Cropper	C
Chain reed-type conveyer	B	** Cross steering transmitter	B
Crab freighter	B	** Deruster	C
HOIST		** Heavy and medium steel mill	C
Bracket swing gear assembly	B	** Bar mill	C

ADDENDUM

BAR TRANSMISSION EQUIPMENTS		PUMPS	
Bar pusher	B	Centrifugal pump (thin liquid)	A
Push bed	B	Centrifugal pump (half liquid)	B
** Shears	C	Displacement pump	C
** Lumber elevator platform	B	Plunger pump	C
ROLL ADJUSTING EQUIPMENTS		Force pump	C
Roller leveling machine	B	PLASTIC EQUIPMENTS	
** Mill rolling way (heavy)	C	** Glazing press	B
** Mill rolling way (light)	B	** Ejecting press	B
** Sheet rolling mill	C	** Spiral extruding machine	B
** Trimming shears	B	** Mixing machine	B
Pipe welder	C	RUBBER EQUIPMENT	
Soldering machine(belt material and wire rod)	B	** Glazing press	B
Wire drawbench	B	** Ejecting press	C
METAL PROCESSING MACHINE TOOLS		** Mixing stir machine	B
Power shaft	A	Kneading machine	B
** Forging machine	C	** Roller machine	C
Drop hammer	C	STONE PORCELAIN CLAY PROCESSING EQUIPMENTS	
Machine tool and necessary	A	Ball crusher	B
Machine tool and main driving equipment	B	** Ejecting press and breaker	C
Metal facing machine	C	Breaker	C
Plate-leveling machine tool	C	Brick press	C
Backing-out punch	C	** Beating crusher	C
Press machine tool	C	** Converter	C
Cutting machine	B	** Cylinder mill	C
Sheet bending machine tool	B	TEXTILE MACHINERY	
PETROLEUM PROCESSING MACHINERY		Feeding machine	B
** Pump of oil pipe line	B	Loom machine	B
Rotary drilling equipment	C	Dyeing machine	B
PAPERING MACHINE		Purified drum	B
** Glazing press	C	Welon machine	B
** Multilayer paper board machine	C	WASTER TREATMENT EQUIPMENTS	
** Drying cylinder	C	** Air blast	B
** Glazing cylinder	C	Screw pump	B
** Masher	C	WOOD PROCESSING MACHINE TOOL	
** Mashing and breaking machine	C	Barker	C
** Suction roll	C	Facing machine	B
** Wet paper roller machine	C	Saw bench	C
** Water absorbing roller machine	C	Wood processing machine tool	A
Welon machine	C		

Note: A - Uniform load; B - Moderate shock load; C - Heavy shock load; ** - for 24hour system.

SHOW THE SERIES PRODUCTS

TR Series helical geared motors



TS Series helical-worm geared motors

TK Series helical-bevel geared motors



TF Series parallel shaft helical geared motors

G3 Series mini helical geared motors



TRC Series mini helical gear units



MHR Series worm gear units

UVL Series stepless speed variator

