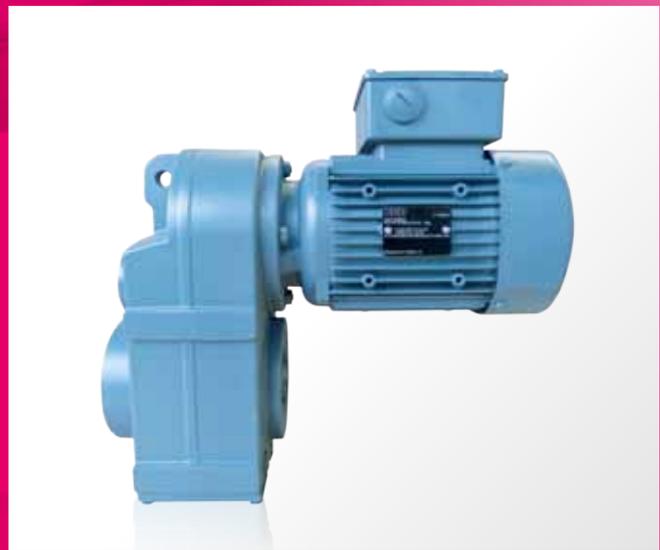
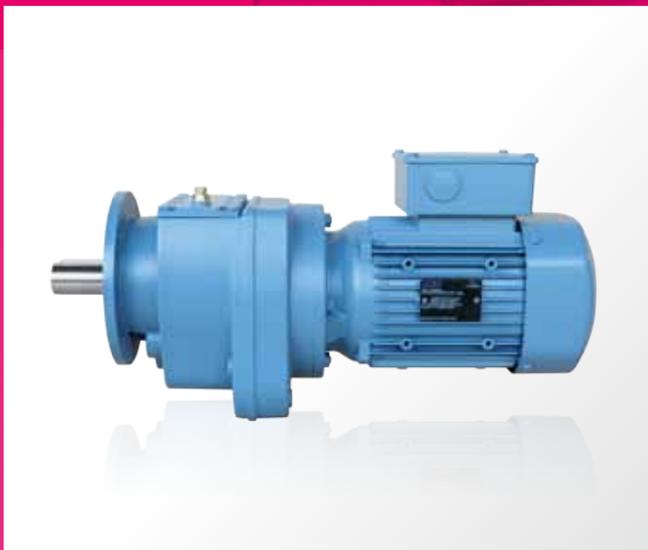




Gear units & Motors



KEB Gear units & Motors 2012

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Introduction

Type designation

The type designation for geared motors describes the construction of the unit starting from the output side.

Gear unit

K	4	3	C V
Gear Type	Size	Number of stages	Options
G–Helical gear unit			A – Foot mounted version C – Flange mounted version E – Foot-flange mounted version
F–Shaft Mounted Helical Gear unit			A – Shaft mounted version B – Shaft mounted version C – Flange mounted version D – Shaft mounted version + side areas E – Flange mounted version + side areas S – Hollow shaft with shrink disc V – Output shaft with key Z – Splined hollow shaft G - Rubber elements
S–Helical worm gear unit K–Helical bevel gear unit			A – Foot mounted version B – Shaft mounted version C – Flange mounted version D – Shaft mounted version + foot area E – Flange mounted version + foot area S – Hollow shaft with shrink disc V – Output shaft with key Z – Splined hollow shaft T1 – Torque arm

Double gearbox

F43	G12	C V
Gear unit 1	Gear unit 2	Options Gear unit 1

Gearbox input

-W2	Free input shaft, Size 2
-W3F	Free input shaft and Flange, Size 3
-M IEC112	adapter for IEC-motors, Frame size 112
-M NEMA180	adapter for Nema-motors, Frame size 180
-M S90/1	adapter for Servo-motors, Frame size 90/1

Three phase motor

DM	90S	4	F TW
Range	Frame size	Number of poles	Options
			IE2 – Efficiency class B - Brake B MB – Brake with hand release F - Forced ventilation I - Incremental encoder EAM – Absolute encoder multiturn TW – PTC thermistor sensor TS - Thermorelay (closed)

Servo motor

TA	43	V30	ER TW
Range	Frame size	Type of motor winding	Options
			BP.. - Brake ER – Resolver EAS – Absolute encoder singleturn EAM – Absolute encoder multiturn F - Forced ventilation TW – PTC thermistor sensor

Example

G23C DM80G4 B TW
G12A –M IEC71
S32G12AV DM63K4
K43BT1 TA51 V30 ER TW
DM80G6
TA42 VD0 EAM TW
F63 -W5

For full identification of geared motors, additional information has to be added to the type designation.

Product description

Values of the selection tables

Pn	Nominal power of the motor
T2	Nominal output torque of the geared motor (Mounting position M1)
n1	Input speed of the gear unit
n2	Output speed of the gear unit related to the nominal speed of the motor or the given input speed of the gearbox
cG	Gear coefficient
i	Ratio of gear unit
is	Ratio of the worm gear stage
~kg	approximate weight of the geared motor at mounting position M1
T2max	Maximum permissible continuous output torque of the gear unit for cG=1
T1max	Maximum permissible continuous input torque of the gear unit or of the input component of the gear unit
P1max	Maximum permissible continuous input power of the gear unit for cG=1
Jg	Inertia Gear unit (applied to input shaft of gearbox)
Jad	Inertia Motor adapter
h	Efficiency

Selection table Gear units

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
K33																			
120.13	400	0.49	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
103.13	400	0.57	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
89.71	400	0.65	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-

standard combinations with servo-motor TA

standard combinations with motor adapter
recommended size of free input shaft

o = available, - = not available

Motoradapter -M are available when the corresponding input shaft in the following table is available:

-W1	-M IEC63, -M IEC71	-M NEMA56	-M S70
-W2	-M IEC80, -M IEC90	-M NEMA140	-M S90, -M S110
-W3	-M IEC100, -M IEC112	-M NEMA180	-M S140
-W4	-M IEC132	-M NEMA210	-M S190
-W5	-M IEC160, -M IEC180	-M NEMA250, -M NEMA280	

Please consider T2max and P1max of gearbox when combining the drive.
For drives with motor adapter or free input shaft, additional consider T1max.

Selection table Helical worm gear units

S12

i	is	n1=3400 1/min				n1=2800 1/min				n1=1700 1/min				n1=1400 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
168.00	1/40	20	151	0.49	0.66	17	156	0.43	0.64	10	168	0.30	0.59	8.3	171	0.26	0.57
143.53	1/40	24	146	0.54	0.67	20	152	0.47	0.65	12	164	0.33	0.61	9.8	168	0.29	0.59

With new helical-worm gear units the tooth flanks are not completely smoothed down. The efficiency is lower than after the running in process. For a two start worm the decrease is about 6%. The running-in process is essentially concluded after 24 hours. The rated efficiencies are achieved if:

- the gear unit has been run in completely,
- the gear unit has reached the nominal operating temperature,
- the recommended lubricant is used,
- the gear unit is working with rated load.

Selection table Geared motors

Type	-kg			
n ₂ [1/min]	T ₂ [Nm]	c _G	i	
3.0 kW				
K53A DM112M4 IE2				75
K53B DM112M4 IE2				75
K53C DM112M4 IE2				78
17	1690	0.85	83.01	
19	1510	0.95	74.48	
21	1370	1.05	67.22	

The selection table contains standard geared motors with

- Three phase motor DM/DA, 4 pole, P_n=0.12..37kW
- Ratio of gear unit i<1000
- Gear coefficient c_G<3.0

Additional geared motors can be combined with help of corresponding selection table for gearboxes.

Efficiency of gearbox

The efficiency of the gear unit for helical gear units G, shaft mounted helical gear units F and helical bevel gear units K depends on the number of gear stages, 2-stage (0.96) and 3-stage (0.94).

The efficiency of helical worm gear units S depends on the ratio of the worm gear stage, the input speed into the gear unit and the temperature of the gear unit.

The efficiency of helical worm gear units S is shown in the selection table for gear units.

The efficiency of helical worm gear units S for back driving is significantly lower than the normal efficiency. In certain cases the worm gear unit can be self-locking.

At certain mounting positions the gearbox is completely filled with lubricant. At high input speed mixing losses can reduce the efficiency of the gear unit.

Dimension sheet notes

If not stated differently in the dimension sheet, the following tolerances are used:

Tolerance of shaft height <250mm: -0.5mm >250mm: -1mm

Tolerance of shaft diameter £50mm: ISO k6 >50mm: ISO m6

Flanges - Tolerance of spigot £230mm: ISO j6 >230mm: ISO h6

Paint

Paint	Description	Total thickness of paint ~mm	Typical area of use
Standard	1x dip-primer 1x 1-component-coat 1)	60-80	normal environment conditions up to 120°C surface temperature Humidity <90%
C1	1x dip-primer 1x 2-component-primer 1x 2-component-coat 1)	110-140	corrosive environment conditions up to 120°C surface temperature Humidity <95%
C2	1x dip-primer 2x 2-component-primer 2x 2-component-coat 1)	190-240	high corrosive environment conditions up to 120°C surface temperature Humidity ..100%

- 1) Standard color RAL7031 bluegrey
Different colors on request.

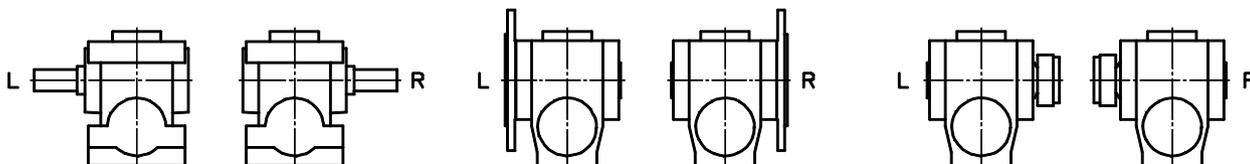
For the operation of the geared motors under corrosive environment the following additional options are available:

Dust- and water protection IP65 for normal and braked motors

Output shaft / hollow shaft from stainless steel

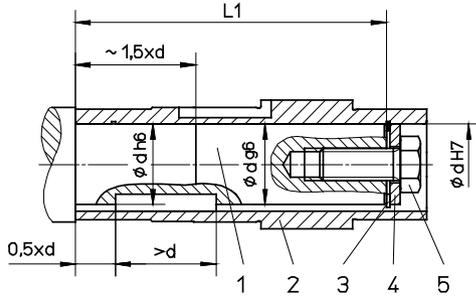
Mounting face

For helical-worm and helical bevel geared motors with flange, with solid shaft or with shrink disk the position of mounting face has to be specified.

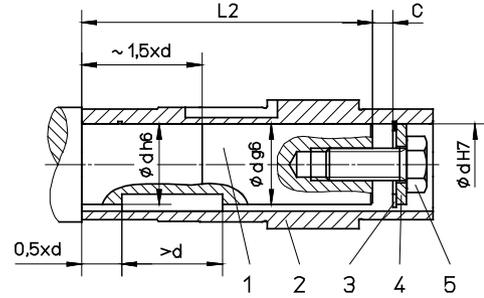


Example: Mounting face R

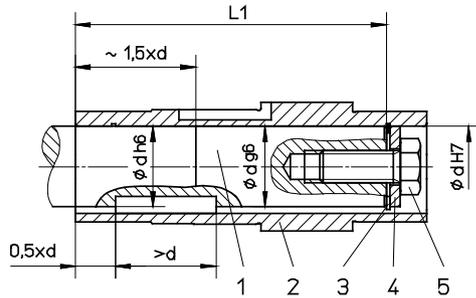
Assembly / Disassembly notes when using gear units with hollow shaft



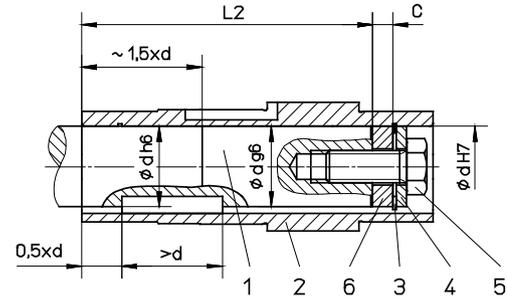
Assembly on shaft with shoulder
Length of customers shaft: L1-1mm



Assembly on shaft with shoulder
Disassembly with turn safe nut possible
Length of customers shaft: L2



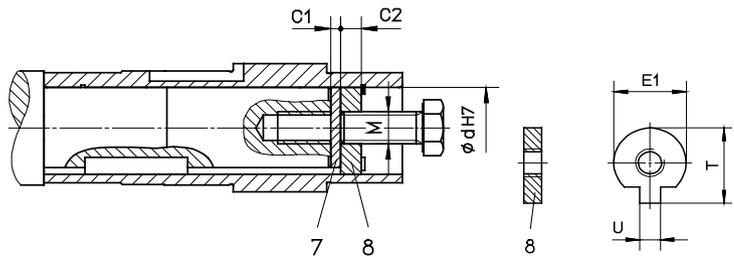
Assembly on shaft without shoulder
Length of customers shaft: L1



Assembly on shaft without shoulder
Disassembly with turn safe nut possible
Length of customers shaft: L2

Gear unit	d	L1	L2	C	C1	C2	E1	M	T	U
S0	20	76	64	12	5	6	19.7	M6	22.5	5.5
S1, F2, K2	25	105	89	16	5	10	24.7	M10	28	7.5
S2, F3, K3	30	132	116	16	5	10	29.7	M10	33	7.5
S2, F3, K3	35	132	116	16	5	10	34.7	M12	38	9.5
S3, F4, K4	40	155	137	18	5	12	39.7	M16	43	11.5
S4, F5, K5	50	185	167	18	5	12	49.7	M16	53.5	13.5
F6, K6	60	210	188	22	5	16	59.7	M20	64	17.5
F7, K7	70	270	248	22	5	16	69.7	M20	74.5	19.5
F8, K8	90	315	289	26	5	20	89.7	M24	95	24.5
K9	100	375	349	26	5	20	99.7	M24	106	27.5

- 1 Customer's shaft
- 2 Hollow shaft
- 3 Circlip DIN472
- 4 Washer
- 5 Screw DIN933
- 6 Spacer
- 7 Washer
- 8 Nut with tang



Drive selection

Selection conditions

The following conditions must be considered in the selection of the geared motor:

$T_2 \geq T_A$	T2	[Nm]	Torque of geared motor (see selection table)
$cG \geq fB$	TA	[Nm]	Counter-torque of driven machine
	cG		Gear coefficient (see selection table)
	fB		Application factor of driven machine

Further, the selection of the gearmotor is influenced by the following factors:

- Duty cycle of the motor
- Application of forces on the output shaft
- Ambient temperature and altitude
- Environment conditions

Please consult the manufacturer in the case of complicated drive applications.

Application factor fB

The service factor of the driven machine is given from the shock grade, the average operating time / day and the number of switches per hour. The shock grade is given from the mass acceleration factor of the driven machine.

$$F_J = \frac{J_{red}}{J_{mot}}$$

FJ	Mass acceleration factor
Jred	All external inertias corrected to motor input
Jmot	Inertia (Motor)

Shock grade	FJ	Operating time hours/day	Operations per hour			
			< 10	10 ... 100	100 ... 200	> 200
I - uniform	0 ... 0.2	< 8	0.8	1.0	1.2	1.3
		8 ... 16	1.0	1.2	1.3	1.4
		16 ... 24	1.2	1.3	1.4	1.5
II - moderate shocks	0.2 ... 3	< 8	1.1	1.3	1.4	1.5
		8 ... 16	1.3	1.4	1.5	1.7
		16 ... 24	1.5	1.6	1.7	1.8
III - severe shocks	3 ... 10	< 8	1.4	1.6	1.7	1.8
		8 ... 16	1.6	1.7	1.8	2.0
		16 ... 24	1.8	1.9	2.0	2.1

Radial force on gear output shaft

$$F_R = \frac{M_{ab} \times 2000}{d_0} \times f_z$$

Transmission element	fz	Remarks	F_R	[N]	Radial force on gear output shaft
Gears	1.1	< 17 teeth	M_{ab}	[Nm]	Torque of geared motor (see selection table)
Sprockets	1.4	< 13 teeth	d_0	[mm]	Effective diameter of fitted drive element
V-belt pulleys	1.7	Influence of initial pretensioning force	fz		Incremental factor (see table)
Flat belt pulleys	2.5	Influence of initial pretensioning force			

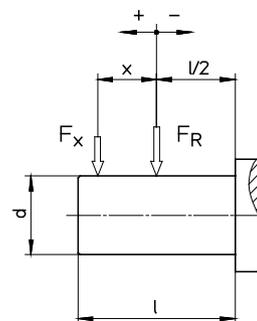
The radial force determined must not exceed the permissible radial force for the gear unit.

Permissible Radial Forces for the Output Shaft

If there are radial loads on the output shaft, they should be compared with the permissible values for radial forces.

The values in the table for the permissible radial forces apply under the following conditions

- gear unit with solid output shaft, normal shaft ends
- constant load in continuous operation
- radial load on the middle of the output shaft in the case of worst load direction
- no axial forces



Introduction

If the radial force is not applied to the middle of the shaft, use the following formula for the conversion of the permissible radial force:

$$F_{Rx1} = F_{R1} \times \frac{1}{1 + \frac{x}{K_1}}$$

$$F_{Rx2} = F_{R2} \times \frac{1}{1 + \frac{x}{K_2}}$$

$$F_{Rxp} = \min(F_{Rx1}, F_{Rx2})$$

F_{R1}	[N]	permissible radial force for bearing lifetime application at middle of output shaft (table)
F_{R2}	[N]	permissible radial force for shaft strength application at middle of output shaft (table)
K_1, K_2	[mm]	Constant (table)
x	[mm]	Distance (subject to sign, see sketch)
F_{Rx1}	[N]	permissible radial force for bearing lifetime application at point x
F_{Rx2}	[N]	permissible radial force for shaft strength application at point x
F_{Rxp}	[N]	total value of permissible radial force application at point x

Gear unit	Output shaft dxl [mm]	K1 [mm]	K2 [mm]	FR2 [N]	FR1 [N]							
					<16 1/min	<25 1/min	<40 1/min	<63 1/min	<100 1/min	<160 1/min	<250 1/min	<400 1/min
G0	20x40	81.5	32.5	2540	2850	2430	1950	1630	1460	1200	1080	950
G1	20x40	90	20	4030	4450	3600	3040	2420	2020	1770	1600	1440
G2	25x50	110.5	25	5900	6000	4920	4180	3410	2860	2440	2240	2040
G3	30x60	132	30	7050	10400	8650	7100	5800	4700	4300	3900	3550
G3	35x70	137	54.5	6760	10000	8330	6840	5600	4530	4140	3760	3420
G4	40x80	159	60.5	11500	16500	13600	11300	9400	7950	6650	6050	5500
G5	50x100	191.5	73.5	17600	21200	17900	14700	12800	10200	9000	8150	7450
G6	60x120	218.5	83.5	24000	27400	22500	19200	16300	14000	12600	11400	10300
G7	75x140	287	97.5	30700	36100	31900	22200	20700	19600	18200	16300	14700
G8	90x170	347.5	117	50000	101000	84500	70000	62000	60500	56000	51000	
G9	110x210	410	140	63000	179000	150000	128000	119000	112000	100000	89000	
F2	25x50	131	25	5830	6250	5300	4100	3450	3250	3050	2700	2350
F3	30x60	161	30	8000	9600	8050	6250	5150	4350	4250	3900	3600
F3	35x70	166	80	7960	9300	7800	6050	5000	4200	4150	3800	3500
F4	40x80	193.5	40	12700	10100	8000	6250	5800	3900	4200	4000	3800
F5	50x100	234.5	50	18200	15100	12100	9350	7300	5500	5750	5850	5650
F6	60x120	256	60	26200	15700	12800	9350	7750	5350	6550	6700	6700
F7	75x140	313	70	41700	50300	41600	34200	29600	28600	27200	24900	22800
F8	90x170	372.5	85	61000	64700	55700	45500	40500	39700	36700	33600	
S02A	20x40	91	20	4030	5370	4410	3750	3100	2380	2080	1910	
S02C	20x40	109	20	4030	4490	3680	3130	2590	1980	1740	1590	
S1	25x50	128	25	5830	6400	5470	4170	3430	2510	2470	2230	
S2	30x60	161	30	8000	10500	8060	6700	5730	3170	3530	3230	
S2	35x70	166	80	7960	10200	7820	6500	5560	3080	3430	3130	
S3	40x80	193.5	40	12700	11800	10400	7950	6150	5450	5200	5000	
S4	50x100	234.5	50	18200	16900	15100	10500	8900	8250	7950	7650	
K2	25x50	131	25	5830	6200	5200	4300	3350	3100	2820	2600	2530
K3	30x60	161	30	8000	9650	7800	6600	5150	4050	3800	3750	3650
K3	35x70	166	80	7960	9350	7550	6400	5000	3900	3700	3650	3550
K4	40x80	193.5	40	12700	10500	8200	6400	4700	3950	3750	3600	3600
K5	50x100	234.5	50	18200	15200	12100	9400	7800	4900	5050	5350	5350
K6	60x120	256	60	26200	15800	12100	8500	5800	4700	5100	5750	
K7	75x140	313	70	41700	49100	42600	36700	33200	27200	25400	24500	
K8	90x170	372.5	85	61000	65700	55200	46700	41000	38900	35600	34900	
K9	110x210	444.5	105	77300	87200	73300	62800	57300	55100	49300	48100	

The radial force determined from the application must not exceed the permissible radial force for the gear unit.

In certain conditions, the gear unit is able to accept higher radial forces.

If no radial force is applied, the permissible axial force for the gear unit is 50% of the calculated permissible radial force.

If the radial forces found for a special drive application are higher than the values in the table, or if radial and axial forces are acting at the same time, consultation with the manufacturer is necessary.

Mounting position

Helical gear units G

M1

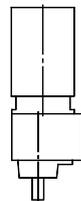
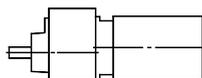
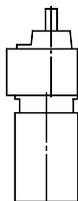
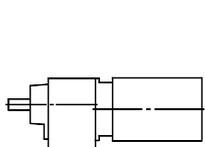
M2

M3

M4

M5

M6



Shaft mounted helical gear units F

M1

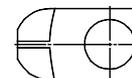
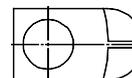
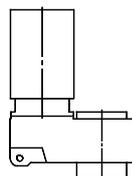
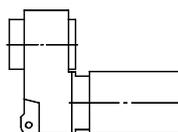
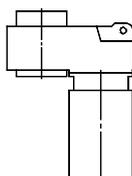
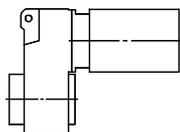
M2

M3

M4

M5

M6



Helical worm gear units S

M1

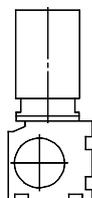
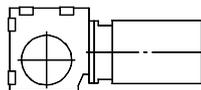
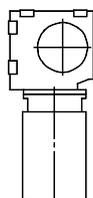
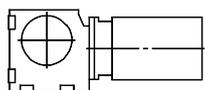
M2

M3

M4

M5

M6



Helical bevel gear units K

M1

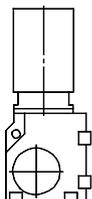
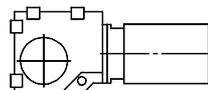
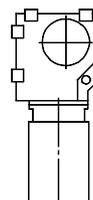
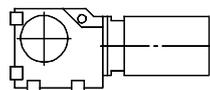
M2

M3

M4

M5

M6



Lubrication

The geared motors are supplied oil filled for the mounting position and ambient temperature of the order.
If the gear unit is to be used in a different mounting position as given on the nameplate, the quantity of lubricant has to be adjusted.

Quantities of lubricant

Gear unit	Mounting position					
	Quantity of lubricant [l]					
	M1	M2	M3	M4	M5	M6
G0	0.1	0.45	0.35	0.4	0.25	0.25
G1	0.15	0.65	0.55	0.65	0.4	0.4
G2	0.25	1.1	0.9	1.1	0.65	0.65
G3	0.35	1.8	1.2	1.8	1	1
G4	0.5	2.7	1.9	2.6	1.7	1.7
G5	1.1	5.2	4.1	4.8	3.1	3.1
G6	1.9	8.8	8.1	8.2	7	7
G7	3	14.5	13.4	12.7	12.2	12.2
G8	4.8	23.2	22.2	21.5	21	21
G9	8.1	38.2	28.5	37	22	20.7
F2	0.75	1.1	0.6	1	0.7	0.65
F3	1.5	2.1	1.2	1.7	1.4	1.3
F4	2.7	3.5	1.9	3	2.3	2.1
F5	4.6	6.4	3.6	5.9	4.1	4
F6	7.6	11.5	6.2	10.4	7.7	6.2
F7	11.4	18	9.8	16.6	10.8	10.5
F8	19.9	30.1	17.4	29.8	17.4	17.1
S0	0.1	0.35	0.25	0.35	0.25	0.25
S1	0.3	0.75	0.55	1	0.6	0.6
S2	0.5	1.2	0.85	1.7	1	1
S3	0.8	2	1.6	3	1.8	1.8
S4	1.4	3.5	2.8	5.1	3	3
K2	0.3	0.7	0.8	1	0.75	0.75
K3	0.6	1.1	1.7	2	1.4	1.4
K4	1	1.8	2.9	3.2	2.5	2.5
K5	1.9	3.4	5	6.5	4.6	4.6
K6	3.1	5.7	7.6	10.5	7.1	7.1
K7	4.7	9.7	11.3	18.5	13.1	13.1
K8	7.5	14.5	18	28	20.5	20.5
K9	12	22.6	30.7	46.7	35.8	35.8

Type of lubricant	Area of use			Products					
	Gear unit	θ [°C]	1) 2)	ARAL	ESSO	KLÜBER	MOBIL	SHELL	FUCHS
Mineraloil									
CLP VG100	G,F,K	-20... +25	0 0	Degol BG 100	Spartan EP 100	Klüberoil GEM 1-100	Mobilgear 629	Shell Omala 100	Renolin CLP 100
	S	-20... +10	0 0						
CLP VG220	G,F,K	-10... +40	0 0	Degol BG 220	Spartan EP 220	Klüberoil GEM 1-220	Mobilgear 630	Shell Omala 220	Renolin CLP220
CLP VG680	S	0... +40	0 0	Degol BG 680		Klüberoil GEM 1-680	Mobilgear 636	Shell Omala 680	Renolin CLP460
Synthetic oil – PG									
PGLP VG220	G,F,K	-25... +80	+ +	Degol GS 220	Glycolube 220	Klübersynth GH 6-220	Glygoyle 30	Shell Tivela S220	Renolin PG220
	S	-25... +20	0 +						
PGLP VG460	S	-20... +60	+ +	Degol GS 460	Glycolube 460	Klübersynth GH 6-460	Glygoyle HE460	Shell Tivela S460	Renolin PG460
Synthetic oil – HC									
CLP HC VG220	G,F,K	-40... +80	+ ++	Degol PAS 220		Klübersynth EG 4-220	Mobilgear SHC XMP220	Shell Omala HD 220	Renolin Unisyn CLP220
CLP HC VG460	S	-30... +80	+ ++	Degol PAS 460		Klübersynth EG 4-460	Mobilgear SHC XMP460	Shell Omala HD 460	Renolin Unisyn CLP460
Synthetic oil Food grade									
USDA-H1 VG220	G,F,K	-30... +40	+ +	Eural Gear 220		Klüberoil 4 UH 1-220	Mobil DTE FM 220	Shell Cassida GL 220	
USDA-H1 VG460	S	-30... +40	+ +	Eural Gear 460		Klüberoil 4 UH 1-460	Mobil DTE FM 460	Shell Cassida GL 460	
Bearing lubricants									
Mineral oil based		-25... +60					Mobilux 3	Alvania R3	
		-40... +80					Mobiltemp SHC100	Stamina EP2	
		-30... +40						Cassida RLS 2	
		Motor Iso H			Exxon Polyrex EM				

θ Ambient temperature

1) Load capacity

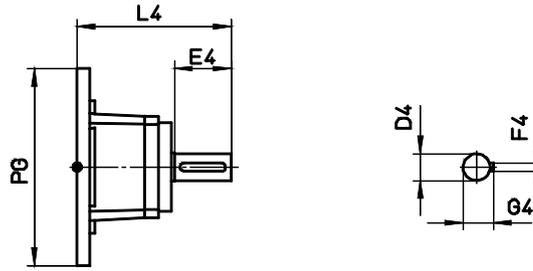
2) Resistance to ageing

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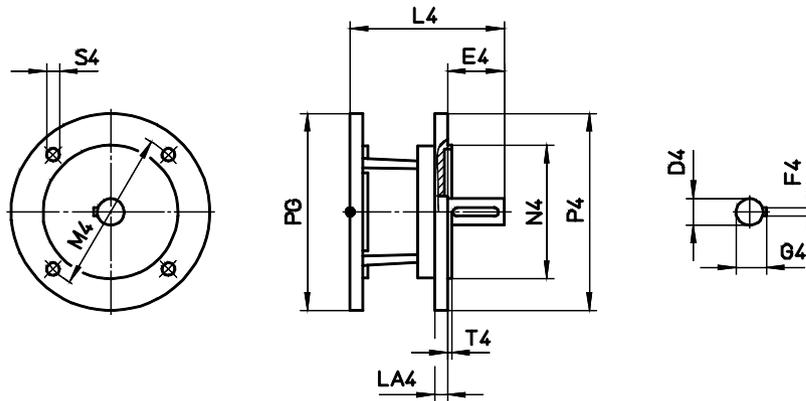
0=normal, +=high, ++=very high

Free input shaft -W

-W

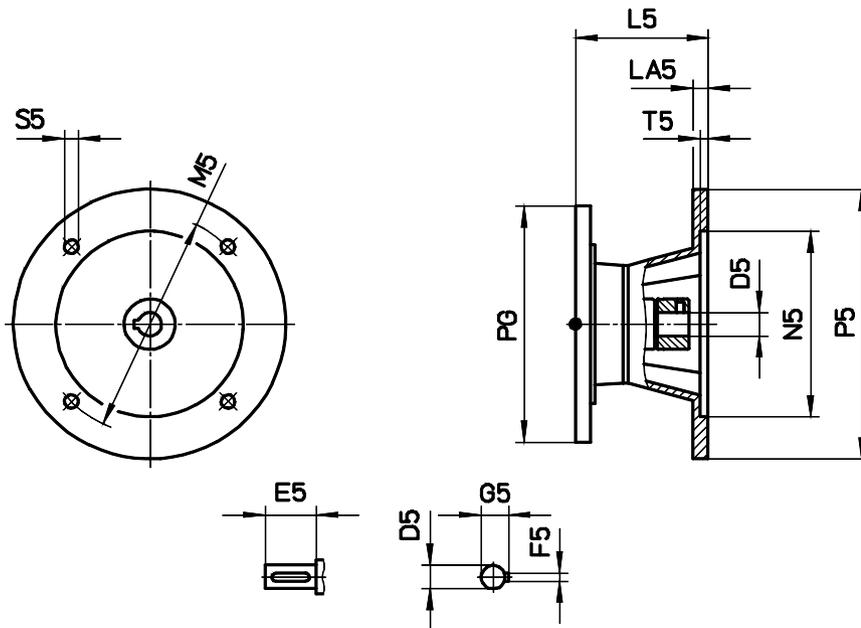


-WF



Adapter	-W1	-W2	-W3	-W4	-W5	PG	Gear unit
T1max [Nm]	4	12	30	60	180		
D4	14	19	28	38	48		
E4	30	40	60	80	110		
F4	5	6	8	10	14		
G4	16	21.5	31	41	51.5		
LA4	8	9	9	10	12		
M4	100	115	130	165	265		
N4	80	95	110	130	230		
P4	120	140	160	200	300		
S4	6.6	9	9	11	14		
T4	3	3	3.5	3.5	4		
L4	79.5					105	G0, S0
	78.5	113.5				120	G1, S1, F2, K2
	75.5	108.5	153.5			140	G2, S2, F3, K3
	75	110	154	192.5		160	G3, S3, F4, K4
	71.5	106.5	149.5	189		200	G4, S4, F5, K5
		101.5	146	185.5	243.5	250	G5, F6, K6
			139	178.5	237.5	300	G6, F7, K7
			132	170.5	230	350	G7, F8, K8
				154	215	400	G8, K9
				202.5	450	G9	

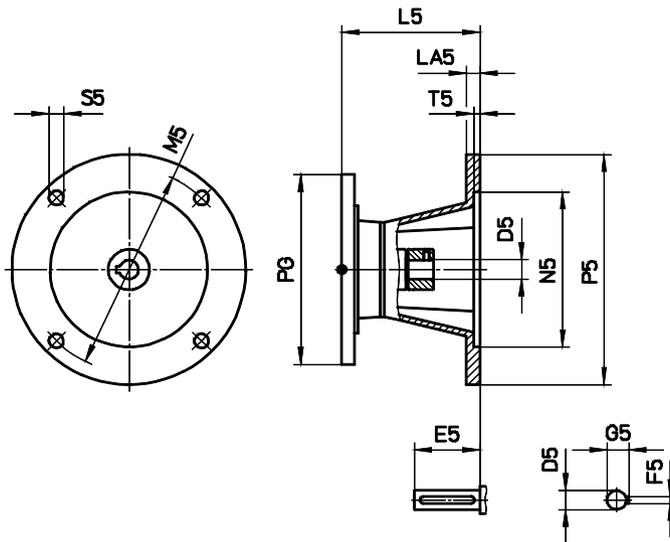
Motor adapter -M IEC



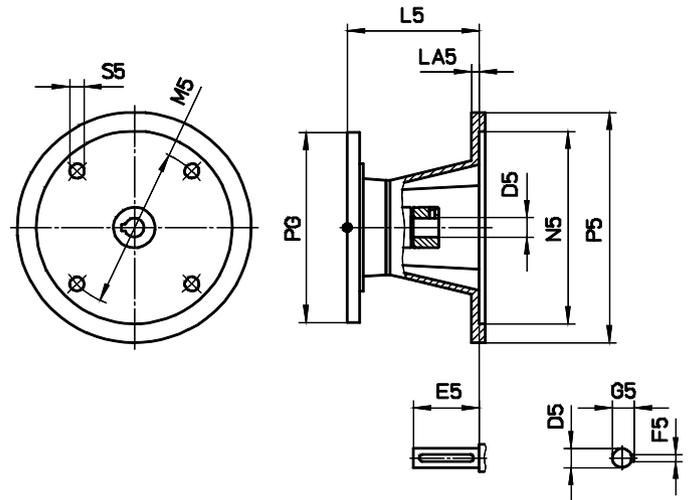
Adapter -M	IEC63	IEC71	IEC80	IEC90	IEC100	IEC112	IEC132	IEC160	IEC180		
T1max [Nm]	4	4	8	12	21	30	60	120	180		
Jad [kgcm ²]	0.1	0.1	0.69	0.69	2.3	2.3	7.7	54.3	54.3		
D5	11	14	19	24	28	28	38	42	48		
E5	23	30	40	50	60	60	80	110	110		
F5	4	5	6	8	8	8	10	12	14		
G5	12.5	16	21.5	27	31	31	41	45	51.5		
LA5	12	12	15	15	18	18	18	24	24		
M5	115	130	165	165	215	215	265	300	300		
N5	95	110	130	130	180	180	230	250	250		
P5	140	160	200	200	250	250	300	350	350		
S5	M8	M8	M10	M10	M12	M12	M12	M16	M16		
T5	4	4.5	4.5	4.5	5	5	5	6	6		
										PG	Gear unit
L5	75	82								105	G0, S0
	74	81	118	128						120	G1, S1, F2, K2
	71	78	113	123	156.5	156.5				140	G2, S2, F3, K3
	70.5	77.5	114.5	124.5	157	157	196			160	G3, S3, F4, K4
	67	74	111	121	152.5	152.5	192.5			200	G4, S4, F5, K5
			106	116	149	149	189	249	249	250	G5, F6, K6
					142	142	182	243	243	300	G6, F7, K7
					135	135	174	234.5	234.5	350	G7, F8, K8
							157.5	223.5	223.5	400	G8, K9
							208	208	450	G9	

Motor adapter -M NEMA

NEMA 56 .. 140

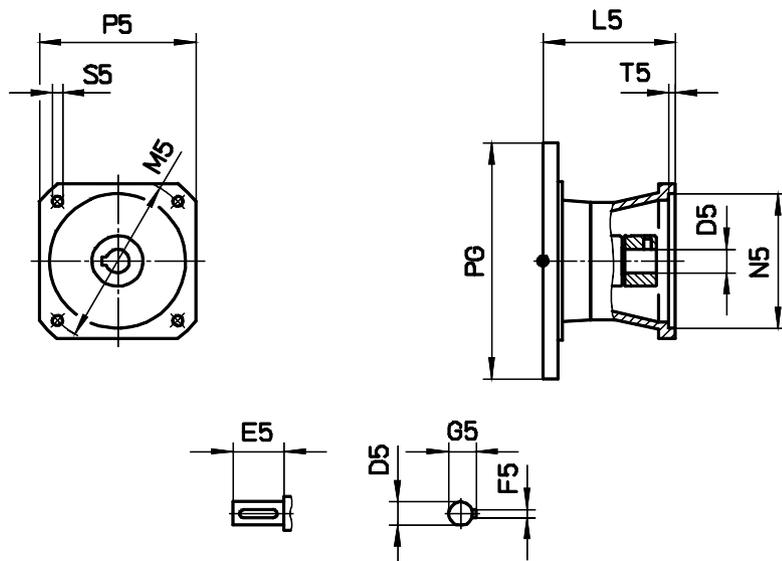


NEMA180 .. 280



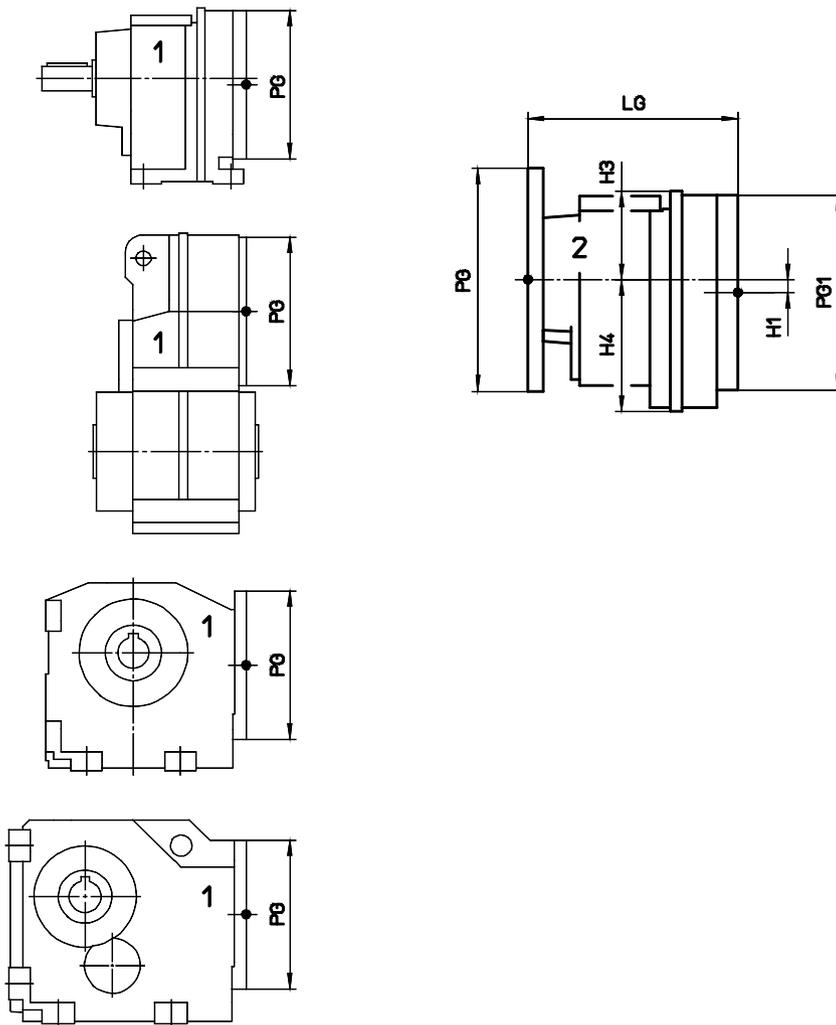
Adapter -M	NEMA56	NEMA140	NEMA180	NEMA210	NEMA250	NEMA280	PG [mm]	Gear unit
T1max [Nm]	4	12	30	60	120	180		
Jad [kgcm ²]	0.1	0.69	2.3	7.7	54.3	54.3		
D5 [inch]	0.625	0.875	1.125	1.375	1.625	1.875		
E5 [inch]	2.08	2.12	2.62	3.125	3.75	4.380		
F5 [inch]	0.188	0.188	0.250	0.312	0.375	0.500		
G5 [inch]	0.705	0.959	1.236	1.522	1.791	2.091		
LA5 [inch]	0.43	0.47	0.39	0.43	0.47	0.59		
M5 [inch]	5.875	5.875	7.25	7.25	7.25	9.00		
N5 [inch]	4.50	4.50	8.50	8.50	8.50	10.50		
P5 [inch]	6.69	6.69	9.00	9.00	9.00	11.26		
S5 [inch]	0.41	0.41	0.59	0.59	0.59	0.59		
T5 [inch]	0.17	0.17	-	-	-	-		
L5 [mm]	104.5						105	G0, S0
	103.5	132					120	G1, S1, F2, K2
	100.5	127	163				140	G2, S2, F3, K3
	100	128.5	163.5	195.5			160	G3, S3, F4, K4
	96.5	125	159	192			200	G4, S4, F5, K5
		120	155.5	188.5	234.5	250.5	250	G5, F6, K6
			148.5	181.5	228.5	244.5	300	G6, F7, K7
			141.5	173.5	220	236	350	G7, F8, K8
				157	209	225	400	G8, K9
					193.5	209.5	450	G9

Motor adapter -M S



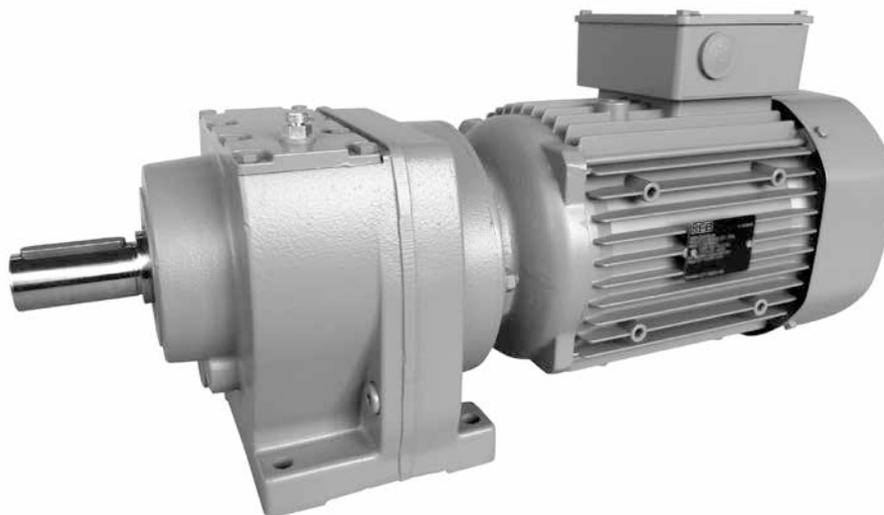
Adapter -M	S70/1	S90/1	S90/2	S110/1	S140/1	S140/2	S190/1	S190/2		
T1max [Nm]	4	8	8	12	30	30	60	60		
Jad [kgcm²]	0.1	0.69	0.69	0.69	2.3	2.3	7.7	7.7		
D5	11	14	19	19	24	24	32	32		
E5	23	30	40	40	50	50	58	58		
F5	4	5	6	6	8	8	10	10		
G5	12.5	16	21.5	21.5	27	27	35	35		
M5	75	100	100	115	165	130	215	165		
N5	60	80	80	95	130	110	180	130		
P5	70	92	92	110	140	140	190	190		
S5	M5	M6	M6	M8	M10	M8	M12	M10		
T5	3.5	4	4	4	4.5	4.5	5	4.5	PG	Gear unit
L5	75								105	G0, S0
	74	108	118	118					120	G1, S1, F2, K2
	71	103	113	113	146.5	146.5			140	G2, S2, F3, K3
	70.5	104.5	114.5	114.5	147	147	174	174	160	G3, S3, F4, K4
	67	101	111	111	142.5	142.5	170.5	170.5	200	G4, S4, F5, K5
		96	106	106	139	139	167	167	250	G5, F6, K6
					132	132	160	160	300	G6, F7, K7
					125	125	152	152	350	G7, F8, K8
						135.5	135.5	400	G8, K9	

Double gearbox - Dimensions

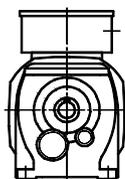
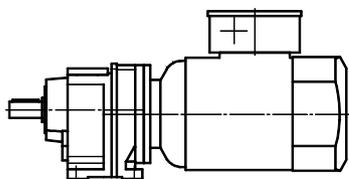


Gear unit 1	Gear unit 2	H1	H3	H4	LG	PG	PG1
G1, S1, F2, K2	G0	7	47.5	71	111.5	120	105
G2, S2, F3, K3	G1	5	57.5	85	123	140	120
G3, S3, F4, K4	G1	5	57.5	85	123	160	120
G4, S4, F5, K5	G2	11	62.5	100.5	145	200	140
G5, F6, K6	G2	11	62.5	100.5	142.5	250	140
G6, F7, K7	G3	11	72.5	120	173	300	160
G7, K8, F8	G3	11	72.5	120	168	350	160
G8, K9	G4	16	88	144.5	201	400	200
G9	G4	16	88	144.5	189	450	200

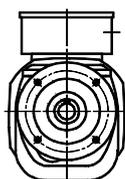
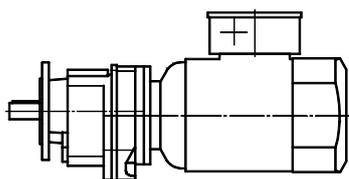
Helical gear units G



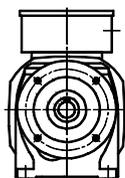
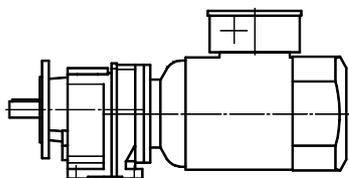
Type of construction



Foot mounted version
Example: G02A DM63G4



Flange mounted version
Example: G33C DM80G4



Foot-flange mounted version
Example: G22E DM90S4

Selection table - Gear units

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G03

72.52	60	0.12	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
61.26	60	0.14	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
52.38	60	0.17	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
45.19	60	0.19	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
39.24	60	0.22	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
34.25	60	0.26	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
29.57	60	0.30	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
25.51	60	0.34	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
22.15	60	0.40	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
19.33	60	0.45	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

G02

16.97	60	0.52	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
14.34	60	0.61	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
12.26	60	0.72	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
10.58	60	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
9.18	60	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
8.02	60	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
7.02	60	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6.04	59	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5.21	56	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4.52	53	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3.95	49	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3.46	47	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

G13G03

6085.3	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5140.9	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4395.3	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3791.8	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3293.2	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2874.3	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2481.0	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2140.3	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1858.8	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1622.4	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

G13G02

1424.2	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1203.2	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1028.7	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
887.43	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
770.74	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
672.72	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
589.22	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
506.43	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
436.89	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
379.44	117	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
331.18	117	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
290.08	117	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
251.28	117	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
219.23	117	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
192.31	117	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
169.38	117	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
145.94	117	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
127.83	117	0.13	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G13

115.34	117	0.15	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
97.78	117	0.18	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
83.91	117	0.20	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
72.69	117	0.24	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
63.42	117	0.27	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
55.63	117	0.31	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
49.00	117	0.35	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
43.09	117	0.40	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
36.98	117	0.46	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
32.03	117	0.54	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
27.95	117	0.61	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
24.52	117	0.70	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
21.59	117	0.79	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-

G12

24.88	117	0.69	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
21.25	117	0.81	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
18.39	117	0.93	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
16.08	117	1.07	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
14.16	117	1.21	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
12.56	117	1.37	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
11.19	117	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
10.04	112	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
8.77	106	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
7.68	100	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
7.06	97	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
6.22	92	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
5.51	87	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
4.91	83	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
4.41	79	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
3.85	74	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
3.37	69	1.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-

G22G13

1960.4	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1661.9	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1426.3	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1235.5	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1078.0	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
945.59	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
832.84	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
732.34	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
628.51	235	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
544.45	235	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
475.02	235	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

G22G12

422.82	235	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
361.24	235	0.09																	

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G23

153.41	235	0.22	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
131.06	235	0.26	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
113.42	235	0.30	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
99.14	235	0.34	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
87.34	235	0.39	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
77.43	235	0.44	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
69.48	235	0.49	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
60.74	235	0.56	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
53.51	235	0.64	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
47.44	235	0.72	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
41.53	235	0.82	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
36.59	235	0.93	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
32.44	235	1.05	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
28.90	235	1.18	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
25.95	235	1.32	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
22.65	230	1.49	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
19.83	235	1.72	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-

G22

29.22	235	1.17	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
25.09	235	1.36	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
21.82	235	1.57	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
19.18	235	1.78	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
17.00	235	2.01	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
15.16	235	2.25	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
13.60	235	2.51	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
12.36	235	2.76	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
10.90	235	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
9.65	230	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
8.64	220	3.00	-	-	-	o	-	-	-	-	-	-	-	-	-	o	-	-	-
7.52	210	3.00	-	-	-	o	-	-	-	-	-	-	-	-	-	o	-	-	-
7.04	167	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
6.31	164	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
5.74	197	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
5.06	183	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
4.48	169	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
4.01	157	3.00	-	-	-	o	-	-	-	-	-	-	-	-	-	o	-	-	-
3.49	142	3.00	-	-	-	o	-	-	-	-	-	-	-	-	-	o	-	-	-

G23G13

10074	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
8540.3	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
7329.5	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6349.2	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5539.5	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4859.3	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4279.9	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3763.4	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3229.8	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2797.9	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2441.1	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2164.1	235	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

G33G13

11893	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
10082	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
8652.7	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
7495.5	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6539.6	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5736.6	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5052.5	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4442.9	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3813.0	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3303.0	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2881.8	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G33G12

2565.1	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2191.5	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1896.5	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1657.7	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1460.5	480	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1294.8	480	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1153.6	480	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1035.6	480	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
903.90	480	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
791.71	480	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
727.68	480	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
641.09	480	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
568.36	480	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
506.40	480	0.14	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
454.59	480	0.16	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
396.78	480	0.18	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
347.53	480	0.20	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
310.04	480	0.23	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
278.10	480	0.25	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
252.75	480	0.28	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
222.84	480	0.32	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
197.36	480	0.36	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

G33

177.27	480	0.40	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
152.19	480	0.46	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
132.39	480	0.53	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
116.36	480	0.61	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
103.11	480	0.69	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
91.99	480	0.77	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
82.51	480	0.86	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
74.99	480	0.94	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
66.12	480	1.07	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
58.56	480	1.21	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
52.40	480	1.35	-	-	-	o	-	-	-	-	-	-	-	-	-	o	-	-	-
51.70	480	1.37	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
45.82	480	1.54	o	o	o	o	-	-	-										

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G53

186.77	1630	1.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
165.96	1630	1.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
148.78	1630	1.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
134.34	1630	1.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
122.04	1630	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111.58	1630	2.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100.12	1630	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
90.36	1630	2.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83.17	1630	2.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
74.34	1630	3.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
66.01	1630	3.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58.49	1630	4.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51.20	1630	4.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46.21	1630	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42.53	1630	5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38.01	1630	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33.76	1630	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29.91	1560	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.62	1500	8.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22.80	1430	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.11	1350	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

G52

31.19	1130	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.45	1120	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.17	1330	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.62	1310	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.45	1290	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.83	1390	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.86	1430	11.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.01	1360	12.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.33	1330	13.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.90	1260	14.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.25	1190	15.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.08	1140	16.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.94	1070	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.86	1000	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.02	815	17.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.32	790	18.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.51	760	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.94	735	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.38	700	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.85	660	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

G63G33

14755	2800	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12667	2800	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11019	2800	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9684.6	2800	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8582.4	2800	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7656.6	2800	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6867.9	2800	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6241.8	2800	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5503.1	2800	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4874.0	2800	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4386.6	2800	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3827.0	2800	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3402.1	2800	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3051.7	2800	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2773.5	2800	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2445.3	2800	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G63G32

2136.3	2800	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1907.7	2800	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1715.6	2800	0.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1552.0	2800	0.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1414.7	2800	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1262.1	2800	0.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1132.1	2800	0.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1018.9	2800	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
888.88	2800	0.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
796.35	2800	0.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
686.91	2800	0.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612.80	2800	0.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
549.68	2800	0.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
494.71	2800	0.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
431.60	2800	0.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
386.67	2800	1.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
343.00	2800	1.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
301.31	2800	1.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
271.16	2800	1.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
237.47	2800	1.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

G63

221.95	2800	1.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
199.76	2800	2.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
181.12	2800	2.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
165.23	2800	2.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
151.99	2800	2.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
137.17	2800	2.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
124.54	2800	3.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115.14	2800	3.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
103.72	2800	3.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92.94	2800	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83.23	2800	4.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
74.91	2800	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65.35	2800	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58.55	2800	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51.94	2690	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45.13	2520	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40.41	2450	8.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36.37	2350	9.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.73	2240	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28.43	2160	11.1	-	-	-	-	-</												

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G83

186.96	8900	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
170.93	8900	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
158.00	8900	8.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
143.59	8900	9.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
131.06	8900	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
118.71	8900	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
108.13	8900	12.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
94.72	8900	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
86.16	8900	15.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
77.61	8900	16.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
69.68	8900	18.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
59.77	8900	21.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
51.67	8900	25.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
44.91	8900	29.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
38.61	8590	32.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
34.66	8310	35.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
29.74	7940	39.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
25.70	7600	43.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
22.34	7290	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o

G82

18.81	6040	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
17.01	5920	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
14.76	5640	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
12.91	5440	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
11.37	5250	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
9.79	4560	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
8.85	4360	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
7.68	4100	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
6.72	3870	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
5.92	3650	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o

G93G43

22255	13600	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
19232	13600	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
16845	13600	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
14913	13600	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
13317	13600	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
11976	13600	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
10834	13600	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
9875.6	13600	0.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
8810.2	13600	0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
7902.7	13600	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
7223.9	13600	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
6595.1	13600	0.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
6033.5	13600	0.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
5458.2	13600	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
4975.2	13600	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
4438.5	13600	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
3981.3	13600	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
3639.3	13600	0.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
3322.5	13600	0.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
3004.0	13600	0.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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G93G42

2843.0	13600	0.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
2567.1	13600	0.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
2332.1	13600	0.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
2132.2	13600	0.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
1913.2	13600	1.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
1726.6	13600	1.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
1578.3	13600	1.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
1441.0	13600	1.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
1302.8	13600	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
1130.2	13600	1.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
988.90	13600	2.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
871.17	10800	1.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
803.56	13600	2.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
722.07	13600	2.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
641.18	13600	3.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
568.19	13600	3.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
519.38	13600	3.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
474.18	13600	4.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
428.72	13600	4.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
371.90	13600	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
325.42	13600	6.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
288.28	13600	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
250.07	13600	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
218.81	13600	9.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
192.77	13600	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
177.81	10000	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o

G93

157.04	13600	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
144.12	13600	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
131.03	13600	15.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
119.82	13600	16.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105.95	13600	18.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
96.85	13600	20.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
88.42	13600	22.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
79.95	13600	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
69.35	13600	28.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60.68	13600	32.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53.46	13600	37.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49.31	13600	40.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45.02	13600	44.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40.70	13600	49.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.31	13600	56.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30.89	13500	64.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.22	13000	70.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.27	12300	77.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.23	11700	84.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

G92

17.34	11600	90.0	-	-	-
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Selection table - Geared motors

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.12 kW						0.12 kW						0.18 kW						0.25 kW					
G53G22A DM63K4					59	G03A DM63K4					8	G33A DM63G4					18	G53G22A DM71K4					61
G53G22C DM63K4					60	G03C DM63K4					9	G33C DM63G4					18	G53G22C DM71K4					62
1.4	785	2.1	984.77			19	60	1.00	72.52			7.8	220	2.2	177.27			1.4	1600	1.00	984.77		
1.6	695	2.3	872.18			23	51	1.20	61.26			9.1	190	2.5	152.19			1.6	1420	1.15	872.18		
1.7	640	2.5	802.80			26	43	1.40	52.38			10	165	2.9	132.39			1.8	1300	1.25	802.80		
1.9	570	2.8	717.52			31	38	1.60	45.19			G22G12A DM63G4					16	2.0	1170	1.40	717.52		
G43G22A DM63K4					35	35	33	1.85	39.24			G22G12C DM63G4					17	2.2	1030	1.55	636.13		
G43G22C DM63K4					36	40	28	2.1	34.25			5.7	295	0.80	240.74			2.5	930	1.75	570.60		
1.5	720	1.20	906.23			47	25	2.4	29.57			6.5	260	0.90	213.43			2.7	845	1.95	518.58		
1.7	640	1.35	802.62			54	21	2.8	25.51			7.3	230	1.00	190.16			3.1	745	2.2	457.21		
1.9	575	1.50	719.94			62	18	3.3	22.15			8.1	210	1.10	170.71			3.5	660	2.5	404.94		
2.1	520	1.70	653.17			71	16	3.7	19.33			G23A DM63G4					12	3.8	605	2.7	372.73		
2.4	465	1.85	585.39			G02A DM63K4					8	G23C DM63G4					13	4.2	540	3.0	333.14		
2.6	420	2.1	525.09			G02C DM63K4					8	9.0	191	1.20	153.41			G43G22A DM71K4					37
2.9	380	2.3	477.22			81	14	4.3	16.97			11	163	1.45	131.06			G43G22C DM71K4					38
3.3	335	2.6	420.75			96	12	5.0	14.34			12	141	1.65	113.42			2.2	1060	0.80	653.17		
3.7	295	2.9	372.64			113	10	5.9	12.26			14	123	1.90	99.14			2.4	950	0.90	585.39		
G33G12A DM63K4					22	130	8.8	6.8	10.58			16	109	2.1	87.34			2.7	855	1.05	525.09		
G33G12C DM63K4					23	150	7.6	7.9	9.18			18	96	2.4	77.43			3.0	775	1.15	477.22		
1.9	580	0.85	727.68			172	6.7	9.0	8.02			20	87	2.7	69.48			3.4	685	1.30	420.75		
2.2	510	0.95	641.09			197	5.8	10	7.02			G13A DM63G4					10	3.8	605	1.45	372.64		
2.4	455	1.05	568.36			229	5.0	12	6.04			G13C DM63G4					10	4.2	545	1.60	334.26		
2.7	405	1.20	506.40			265	4.3	13	5.21			12	144	0.80	115.34			4.6	495	1.80	303.26		
3.0	360	1.35	454.59			305	3.8	14	4.52			14	122	0.95	97.78			5.2	435	2.0	268.73		
3.5	315	1.50	396.78			350	3.3	15	3.95			16	105	1.10	83.91			5.9	390	2.2	240.42		
4.0	275	1.75	347.53			399	2.9	16	3.46			19	91	1.30	72.69			G43A DM71K4					31
4.5	245	1.95	310.04			0.18 kW						22	79	1.50	63.42			G43C DM71K4					32
5.0	220	2.2	278.10			G63G32A DM63G4					92	25	69	1.70	55.63			6.7	355	2.5	210.05		
5.5	200	2.4	252.75			G63G32C DM63G4					92	28	61	1.90	49.00			7.8	305	2.8	181.51		
6.2	178	2.7	222.84			1.6	1060	2.6	888.88			32	54	2.2	43.09			G33G12A DM71K4					24
G22G12A DM63K4					16	1.7	950	2.9	796.35			37	46	2.5	36.98			G33G12C DM71K4					25
G22G12C DM63K4					16	G53G22A DM63G4					59	43	40	2.9	32.03			4.1	565	0.85	347.53		
3.8	295	0.80	361.24			G53G22C DM63G4					61	G03A DM63G4					9	4.5	505	0.95	310.04		
4.4	255	0.90	312.61			1.4	1180	1.40	984.77			G03C DM63G4					9	5.1	450	1.05	278.10		
5.1	220	1.05	273.25			1.6	1040	1.55	872.18			23	76	0.80	61.26			5.6	410	1.15	252.75		
5.7	196	1.20	240.74			1.7	960	1.70	802.80			26	65	0.90	52.38			6.3	360	1.35	222.84		
6.5	174	1.35	213.43			1.9	860	1.90	717.52			31	56	1.05	45.19			7.1	320	1.50	197.36		
7.3	155	1.50	190.16			2.2	760	2.1	636.13			35	49	1.25	39.24			G33A DM71K4					20
8.1	139	1.70	170.71			2.4	680	2.4	570.60			40	43	1.40	34.25			G33C DM71K4					20
G23A DM63K4					12	2.7	620	2.6	518.58			47	37	1.65	29.57			8.0	300	1.60	177.27		
G23C DM63K4					12	3.0	545	3.0	457.21			54	32	1.90	25.51			9.3	260	1.85	152.19		
9.0	127	1.85	153.41			G43G22A DM63G4					36	62	28	2.2	22.15			11	225	2.2	132.39		
11	109	2.1	131.06			G43G22C DM63G4					36	71	24	2.5	19.33			12	197	2.4	116.36		
12	94	2.5	113.42			1.5	1080	0.80	906.23			G02A DM63G4					8	14	175	2.8	103.11		
14	82	2.8	99.14			1.7	960	0.90	802.62			G02C DM63G4					9	15	156	3.1	91.99		
G13G02A DM63K4					13	1.9	860	1.00	719.94			81	21	2.8	16.97			G22G12A DM71K4					18
G13G02C DM63K4					14	2.1	780	1.10	653.17			96	18	3.4	14.34			G22G12C DM71K4					18
8.1	135	0.85	169.38			2.4	700	1.25	585.39			113	15	3.9	12.26			8.3	285	0.80	170.71		
9.5	116	1.00	145.94			2.6	630	1.40	525.09			130	13	4.6	10.58			G23A DM71K4					14
11	102	1.15	127.83			2.9	570	1.55	477.22			150	11	5.2	9.18			G23C DM71K4					14
G13A DM63K4					9	3.3	505	1.75	420.75			172	10.0	6.0	8.02			9.2	260	0.90	153.41		
G13C DM63K4					9	3.7	445	1.95	372.64			197	8.7	6.9	7.02			11	220	1.05	131.06		
12	96	1.20	115.34			4.1	400	2.2	334.26			229	7.5	7.8	6.04			12	192	1.20	113.42		
14	81	1.45	97.78			4.6	365	2.4	303.26			265	6.5	8.6	5.21			14	168	1.40	99.14		
16	70	1.70	83.91			5.1	320	2.7	268.73			305	5.6	9.4	4.52			16	148	1.60	87.34		
19	60	1.95	72.69			G33G12A DM63G4					23	350	4.9	10.0	3.95			18	131	1.80	77.43		
22	53	2.2	63.42			G33G12C DM63G4					23	399	4.3	11	3.46			20	118	2.00	69.48		
25	46	2.5	55.63			2.7	605	0.80	506.40			0.25 kW						23	103	2.3	60.74		
28	41	2.9	49.00			3.0	545	0.90	454.59			G63G32A DM71K4					93	26	91	2.6	53.51		
						3.5	475	1.00	396.78			G63G32C DM71K4					94	30	80	2.9	47.44		
						4.0	415	1.15	347.53			1.6	1440	1.95	888.88								
						4.5	370	1.30	310.04			1.8	1290	2.2	796.35								
						5.0	335	1.45	278.10			2.1	1120	2.5	686.91								
						5.5	300	1.60	252.75			2.3	995	2.8	612.80								
						6.2	265	1.80	222.84														
						7.0	235	2.0	197.36														

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.25 kW					
G13A DM71K4					11
G13C DM71K4					11
17	142	0.80	83.91		
19	123	0.95	72.69		
22	107	1.10	63.42		
25	94	1.25	55.63		
29	83	1.40	49.00		
33	73	1.60	43.09		
38	63	1.85	36.98		
44	54	2.2	32.03		
50	47	2.5	27.95		
58	42	2.8	24.52		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
G12A DM71K4					10
G12C DM71K4					11
57	42	2.8	24.88		
G03A DM71K4					10
G03C DM71K4					11
31	77	0.80	45.19		
36	66	0.90	39.24		
41	58	1.05	34.25		
48	50	1.20	29.57		
55	43	1.40	25.51		
64	38	1.60	22.15		
73	33	1.85	19.33		
G02A DM71K4					10
G02C DM71K4					10
83	29	2.1	16.97		
98	24	2.5	14.34		
115	21	2.9	12.26		
133	18	3.4	10.58		
154	16	3.9	9.18		
176	14	4.4	8.02		
201	12	5.0	7.02		
234	10	5.8	6.04		
271	8.8	6.4	5.21		
312	7.7	6.9	4.52		
357	6.7	7.3	3.95		
408	5.9	8.0	3.46		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
G73G32A DM71G4					146
G73G32C DM71G4					147
1.5	2330	2.1	969.05		
1.6	2080	2.4	864.03		
1.8	1940	2.5	805.28		
2.0	1740	2.8	722.33		
2.2	1580	3.1	655.31		
G63G32A DM71G4					94
G63G32C DM71G4					95
1.6	2140	1.30	888.88		
1.8	1920	1.45	796.35		
2.1	1650	1.70	686.91		
2.3	1470	1.90	612.80		
2.6	1320	2.1	549.68		
2.9	1190	2.4	494.71		
3.3	1040	2.7	431.60		
3.6	930	3.0	386.67		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
G53G22A DM71G4					62
G53G22C DM71G4					63
1.6	2100	0.80	872.18		
1.8	1930	0.85	802.80		
2.0	1730	0.95	717.52		
2.2	1530	1.05	636.13		
2.5	1370	1.20	570.60		
2.7	1250	1.30	518.58		
3.1	1100	1.50	457.21		
3.5	975	1.65	404.94		
3.8	895	1.80	372.73		
4.2	800	2.0	333.14		
4.8	710	2.3	295.82		
5.4	630	2.6	262.14		
6.1	550	2.9	229.46		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
G43G22A DM71G4					38
G43G22C DM71G4					39
3.4	1010	0.85	420.75		
3.8	895	1.00	372.64		
4.2	805	1.10	334.26		
4.6	730	1.20	303.26		
5.2	645	1.35	268.73		
5.9	580	1.50	240.42		
G43A DM71G4					32
G43C DM71G4					33
6.7	525	1.65	210.05		
7.8	455	1.90	181.51		
8.9	400	2.2	158.99		
10	355	2.5	140.75		
11	315	2.8	125.69		
12	285	3.1	113.03		
G33G12A DM71G4					25
G33G12C DM71G4					26
5.6	610	0.80	252.75		
6.3	535	0.90	222.84		
7.1	475	1.00	197.36		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
G33A DM71G4					21
G33C DM71G4					21
8.0	445	1.10	177.27		
9.3	380	1.25	152.19		
11	330	1.45	132.39		
12	290	1.65	116.36		
14	260	1.85	103.11		
15	230	2.1	91.99		
17	205	2.3	82.51		
19	188	2.6	74.99		
21	166	2.9	66.12		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
G23A DM71G4					15
G23C DM71G4					15
12	285	0.80	113.42		
14	250	0.95	99.14		
16	220	1.05	87.34		
18	194	1.20	77.43		
20	174	1.35	69.48		
23	152	1.55	60.74		
26	134	1.75	53.51		
30	119	1.95	47.44		
34	104	2.2	41.53		
39	92	2.5	36.59		
43	81	2.9	32.44		
G13A DM71G4					12
G13C DM71G4					12
25	139	0.85	55.63		
29	123	0.95	49.00		
33	108	1.10	43.09		
38	93	1.25	36.98		
44	80	1.45	32.03		
50	70	1.65	27.95		
58	61	1.90	24.52		
65	54	2.2	21.59		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
G12A DM71G4					11
G12C DM71G4					12
57	62	1.90	24.88		
66	53	2.2	21.25		
77	46	2.5	18.39		
88	40	2.9	16.08		
G03A DM71G4					11
G03C DM71G4					12
48	74	0.80	29.57		
55	64	0.95	25.51		
64	56	1.10	22.15		
73	48	1.25	19.33		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
G02A DM71G4					11
G02C DM71G4					11
83	43	1.40	16.97		
98	36	1.65	14.34		
115	31	1.95	12.26		
133	27	2.3	10.58		
154	23	2.6	9.18		
176	20	3.0	8.02		
201	18	3.4	7.02		
234	15	3.9	6.04		
271	13	4.3	5.21		
312	11	4.7	4.52		
357	9.9	5.0	3.95		
408	8.7	5.4	3.46		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.55 kW					
G83G42A DM80K4					235
G83G42C DM80K4					242
1.4	3500	2.5	974.05		
1.7	3020	2.9	841.95		
G73G32A DM80K4					148
G73G32C DM80K4					150
1.4	3480	1.40	969.05		
1.6	3100	1.60	864.03		
1.7	2890	1.70	805.28		
1.9	2590	1.90	722.33		
2.1	2350	2.1	655.31		
2.5	2040	2.4	567.65		
2.7	1840	2.7	513.62		
3.0	1670	2.9	466.28		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
G63G32A DM80K4					96
G63G32C DM80K4					97
1.6	3190	0.90	888.88		
1.8	2860	1.00	796.35		
2.0	2470	1.15	686.91		
2.3	2200	1.25	612.80		
2.6	1970	1.40	549.68		
2.8	1780	1.60	494.71		
3.3	1550	1.80	431.60		
3.6	1390	2.0	386.67		
4.1	1230	2.3	343.00		
4.7	1080	2.6	301.31		
G53G22A DM80K4					64
G53G22C DM80K4					66
2.5	2050	0.80	570.60		
2.7	1860	0.85	518.58		
3.1	1640	1.00	457.21		
3.5	1450	1.10	404.94		
3.8	1340	1.20	372.73		
4.2	1200	1.35	333.14		
4.7	1060	1.55	295.82		
5.4	940	1.75	262.14		
6.1	825	2.00	229.46		
6.8	745	2.2	207.08		
7.4	685	2.4	190.61		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.55 kW					
G53A DM80K4					59
G53C DM80K4					60
7.5	700	2.3	186.77		
8.5	620	2.6	165.96		
9.4	555	2.9	148.78		
G43G22A DM80K4					40
G43G22C DM80K4					41
4.6	1090	0.80	303.26		
5.2	965	0.90	268.73		
5.8	865	1.00	240.42		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.55 kW					
G02A DM80K4					13
G02C DM80K4					13
115	46	1.30		12.26	
133	40	1.50		10.58	
153	34	1.75		9.18	
175	30	2.0		8.02	
200	26	2.3		7.02	
233	23	2.6		6.04	
270	19	2.9		5.21	
311	17	3.1		4.52	
356	15	3.3		3.95	
406	13	3.6		3.46	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
G93G42A DM80GC4 IE2					369
G93G42C DM80GC4 IE2					376
1.4	4820	2.8		988.90	
1.6	4250	2.5		871.17	
1.8	3920	3.5		803.56	
G83G42A DM80GC4 IE2					236
G83G42C DM80GC4 IE2					243
1.4	4750	1.85		974.05	
1.7	4110	2.2		841.95	
1.9	3570	2.5		731.87	
G73G32A DM80GC4 IE2					150
G73G32C DM80GC4 IE2					151
1.5	4730	1.05		969.05	
1.6	4210	1.15		864.03	
1.8	3930	1.25		805.28	
2.0	3520	1.40		722.33	
2.2	3200	1.55		655.31	
2.5	2770	1.75		567.65	
2.7	2500	1.95		513.62	
3.0	2270	2.1		466.28	
3.4	2030	2.4		415.75	
G63G32A DM80GC4 IE2					98
G63G32C DM80GC4 IE2					98
2.1	3350	0.85		686.91	
2.3	2990	0.95		612.80	
2.6	2680	1.05		549.68	
2.9	2410	1.15		494.71	
3.3	2100	1.35		431.60	
3.6	1890	1.50		386.67	
4.1	1670	1.65		343.00	
4.7	1470	1.90		301.31	
G53G22A DM80GC4 IE2					65
G53G22C DM80GC4 IE2					67
3.5	1970	0.80		404.94	
3.8	1820	0.90		372.73	
4.2	1620	1.00		333.14	
4.8	1440	1.15		295.82	
5.4	1280	1.25		262.14	
6.1	1120	1.45		229.46	
6.8	1010	1.60		207.08	
7.4	930	1.75		190.61	
G53A DM80GC4 IE2					60
G53C DM80GC4 IE2					62
7.5	950	1.70		186.77	
8.5	845	1.95		165.96	
9.5	755	2.2		148.78	
10	680	2.4		134.34	
12	620	2.6		122.04	
13	565	2.9		111.58	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
G43A DM80GC4 IE2					36
G43C DM80GC4 IE2					36
8.9	810	1.10		158.99	
10	715	1.20		140.75	
11	640	1.35		125.69	
12	575	1.50		113.03	
14	520	1.70		102.26	
15	475	1.85		93.21	
17	420	2.1		83.15	
19	380	2.3		74.59	
25	290	3.0		56.95	
G33A DM80GC4 IE2					24
G33C DM80GC4 IE2					24
12	590	0.80		116.36	
14	525	0.90		103.11	
15	465	1.05		91.99	
17	420	1.15		82.51	
19	380	1.25		74.99	
21	335	1.45		66.12	
24	295	1.60		58.56	
27	265	1.85		51.70	
31	235	2.1		45.82	
34	210	2.3		40.87	
38	186	2.6		36.66	
42	169	2.7		33.32	
48	149	2.9		29.38	
G23A DM80GC4 IE2					18
G23C DM80GC4 IE2					19
26	270	0.85		53.51	
30	240	0.95		47.44	
34	210	1.10		41.53	
39	186	1.25		36.59	
43	165	1.40		32.44	
49	147	1.60		28.90	
54	132	1.75		25.95	
62	115	2.00		22.65	
71	101	2.3		19.83	
G22A DM80GC4 IE2					18
G22C DM80GC4 IE2					18
65	111	2.1		21.82	
74	97	2.4		19.18	
83	86	2.7		17.00	
93	77	3.0		15.16	
G13A DM80GC4 IE2					16
G13C DM80GC4 IE2					16
50	142	0.80		27.95	
58	125	0.95		24.52	
65	110	1.05		21.59	
G12A DM80GC4 IE2					15
G12C DM80GC4 IE2					15
77	93	1.25		18.39	
88	82	1.45		16.08	
100	72	1.65		14.16	
112	64	1.85		12.56	
126	57	2.1		11.19	
140	51	2.2		10.04	
161	45	2.4		8.77	
184	39	2.6		7.68	
200	36	2.7		7.06	
227	32	2.9		6.22	
256	28	3.1		5.51	
287	25	3.3		4.91	
320	22	3.5		4.41	
366	20	3.8		3.85	
418	17	4.0		3.37	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
G02A DM80GC4 IE2					14
G02C DM80GC4 IE2					15
115	62	0.95		12.26	
133	54	1.10		10.58	
154	47	1.30		9.18	
176	41	1.45		8.02	
201	36	1.70		7.02	
234	31	1.90		6.04	
271	26	2.1		5.21	
312	23	2.3		4.52	
357	20	2.4		3.95	
408	18	2.7		3.46	
1.1 kW					
G93G42A DM90L4 IE2					375
G93G42C DM90L4 IE2					382
1.4	7050	1.95		988.90	
1.6	6210	1.75		871.17	
1.8	5730	2.4		803.56	
2.0	5150	2.6		722.07	
2.2	4570	3.0		641.18	
G83G42A DM90L4 IE2					242
G83G42C DM90L4 IE2					249
1.5	6940	1.30		974.05	
1.7	6000	1.50		841.95	
1.9	5220	1.70		731.87	
2.2	4600	1.95		645.52	
2.5	4090	2.2		573.21	
2.8	3620	2.5		507.95	
3.1	3290	2.7		462.05	
3.4	2970	3.0		416.17	
G73G32A DM90L4 IE2					155
G73G32C DM90L4 IE2					156
1.6	6160	0.80		864.03	
1.8	5740	0.85		805.28	
2.0	5150	0.95		722.33	
2.2	4670	1.05		655.31	
2.5	4050	1.20		567.65	
2.8	3660	1.35		513.62	
3.0	3320	1.45		466.28	
3.4	2960	1.65		415.75	
4.0	2510	1.95		351.79	
4.4	2270	2.2		318.30	
4.9	2060	2.4		288.96	
5.5	1840	2.7		257.65	
G63G32A DM90L4 IE2					103
G63G32C DM90L4 IE2					103
2.9	3530	0.80		494.71	
3.3	3080	0.90		431.60	
3.7	2760	1.00		386.67	
4.1	2440	1.15		343.00	
4.7	2150	1.30		301.31	
5.2	1930	1.45		271.16	
6.0	1690	1.65		237.47	
G63A DM90L4 IE2					95
G63C DM90L4 IE2					95
6.4	1650	1.70		221.95	
7.1	1480	1.90		199.76	
7.8	1340	2.1		181.12	
8.6	1230	2.3		165.23	
9.3	1130	2.5		151.99	
10	1020	2.7		137.17	
11	925	3.0		124.54	
G53G22A DM90L4 IE2					70
G53G22C DM90L4 IE2					72
5.4	1870	0.85		262.14	
6.2	1640	1.00		229.46	
6.8	1480	1.10		207.08	
7.4	1360	1.20		190.61	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
G53A DM90L4 IE2					65
G53C DM90L4 IE2					67
8.5	1230	1.30		165.96	
9.5	1100	1.45		148.78	
11	995	1.65		134.34	
12	905	1.80		122.04	
13	830	1.95		111.58	
14	745	2.2		100.12	
16	670	2.4		90.36	
17	615	2.6		83.17	
19	550	2.9		74.34	
G43A DM90L4 IE2					41
G43C DM90L4 IE2					42
10	1040	0.85		140.75	
11	935	0.95		125.69	
13	840	1.05		113.03	
14	760	1.15		102.26	
15	690	1.25			

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
G12A DM90L4 IE2					20
G12C DM90L4 IE2					20
88	119	1.00		16.08	
100	105	1.10		14.16	
113	93	1.25		12.56	
126	83	1.40		11.19	
141	75	1.50		10.04	
161	65	1.65		8.77	
184	57	1.75		7.68	
201	52	1.85		7.06	
228	46	2.00		6.22	
257	41	2.1		5.51	
288	36	2.3		4.91	
321	33	2.4		4.41	
368	29	2.6		3.85	
420	25	2.8		3.37	
1.5 kW					
G93G42A DM100L4 IE2					380
G93G42C DM100L4 IE2					387
1.4	9640	1.40		988.90	
1.6	8500	1.25		871.17	
1.8	7840	1.75		803.56	
2.0	7040	1.95		722.07	
2.2	6250	2.2		641.18	
2.5	5540	2.5		568.19	
2.7	5070	2.7		519.38	
3.0	4620	2.9		474.18	
G83G42A DM100L4 IE2					247
G83G42C DM100L4 IE2					254
1.4	9500	0.95		974.05	
1.7	8210	1.10		841.95	
1.9	7140	1.25		731.87	
2.2	6300	1.40		645.52	
2.5	5590	1.60		573.21	
2.8	4950	1.80		507.95	
3.1	4510	1.95		462.05	
3.4	4060	2.2		416.17	
3.8	3640	2.4		373.66	
4.4	3130	2.8		320.53	
G73G32A DM100L4 IE2					161
G73G32C DM100L4 IE2					162
2.5	5540	0.90		567.65	
2.7	5010	1.00		513.62	
3.0	4550	1.05		466.28	
3.4	4050	1.20		415.75	
4.0	3430	1.40		351.79	
4.4	3100	1.55		318.30	
4.9	2820	1.75		288.96	
5.5	2510	1.95		257.65	
G63G32A DM100L4 IE2					109
G63G32C DM100L4 IE2					110
4.1	3350	0.85		343.00	
4.7	2940	0.95		301.31	
5.2	2640	1.05		271.16	
5.9	2320	1.20		237.47	
G63A DM100L4 IE2					100
G63C DM100L4 IE2					101
6.4	2250	1.25		221.95	
7.1	2030	1.40		199.76	
7.8	1840	1.50		181.12	
8.5	1680	1.65		165.23	
9.3	1540	1.80		151.99	
10	1390	2.0		137.17	
11	1270	2.2		124.54	
12	1170	2.4		115.14	
14	1050	2.7		103.72	
15	945	3.0		92.94	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
G53G22A DM100L4 IE2					77
G53G22C DM100L4 IE2					78
6.8	2020	0.80		207.08	
7.4	1860	0.90		190.61	
G53A DM100L4 IE2					71
G53C DM100L4 IE2					72
8.5	1690	0.95		165.96	
9.5	1510	1.10		148.78	
10	1360	1.20		134.34	
12	1240	1.30		122.04	
13	1130	1.45		111.58	
14	1020	1.60		100.12	
16	920	1.75		90.36	
17	845	1.95		83.17	
19	755	2.2		74.34	
21	670	2.4		66.01	
24	595	2.7		58.49	
G43A DM100L4 IE2					46
G43C DM100L4 IE2					47
14	1040	0.85		102.26	
15	945	0.90		93.21	
17	845	1.05		83.15	
19	760	1.15		74.59	
21	685	1.25		67.67	
24	610	1.45		59.97	
25	580	1.50		56.95	
27	525	1.65		51.52	
30	475	1.85		46.96	
34	425	2.1		41.89	
38	380	2.3		37.58	
41	345	2.5		34.09	
47	305	2.9		30.21	
G33A DM100L4 IE2					35
G33C DM100L4 IE2					36
24	595	0.80		58.56	
27	530	0.90		52.40	
27	525	0.90		51.70	
31	465	1.05		45.82	
31	465	1.05		45.61	
34	415	1.15		40.87	
38	370	1.30		36.66	
42	340	1.35		33.32	
48	300	1.45		29.38	
54	265	1.60		26.02	
61	235	1.70		23.28	
70	205	1.85		20.27	
G32A DM100L4 IE2					34
G32C DM100L4 IE2					34
55	260	1.85		25.67	
62	235	2.1		22.92	
68	210	2.3		20.61	
76	189	2.5		18.65	
83	173	2.8		17.00	
G22A DM100L4 IE2					29
G22C DM100L4 IE2					29
74	195	1.20		19.18	
83	173	1.35		17.00	
93	154	1.50		15.16	
104	138	1.70		13.60	
114	126	1.85		12.36	
129	111	2.1		10.90	
146	98	2.3		9.65	
163	88	2.5		8.64	
188	76	2.7		7.52	
200	72	2.3		7.04	
223	64	2.6		6.31	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
G12A DM100L4 IE2					26
G12C DM100L4 IE2					27
100	144	0.80		14.16	
112	128	0.90		12.56	
126	114	1.05		11.19	
140	102	1.10		10.04	
161	89	1.20		8.77	
184	78	1.30		7.68	
200	72	1.35		7.06	
227	63	1.45		6.22	
256	56	1.55		5.51	
287	50	1.65		4.91	
320	45	1.75		4.41	
366	39	1.90		3.85	
418	34	2.0		3.37	
2.2 kW					
G93G42A DM100LX4 IE2					383
G93G42C DM100LX4 IE2					390
1.4	14100	0.95		988.90	
1.6	12500	0.85		871.17	
1.8	11500	1.20		803.56	
2.0	10300	1.30		722.07	
2.2	9170	1.50		641.18	
2.5	8130	1.65		568.19	
2.7	7430	1.85		519.38	
3.0	6780	2.0		474.18	
3.3	6130	2.2		428.72	
3.8	5320	2.6		371.90	
4.3	4650	2.9		325.42	
G83G42A DM100LX4 IE2					250
G83G42C DM100LX4 IE2					257
1.9	10500	0.85		731.87	
2.2	9230	0.95		645.52	
2.5	8200	1.10		573.21	
2.8	7270	1.20		507.95	
3.1	6610	1.35		462.05	
3.4	5950	1.50		416.17	
3.8	5350	1.65		373.66	
4.4	4590	1.95		320.53	
4.9	4080	2.2		285.24	
G73G32A DM100LX4 IE2					164
G73G32C DM100LX4 IE2					165
3.4	5950	0.80		415.75	
4.0	5030	0.95		351.79	
4.4	4550	1.05		318.30	
4.9	4130	1.20		288.96	
5.5	3690	1.35		257.65	
G73A DM100LX4 IE2					161
G73C DM100LX4 IE2					162
5.6	3740	1.30		250.97	
6.2	3400	1.45		228.26	
6.7	3110	1.55		208.90	
7.3	2880	1.70		193.61	
8.0	2610	1.85		175.48	
8.8	2380	2.0		160.04	
9.5	2210	2.2		148.43	
10	2000	2.4		134.48	
12	1820	2.7		122.32	
13	1640	3.0		110.37	
G63G32A DM100LX4 IE2					112
G63G32C DM100LX4 IE2					113
5.9	3400	0.80		237.47	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
2.2 kW					
G63A DM100LX4 IE2					103
G63C DM100LX4 IE2					104
7.1	2980	0.95		199.76	
7.8	2700	1.05		181.12	
8.5	2460	1.15		165.23	
9.3	2260	1.25		151.99	
10	2040	1.35		137.17	
11	1860	1.50		124.54	
12	1720	1.65		115.14	
14	1550	1.80		103.72	
15	1380	2.0		92.94	
17	1240	2.3		83.23	
19	1120	2.5		74.91	
G53A DM100LX4 IE2					74
G53C DM100LX4 IE2					75
10	2000	0.80		134.34	
12	1820	0.90		122.04	
13	166				

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
2.2 kW					
G32A DM100LX4 IE2					37
G32C DM100LX4 IE2					37
62	340	1.40	22.92		
68	305	1.55	20.61		
76	280	1.75	18.65		
83	255	1.90	17.00		
93	225	2.1	15.16		
104	205	2.4	13.60		
114	184	2.6	12.34		
129	163	2.9	10.93		
G22A DM100LX4 IE2					32
G22C DM100LX4 IE2					32
83	255	0.90	17.00		
93	225	1.05	15.16		
104	205	1.15	13.60		
114	184	1.25	12.36		
129	162	1.45	10.90		
146	144	1.60	9.65		
163	129	1.70	8.64		
188	112	1.85	7.52		
200	105	1.60	7.04		
223	94	1.75	6.31		
246	86	2.3	5.74		
279	75	2.4	5.06		
315	67	2.5	4.48		
352	60	2.6	4.01		
404	52	2.7	3.49		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
G93G42A DM112M4 IE2					389
G93G42C DM112M4 IE2					396
1.8	15700	0.85	803.56		
2.0	14100	0.95	722.07		
2.2	12500	1.10	641.18		
2.5	11100	1.25	568.19		
2.7	10100	1.35	519.38		
3.0	9250	1.45	474.18		
3.3	8360	1.65	428.72		
3.8	7250	1.90	371.90		
4.3	6350	2.1	325.42		
G83G42A DM112M4 IE2					256
G83G42C DM112M4 IE2					263
2.5	11200	0.80	573.21		
2.8	9910	0.90	507.95		
3.1	9010	1.00	462.05		
3.4	8120	1.10	416.17		
3.8	7290	1.20	373.66		
4.4	6250	1.40	320.53		
4.9	5560	1.60	285.24		
G73G32A DM112M4 IE2					171
G73G32C DM112M4 IE2					172
4.4	6210	0.80	318.30		
4.9	5640	0.85	288.96		
5.5	5030	0.95	257.65		
G73A DM112M4 IE2					167
G73C DM112M4 IE2					168
5.6	5100	0.95	250.97		
6.2	4640	1.05	228.26		
6.7	4240	1.15	208.90		
7.3	3930	1.25	193.61		
8.0	3570	1.35	175.48		
8.8	3250	1.50	160.04		
9.5	3020	1.60	148.43		
10	2730	1.80	134.48		
12	2490	1.95	122.32		
13	2240	2.2	110.37		
14	2030	2.4	100.13		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
G63A DM112M4 IE2					110
G63C DM112M4 IE2					110
8.5	3360	0.85	165.23		
9.3	3090	0.90	151.99		
10	2790	1.00	137.17		
11	2530	1.10	124.54		
12	2340	1.20	115.14		
14	2110	1.35	103.72		
15	1890	1.50	92.94		
17	1690	1.65	83.23		
19	1520	1.85	74.91		
31	915	2.7	45.13		
35	820	3.0	40.41		
G53A DM112M4 IE2					81
G53C DM112M4 IE2					82
14	2030	0.80	100.12		
16	1840	0.90	90.36		
17	1690	0.95	83.17		
19	1510	1.10	74.34		
21	1340	1.20	66.01		
24	1190	1.35	58.49		
28	1040	1.55	51.20		
31	940	1.75	46.21		
33	865	1.90	42.53		
37	770	2.1	38.01		
42	685	2.4	33.76		
47	610	2.6	29.91		
53	540	2.8	26.62		
G52A DM112M4 IE2					77
G52C DM112M4 IE2					78
45	635	1.80	31.19		
50	580	1.95	28.45		
54	530	2.5	26.17		
60	480	2.7	23.62		
66	435	3.0	21.45		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
G43A DM112M4 IE2					56
G43C DM112M4 IE2					56
27	1050	0.85	51.52		
30	955	0.90	46.96		
34	850	1.05	41.89		
38	765	1.15	37.58		
41	695	1.25	34.09		
47	615	1.45	30.21		
53	540	1.60	26.59		
61	475	1.70	23.29		
69	415	1.75	20.45		
G42A DM112M4 IE2					54
G42C DM112M4 IE2					54
53	545	1.60	26.83		
58	490	1.75	24.23		
64	445	1.90	22.01		
70	410	2.1	20.12		
78	365	2.4	18.06		
87	330	2.6	16.30		
94	305	2.7	15.00		
105	270	3.0	13.41		
G33A DM112M4 IE2					45
G33C DM112M4 IE2					45
54	530	0.80	26.02		
61	475	0.85	23.28		
70	410	0.95	20.27		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
G32A DM112M4 IE2					44
G32C DM112M4 IE2					44
62	465	1.05	22.92		
68	420	1.15	20.61		
76	380	1.25	18.65		
83	345	1.40	17.00		
93	310	1.55	15.16		
104	275	1.75	13.60		
114	250	1.90	12.34		
129	220	2.1	10.93		
146	196	2.2	9.63		
167	171	2.4	8.43		
190	150	2.6	7.40		
193	148	2.2	7.30		
215	133	2.4	6.54		
237	121	2.7	5.94		
268	107	2.9	5.26		
G22A DM112M4 IE2					38
G22C DM112M4 IE2					39
104	275	0.85	13.60		
114	250	0.95	12.36		
129	220	1.05	10.90		
146	196	1.15	9.65		
163	176	1.25	8.64		
188	153	1.35	7.52		
200	143	1.15	7.04		
223	128	1.30	6.31		
246	117	1.70	5.74		
279	103	1.80	5.06		
315	91	1.85	4.48		
352	81	1.95	4.01		
404	71	2.0	3.49		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
G93G42A DM112MX4 IE2					389
G93G42C DM112MX4 IE2					396
2.2	16500	0.80	641.18		
2.5	14600	0.95	568.19		
2.7	13400	1.00	519.38		
3.0	12200	1.10	474.18		
3.3	11000	1.25	428.72		
3.8	9570	1.40	371.90		
4.4	8370	1.65	325.42		
G83G42A DM112MX4 IE2					256
G83G42C DM112MX4 IE2					263
3.4	10700	0.85	416.17		
3.8	9620	0.95	373.66		
4.4	8250	1.10	320.53		
5.0	7340	1.20	285.24		
G73A DM112MX4 IE2					167
G73C DM112MX4 IE2					168
6.2	6120	0.80	228.26		
6.8	5600	0.85	208.90		
7.4	5190	0.95	193.61		
8.1	4700	1.05	175.48		
8.9	4290	1.15	160.04		
9.6	3980	1.25	148.43		
11	3600	1.35	134.48		
12	3280	1.50	122.32		
13	2960	1.65	110.37		
14	2680	1.80	100.13		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
G63A DM112MX4 IE2					110
G63C DM112MX4 IE2					110
11	3340	0.85	124.54		
12	3090	0.90	115.14		
14	2780	1.00	103.72		
15	2490	1.10	92.94		
17	2230	1.25	83.23		
19	2010	1.40	74.91		
32	1210	2.1	45.13		
35	1080	2.3	40.41		
39	975	2.4	36.37		
G62A DM112MX4 IE2					102
G62C DM112MX4 IE2					102
46	835	2.4	31.16		
50	760	2.7	28.42		
54	705	3.0	26.36		
G53A DM112MX4 IE2					81
G53C DM112MX4 IE2					82
19	1990	0.80	74.34		
22	1770	0.90	66.01		
24	1570	1.05			

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
G32A DM112MX4 IE2					44
G32C DM112MX4 IE2					44
69	555	0.85	20.61		
76	500	0.95	18.65		
84	455	1.05	17.00		
94	405	1.20	15.16		
105	365	1.30	13.60		
115	330	1.45	12.34		
130	295	1.60	10.93		
148	260	1.70	9.63		
169	225	1.85	8.43		
192	198	1.95	7.40		
195	196	1.70	7.30		
218	175	1.80	6.54		
240	159	2.0	5.94		
271	141	2.2	5.26		
308	124	2.3	4.63		
351	109	2.5	4.06		
400	96	2.7	3.56		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
5.5 kW					
G93G42A DA132S4 IE2					407
G93G42C DA132S4 IE2					414
3.1	16400	0.85	474.18		
3.4	14900	0.90	428.72		
3.9	12900	1.05	371.90		
4.5	11300	1.20	325.42		
5.0	9990	1.35	288.28		
5.8	8670	1.55	250.07		
6.6	7580	1.80	218.81		
7.5	6680	2.0	192.77		
8.2	6160	1.60	177.81		
G83G42A DA132S4 IE2					274
G83G42C DA132S4 IE2					281
4.5	11100	0.80	320.53		
5.1	9890	0.90	285.24		
6.0	8470	1.05	244.36		
6.8	7470	1.20	215.53		
G83A DA132S4 IE2					259
G83C DA132S4 IE2					265
7.8	6750	1.30	186.96		
8.5	6170	1.45	170.93		
9.2	5700	1.55	158.00		
10	5180	1.70	143.59		
11	4730	1.90	131.06		
12	4290	2.1	118.71		
13	3900	2.3	108.13		
15	3420	2.6	94.72		
17	3110	2.9	86.16		
G73A DA132S4 IE2					183
G73C DA132S4 IE2					184
9.1	5780	0.85	160.04		
9.8	5360	0.90	148.43		
11	4850	1.00	134.48		
12	4420	1.10	122.32		
13	3980	1.25	110.37		
15	3610	1.35	100.13		
17	3130	1.55	86.74		
19	2830	1.70	78.48		
20	2570	1.90	71.25		
23	2290	2.1	63.53		
27	1940	2.5	53.88		
31	1710	2.9	47.41		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
5.5 kW					
G63A DA132S4 IE2					128
G63C DA132S4 IE2					128
16	3360	0.85	92.94		
17	3000	0.95	83.23		
19	2700	1.05	74.91		
22	2360	1.20	65.35		
25	2110	1.30	58.55		
28	1870	1.45	51.94		
32	1630	1.55	45.13		
36	1460	1.70	40.41		
40	1310	1.80	36.37		
46	1150	1.95	31.73		
51	1030	2.1	28.43		
58	910	2.3	25.22		
66	800	2.5	22.15		
G62A DA132S4 IE2					120
G62C DA132S4 IE2					120
47	1120	1.80	31.16		
51	1030	1.95	28.42		
55	950	2.2	26.36		
61	860	2.6	23.88		
67	785	2.7	21.72		
74	710	3.0	19.60		
G53A DA132S4 IE2					98
G53C DA132S4 IE2					99
28	1850	0.90	51.20		
31	1670	1.00	46.21		
34	1540	1.05	42.53		
38	1370	1.20	38.01		
43	1220	1.35	33.76		
49	1080	1.45	29.91		
55	960	1.55	26.62		
64	825	1.75	22.80		
72	725	1.85	20.11		
G52A DA132S4 IE2					94
G52C DA132S4 IE2					95
62	855	1.55	23.62		
68	775	1.65	21.45		
73	715	1.95	19.83		
81	645	2.2	17.86		
91	580	2.4	16.01		
102	515	2.6	14.33		
113	465	2.7	12.90		
129	405	2.9	11.25		
G43A DA132S4 IE2					73
G43C DA132S4 IE2					74
48	1090	0.80	30.21		
55	960	0.90	26.59		
62	840	0.95	23.29		
71	740	1.00	20.45		
G42A DA132S4 IE2					71
G42C DA132S4 IE2					72
81	650	1.35	18.06		
89	590	1.45	16.30		
97	540	1.50	15.00		
109	485	1.65	13.41		
122	430	1.75	11.90		
138	380	1.90	10.55		
155	340	2.0	9.39		
181	290	2.2	8.04		
205	255	2.3	7.09		
213	245	1.90	6.82		
240	220	2.1	6.05		
271	194	2.3	5.36		
305	172	2.5	4.77		
356	148	2.7	4.09		
404	130	3.0	3.61		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
5.5 kW					
G32A DA132S4 IE2					61
G32C DA132S4 IE2					61
96	545	0.90	15.16		
107	490	1.00	13.60		
118	445	1.10	12.34		
133	395	1.20	10.93		
151	345	1.25	9.63		
173	305	1.35	8.43		
197	265	1.45	7.40		
199	265	1.25	7.30		
222	235	1.35	6.54		
245	215	1.50	5.94		
277	190	1.60	5.26		
314	167	1.75	4.63		
359	146	1.90	4.06		
408	129	2.0	3.56		
7.5 kW					
G93G42A DA132MX4 IE2					413
G93G42C DA132MX4 IE2					420
4.5	15400	0.90	325.42		
5.0	13600	1.00	288.28		
5.8	11800	1.15	250.07		
6.6	10300	1.30	218.81		
7.5	9110	1.50	192.77		
8.2	8400	1.20	177.81		
G83G42A DA132MX4 IE2					280
G83G42C DA132MX4 IE2					287
6.8	10200	0.85	215.53		
G83A DA132MX4 IE2					265
G83C DA132MX4 IE2					272
7.8	9200	0.95	186.96		
8.5	8410	1.05	170.93		
9.2	7780	1.15	158.00		
10	7070	1.25	143.59		
11	6450	1.40	131.06		
12	5840	1.50	118.71		
13	5320	1.65	108.13		
15	4660	1.90	94.72		
17	4240	2.1	86.16		
19	3820	2.3	77.61		
21	3430	2.6	69.68		
24	2940	3.0	59.77		
G73A DA132MX4 IE2					189
G73C DA132MX4 IE2					191
12	6020	0.80	122.32		
13	5430	0.90	110.37		
15	4930	1.00	100.13		
17	4270	1.15	86.74		
19	3860	1.25	78.48		
20	3510	1.40	71.25		
23	3130	1.55	63.53		
27	2650	1.85	53.88		
31	2330	2.1	47.41		
35	2020	2.4	41.07		
39	1830	2.5	37.16		
43	1660	2.7	33.74		
48	1480	2.9	30.08		
G63A DA132MX4 IE2					134
G63C DA132MX4 IE2					134
22	3220	0.85	65.35		
25	2880	0.95	58.55		
28	2560	1.05	51.94		
32	2220	1.15	45.13		
36	1990	1.25	40.41		
40	1790	1.30	36.37		
46	1560	1.45	31.73		
51	1400	1.55	28.43		
58	1240	1.70	25.22		
66	1090	1.80	22.15		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
7.5 kW					
G62A DA132MX4 IE2					126
G62C DA132MX4 IE2					126
47	1530	1.35	31.16		
51	1400	1.45	28.42		
55	1300	1.65	26.36		
61	1180	1.85	23.88		
67	1070	1.95	21.72		
74	965	2.2	19.60		
82	875	2.3	17.78		
94	760	2.5	15.40		
104	685	2.7	13.94		
115	625	2.9	12.65		
G53A DA132MX4 IE2					104
G53C DA132MX4 IE2					106
34	2090				

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
9.2 kW					
G93A DA160MS4 IE2					411
G93C DA160MS4 IE2					418
9.4	9390	1.45	157.04		
10	8610	1.60	144.12		
11	7830	1.75	131.03		
12	7160	1.90	119.82		
14	6330	2.1	105.95		
15	5790	2.4	96.85		
17	5280	2.6	88.42		
18	4780	2.8	79.95		
G83A DA160MS4 IE2					278
G83C DA160MS4 IE2					285
10	8580	1.05	143.59		
11	7830	1.15	131.06		
12	7100	1.25	118.71		
14	6460	1.40	108.13		
16	5660	1.55	94.72		
17	5150	1.75	86.16		
19	4640	1.90	77.61		
21	4160	2.1	69.68		
25	3570	2.5	59.77		
28	3090	2.9	51.67		
G73A DA160MS4 IE2					203
G73C DA160MS4 IE2					204
15	5980	0.80	100.13		
17	5180	0.95	86.74		
19	4690	1.05	78.48		
21	4260	1.15	71.25		
23	3800	1.30	63.53		
27	3220	1.50	53.88		
31	2830	1.70	47.41		
36	2450	1.95	41.07		
40	2220	2.1	37.16		
44	2020	2.2	33.74		
49	1800	2.4	30.08		
58	1520	2.7	25.51		
68	1300	3.0	21.77		
G72A DA160MS4 IE2					191
G72C DA160MS4 IE2					192
56	1560	2.6	26.11		
62	1410	2.9	23.65		
G63A DA160MS4 IE2					149
G63C DA160MS4 IE2					149
25	3500	0.80	58.55		
28	3100	0.85	51.94		
33	2700	0.95	45.13		
36	2420	1.00	40.41		
40	2170	1.10	36.37		
46	1900	1.20	31.73		
52	1700	1.25	28.43		
58	1510	1.40	25.22		
66	1320	1.50	22.15		
G62A DA160MS4 IE2					141
G62C DA160MS4 IE2					141
62	1430	1.55	23.88		
68	1300	1.65	21.72		
75	1170	1.80	19.60		
83	1060	1.90	17.78		
95	920	2.1	15.40		
105	835	2.2	13.94		
116	755	2.4	12.65		
130	675	2.5	11.28		
154	570	2.7	9.57		
180	490	3.0	8.16		
197	445	2.7	7.47		
218	405	2.9	6.76		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
9.2 kW					
G53A DA160MS4 IE2					119
G53C DA160MS4 IE2					121
44	2020	0.80	33.76		
49	1790	0.85	29.91		
55	1590	0.95	26.62		
64	1360	1.05	22.80		
73	1200	1.10	20.11		
G52A DA160MS4 IE2					115
G52C DA160MS4 IE2					117
82	1070	1.35	17.86		
92	955	1.40	16.01		
103	855	1.55	14.33		
114	770	1.65	12.90		
131	675	1.75	11.25		
146	605	1.90	10.08		
164	535	2.0	8.94		
187	470	2.1	7.86		
209	420	1.95	7.02		
233	380	2.1	6.32		
267	330	2.3	5.51		
298	295	2.5	4.94		
335	260	2.7	4.38		
382	230	2.9	3.85		
G42A DA160MS4 IE2					93
G42C DA160MS4 IE2					94
110	800	1.00	13.41		
123	710	1.05	11.90		
139	630	1.15	10.55		
157	560	1.20	9.39		
183	480	1.30	8.04		
207	425	1.40	7.09		
216	405	1.15	6.82		
243	360	1.25	6.05		
274	320	1.35	5.36		
308	285	1.50	4.77		
360	245	1.65	4.09		
408	215	1.80	3.61		
11.0 kW					
G93G42A DA160M4 IE2					439
G93G42C DA160M4 IE2					445
5.9	17200	0.80	250.07		
6.7	15100	0.90	218.81		
7.6	13300	1.05	192.77		
8.2	12200	0.80	177.81		
G93A DA160M4 IE2					421
G93C DA160M4 IE2					428
9.3	11300	1.20	157.04		
10	10300	1.30	144.12		
11	9400	1.45	131.03		
12	8590	1.60	119.82		
14	7600	1.80	105.95		
15	6940	1.95	96.85		
17	6340	2.1	88.42		
18	5730	2.4	79.95		
21	4970	2.7	69.35		
G83A DA160M4 IE2					288
G83C DA160M4 IE2					295
10	10300	0.85	143.59		
11	9400	0.95	131.06		
12	8510	1.05	118.71		
14	7750	1.15	108.13		
15	6790	1.30	94.72		
17	6180	1.45	86.16		
19	5560	1.60	77.61		
21	5000	1.80	69.68		
25	4290	2.1	59.77		
28	3700	2.4	51.67		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
11.0 kW					
G73A DA160M4 IE2					213
G73C DA160M4 IE2					214
17	6220	0.80	86.74		
19	5630	0.85	78.48		
21	5110	0.95	71.25		
23	4560	1.05	63.53		
27	3860	1.25	53.88		
31	3400	1.45	47.41		
36	2950	1.65	41.07		
39	2660	1.75	37.16		
43	2420	1.85	33.74		
49	2160	2.0	30.08		
57	1830	2.3	25.51		
67	1560	2.5	21.77		
G72A DA160M4 IE2					201
G72C DA160M4 IE2					202
56	1870	2.2	26.11		
62	1700	2.5	23.65		
68	1540	2.6	21.55		
78	1350	2.9	18.87		
85	1230	3.0	17.17		
G63A DA160M4 IE2					159
G63C DA160M4 IE2					159
32	3240	0.80	45.13		
36	2900	0.85	40.41		
40	2610	0.90	36.37		
46	2280	1.00	31.73		
52	2040	1.05	28.43		
58	1810	1.15	25.22		
66	1590	1.25	22.15		
G62A DA160M4 IE2					151
G62C DA160M4 IE2					151
61	1710	1.30	23.88		
67	1560	1.35	21.72		
75	1410	1.50	19.60		
82	1270	1.60	17.78		
95	1100	1.75	15.40		
105	1000	1.85	13.94		
116	905	1.95	12.65		
130	810	2.1	11.28		
153	685	2.3	9.57		
179	585	2.5	8.16		
196	535	2.3	7.47		
217	485	2.4	6.76		
239	440	2.6	6.13		
268	390	2.8	5.47		
G53A DA160M4 IE2					129
G53C DA160M4 IE2					131
55	1910	0.80	26.62		
64	1640	0.85	22.80		
73	1440	0.95	20.11		
G52A DA160M4 IE2					125
G52C DA160M4 IE2					127
82	1280	1.10	17.86		
92	1150	1.20	16.01		
102	1030	1.30	14.33		
114	925	1.35	12.90		
130	805	1.45	11.25		
145	725	1.60	10.08		
164	640	1.65	8.94		
186	565	1.75	7.86		
209	505	1.60	7.02		
232	455	1.75	6.32		
266	395	1.90	5.51		
297	355	2.1	4.94		
334	315	2.2	4.38		
381	275	2.4	3.85		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
11.0 kW					
G42A DA160M4 IE2					103
G42C DA160M4 IE2					104
109	960	0.85	13.41		
123	855	0.90	11.90		
139	755	0.95	10.55		
156	675	1.00	9.39		
182	575	1.10	8.04		
207	510	1.20	7.09		
215	490	0.95	6.82		
242	435	1.05	6.05		
273	385	1.15	5.36		
307	340	1.25	4.77		
358	295	1.40	4.09		
406	260	1.50	3.61		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
15.0 kW					
G62A DA160L4 IE2					168
G62C DA160L4 IE2					168
61	2330	0.95		23.88	
67	2120	1.00		21.72	
75	1920	1.10		19.60	
82	1740	1.15		17.78	
95	1510	1.30		15.40	
105	1360	1.35		13.94	
116	1240	1.45		12.65	
130	1100	1.55		11.28	
153	935	1.70		9.57	
179	800	1.85		8.16	
196	730	1.65		7.47	
217	660	1.80		6.76	
239	600	1.90		6.13	
268	535	2.1		5.47	
316	455	2.3		4.64	
370	385	2.6		3.96	
G52A DA160L4 IE2					143
G52C DA160L4 IE2					144
82	1750	0.80		17.86	
92	1570	0.85		16.01	
102	1400	0.95		14.33	
114	1260	1.00		12.90	
130	1100	1.10		11.25	
145	985	1.15		10.08	
164	875	1.20		8.94	
186	770	1.30		7.86	
209	685	1.20		7.02	
232	620	1.30		6.32	
266	540	1.40		5.51	
297	485	1.50		4.94	
334	430	1.65		4.38	
381	375	1.75		3.85	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
18.5 kW					
G93A DA180M4 IE2					490
G93C DA180M4 IE2					496
11	15800	0.85		131.03	
12	14400	0.95		119.82	
14	12800	1.05		105.95	
15	11700	1.15		96.85	
17	10700	1.30		88.42	
18	9640	1.40		79.95	
21	8360	1.65		69.35	
24	7320	1.85		60.68	
27	6450	2.1		53.46	
30	5950	2.3		49.31	
33	5430	2.5		45.02	
36	4910	2.8		40.70	
G83A DA180M4 IE2					357
G83C DA180M4 IE2					363
15	11400	0.80		94.72	
17	10400	0.85		86.16	
19	9360	0.95		77.61	
21	8400	1.05		69.68	
25	7210	1.25		59.77	
28	6230	1.45		51.67	
33	5420	1.65		44.91	
38	4660	1.85		38.61	
42	4180	2.00		34.66	
49	3590	2.2		29.74	
57	3100	2.5		25.70	
66	2690	2.7		22.34	
G82A DA180M4 IE2					339
G82C DA180M4 IE2					345
78	2270	2.7		18.81	
86	2050	2.9		17.01	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
18.5 kW					
G73A DA180M4 IE2					281
G73C DA180M4 IE2					282
31	5720	0.85		47.41	
36	4950	0.95		41.07	
39	4480	1.05		37.16	
43	4070	1.10		33.74	
49	3630	1.20		30.08	
57	3080	1.35		25.51	
67	2630	1.50		21.77	
G72A DA180M4 IE2					269
G72C DA180M4 IE2					270
62	2850	1.45		23.65	
68	2600	1.55		21.55	
78	2280	1.70		18.87	
85	2070	1.80		17.17	
95	1860	1.90		15.46	
106	1670	2.0		13.88	
123	1440	2.2		11.91	
142	1240	2.4		10.29	
160	1100	2.2		9.15	
164	1080	2.5		8.95	
176	1000	2.3		8.32	
195	905	2.5		7.50	
218	810	2.6		6.73	
254	695	2.9		5.77	
G62A DA180M4 IE2					220
G62C DA180M4 IE2					221
75	2360	0.90		19.60	
82	2140	0.95		17.78	
95	1860	1.05		15.40	
105	1680	1.10		13.94	
116	1530	1.15		12.65	
130	1360	1.25		11.28	
153	1150	1.35		9.57	
179	985	1.50		8.16	
196	900	1.35		7.47	
217	815	1.45		6.76	
239	740	1.55		6.13	
268	660	1.70		5.47	
316	560	1.90		4.64	
370	475	2.1		3.96	
G52A DA180M4 IE2					195
G52C DA180M4 IE2					196
114	1560	0.80		12.90	
130	1360	0.90		11.25	
145	1220	0.95		10.08	
164	1080	1.00		8.94	
186	950	1.05		7.86	
209	845	0.95		7.02	
232	760	1.05		6.32	
266	665	1.15		5.51	
297	595	1.25		4.94	
334	530	1.30		4.38	
381	465	1.40		3.85	
22.0 kW					
G93A DA180L4 IE2					527
G93C DA180L4 IE2					533
12	17200	0.80		119.82	
14	15200	0.90		105.95	
15	13900	1.00		96.85	
17	12700	1.05		88.42	
18	11500	1.20		79.95	
21	9950	1.35		69.35	
24	8700	1.55		60.68	
27	7670	1.80		53.46	
30	7070	1.90		49.31	
33	6460	2.1		45.02	
36	5840	2.3		40.70	
41	5060	2.7		35.31	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
22.0 kW					
G83A DA180L4 IE2					394
G83C DA180L4 IE2					400
19	11100	0.80		77.61	
21	9990	0.90		69.68	
25	8570	1.05		59.77	
28	7410	1.20		51.67	
33	6440	1.40		44.91	
38	5540	1.55		38.61	
42	4970	1.65		34.66	
49	4260	1.85		29.74	
57	3690	2.1		25.70	
66	3200	2.3		22.34	
G82A DA180L4 IE2					376
G82C DA180L4 IE2					382
78	2700	2.2		18.81	
86	2440	2.4		17.01	
99	2120	2.7		14.76	
113	1850	2.9		12.91	
G73A DA180L4 IE2					318
G73C DA180L4 IE2					319
36	5890	0.80		41.07	
39	5330	0.85		37.16	
43	4840	0.95		33.74	
49	4310	1.00		30.08	
57	3660	1.15		25.51	
67	3120	1.25		21.77	
G72A DA180L4 IE2					306
G72C DA180L4 IE2					307
62	3390	1.25		23.65	
68	3090	1.30		21.55	
78	2710	1.45		18.87	
85	2460	1.50		17.17	
95	2220	1.60		15.46	
106	1990	1.70		13.88	
123	1710	1.85		11.91	
142	1480	2.00		10.29	
160	1310	1.85		9.15	
164	1280	2.1		8.95	
176	1190	1.95		8.32	
195	1080	2.1		7.50	
218	965	2.2		6.73	
254	830	2.4		5.77	
293	715	2.6		4.99	
338	620	2.8		4.34	
G62A DA180L4 IE2					257
G62C DA180L4 IE2					258
82	2550	0.80		17.78	
95	2210	0.85		15.40	
105	2000	0.95		13.94	
116	1810	1.00		12.65	
130	1620	1.05		11.28	
153	1370	1.15		9.57	
179	1170	1.25		8.16	
196	1070	1.15		7.47	
217	970	1.20		6.76	
239	880	1.30		6.13	
268	785	1.40		5.47	
316	665	1.60		4.64	
370	570	1.75		3.96	

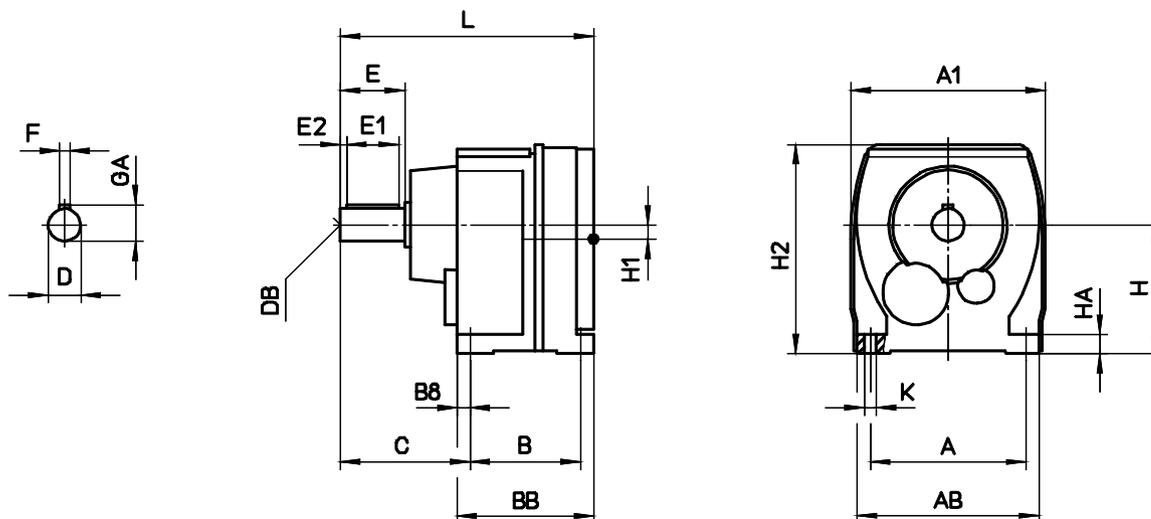
Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
30.0 kW					
G93A DA200L4 IE2					582
G93C DA200L4 IE2					588
17	17100	0.80		88.42	
19	15500	0.90		79.95	
21	13400	1.00		69.35	
24	11700	1.15		60.68	
28	10300	1.30		53.46	
30	9550	1.45		49.31	
33	8710	1.55		45.02	
36	7880	1.75		40.70	
42	6830	2.00		35.31	
48	5980	2.3		30.89	
54	5270	2.5		27.22	
64	4500	2.7		23.27	
73	3920	3.0		20.23	
G83A DA200L4 IE2					449
G83C DA200L4 IE2					455
29	10000	0.9			

Helical gear units G

Type					-kg
n2 [1/min]	T2 [Nm]	cG	i		
37.0 kW					
G92A DA225SX4 IE2					602
G92C DA225SX4 IE2					608
85	4150	2.8	17.34		
97	3660	3.0	15.26		
109	3240	3.3	13.53		
126	2810	3.6	11.74		
143	2470	4.0	10.30		
161	2190	3.0	9.15		
G83A DA225SX4 IE2					497
G83C DA225SX4 IE2					503
33	10800	0.85	44.91		
38	9250	0.95	38.61		
43	8300	1.00	34.66		
50	7120	1.10	29.74		
57	6160	1.25	25.70		
66	5350	1.35	22.34		
G82A DA225SX4 IE2					479
G82C DA225SX4 IE2					485
78	4510	1.35	18.81		
87	4070	1.45	17.01		
100	3530	1.60	14.76		
114	3090	1.75	12.91		
130	2720	1.95	11.37		
151	2350	1.95	9.79		
167	2120	2.1	8.85		
192	1840	2.2	7.68		
219	1610	2.4	6.72		
249	1420	2.6	5.92		

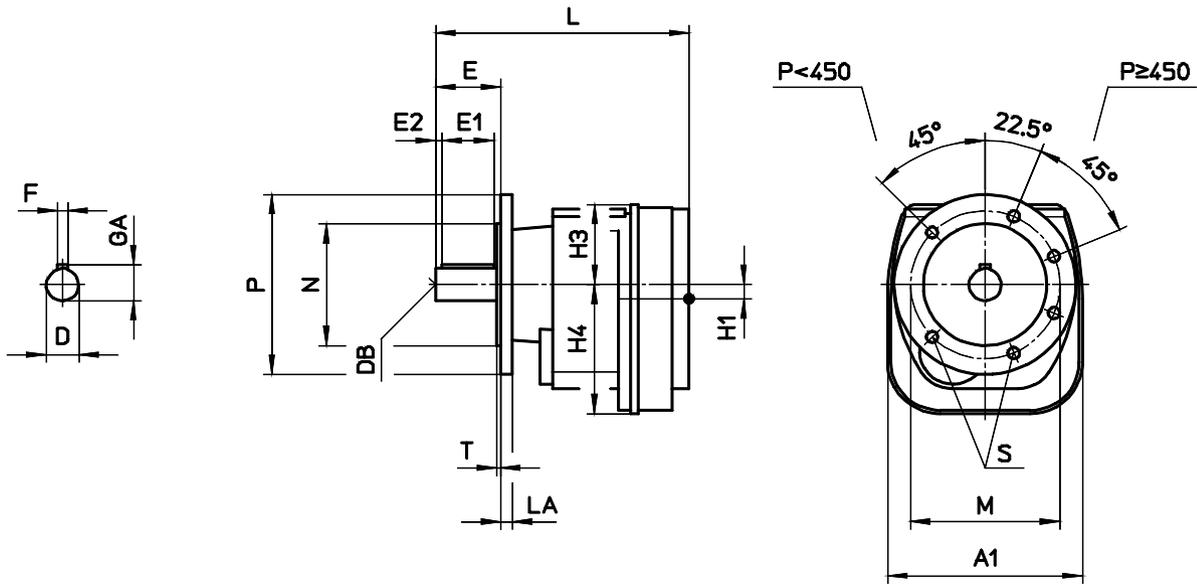
Dimensions

A - Foot mounted version



	A	AB	A1	B	BB	B8	C	H	HA	H1	H2	K	L	D	DB	E	E1	E2	F	GA
G0	90	105	109	70	90	12.5	80	70-0.5	10	7	117.5	Ø6.6	151.5	Ø20k6	M6	40	32	4	6	22.5
G1	100	120	125	70	90	10	81	85-0.5	12	5	142.5	Ø6.6	163	Ø20k6	M6	40	32	4	6	22.5
G2	120	140	150	85	105	10	100	100-0.5	18	11	162.5	Ø9	195	Ø25k6	M10	50	40	5	8	28
G3	135	160	177	110	135	12.5	116.5 126.5	120-0.5	24	11	192.5	Ø11	234 244	Ø30k6 Ø35k6	M10 M12	60 70	50 60	5 5	8 10	33 38
G4	170	200	208	135	165	15	146	145-0.5	30	16	233	Ø13.5	281	Ø40k6	M16	80	70	5	12	43
G5	215	250	259	170	205	17.5	181	180-0.5	35	20	289.5	Ø17.5	335	Ø50k6	M16	100	80	10	14	53.5
G6	255	300	309	200	245	23	207	220-0.5	45	20	354.5	Ø22	392	Ø60m6	M20	120	100	10	18	64
G7	290	350	360	280	330	25	239	250-1	55	28.5	401.5	Ø26	485	Ø75m6	M20	140	125	7.5	20	79.5
G8	330	400	412	330	395	32.5	290	290-1	65	32	464	Ø33	585.5	Ø90m6	M24	170	140	15	25	95
G9	390	460	466	400	480	40	335	340-1	75	39	534	Ø39	695	Ø110m6	M24	210	180	15	28	116

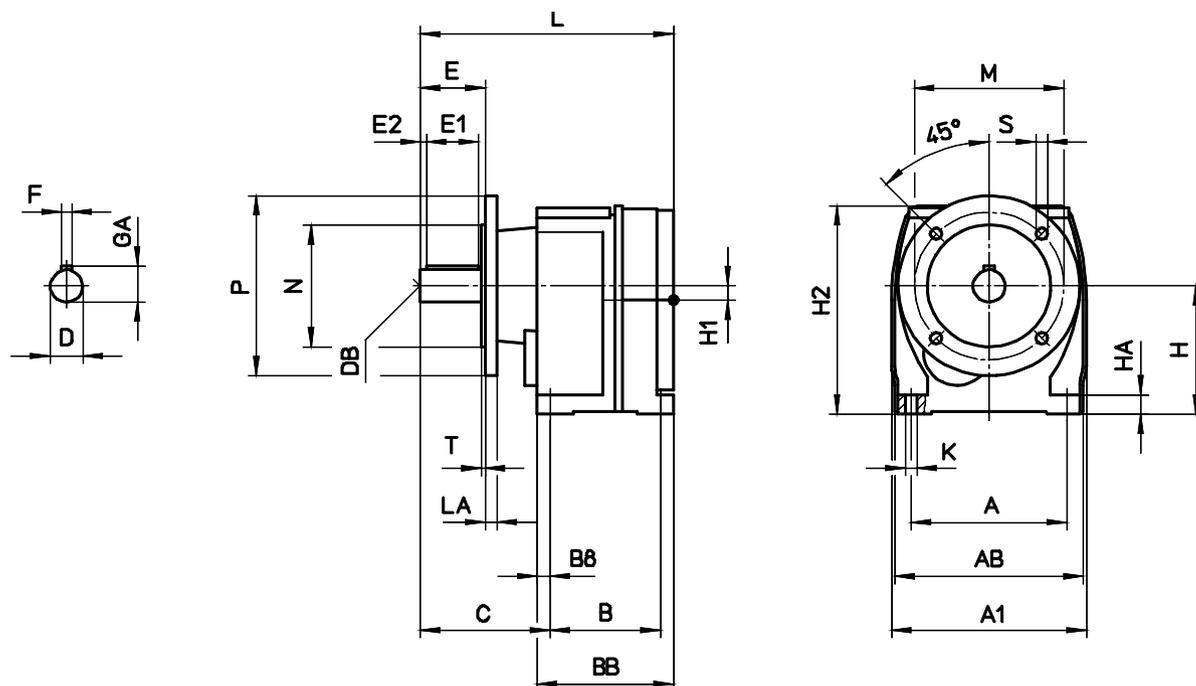
C - Flange mounted version



	A1	H1	L	H3	H4	D	DB	E	E1	E2	F	GA
G0	109	7	151.5	47.5	71	Ø20k6	M6	40	32	4	6	22.5
G1	125	5	163	57.5	85	Ø20k6	M6	40	32	4	6	22.5
G2	150	11	195	62.5	100.5	Ø25k6	M10	50	40	5	8	28
G3	177	11	234	72.5	120	Ø30k6	M10	60	50	5	8	33
			244			Ø35k6	M12	70	60	5	10	38
G4	208	16	281	88	144.5	Ø40k6	M16	80	70	5	12	43
G5	259	20	335	109.5	179	Ø50k6	M16	100	80	10	14	53.5
G6	309	20	392	134.5	218.5	Ø60m6	M20	120	100	10	18	64
G7	360	28.5	485	151.5	248.5	Ø75m6	M20	140	125	7.5	20	79.5
G8	412	32	585.5	174	289	Ø90m6	M24	170	140	15	25	95
G9	466	39	695	194	338.5	Ø110m6	M24	210	180	15	28	116

	M	N	P	LA	T	S
G0	Ø100	Ø80 j6	Ø120	8	3	Ø6.6
G1	Ø100	Ø80 j6	Ø120	8	3	Ø6.6
	Ø115	Ø95 j6	Ø140	9	3	Ø9
G2	Ø115	Ø95 j6	Ø140	9	3	Ø9
	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
G3	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
G4	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
G5	Ø215	Ø180 j6	Ø250	11	4	Ø13.5
G6	Ø265	Ø230 j6	Ø300	12	4	Ø13.5
G7	Ø300	Ø250 h6	Ø350	13	5	Ø17.5
G8	Ø400	Ø350 h6	Ø450	16	5	Ø17.5
G9	Ø400	Ø350 h6	Ø450	16	5	Ø17.5

E - Foot-flange mounted version



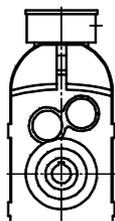
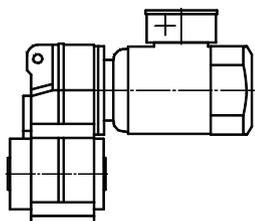
	A	AB	A1	B	BB	B8	C	H	HA	H1	H2	K	L	D	DB	E	E1	E2	F	GA
G0	90	105	109	70	90	12.5	80	70-0.5	10	7	117.5	Ø6.6	151.5	Ø20k6	M6	40	32	4	6	22.5
G1	100	120	125	70	90	10	81	85-0.5	12	5	142.5	Ø6.6	163	Ø20k6	M6	40	32	4	6	22.5
G2	120	140	150	85	105	10	100	100-0.5	18	11	162.5	Ø9	195	Ø25k6	M10	50	40	5	8	28
G3	135	160	177	110	135	12.5	116.5 126.5	120-0.5	24	11	192.5	Ø11	234 244	Ø30k6 Ø35k6	M10 M12	60 70	50 60	5 5	8 10	33 38
G4	170	200	208	135	165	15	146	145-0.5	30	16	233	Ø13.5	281	Ø40k6	M16	80	70	5	12	43
G5	215	250	259	170	205	17.5	181	180-0.5	35	20	289.5	Ø17.5	335	Ø50k6	M16	100	80	10	14	53.5

	M	N	P	LA	T	S
G0	Ø100	Ø80 j6	Ø120	8	3	Ø6.6
G1	Ø100	Ø80 j6	Ø120	8	3	Ø6.6
	Ø115	Ø95 j6	Ø140	9	3	Ø9
G2	Ø115	Ø95 j6	Ø140	9	3	Ø9
	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
G3	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
G4	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
G5	Ø215	Ø180 j6	Ø250	11	4	Ø13.5

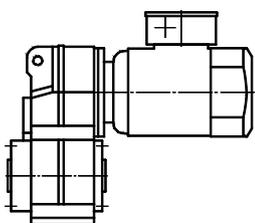
Shaft mounted helical gear units F



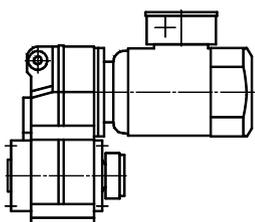
Type of construction



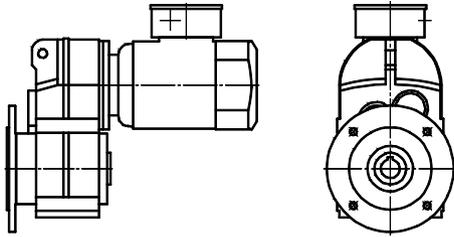
Shaft mounted version
Hollow shaft with keyway
Example: F42**A** DM100L4



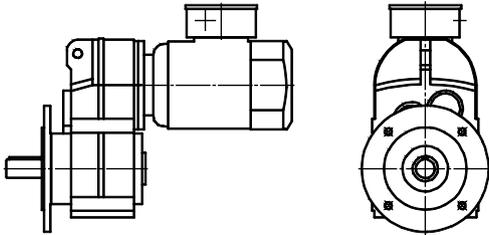
Shaft mounted version
Hollow shaft with keyway
Example: F53**B** DA132M4



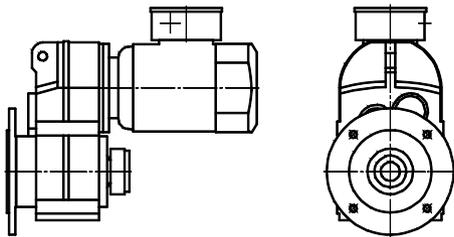
Shaft mounted version
Hollow shaft with shrink disc
Rubber elements
Example: F32**BSG** DM90S4



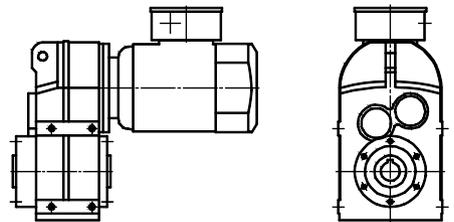
Flange mounted version
Hollow shaft with keyway
Example: F33**C** DM71G4



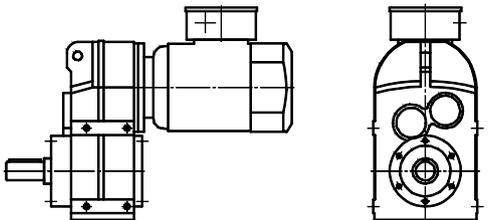
Flange mounted version
Output shaft with key
Example: F42**CV** DM100LX4



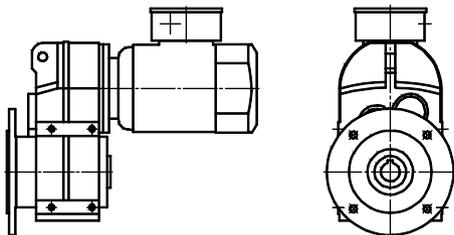
Flange mounted version
Hollow shaft with shrink disc
Example: F52**CS** DA132S4



Shaft mounted version + side areas
Hollow shaft with keyway
Example: F43**D** DM90L4



Shaft mounted version + side areas
Output shaft with key
Example: F32**DV** DM80G4



Flange mounted version + side areas
Hollow shaft with keyway
Example: F42**E** DM112M4

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F33

190.26	470	0.36	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
163.34	470	0.42	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
142.09	470	0.49	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
124.88	470	0.55	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
110.67	470	0.62	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
98.73	470	0.70	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
88.56	470	0.78	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
80.49	470	0.86	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
70.96	470	0.97	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
62.85	470	1.10	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
56.24	470	1.23	-	-	-	-	o	-	-	-	-	-	-	-	-	o	o	-	-
49.17	470	1.40	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
43.87	470	1.57	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
39.35	470	1.75	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
35.76	470	1.93	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
31.53	470	2.19	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
27.93	470	2.47	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
24.99	470	2.76	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
21.75	465	3.13	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-

F32

27.55	470	2.51	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
24.60	470	2.81	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
22.12	470	3.12	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
20.01	465	3.41	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
18.24	450	3.62	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
16.27	435	3.92	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
14.60	425	4.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
13.24	415	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
11.74	400	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
10.33	385	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
9.05	375	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
8.50	245	4.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
7.95	360	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
7.58	235	4.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
6.80	225	4.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
6.17	215	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
5.47	205	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
4.81	192	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
4.21	181	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
3.70	170	4.00	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-

F43G13

16236	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
13764	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
11813	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
10233	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
8927.9	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
7831.6	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
6897.8	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
6065.5	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
5205.5	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
4509.3	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
3934.2	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F43G12

3501.9	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2991.9	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2589.2	885	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2263.2	885	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1993.9	885	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1767.6	885	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1574.9	885	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1413.8	885	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1234.0	885	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1080.8	885	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
993.44	885	0.13	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
875.23	885	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
775.93	885	0.17	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
691.34	885	0.19	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
620.62	885	0.21	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
541.69	885	0.24	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
474.45	885	0.27	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
426.68	885	0.30	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
386.00	885	0.34	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
351.84	885	0.37	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
313.88	885	0.41	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
281.55	885	0.46	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
255.44	885	0.51	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
226.36	885	0.57	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
199.24	885	0.65	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-

F43

235.25	885	0.55	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
203.29	885	0.64	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
178.07	885	0.73	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
157.64	885	0.82	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
140.77	885	0.92	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
126.60	885	1.02	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
114.53	885	1.13	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
104.39	885	1.24	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
93.13	885	1.39	o	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
83.54	885	1.55	o	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
75.79	885	1.71	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	-	-
67.16	885	1.93	-	-	-	-	o	o	o	-	-	-	-	-	-	o	o	-	-
59.12	885	2.19	-	-	-	-	o	o	o	o	-	-	-	-	-	o	o	-	-
51.77	885	2.50	-	-	-	-	o	o	o	o	o	-	-	-	-	o	o	-	-
46.92	885	2.76	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
42.08	885	3.08	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
38.18	885	3.39	-	-	-	-	o	o	o	o	o	-	-	-	-	o	o	-	-
33.83	885	3.83	-	-	-	-	o	o	o	o	o	-	-	-	-	o	o	-	-
29.78	885	4.35																	

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F42

30.05	885	4.31	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
27.14	885	4.77	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
24.65	885	5.3	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
22.54	885	5.7	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
20.22	885	6.4	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
18.25	885	7.1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
16.80	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
15.02	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
13.33	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
11.82	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
10.51	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
9.01	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
7.94	885	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
7.36	440	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
6.77	570	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
6.05	555	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
5.38	565	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
4.76	535	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
4.24	505	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
3.63	470	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
3.20	440	7.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

F53G23

16911	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
14448	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
12503	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
10929	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
9628.5	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
8536.1	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
7659.6	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
6695.2	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
5898.5	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
5229.3	1580	<0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
4578.3	1580	0.05	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
4033.5	1580	0.06	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
3575.9	1580	0.06	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

F53G22

3221.2	1580	0.07	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
2765.4	1580	0.08	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
2405.6	1580	0.10	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
2114.3	1580	0.11	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
1873.6	1580	0.12	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
1671.5	1580	0.14	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
1499.3	1580	0.15	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
1362.7	1580	0.17	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
1201.4	1580	0.19	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
1064.0	1580	0.22	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
960.29	1580	0.24	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
883.90	1580	0.26	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
776.06	1580	0.30	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
696.12	1580	0.33	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
632.66	1580	0.37	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
557.80	1580	0.42	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
494.02	1580	0.47	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
445.85	1580	0.52	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
410.38	1580	0.57	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
366.79	1580	0.63	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
325.70	1580	0.71	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
288.62	1580	0.80	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
252.64	1580	0.92	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
228.00	1580	1.02	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
209.86	1580	1.11	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
196.76	1580	1.18	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F53

205.64	1580	1.13	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
182.73	1580	1.27	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
163.81	1580	1.42	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
147.91	1580	1.57	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
134.37	1580	1.73	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
122.86	1580	1.89	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
110.24	1580	2.11	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
99.49	1580	2.33	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
91.57	1580	2.54	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
81.85	1580	2.84	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
72.68	1580	3.20	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
64.40	1580	3.61	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
56.37	1580	4.12	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
50.88	1580	4.56	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
46.83	1580	4.96	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
41.85	1580	5.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
37.17	1580	6.2	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
32.93	1580	7.1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
29.31	1580	7.9	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
25.11	1580	9.2	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
22.15	1480	9.8	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

F52

34.34	1460	6.2	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
31.33	1450	6.8	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
28.82	1580	8.1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
26.01	1580	8.9	o	o	o	o	o												

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F63G22

3976.5	2800	0.10	o	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3413.8	2800	0.12	o	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2969.6	2800	0.14	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2610.0	2800	0.16	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2313.0	2800	0.18	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2063.5	2800	0.20	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1850.9	2800	0.22	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1682.2	2800	0.24	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1483.1	2800	0.28	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1313.5	2800	0.31	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1214.4	2800	0.34	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1094.0	2800	0.38	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
958.03	2800	0.43	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
859.35	2800	0.48	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
781.01	2800	0.53	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
688.59	2800	0.60	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
609.86	2800	0.67	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
563.82	2800	0.73	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
507.91	2800	0.81	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
455.13	2800	0.90	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
407.58	2800	1.01	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
366.82	2800	1.12	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
320.02	2800	1.28	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
286.71	2800	1.43	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
254.33	2800	1.62	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-

F63

242.53	2800	1.69	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-
218.27	2800	1.88	-	-	-	-	o	-	-	-	-	-	-	-	o	o	-	-
197.90	2800	2.08	-	-	-	-	o	o	-	-	-	-	-	-	o	o	-	-
180.55	2800	2.28	-	-	-	-	o	o	o	-	-	-	-	-	o	o	-	-
166.08	2800	2.47	-	-	-	-	o	o	o	-	-	-	-	-	o	o	-	-
149.88	2800	2.74	-	-	-	-	o	o	o	-	-	-	-	-	o	o	o	-
136.08	2800	3.02	-	-	-	-	o	o	o	-	-	-	-	-	o	o	o	-
125.81	2800	3.27	-	-	-	-	o	o	o	-	-	-	-	-	o	o	o	-
113.33	2800	3.63	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
101.56	2800	4.05	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
90.95	2800	4.52	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
81.85	2800	5.0	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
71.41	2800	5.8	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
63.98	2800	6.4	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
56.75	2800	7.2	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o
49.31	2800	8.3	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o
44.16	2800	9.3	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o
39.74	2800	10.3	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o
34.67	2800	11.9	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o
31.06	2780	13.1	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o
27.56	2590	13.8	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o
24.21	2390	14.5	-	-	-	-	o	o	o	o	o	-	-	-	o	o	o	o

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F62

34.05	2550	11.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
31.05	2520	11.9	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
28.80	2800	14.3	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
26.09	2800	15.7	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
23.73	2800	17.3	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
21.42	2800	19.2	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
19.43	2760	20.8	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
16.83	2650	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
15.23	2580	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
13.82	2510	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
12.33	2430	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
10.45	2320	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
8.92	2220	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
7.70	1440	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
6.97	1400	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
6.33	1340	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
5.64	1280	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
4.78	1190	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o
4.08	1100	22.0	-	-	-	-	-	-	o	o	o	o	o	-	-	o	o	o

F73G33

21379	4880	<0.05	o	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
18354	4880	<0.05	o	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
15966	4880	<0.05	o	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
14033	4880	0.05	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
12436	4880	0.06	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
11094	4880	0.06	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
9951.3	4880	0.07	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
9044.1	4880	0.08	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
7973.9	4880	0.09	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
7062.2	4880	0.10	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
6407.0	4880	0.11	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
5550.0	4880	0.13	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
4929.5	4880	0.15	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
4421.8	4880	0.16	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
4018.7	4880	0.18	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-
3543.1	4880	0.20	o	-	-	-	-	-	-	-	-	-	-	o	o	o	o	-

F73G32

3095.5	4880	0.23	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2764.2	4880	0.26	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2485.9	4880	0.29	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2248.8	4880	0.32	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2049.8	4880	0.35	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1828.7	4880	0.39	o	o	-	-	-	-	-	-	-	-	-	o	o	o	o	-
1640.3	4880	0.44	o	o	o	-	-	-	-	-	-	-	-	o	o	o	o	-
1488.1	4880	0.48	o	o	o	-	-	-	-	-	-	-	-	o	o	o	o	-
1289.1	4880	0.55	o	o	o	-	-	-	-	-	-	-	-	o	o	o	o	-
1166.4	4880	0.61	o	o	o	-	-	-	-	-	-	-	-	o	o	o	o	-
1058.9	4880	0.68	o	o	o	-	-	-	-	-	-	-	-	o	o	o	o	-
944.12	4880	0.76	o	o	o	o	-	-	-	-	-	-	-	o	o	o	o	-
879.92	4880	0.81	o	o	o	o	-	-	-	-	-	-	-	o	o	o	o	-
789.28	4880	0.91	o	o	o													

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F73

274.23	4880	2.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
249.41	4880	2.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
228.27	4880	3.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
211.55	4880	3.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
191.74	4880	3.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
174.87	4880	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
162.19	4880	4.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
146.94	4880	4.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
133.66	4880	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120.60	4880	5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
109.41	4880	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
94.78	4880	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85.76	4880	8.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
77.85	4880	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
69.41	4880	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58.87	4880	12.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51.81	4880	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44.88	4880	15.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40.61	4810	17.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36.86	4630	18.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32.87	4410	19.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27.88	4100	21.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.79	3810	23.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

F72

28.53	4430	22.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25.85	4300	24.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.54	4190	26.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20.62	4030	28.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18.76	3920	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.90	3800	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.17	3690	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.01	3530	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.25	3390	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.78	3260	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.11	2240	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.29	2160	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.46	2070	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.70	1980	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.75	1860	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.97	1740	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.32	1630	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

F83G33

22582	8900	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19387	8900	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16864	8900	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14822	8900	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13135	8900	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11718	8900	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10511	8900	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9552.8	8900	0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8422.4	8900	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7459.4	8900	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6586.0	8900	0.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5836.4	8900	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5206.8	8900	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4670.4	8900	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4244.7	8900	0.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3742.4	8900	0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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F83G32

3269.6	8900	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2919.6	8900	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2625.7	8900	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2375.3	8900	0.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2165.1	8900	0.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1931.5	8900	0.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1732.6	8900	0.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1578.2	8900	0.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1382.4	8900	0.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1257.5	8900	1.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1132.6	8900	1.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1016.9	8900	1.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
929.40	8900	1.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
833.66	8900	1.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
756.35	8900	1.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
670.24	8900	1.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
589.95	8900	2.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
516.64	8900	2.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
470.60	8900	2.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
412.22	8900	3.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
374.97	8900	3.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
337.74	8900	3.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
303.24	8900	4.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
260.13	8900	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
228.49	8900	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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200.61	8900	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
183.42	8900	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
169.54	8900	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
154.08	8900	8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140.63	8900	9.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
127.39	8900	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116.03	8900	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
101.64	8900	12.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
92.45	8900	14.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83.27	8900	15.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
74.77	8900	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
64.14	8900	20.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55.44	8900	23.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48.19	8850	26.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41.43	8540	30.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37.20	8260	32.6	-	-	-</														

Selection table - Geared motors

Type					Type					Type					Type																								
n2 [1/min]					T2 [Nm]					cG					i					-kg																			
0.12 kW																																							
F53G22A DM63K4					65					F22A DM63K4					17					F33A DM63G4					22														
F53G22B DM63K4					65					F22B DM63K4					17					F33B DM63G4					22														
F53G22C DM63K4					69					F22C DM63K4					18					F33C DM63G4					24														
1.4	765	2.1	960.29		43	27	9.1	32.42		7.3	235	2.00	190.26		1.5	1560	1.00	960.29																					
1.6	705	2.2	883.90		50	23	11	27.83		8.4	205	2.3	163.34		1.6	1440	1.10	883.90																					
1.8	620	2.6	776.06		57	20	12	24.21		9.7	177	2.7	142.09		1.8	1260	1.25	776.06																					
2.0	555	2.9	696.12		65	18	14	21.28							2.0	1130	1.40	696.12																					
F43G12A DM63K4					39					73					16					16					18.86														
F43G12B DM63K4					39					82					14					18					16.82														
F43G12C DM63K4					41					91					13					19					15.09														
1.4	790	1.10	993.44		101	11	21	13.71		5.9	280	0.90	232.93		2.2	1030	1.55	632.66																					
1.6	700	1.25	875.23		114	10	22	12.09		6.7	245	1.00	205.21		2.5	905	1.75	557.80																					
1.8	620	1.45	775.93		129	8.9	24	10.71		7.6	220	1.15	181.93		2.9	805	1.95	494.02																					
2.0	550	1.60	691.34		181	6.3	26	7.62		F23A DM63G4					18					3.2	725	2.2	445.85																
2.2	495	1.80	620.62		203	5.6	28	6.80		F23B DM63G4					18					3.4	665	2.4	410.38																
2.5	430	2.0	541.69		226	5.1	30	6.10		F23C DM63G4					19					3.8	595	2.7	366.79																
2.9	380	2.3	474.45		249	4.6	31	5.54		8.1	210	1.15	170.20		4.3	530	3.0	325.70																					
3.2	340	2.6	426.68		282	4.1	33	4.89		9.5	181	1.35	145.41		F43G12A DM71K4					41																			
3.6	310	2.9	386.00		319	3.6	34	4.33		11	157	1.55	125.84		F43G12B DM71K4					41																			
3.9	280	3.1	351.84																	F43G12C DM71K4					43														
F33G12A DM63K4					26					0.18 kW					8.1					210					1.15					170.20									
F33G12B DM63K4					26					F63G22A DM63G4					97					9.5					181					1.35					145.41				
F33G12C DM63K4					28					F63G22B DM63G4					97					11					157					1.55					125.84				
2.0	550	0.85	688.08							1.4	1150	2.4	958.03		13	137	1.80	109.99		13	137	1.80	109.99		2.0	1120	0.80	691.34											
2.3	485	0.95	610.01							1.6	1030	2.7	859.35		14	121	2.0	96.90		2.3	1010	0.90	620.62		2.6	880	1.00	541.69											
2.5	435	1.10	543.51							F53G22A DM63G4					66					3.0	770	1.15	474.45																
2.8	390	1.20	487.91							F53G22B DM63G4					66					3.3	695	1.25	426.68																
3.2	340	1.40	425.86							F53G22C DM63G4					69					3.7	625	1.40	386.00																
3.7	295	1.60	373.00							1.4	1150	1.40	960.29		4.0	570	1.55	351.84		4.0	570	1.55	351.84																
4.1	265	1.80	332.76							1.6	1060	1.50	883.90		4.5	510	1.75	313.88		4.5	510	1.75	313.88																
4.6	240	2.00	298.48							1.8	930	1.70	776.06		5.0	460	1.95	281.55		5.0	460	1.95	281.55																
5.1	215	2.2	271.27							2.0	830	1.90	696.12		5.5	415	2.1	255.44		5.5	415	2.1	255.44																
5.8	191	2.5	239.17							2.2	755	2.1	632.66		6.2	370	2.4	226.36		6.2	370	2.4	226.36																
6.5	169	2.8	211.83							2.5	665	2.4	557.80		7.1	325	2.7	199.24		7.1	325	2.7	199.24																
F33A DM63K4					21					F43G12A DM63G4					40					F43A DM71K4					36														
F33B DM63K4					21					F43G12B DM63G4					40					F43B DM71K4					36														
F33C DM63K4					23					F43G12C DM63G4					42					F43C DM71K4					38														
7.3	158	3.0	190.26							1.6	1050	0.85	875.23		6.0	400	2.2	235.25																					
F23G02A DM63K4					22					1.8					930					0.95					775.93														
F23G02B DM63K4					22					2.0					825					1.05					691.34														
F23G02C DM63K4					23					2.2					740					1.20					620.62														
3.6	305	0.80	380.22							2.5	650	1.35	541.69		6.7	390	1.20	239.17																					
4.1	265	0.90	334.98							2.9	565	1.55	474.45		7.9	300	2.9	178.07																					
4.6	235	1.05	296.97							3.2	510	1.75	426.68		F33G12A DM71K4					28																			
5.2	210	1.15	266.48							3.6	460	1.90	386.00		F33G12B DM71K4					28																			
5.9	186	1.30	232.93							3.9	420	2.1	351.84		F33G12C DM71K4					30																			
6.7	164	1.50	205.21							4.4	375	2.4	313.88		3.8	605	0.80	373.00																					
7.6	145	1.70	181.93							4.9	335	2.6	281.55		4.2	540	0.85	332.76																					
F23A DM63K4					18					5.4					305					2.9					255.44														
F23B DM63K4					18					F33G12A DM63G4					27					F33G12A DM71K4					98														
F23C DM63K4					19					F33G12B DM63G4					27					F33G22B DM71K4					98														
8.1	141	1.75	170.20							2.8	585	0.80	487.91		F63G22C DM71K4					104																			
9.5	121	2.0	145.41							3.2	510	0.90	425.86		1.5	1560	1.80	958.03																					
11	104	2.3	125.84							3.7	445	1.05	373.00		1.6	1400	2.0	859.35																					
13	91	2.7	109.99							4.1	400	1.20	332.76		1.8	1270	2.2	781.01																					
14	80	3.0	96.90							4.6	355	1.30	298.48		2.0	1120	2.5	688.59																					
16	71	3.4	85.91							5.1	325	1.45	271.27		2.3	990	2.8	609.86																					
18	64	3.8	77.09							5.8	285	1.65	239.17		2.5	915	3.1	563.82																					
20	56	4.4	67.38							6.5	255	1.85	211.83																										
23	49	5.0	59.37							F33G12C DM63G4					29					F23G02A DM71K4					24														
26	44	5.6	52.63							F33G12A DM63G4					27					F23G02B DM71K4					24														
30	38	6.4	46.08							F33G12B DM63G4					27					F23G02C DM71K4					25														
34	34	7.3	40.60							F33G12C DM63G4					29					7.8					295					0.85					181.93				
38	30	8.2	35.99																																				
43	27	9.2	32.07																																				
48	24	10	28.79																																				
55	21	12	25.12																																				
63	18	13	22.01																																				

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.25 kW					
F23A DM71K4					20
F23B DM71K4					20
F23C DM71K4					21
8.3	290	0.85	170.20		
9.7	245	1.00	145.41		
11	215	1.15	125.84		
13	186	1.30	109.99		
15	164	1.50	96.90		
16	145	1.70	85.91		
18	131	1.90	77.09		
21	114	2.1	67.38		
24	101	2.4	59.37		
27	89	2.7	52.63		
31	78	3.1	46.08		
35	69	3.6	40.60		
39	61	4.0	35.99		
44	54	4.5	32.07		
49	49	5.0	28.79		
56	43	5.8	25.12		
64	37	6.2	22.01		
F22A DM71K4					19
F22B DM71K4					19
F22C DM71K4					20
43	55	4.5	32.42		
51	47	5.2	27.83		
58	41	6.0	24.21		
66	36	6.8	21.28		
75	32	7.7	18.86		
84	28	8.6	16.82		
93	26	9.4	15.09		
103	23	10	13.71		
117	20	11	12.09		
132	18	12	10.71		
185	13	13	7.62		
207	12	14	6.80		
231	10	15	6.10		
254	9.4	15	5.54		
289	8.3	16	4.89		
326	7.3	17	4.33		
0.37 kW					
F73G32A DM71G4					162
F73G32B DM71G4					162
F73G32C DM71G4					170
1.5	2270	2.1	944.12		
1.6	2120	2.3	879.92		
1.8	1900	2.6	789.28		
2.0	1720	2.8	716.05		
F63G22A DM71G4					99
F63G22B DM71G4					99
F63G22C DM71G4					105
1.5	2300	1.20	958.03		
1.6	2070	1.35	859.35		
1.8	1880	1.50	781.01		
2.0	1660	1.70	688.59		
2.3	1470	1.90	609.86		
2.5	1360	2.1	563.82		
2.8	1220	2.3	507.91		
3.1	1090	2.6	455.13		
3.5	980	2.9	407.58		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
F53G22A DM71G4					68
F53G22B DM71G4					68
F53G22C DM71G4					72
1.8	1870	0.85	776.06		
2.0	1670	0.95	696.12		
2.2	1520	1.05	632.66		
2.5	1340	1.20	557.80		
2.9	1190	1.35	494.02		
3.2	1070	1.50	445.85		
3.4	985	1.60	410.38		
3.8	880	1.80	366.79		
4.3	785	2.0	325.70		
4.9	695	2.3	288.62		
5.6	610	2.6	252.64		
6.2	550	2.9	228.00		
F53A DM71G4					62
F53B DM71G4					62
F53C DM71G4					66
6.9	515	3.1	205.64		
F43G12A DM71G4					42
F43G12B DM71G4					42
F43G12C DM71G4					44
3.3	1030	0.85	426.68		
3.7	930	0.95	386.00		
4.0	845	1.05	351.84		
4.5	755	1.15	313.88		
5.0	675	1.30	281.55		
5.5	615	1.45	255.44		
6.2	545	1.60	226.36		
7.1	480	1.85	199.24		
F43A DM71G4					37
F43B DM71G4					37
F43C DM71G4					39
6.0	590	1.50	235.25		
6.9	510	1.75	203.29		
7.9	445	2.00	178.07		
8.9	395	2.2	157.64		
10	355	2.5	140.77		
11	315	2.8	126.60		
12	285	3.1	114.53		
F33G12A DM71G4					29
F33G12B DM71G4					29
F33G12C DM71G4					31
5.9	575	0.80	239.17		
6.7	510	0.90	211.83		
F33A DM71G4					24
F33B DM71G4					24
F33C DM71G4					26
7.4	475	1.00	190.26		
8.6	410	1.15	163.34		
9.9	355	1.30	142.09		
11	315	1.50	124.88		
13	275	1.70	110.67		
14	245	1.90	98.73		
16	220	2.1	88.56		
18	200	2.3	80.49		
20	178	2.6	70.96		
22	158	3.0	62.85		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
F23A DM71G4					21
F23B DM71G4					21
F23C DM71G4					22
11	315	0.80	125.84		
13	275	0.90	109.99		
15	245	1.00	96.90		
16	215	1.15	85.91		
18	193	1.25	77.09		
21	169	1.45	67.38		
24	149	1.65	59.37		
27	132	1.85	52.63		
31	115	2.1	46.08		
35	102	2.4	40.60		
39	90	2.7	35.99		
44	80	3.0	32.07		
49	72	3.4	28.79		
56	63	3.9	25.12		
64	55	4.2	22.01		
F22A DM71G4					20
F22B DM71G4					20
F22C DM71G4					21
43	81	3.0	32.42		
51	70	3.5	27.83		
58	61	4.0	24.21		
66	53	4.6	21.28		
75	47	5.2	18.86		
84	42	5.8	16.82		
93	38	6.3	15.09		
103	34	6.8	13.71		
117	30	7.4	12.09		
132	27	8.0	10.71		
185	19	8.6	7.62		
207	17	9.4	6.80		
231	15	9.8	6.10		
254	14	10	5.54		
289	12	11	4.89		
326	11	11	4.33		
0.55 kW					
F73G32A DM80K4					164
F73G32B DM80K4					164
F73G32C DM80K4					172
1.5	3390	1.45	944.12		
1.6	3160	1.55	879.92		
1.8	2830	1.70	789.28		
2.0	2570	1.90	716.05		
2.3	2230	2.2	620.27		
2.5	2010	2.4	561.22		
2.8	1830	2.7	509.49		
3.1	1630	3.0	454.28		
F63G22A DM80K4					101
F63G22B DM80K4					101
F63G22C DM80K4					107
1.5	3440	0.80	958.03		
1.6	3080	0.90	859.35		
1.8	2800	1.00	781.01		
2.0	2470	1.15	688.59		
2.3	2190	1.30	609.86		
2.5	2020	1.40	563.82		
2.8	1820	1.55	507.91		
3.1	1630	1.70	455.13		
3.4	1460	1.90	407.58		
3.8	1320	2.1	366.82		
4.4	1150	2.4	320.02		
4.9	1030	2.7	286.71		
5.5	915	3.1	254.33		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.55 kW					
F53G22A DM80K4					70
F53G22B DM80K4					70
F53G22C DM80K4					74
2.5	2000	0.80	557.80		
2.8	1770	0.90	494.02		
3.2	1600	1.00	445.85		
3.4	1470	1.10	410.38		
3.8	1320	1.20	366.79		
4.3	1170	1.35	325.70		
4.9	1040	1.55	288.62		
5.6	905	1.75	252.64		
6.2	820	1.95	228.00		
6.7	755	2.1	209.86		
F53A DM80K4					64
F53B DM80K4					64
F53C DM80K4					68
6.8	770	2.1	205.64		
7.7	685	2.3	182.73		
8.6	610	2.6	163.81		
9.5	555	2.9	147.91		
F43G12A DM80K4					44
F43G12B DM80K4					44
F43G12C DM80K4					46
4.5	1130	0.80	313.88		
5.0	1010	0.85	281.55		
5.5	915	0.95	255.44		
6.2	810	1.10	226.36		
7.1	715	1.25	199.24		
F43A DM80K4					40
F43B DM80K4					40
F43C DM80K4					42
7.9	665	1.35	178.07		
8.9	590	1.50	157.64		
10.0	525	1.70	140.77		
11	475	1.85	126.60		
12	430	2.1	114.53		

Type				Type				Type				Type			
n2 [1/min]	T2 [Nm]	cG	i	n2 [1/min]	T2 [Nm]	cG	i	n2 [1/min]	T2 [Nm]	cG	i	n2 [1/min]	T2 [Nm]	cG	i
0.55 kW				0.75 kW				1.1 kW				1.1 kW			
F22A DM80K4			22	F53A DM80GC4 IE2			66	F83G32A DM90L4 IE2			264	F53A DM90L4 IE2			71
F22B DM80K4			22	F53B DM80GC4 IE2			66	F83G32B DM90L4 IE2			264	F53B DM90L4 IE2			71
F22C DM80K4			23	F53C DM80GC4 IE2			69	F83G32C DM90L4 IE2			281	F53C DM90L4 IE2			75
58	91	2.7	24.21	6.9	1040	1.50	205.64	1.5	6620	1.35	929.40	7.7	1360	1.15	182.73
66	80	3.1	21.28	7.7	930	1.70	182.73	1.7	5940	1.50	833.66	8.6	1220	1.30	163.81
75	70	3.5	18.86	8.6	830	1.90	163.81	1.9	5390	1.65	756.35	9.6	1100	1.45	147.91
84	63	3.9	16.82	9.5	750	2.1	147.91	2.1	4780	1.85	670.24	11	1000	1.60	134.37
93	56	4.3	15.09	10	685	2.3	134.37	2.4	4200	2.1	589.95	12	910	1.75	122.86
102	51	4.6	13.71	11	625	2.5	122.86	2.7	3680	2.4	516.64	13	820	1.95	110.24
116	45	5.0	12.09	13	560	2.8	110.24	3.0	3350	2.7	470.60	14	740	2.1	99.49
131	40	5.4	10.71	F43G12A DM80GC4 IE2				3.4	2940	3.0	412.22	15	680	2.3	91.57
184	28	5.8	7.62					F73G32A DM90L4 IE2				17	610	2.6	81.85
207	25	6.3	6.80	F43G12B DM80GC4 IE2								19	540	2.9	72.68
230	23	6.6	6.10	F43G12C DM80GC4 IE2				F73G32B DM90L4 IE2				F43A DM90L4 IE2			
254	21	6.9	5.54									F43B DM90L4 IE2			
288	18	7.2	4.89	6.2				1.6				F43C DM90L4 IE2			
325	16	7.5	4.33	7.1				1.8				10			
0.75 kW				F43A DM80GC4 IE2				2.0				11			
F83G32A DM80GC4 IE2			259	F43B DM80GC4 IE2				2.3				12			
F83G32B DM80GC4 IE2			259	F43C DM80GC4 IE2				2.5				14			
F83G32C DM80GC4 IE2			276					2.8				15			
1.5	4530	1.95	929.40	7.9				3.1				17			
1.7	4070	2.2	833.66	8.9				3.7				19			
F73G32A DM80GC4 IE2				10				4.1				21			
F73G32B DM80GC4 IE2				11				4.5				24			
F73G32C DM80GC4 IE2				12				5.0				27			
1.5				14				5.9				30			
1.6				15				F73A DM90L4 IE2				34			
1.8				17				F73B DM90L4 IE2				F33A DM90L4 IE2			
2.0				18				F73C DM90L4 IE2				F33B DM90L4 IE2			
2.3				19				5.2				F33C DM90L4 IE2			
2.5				20				5.7				18			
2.8				22				6.2				20			
3.1				29				F63G22A DM90L4 IE2				23			
3.7				32				F63G22B DM90L4 IE2				25			
4.600				36				F63G22C DM90L4 IE2				29			
4.290				39				3.1				32			
3.850				45				3.5				36			
3.490				F23A DM80GC4 IE2				3.9				40			
3.3020				F23B DM80GC4 IE2				4.4				45			
2.740				F23C DM80GC4 IE2				4.9				51			
2.480				24				5.6				57			
2.480				27				F63A DM90L4 IE2				65			
2.220				29				F63B DM90L4 IE2				F32A DM90L4 IE2			
1.880				32				F63C DM90L4 IE2				F32B DM90L4 IE2			
F63G22A DM80GC4 IE2				36				5.8				F32C DM90L4 IE2			
F63G22B DM80GC4 IE2				39				6.5				51			
F63G22C DM80GC4 IE2				44				7.2				58			
2.0				49				7.8				64			
2.3				56				8.5				F23A DM90L4 IE2			
2.5				64				9.4				F23B DM90L4 IE2			
2.8				F22A DM80GC4 IE2				10				F23C DM90L4 IE2			
3.1				F22B DM80GC4 IE2				11				35			
3.5				F22C DM80GC4 IE2				F53G22A DM90L4 IE2				39			
3.8				58				F53G22B DM90L4 IE2				44			
4.4				66				F53G22C DM90L4 IE2				49			
4.9				75				5.6				56			
5.5				84				6.2				64			
F63A DM80GC4 IE2				93				6.7				F22A DM90L4 IE2			
F63B DM80GC4 IE2				103				7.2				F22B DM90L4 IE2			
F63C DM80GC4 IE2				117				1800				F22C DM90L4 IE2			
5.8				132				1800				35			
6.5				185				1800				39			
7.1				207				1800				44			
7.8				231				1800				49			
F53G22A DM80GC4 IE2				254				1800				56			
F53G22B DM80GC4 IE2				289				1800				64			
F53G22C DM80GC4 IE2				326				1800				F23A DM90L4 IE2			
3.4				58				1800				F23B DM90L4 IE2			
3.8				66				1800				F23C DM90L4 IE2			
4.3				75				1800				35			
4.9				84				1800				39			
5.6				93				1800				44			
6.2				103				1800				49			
6.7				117				1800				56			
7.2				132				1800				64			
1230				185				1800				F22A DM90L4 IE2			
1110				207				1800				F22B DM90L4 IE2			
1010				231				1800				F22C DM90L4 IE2			
915				254				1800				35			
3.1				289				1800				39			
3.1				326				1800				44			
3.1				58				1800				49			
3.1				66				1800				56			
3.1				75				1800				64			
3.1				84				1800				F22A DM90L4 IE2			
3.1				93				1800				F22B DM90L4 IE2			
3.1				103				1800				F22C DM90L4 IE2			
3.1				117				1800				35			
3.1				132				1800				39			
3.1				185				1800				44			
3.1				207				1800				49			
3.1				231				1800				56			
3.1				254				1800				64			
3.1				289				1800				F22A DM90L4 IE2			
3.1				326				1800				F22B DM90L4 IE2			

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
F22A DM90L4 IE2					29
F22B DM90L4 IE2					29
F22C DM90L4 IE2					30
66	158	1.55	21.28		
75	140	1.75	18.86		
84	125	1.95	16.82		
94	112	2.1	15.09		
103	102	2.3	13.71		
117	90	2.5	12.09		
132	80	2.7	10.71		
148	71	2.9	9.58		
170	62	3.1	8.34		
186	57	2.9	7.62		
208	50	3.2	6.80		
232	45	3.3	6.10		
255	41	3.5	5.54		
290	36	3.6	4.89		
327	32	3.8	4.33		
365	29	4.0	3.87		
420	25	4.2	3.37		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
F83G32A DM100L4 IE2					270
F83G32B DM100L4 IE2					270
F83G32C DM100L4 IE2					287
1.5	9060	1.00	929.40		
1.7	8130	1.10	833.66		
1.9	7380	1.20	756.35		
2.1	6540	1.35	670.24		
2.4	5750	1.55	589.95		
2.7	5040	1.75	516.64		
3.0	4590	1.95	470.60		
3.4	4020	2.2	412.22		
3.8	3660	2.4	374.97		
4.2	3290	2.7	337.74		
F73G32A DM100L4 IE2					177
F73G32B DM100L4 IE2					177
F73G32C DM100L4 IE2					185
2.3	6050	0.80	620.27		
2.5	5470	0.90	561.22		
2.8	4970	1.00	509.49		
3.1	4430	1.10	454.28		
3.7	3760	1.30	385.26		
4.1	3390	1.45	347.80		
4.5	3080	1.60	315.75		
5.0	2750	1.80	281.53		
5.9	2330	2.1	238.76		
F73A DM100L4 IE2					168
F73B DM100L4 IE2					168
F73C DM100L4 IE2					176
5.1	2790	1.75	274.23		
5.7	2530	1.90	249.41		
6.2	2320	2.1	228.27		
6.7	2150	2.3	211.55		
7.4	1950	2.5	191.74		
8.1	1780	2.7	174.87		
8.7	1650	3.0	162.19		
F63G22A DM100L4 IE2					114
F63G22B DM100L4 IE2					114
F63G22C DM100L4 IE2					120
3.8	3580	0.80	366.82		
4.4	3120	0.90	320.02		
4.9	2800	1.00	286.71		
5.5	2480	1.15	254.33		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
F63A DM100L4 IE2					108
F63B DM100L4 IE2					108
F63C DM100L4 IE2					114
5.8	2460	1.15	242.53		
6.5	2220	1.25	218.27		
7.1	2010	1.40	197.90		
7.8	1830	1.55	180.55		
8.5	1690	1.65	166.08		
9.4	1520	1.85	149.88		
10	1380	2.0	136.08		
11	1280	2.2	125.81		
12	1150	2.4	113.33		
14	1030	2.7	101.56		
16	925	3.0	90.95		
F53G22A DM100L4 IE2					83
F53G22B DM100L4 IE2					83
F53G22C DM100L4 IE2					87
7.2	1920	0.85	196.76		
F53A DM100L4 IE2					76
F53B DM100L4 IE2					76
F53C DM100L4 IE2					80
7.7	1860	0.85	182.73		
8.6	1660	0.95	163.81		
9.5	1500	1.05	147.91		
10	1370	1.15	134.37		
11	1250	1.25	122.86		
13	1120	1.40	110.24		
14	1010	1.55	99.49		
15	930	1.70	91.57		
17	830	1.90	81.85		
19	740	2.1	72.68		
22	655	2.4	64.40		
25	575	2.8	56.37		
F43A DM100L4 IE2					52
F43B DM100L4 IE2					52
F43C DM100L4 IE2					54
14	1060	0.85	104.39		
15	945	0.95	93.13		
17	850	1.05	83.54		
19	770	1.15	75.79		
21	680	1.30	67.16		
24	600	1.45	59.12		
27	525	1.70	51.77		
30	475	1.85	46.92		
34	430	2.1	42.08		
37	390	2.3	38.18		
42	345	2.6	33.83		
47	305	2.9	29.78		
F42A DM100L4 IE2					50
F42B DM100L4 IE2					50
F42C DM100L4 IE2					52
47	305	2.9	30.05		
F33A DM100L4 IE2					39
F33B DM100L4 IE2					39
F33C DM100L4 IE2					41
25	570	0.80	56.24		
29	500	0.95	49.17		
32	445	1.05	43.87		
36	400	1.20	39.35		
39	365	1.30	35.76		
45	320	1.45	31.53		
50	285	1.65	27.93		
56	255	1.85	24.99		
65	220	2.1	21.75		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
F32A DM100L4 IE2					38
F32B DM100L4 IE2					38
F32C DM100L4 IE2					40
51	280	1.70	27.55		
57	250	1.90	24.60		
64	225	2.1	22.12		
70	205	2.3	20.01		
77	185	2.4	18.24		
87	165	2.6	16.27		
F22A DM100L4 IE2					35
F22B DM100L4 IE2					35
F22C DM100L4 IE2					36
66	215	1.15	21.28		
75	192	1.30	18.86		
84	171	1.45	16.82		
93	153	1.55	15.09		
103	139	1.70	13.71		
117	123	1.85	12.09		
132	109	2.00	10.71		
147	97	2.1	9.58		
169	85	2.3	8.34		
185	77	2.1	7.62		
207	69	2.3	6.80		
231	62	2.4	6.10		
254	56	2.5	5.54		
289	50	2.7	4.89		
326	44	2.8	4.33		
364	39	2.9	3.87		
418	34	3.0	3.37		
2.2 kW					
F83G32A DM100LX4 IE2					273
F83G32B DM100LX4 IE2					273
F83G32C DM100LX4 IE2					290
1.9	10800	0.80	756.35		
2.1	9590	0.95	670.24		
2.4	8440	1.05	589.95		
2.7	7390	1.20	516.64		
3.0	6730	1.30	470.60		
3.4	5900	1.50	412.22		
3.8	5360	1.65	374.97		
4.2	4830	1.85	337.74		
4.6	4340	2.1	303.24		
5.4	3720	2.4	260.13		
6.2	3270	2.7	228.49		
F73G32A DM100LX4 IE2					180
F73G32B DM100LX4 IE2					180
F73G32C DM100LX4 IE2					188
3.7	5510	0.90	385.26		
4.1	4980	1.00	347.80		
4.5	4520	1.10	315.75		
5.0	4030	1.20	281.53		
5.9	3420	1.45	238.76		
F73A DM100LX4 IE2					171
F73B DM100LX4 IE2					171
F73C DM100LX4 IE2					179
5.1	4090	1.20	274.23		
5.7	3720	1.30	249.41		
6.2	3400	1.45	228.27		
6.7	3150	1.55	211.55		
7.4	2860	1.70	191.74		
8.1	2610	1.85	174.87		
8.7	2420	2.0	162.19		
9.6	2190	2.2	146.94		
11	1990	2.4	133.66		
12	1800	2.7	120.60		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
2.2 kW					
F63A DM100LX4 IE2					111
F63B DM100LX4 IE2					111
F63C DM100LX4 IE2					117
6.5	3250	0.85	218.27		
7.1	2950	0.95	197.90		
7.8	2690	1.05	180.55		
8.5	2470	1.15	166.08		
9.4	2230	1.25	149.88		
10	2030	1.40	136.08		
11	1870	1.50	125.81		
12	1690	1.65	113.33		
14	1510	1.85	101.56		
16	1360	2.1	90.95		
17	1220	2.3	81.85		
F53A DM100LX4 IE2					79
F53B DM100LX4 IE2					79
F53C DM100LX4 IE2					83
10	2000	0.80	134.37		
11	1830	0.85	122.86		
13	1640	0.95	110.24		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
2.2 kW					
F32A DM100LX4 IE2					41
F32B DM100LX4 IE2					41
F32C DM100LX4 IE2					43
57	365	1.30		24.60	
64	330	1.45		22.12	
70	300	1.55		20.01	
77	270	1.65		18.24	
87	240	1.80		16.27	
97	220	1.95		14.60	
106	197	2.1		13.24	
120	175	2.3		11.74	
136	154	2.5		10.33	
156	135	2.8		9.05	
166	127	1.95		8.50	
177	118	3.0		7.95	
186	113	2.1		7.58	
207	101	2.2		6.80	
229	92	2.3		6.17	
258	81	2.5		5.47	
293	72	2.7		4.81	
335	63	2.9		4.21	
381	55	3.1		3.70	
F22A DM100LX4 IE2					38
F22B DM100LX4 IE2					38
F22C DM100LX4 IE2					39
75	280	0.85		18.86	
84	250	1.00		16.82	
93	225	1.05		15.09	
103	205	1.15		13.71	
117	180	1.25		12.09	
132	160	1.35		10.71	
147	143	1.45		9.58	
169	124	1.55		8.34	
185	114	1.45		7.62	
207	101	1.60		6.80	
231	91	1.65		6.10	
254	83	1.70		5.54	
289	73	1.80		4.89	
326	64	1.90		4.33	
364	58	2.00		3.87	
418	50	2.1		3.37	
3.0 kW					
F83G32A DM112M4 IE2					280
F83G32B DM112M4 IE2					280
F83G32C DM112M4 IE2					297
2.7	10100	0.90		516.64	
3.0	9180	0.95		470.60	
3.4	8040	1.10		412.22	
3.8	7310	1.20		374.97	
4.2	6590	1.35		337.74	
4.6	5920	1.50		303.24	
5.4	5070	1.75		260.13	
6.2	4460	2.00		228.49	
F83A DM112M4 IE2					276
F83B DM112M4 IE2					276
F83C DM112M4 IE2					292
7.0	4080	2.2		200.61	
7.7	3730	2.4		183.42	
8.3	3440	2.6		169.54	
9.2	3130	2.8		154.08	
F73G32A DM112M4 IE2					186
F73G32B DM112M4 IE2					186
F73G32C DM112M4 IE2					194
4.5	6160	0.80		315.75	
5.0	5490	0.90		281.53	
5.9	4660	1.05		238.76	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
F73A DM112M4 IE2					177
F73B DM112M4 IE2					177
F73C DM112M4 IE2					185
5.1	5570	0.90		274.23	
5.7	5070	0.95		249.41	
6.2	4640	1.05		228.27	
6.7	4300	1.15		211.55	
7.4	3900	1.25		191.74	
8.1	3550	1.35		174.87	
8.7	3300	1.50		162.19	
9.6	2990	1.65		146.94	
11	2720	1.80		133.66	
12	2450	2.00		120.60	
13	2220	2.2		109.41	
F63A DM112M4 IE2					118
F63B DM112M4 IE2					118
F63C DM112M4 IE2					124
8.5	3370	0.85		166.08	
9.4	3050	0.90		149.88	
10	2770	1.00		136.08	
11	2560	1.10		125.81	
12	2300	1.20		113.33	
14	2060	1.35		101.56	
16	1850	1.50		90.95	
17	1660	1.70		81.85	
29	1000	2.8		49.31	
F53A DM112M4 IE2					86
F53B DM112M4 IE2					86
F53C DM112M4 IE2					89
14	2020	0.80		99.49	
15	1860	0.85		91.57	
17	1660	0.95		81.85	
19	1480	1.05		72.68	
22	1310	1.20		64.40	
25	1150	1.40		56.37	
28	1030	1.55		50.88	
30	950	1.65		46.83	
34	850	1.85		41.85	
38	755	2.1		37.17	
43	670	2.4		32.93	
48	595	2.7		29.31	
F52A DM112M4 IE2					82
F52B DM112M4 IE2					82
F52C DM112M4 IE2					85
41	700	2.1		34.34	
45	635	2.3		31.33	
49	585	2.7		28.82	
54	530	3.0		26.01	
F43A DM112M4 IE2					62
F43B DM112M4 IE2					62
F43C DM112M4 IE2					64
27	1050	0.85		51.77	
30	955	0.95		46.92	
34	855	1.05		42.08	
37	775	1.15		38.18	
42	685	1.30		33.83	
47	605	1.45		29.78	
54	530	1.60		26.08	
62	465	1.70		22.91	
F42A DM112M4 IE2					60
F42B DM112M4 IE2					60
F42C DM112M4 IE2					62
47	610	1.45		30.05	
52	550	1.60		27.14	
57	500	1.75		24.65	
63	460	1.95		22.54	
70	410	2.1		20.22	
77	370	2.4		18.25	
84	340	2.6		16.80	
94	305	2.9		15.02	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
F33A DM112M4 IE2					49
F33B DM112M4 IE2					49
F33C DM112M4 IE2					51
50	565	0.85		27.93	
56	510	0.95		24.99	
65	440	1.05		21.75	
F32A DM112M4 IE2					47
F32B DM112M4 IE2					47
F32C DM112M4 IE2					49
57	500	0.95		24.60	
64	450	1.05		22.12	
70	405	1.15		20.01	
77	370	1.20		18.24	
87	330	1.30		16.27	
97	295	1.45		14.60	
106	270	1.55		13.24	
120	240	1.70		11.74	
136	210	1.85		10.33	
156	184	2.0		9.05	
166	173	1.40		8.50	
177	161	2.2		7.95	
186	154	1.55		7.58	
207	138	1.65		6.80	
229	125	1.70		6.17	
258	111	1.85		5.47	
293	98	1.95		4.81	
335	86	2.1		4.21	
381	75	2.3		3.70	
4.0 kW					
F83G32A DM112MX4 IE2					280
F83G32B DM112MX4 IE2					280
F83G32C DM112MX4 IE2					297
3.5	10600	0.85		412.22	
3.8	9650	0.90		374.97	
4.2	8690	1.00		337.74	
4.7	7800	1.15		303.24	
5.5	6690	1.35		260.13	
6.2	5880	1.50		228.49	
F83A DM112MX4 IE2					276
F83B DM112MX4 IE2					276
F83C DM112MX4 IE2					292
7.1	5380	1.65		200.61	
7.8	4920	1.80		183.42	
8.4	4540	1.95		169.54	
9.2	4130	2.2		154.08	
10	3770	2.4		140.63	
11	3410	2.6		127.39	
12	3110	2.9		116.03	
F73G32A DM112MX4 IE2					186
F73G32B DM112MX4 IE2					186
F73G32C DM112MX4 IE2					194
6.0	6140	0.80		238.76	
F73A DM112MX4 IE2					177
F73B DM112MX4 IE2					177
F73C DM112MX4 IE2					185
6.2	6120	0.80		228.27	
6.7	5670	0.85		211.55	
7.4	5140	0.95		191.74	
8.1	4690	1.05		174.87	
8.8	4350	1.10		162.19	
9.7	3940	1.25		146.94	
11	3580	1.35		133.66	
12	3230	1.50		120.60	
13	2930	1.65		109.41	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
F63A DM112MX4 IE2					118
F63B DM112MX4 IE2					118
F63C DM112MX4 IE2					124
11	3370	0.85		125.81	
13	3040	0.90		113.33	
14	2720	1.05		101.56	
16	2440	1.15		90.95	
17	2190	1.30		81.85	
29	1320	2.1		49.31	
32	1180	2.4		44.16	
36	1070	2.6		39.74	
F62A DM112MX4 IE2					110
F62B DM112MX4 IE2					110
F62C DM112MX4 IE2					116
42	915	2.8		34.05	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
F32A DM112MX4 IE2					47
F32B DM112MX4 IE2					47
F32C DM112MX4 IE2					49
64	595	0.80	22.12		
71	535	0.85	20.01		
78	490	0.90	18.24		
88	435	1.00	16.27		
98	390	1.10	14.60		
108	355	1.15	13.24		
121	315	1.25	11.74		
138	275	1.40	10.33		
158	245	1.55	9.05		
168	230	1.10	8.50		
179	215	1.70	7.95		
188	205	1.15	7.58		
210	182	1.25	6.80		
231	165	1.30	6.17		
261	147	1.40	5.47		
296	129	1.50	4.81		
338	113	1.60	4.21		
385	99	1.70	3.70		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
5.5 kW					
F83G32A DA132S4 IE2					297
F83G32B DA132S4 IE2					297
F83G32C DA132S4 IE2					314
4.8	10500	0.85	303.24		
5.6	9010	1.00	260.13		
6.4	7920	1.10	228.49		
F83A DA132S4 IE2					292
F83B DA132S4 IE2					292
F83C DA132S4 IE2					309
7.3	7240	1.25	200.61		
7.9	6620	1.35	183.42		
8.6	6120	1.45	169.54		
9.4	5560	1.60	154.08		
10	5080	1.75	140.63		
11	4600	1.95	127.39		
13	4190	2.1	116.03		
14	3670	2.4	101.64		
16	3340	2.7	92.45		
17	3010	3.0	83.27		
F73A DA132S4 IE2					195
F73B DA132S4 IE2					195
F73C DA132S4 IE2					203
9.0	5850	0.85	162.19		
9.9	5300	0.90	146.94		
11	4820	1.00	133.66		
12	4350	1.10	120.60		
13	3950	1.25	109.41		
15	3420	1.45	94.78		
17	3100	1.60	85.76		
19	2810	1.75	77.85		
21	2510	1.95	69.41		
25	2130	2.3	58.87		
28	1870	2.6	51.81		
32	1620	3.0	44.88		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
5.5 kW					
F63A DA132S4 IE2					135
F63B DA132S4 IE2					135
F63C DA132S4 IE2					141
16	3280	0.85	90.95		
18	2950	0.95	81.85		
20	2580	1.10	71.41		
23	2310	1.20	63.98		
26	2050	1.35	56.75		
30	1780	1.55	49.31		
33	1590	1.75	44.16		
37	1430	1.95	39.74		
42	1250	2.2	34.67		
47	1120	2.5	31.06		
53	995	2.6	27.56		
60	875	2.7	24.21		
F62A DA132S4 IE2					127
F62B DA132S4 IE2					127
F62C DA132S4 IE2					133
43	1230	2.1	34.05		
47	1120	2.2	31.05		
51	1040	2.7	28.80		
56	940	3.0	26.09		
F53A DA132S4 IE2					103
F53B DA132S4 IE2					103
F53C DA132S4 IE2					107
26	2040	0.80	56.37		
29	1840	0.85	50.88		
31	1690	0.95	46.83		
35	1510	1.05	41.85		
39	1340	1.20	37.17		
44	1190	1.35	32.93		
50	1060	1.50	29.31		
58	905	1.75	25.11		
66	800	1.85	22.15		
F52A DA132S4 IE2					99
F52B DA132S4 IE2					99
F52C DA132S4 IE2					103
56	940	1.70	26.01		
62	850	1.85	23.61		
67	790	2.0	21.83		
74	710	2.2	19.67		
83	635	2.5	17.62		
92	570	2.8	15.78		
F43A DA132S4 IE2					79
F43B DA132S4 IE2					79
F43C DA132S4 IE2					81
49	1080	0.80	29.78		
56	940	0.90	26.08		
64	825	0.95	22.91		
F42A DA132S4 IE2					77
F42B DA132S4 IE2					77
F42C DA132S4 IE2					79
72	730	1.20	20.22		
80	660	1.35	18.25		
87	605	1.45	16.80		
97	540	1.65	15.02		
109	480	1.85	13.33		
123	425	2.1	11.82		
138	380	2.3	10.51		
162	325	2.7	9.01		
183	285	3.1	7.94		
198	265	1.65	7.36		
215	245	2.3	6.77		
240	220	2.5	6.05		
271	194	2.9	5.38		
305	172	3.1	4.76		
343	153	3.3	4.24		
401	131	3.6	3.63		
454	116	3.8	3.20		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
7.5 kW					
F83A DA132MX4 IE2					299
F83B DA132MX4 IE2					299
F83C DA132MX4 IE2					315
7.3	9880	0.90	200.61		
7.9	9030	1.00	183.42		
8.6	8350	1.05	169.54		
9.4	7580	1.15	154.08		
10	6920	1.30	140.63		
11	6270	1.40	127.39		
13	5710	1.55	116.03		
14	5000	1.80	101.64		
16	4550	1.95	92.45		
17	4100	2.2	83.27		
19	3680	2.4	74.77		
23	3160	2.8	64.14		
F73A DA132MX4 IE2					201
F73B DA132MX4 IE2					201
F73C DA132MX4 IE2					210
12	5940	0.80	120.60		
13	5390	0.90	109.41		
15	4670	1.05	94.78		
17	4220	1.15	85.76		
19	3830	1.25	77.85		
21	3420	1.45	69.41		
25	2900	1.70	58.87		
28	2550	1.90	51.81		
32	2210	2.2	44.88		
36	2000	2.4	40.61		
39	1810	2.6	36.86		
44	1620	2.7	32.87		
F63A DA132MX4 IE2					142
F63B DA132MX4 IE2					142
F63C DA132MX4 IE2					148
20	3520	0.80	71.41		
23	3150	0.90	63.98		
26	2790	1.00	56.75		
30	2430	1.15	49.31		
33	2170	1.30	44.16		
37	1960	1.45	39.74		
42	1710	1.65	34.67		
47	1530	1.80	31.06		
53	1360	1.90	27.56		
60	1190	2.0	24.21		
F62A DA132MX4 IE2					134
F62B DA132MX4 IE2					134
F62C DA132MX4 IE2					140
43	1680	1.50	34.05		
47	1530	1.65	31.05		
51	1420	2.00	28.80		
56	1280	2.2	26.09		
61	1170	2.4	23.73		
68	1050	2.7	21.42		
75	955	2.9	19.43		
F53A DA132MX4 IE2					110
F53B DA132MX4 IE2					110
F53C DA132MX4 IE2					113
39	1830	0.85	37.17		
44	1620	1.00	32.93		
50	1440	1.10	29.31		
58	1240	1.30	25.11		
66	1090	1.35	22.15		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
7.5 kW					
F52A DA132MX4 IE2					106
F52B DA132MX4 IE2					106
F52C DA132MX4 IE2					109
56	1280	1.25	26.01		
62	1160	1.35	23.61		
67	1070	1.45	21.83		
74	970	1.65	19.67		
83	865	1.85	17.62		
92	775	2.0	15.78		
102	700	2.3	14.20		
117	610	2.6	12.39		
131	545	2.8	11.10		
148	485	3.1	9.85		
168	425	3.4	8.65		
188	380	2.4	7.74		
210	340	2.5	6.94		
F42A DA132MX4 IE2					84
F42B DA132MX4 IE2					84
F42C DA132MX4 IE2					86
72	995	0.90	20.22		
80	900	1.00	18.25		
87	825	1.05	16.80		
97	740	1.20	15.02		
109	655	1.35	13.33		
123	580	1.50	11.82		
138	520	1.70	10.51		
162	445	2.00	9.01		
183	390	2.3			

Type				-kg	Type				-kg	Type				-kg	Type				-kg									
n2	[1/min]	T2	[Nm]	cG	i	n2	[1/min]	T2	[Nm]	cG	i	n2	[1/min]	T2	[Nm]	cG	i	n2	[1/min]	T2	[Nm]	cG	i					
9.2 kW																												
F63A	DA160MS4	IE2			157	F63A	DA160MS4	IE2			157	F63A	DA160MS4	IE2			157	F63A	DA160MS4	IE2			157					
F63B	DA160MS4	IE2			163	F63B	DA160MS4	IE2			163	F63B	DA160MS4	IE2			163	F63B	DA160MS4	IE2			163					
F63C	DA160MS4	IE2				F63C	DA160MS4	IE2				F63C	DA160MS4	IE2			F63C	DA160MS4	IE2				F63C	DA160MS4	IE2			
26	3390	0.85	56.75			17	6150	0.80	85.76			13	11300	0.80	116.03			74	1920	0.80	19.67			83	1720	0.90	17.62	
30	2950	0.95	49.31			19	5580	0.85	77.85			14	9940	0.90	101.64			83	1720	0.90	17.62			93	1540	1.05	15.78	
33	2640	1.05	44.16			21	4980	1.00	69.41			16	9040	1.00	92.45			103	1390	1.15	14.20			118	1210	1.30	12.39	
37	2380	1.20	39.74			25	4220	1.15	58.87			18	8140	1.10	83.27			132	1090	1.40	11.10			149	965	1.55	9.85	
42	2070	1.35	34.67			28	3720	1.30	51.81			20	7310	1.20	74.77			169	845	1.70	8.65			189	755	1.20	7.74	
47	1860	1.50	31.06			33	3220	1.50	44.88			23	6270	1.40	64.14			211	680	1.30	6.94			235	610	1.35	6.24	
53	1650	1.55	27.56			36	2910	1.65	40.61			26	5420	1.65	55.44			269	530	1.45	5.45			300	475	1.55	4.88	
61	1450	1.65	24.21			40	2640	1.75	36.86			35	4050	2.1	41.43			339	425	1.70	4.33			385	370	1.80	3.80	
F62A	DA160MS4	IE2			149	F62A	DA160MS4	IE2			149	F62A	DA160MS4	IE2			149	F62A	DA160MS4	IE2			149	F62A	DA160MS4	IE2		
F62B	DA160MS4	IE2			155	F62B	DA160MS4	IE2			155	F62B	DA160MS4	IE2			155	F62B	DA160MS4	IE2			155	F62B	DA160MS4	IE2		
F62C	DA160MS4	IE2				F62C	DA160MS4	IE2				F62C	DA160MS4	IE2			F62C	DA160MS4	IE2				F62C	DA160MS4	IE2			
56	1560	1.80	26.09			51	2050	2.2	28.53			25	5760	0.85	58.87			25	5760	0.85	58.87			28	5070	0.95	51.81	
62	1420	2.00	23.73			57	1850	2.3	25.85			28	5070	0.95	51.81			33	4390	1.10	44.88			36	3970	1.20	40.61	
69	1280	2.2	21.42			62	1690	2.5	23.54			33	4390	1.10	44.88			40	3600	1.30	36.86			45	3210	1.35	32.87	
76	1160	2.4	19.43			71	1480	2.7	20.62			40	3600	1.30	36.86			53	2730	1.50	27.88			62	2330	1.65	23.79	
87	1010	2.6	16.83			78	1350	2.9	18.76			53	2730	1.50	27.88			62	2330	1.65	23.79			F72A	DA160L4	IE2	231	
97	910	2.8	15.23			F72A	DA160L4	IE2			231	F72A	DA160L4	IE2			231	F72A	DA160L4	IE2			231	F72A	DA160L4	IE2		
106	825	3.0	13.82			F72B	DA160L4	IE2			240	F72B	DA160L4	IE2			240	F72B	DA160L4	IE2			240	F72B	DA160L4	IE2		
F53A	DA160MS4	IE2			125	F53A	DA160MS4	IE2			125	F53A	DA160MS4	IE2			125	F53A	DA160MS4	IE2			125	F53A	DA160MS4	IE2		
F53B	DA160MS4	IE2			129	F53B	DA160MS4	IE2			129	F53B	DA160MS4	IE2			129	F53B	DA160MS4	IE2			129	F53B	DA160MS4	IE2		
F53C	DA160MS4	IE2				F53C	DA160MS4	IE2				F53C	DA160MS4	IE2			F53C	DA160MS4	IE2				F53C	DA160MS4	IE2			
45	1970	0.80	32.93			30	3540	0.80	49.31			51	2790	1.60	28.53			57	2530	1.70	25.85			62	2300	1.80	23.54	
50	1750	0.90	29.31			33	3170	0.90	44.16			57	2530	1.70	25.85			62	2300	1.80	23.54			71	2020	2.00	20.62	
59	1500	1.05	25.11			37	2850	1.00	39.74			62	2300	1.80	23.54			71	2020	2.00	20.62			78	1830	2.1	18.76	
66	1320	1.10	22.15			42	2490	1.15	34.67			71	2020	2.00	20.62			78	1830	2.1	18.76			87	1650	2.3	16.90	
F52A	DA160MS4	IE2			121	47	2230	1.25	31.06			78	1830	2.1	18.76			87	1650	2.3	16.90			97	1480	2.5	15.17	
F52B	DA160MS4	IE2			125	53	1980	1.30	27.56			97	1480	2.5	15.17			113	1270	2.8	13.01			130	1100	3.1	11.25	
F52C	DA160MS4	IE2				61	1740	1.40	24.21			113	1270	2.8	13.01			130	1100	3.1	11.25			161	890	2.5	9.11	
75	1180	1.35	19.67			F62A	DA160M4	IE2			159	161	890	2.5	9.11			177	810	2.7	8.29			177	810	2.7	8.29	
83	1050	1.50	17.62			F62B	DA160M4	IE2			165	177	810	2.7	8.29			F63A	DA160L4	IE2			184	F63A	DA160L4	IE2		
93	945	1.70	15.78			F62C	DA160M4	IE2				184	F63A	DA160L4	IE2			F63B	DA160L4	IE2			184	F63B	DA160L4	IE2		
103	850	1.85	14.20			56	1870	1.50	26.09			184	F63B	DA160L4	IE2			F63C	DA160L4	IE2			190	F63C	DA160L4	IE2		
119	740	2.1	12.39			62	1700	1.65	23.73			190	F63C	DA160L4	IE2			42	3390	0.85	34.67			47	3040	0.90	31.06	
132	665	2.3	11.10			68	1540	1.85	21.42			47	3040	0.90	31.06			53	2690	0.95	27.56			61	2370	1.00	24.21	
149	590	2.5	9.85			75	1390	2.00	19.43			53	2690	0.95	27.56			61	2370	1.00	24.21			F62A	DA160L4	IE2	176	
170	515	2.8	8.65			87	1210	2.2	16.83			61	2370	1.00	24.21			F62B	DA160L4	IE2			176	F62B	DA160L4	IE2		
190	465	1.95	7.74			96	1090	2.4	15.23			F62C	DA160L4	IE2			182	F62C	DA160L4	IE2			182	F62C	DA160L4	IE2		
212	415	2.1	6.94			106	990	2.5	13.82			56	2550	1.10	26.09			62	2320	1.20	23.73			68	2090	1.35	21.42	
236	375	2.2	6.24			119	885	2.7	12.33			68	2090	1.35	21.42			75	1900	1.45	19.43			87	1650	1.60	16.83	
270	325	2.4	5.45			F53A	DA160M4	IE2			135	75	1900	1.45	19.43			87	1650	1.60	16.83			96	1490	1.75	15.23	
301	290	2.6	4.88			F53B	DA160M4	IE2			135	87	1650	1.60	16.83			96	1490	1.75	15.23			106	1350	1.85	13.82	
340	260	2.7	4.33			F53C	DA160M4	IE2			139	96	1490	1.75	15.23			119	1210	2.0	12.33			119	1210	2.0	12.33	
387	225	2.9	3.80			58	1800	0.90	25.11			119	1210	2.0	12.33			140	1020	2.3	10.45			140	1020	2.3	10.45	
11.0 kW																												
F83A	DA160M4	IE2			322	58	1800	0.90	25.11			140	1020	2.3	10.45			164	870	2.5	8.92			190	755	1.90	7.70	
F83B	DA160M4	IE2			339	66	1590	0.95	22.15			164	870	2.5	8.92			190	755	1.90	7.70			210	680	2.1	6.97	
F83C	DA160M4	IE2				F52A	DA160M4	IE2			131	164	870	2.5	8.92			210	680	2.1	6.97			F72A	DA180M4	IE2	284	
9.5	11000	0.80	154.08			F52B	DA160M4	IE2			131	56	2550	1.10	26.09			62	2320	1.20	23.73			F72B	DA180M4	IE2	284	
10	10100	0.90	140.63			F52C	DA160M4	IE2			135	62	2320	1.20	23.73													

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
18.5 kW					
F62A DA180M4 IE2					228
F62B DA180M4 IE2					228
F62C DA180M4 IE2					234
68	2580	1.10	21.42		
75	2340	1.20	19.43		
87	2030	1.30	16.83		
96	1840	1.40	15.23		
106	1670	1.50	13.82		
119	1490	1.65	12.33		
140	1260	1.85	10.45		
164	1080	2.1	8.92		
190	930	1.55	7.70		
210	840	1.65	6.97		
232	765	1.75	6.33		
260	680	1.90	5.64		
306	575	2.1	4.78		
359	490	2.2	4.08		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
22.0 kW					
F83A DA180L4 IE2					427
F83B DA180L4 IE2					427
F83C DA180L4 IE2					444
20	10700	0.85	74.77		
23	9200	0.95	64.14		
26	7950	1.10	55.44		
30	6910	1.30	48.19		
35	5940	1.45	41.43		
39	5330	1.55	37.20		
46	4580	1.70	31.91		
53	3960	1.90	27.58		
61	3440	2.1	23.97		
F82A DA180L4 IE2					409
F82B DA180L4 IE2					409
F82C DA180L4 IE2					426
73	2900	2.2	20.19		
80	2620	2.4	18.25		
93	2270	2.7	15.83		
F73A DA180L4 IE2					333
F73B DA180L4 IE2					333
F73C DA180L4 IE2					341
36	5820	0.85	40.61		
40	5290	0.90	36.86		
45	4710	0.95	32.87		
53	4000	1.05	27.88		
62	3410	1.10	23.79		
F72A DA180L4 IE2					321
F72B DA180L4 IE2					321
F72C DA180L4 IE2					329
57	3710	1.15	25.85		
62	3380	1.25	23.54		
71	2960	1.35	20.62		
78	2690	1.45	18.76		
87	2420	1.55	16.90		
97	2180	1.70	15.17		
113	1870	1.90	13.01		
130	1610	2.1	11.25		
150	1400	2.3	9.78		
161	1310	1.70	9.11		
177	1190	1.80	8.29		
196	1070	1.95	7.46		

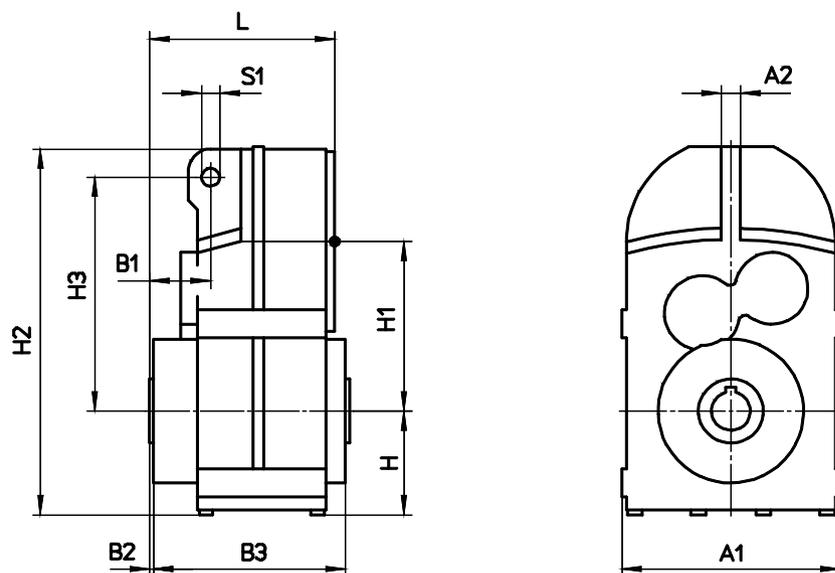
Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
22.0 kW					
F62A DA180L4 IE2					265
F62B DA180L4 IE2					265
F62C DA180L4 IE2					271
68	3070	0.90	21.42		
75	2790	1.00	19.43		
87	2410	1.10	16.83		
96	2180	1.20	15.23		
106	1980	1.25	13.82		
119	1770	1.35	12.33		
140	1500	1.55	10.45		
164	1280	1.75	8.92		
190	1100	1.30	7.70		
210	1000	1.40	6.97		
232	905	1.50	6.33		
260	810	1.60	5.64		
306	685	1.75	4.78		
359	585	1.90	4.08		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
30.0 kW					
F83A DA200L4 IE2					482
F83B DA200L4 IE2					482
F83C DA200L4 IE2					499
27	10700	0.85	55.44		
31	9330	0.95	48.19		
36	8020	1.05	41.43		
40	7200	1.15	37.20		
46	6180	1.30	31.91		
54	5340	1.40	27.58		
62	4640	1.55	23.97		
F82A DA200L4 IE2					464
F82B DA200L4 IE2					464
F82C DA200L4 IE2					481
73	3910	1.65	20.19		
81	3530	1.80	18.25		
93	3070	1.95	15.83		
107	2680	2.2	13.85		
121	2360	2.4	12.20		
147	1950	1.95	10.08		
F73A DA200L4 IE2					388
F73B DA200L4 IE2					388
F73C DA200L4 IE2					396
62	4610	0.85	23.79		
F72A DA200L4 IE2					376
F72B DA200L4 IE2					376
F72C DA200L4 IE2					384
72	3990	1.00	20.62		
79	3630	1.10	18.76		
88	3270	1.15	16.90		
98	2940	1.25	15.17		
114	2520	1.40	13.01		
132	2180	1.55	11.25		
151	1890	1.70	9.78		
162	1760	1.25	9.11		
179	1600	1.35	8.29		
198	1450	1.45	7.46		
221	1300	1.55	6.70		
257	1110	1.65	5.75		
298	960	1.80	4.97		
343	835	1.95	4.32		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
37.0 kW					
F83A DA225SX4 IE2					530
F83B DA225SX4 IE2					530
F83C DA225SX4 IE2					547
36	9920	0.85	41.43		
40	8910	0.95	37.20		
46	7640	1.05	31.91		
53	6610	1.15	27.58		
62	5740	1.25	23.97		

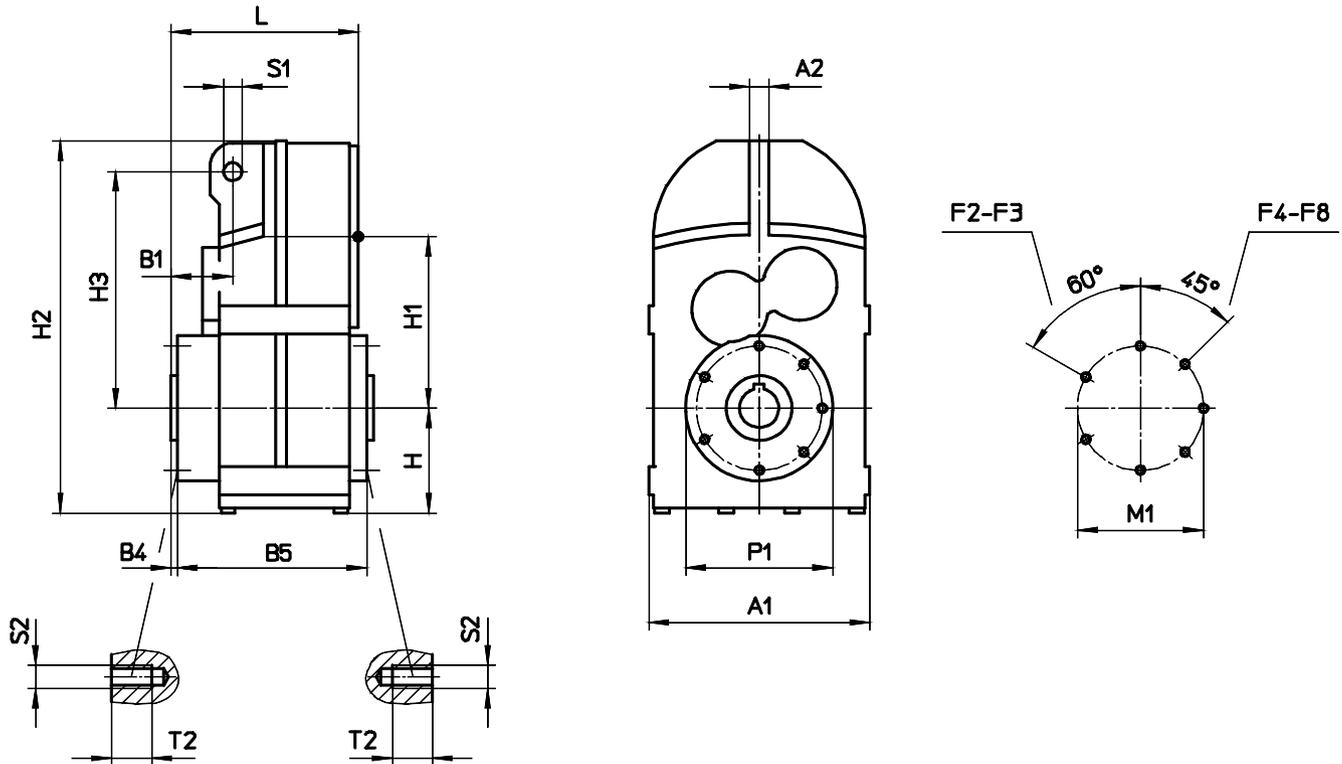
Dimensions

A - Shaft mounted version



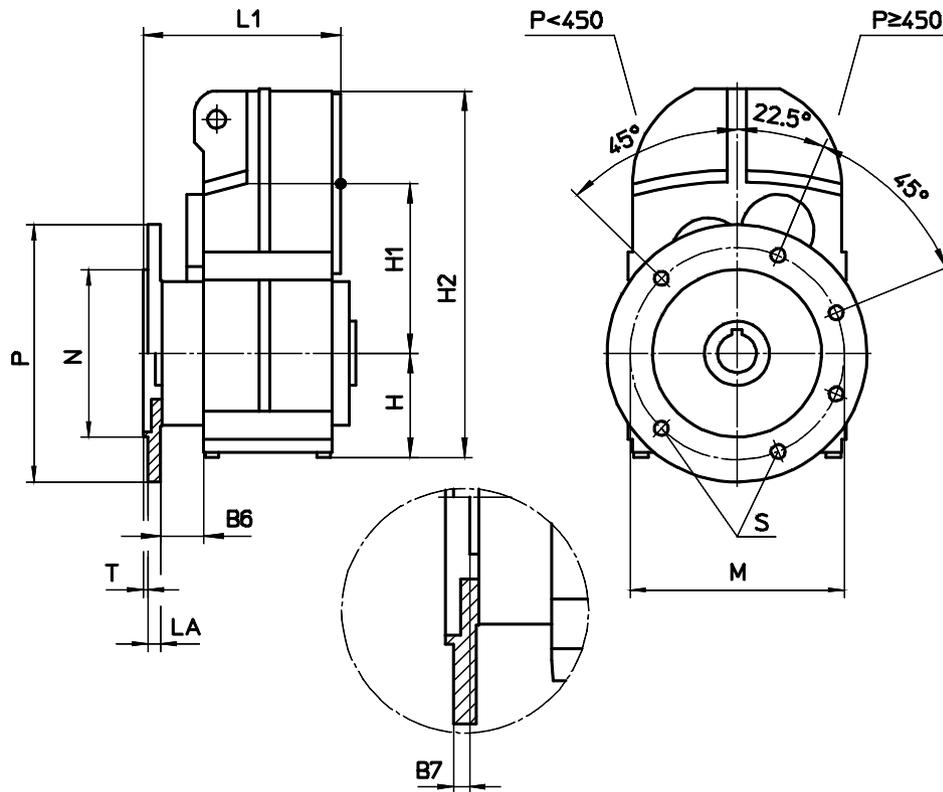
	A1	A2	B1	B2	B3	H	H1	H2	H3	L	S1
F2	150	12	40	1	119	70.5	110	243	156	109	Ø14
F3	168	15	45	1	148	81	132	286.5	182	140.5	Ø14
F4	210	20	47.5	1.5	172	98.5	159	341	217	158.5	Ø14
F5	263	25	53	1.5	207	120.5	196	421	270	184	Ø22
F6	313	30	62	2.5	235	144.5	234	508	328	215	Ø22
F7	367	35	76	3.5	293	171.5	273	599.5	382	250.5	Ø26
F8	417	40	93	3.5	343	191.5	324	696.5	458	301	Ø26

B - Shaft mounted version



	A1	A2	B1	B4	B5	H	H1	H2	H3	L	S1	M1	P1	S2	T2
F2	150	12	40	2	116	70.5	110	243	156	109	Ø14	87	99	M6	9
F3	168	15	45	3	144	81	132	286.5	182	140.5	Ø14	96	112	M8	12
F4	210	20	47.5	3.5	168	98.5	159	341	217	158.5	Ø14	106	122	M8	12
F5	263	25	53	4	202	120.5	196	421	270	184	Ø22	130	150	M10	15
F6	313	30	62	5	230	144.5	234	508	328	215	Ø22	154	178	M12	18
F7	367	35	76	6	288	171.5	273	599.5	382	250.5	Ø26	182	214	M16	24
F8	417	40	93	6	338	191.5	324	696.5	458	301	Ø26	220	260	M20	30

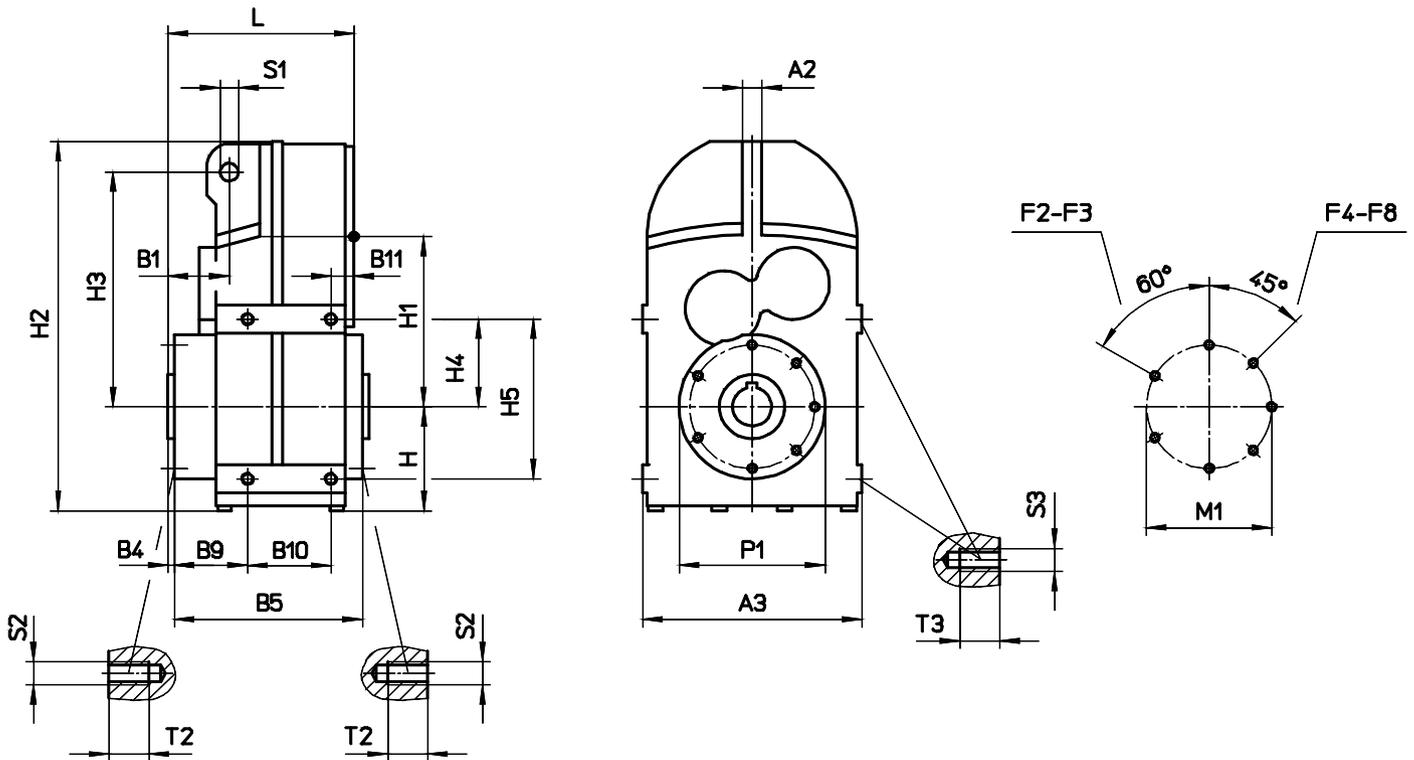
C - Flange mounted version



	B6	B7	H	H1	H2	L1
F2	26	10	70.5	110	243	122.5
F3	33	8	81	132	286.5	152
F4	35	7.5	98.5	159	341	169.5
F5	43	8	120.5	196	421	196
F6	47	8	144.5	234	508	227
F7	58.5	10	171.5	273	599.5	265.5
F8	60	15	191.5	324	696.5	321

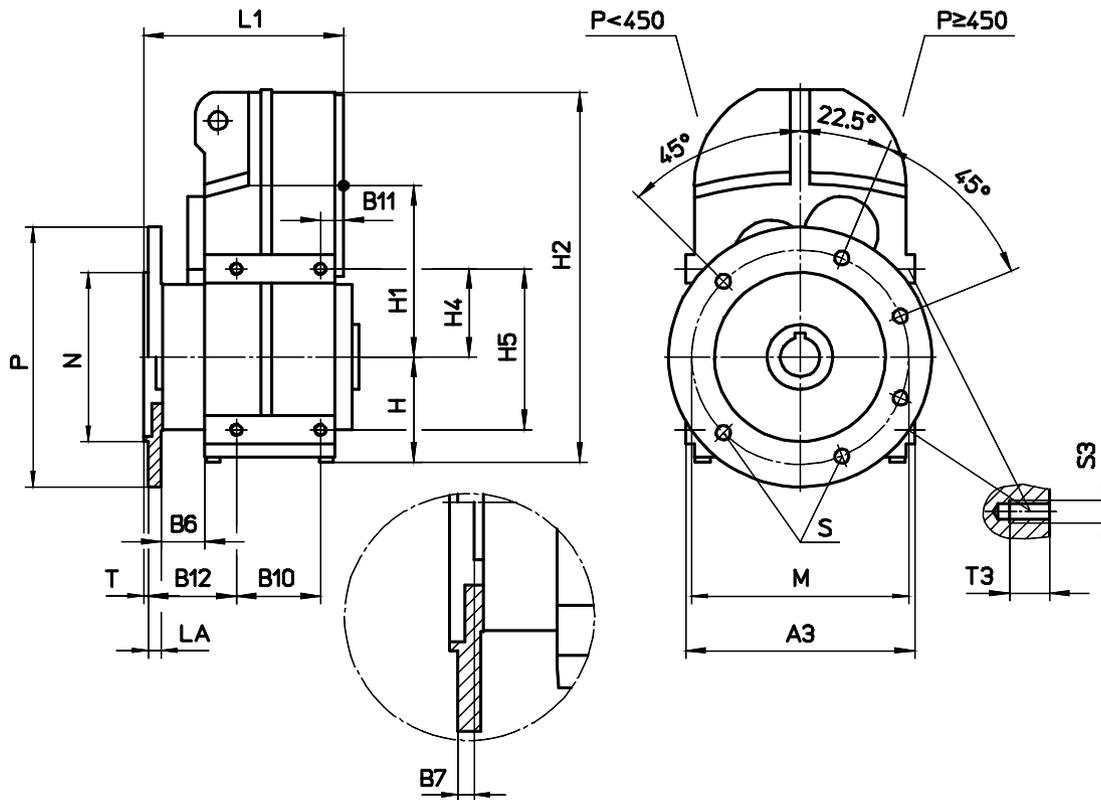
	M	N	P	LA	T	S
F2	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
F3	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
F4	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
F5	Ø215	Ø180 j6	Ø250	11	4	Ø13.5
F6	Ø265	Ø230 j6	Ø300	12	4	Ø13.5
F7	Ø300	Ø250 h6	Ø350	13	5	Ø17.5
F8	Ø400	Ø350 h6	Ø450	16	5	Ø17.5

D - Shaft mounted version + side areas



	A2	A3	B1	B4	B5	B9	B10	B11	H	H1	H2	H3	H4	H5	L	S1	M1	P1	S2	T2	S3	T3
F2	12	146	40	2	116	31	64	12	70.5	110	243	156	55	100	109	Ø14	87	99	M6	9	M8	12
F3	15	164	45	3	144	56	64	17.5	81	132	286.5	182	68	124	140.5	Ø14	96	112	M8	12	M10	15
F4	20	206	47.5	3.5	168	57	80	18	98.5	159	341	217	87	158	158.5	Ø14	106	122	M8	12	M12	18
F5	25	258	53	4	202	60	104	16	120.5	196	421	270	112	202	184	Ø22	130	150	M10	15	M12	18
F6	30	308	62	5	230	70	120	20	144.5	234	508	328	134	244	215	Ø22	154	178	M12	18	M16	24
F7	35	362	76	6	288	75.5	145	24	171.5	273	599.5	382	245	370	250.5	Ø26	182	214	M16	24	M20	30
F8	40	412	93	6	338	81	185	29	191.5	324	696.5	458	298	440	301	Ø26	220	260	M20	30	M24	36

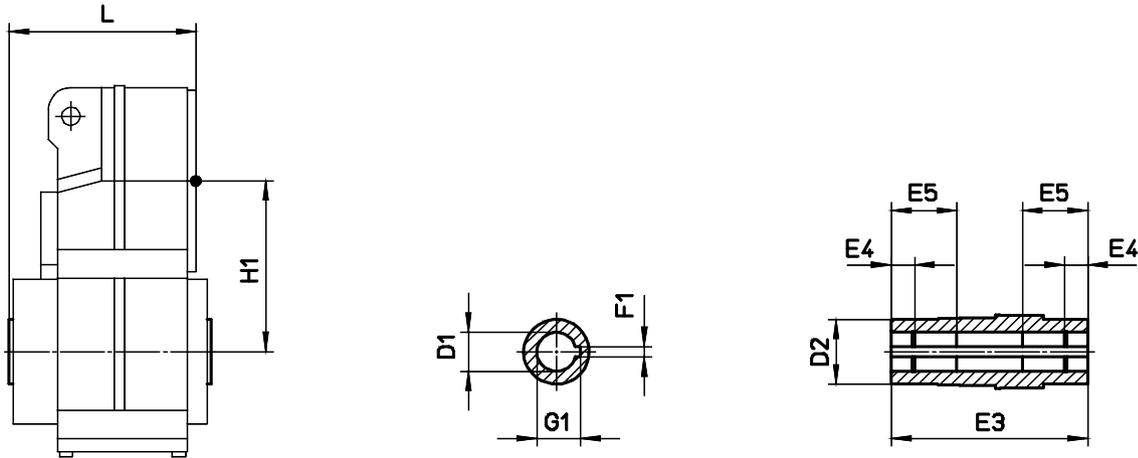
E - Flange mounted version + side areas



	A3	B6	B7	B10	B11	B12	H	H1	H2	H4	H5	L1	S3	T3
F2	146	26	10	64	12	43	70.5	110	243	55	100	122.5	M8	12
F3	164	33	8	64	17.5	67	81	132	286.5	68	124	152	M10	15
F4	206	35	7.5	80	18	68	98.5	159	341	87	158	169.5	M12	18
F5	258	43	8	104	16	72	120.5	196	421	112	202	196	M12	18
F6	308	47	8	120	20	83	144.5	234	508	134	244	227	M16	24
F7	362	58.5	10	145	24	91.5	171.5	273	599.5	245	370	265.5	M20	30
F8	412	60	15	185	29	102	191.5	324	696.5	298	440	321	M24	36

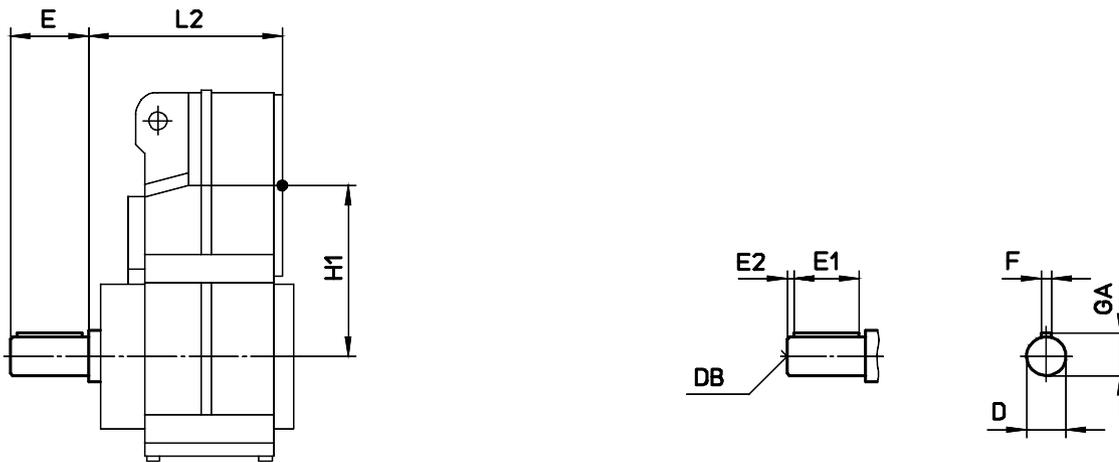
	M	N	P	LA	T	S
F2	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
F3	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
F4	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
F5	Ø215	Ø180 j6	Ø250	11	4	Ø13.5
F6	Ø265	Ø230 j6	Ø300	12	4	Ø13.5
F7	Ø300	Ø250 h6	Ø350	13	5	Ø17.5
F8	Ø400	Ø350 h6	Ø450	16	5	Ø17.5

Hollow shaft with keyway



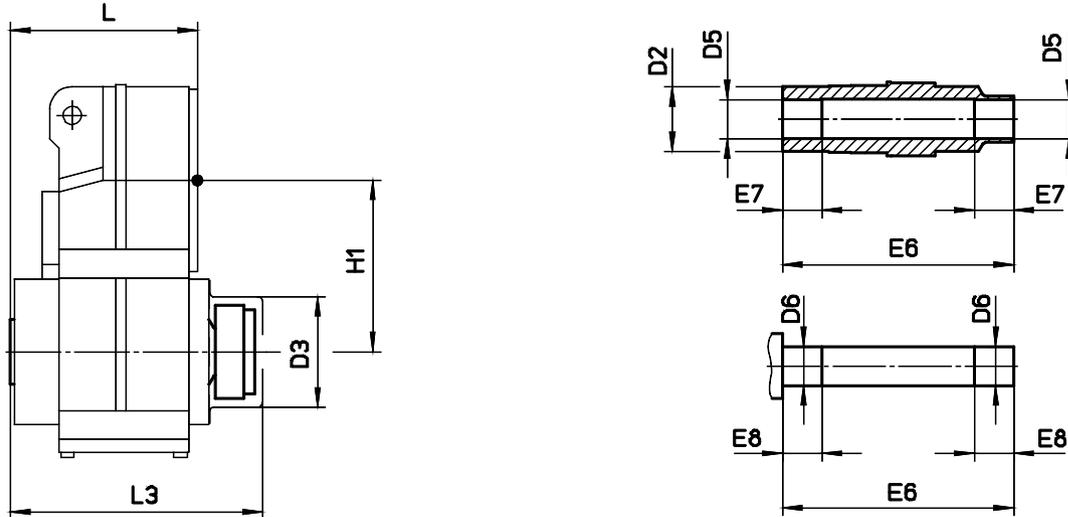
	D1	D2	E3	E4	E5	F1	G1	H1	L
F2	Ø25H7	45	120	15	-	8	28.3	110	109
F3	Ø30H7 Ø35H7	50	150	18	-	8 10	33.3 38.3	132	140.5
F4	Ø40H7	55	175	20	-	12	43.3	159	158.5
F5	Ø50H7	70	210	25	70	14	53.8	196	184
F6	Ø60H7	85	240	30	80	18	64.4	234	215
F7	Ø70H7	100	300	30	100	20	74.9	273	250.5
F8	Ø90H7	120	350	35	120	25	95.4	324	301

V - Output shaft with key



	D	DB	E	E1	E2	F	GA	H1	L2
F2	Ø25k6	M10	50	40	5	8	28	110	119
F3	Ø30k6 Ø35k6	M10 M12	60 70	50 60	5	8 10	33 38	132	148.5
F4	Ø40k6	M16	80	70	5	12	43	159	166
F5	Ø50k6	M16	100	80	10	14	53.5	196	192
F6	Ø60m6	M20	120	100	10	18	64	234	223
F7	Ø75m6	M20	140	125	7.5	20	79.5	273	260.5
F8	Ø90m6	M24	170	140	15	25	95	324	316

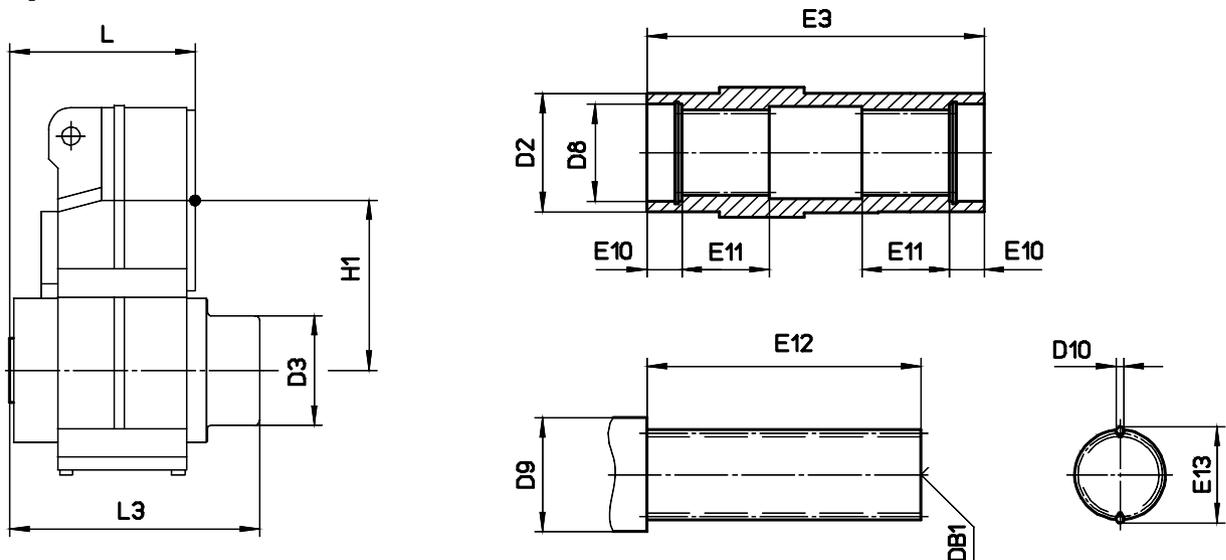
S - Hollow shaft with shrink disc



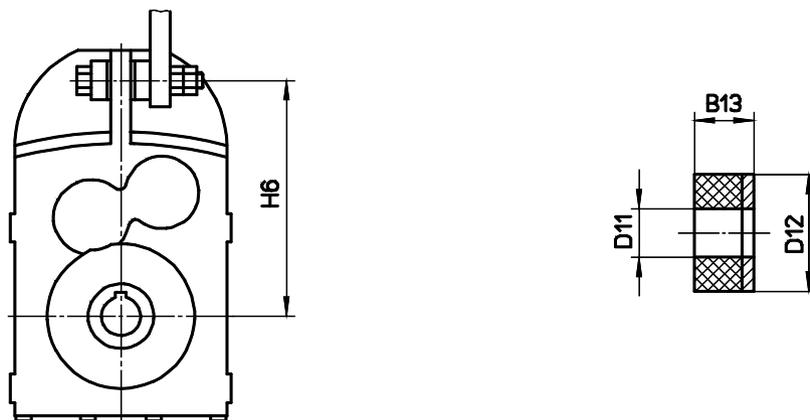
	*)	D2	D3	D5	D6	E6	E7	E8	H1	L	L3
F2	DM80 (DM100)	45	77	Ø25H7	Ø25H6	143	25	27	110	109	157
F3	DM100 (DM112)	50	86	Ø30H7 Ø35H7	Ø30h6 Ø35h6	176	30	32	132	140.5	188
F4	DM112 (DA132)	55	96	Ø40H7	Ø40h6	202	40	42	159	158.5	214.5
F5	DA132	70	117	Ø50H7	Ø50h6	242	50	52	196	184	255
F6	DA180	85	148	Ø60H7	Ø60h6	274	60	62	234	215	292
F7	DA200	100	180	Ø70H7	Ø70h6	343	70	72	273	250.5	359
F8	DA225	120	225	Ø90H7	Ø90h6	402	80	82	324	301	422

*) largest possible motor size (without protection cover)

Z - Splined hollow shaft

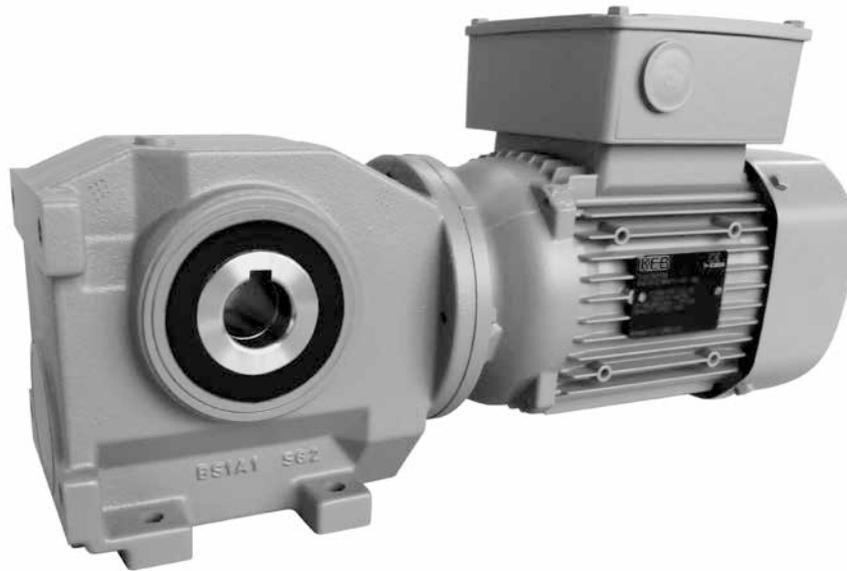


	DIN5480	D2	D3	D8	D9	D10	DB1	E3	E10	E11	E12	E13	H1	L	L3
F2	30x1.25x30x22	45	77	35	40	2.75	M10	120	18	25	88	33.05 -0.04	110	109	157
F3	35x2x30x16	50	86	40	46	4	M12	150	18	32	118	38.94 -0.04	132	140.5	188
F4	40x2x30x18	55	96	42	50	4.5	M16	175	23	42	140	45.08 -0.04	159	158.5	214.5
F5	50x2x30x24	70	117	52	62	4	M16	210	23	52	174	54.16 -0.05	196	184	255
F6	65x2x30x31	85	148	70	82	4	M20	240	25	62	195	68.99 -0.06	234	215	292
F7	70x2x30x34	100	180	72	85	4	M20	300	25	72	255	74.18 -0.06	273	250.5	359
F8	85x3x30x27	120	225	90	105	6	M20	350	27	88	298	91.02 -0.06	324	301	422

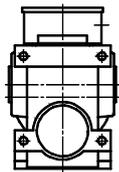
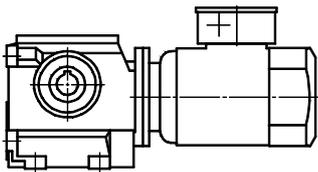
G - Rubber elements

Gear unit	B13	D11	D12	H6
F2	15	12.5	30	156
F3	15	12.5	30	182
F4	20	12.5	40	217
F5	30	21	50	270
F6	30	21	60	328
F7	40	25	80	382
F8	40	25	80	458

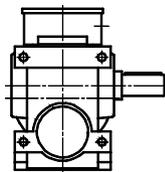
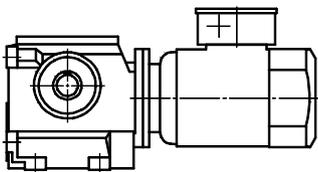
Helical worm gear units S



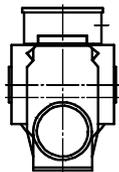
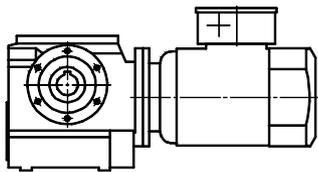
Type of construction



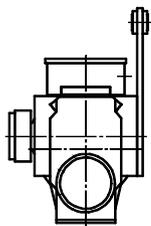
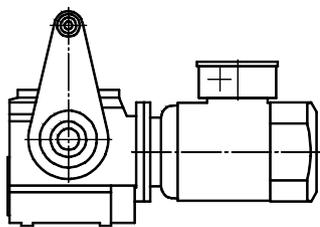
Foot mounted version
Hollow shaft with keyway
Example: S32A DM90L4



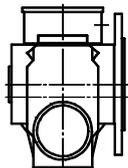
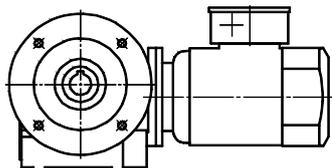
Foot mounted version
Output shaft with key
Example: S12AV DM80G4



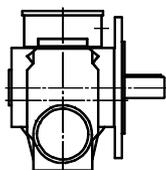
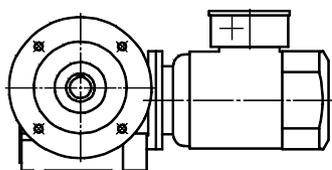
Shaft mounted version
Hollow shaft with keyway
Example: S22B DM100L4



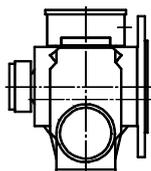
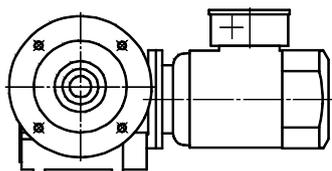
Shaft mounted version
Hollow shaft with shrink disc
Torque arm T1
Example: S22**BT1S** DM80K4



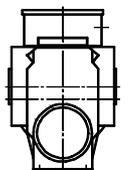
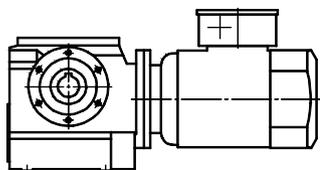
Flange mounted version
Hollow shaft with keyway
Example: S22**C** DM90S4



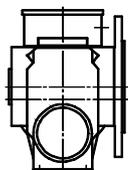
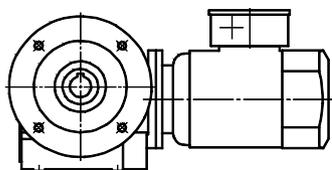
Flange mounted version
Output shaft with key
Example: S12**CV** DM71G4



Flange mounted version
Hollow shaft with shrink disc
Example: S32**CS** DM100LX4



Shaft mounted version + foot area
Hollow shaft with keyway
Example: S22**D** DM80G4



Flange mounted version + foot area
Hollow shaft with keyway
Example: S32**E** DM90S4



Selection table - Gear units

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S02

189.00	58	0.10	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
159.35	58	0.11	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
135.95	57	0.12	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
117.00	56	0.14	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
101.35	55	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
88.20	53	0.16	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
77.00	52	0.18	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
69.00	69	0.21	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
58.18	67	0.24	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
49.63	66	0.27	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
42.71	64	0.30	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
37.00	62	0.34	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
32.20	60	0.37	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
28.11	58	0.41	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
25.00	63	0.44	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
21.08	61	0.50	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
17.98	59	0.56	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
15.48	57	0.63	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
13.41	55	0.70	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
12.50	67	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
11.67	53	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
10.54	65	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
10.19	51	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
8.99	63	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
7.74	61	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6.70	59	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5.83	57	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5.09	55	0.75	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

S12G03

9007.5	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
7609.6	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6505.9	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5612.6	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4874.5	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4254.6	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3672.3	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3168.0	188	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2751.5	187	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2401.5	187	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

S12G02

2108.1	187	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1781.0	187	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1522.7	186	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1313.6	186	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1140.8	186	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
995.75	185	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
872.16	185	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
749.62	184	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
646.68	184	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
561.65	183	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
490.22	182	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
429.37	181	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
375.31	180	0.14	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
330.65	179	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
293.14	178	0.17	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
261.18	177	0.18	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
234.46	176	0.20	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
204.64	174	0.22	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
179.24	172	0.25	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S12

168.00	171	0.26	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
143.53	168	0.29	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
124.21	165	0.32	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
108.57	162	0.35	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
95.65	160	0.39	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
84.80	157	0.42	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
75.56	153	0.46	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
67.83	150	0.49	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
60.90	166	0.5	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
59.20	146	0.54	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
52.03	163	0.59	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
51.85	141	0.59	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
45.03	160	0.66	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
39.36	156	0.73	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
34.67	153	0.80	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
30.74	150	0.88	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
27.39	146	0.96	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
24.59	143	1.04	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
22.68	152	1.12	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
21.46	138	1.14	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
19.38	149	1.27	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
18.80	133	1.25	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
16.77	146	1.43	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
14.66	142	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
12.91	139	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
11.45	136	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
10.20	132	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
9.16	129	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
7.99	124	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
7.00	120	1.50	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-

S22G13

13901	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
11784	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
10114	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
8761.0	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
7643.7	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6705.1	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5905.6	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5193.0																			

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S22G12

2998.2	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2561.5	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2216.7	340	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1937.6	340	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1707.1	340	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1513.4	335	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1348.4	335	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1210.5	335	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1056.5	335	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
925.37	335	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
850.54	335	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
749.33	335	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
664.32	330	0.14	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
591.90	330	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
531.34	330	0.17	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
463.77	330	0.19	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
406.20	325	0.21	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
362.38	325	0.23	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
325.05	325	0.25	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
295.42	320	0.27	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
260.46	320	0.30	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
230.68	315	0.34	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
206.44	315	0.37	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
179.67	310	0.41	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-

S22

207.20	315	0.37	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
177.88	310	0.41	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
154.74	305	0.46	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
136.00	300	0.50	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
120.52	295	0.54	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
107.52	295	0.59	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
96.44	290	0.64	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
87.65	285	0.69	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
77.28	275	0.75	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
71.53	305	0.81	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
68.44	270	0.82	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
61.41	295	0.91	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
61.25	265	0.88	-	-	-	o	-	-	-	-	-	-	-	-	-	o	o	-	-
53.42	290	1.01	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
53.31	255	0.97	-	-	-	o	-	-	-	-	-	-	-	-	-	o	o	-	-
46.95	285	1.11	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
41.61	280	1.20	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
37.12	275	1.31	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
33.30	265	1.42	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
30.26	260	1.51	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
26.68	250	1.65	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
26.64	295	1.85	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
23.63	245	1.79	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
22.87	290	2.10	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
21.15	235	1.93	-	-	-	o	-	-	-	-	-	-	-	-	-	o	o	-	-
19.89	285	2.34	o	o	o	-	-	-	-	-	-	-	-	-	o	-	-	-	-
18.40	225	2.12	-	-	-	o	-	-	-	-	-	-	-	-	-	o	o	-	-
17.49	280	2.59	o	o	o	o	-	-	-	-	-	-	-	-	o	-	-	-	-
15.50	270	2.83	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
13.82	265	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
12.40	260	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
11.27	255	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
9.94	245	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
8.80	235	3.00	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
7.88	230	3.00	-	-	-	o	-	-	-	-	-	-	-	-	-	o	o	-	-
6.85	220	3.00	-	-	-	o	-	-	-	-	-	-	-	-	-	o	o	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S32G13

18745	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
15891	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
13638	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
11814	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
10307	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
9041.7	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
7963.6	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
7002.7	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6009.8	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5206.1	665	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4542.1	660	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-

S32G12

4043.0	660	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3454.1	660	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2989.2	660	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2612.8	660	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2301.9	660	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2040.8	660	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1818.3	655	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1632.3	655	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1424.7	655	0.13	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1247.9	655	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1146.9	650	0.16	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1010.5	650	0.18	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
895.82	650	0.20	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
798.16	645	0.22	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
716.51	645	0.25	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
625.38	640	0.28	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
547.76	635	0.31	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
492.61	635	0.33	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
445.64	630	0.36	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
406.20	625	0.39	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
362.38	625	0.42	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
325.05	620	0.47	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
294.91	615	0.51	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
261.33	610	0.56	o	o	-	-	-												

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S32

271.60	610	0.54	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
234.71	605	0.61	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
205.58	595	0.68	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
182.00	585	0.74	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
162.52	580	0.80	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
146.16	570	0.86	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
132.22	560	0.92	o	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
120.52	550	0.98	o	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
107.52	540	1.06	o	o	o	o	o	-	-	-	-	-	-	-	o	o	o	o	-
96.44	530	1.14	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	o	-
87.50	515	1.22	-	-	-	-	o	o	-	-	-	-	-	-	-	o	o	o	-
77.54	500	1.32	-	-	-	-	-	-	o	o	-	-	-	-	-	o	o	o	-
68.25	485	1.43	-	-	-	-	-	-	o	o	-	-	-	-	-	o	o	o	-
59.77	465	1.55	-	-	-	-	-	-	-	o	o	-	-	-	-	o	o	o	-
52.50	450	1.69	-	-	-	-	-	-	-	-	o	-	-	-	-	o	o	o	-
52.21	635	2.12	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
46.22	625	2.33	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
41.28	615	2.54	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
37.12	600	2.75	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
33.58	590	2.95	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
30.61	575	3.14	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
27.31	560	3.42	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
24.49	545	3.70	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
22.44	530	3.84	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
22.22	535	3.96	-	-	-	-	-	-	o	o	-	-	-	-	-	o	o	o	-
20.18	525	4.00	o	o	o	o	o	o	-	-	-	-	-	-	o	o	-	-	-
19.69	515	4.00	-	-	-	-	-	-	o	o	-	-	-	-	-	o	o	o	-
18.26	515	4.00	o	o	o	o	o	o	-	-	-	-	-	-	o	o	-	-	-
17.33	495	4.00	-	-	-	-	-	-	-	o	o	-	-	-	-	o	o	o	-
16.64	525	4.00	o	o	o	o	o	o	-	-	-	-	-	-	o	o	-	-	-
15.18	470	4.00	-	-	-	-	-	-	-	o	o	-	-	-	-	o	o	o	-
14.85	510	4.00	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
13.33	450	4.00	-	-	-	-	-	-	-	-	o	-	-	-	-	o	o	o	-
13.32	495	4.00	o	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-
12.08	485	4.00	-	-	-	-	-	-	-	-	o	o	-	-	-	o	o	o	-
10.71	465	4.00	-	-	-	-	-	-	-	-	-	o	o	-	-	-	o	o	-
9.43	445	4.00	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	o	-
8.25	425	4.00	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-
7.25	405	4.00	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-

S42G23

20360	1530	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
17395	1530	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
15053	1530	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
13158	1530	<0.0	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
11592	1530	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
10277	1530	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
9221.9	1530	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
8060.8	1530	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
7101.6	1530	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
6295.9	1530	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
5512.1	1530	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
4856.2	1520	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
4305.3	1520	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S42G22

3878.1	1520	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3329.4	1520	0.14	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2896.2	1520	0.16	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2545.5	1510	0.18	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2255.8	1510	0.20	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2012.4	1510	0.22	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1805.1	1510	0.24	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1640.6	1500	0.27	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1446.4	1500	0.30	o	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1281.1	1500	0.33	o	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1156.1	1490	0.37	o	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
1064.2	1490	0.39	o	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
934.35	1480	0.44	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
838.10	1470	0.48	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
761.70	1470	0.52	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
671.56	1460	0.58	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
594.78	1450	0.64	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
536.78	1440	0.69	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
494.08	1430	0.73	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
441.60	1420	0.79	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
392.13	1410	0.86	o	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-
384.81	1410	0.88	-	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-
347.49	1390	0.96	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
343.94	1390	0.96	-	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-
309.22	1380	1.05	o	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-
305.41	1380	1.06	-	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-
270.64	1360	1.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-
264.91	1360	1.19	o	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-
240.84	1350	1.29	-	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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S42

247.58	1350	1.26	-	-	-	o	-	-	-	-	-	-	-	-	o	o	-	-	-
220.00	1330	1.38	-	-	-	o	o	o	-	-	-	-	-	-	o	o	-	-	-
197.22	1310	1.49	-	-	-	o	o	o	o	-	-	-	-	-	o	o	o	-	-
178.08	1290	1.60	-	-	-	o	o	o	o	o	-	-	-	-	o	o	o	-	-
161.78	1270	1.71	-	-	-	o	o	o	o	o	-	-	-	-	o	o	o	-	-
147.91	1250	1.81	-	-	-	o	o	o	o	o	-	-	-	-	o	o	o	-	-
132.72	1220	1.93	-	-	-	o	o	o	o	o	-	-	-	-	o	o	o	o	-
119.78	1180	2.05	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	o	-
110.25	1160	2.16	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	o	-
98.54	1130	2.33	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	o	-
87.50	1090	2.51	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	o	-
77.54	1050	2.68	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	o	-
69.00	1000	2.84	-	-	-	-	-	-	o	o	o	-	-	-	-	o	o	o	-
59.37	1260	3.59	-	-	-	o	o	o	-	-	-	-	-	-	o	o	-	-	-
59.11	920	3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-
53.22	1390	4.38	-	-	-	o	o	o	o	-	-	-	-	-	o	o	o	-	-
52.14	915	3.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-
48.05	1360	4.74	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
43.65	1320	5.0	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
39.91	1250	5.2	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
35.81	1250	5.7	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
32.48	870	4.32	-	-	-	o	o	o	-	-	-	-	-	-	o	o	-	-	-
32.32	1200	6.1	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
29.75	1140	6.2	-	-	-	-	-	-	o	o	o	o	-	-	-	o	o	-	-
29.11	865	4.78	-	-	-	o	o	o	o	-	-	-	-	-	o	o	o	-	-
26.59	1140	7.0	-	-	-	o	o	o	o	o	-	-	-	-	-	o	o	-	-
26.29	855	5.2	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
23.88	850	5.7	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
23.61	1080	7.4	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	-	-
21.83	1010	7.3	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
20.92	1010	7.5	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	-	-
19.59	995	7.5	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
18.62	950	7.5	-	-	-	-	-	-	o	o	o	-	-	-	-	o	o	-	-
17.68	985	7.5	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	-	-
16.28	1050	7.5	-	-	-	o	o	o	o	o	o	-	-	-	-	o	o	-	-
15.95	885	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-
14.55	1000	7.5	-	-	-	o	o	o	o	o	-	-	-	-	-	o	o	-	-
14.07	820	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-
12.92	940	7.5	-	-	-	o	o	o	o	o	-	-	-	-	-	o	o	-	-
11.45	885	7.5	-	-	-	o	o	o	o	o	-	-	-	-	-	o	o	-	-
10.19	835	7.5	-	-	-	-	-	-	o	o	o	-	-	-	-	o	o	-	-
8.73	775	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-
7.70	725	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-

S02

i	is	n1=3400 1/min				n1=2800 1/min				n1=1700 1/min				n1=1400 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
189.00	1/63	18	52	0.18	0.55	15	54	0.16	0.53	9.0	57	0.11	0.49	7.4	58	0.10	0.47
159.35	1/63	21	50	0.20	0.57	18	52	0.17	0.55	11	57	0.13	0.50	8.8	58	0.11	0.49
135.95	1/63	25	48	0.22	0.58	21	51	0.19	0.56	13	56	0.14	0.51	10	57	0.12	0.50
117.00	1/63	29	46	0.24	0.59	24	49	0.21	0.58	15	54	0.16	0.53	12	56	0.14	0.51
101.35	1/63	34	44	0.26	0.60	28	47	0.23	0.59	17	53	0.17	0.54	14	55	0.15	0.52
88.20	1/63	39	42	0.28	0.61	32	45	0.25	0.60	19	51	0.19	0.56	16	53	0.16	0.54
77.00	1/63	44	40	0.30	0.62	36	43	0.27	0.61	22	50	0.20	0.57	18	52	0.18	0.55
69.00	1/23	49	58	0.40	0.75	41	61	0.35	0.73	25	67	0.25	0.70	20	69	0.21	0.68
58.18	1/23	58	56	0.45	0.76	48	59	0.40	0.75	29	65	0.28	0.71	24	67	0.24	0.70
49.63	1/23	69	53	0.49	0.77	56	56	0.44	0.76	34	63	0.31	0.72	28	66	0.27	0.71
42.71	1/23	80	51	0.54	0.78	66	54	0.48	0.77	40	61	0.35	0.73	33	64	0.30	0.72
37.00	1/23	92	48	0.58	0.79	76	52	0.52	0.78	46	59	0.38	0.74	38	62	0.34	0.73
32.20	1/23	106	46	0.63	0.79	87	49	0.56	0.79	53	57	0.42	0.75	43	60	0.37	0.74
28.11	1/23	121	43	0.68	0.80	100	47	0.61	0.79	60	55	0.46	0.76	50	58	0.41	0.75
25.00	3/25	136	51	0.75	0.87	112	54	0.73	0.87	68	61	0.51	0.85	56	63	0.44	0.83
21.08	3/25	161	49	0.75	0.88	133	52	0.75	0.87	81	59	0.58	0.85	66	61	0.50	0.84
17.98	3/25	189	46	0.75	0.88	156	49	0.75	0.88	95	56	0.65	0.86	78	59	0.56	0.85
15.48	3/25	220	44	0.75	0.89	181	47	0.75	0.88	110	54	0.72	0.87	90	57	0.63	0.86
13.41	3/25	254	41	0.75	0.89	209	45	0.75	0.88	127	52	0.75	0.87	104	55	0.70	0.86
12.50	6/25	272	55	0.75	0.92	224	58	0.75	0.92	136	65	0.75	0.91	112	67	0.75	0.90
11.67	3/25	291	39	0.75	0.89	240	42	0.75	0.89	146	50	0.75	0.87	120	53	0.75	0.87
10.54	6/25	323	52	0.75	0.93	266	56	0.75	0.92	161	63	0.75	0.91	133	65	0.75	0.90
10.19	3/25	334	37	0.75	0.90	275	40	0.75	0.89	167	48	0.75	0.88	137	51	0.75	0.87
8.99	6/25	378	49	0.75	0.93	311	53	0.75	0.93	189	60	0.75	0.92	156	63	0.75	0.91
7.74	6/25	439	47	0.75	0.94	362	50	0.75	0.93	220	58	0.75	0.92	181	61	0.75	0.92
6.70	6/25	507	44	0.75	0.94	418	48	0.75	0.93	254	56	0.75	0.92	209	59	0.75	0.92
5.83	6/25	583	42	0.75	0.94	480	45	0.75	0.94	291	54	0.75	0.92	240	57	0.75	0.92
5.09	6/25	668	39	0.75	0.94	550	43	0.75	0.94	334	52	0.75	0.93	275	55	0.75	0.92

S02

i	is	n1=900 1/min				n1=700 1/min				n1=500 1/min				n1=10 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
189.00	1/63	4.8	61	0.07	0.43	3.7	62	0.06	0.41	2.6	63	<0.05	0.39	0.053	65	<0.05	0.32
159.35	1/63	5.6	60	0.08	0.44	4.4	61	0.07	0.42	3.1	62	0.05	0.40	0.063	65	<0.05	0.32
135.95	1/63	6.6	59	0.09	0.46	5.1	61	0.08	0.43	3.7	62	0.06	0.41	0.074	65	<0.05	0.32
117.00	1/63	7.7	58	0.10	0.48	6.0	60	0.08	0.45	4.3	61	0.07	0.42	0.085	65	<0.05	0.32
101.35	1/63	8.9	58	0.11	0.49	6.9	59	0.09	0.46	4.9	61	0.07	0.43	0.099	65	<0.05	0.32
88.20	1/63	10	57	0.12	0.50	7.9	58	0.10	0.48	5.7	60	0.08	0.44	0.11	65	<0.05	0.32
77.00	1/63	12	56	0.14	0.51	9.1	57	0.11	0.49	6.5	59	0.09	0.46	0.13	65	<0.05	0.32
69.00	1/23	13	72	0.15	0.64	10	73	0.13	0.62	7.2	75	0.09	0.60	0.14	78	<0.05	0.51
58.18	1/23	15	71	0.18	0.65	12	72	0.14	0.63	8.6	74	0.11	0.61	0.17	78	<0.05	0.51
49.63	1/23	18	70	0.20	0.67	14	72	0.16	0.64	10	73	0.12	0.62	0.20	78	<0.05	0.51
42.71	1/23	21	68	0.22	0.69	16	70	0.18	0.66	12	73	0.14	0.63	0.23	78	<0.05	0.51
37.00	1/23	24	67	0.24	0.70	19	69	0.20	0.67	14	72	0.16	0.64	0.27	78	<0.05	0.51
32.20	1/23	28	66	0.27	0.71	22	68	0.22	0.69	16	71	0.18	0.65	0.31	78	<0.05	0.51
28.11	1/23	32	64	0.30	0.72	25	67	0.25	0.70	18	70	0.20	0.67	0.36	78	<0.05	0.51
25.00	3/25	36	66	0.31	0.80	28	67	0.25	0.79	20	69	0.19	0.77	0.40	72	<0.05	0.69
21.08	3/25	43	65	0.36	0.81	33	66	0.29	0.80	24	68	0.22	0.78	0.47	72	<0.05	0.69
17.98	3/25	50	64	0.41	0.82	39	66	0.33	0.80	28	67	0.25	0.79	0.56	72	<0.05	0.69
15.48	3/25	58	62	0.45	0.84	45	64	0.37	0.82	32	67	0.28	0.79	0.65	72	<0.05	0.69
13.41	3/25	67	61	0.51	0.84	52	63	0.42	0.83	37	66	0.32	0.80	0.75	72	<0.05	0.69
12.50	6/25	72	71	0.61	0.88	56	72	0.49	0.87	40	74	0.36	0.86	0.80	77	<0.05	0.80
11.67	3/25	77	59	0.56	0.85	60	62	0.46	0.84	43	65	0.36	0.81	0.86	72	<0.05	0.69
10.54	6/25	85	69	0.70	0.88	66	71	0.57	0.87	47	73	0.42	0.87	0.95	77	<0.05	0.80
10.19	3/25	88	57	0.62	0.86	69	61	0.52	0.85	49	64	0.40	0.82	0.98	72	<0.05	0.69
8.99	6/25	100	68	0.75	0.89	78	70	0.65	0.88	56	72	0.48	0.87	1.1	77	<0.05	0.80
7.74	6/25	116	66	0.75	0.90	90	69	0.74	0.89	65	71	0.55	0.87	1.3	77	<0.05	0.80
6.70	6/25	134	65	0.75	0.90	104	67	0.75	0.89	75	70	0.63	0.88	1.5	77	<0.05	0.80
5.83	6/25	154	63	0.75	0.91	120	66	0.75	0.90	86	69	0.70	0.88	1.7	77	<0.05	0.80
5.09	6/25	177	61	0.75	0.92	137	65	0.75	0.91	98	68	0.75	0.89	2.0	77	<0.05	0.80

S12

i	is	n1=3400 1/min				n1=2800 1/min				n1=1700 1/min				n1=1400 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
168.00	1/40	20	151	0.49	0.66	17	156	0.43	0.64	10	168	0.30	0.59	8.3	171	0.26	0.57
143.53	1/40	24	146	0.54	0.67	20	152	0.47	0.65	12	164	0.33	0.61	9.8	168	0.29	0.59
124.21	1/40	27	141	0.59	0.68	23	148	0.52	0.67	14	161	0.37	0.63	11	165	0.32	0.61
108.57	1/40	31	136	0.65	0.69	26	143	0.57	0.68	16	158	0.41	0.64	13	162	0.35	0.62
95.65	1/40	36	131	0.70	0.70	29	139	0.62	0.69	18	155	0.45	0.65	15	160	0.39	0.63
84.80	1/40	40	126	0.75	0.70	33	134	0.67	0.69	20	151	0.48	0.66	17	157	0.42	0.64
75.56	1/40	45	121	0.80	0.71	37	129	0.71	0.70	23	148	0.52	0.67	19	153	0.46	0.65
67.83	1/40	50	116	0.84	0.72	41	124	0.76	0.71	25	144	0.56	0.68	21	150	0.49	0.66
60.90	2/29	56	144	1.02	0.82	46	150	0.89	0.81	28	162	0.61	0.78	23	166	0.52	0.76
59.20	1/40	57	110	0.91	0.73	47	119	0.82	0.72	29	139	0.61	0.69	24	146	0.54	0.67
52.03	2/29	65	138	1.14	0.83	54	145	0.99	0.82	33	158	0.68	0.79	27	163	0.59	0.77
51.85	1/40	66	104	0.98	0.73	54	113	0.88	0.72	33	134	0.66	0.69	27	141	0.59	0.68
45.03	2/29	76	133	1.26	0.83	62	140	1.10	0.83	38	155	0.76	0.80	31	160	0.66	0.79
39.36	2/29	86	128	1.38	0.84	71	135	1.21	0.83	43	151	0.85	0.81	36	156	0.73	0.80
34.67	2/29	98	123	1.49	0.85	81	131	1.32	0.84	49	148	0.93	0.82	40	153	0.80	0.81
30.74	2/29	111	117	1.50	0.85	91	126	1.42	0.84	55	144	1.01	0.82	46	150	0.88	0.81
27.39	2/29	124	112	1.50	0.86	102	121	1.50	0.85	62	140	1.10	0.83	51	146	0.96	0.82
24.59	2/29	138	107	1.50	0.86	114	116	1.50	0.85	69	136	1.19	0.83	57	143	1.04	0.82
22.68	5/27	150	130	1.50	0.91	123	136	1.50	0.91	75	148	1.31	0.89	62	152	1.12	0.88
21.46	2/29	158	101	1.50	0.86	130	110	1.50	0.86	79	131	1.30	0.84	65	138	1.14	0.83
19.38	5/27	175	124	1.50	0.92	145	131	1.50	0.91	88	144	1.48	0.90	72	149	1.27	0.88
18.80	2/29	181	95	1.50	0.87	149	104	1.50	0.86	90	126	1.42	0.84	74	133	1.25	0.83
16.77	5/27	203	119	1.50	0.92	167	126	1.50	0.92	101	141	1.50	0.90	83	146	1.43	0.89
14.66	5/27	232	114	1.50	0.93	191	121	1.50	0.92	116	137	1.50	0.91	96	142	1.50	0.90
12.91	5/27	263	109	1.50	0.93	217	117	1.50	0.92	132	134	1.50	0.91	108	139	1.50	0.90
11.45	5/27	297	105	1.50	0.93	245	112	1.50	0.93	148	130	1.50	0.91	122	136	1.50	0.91
10.20	5/27	333	100	1.50	0.93	275	108	1.50	0.93	167	126	1.50	0.92	137	132	1.50	0.91
9.16	5/27	371	95	1.50	0.93	306	103	1.50	0.93	186	122	1.50	0.92	153	129	1.50	0.91
7.99	5/27	425	90	1.50	0.93	350	98	1.50	0.93	213	118	1.50	0.92	175	124	1.50	0.92
7.00	5/27	486	84	1.50	0.94	400	92	1.50	0.93	243	113	1.50	0.93	200	120	1.50	0.92

S12

i	is	n1=900 1/min				n1=700 1/min				n1=500 1/min				n1=10 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
168.00	1/40	5.4	177	0.18	0.54	4.2	179	0.15	0.52	3.0	182	0.11	0.50	0.060	188	<0.05	0.42
143.53	1/40	6.3	175	0.21	0.55	4.9	178	0.17	0.53	3.5	181	0.13	0.51	0.070	188	<0.05	0.42
124.21	1/40	7.2	173	0.23	0.56	5.6	176	0.19	0.54	4.0	179	0.14	0.52	0.081	188	<0.05	0.42
108.57	1/40	8.3	171	0.26	0.57	6.4	175	0.21	0.55	4.6	178	0.16	0.53	0.092	188	<0.05	0.42
95.65	1/40	9.4	169	0.28	0.58	7.3	173	0.24	0.56	5.2	177	0.18	0.54	0.10	188	<0.05	0.42
84.80	1/40	11	167	0.31	0.60	8.3	171	0.26	0.57	5.9	176	0.20	0.54	0.12	188	<0.05	0.42
75.56	1/40	12	164	0.33	0.61	9.3	169	0.28	0.58	6.6	174	0.22	0.55	0.13	188	<0.05	0.42
67.83	1/40	13	162	0.36	0.62	10	167	0.30	0.60	7.4	173	0.24	0.56	0.15	188	<0.05	0.42
60.90	2/29	15	173	0.36	0.73	11	175	0.29	0.72	8.2	178	0.22	0.70	0.16	185	<0.05	0.63
59.20	1/40	15	159	0.40	0.63	12	164	0.33	0.61	8.4	171	0.26	0.57	0.17	188	<0.05	0.42
52.03	2/29	17	171	0.42	0.74	13	174	0.33	0.73	9.6	177	0.25	0.71	0.19	185	<0.05	0.63
51.85	1/40	17	155	0.44	0.64	14	161	0.37	0.62	9.6	169	0.29	0.59	0.19	188	<0.05	0.42
45.03	2/29	20	168	0.47	0.75	16	172	0.38	0.74	11	175	0.28	0.72	0.22	185	<0.05	0.63
39.36	2/29	23	166	0.52	0.76	18	170	0.43	0.74	13	174	0.32	0.73	0.25	185	<0.05	0.63
34.67	2/29	26	164	0.58	0.77	20	168	0.47	0.75	14	173	0.36	0.73	0.29	185	<0.05	0.63
30.74	2/29	29	161	0.63	0.78	23	166	0.52	0.76	16	171	0.39	0.74	0.33	185	<0.05	0.63
27.39	2/29	33	158	0.69	0.79	26	164	0.57	0.77	18	170	0.43	0.75	0.37	185	<0.05	0.63
24.59	2/29	37	156	0.74	0.80	28	162	0.62	0.78	20	168	0.48	0.75	0.41	185	<0.05	0.63
22.68	5/27	40	159	0.77	0.86	31	161	0.61	0.85	22	164	0.45	0.84	0.44	171	<0.05	0.79
21.46	2/29	42	152	0.83	0.81	33	158	0.68	0.79	23	166	0.53	0.76	0.47	185	<0.05	0.63
19.38	5/27	46	157	0.88	0.86	36	160	0.70	0.86	26	163	0.52	0.85	0.52	171	<0.05	0.79
18.80	2/29	48	148	0.91	0.82	37	155	0.75	0.80	27	163	0.59	0.77	0.53	185	<0.05	0.63
16.77	5/27	54	154	1.00	0.87	42	158	0.80	0.86	30	161	0.59	0.85	0.60	171	<0.05	0.79
14.66	5/27	61	152	1.12	0.88	48	156	0.90	0.87	34	160	0.67	0.85	0.68	171	<0.05	0.79
12.91	5/27	70	150	1.24	0.88	54	154	1.01	0.87	39	159	0.75	0.86	0.77	171	<0.05	0.79
11.45	5/27	79	147	1.36	0.89	61	152	1.11	0.88	44	157	0.83	0.86	0.87	171	<0.05	0.79
10.20	5/27	88	144	1.49	0.90	69	150	1.22	0.88	49	156	0.92	0.87	0.98	171	<0.05	0.79
9.16	5/27	98	142	1.50	0.90	76	148	1.33	0.89	55	154	1.01	0.87	1.1	171	<0.05	0.79
7.99	5/27	113	138	1.50	0.90	88	144	1.48	0.90	63	152	1.13	0.88	1.3	171	<0.05	0.79
7.00	5/27	129	134	1.50	0.91	100	141	1.50	0.90	71	149	1.26	0.88	1.4	171	<0.05	0.79

S22

i	is	n1=3400 1/min				n1=2800 1/min				n1=1700 1/min				n1=1400 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
207.20	1/42	16	280	0.70	0.69	14	290	0.61	0.68	8.2	310	0.42	0.63	6.8	315	0.37	0.61
177.88	1/42	19	275	0.78	0.70	16	285	0.68	0.69	9.6	305	0.47	0.64	7.9	310	0.41	0.62
154.74	1/42	22	265	0.86	0.71	18	275	0.75	0.70	11	300	0.52	0.66	9.0	305	0.46	0.64
136.00	1/42	25	260	0.94	0.72	21	270	0.82	0.71	13	295	0.57	0.67	10	300	0.50	0.65
120.52	1/42	28	250	1.02	0.73	23	265	0.89	0.72	14	290	0.63	0.68	12	295	0.54	0.67
107.52	1/42	32	245	1.09	0.74	26	255	0.96	0.73	16	285	0.68	0.69	13	295	0.59	0.68
96.44	1/42	35	235	1.16	0.75	29	250	1.04	0.73	18	280	0.74	0.70	15	290	0.64	0.68
87.65	1/42	39	230	1.23	0.75	32	245	1.10	0.74	19	275	0.79	0.71	16	285	0.69	0.69
77.28	1/42	44	220	1.33	0.76	36	235	1.18	0.75	22	265	0.86	0.71	18	275	0.75	0.70
71.53	2/29	48	260	1.54	0.84	39	270	1.34	0.83	24	295	0.94	0.78	20	305	0.81	0.77
68.44	1/42	50	210	1.43	0.76	41	225	1.27	0.75	25	260	0.93	0.72	20	270	0.82	0.71
61.41	2/29	55	250	1.71	0.84	46	260	1.50	0.83	28	290	1.05	0.80	23	295	0.91	0.78
61.25	1/42	56	200	1.52	0.77	46	215	1.36	0.76	28	255	1.01	0.73	23	265	0.88	0.72
53.42	2/29	64	240	1.88	0.85	52	250	1.65	0.84	32	280	1.16	0.81	26	290	1.01	0.79
53.31	1/42	64	190	1.64	0.77	53	205	1.48	0.76	32	245	1.10	0.74	26	255	0.97	0.73
46.95	2/29	72	230	2.05	0.85	60	245	1.80	0.84	36	275	1.27	0.82	30	285	1.11	0.80
41.61	2/29	82	220	2.22	0.85	67	235	1.95	0.85	41	270	1.39	0.83	34	280	1.20	0.82
37.12	2/29	92	215	2.38	0.86	75	225	2.11	0.85	46	260	1.50	0.83	38	275	1.31	0.82
33.30	2/29	102	205	2.53	0.86	84	220	2.26	0.85	51	255	1.62	0.84	42	265	1.42	0.83
30.26	2/29	112	196	2.67	0.86	93	210	2.40	0.86	56	250	1.73	0.84	46	260	1.51	0.83
26.68	2/29	127	185	2.84	0.87	105	200	2.57	0.86	64	240	1.88	0.85	52	250	1.65	0.84
26.64	5/27	128	250	3.00	0.92	105	265	3.00	0.91	64	290	2.17	0.89	53	295	1.85	0.89
23.63	2/29	144	174	3.00	0.87	118	191	2.74	0.86	72	230	2.04	0.85	59	245	1.79	0.84
22.87	5/27	149	240	3.00	0.92	122	255	3.00	0.92	74	280	2.45	0.90	61	290	2.10	0.89
21.15	2/29	161	166	3.00	0.87	132	181	2.89	0.87	80	225	2.20	0.85	66	235	1.93	0.85
19.89	5/27	171	230	3.00	0.93	141	245	3.00	0.92	85	275	2.72	0.91	70	285	2.34	0.90
18.40	2/29	185	154	3.00	0.88	152	170	3.00	0.87	92	210	2.39	0.86	76	225	2.12	0.85
17.49	5/27	194	220	3.00	0.93	160	235	3.00	0.92	97	270	2.99	0.91	80	280	2.59	0.90
15.50	5/27	219	215	3.00	0.93	181	225	3.00	0.93	110	260	3.00	0.91	90	270	2.83	0.91
13.82	5/27	246	205	3.00	0.94	203	220	3.00	0.93	123	255	3.00	0.92	101	265	3.00	0.91
12.40	5/27	274	194	3.00	0.94	226	210	3.00	0.93	137	245	3.00	0.92	113	260	3.00	0.91
11.27	5/27	302	187	3.00	0.94	248	205	3.00	0.94	151	240	3.00	0.92	124	255	3.00	0.92
9.94	5/27	342	176	3.0	0.94	282	192	3.0	0.94	171	231	3.0	0.93	141	244	3.0	0.92
8.80	5/27	386	166	3.0	0.94	318	183	3.0	0.94	193	222	3.0	0.93	159	236	3.0	0.92
7.88	5/27	432	158	3.0	0.94	356	173	3.0	0.94	216	214	3.0	0.93	178	228	3.0	0.93
6.85	5/27	496	146	3.0	0.94	409	162	3.0	0.94	248	203	3.0	0.94	204	218	3.0	0.93

S22

i	is	n1=900 1/min				n1=700 1/min				n1=500 1/min				n1=10 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
207.20	1/42	4.3	325	0.25	0.58	3.4	325	0.20	0.56	2.4	330	0.16	0.54	0.048	340	<0.05	0.48
177.88	1/42	5.1	320	0.29	0.59	3.9	325	0.23	0.57	2.8	330	0.18	0.55	0.056	340	<0.05	0.48
154.74	1/42	5.8	320	0.32	0.60	4.5	325	0.26	0.58	3.2	325	0.20	0.56	0.065	340	<0.05	0.48
136.00	1/42	6.6	315	0.36	0.61	5.1	320	0.29	0.59	3.7	325	0.22	0.57	0.074	340	<0.05	0.48
120.52	1/42	7.5	310	0.40	0.62	5.8	320	0.32	0.60	4.1	325	0.24	0.58	0.083	340	<0.05	0.48
107.52	1/42	8.4	310	0.43	0.63	6.5	315	0.36	0.61	4.7	320	0.27	0.58	0.093	340	<0.05	0.48
96.44	1/42	9.3	305	0.47	0.64	7.3	315	0.39	0.61	5.2	320	0.29	0.59	0.10	340	<0.05	0.48
87.65	1/42	10	300	0.50	0.65	8.0	310	0.42	0.62	5.7	320	0.32	0.60	0.11	340	<0.05	0.48
77.28	1/42	12	295	0.54	0.67	9.1	305	0.46	0.64	6.5	315	0.35	0.60	0.13	340	<0.05	0.48
71.53	2/29	13	315	0.56	0.75	9.8	320	0.45	0.73	7.0	325	0.34	0.71	0.14	340	<0.05	0.64
68.44	1/42	13	290	0.59	0.68	10	300	0.50	0.65	7.3	315	0.39	0.61	0.15	340	<0.05	0.48
61.41	2/29	15	310	0.63	0.75	11	315	0.51	0.74	8.1	325	0.38	0.72	0.16	340	<0.05	0.64
61.25	1/42	15	290	0.65	0.68	11	300	0.54	0.66	8.2	310	0.42	0.63	0.16	340	<0.05	0.48
53.42	2/29	17	310	0.71	0.76	13	315	0.58	0.75	9.4	320	0.43	0.73	0.19	340	<0.05	0.64
53.31	1/42	17	280	0.71	0.70	13	290	0.59	0.68	9.4	305	0.47	0.64	0.19	340	<0.05	0.48
46.95	2/29	19	305	0.79	0.77	15	310	0.64	0.76	11	320	0.48	0.74	0.21	340	<0.05	0.64
41.61	2/29	22	300	0.87	0.78	17	310	0.71	0.76	12	315	0.53	0.75	0.24	340	<0.05	0.64
37.12	2/29	24	295	0.95	0.79	19	305	0.78	0.77	13	315	0.59	0.75	0.27	340	<0.05	0.64
33.30	2/29	27	290	1.03	0.80	21	300	0.85	0.78	15	310	0.65	0.76	0.30	340	<0.05	0.64
30.26	2/29	30	285	1.10	0.80	23	295	0.92	0.78	17	310	0.70	0.76	0.33	340	<0.05	0.64
26.68	2/29	34	280	1.20	0.82	26	290	1.01	0.79	19	305	0.78	0.77	0.37	340	<0.05	0.64
26.64	5/27	34	310	1.25	0.87	26	315	1.00	0.87	19	305	0.71	0.84	0.38	285	<0.05	0.79
23.63	2/29	38	270	1.32	0.82	30	285	1.10	0.80	21	300	0.86	0.78	0.42	340	<0.05	0.64
22.87	5/27	39	305	1.44	0.88	31	305	1.13	0.87	22	300	0.81	0.85	0.44	280	<0.05	0.79
21.15	2/29	43	265	1.43	0.83	33	280	1.19	0.82	24	295	0.93	0.78	0.47	340	<0.05	0.64
19.89	5/27	45	300	1.63	0.88	35	305	1.28	0.87	25	300	0.92	0.86	0.50	275	<0.05	0.79
18.40	2/29	49	255	1.57	0.84	38	270	1.31	0.82	27	290	1.04	0.80	0.54	340	<0.05	0.64
17.49	5/27	51	300	1.82	0.88	40	300	1.43	0.88	29	295	1.02	0.87	0.57	270	<0.05	0.79
15.50	5/27	58	295	2.01	0.89	45	295	1.59	0.88	32	295	1.14	0.87	0.65	265	<0.05	0.79
13.82	5/27	65	290	2.20	0.89	51	290	1.74	0.88	36	285	1.24	0.88	0.72	260	<0.05	0.79
12.40	5/27	73	285	2.40	0.90	56	285	1.90	0.89	40	285	1.36	0.88	0.81	255	<0.05	0.79
11.27	5/27	80	280	2.58	0.90	62	290	2.12	0.89	44	305	1.60	0.88	0.89	315	<0.05	0.79
9.94	5/27	91	270	2.83	0.91	70	285	2.35	0.90	50	300	1.78	0.88	1.0	300	<0.05	0.79
8.80	5/27	102	265	3.00	0.91	80	280	2.58	0.90	57	295	1.97	0.89	1.1	290	<0.05	0.79
7.88	5/27	114	260	3.00	0.91	89	275	2.79	0.91	63	290	2.16	0.89	1.3	335	0.06	0.79
6.85	5/27	131	250	3.00	0.92	102	265	3.00	0.91	73	285	2.41	0.90	1.5	320	0.06	0.79

S32

i	is	n1=3400 1/min				n1=2800 1/min				n1=1700 1/min				n1=1400 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
271.60	1/42	13	545	1.03	0.69	10	565	0.91	0.67	6.3	600	0.63	0.62	5.2	610	0.54	0.61
234.71	1/42	14	530	1.14	0.70	12	550	0.99	0.69	7.2	590	0.71	0.63	6.0	605	0.61	0.62
205.58	1/42	17	515	1.25	0.71	14	535	1.09	0.70	8.3	580	0.78	0.65	6.8	595	0.68	0.63
182.00	1/42	19	500	1.35	0.72	15	520	1.19	0.71	9.3	570	0.85	0.66	7.7	585	0.74	0.64
162.52	1/42	21	485	1.45	0.73	17	510	1.28	0.72	10	560	0.91	0.67	8.6	580	0.80	0.65
146.16	1/42	23	470	1.55	0.74	19	495	1.37	0.72	12	550	0.98	0.69	9.6	570	0.86	0.66
132.22	1/42	26	455	1.65	0.74	21	480	1.46	0.73	13	540	1.05	0.69	11	560	0.92	0.67
120.52	1/42	28	440	1.75	0.75	23	470	1.54	0.74	14	530	1.12	0.70	12	550	0.98	0.69
107.52	1/42	32	425	1.87	0.75	26	455	1.66	0.74	16	520	1.21	0.71	13	540	1.06	0.70
96.44	1/42	35	405	1.98	0.76	29	440	1.78	0.75	18	505	1.30	0.72	15	530	1.14	0.70
87.50	1/42	39	390	2.08	0.77	32	425	1.88	0.75	19	495	1.38	0.73	16	515	1.22	0.71
77.54	1/42	44	375	2.21	0.77	36	400	2.00	0.76	22	475	1.49	0.73	18	500	1.32	0.72
68.25	1/42	50	350	2.35	0.78	41	385	2.14	0.77	25	460	1.62	0.74	21	485	1.43	0.73
59.77	1/42	57	330	2.52	0.78	47	360	2.27	0.78	28	440	1.76	0.75	23	465	1.55	0.74
52.50	1/42	65	310	2.66	0.79	53	340	2.44	0.78	32	420	1.89	0.75	27	450	1.69	0.74
52.21	3/32	65	530	4.00	0.89	54	555	3.53	0.88	33	615	2.47	0.85	27	635	2.12	0.84
46.22	3/32	74	510	4.00	0.89	61	540	3.86	0.89	37	605	2.70	0.86	30	625	2.33	0.85
41.28	3/32	82	490	4.00	0.90	68	520	4.00	0.89	41	590	2.93	0.87	34	615	2.54	0.86
37.12	3/32	92	475	4.00	0.90	75	505	4.00	0.89	46	575	3.14	0.88	38	600	2.75	0.86
33.58	3/32	101	455	4.00	0.90	83	490	4.00	0.90	51	565	3.38	0.88	42	590	2.95	0.87
30.61	3/32	111	440	4.00	0.90	91	475	4.00	0.90	56	550	3.63	0.88	46	575	3.14	0.88
27.31	3/32	125	420	4.00	0.91	103	455	4.00	0.90	62	535	3.93	0.89	51	560	3.42	0.88
24.49	3/32	139	400	4.00	0.91	114	435	4.00	0.90	69	515	4.00	0.89	57	545	3.70	0.88
22.44	5/29	151	445	4.00	0.94	125	470	4.00	0.93	76	535	4.00	0.91	62	530	3.84	0.90
22.22	3/32	153	385	4.00	0.91	126	420	4.00	0.91	77	505	4.00	0.89	63	535	3.96	0.89
20.18	5/29	168	425	4.00	0.94	139	455	4.00	0.93	84	525	4.00	0.92	69	525	4.00	0.91
19.69	3/32	173	360	4.00	0.92	142	395	4.00	0.91	86	485	4.00	0.90	71	515	4.00	0.89
18.26	5/29	186	410	4.00	0.94	153	440	4.00	0.94	93	510	4.00	0.92	77	515	4.00	0.91
17.33	3/32	196	335	4.00	0.92	162	375	4.00	0.91	98	460	4.00	0.90	81	495	4.00	0.89
16.64	5/29	204	395	4.00	0.94	168	425	4.00	0.94	102	500	4.00	0.92	84	525	4.00	0.92
15.18	3/32	224	315	4.00	0.92	184	345	4.00	0.92	112	440	4.00	0.90	92	470	4.00	0.90
14.85	5/29	229	380	4.00	0.94	189	410	4.00	0.94	114	485	4.00	0.93	94	510	4.00	0.92
13.33	3/32	255	290	4.00	0.92	210	325	4.00	0.92	128	415	4.00	0.91	105	450	4.00	0.90
13.32	5/29	255	360	4.00	0.94	210	395	4.00	0.94	128	470	4.00	0.93	105	495	4.00	0.92
12.08	5/29	281	340	4.00	0.94	232	375	4.00	0.94	141	455	4.00	0.93	116	485	4.00	0.93
10.71	5/29	318	320	4.00	0.95	261	355	4.00	0.94	159	435	4.00	0.94	131	465	4.00	0.93
9.43	5/29	361	300	4.00	0.95	297	335	4.00	0.94	180	415	4.00	0.94	149	445	4.00	0.93
8.25	5/29	412	280	4.00	0.95	339	310	4.00	0.95	206	395	4.00	0.94	170	425	4.00	0.94
7.25	5/29	469	260	4.00	0.95	386	290	4.00	0.95	234	375	4.00	0.94	193	405	4.00	0.94

S32

i	is	n1=900 1/min				n1=700 1/min				n1=500 1/min				n1=10 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
271.60	1/42	3.3	630	0.38	0.58	2.6	635	0.31	0.56	1.8	645	0.23	0.53	0.037	665	<0.05	0.48
234.71	1/42	3.8	625	0.42	0.59	3.0	635	0.35	0.57	2.1	640	0.26	0.54	0.043	665	<0.05	0.48
205.58	1/42	4.4	620	0.47	0.60	3.4	630	0.38	0.58	2.4	640	0.29	0.55	0.049	665	<0.05	0.48
182.00	1/42	4.9	615	0.52	0.61	3.8	625	0.42	0.59	2.7	635	0.32	0.56	0.055	665	<0.05	0.48
162.52	1/42	5.5	610	0.57	0.61	4.3	620	0.47	0.60	3.1	630	0.35	0.57	0.062	665	<0.05	0.48
146.16	1/42	6.2	600	0.62	0.62	4.8	615	0.51	0.60	3.4	630	0.38	0.59	0.068	665	<0.05	0.48
132.22	1/42	6.8	595	0.68	0.63	5.3	610	0.55	0.61	3.8	625	0.42	0.59	0.076	665	<0.05	0.48
120.52	1/42	7.5	590	0.72	0.64	5.8	605	0.60	0.62	4.1	620	0.45	0.60	0.083	665	<0.05	0.48
107.52	1/42	8.4	580	0.79	0.65	6.5	600	0.65	0.63	4.7	615	0.50	0.60	0.093	665	<0.05	0.48
96.44	1/42	9.3	570	0.85	0.66	7.3	590	0.71	0.63	5.2	610	0.54	0.61	0.10	665	<0.05	0.48
87.50	1/42	10	565	0.90	0.67	8.0	585	0.76	0.64	5.7	605	0.59	0.62	0.11	665	<0.05	0.48
77.54	1/42	12	550	0.98	0.69	9.0	575	0.83	0.66	6.4	600	0.65	0.62	0.13	665	<0.05	0.48
68.25	1/42	13	540	1.07	0.70	10	565	0.90	0.67	7.3	590	0.71	0.64	0.15	665	<0.05	0.48
59.77	1/42	15	525	1.17	0.71	12	550	0.98	0.69	8.4	580	0.79	0.65	0.17	665	<0.05	0.48
52.50	1/42	17	510	1.27	0.72	13	535	1.08	0.70	9.5	570	0.86	0.66	0.19	665	<0.05	0.48
52.21	3/32	17	665	1.46	0.83	13	680	1.17	0.82	9.6	695	0.88	0.79	0.19	730	<0.05	0.73
46.22	3/32	19	660	1.62	0.83	15	675	1.30	0.82	11	690	0.98	0.80	0.22	730	<0.05	0.73
41.28	3/32	22	650	1.78	0.83	17	665	1.43	0.83	12	685	1.08	0.81	0.24	730	<0.05	0.73
37.12	3/32	24	645	1.95	0.84	19	660	1.57	0.83	13	680	1.17	0.82	0.27	730	<0.05	0.73
33.58	3/32	27	635	2.12	0.84	21	655	1.72	0.83	15	675	1.28	0.82	0.30	730	<0.05	0.73
30.61	3/32	29	625	2.28	0.85	23	650	1.86	0.84	16	670	1.39	0.82	0.33	730	<0.05	0.73
27.31	3/32	33	615	2.49	0.85	26	640	2.04	0.84	18	665	1.53	0.83	0.37	730	<0.05	0.73
24.49	3/32	37	605	2.70	0.86	29	630	2.23	0.85	20	655	1.69	0.83	0.41	730	<0.05	0.73
22.44	5/29	40	525	2.47	0.89	31	520	1.92	0.88	22	510	1.37	0.87	0.45	475	<0.05	0.81
22.22	3/32	41	590	2.89	0.87	32	620	2.40	0.85	23	650	1.83	0.84	0.45	730	<0.05	0.73
20.18	5/29	45	515	2.68	0.89	35	510	2.09	0.89	25	505	1.49	0.88	0.50	465	<0.05	0.81
19.69	3/32	46	575	3.14	0.88	36	610	2.63	0.86	25	640	2.02	0.84	0.51	730	0.05	0.73
18.26	5/29	49	505	2.92	0.90	38	505	2.27	0.89	27	500	1.62	0.88	0.55	460	<0.05	0.81
17.33	3/32	52	560	3.45	0.88	40	595	2.89	0.87	29	630	2.24	0.85	0.58	730	0.06	0.73
16.64	5/29	54	575	3.62	0.90	42	595	2.94	0.89	30	615	2.19	0.88	0.60	565	<0.05	0.81
15.18	3/32	59	540	3.80	0.89	46	575	3.16	0.88	33	615	2.49	0.85	0.66	730	0.07	0.73
14.85	5/29	61	565	3.97	0.90	47	585	3.24	0.89	34	590	2.35	0.89	0.67	540	<0.05	0.81
13.33	3/32	68	520	4.00	0.89	53	560	3.48	0.88	38	600	2.74	0.86	0.75	730	0.08	0.73
13.32	5/29	68	550	4.00	0.91	53	580	3.54	0.90	38	575	2.55	0.89	0.75	525	0.05	0.81
12.08	5/29	74	540	4.00	0.91	58	570	3.83	0.90	41	595	2.90	0.89	0.83	645	0.07	0.81
10.71	5/29	84	525	4.00	0.92	65	555	4.00	0.91	47	590	3.22	0.89	0.93	625	0.08	0.81
9.43	5/29	95	510	4.00	0.92	74	540	4.00	0.91	53	575	3.57	0.90	1.1	660	0.09	0.81
8.25	5/29	109	490	4.00	0.93	85	525	4.00	0.92	61	565	3.96	0.90	1.2	625	0.10	0.81
7.25	5/29	124	475	4.00	0.93	97	510	4.00	0.92	69	550	4.00	0.91	1.4	595	0.11	0.81

S42

i	is	n1=3400 1/min				n1=2800 1/min				n1=1700 1/min				n1=1400 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
247.58	1/42	14	1140	2.28	0.72	11	1190	2.01	0.70	6.9	1320	1.46	0.65	5.7	1350	1.26	0.64
220.00	1/42	15	1100	2.46	0.73	13	1160	2.17	0.71	7.7	1290	1.59	0.66	6.4	1330	1.38	0.64
197.22	1/42	17	1070	2.62	0.74	14	1130	2.33	0.72	8.6	1270	1.71	0.67	7.1	1310	1.49	0.65
178.08	1/42	19	1030	2.78	0.74	16	1100	2.48	0.73	9.5	1240	1.82	0.68	7.9	1290	1.60	0.66
161.78	1/42	21	1000	2.94	0.75	17	1070	2.62	0.74	11	1220	1.93	0.69	8.7	1270	1.71	0.67
147.91	1/42	23	970	3.08	0.76	19	1040	2.76	0.74	11	1190	2.03	0.71	9.5	1250	1.81	0.68
132.72	1/42	26	935	3.28	0.76	21	1000	2.95	0.75	13	1160	2.18	0.71	11	1220	1.93	0.69
119.78	1/42	28	900	3.48	0.77	23	965	3.11	0.76	14	1130	2.33	0.72	12	1180	2.05	0.71
110.25	1/42	31	865	3.62	0.77	25	935	3.26	0.76	15	1110	2.45	0.73	13	1160	2.16	0.71
98.54	1/42	35	820	3.81	0.78	28	895	3.48	0.77	17	1070	2.62	0.74	14	1130	2.33	0.72
87.50	1/42	39	775	4.03	0.78	32	850	3.69	0.77	19	1030	2.81	0.75	16	1090	2.51	0.73
77.54	1/42	44	730	4.25	0.79	36	800	3.88	0.78	22	985	3.01	0.75	18	1050	2.68	0.74
69.00	1/42	49	685	4.46	0.79	41	760	4.11	0.78	25	945	3.20	0.76	20	1000	2.84	0.75
59.37	3/34	57	1150	7.5	0.91	47	1220	6.7	0.90	29	1260	4.32	0.87	24	1260	3.59	0.87
59.11	1/42	58	630	4.79	0.79	47	695	4.37	0.79	29	895	3.50	0.77	24	920	3.00	0.76
53.22	3/34	64	1110	7.5	0.91	53	1180	7.2	0.90	32	1340	5.1	0.88	26	1390	4.38	0.87
52.14	1/42	65	585	4.99	0.80	54	655	4.65	0.79	33	845	3.72	0.77	27	915	3.37	0.77
48.05	3/34	71	1070	7.5	0.91	58	1150	7.5	0.91	35	1310	5.5	0.89	29	1360	4.74	0.88
43.65	3/34	78	1040	7.5	0.91	64	1110	7.5	0.91	39	1280	5.8	0.89	32	1320	5.0	0.88
39.91	3/34	85	1000	7.5	0.91	70	1080	7.5	0.91	43	1250	6.2	0.90	35	1250	5.2	0.89
35.81	3/34	95	960	7.5	0.91	78	1040	7.5	0.91	47	1210	6.7	0.90	39	1250	5.7	0.89
32.48	5/31	105	895	7.5	0.94	86	890	7.5	0.93	52	875	5.3	0.91	43	870	4.32	0.91
32.32	3/34	105	925	7.5	0.91	87	995	7.5	0.91	53	1180	7.2	0.90	43	1200	6.1	0.90
29.75	3/34	114	890	7.5	0.92	94	965	7.5	0.91	57	1140	7.5	0.91	47	1140	6.2	0.90
29.11	5/31	117	890	7.5	0.94	96	885	7.5	0.93	58	870	5.8	0.92	48	865	4.78	0.91
26.59	3/34	128	840	7.5	0.92	105	925	7.5	0.91	64	1110	7.5	0.91	53	1140	7.0	0.90
26.29	5/31	129	880	7.5	0.94	107	875	7.5	0.94	65	865	6.3	0.92	53	855	5.2	0.92
23.88	5/31	142	875	7.5	0.95	117	870	7.5	0.94	71	855	6.9	0.92	59	850	5.7	0.92
23.61	3/34	144	790	7.5	0.92	119	875	7.5	0.92	72	1070	7.5	0.91	59	1080	7.4	0.91
21.83	5/31	156	860	7.5	0.95	128	930	7.5	0.94	78	1010	7.5	0.93	64	1010	7.3	0.92
20.92	3/34	163	740	7.5	0.93	134	820	7.5	0.92	81	1010	7.5	0.91	67	1010	7.5	0.91
19.59	5/31	174	825	7.5	0.95	143	890	7.5	0.95	87	1000	7.5	0.93	71	995	7.5	0.93
18.62	3/34	183	695	7.5	0.93	150	775	7.5	0.92	91	950	7.5	0.91	75	950	7.5	0.91
17.68	5/31	192	790	7.5	0.95	158	855	7.5	0.95	96	990	7.5	0.93	79	985	7.5	0.93
16.28	5/31	209	760	7.5	0.95	172	825	7.5	0.95	104	995	7.5	0.94	86	1050	7.5	0.93
15.95	3/34	213	640	7.5	0.93	176	705	7.5	0.93	107	885	7.5	0.91	88	885	7.5	0.91
14.55	5/31	234	715	7.5	0.95	192	790	7.5	0.95	117	960	7.5	0.94	96	1000	7.5	0.93
14.07	3/34	242	590	7.5	0.93	199	665	7.5	0.93	121	820	7.5	0.92	100	820	7.5	0.91
12.92	5/31	263	675	7.5	0.95	217	745	7.5	0.95	132	920	7.5	0.94	108	940	7.5	0.94
11.45	5/31	297	630	7.5	0.95	245	695	7.5	0.95	149	880	7.5	0.95	122	885	7.5	0.94
10.19	5/31	334	585	7.5	0.95	275	655	7.5	0.95	167	835	7.5	0.95	137	835	7.5	0.94
8.73	5/31	390	540	7.5	0.95	321	600	7.5	0.95	195	775	7.5	0.95	160	775	7.5	0.95
7.70	5/31	442	495	7.5	0.96	364	560	7.5	0.95	221	725	7.5	0.95	182	725	7.5	0.95

S42

i	is	n1=900 1/min				n1=700 1/min				n1=500 1/min				n1=10 1/min			
		n2 [1/min]	T2max [Nm]	P1max [kW]	h												
247.58	1/42	3.6	1410	0.88	0.61	2.8	1430	0.73	0.58	2.0	1460	0.56	0.55	0.040	1530	<0.05	0.48
220.00	1/42	4.1	1390	0.97	0.62	3.2	1420	0.80	0.59	2.3	1450	0.62	0.56	0.045	1530	<0.05	0.48
197.22	1/42	4.6	1380	1.06	0.62	3.5	1410	0.86	0.61	2.5	1440	0.67	0.57	0.051	1530	<0.05	0.48
178.08	1/42	5.1	1370	1.15	0.63	3.9	1400	0.94	0.61	2.8	1430	0.73	0.58	0.056	1530	<0.05	0.48
161.78	1/42	5.6	1350	1.24	0.63	4.3	1390	1.01	0.62	3.1	1420	0.78	0.59	0.062	1530	<0.05	0.48
147.91	1/42	6.1	1340	1.33	0.64	4.7	1380	1.09	0.62	3.4	1410	0.83	0.60	0.068	1530	<0.05	0.48
132.72	1/42	6.8	1320	1.44	0.65	5.3	1360	1.19	0.63	3.8	1400	0.90	0.61	0.075	1530	<0.05	0.48
119.78	1/42	7.5	1300	1.55	0.66	5.8	1340	1.29	0.64	4.2	1390	0.98	0.62	0.083	1530	<0.05	0.48
110.25	1/42	8.2	1280	1.65	0.67	6.3	1330	1.38	0.64	4.5	1380	1.05	0.62	0.091	1530	<0.05	0.48
98.54	1/42	9.1	1250	1.77	0.68	7.1	1310	1.49	0.65	5.1	1370	1.16	0.63	0.10	1530	<0.05	0.48
87.50	1/42	10	1220	1.91	0.69	8.0	1290	1.62	0.66	5.7	1350	1.27	0.64	0.11	1530	<0.05	0.48
77.54	1/42	12	1190	2.04	0.71	9.0	1260	1.76	0.68	6.4	1330	1.39	0.64	0.13	1530	<0.05	0.48
69.00	1/42	13	1000	1.91	0.72	10	1000	1.54	0.69	7.2	1000	1.16	0.65	0.14	1000	<0.05	0.48
59.37	3/34	15	1260	2.34	0.85	12	1260	1.85	0.84	8.4	1260	1.36	0.81	0.17	1260	<0.05	0.76
59.11	1/42	15	920	2.02	0.73	12	920	1.61	0.71	8.5	920	1.22	0.67	0.17	920	<0.05	0.48
53.22	3/34	17	1460	3.03	0.86	13	1470	2.39	0.85	9.4	1430	1.71	0.82	0.19	1320	<0.05	0.76
52.14	1/42	17	1070	2.62	0.74	13	1150	2.25	0.72	9.6	1240	1.83	0.68	0.19	1530	0.06	0.48
48.05	3/34	19	1450	3.31	0.86	15	1460	2.61	0.85	10	1420	1.86	0.83	0.21	1300	<0.05	0.76
43.65	3/34	21	1320	3.31	0.86	16	1320	2.59	0.85	11	1320	1.89	0.84	0.23	1280	<0.05	0.76
39.91	3/34	23	1250	3.41	0.87	18	1250	2.68	0.86	13	1250	1.94	0.84	0.25	1250	<0.05	0.76
35.81	3/34	25	1250	3.78	0.87	20	1250	2.97	0.86	14	1250	2.15	0.85	0.28	1250	<0.05	0.76
32.48	5/31	28	865	2.78	0.90	22	855	2.16	0.89	15	835	1.54	0.87	0.31	795	<0.05	0.83
32.32	3/34	28	1200	4.00	0.87	22	1200	3.15	0.86	15	1200	2.28	0.85	0.31	1200	0.05	0.76
29.75	3/34	30	1140	4.12	0.88	24	1140	3.24	0.87	17	1140	2.34	0.86	0.34	1140	0.05	0.76
29.11	5/31	31	855	3.07	0.90	24	855	2.39	0.90	17	835	1.71	0.88	0.34	790	<0.05	0.83
26.59	3/34	34	1140	4.57	0.88	26	1140	3.61	0.87	19	1140	2.61	0.86	0.38	1140	0.06	0.76
26.29	5/31	34	845	3.36	0.91	27	845	2.61	0.90	19	825	1.86	0.88	0.38	775	<0.05	0.83
23.88	5/31	38	840	3.65	0.91	29	835	2.84	0.90	21	820	2.03	0.89	0.42	765	<0.05	0.83
23.61	3/34	38	1080	4.84	0.89	30	1080	3.82	0.88	21	1080	2.78	0.86	0.42	1080	0.06	0.76
21.83	5/31	41	995	4.71	0.91	32	985	3.67	0.90	23	980	2.62	0.90	0.46	905	0.05	0.83
20.92	3/34	43	1010	5.1	0.90	33	1010	4.01	0.88	24	1010	2.91	0.87	0.48	1010	0.07	0.76
19.59	5/31	46	985	5.2	0.91	36	975	4.03	0.91	26	970	2.88	0.90	0.51	895	0.06	0.83
18.62	3/34	48	950	5.3	0.90	38	950	4.20	0.89	27	950	3.06	0.87	0.54	950	0.07	0.76
17.68	5/31	51	970	5.6	0.91	40	960	4.39	0.91	28	955	3.14	0.90	0.57	880	0.06	0.83
16.28	5/31	55	1180	7.5	0.92	43	1230	6.1	0.91	31	1240	4.42	0.90	0.61	1140	0.09	0.83
15.95	3/34	56	885	5.8	0.91	44	885	4.52	0.90	31	885	3.30	0.88	0.63	885	0.08	0.76
14.55	5/31	62	1000	7.0	0.92	48	1000	5.5	0.91	34	1000	3.98	0.91	0.69	1000	0.09	0.83
14.07	3/34	64	820	6.0	0.91	50	820	4.73	0.90	36	820	3.44	0.89	0.71	820	0.08	0.76
12.92	5/31	70	940	7.4	0.92	54	940	5.8	0.92	39	940	4.20	0.91	0.77	940	0.09	0.83
11.45	5/31	79	885	7.5	0.93	61	885	6.2	0.92	44	885	4.45	0.91	0.87	885	0.10	0.83
10.19	5/31	88	835	7.5	0.93	69	835	6.5	0.92	49	835	4.70	0.91	0.98	835	0.10	0.83
8.73	5/31	103	775	7.5	0.94	80	775	7.0	0.93	57	775	5.1	0.92	1.1	775	0.11	0.83

Selection table - Geared motors

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.12 kW						0.12 kW						0.18 kW						0.25 kW					
S32G12A DM63K4					32	S02A DM63K4					7	S22A DM63G4					16	S42G22A DM71K4					53
S32G12B DM63K4					32	S02B DM63K4					7	S22B DM63G4					16	S42G22B DM71K4					53
S32G12C DM63K4					34	S02C DM63K4					8	S22C DM63G4					18	S42G22C DM71K4					56
1.5	390	1.65	895.82			7.3	74	0.80	189.00			6.7	157	2.0	207.20			1.5	840	1.75	934.35		
1.7	350	1.85	798.16			8.7	64	0.90	159.35			7.8	137	2.3	177.88			1.7	760	1.95	838.10		
1.9	320	2.0	716.51			10	56	1.00	135.95			8.9	122	2.5	154.74			1.9	700	2.1	761.70		
2.2	285	2.3	625.38			12	49	1.15	117.00			10	110	2.8	136.00			2.1	630	2.3	671.56		
2.5	255	2.5	547.76			14	44	1.25	101.35			11	100	3.0	120.52			2.4	565	2.6	594.78		
2.8	230	2.7	492.61			16	39	1.35	88.20			S12G02A DM63G4					16	2.6	520	2.8	536.78		
3.1	215	3.0	445.64			18	35	1.50	77.00			S12G02B DM63G4					16	2.9	485	2.9	494.08		
S22G12A DM63K4					21	20	39	1.75	69.00			S12G02C DM63G4					17	S32G12A DM71K4					34
S22G12B DM63K4					21	24	34	2.0	58.18			4.2	215	0.85	330.65			S32G12B DM71K4					34
S22G12C DM63K4					23	28	29	2.3	49.63			4.7	194	0.90	293.14			S32G12C DM71K4					36
1.5	395	0.85	925.37			32	26	2.5	42.71			5.3	175	1.00	261.18			1.6	795	0.80	895.82		
1.6	365	0.90	850.54			37	22	2.8	37.00			5.9	159	1.10	234.46			1.8	715	0.90	798.16		
1.8	325	1.00	749.33			43	20	3.0	32.20			6.7	141	1.25	204.64			2.0	650	1.00	716.51		
2.1	290	1.15	664.32			49	17	3.3	28.11			7.7	126	1.35	179.24			2.3	580	1.10	625.38		
2.3	265	1.25	591.90			55	17	3.6	25.00			S12A DM63G4					11	2.6	515	1.25	547.76		
2.6	240	1.40	531.34			65	15	4.1	21.08			S12B DM63G4					11	2.9	475	1.35	492.61		
3.0	215	1.55	463.77			77	13	4.7	17.98			S12C DM63G4					12	3.2	435	1.45	445.64		
3.4	191	1.70	406.20			89	11	5.2	15.48			8.2	119	1.45	168.00			3.5	405	1.55	406.20		
3.8	172	1.90	362.38			103	9.6	5.7	13.41			9.6	105	1.60	143.53			3.9	365	1.70	362.38		
4.2	156	2.1	325.05			110	9.3	7.2	12.50			11	93	1.75	124.21			4.3	330	1.90	325.05		
4.7	143	2.3	295.42			118	8.4	6.3	11.67			13	84	1.95	108.57			4.8	300	2.0	294.91		
5.3	128	2.5	260.46			131	7.9	8.2	10.54			14	75	2.1	95.65			5.4	270	2.2	261.33		
6.0	115	2.8	230.68			135	7.4	7.0	10.19			16	67	2.3	84.80			6.1	240	2.5	230.03		
S12G02A DM63K4					15	153	6.8	9.3	8.99			18	61	2.5	75.56			S32A DM71K4					29
S12G02B DM63K4					15	178	5.9	10	7.74			20	56	2.7	67.83			S32B DM71K4					29
S12G02C DM63K4					16	206	5.1	12	6.70			23	58	2.9	60.90			S32C DM71K4					31
2.5	225	0.80	561.65			237	4.5	13	5.83			23	50	3.0	59.20			5.2	280	2.2	271.60		
2.8	200	0.90	490.22			271	3.9	14	5.09			S02A DM63G4					8	6.0	245	2.5	234.71		
3.2	180	1.00	429.37			0.18 kW						S02B DM63G4					8	6.9	220	2.7	205.58		
3.7	161	1.10	375.31			S32G12A DM63G4					32	S02C DM63G4					9	7.7	197	3.0	182.00		
4.2	144	1.25	330.65			S32G12B DM63G4					32	14	66	0.85	101.35			S22G12A DM71K4					23
4.7	129	1.40	293.14			S32G12C DM63G4					34	16	59	0.90	88.20			S22G12B DM71K4					23
5.3	117	1.50	261.18			1.5	585	1.10	895.82			18	53	1.00	77.00			S22G12C DM71K4					25
5.9	106	1.65	234.46			1.7	525	1.25	798.16			20	58	1.20	69.00			3.5	390	0.85	406.20		
6.7	94	1.85	204.64			1.9	480	1.35	716.51			24	50	1.35	58.18			3.9	350	0.90	362.38		
7.7	84	2.0	179.24			2.2	425	1.50	625.38			28	44	1.50	49.63			4.3	320	1.00	325.05		
S12A DM63K4					11	2.5	380	1.70	547.76			32	38	1.70	42.71			4.8	290	1.10	295.42		
S12B DM63K4					11	2.8	345	1.85	492.61			37	34	1.85	37.00			5.4	260	1.20	260.46		
S12C DM63K4					12	3.1	320	2.00	445.64			43	30	2.0	32.20			6.1	235	1.35	230.68		
8.2	80	2.2	168.00			3.4	295	2.1	406.20			49	26	2.2	28.11			6.8	215	1.50	206.44		
9.6	70	2.4	143.53			3.8	270	2.3	362.38			55	26	2.4	25.00			7.8	189	1.65	179.67		
11	62	2.7	124.21			4.2	240	2.6	325.05			65	22	2.8	21.08			S22A DM71K4					18
13	56	2.9	108.57			4.7	220	2.8	294.91			77	19	3.1	17.98			S22B DM71K4					18
						S22G12A DM63G4					21	89	17	3.4	15.48			S22C DM71K4					20
						S22G12B DM63G4					21	103	14	3.8	13.41			6.8	215	1.45	207.20		
						S22G12C DM63G4					23	110	14	4.8	12.50			7.9	187	1.65	177.88		
						2.3	395	0.85	591.90			118	13	4.2	11.67			9.1	167	1.85	154.74		
						2.6	360	0.90	531.34			131	12	5.5	10.54			10	150	2.0	136.00		
						3.0	320	1.05	463.77			135	11	4.6	10.19			12	136	2.2	120.52		
						3.4	285	1.15	406.20			153	10	6.2	8.99			13	123	2.4	107.52		
						3.8	260	1.25	362.38			178	8.9	6.9	7.74			15	112	2.6	96.44		
						4.2	235	1.40	325.05			206	7.7	7.7	6.70			16	103	2.8	87.65		
						4.7	215	1.50	295.42			237	6.7	8.6	5.83			18	92	3.0	77.28		
						5.3	192	1.65	260.46			271	5.9	9.4	5.09			S12G02A DM71K4					17
						6.0	172	1.85	230.68			S12G02B DM71K4					17	S12G02C DM71K4					18
						6.7	156	2.0	206.44			6.0	215	0.80	234.46			6.0	215	0.80	234.46		
						7.7	139	2.2	179.67			6.9	193	0.90	204.64			6.9	193	0.90	204.64		
												7.9	172	1.00	179.24			7.9	172	1.00	179.24		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.25 kW					
S12A DM71K4					13
S12B DM71K4					13
S12C DM71K4					14
8.4	163	1.05	168.00		
9.8	143	1.15	143.53		
11	128	1.30	124.21		
13	114	1.40	108.57		
15	102	1.55	95.65		
17	92	1.70	84.80		
19	83	1.85	75.56		
21	76	2.00	67.83		
23	79	2.1	60.90		
24	68	2.2	59.20		
27	68	2.4	52.03		
27	60	2.4	51.85		
31	60	2.6	45.03		
36	53	2.9	39.36		
S02A DM71K4					9
S02B DM71K4					9
S02C DM71K4					10
20	80	0.85	69.00		
24	69	1.00	58.18		
28	60	1.10	49.63		
33	52	1.20	42.71		
38	46	1.35	37.00		
44	40	1.50	32.20		
50	36	1.65	28.11		
56	35	1.75	25.00		
67	30	2.0	21.08		
78	26	2.3	17.98		
91	23	2.5	15.48		
105	20	2.8	13.41		
113	19	3.5	12.50		
121	17	3.1	11.67		
134	16	4.0	10.54		
138	15	3.4	10.19		
157	14	4.5	8.99		
182	12	5.0	7.74		
210	10	5.6	6.70		
242	9.1	6.3	5.83		
277	8.0	6.9	5.09		
0.37 kW					
S42G22A DM71G4					54
S42G22B DM71G4					54
S42G22C DM71G4					57
1.5	1240	1.20	934.35		
1.7	1130	1.30	838.10		
1.9	1040	1.40	761.70		
2.1	930	1.55	671.56		
2.4	840	1.75	594.78		
2.6	770	1.85	536.78		
2.9	720	2.00	494.08		
3.2	660	2.2	441.60		
3.6	600	2.3	392.13		
4.1	535	2.6	347.49		
4.6	480	2.9	309.22		
S32G12A DM71G4					35
S32G12B DM71G4					35
S32G12C DM71G4					37
2.6	765	0.85	547.76		
2.9	700	0.90	492.61		
3.2	645	1.00	445.64		
3.5	595	1.05	406.20		
3.9	540	1.15	362.38		
4.3	490	1.25	325.05		
4.8	445	1.40	294.91		
5.4	400	1.50	261.33		
6.1	360	1.70	230.03		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
S32A DM71G4					30
S32B DM71G4					30
S32C DM71G4					32
5.2	415	1.45	271.60		
6.0	365	1.65	234.71		
6.9	325	1.85	205.58		
7.7	290	2.0	182.00		
8.7	265	2.2	162.52		
9.6	245	2.3	146.16		
11	225	2.5	132.22		
12	210	2.6	120.52		
13	188	2.9	107.52		
S22G12A DM71G4					24
S22G12B DM71G4					24
S22G12C DM71G4					26
5.4	385	0.85	260.46		
6.1	345	0.90	230.68		
6.8	315	1.00	206.44		
7.8	280	1.10	179.67		
S22A DM71G4					19
S22B DM71G4					19
S22C DM71G4					21
6.8	315	1.00	207.20		
7.9	275	1.10	177.88		
9.1	245	1.25	154.74		
10	220	1.35	136.00		
12	200	1.45	120.52		
13	182	1.60	107.52		
15	165	1.75	96.44		
16	152	1.85	87.65		
18	136	2.0	77.28		
20	138	2.2	71.53		
21	122	2.2	68.44		
23	120	2.5	61.41		
26	106	2.7	53.42		
30	95	3.0	46.95		
S12A DM71G4					14
S12B DM71G4					14
S12C DM71G4					15
9.8	210	0.80	143.53		
11	189	0.85	124.21		
13	169	0.95	108.57		
15	151	1.05	95.65		
17	136	1.15	84.80		
19	123	1.25	75.56		
21	112	1.35	67.83		
23	116	1.45	60.90		
24	100	1.45	59.20		
27	101	1.60	52.03		
27	89	1.60	51.85		
31	89	1.80	45.03		
36	79	2.00	39.36		
41	70	2.2	34.67		
46	63	2.4	30.74		
51	56	2.6	27.39		
57	51	2.8	24.59		
62	50	3.0	22.68		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.37 kW					
S02A DM71G4					10
S02B DM71G4					10
S02C DM71G4					11
33	77	0.85	42.71		
38	68	0.90	37.00		
44	60	1.00	32.20		
50	53	1.10	28.11		
56	52	1.20	25.00		
67	45	1.35	21.08		
78	38	1.55	17.98		
91	33	1.70	15.48		
105	29	1.90	13.41		
113	28	2.4	12.50		
121	25	2.1	11.67		
134	24	2.7	10.54		
138	22	2.3	10.19		
157	21	3.1	8.99		
182	18	3.4	7.74		
210	15	3.8	6.70		
242	13	4.2	5.83		
277	12	4.7	5.09		
0.55 kW					
S42G22A DM80K4					56
S42G22B DM80K4					56
S42G22C DM80K4					59
1.5	1850	0.80	934.35		
1.7	1680	0.90	838.10		
1.8	1550	0.95	761.70		
2.1	1390	1.05	671.56		
2.4	1250	1.15	594.78		
2.6	1150	1.25	536.78		
2.8	1070	1.35	494.08		
3.2	980	1.45	441.60		
3.6	895	1.55	392.13		
4.0	800	1.75	347.49		
4.5	720	1.90	309.22		
5.3	625	2.2	264.91		
S42A DM80K4					50
S42B DM80K4					50
S42C DM80K4					53
5.7	590	2.3	247.58		
6.4	530	2.5	220.00		
7.1	480	2.7	197.22		
7.9	440	2.9	178.08		
S32G12A DM80K4					37
S32G12B DM80K4					37
S32G12C DM80K4					39
4.3	730	0.85	325.05		
4.8	665	0.90	294.91		
5.4	600	1.00	261.33		
6.1	535	1.15	230.03		
S32A DM80K4					32
S32B DM80K4					32
S32C DM80K4					34
6.8	485	1.25	205.58		
7.7	435	1.35	182.00		
8.6	395	1.45	162.52		
9.6	360	1.55	146.16		
11	335	1.70	132.22		
12	310	1.80	120.52		
13	280	1.95	107.52		
15	255	2.1	96.44		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.55 kW					
S22A DM80K4					21
S22B DM80K4					21
S22C DM80K4					23
9.1	370	0.85	154.74		
10	330	0.90	136.00		
12	300	1.00	120.52		
13	270	1.10	107.52		
15	245	1.15	96.44		
16	225	1.25	87.65		
18	205	1.35	77.28		
21	181	1.50	68.44		
26	158	1.85	53.42		
30	141	2.0	46.95		
34	127	2.2	41.61		
38	114	2.4	37.12		
42	103	2.6	33.30		
46	94	2.8	30.26		
53	84	3.0	26.68		
S12A DM80K4					16
S12B DM80K4					16
S12C DM80K4					17
19	183	0.85	75.56		
21	167	0.90	67.83		
24	149	1.00	59.20		
27	132	1.05	51.85		
31	133	1.20	45.03		
36	118	1.30	39.36		
41	105	1.45	34.67		
46	93	1.60	30.74		
51	84	1.75	27.39		
57	76	1.90	24.59		
65	66	2.1	21.46		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
S42A DM80GC4 IE2					51
S42B DM80GC4 IE2					51
S42C DM80GC4 IE2					55
5.7	800	1.70	247.58		
6.4	720	1.85	220.00		
7.1	655	2.0	197.22		
7.9	600	2.1	178.08		
8.7	550	2.3	161.78		
9.5	510	2.4	147.91		
11	470	2.6	132.72		
12	430	2.7	119.78		
S32G12A DM80GC4 IE2					38
S32G12B DM80GC4 IE2					38
S32G12C DM80GC4 IE2					40
6.1	725	0.85	230.03		
S32A DM80GC4 IE2					33
S32B DM80GC4 IE2					33
S32C DM80GC4 IE2					35
6.9	655	0.90	205.58		
7.7	590	1.00	182.00		
8.7	540	1.10	162.52		
9.6	490	1.15	146.16		
11	455	1.25	132.22		
12	420	1.30	120.52		
13	380	1.40	107.52		
15	345	1.55	96.44		
27	225	2.8	52.21		
S22A DM80GC4 IE2					22
S22B DM80GC4 IE2					22
S22C DM80GC4 IE2					24
13	370	0.80	107.52		
15	335	0.85	96.44		
16	310	0.90	87.65		
18	275	1.00	77.28		
21	245	1.10	68.44		
26	215	1.35	53.42		
30	192	1.50	46.95		
34	173	1.60	41.61		
38	155	1.75	37.12		
42	140	1.90	33.30		
47	128	2.0	30.26		
53	114	2.2	26.68		
60	101	2.4	23.63		
S12A DM80GC4 IE2					17
S12B DM80GC4 IE2					17
S12C DM80GC4 IE2					18
27	180	0.80	51.85		
31	181	0.90	45.03		
36	160	0.95	39.36		
41	142	1.10	34.67		
46	127	1.20	30.74		
51	114	1.30	27.39		
57	103	1.40	24.59		
66	90	1.55	21.46		
75	80	1.65	18.80		
84	76	1.90	16.77		
96	67	2.1	14.66		
109	59	2.3	12.91		
123	53	2.6	11.45		
138	47	2.8	10.20		
154	42	3.0	9.16		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
S02A DM80GC4 IE2					14
S02B DM80GC4 IE2					14
S02C DM80GC4 IE2					15
91	68	0.85	15.48		
105	59	0.95	13.41		
121	52	1.05	11.67		
138	45	1.15	10.19		
157	42	1.50	8.99		
182	36	1.70	7.74		
210	31	1.90	6.70		
242	27	2.1	5.83		
277	24	2.3	5.09		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
S42G22A DM90L4 IE2					62
S42G22B DM90L4 IE2					62
S42G22C DM90L4 IE2					66
3.6	1780	0.80	392.13		
3.7	1750	0.80	384.81		
4.1	1590	0.90	347.49		
4.1	1570	0.90	343.94		
4.6	1430	0.95	309.22		
4.6	1410	1.00	305.41		
5.2	1270	1.10	270.64		
5.3	1240	1.10	264.91		
5.9	1140	1.20	240.84		
S42A DM90L4 IE2					57
S42B DM90L4 IE2					57
S42C DM90L4 IE2					60
6.4	1050	1.25	220.00		
7.2	955	1.35	197.22		
7.9	875	1.45	178.08		
8.7	805	1.55	161.78		
9.6	750	1.65	147.91		
11	685	1.75	132.72		
12	630	1.85	119.78		
13	585	2.00	110.25		
14	530	2.1	98.54		
16	475	2.3	87.50		
18	425	2.5	77.54		
S32A DM90L4 IE2					38
S32B DM90L4 IE2					38
S32C DM90L4 IE2					40
9.7	720	0.80	146.16		
11	665	0.85	132.22		
12	615	0.90	120.52		
13	555	0.95	107.52		
15	505	1.05	96.44		
16	460	1.10	87.50		
18	415	1.20	77.54		
21	370	1.30	68.25		
24	330	1.40	59.77		
31	290	2.1	46.22		
34	265	2.3	41.28		
38	240	2.5	37.12		
42	215	2.7	33.58		
46	200	2.9	30.61		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
S22A DM90L4 IE2					28
S22B DM90L4 IE2					28
S22C DM90L4 IE2					30
23	325	0.80	61.25		
27	290	0.90	53.31		
30	280	1.00	46.95		
34	255	1.10	41.61		
38	225	1.20	37.12		
42	205	1.30	33.30		
47	187	1.40	30.26		
53	167	1.50	26.68		
60	148	1.65	23.63		
67	133	1.75	21.15		
77	116	1.95	18.40		
81	117	2.4	17.49		
91	105	2.6	15.50		
102	94	2.8	13.82		
S12A DM90L4 IE2					22
S12B DM90L4 IE2					22
S12C DM90L4 IE2					23
46	186	0.80	30.74		
52	167	0.90	27.39		
58	150	0.95	24.59		
66	132	1.05	21.46		
75	116	1.15	18.80		
97	98	1.45	14.66		
110	87	1.60	12.91		
124	77	1.75	11.45		
139	69	1.90	10.20		
155	62	2.1	9.16		
177	54	2.3	7.99		
202	48	2.5	7.00		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
S42G22A DM100L4 IE2					68
S42G22B DM100L4 IE2					68
S42G22C DM100L4 IE2					72
5.2	1730	0.80	270.64		
5.3	1700	0.80	264.91		
5.9	1560	0.85	240.84		
S42A DM100L4 IE2					62
S42B DM100L4 IE2					62
S42C DM100L4 IE2					65
6.4	1440	0.90	220.00		
7.1	1310	1.00	197.22		
7.9	1200	1.05	178.08		
8.7	1100	1.15	161.78		
9.5	1020	1.20	147.91		
11	935	1.30	132.72		
12	860	1.35	119.78		
13	800	1.45	110.25		
14	725	1.55	98.54		
16	650	1.70	87.50		
18	585	1.80	77.54		
20	525	1.90	69.00		
24	525	2.4	59.37		
26	470	2.9	53.22		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.5 kW					
S32A DM100L4 IE2					45
S32B DM100L4 IE2					45
S32C DM100L4 IE2					47
16	630	0.80	87.50		
18	570	0.90	77.54		
21	505	0.95	68.25		
24	450	1.05	59.77		
27	395	1.15	52.50		
31	400	1.55	46.22		
34	360	1.70	41.28		
38	325	1.85	37.12		
42	295	2.00	33.58		
46	275	2.1	30.61		
52	245	2.3	27.31		
58	220	2.5	24.49		
63	205	2.6	22.44		
63	200	2.7	22.22		
70	186	2.8	20.18		
72	178	2.9	19.69		
S22A DM100L4 IE2					34
S22B DM100L4 IE2					34
S22C DM100L4 IE2					36
34	345	0.80	41.61		
38	310	0.90	37.12		
42	280	0.95	33.30		
47	255	1.00	30.26		
53	230	1.10	26.68		
60	205	1.20	23.63		
67	182	1.30	21.15		
77	159	1.40	18.40		
81	160	1.75	17.49		
91	143	1.90	15.50		
102	128	2.1	13.82		
114	115	2.2	12.40		
125	105	2.4	11.27		
142	93	2.6	9.94		
160	83	2.9	8.80		
S12A DM100L4 IE2					29
S12B DM100L4 IE2					29
S12C DM100L4 IE2					30
75	159	0.85			

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
2.2 kW					
S42A DM100LX4 IE2					65
S42B DM100LX4 IE2					65
S42C DM100LX4 IE2					68
8.7	1620	0.80	161.78		
9.5	1500	0.85	147.91		
11	1370	0.90	132.72		
12	1260	0.95	119.78		
13	1170	1.00	110.25		
14	1060	1.05	98.54		
16	955	1.15	87.50		
18	855	1.25	77.54		
20	770	1.30	69.00		
26	690	2.0	53.22		
29	625	2.2	48.05		
32	575	2.3	43.65		
35	525	2.4	39.91		
39	475	2.6	35.81		
44	435	2.8	32.32		
47	400	2.9	29.75		
48	395	2.2	29.11		
53	360	3.2	26.59		
54	360	2.4	26.29		
59	325	2.6	23.88		
S32A DM100LX4 IE2					48
S32B DM100LX4 IE2					48
S32C DM100LX4 IE2					50
34	525	1.15	41.28		
38	480	1.25	37.12		
42	435	1.35	33.58		
46	400	1.45	30.61		
52	360	1.55	27.31		
58	325	1.70	24.49		
63	300	1.75	22.44		
63	295	1.80	22.22		
70	275	1.90	20.18		
72	260	1.95	19.69		
77	250	2.1	18.26		
81	230	2.1	17.33		
85	230	2.3	16.64		
93	205	2.3	15.18		
95	205	2.5	14.85		
106	179	2.5	13.33		
106	183	2.7	13.32		
117	167	2.9	12.08		
S22A DM100LX4 IE2					37
S22B DM100LX4 IE2					37
S22C DM100LX4 IE2					39
60	295	0.80	23.63		
67	265	0.90	21.15		
77	235	0.95	18.40		
91	210	1.30	15.50		
102	188	1.40	13.82		
114	169	1.55	12.40		
125	154	1.65	11.27		
142	136	1.80	9.94		
160	121	1.95	8.80		
179	109	2.1	7.88		
206	95	2.3	6.85		

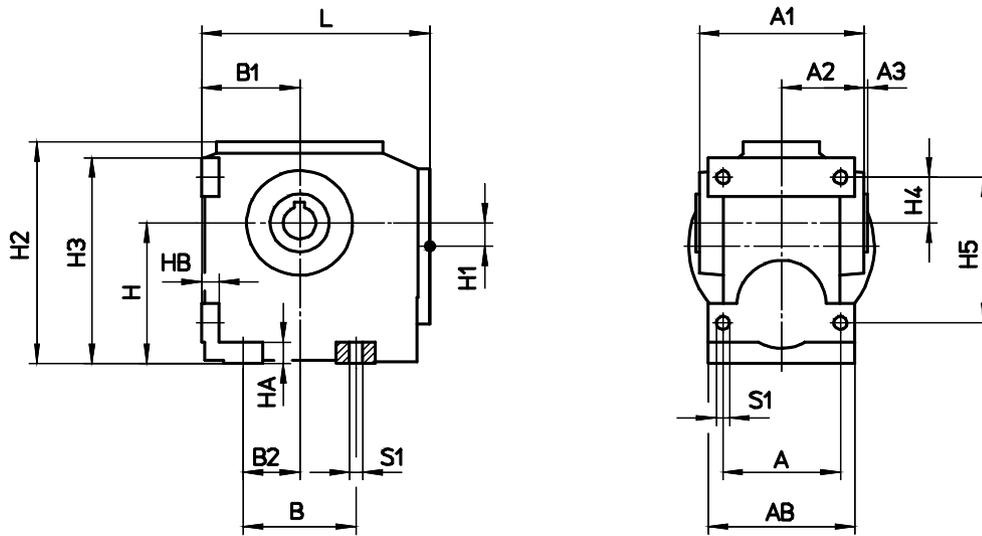
Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
S42A DM112M4 IE2					71
S42B DM112M4 IE2					71
S42C DM112M4 IE2					75
14	1450	0.80	98.54		
16	1300	0.85	87.50		
18	1170	0.90	77.54		
20	1050	0.95	69.00		
26	940	1.45	53.22		
29	855	1.60	48.05		
32	780	1.70	43.65		
35	720	1.75	39.91		
39	650	1.95	35.81		
44	590	2.0	32.32		
47	545	2.1	29.75		
48	540	1.60	29.11		
53	490	2.3	26.59		
54	490	1.75	26.29		
59	445	1.90	23.88		
60	435	2.5	23.61		
65	410	2.5	21.83		
67	385	2.6	20.92		
72	370	2.7	19.59		
76	345	2.8	18.62		
80	335	2.9	17.68		
S32A DM112M4 IE2					54
S32B DM112M4 IE2					54
S32C DM112M4 IE2					56
34	720	0.85	41.28		
38	650	0.90	37.12		
42	595	1.00	33.58		
46	545	1.05	30.61		
52	490	1.15	27.31		
58	440	1.25	24.49		
63	410	1.30	22.44		
63	400	1.35	22.22		
70	375	1.40	20.18		
72	355	1.45	19.69		
77	340	1.55	18.26		
81	315	1.55	17.33		
85	310	1.70	16.64		
93	275	1.70	15.18		
95	280	1.85	14.85		
106	245	1.85	13.33		
106	250	2.00	13.32		
117	230	2.1	12.08		
132	200	2.3	10.71		
150	179	2.5	9.43		
171	158	2.7	8.25		
194	138	2.9	7.25		
S22A DM112M4 IE2					43
S22B DM112M4 IE2					43
S22C DM112M4 IE2					45
91	285	0.95	15.50		
102	255	1.05	13.82		
114	230	1.10	12.40		
125	210	1.20	11.27		
142	186	1.30	9.94		
160	165	1.45	8.80		
179	149	1.55	7.88		
206	130	1.70	6.85		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
S42A DM112MX4 IE2					71
S42B DM112MX4 IE2					71
S42C DM112MX4 IE2					75
30	1130	1.20	48.05		
33	1030	1.30	43.65		
36	950	1.30	39.91		
40	855	1.45	35.81		
44	780	1.55	32.32		
48	720	1.60	29.75		
54	645	1.75	26.59		
54	645	1.35	26.29		
60	590	1.45	23.88		
60	575	1.90	23.61		
65	540	1.85	21.83		
68	510	2.00	20.92		
73	485	2.1	19.59		
77	455	2.1	18.62		
81	440	2.2	17.68		
S32A DM112MX4 IE2					54
S32B DM112MX4 IE2					54
S32C DM112MX4 IE2					56
47	720	0.80	30.61		
52	645	0.85	27.31		
58	580	0.95	24.49		
64	530	1.00	22.22		
71	490	1.05	20.18		
72	470	1.10	19.69		
78	450	1.15	18.26		
82	415	1.20	17.33		
86	410	1.25	16.64		
94	365	1.30	15.18		
96	365	1.40	14.85		
107	325	1.40	13.33		
107	330	1.50	13.32		
118	300	1.60	12.08		
133	265	1.75	10.71		
151	235	1.90	9.43		
173	210	2.0	8.25		
197	183	2.2	7.25		
5.5 kW					
S42A DA132S4 IE2					89
S42B DA132S4 IE2					89
S42C DA132S4 IE2					92
41	1160	1.10	35.81		
45	1050	1.15	32.32		
49	970	1.20	29.75		
55	870	1.30	26.59		
62	775	1.40	23.61		
70	685	1.45	20.92		
74	655	1.50	19.59		
78	610	1.55	18.62		
82	595	1.65	17.68		
89	550	1.90	16.28		
91	525	1.70	15.95		
100	490	2.0	14.55		
103	465	1.75	14.07		
113	435	2.1	12.92		
127	390	2.3	11.45		
143	350	2.4	10.19		
167	300	2.6	8.73		
189	265	2.7	7.70		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
7.5 kW					
S42A DA132MX4 IE2					95
S42B DA132MX4 IE2					95
S42C DA132MX4 IE2					99
41	1580	0.80	35.81		
45	1430	0.85	32.32		
49	1320	0.85	29.75		
55	1180	0.95	26.59		
62	1060	1.00	23.61		
70	935	1.10	20.92		
74	895	1.10	19.59		
78	835	1.15	18.62		
82	810	1.20	17.68		
89	745	1.40	16.28		
91	715	1.25	15.95		
100	670	1.50	14.55		
103	635	1.30	14.07		
113	595	1.60	12.92		
127	530	1.65	11.45		
143	475	1.75	10.19		
167	410	1.90	8.73		
189	360	2.0	7.70		

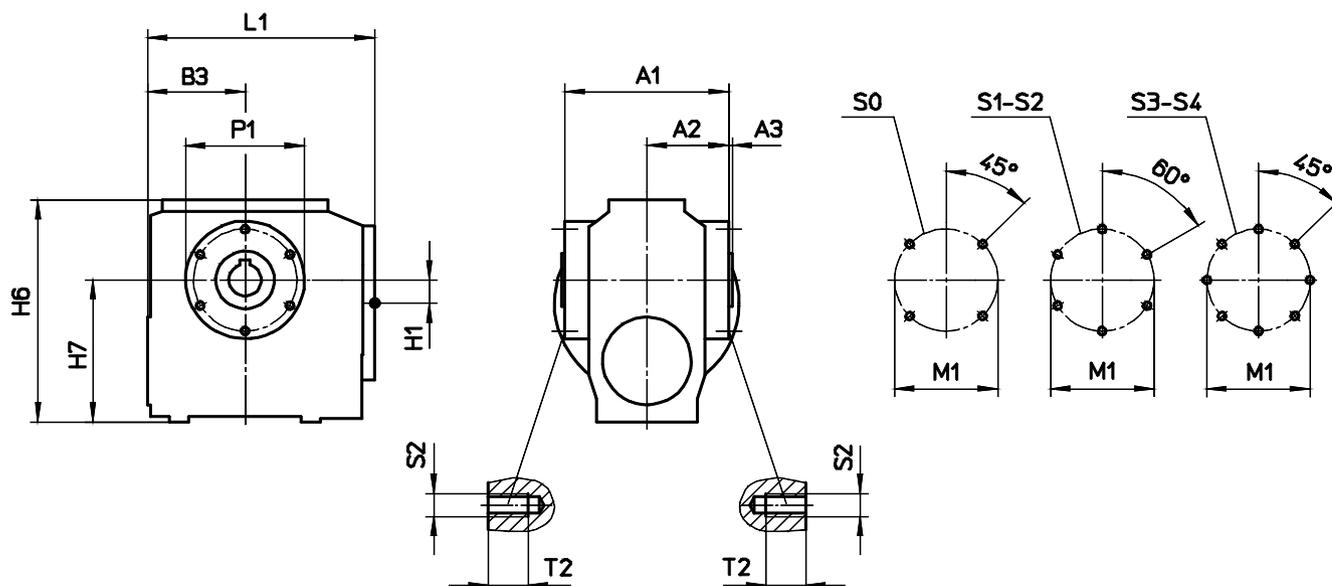
Dimensions

A - Foot mounted version



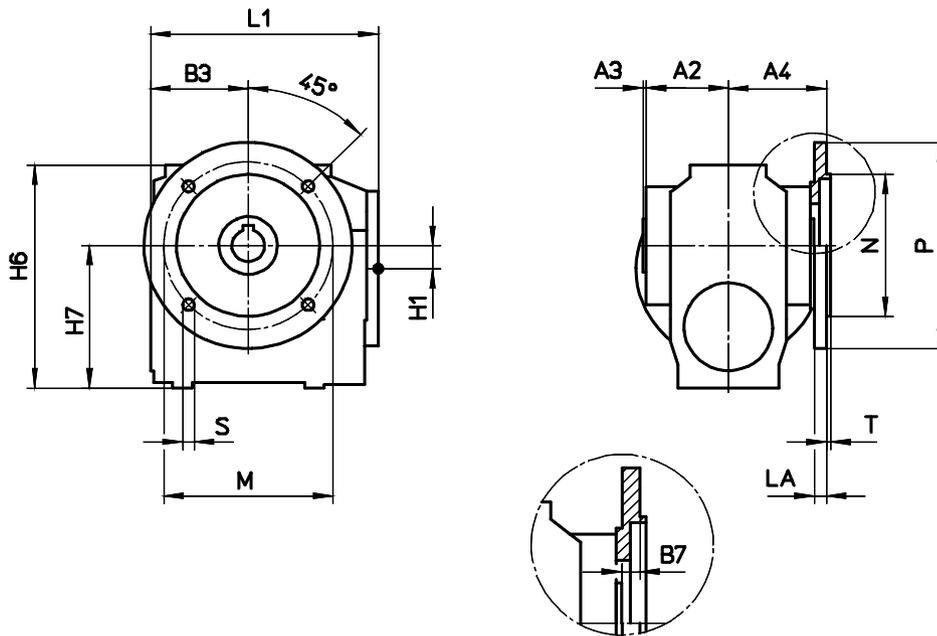
	A	AB	A1	A2	A3	B	B1	B2	H	HA	HB	H1	H2	H3	H4	H5	L	S1
S0	50	63	86	43	2	60	52-0.5	30	70-0.5	9	9	7.5	113	106.5	29	86	126	M6
S1	90	110	116	58	2	75	70-0.5	37.5	95-0.5	15	12	10	151.5	137.5	30	95	160	Ø9
S2	110	135	144	72	3	90	85-0.5	45	120-0.5	18	15	18	191	175	40	120	191	Ø11
S3	120	150	168	84	3.5	115	100-0.5	57.5	145-0.5	22	18	24	229.5	212	47	150	233	Ø13.5
S4	150	185	202	101	4	135	125-0.5	70	180-0.5	25	22	35	280	259.5	57	180	280	Ø17.5

B - Shaft mounted version



	A1	A2	A3	B3	H1	H6	H7	L1	M1	P1	S2	T2
S0	86	43	2	52	7.5	113.5	70.5	126	74	86	M6	9
S1	116	58	2	69	10	153.5	97	159	87	99	M6	9
S2	144	72	3	85	18	193	122	191	96	112	M8	12
S3	168	84	3.5	100	24	231.5	147	233	106	122	M8	12
S4	202	101	4	125	35	282	182	280	130	150	M10	15

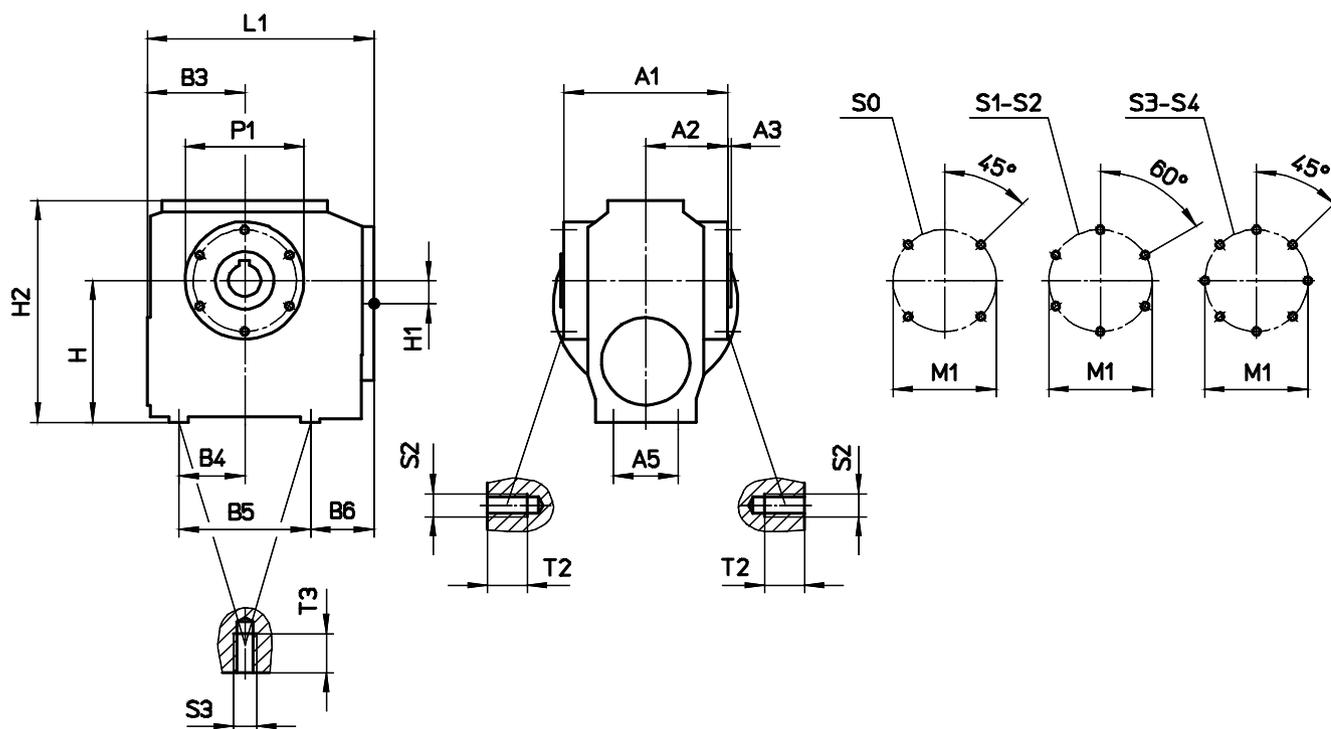
C - Flange mounted version



	A2	A3	A4	B3	B7	H1	H6	H7	L1
S0	43	2	63	52	18	7.5	113.5	70.5	126
S1	58	2	70	69	10	10	153.5	97	159
S2	72	3	83	85	8	18	193	122	191
S3	84	3.5	95	100	7.5	24	231.5	147	233
S4	101	4	113	125	8	35	282	182	280

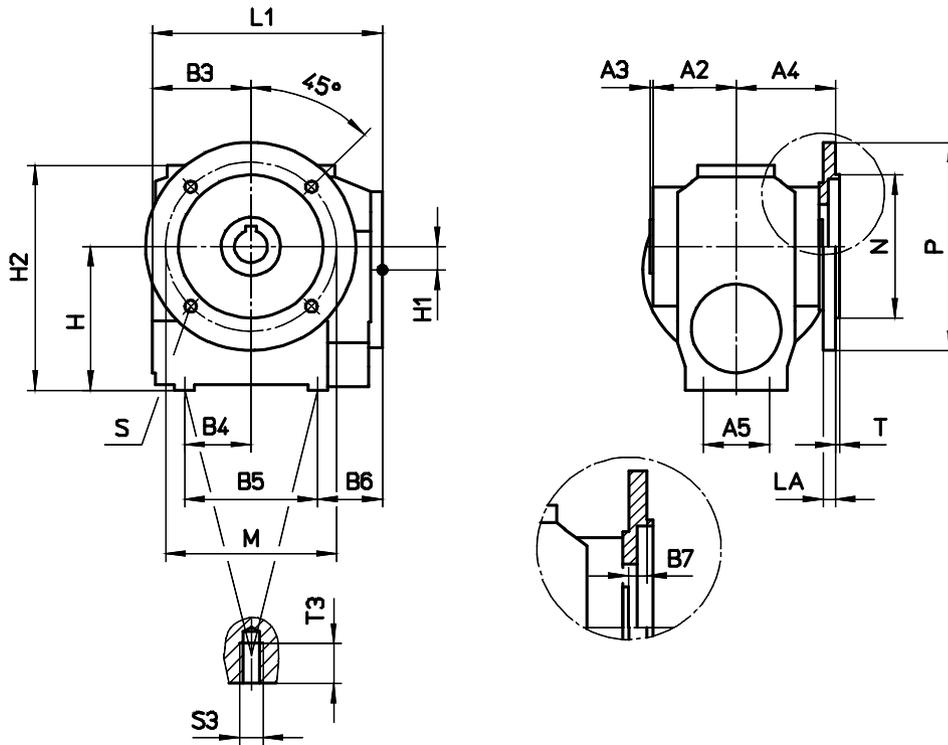
	M	N	P	LA	T	S
S0	Ø100	Ø80 j6	Ø120	8	3	Ø6.6
S1	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
S2	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
S3	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
S4	Ø215	Ø180 j6	Ø250	11	4	Ø13.5

D - Shaft mounted version + foot area



	A1	A2	A3	A5	B3	B4	B5	B6	H	H1	H2	L1	M1	P1	S2	T2	S3	T3
S1	116	58	2	50	69	46	82	54	95	10	151.5	159	87	99	M6	9	M8	12
S2	144	72	3	65	85	58	110	54	120	18	191	191	96	112	M8	12	M8	12
S3	168	84	3.5	70	100	67.5	135	65.5	145	24	229.5	233	106	122	M8	12	M10	15
S4	202	101	4	80	125	87.5	175	67.5	180	35	280	280	130	150	M10	15	M16	24

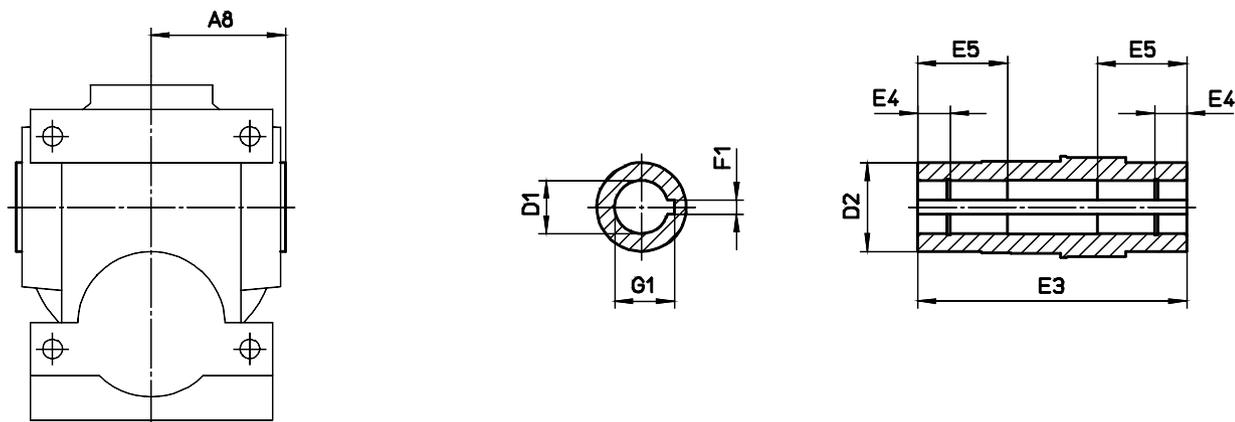
E - Flange mounted version + foot area



	A2	A3	A4	A5	B3	B4	B5	B6	B7	H	H1	H2	L1	S3	T3
S1	58	2	70	50	69	46	82	54	10	95	10	151.5	159	M8	12
S2	72	3	83	65	85	58	110	54	8	120	18	191	191	M8	12
S3	84	3.5	95	70	100	67.5	135	65.5	8	145	24	229.5	233	M10	15
S4	101	4	113	80	125	87.5	175	67.5	8	180	35	280	280	M16	24

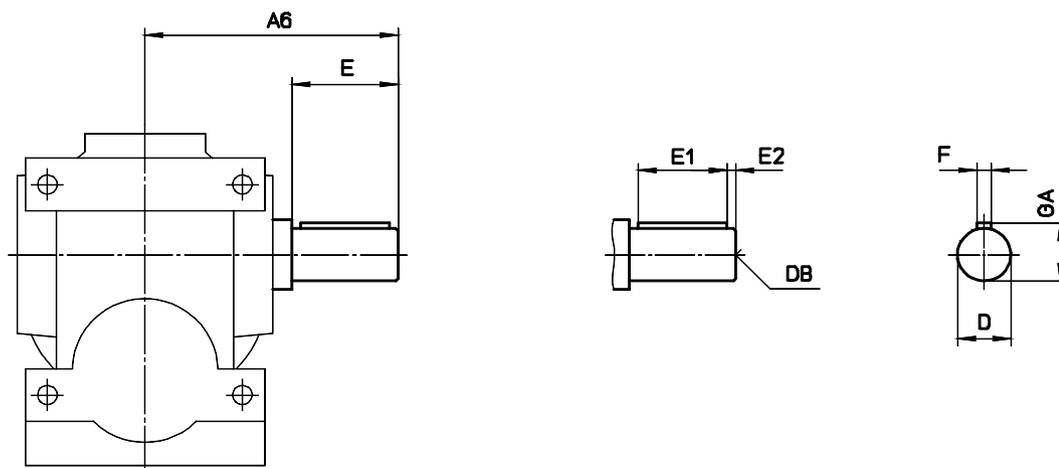
	M	N	P	LA	T	S
S1	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
S2	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
S3	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
S4	Ø215	Ø180 j6	Ø250	11	4	Ø13.5

Hollow shaft with keyway



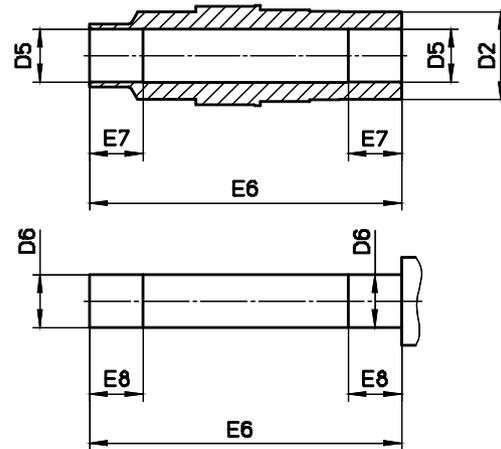
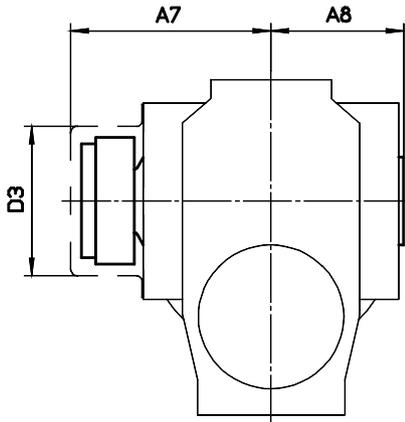
	A8	D1	D2	E3	E4	E5	F1	G1
S0	45	Ø20H7	35	90	14	-	6	22.8
S1	60	Ø25H7	45	120	15	-	8	28.3
S2	75	Ø30H7 Ø35H7	50	150	18	-	8 10	33.3 38.3
S3	87.5	Ø40H7	55	175	20	-	12	43.3
S4	105	Ø50H7	70	210	25	70	14	53.8

V - Output shaft with key



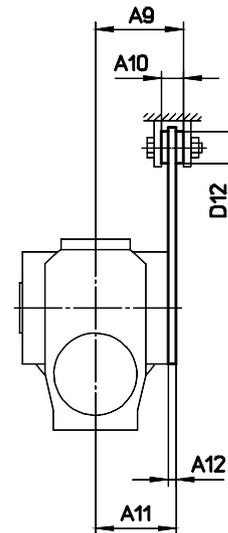
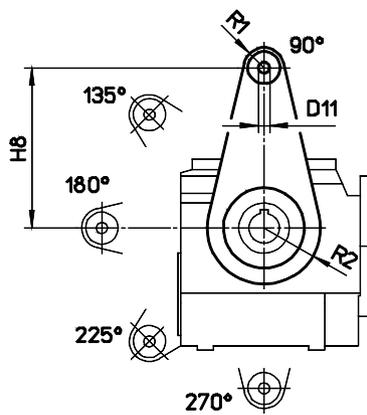
	A6	D	DB	E	E1	E2	F	GA
S02A	85	Ø20k6	M6	40	32	4	6	22.5
S02C	103							
S1	120	Ø25k6	M10	50	40	5	8	28
S2	143	Ø30k6	M10	60	50	5	8	33
	153	Ø35k6	M12	70	60		10	38
S3	175	Ø40k6	M16	80	70	5	12	43
S4	213	Ø50k6	M16	100	80	10	14	53.5

S - Hollow shaft with shrink disc



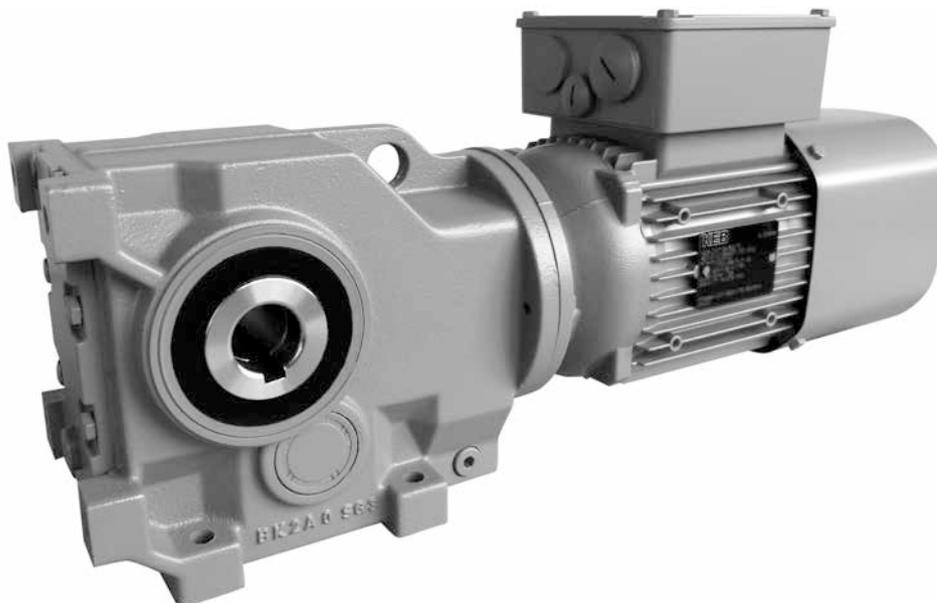
	A7	A8	D2	D3	D5	D6	E6	E7	E8
S1	97	60	45	77	Ø25H7	Ø25H6	143	25	27
S2	113	75	50	86	Ø30H7 Ø35H7	Ø30h6 Ø35h6	176	30	32
S3	127	87.5	55	96	Ø40H7	Ø40h6	202	40	42
S4	150	105	70	117	Ø50H7	Ø50h6	242	50	52

T1 - Torque arm

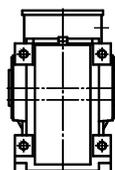
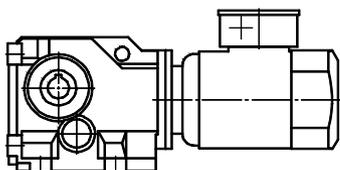


	A9	A10	A11	A12	D11	D12	H8	R1	R2
S0	52.5	15	47	4	11	32	100	20	43
S1	68.5	15	64	6	11	32	130	20	49.5
S2	87	22	80	8	11	32	160	20	56
S3	99	22	92	8	11	32	200	23	61
S4	121	32	109	8	17	40	250	30	75

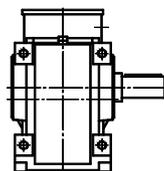
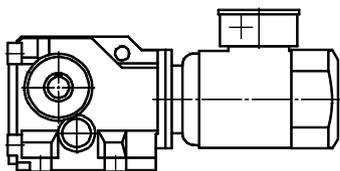
Helical bevel gear units K



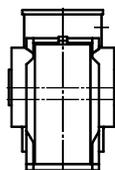
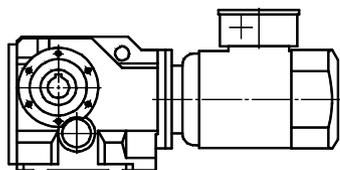
Type of construction



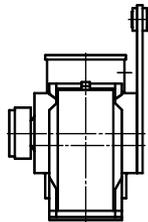
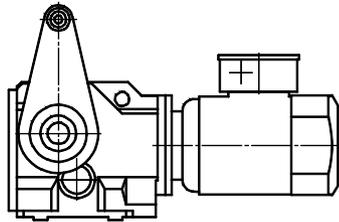
Foot mounted version
Hollow shaft with keyway
Example: K43A DM90L4



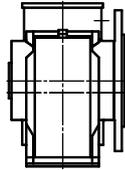
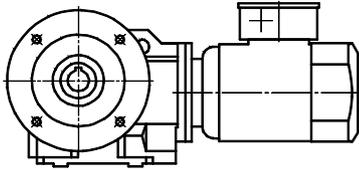
Foot mounted version
Output shaft with key
Example: K33AV DM80G4



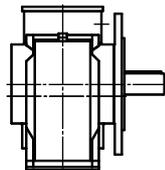
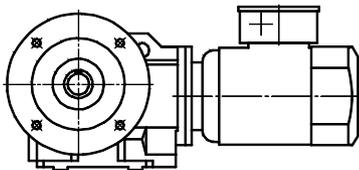
Shaft mounted version
Hollow shaft with keyway
Example: K53B DA132S4



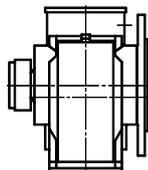
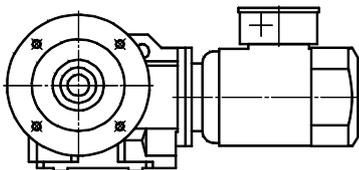
Shaft mounted version
 Hollow shaft with shrink disc
 Torque arm T1
 Example: K53**BT1S** DA160M4



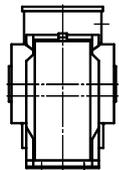
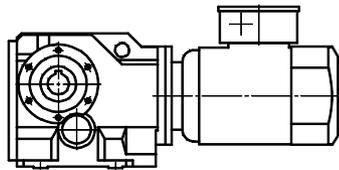
Flange mounted version
 Hollow shaft with keyway
 Example: K43**C** DA132S4



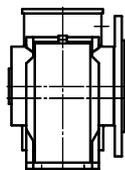
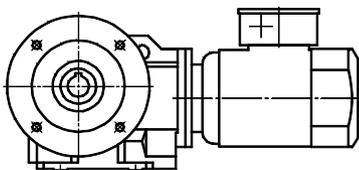
Flange mounted version
 Output shaft with key
 Example: K33**CV** DM71G4



Flange mounted version
 Hollow shaft with shrink disc
 Example: K43**CS** DM100LX4



Shaft mounted version + foot area
 Hollow shaft with keyway
 Example: K53**D** DM80G4



Flange mounted version + foot area
 Hollow shaft with keyway
 Example: K33**E** DM90S4



Selection table - Gear units

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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K23G03

5483.4	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
4632.4	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3960.6	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3416.7	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2967.4	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2590.0	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2235.6	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1928.6	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1675.0	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	□	-	-	-
1462.0	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

K23G02

1283.3	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1084.2	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
926.94	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
799.65	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
694.50	205	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
606.18	205	<0.05	o	-	-	□	-	-	-	-	-	-	-	-	o	-	-	-	-
530.94	205	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
456.34	205	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
393.68	205	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
341.91	205	0.09	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
298.43	205	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
261.38	205	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
228.47	205	0.13	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
201.29	205	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
178.45	205	0.17	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
159.00	205	0.19	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
142.73	205	0.21	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
124.58	205	0.24	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
109.11	205	0.27	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-

K23

102.27	205	0.29	o	-	-	-	□	-	-	-	-	-	-	-	o	-	-	-	-
87.38	205	0.34	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
75.61	205	0.40	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
66.09	205	0.45	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
58.23	205	0.51	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
51.62	205	0.58	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
46.00	205	0.65	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
41.29	205	0.72	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	□	-
36.04	205	0.83	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
31.57	205	0.95	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
26.14	205	1.14	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
22.85	205	1.31	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
20.13	205	1.49	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
17.84	205	1.68	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
15.90	205	1.88	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
14.27	205	2.10	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
12.46	205	2.40	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
10.91	205	2.74	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
9.34	161	2.53	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
8.28	161	2.85	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
7.38	161	3.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
6.63	161	3.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
5.78	161	3.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-
5.07	161	3.00	o	o	o	o	o	-	-	-	-	-	-	-	o	o	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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K33G13

8059.3	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
6832.3	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
5863.6	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
5079.4	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
4431.6	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
3887.4	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
3423.9	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
3010.7	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
2583.9	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
2238.3	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1952.8	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-

K33G12

1738.3	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1485.1	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
1285.2	400	<0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
1123.4	400	0.05	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
989.70	400	0.06	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
877.42	400	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
781.77	400	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
701.79	400	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
612.54	400	0.10	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
536.51	400	0.11	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
493.12	400	0.12	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
434.44	400	0.13	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
385.15	400	0.15	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
343.16	400	0.17	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
308.06	400	0.19	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
268.88	400	0.22	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
235.51	400	0.25	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
210.10	400	0.28	o	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
188.46	400	0.31	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
171.28	400	0.34	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
151.01	400	0.39	o	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
133.74	400	0.44	o	o	o	-	-	-	-	-	-	-	-	-	o	o	-	-	-
119.69	400	0.49	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-
104.17	400	0.56	o	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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K83G33

16285	7960	0.07	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
13981	7960	0.08	o	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
12162	7960	0.10	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-
10689	7960	0.11	o	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-
9472.7	7960	0.12	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
8450.8	7960	0.14	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
7580.3	7960	0.15	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
6889.3	7960	0.17	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
6074.0	7960	0.19	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
5379.6	7960	0.22	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
4900.2	7960	0.24	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
4292.3	7960	0.27	o	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
3755.0	7960	0.31	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
3368.2	7960	0.3	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
3061.2	7960	0.38	o	o	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-
2698.9	7960	0.43	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-

K83G32

2357.9	7960	0.49	o	o	o	-	-	-	-	-	-	-	-	o	o	-	-	-	-
2105.6	7960	0.55	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-
1893.6	7960	0.62	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-
1713.0	7960	0.68	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-
1561.4	7960	0.75	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-
1393.0	7960	0.84	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-
1249.5	7960	0.93	o	o	o	-	-	-	-	-	-	-	-	o	o	o	-	-	-
1138.2	7960	1.02	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-	-
996.96	7960	1.17	o	o	o	o	-	-	-	-	-	-	-	o	o	o	-	-	-
906.86	7960	1.29	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-	-
816.82	7960	1.43	o	o	o	o	o	-	-	-	-	-	-	o	o	o	-	-	-
774.35	7960	1.51	-	-	-	-	o	o	-	-	-	-	-	-	o	o	-	-	-
705.34	7960	1.65	-	-	-	-	o	o	-	-	-	-	-	-	o	o	-	-	-
617.84	7960	1.89	-	-	-	-	o	o	o	-	-	-	-	-	o	o	-	-	-
545.46	7960	2.14	-	-	-	-	o	o	o	-	-	-	-	-	o	o	-	-	-
483.36	7960	2.41	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
425.46	7960	2.74	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
372.59	7960	3.13	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
327.28	7960	3.56	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
298.11	7960	3.91	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
261.13	7960	4.47	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
237.53	7960	4.91	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
213.95	7960	5.5	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
192.10	7960	6.1	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
187.60	7680	6.0	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-
164.78	7060	6.3	-	-	-	-	o	o	o	o	-	-	-	-	o	o	-	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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K83

144.68	7960	8.1	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
132.28	7960	8.8	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
122.27	7960	9.5	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
111.12	7960	10.5	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
101.42	7960	11.5	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
91.87	7960	12.7	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
83.68	7960	13.9	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
73.30	7960	15.9	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
66.68	7960	17.5	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
60.06	7960	19.4	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
53.92	7960	21.6	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
46.25	7960	25.2	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
39.98	7960	29.2	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
34.75	7960	33.6	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
32.84	7960	35.5	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
29.88	7960	39.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
26.91	7960	43.3	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
24.16	7960	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
20.73	7740	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
17.91	7400	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
15.57	7100	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
14.01	4850	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
12.58	4850	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
10.79	4850	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
9.32	4850	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
8.11	4850	45.0	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-

K93G43

19466	12300	0.09	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
16822	12300	0.11	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-
14735	12300	0.12	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
13045	12300	0.14	-	-	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-
11648	12300	0.15	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
10476	12300	0.17	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
9476.8	12300	0.19	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
8638.2	12300	0.21	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
7706.3	12300	0.23	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
6912.5	12300	0.26	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
6318.8	12300	0.28	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
5768.8	12300	0.31	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
5277.6	12300	0.34	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
4774.3	12300	0.38	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
4351.8	12300	0.41	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
3882.4	12300	0.46	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
3482.4	12300	0.52	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
3183.3	12300	0.56	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2906.2	12300	0.62	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2627.7	12300	0.68	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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K93G42

2486.8	12300	0.72	-	-	-	-	-	-	-	-	-	-	-	-	o	o	o	-	-
2245.4	12300	0.80	-	-	-	o	-	-	-	-	-	-	-	-	o	o	o	-	-
2039.9	12300	0.88	-	-	-	o	-	-	-	-	-	-	-	-	o	o	o	-	-
1865.1	12300	0.96	-	-	-	o	-	-	-	-	-	-	-	-	o	o	o	-	-
1673.5	12300	1.07	-	-	-	o	o	-	-	-	-	-	-	-	o	o	o	o	-
1510.3	12300	1.19	-	-	-	o	o	o	-	-	-	-	-	-	o	o	o	o	-
1380.6	12300	1.30	-	-	-	o	o	o	o	-	-	-	-	-	o	o	o	o	-
1260.4	12300	1.42	-	-	-	o	o	o	o	o	-	-	-	-	o	o	o	o	-
1139.6	12300	1.58	-	-	-	o	o	o	o	o	-	-	-	-	o	o	o	o	-
988.56	12300	1.82	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	o	-
864.99	12300	2.08	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	o	-
762.02	12300	2.36	-	-	-	o	o	o	o	o	o	-	-	-	o	o	o	o	-
651.55	12300	2.76	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
631.60	12300	2.84	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
560.85	12300	3.20	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
497.00	12300	3.61	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
454.31	12300	3.95	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
414.77	12300	4.33	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
375.01	12300	4.79	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
325.31	12300	5.5	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
284.64	12300	6.3	-	-	-	o	o	o	o	o	o	o	-	-	o	o	o	o	-
252.16	12300	7.1	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-	o
218.74	12300	8.2	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-	o
191.40	12300	9.4	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-	o
168.61	12300	10.7	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-	o
144.17	12300	12.5	-	-	-	-	-	-	-	-	-	-	o	o	-	-	-	-	o

i	T2max [Nm]	P1max [kW]	TA31	TA32	TA33	TA41	TA42	TA43	TA51	TA52	TA53	TA61	TA62	TA63	-W1	-W2	-W3	-W4	-W5
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K93

137.36	12300	13.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
126.06	12300	14.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
114.62	12300	15.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
104.80	12300	17.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
92.68	12300	19.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
84.72	12300	21.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
77.34	12300	23.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
69.93	12300	25.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
60.66	12300	29.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
53.08	12300	33.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
46.76	12100	37.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
39.98	11700	42.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34.75	11300	47.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.33	12300	57.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
27.18	12300	66.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
23.78	11800	72.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
20.95	11400	79.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
17.91	10800	88.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15.57	10400	90.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.34	7320	74.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
12.55	7320	85.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
11.06	7320	90.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	o
9.45	7320	90.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.22	7230	90.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Selection table - Geared motors

Type				-kg	Type				-kg	Type				-kg	Type				-kg							
n2 [1/min]	T2 [Nm]	cG	i		n2 [1/min]	T2 [Nm]	cG	i		n2 [1/min]	T2 [Nm]	cG	i		n2 [1/min]	T2 [Nm]	cG	i		n2 [1/min]	T2 [Nm]	cG	i			
0.12 kW					0.12 kW					0.18 kW					0.25 kW											
K53G22A DM63K4				54	K23A DM63K4				18	K33G12A DM63G4				26	K63G22A DM71K4						81					
K53G22B DM63K4				54	K23B DM63K4				18	K33G12B DM63G4				26	K63G22B DM71K4							81				
K53G22C DM63K4				58	K23C DM63K4				19	K33G12C DM63G4				28	K63G22C DM71K4							87				
1.5	735	1.95	920.69		13	85	2.4	102.27		3.6	460	0.85	385.15		1.4	1600	1.60	981.68								
1.7	645	2.2	811.74		16	73	2.8	87.38		4.0	410	0.95	343.16		1.6	1410	1.80	869.44								
1.9	575	2.5	718.94		18	63	3.2	75.61		4.5	370	1.10	308.06		1.8	1310	1.95	803.80								
2.1	515	2.8	648.83		21	55	3.7	66.09		5.1	320	1.25	268.88		1.9	1180	2.2	724.09								
K43G12A DM63K4				34	24	48	4.2	58.23		5.9	280	1.40	235.51		2.2	1030	2.5	634.13								
K43G12B DM63K4				34	27	43	4.8	51.62		6.6	250	1.60	210.10		2.5	925	2.8	568.80								
K43G12C DM63K4				36	30	38	5.3	46.00		7.3	225	1.75	188.46		2.7	840	3.0	516.95								
1.5	730	1.00	912.99		33	34	5.9	41.29		8.1	205	1.95	171.28		K53G22A DM71K4				56							
1.7	635	1.15	796.88		38	30	6.8	36.04		9.1	181	2.2	151.01		K53G22B DM71K4				56							
2.0	555	1.35	697.97		44	26	7.8	31.57		10	160	2.5	133.74		K53G22C DM71K4				60							
2.2	510	1.45	641.52		53	22	9.4	26.14		12	143	2.8	119.69		1.5	1500	0.95	920.69								
2.4	450	1.65	565.19		60	19	11	22.85		K33A DM63G4				21	1.7	1320	1.10	811.74								
2.8	400	1.85	501.06		69	17	12	20.13		K33B DM63G4				21	2.0	1170	1.20	718.94								
3.1	355	2.1	446.44		77	15	14	17.84		K33C DM63G4				23	2.2	1050	1.35	648.83								
3.4	320	2.3	400.77		87	13	15	15.90		11	150	2.7	120.13		2.4	970	1.45	597.22								
3.9	280	2.7	349.80		97	12	17	14.27		K23G02A DM63G4				23	2.7	850	1.70	524.36								
K33G12A DM63K4				25	111	10	20	12.46		K23G02B DM63G4				23	3.0	765	1.85	470.34								
K33G12B DM63K4				25	126	9.1	23	10.91		K23G02C DM63G4				24	3.3	695	2.1	427.46								
K33G12C DM63K4				28	148	7.8	21	9.34		6.9	240	0.85	201.29		3.7	615	2.3	376.88								
2.3	490	0.80	612.54		167	6.9	23	8.28		7.7	215	0.95	178.45		4.2	545	2.6	333.79								
2.6	430	0.95	536.51		187	6.1	26	7.38		8.7	190	1.05	159.00		4.7	490	2.9	301.24								
2.8	395	1.00	493.12		208	5.5	29	6.63		9.7	171	1.20	142.73		K43G12A DM71K4				36							
3.2	345	1.15	434.44		239	4.8	34	5.78		11	149	1.35	124.58		K43G12B DM71K4				36							
3.6	305	1.30	385.15		272	4.2	38	5.07		13	130	1.55	109.11		K43G12C DM71K4				38							
4.0	275	1.45	343.16		0.18 kW					K23A DM63G4				19	2.5	920	0.80	565.19								
4.5	245	1.60	308.06		K63G22A DM63G4				80	K23B DM63G4				19	2.8	815	0.90	501.06								
5.1	215	1.85	268.88		K63G22B DM63G4				80	K23C DM63G4				20	3.2	725	1.00	446.44								
5.9	188	2.1	235.51		K63G22C DM63G4				85	13	127	1.60	102.27		3.5	650	1.15	400.77								
6.6	167	2.4	210.10		1.4	1170	2.2	981.68		16	109	1.85	87.38		4.0	570	1.30	349.80								
7.3	150	2.7	188.46		1.6	1040	2.5	869.44		18	94	2.2	75.61		4.6	500	1.50	306.38								
8.1	137	2.9	171.28		1.7	960	2.7	803.80		21	82	2.5	66.09		5.1	450	1.65	275.54								
K23G02A DM63K4				22	1.9	865	2.9	724.09		24	73	2.8	58.23		5.7	405	1.85	249.26								
K23G02B DM63K4				22	K53G22A DM63G4				55	27	64	3.2	51.62		6.2	370	2.0	227.20								
K23G02C DM63K4				24	K53G22B DM63G4				55	30	57	3.6	46.00		7.0	330	2.3	202.69								
4.6	240	0.85	298.43		K53G22C DM63G4				58	33	51	4.0	41.29		7.8	295	2.5	181.81								
5.3	210	1.00	261.38		1.5	1100	1.30	920.69		38	45	4.5	36.04		8.5	270	2.8	164.95								
6.0	182	1.10	228.47		1.7	970	1.45	811.74		44	39	5.2	31.57		9.6	240	3.1	146.17								
6.9	160	1.25	201.29		1.9	860	1.65	718.94		53	33	6.3	26.14		11	210	3.6	128.66								
7.7	142	1.45	178.45		2.1	775	1.85	648.83		60	28	7.2	22.85		K43A DM71K4				31							
8.7	127	1.60	159.00		2.3	715	2.00	597.22		69	25	8.1	20.13		K43B DM71K4				31							
9.7	114	1.80	142.73		2.6	625	2.3	524.36		77	22	9.2	17.84		K43C DM71K4				33							
11	99	2.1	124.58		2.9	560	2.5	470.34		87	20	10	15.90		9.3	255	2.9	151.92								
13	87	2.3	109.11		3.2	510	2.8	427.46		97	18	11	14.27		K33G12A DM71K4				27							
K43G12A DM63G4				34	K43G12B DM63G4				34	K43G12C DM63G4				36	K33G12B DM71K4				27							
1.7	955	0.80	796.88		1.7	955	0.80	796.88		111	16	13	12.46		K33G12C DM71K4				30							
2.0	835	0.90	697.97		1.9	860	1.65	718.94		126	14	15	10.91		4.6	500	0.80	308.06								
2.2	765	0.95	641.52		167	10	16	8.28		148	12	14	9.34		5.2	435	0.90	268.88								
2.4	675	1.10	565.19		187	9.2	18	7.38		167	10	16	8.28		6.0	385	1.05	235.51								
2.8	600	1.25	501.06		208	8.3	20	6.63		187	9.2	18	7.38		6.7	340	1.15	210.10								
3.1	535	1.40	446.44		239	7.2	22	5.78		208	8.3	20	6.63		7.5	305	1.30	188.46								
3.4	480	1.55	400.77		272	6.3	26	5.07		239	7.2	22	5.78		8.2	280	1.45	171.28								
3.9	420	1.80	349.80		0.25 kW					K73G32A DM71K4				135	9.3	245	1.65	151.01								
4.5	365	2.0	306.38		K73G32B DM71K4				135	K73G32B DM71K4				135	11	215	1.85	133.74								
5.0	330	2.3	275.54		K73G32C DM71K4				144	K73G32C DM71K4				144	12	195	2.1	119.69								
5.5	300	2.5	249.26		1.4	1620	2.7	994.22		1.4				1620	2.7	994.22										
6.1	270	2.7	227.20		1.6	1400	3.1	861.22		1.6				1400	3.1	861.22										
K33A DM71K4				22	K33B DM71K4				22	K33C DM71K4				25	12				205	1.95	120.13					
K33B DM71K4				22	K33C DM71K4				25	14				175	2.3	103.13										
K33C DM71K4				25	16				152	2.6	89.71															
12				205	1.95	120.13																				
14				175	2.3																					

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.55 kW					
K23A DM80K4					23
K23B DM80K4					23
K23C DM80K4					24
21	245	0.85	66.09		
24	220	0.95	58.23		
27	193	1.05	51.62		
31	172	1.20	46.00		
34	154	1.30	41.29		
39	135	1.50	36.04		
45	118	1.75	31.57		
54	98	2.1	26.14		
61	85	2.4	22.85		
70	75	2.7	20.13		
79	67	3.1	17.84		
88	59	3.4	15.90		
98	53	3.8	14.27		
113	47	4.4	12.46		
129	41	5.0	10.91		
150	35	4.6	9.34		
170	31	5.2	8.28		
190	28	5.8	7.38		
212	25	6.5	6.63		
243	22	7.4	5.78		
277	19	8.5	5.07		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
K93G42A DM80GC4 IE2					320
K93G42B DM80GC4 IE2					320
K93G42C DM80GC4 IE2					337
1.4	4820	2.5	988.56		
1.6	4220	2.9	864.99		
1.9	3720	3.3	762.02		
2.2	3180	3.9	651.55		
K83G32A DM80GC4 IE2					210
K83G32B DM80GC4 IE2					210
K83G32C DM80GC4 IE2					227
1.4	4860	1.65	996.96		
1.6	4420	1.80	906.86		
1.7	3980	2.00	816.82		
K73G32A DM80GC4 IE2					139
K73G32B DM80GC4 IE2					139
K73G32C DM80GC4 IE2					148
1.4	4850	0.90	994.22		
1.6	4200	1.05	861.22		
1.8	3800	1.15	779.24		
2.0	3450	1.25	707.41		
2.2	3080	1.40	630.75		
2.4	2870	1.50	587.86		
2.7	2570	1.70	527.31		
2.9	2330	1.85	478.39		
3.4	2020	2.1	414.39		
3.8	1830	2.4	374.95		
4.1	1660	2.6	340.39		
4.6	1480	2.9	303.50		
K63G22A DM80GC4 IE2					86
K63G22B DM80GC4 IE2					86
K63G22C DM80GC4 IE2					91
2.2	3090	0.85	634.13		
2.5	2770	0.90	568.80		
2.7	2520	1.00	516.95		
3.1	2220	1.15	455.78		
3.5	1970	1.30	403.67		
3.8	1820	1.40	373.19		
4.2	1640	1.55	336.18		
4.7	1470	1.75	301.25		
5.2	1320	1.95	269.78		
5.8	1180	2.2	242.80		
6.7	1030	2.5	211.83		
7.4	925	2.8	189.77		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
K53G22A DM80GC4 IE2					61
K53G22B DM80GC4 IE2					61
K53G22C DM80GC4 IE2					64
3.7	1840	0.80	376.88		
4.2	1630	0.90	333.79		
4.7	1470	0.95	301.24		
5.1	1350	1.05	277.28		
5.7	1210	1.20	247.82		
6.4	1070	1.35	220.06		
7.2	950	1.50	195.01		
8.1	845	1.70	173.54		
9.5	725	1.95	148.66		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
K53A DM80GC4 IE2					55
K53B DM80GC4 IE2					55
K53C DM80GC4 IE2					58
10	705	2.0	138.94		
11	625	2.3	123.46		
13	560	2.5	110.68		
14	510	2.8	99.94		
K43G12A DM80GC4 IE2					40
K43G12B DM80GC4 IE2					40
K43G12C DM80GC4 IE2					42
7.8	885	0.85	181.81		
8.5	805	0.90	164.95		
9.6	715	1.05	146.17		
11	625	1.20	128.66		
K43A DM80GC4 IE2					36
K43B DM80GC4 IE2					36
K43C DM80GC4 IE2					38
12	585	1.25	114.99		
14	515	1.45	101.80		
16	460	1.60	90.90		
17	415	1.80	81.75		
19	375	2.00	73.96		
21	340	2.2	67.41		
23	305	2.4	60.14		
26	275	2.7	53.94		
K33G12A DM80GC4 IE2					32
K33G12B DM80GC4 IE2					32
K33G12C DM80GC4 IE2					34
14	510	0.80	104.17		
K33A DM80GC4 IE2					27
K33B DM80GC4 IE2					27
K33C DM80GC4 IE2					29
16	455	0.90	89.71		
18	400	1.00	78.85		
20	355	1.10	69.88		
23	315	1.25	62.34		
25	285	1.40	55.92		
28	260	1.55	50.82		
31	230	1.75	44.80		
36	200	2.00	39.68		
52	138	2.9	27.26		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
0.75 kW					
K23A DM80GC4 IE2					25
K23B DM80GC4 IE2					25
K23C DM80GC4 IE2					26
27	260	0.80	51.62		
31	235	0.85	46.00		
34	210	0.95	41.29		
39	183	1.10	36.04		
45	160	1.25	31.57		
54	133	1.55	26.14		
62	116	1.75	22.85		
70	102	2.00	20.13		
79	91	2.3	17.84		
89	81	2.5	15.90		
99	73	2.8	14.27		
113	63	3.2	12.46		
129	55	3.7	10.91		
151	47	3.4	9.34		
170	42	3.8	8.28		
191	37	4.3	7.38		
213	34	4.8	6.63		
244	29	5.5	5.78		
278	26	6.3	5.07		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
K93G42A DM90L4 IE2					325
K93G42B DM90L4 IE2					325
K93G42C DM90L4 IE2					342
1.4	7050	1.75	988.56		
1.6	6160	2.00	864.99		
1.9	5430	2.3	762.02		
2.2	4640	2.6	651.55		
2.2	4500	2.7	631.60		
K83G32A DM90L4 IE2					215
K83G32B DM90L4 IE2					215
K83G32C DM90L4 IE2					232
1.4	7110	1.10	996.96		
1.6	6460	1.25	906.86		
1.7	5820	1.35	816.82		
1.8	5520	1.45	774.35		
2.0	5030	1.60	705.34		
2.3	4400	1.80	617.84		
2.6	3890	2.0	545.46		
2.9	3440	2.3	483.36		
3.3	3030	2.6	425.46		
3.8	2660	3.0	372.59		
K73G32A DM90L4 IE2					144
K73G32B DM90L4 IE2					144
K73G32C DM90L4 IE2					153
1.8	5550	0.80	779.24		
2.0	5040	0.85	707.41		
2.2	4500	0.95	630.75		
2.4	4190	1.05	587.86		
2.7	3760	1.15	527.31		
3.0	3410	1.25	478.39		
3.4	2950	1.45	414.39		
3.8	2670	1.60	374.95		
4.2	2430	1.80	340.39		
4.7	2160	2.0	303.50		
5.5	1830	2.4	256.81		
6.1	1660	2.6	232.36		
6.7	1500	2.9	210.95		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
1.1 kW					
K63G22A DM90L4 IE2					91
K63G22B DM90L4 IE2					91
K63G22C DM90L4 IE2					96
3.1	3250	0.80	455.78		
3.5	2880	0.90	403.67		
3.8	2660	0.95	373.19		
4.2	2400	1.05	336.18		
4.7	2150	1.20	301.25		
5.2	1920	1.35	269.78		
5.8	1730	1.45	242.80		
6.0	1670	1.55	234.63		
6.7	1510	1.70	211.83		
6.7	1500	1.70	210.12		
7.5	1350	1.90	189.77		
7.5	1350	1.90	189.10		
K63A DM90L4 IE2					86
K63B DM90L4 IE2					86
K63C DM90L4 IE2					91
8.8	1190	2.1	160.53		
9.8	1070	2.4	144.48		
11	970	2.6	130.99		
12	885	2.9	119.50		
K53G22A DM90L4 IE2					66
K53G22B DM90L4 IE2					66
K53G22C DM90L4 IE2					69
5.7	1770	0.80	247.82		
6.4	1570	0.90	220.06		

Type				Type				Type				Type			
n2 [1/min]	T2 [Nm]	cG	i	n2 [1/min]	T2 [Nm]	cG	i	n2 [1/min]	T2 [Nm]	cG	i	n2 [1/min]	T2 [Nm]	cG	i
1.1 kW				1.5 kW				1.5 kW				2.2 kW			
K23A DM90L4 IE2			30	K63G22A DM100L4 IE2			97	K23A DM100L4 IE2			36	K63G22A DM100LX4 IE2			100
K23B DM90L4 IE2			30	K63G22B DM100L4 IE2			97	K23B DM100L4 IE2			36	K63G22B DM100LX4 IE2			100
K23C DM90L4 IE2			31	K63G22C DM100L4 IE2			103	K23C DM100L4 IE2			37	K63G22C DM100LX4 IE2			106
45	235	0.85	31.57	4.2	3280	0.80	336.18	62	230	0.90	22.85	6.7	3030	0.85	211.83
62	170	1.20	22.85	4.7	2940	0.85	301.25	70	205	1.00	20.13	6.7	3010	0.85	210.12
70	149	1.35	20.13	5.2	2630	0.95	269.78	79	181	1.15	17.84	7.4	2710	0.95	189.77
79	132	1.55	17.84	5.8	2370	1.10	242.80	89	162	1.25	15.90	7.5	2710	0.95	189.10
89	118	1.75	15.90	6.0	2290	1.10	234.63	99	145	1.40	14.27	K63A DM100LX4 IE2 94			
99	106	1.95	14.27	6.7	2070	1.25	211.83	113	127	1.60	12.46	K63B DM100LX4 IE2 94			
114	92	2.2	12.46	6.7	2050	1.25	210.12	129	111	1.85	10.91	K63C DM100LX4 IE2 100			
130	81	2.5	10.91	7.4	1850	1.40	189.77	151	95	1.70	9.34	9.8	2150	1.20	144.48
151	69	2.3	9.34	7.5	1840	1.40	189.10	170	84	1.90	8.28	11	1950	1.30	130.99
171	62	2.6	8.28	K63A DM100L4 IE2 91				191	75	2.1	7.38	12	1780	1.45	119.50
192	55	2.9	7.38	K63B DM100L4 IE2 91				213	67	2.4	6.63	13	1640	1.55	109.93
214	49	3.3	6.63	K63C DM100L4 IE2 97				244	59	2.7	5.78	14	1480	1.75	99.21
245	43	3.7	5.78	8.8	1630	1.55	160.53	278	51	3.1	5.07	16	1340	1.90	90.07
279	38	4.3	5.07	9.8	1470	1.75	144.48	2.2 kW				17	1240	2.1	83.27
1.5 kW				11	1330	1.90	130.99	K93G42A DM100LX4 IE2			333	19	1120	2.3	75.02
K93G42A DM100L4 IE2			330	12	1210	2.1	119.50	K93G42B DM100LX4 IE2			333	21	1000	2.5	67.22
K93G42B DM100L4 IE2			330	13	1120	2.3	109.93	K93G42C DM100LX4 IE2			350	23	895	2.8	60.20
K93G42C DM100L4 IE2			347	14	1010	2.5	99.21	1.4	14100	0.85	988.56	K53A DM100LX4 IE2 68			
1.4	9640	1.25	988.56	16	915	2.8	90.07	1.6	12400	1.00	864.99	K53B DM100LX4 IE2 68			
1.6	8440	1.45	864.99	K53G22A DM100L4 IE2 72				1.9	10900	1.10	762.02	K53C DM100LX4 IE2 71			
1.9	7430	1.65	762.02	K53G22B DM100L4 IE2 72				2.2	9320	1.30	651.55	13	1650	0.85	110.68
2.2	6350	1.95	651.55	K53G22C DM100L4 IE2 75				2.2	9030	1.35	631.60	14	1490	0.95	99.94
2.2	6160	2.00	631.60	8.1	1690	0.85	173.54	2.5	8020	1.55	560.85	16	1350	1.05	90.79
2.5	5470	2.2	560.85	9.5	1450	1.00	148.66	2.8	7110	1.70	497.00	17	1240	1.15	83.01
2.8	4850	2.5	497.00	10	1320	1.10	135.16	3.1	6500	1.90	454.31	19	1110	1.30	74.48
3.1	4430	2.8	454.31	K53A DM100L4 IE2 65				3.4	5930	2.1	414.77	21	1000	1.45	67.22
3.4	4050	3.0	414.77	K53B DM100L4 IE2 65				3.8	5360	2.3	375.01	23	920	1.55	61.87
K83G32A DM100L4 IE2 221				K53C DM100L4 IE2 68				4.3	4650	2.6	325.31	25	825	1.75	55.30
K83G32B DM100L4 IE2 221				11	1250	1.15	123.46	4.3	4650	2.6	325.31	29	730	1.95	49.10
K83G32C DM100L4 IE2 238				13	1120	1.25	110.68	5.0	4070	3.0	284.64	32	650	2.2	43.51
1.4	9720	0.80	996.96	14	1020	1.40	99.94	K83G32A DM100LX4 IE2 224				36	575	2.5	38.72
1.6	8840	0.90	906.86	16	920	1.55	90.79	K83G32B DM100LX4 IE2 224				K43A DM100LX4 IE2 50			
1.7	7970	1.00	816.82	17	845	1.70	83.01	K83G32C DM100LX4 IE2 241				K43B DM100LX4 IE2 50			
1.8	7550	1.05	774.35	19	755	1.90	74.48	2.0	10100	0.80	705.34	K43C DM100LX4 IE2 52			
2.0	6880	1.15	705.34	21	685	2.1	67.22	2.3	8840	0.90	617.84	23	895	0.85	60.14
2.3	6030	1.30	617.84	23	630	2.3	61.87	2.6	7800	1.00	545.46	26	805	0.90	53.94
2.6	5320	1.50	545.46	25	560	2.5	55.30	2.9	6910	1.15	483.36	29	730	1.00	48.94
2.9	4710	1.70	483.36	29	500	2.9	49.10	3.3	6090	1.30	425.46	33	645	1.15	43.37
3.3	4150	1.90	425.46	K43A DM100L4 IE2 47				3.8	5330	1.50	372.59	37	570	1.30	38.17
3.8	3630	2.2	372.59	K43B DM100L4 IE2 47				4.3	4680	1.70	327.28	42	500	1.50	33.43
4.3	3190	2.5	327.28	K43C DM100L4 IE2 49				4.7	4260	1.85	298.11	48	440	1.70	29.37
4.7	2910	2.7	298.11	16	925	0.80	90.90	5.4	3740	2.1	261.13	55	380	1.95	25.56
5.4	2550	3.1	261.13	17	830	0.90	81.75	5.9	3400	2.3	237.53	61	345	2.1	23.30
5.9	2320	3.4	237.53	19	750	1.00	73.96	6.6	3060	2.6	213.95	68	310	2.4	20.79
6.6	2090	3.8	213.95	21	685	1.10	67.41	7.3	2750	2.9	192.10	76	280	2.7	18.65
7.3	1870	4.2	192.10	23	610	1.20	60.14	7.5	2680	2.9	187.60	83	250	2.9	16.92
7.5	1830	4.2	187.60	26	550	1.35	53.94	8.6	2360	3.0	164.78	94	225	3.3	14.99
K73G32A DM100L4 IE2 151				29	495	1.50	48.94	K73G32A DM100LX4 IE2 154				K33A DM100LX4 IE2 41			
K73G32B DM100L4 IE2 151				33	440	1.70	43.37	K73G32B DM100LX4 IE2 154				K33B DM100LX4 IE2 41			
K73G32C DM100L4 IE2 160				37	390	1.90	38.17	K73G32C DM100LX4 IE2 163				K33C DM100LX4 IE2 43			
2.7	5140	0.85	527.31	42	340	2.2	33.43	3.8	5360	0.80	374.95	46	460	0.85	30.91
2.9	4670	0.95	478.39	48	300	2.5	29.37	4.1	4870	0.90	340.39	58	360	1.10	24.15
3.4	4040	1.05	414.39	55	260	2.9	25.56	4.6	4340	1.00	303.50	65	320	1.25	21.55
3.8	3660	1.20	374.95	K33A DM100L4 IE2 38				5.5	3670	1.20	256.81	73	290	1.40	19.33
4.1	3320	1.30	340.39	K33B DM100L4 IE2 38				6.1	3320	1.30	232.36	80	260	1.50	17.57
4.6	2960	1.45	303.50	K33C DM100L4 IE2 40				6.7	3020	1.45	210.95	91	230	1.75	15.49
5.5	2500	1.75	256.81	31	455	0.90	44.80	7.5	2690	1.60	188.09	103	205	1.95	13.72
6.1	2270	1.90	232.36	36	405	1.00	39.68	K73A DM100LX4 IE2 145				115	183	2.1	12.27
6.7	2060	2.1	210.95	40	360	1.10	35.51	K73B DM100LX4 IE2 145				132	159	2.4	10.68
7.5	1830	2.4	188.09	46	315	1.25	30.91	K73C DM100LX4 IE2 154				152	139	1.75	9.30
K73A DM100L4 IE2 142				52	275	1.45	27.26	7.7	2730	1.60	183.21	167	126	2.4	8.45
K73B DM100L4 IE2 142				58	245	1.65	24.15	8.5	2480	1.75	166.63	189	111	2.6	7.45
K73C DM100L4 IE2 151				65	220	1.80	21.55	9.2	2270	1.90	152.50	214	98	2.8	6.60
7.7	1860	2.3	183.21	73	196	2.0	19.33	10.0	2110	2.1	141.34	239	88	3.4	5.91
8.5	1690	2.6	166.63	80	178	2.2	17.57	11	1910	2.3	128.10	274	77	3.8	5.14
9.2	1550	2.8	152.50	91	157	2.5	15.49	12	1740	2.5	116.83				
10.0	1440	3.0	141.34	103	139	2.9	13.72	13	1610	2.7	108.36				
								14	1460	3.0	98.17				

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
2.2 kW					
K23A DM100LX4 IE2					39
K23B DM100LX4 IE2					39
K23C DM100LX4 IE2					40
89	235	0.85		15.90	
99	215	0.95		14.27	
113	186	1.10		12.46	
129	163	1.25		10.91	
151	139	1.15		9.34	
170	123	1.30		8.28	
191	110	1.45		7.38	
213	99	1.65		6.63	
244	86	1.85		5.78	
278	75	2.1		5.07	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
K93G42A DM112M4 IE2					340
K93G42B DM112M4 IE2					340
K93G42C DM112M4 IE2					357
1.9	14900	0.80		762.02	
2.2	12700	0.95		651.55	
2.2	12300	1.00		631.60	
2.5	10900	1.10		560.85	
2.8	9690	1.25		497.00	
3.1	8860	1.40		454.31	
3.4	8090	1.50		414.77	
3.8	7320	1.65		375.01	
4.3	6350	1.95		325.31	
5.0	5550	2.2		284.64	
K83G32A DM112M4 IE2					231
K83G32B DM112M4 IE2					231
K83G32C DM112M4 IE2					247
2.9	9430	0.85		483.36	
3.3	8300	0.95		425.46	
3.8	7270	1.10		372.59	
4.3	6380	1.25		327.28	
4.7	5820	1.35		298.11	
5.4	5090	1.55		261.13	
5.9	4630	1.70		237.53	
6.6	4170	1.90		213.95	
7.3	3750	2.1		192.10	
7.5	3660	2.1		187.60	
8.6	3210	2.2		164.78	
K83A DM112M4 IE2					227
K83B DM112M4 IE2					227
K83C DM112M4 IE2					243
9.7	2940	2.7		144.68	
11	2690	3.0		132.28	
K73G32A DM112M4 IE2					160
K73G32B DM112M4 IE2					160
K73G32C DM112M4 IE2					169
5.5	5010	0.85		256.81	
6.1	4530	0.95		232.36	
6.7	4110	1.05		210.95	
7.5	3670	1.20		188.09	
K73A DM112M4 IE2					151
K73B DM112M4 IE2					151
K73C DM112M4 IE2					160
7.7	3720	1.15		183.21	
8.5	3390	1.30		166.63	
9.2	3100	1.40		152.50	
10.0	2870	1.50		141.34	
11	2600	1.65		128.10	
12	2370	1.80		116.83	
13	2200	1.95		108.36	
14	1990	2.2		98.17	
16	1810	2.4		89.29	
17	1640	2.6		80.57	
19	1490	2.9		73.10	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
K63A DM112M4 IE2					101
K63B DM112M4 IE2					101
K63C DM112M4 IE2					107
9.8	2940	0.85		144.48	
11	2660	0.95		130.99	
12	2430	1.05		119.50	
13	2230	1.15		109.93	
14	2020	1.25		99.21	
16	1830	1.40		90.07	
17	1690	1.50		83.27	
19	1520	1.65		75.02	
21	1370	1.85		67.22	
23	1220	2.1		60.20	
26	1100	2.3		54.18	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
3.0 kW					
K53A DM112M4 IE2					75
K53B DM112M4 IE2					75
K53C DM112M4 IE2					78
17	1690	0.85		83.01	
19	1510	0.95		74.48	
21	1370	1.05		67.22	
23	1260	1.15		61.87	
25	1120	1.25		55.30	
29	1000	1.45		49.10	
32	885	1.60		43.51	
36	785	1.80		38.72	
48	600	2.4		29.56	
53	540	2.6		26.68	
57	500	2.9		24.56	
K43A DM112M4 IE2					56
K43B DM112M4 IE2					56
K43C DM112M4 IE2					58
33	880	0.85		43.37	
37	775	0.95		38.17	
42	680	1.10		33.43	
48	595	1.25		29.37	
55	520	1.45		25.56	
61	475	1.55		23.30	
68	420	1.75		20.79	
76	380	1.95		18.65	
83	345	2.2		16.92	
94	305	2.4		14.99	
107	270	2.8		13.20	
122	235	3.2		11.56	
139	205	3.6		10.15	
164	175	3.2		8.60	
185	155	3.5		7.62	
K33A DM112M4 IE2					48
K33B DM112M4 IE2					48
K33C DM112M4 IE2					50
58	490	0.80		24.15	
65	440	0.90		21.55	
73	395	1.00		19.33	
80	355	1.10		17.57	
91	315	1.25		15.49	
103	280	1.45		13.72	
115	250	1.55		12.27	
132	215	1.75		10.68	
152	189	1.30		9.30	
167	172	1.75		8.45	
189	151	1.90		7.45	
214	134	2.1		6.60	
239	120	2.5		5.91	
274	104	2.8		5.14	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
K93G42A DM112MX4 IE2					340
K93G42B DM112MX4 IE2					340
K93G42C DM112MX4 IE2					357
2.5	14400	0.85		560.85	
2.9	12800	0.95		497.00	
3.1	11700	1.05		454.31	
3.4	10700	1.15		414.77	
3.8	9650	1.25		375.01	
4.4	8370	1.45		325.31	
5.0	7330	1.65		284.64	
K83G32A DM112MX4 IE2					231
K83G32B DM112MX4 IE2					231
K83G32C DM112MX4 IE2					247
3.8	9590	0.85		372.59	
4.4	8420	0.95		327.28	
4.8	7670	1.05		298.11	
5.5	6720	1.20		261.13	
6.0	6110	1.30		237.53	
6.7	5510	1.45		213.95	
7.4	4940	1.60		192.10	
7.6	4830	1.60		187.60	
8.6	4240	1.65		164.78	
K83A DM112MX4 IE2					227
K83B DM112MX4 IE2					227
K83C DM112MX4 IE2					243
9.8	3880	2.1		144.68	
11	3550	2.2		132.28	
12	3280	2.4		122.27	
13	2980	2.7		111.12	
14	2720	2.9		101.42	
K73G32A DM112MX4 IE2					160
K73G32B DM112MX4 IE2					160
K73G32C DM112MX4 IE2					169
6.8	5430	0.80		210.95	
7.6	4840	0.90		188.09	
K73A DM112MX4 IE2					151
K73B DM112MX4 IE2					151
K73C DM112MX4 IE2					160
8.6	4470	0.95		166.63	
9.3	4090	1.05		152.50	
10	3790	1.15		141.34	
11	3430	1.25		128.10	
12	3130	1.40		116.83	
13	2900	1.50		108.36	
15	2630	1.65		98.17	
16	2390	1.80		89.29	
18	2160	2.0		80.57	
19	1960	2.2		73.10	
K63A DM112MX4 IE2					101
K63B DM112MX4 IE2					101
K63C DM112MX4 IE2					107
12	3200	0.80		119.50	
13	2950	0.85		109.93	
14	2660	0.95		99.21	
16	2410	1.05		90.07	
17	2230	1.15		83.27	
19	2010	1.25		75.02	
21	1800	1.40		67.22	
24	1610	1.60		60.20	
26	1450	1.75		54.18	

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
4.0 kW					
K53A DM112MX4 IE2					75
K53B DM112MX4 IE2					75
K53C DM112MX4 IE2					78
21	1800	0.80		67.22	
23	1660	0.85		61.87	
26	1480	0.95		55.30	
29	1320	1.10		49.10	
33	1170	1.20		43.51	
37	1040	1.40		38.72	
48	790	1.80		29.56	
53	715	2.00		26.68	
58	660	2.2		24.56	
65	590	2.4		21.95	
73	520	2.7		19.49	
83	465	3.0		17.27	
93	410	3.2		15.37	
133	290	3.4		10.75	
K43A DM112MX4 IE2					56
K4					

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg							
5.5 kW						5.5 kW						7.5 kW						9.2 kW						
K83G32A DA132S4 IE2					248	K53A DA132S4 IE2					92	K73A DA132MX4 IE2					175	K93G42A DA160MS4 IE2					379	
K83G32B DA132S4 IE2					248	K53B DA132S4 IE2					92	K73B DA132MX4 IE2					175	K93G42B DA160MS4 IE2					379	
K83G32C DA132S4 IE2					265	K53C DA132S4 IE2					96	K73C DA132MX4 IE2					184	K93G42C DA160MS4 IE2					396	
5.6	9050	0.90			261.13	30	1770	0.80			49.10	13	5330	0.80			108.36	5.8	14500	0.85			252.16	
6.1	8230	0.95			237.53	33	1570	0.90			43.51	15	4830	0.90			98.17	6.7	12600	1.00			218.74	
6.8	7410	1.05			213.95	38	1400	1.00			38.72	16	4400	1.00			89.29	7.7	11000	1.10			191.40	
7.6	6660	1.20			192.10	44	1200	1.20			33.17	18	3970	1.10			80.57	8.7	9670	1.25			168.61	
7.8	6500	1.20			187.60	49	1070	1.35			29.56	20	3600	1.20			73.10	10	8270	1.50			144.17	
8.8	5710	1.25			164.78	55	965	1.50			26.68	23	3120	1.40			63.32	<hr/>						
K83A DA132S4 IE2					243	59	885	1.60			24.56	25	2820	1.55			57.29	K93A DA160MS4 IE2					362	
K83B DA132S4 IE2					243	66	790	1.80			21.95	28	2560	1.70			52.01	K93B DA160MS4 IE2					362	
K83C DA132S4 IE2					260	75	705	2.0			19.49	31	2280	1.90			46.38	K93C DA160MS4 IE2					379	
10	5220	1.50			144.68	84	625	2.2			17.27	33	2170	2.00			43.99	11	8210	1.50			137.36	
11	4780	1.65			132.28	95	555	2.4			15.37	36	1970	2.2			40.01	12	7530	1.65			126.06	
12	4410	1.80			122.27	111	475	2.7			13.17	40	1780	2.4			36.10	13	6850	1.80			114.62	
13	4010	2.00			111.12	125	420	2.9			11.61	44	1610	2.7			32.75	14	6260	1.95			104.80	
14	3660	2.2			101.42	135	390	2.5			10.75	44	1610	2.7			32.75	16	5540	2.2			92.68	
16	3320	2.4			91.87	152	345	2.9			9.55	51	1400	3.1			28.37	17	5060	2.4			84.72	
17	3020	2.6			83.68	172	305	3.2			8.46	<hr/>						19	4620	2.7			77.34	
20	2650	3.0			73.30	193	270	3.6			7.53	K63A DA132MX4 IE2					125	21	4180	2.9			69.93	
K73A DA132S4 IE2					169	226	235	4.1			6.45	K63B DA132MX4 IE2					125	<hr/>						
K73B DA132S4 IE2					169	K43A DA132S4 IE2					74	K63C DA132MX4 IE2					130	K83A DA160MS4 IE2					263	
K73C DA132S4 IE2					178	K43B DA132S4 IE2					74	24	2960	0.85			60.20	K83B DA160MS4 IE2					263	
11	4620	0.95			128.10	K43C DA132S4 IE2					76	27	2670	0.95			54.18	K83C DA160MS4 IE2					280	
12	4220	1.05			116.83	70	750	1.00			20.79	31	2330	1.10			47.27	13	6640	1.20			111.12	
13	3910	1.10			108.36	78	675	1.10			18.65	34	2080	1.20			42.35	14	6060	1.30			101.42	
15	3540	1.20			98.17	86	610	1.20			16.92	39	1850	1.40			37.56	16	5490	1.45			91.87	
16	3220	1.35			89.29	97	540	1.35			14.99	44	1620	1.55			33.00	18	5000	1.60			83.68	
18	2910	1.50			80.57	110	475	1.55			13.20	49	1470	1.75			29.77	20	4380	1.80			73.30	
20	2640	1.65			73.10	126	415	1.80			11.56	55	1310	1.95			26.68	22	3990	2.00			66.68	
23	2290	1.90			63.32	143	365	2.0			10.15	61	1180	2.1			23.89	24	3590	2.2			60.06	
25	2070	2.1			57.29	169	310	1.85			8.60	68	1060	2.3			21.50	27	3220	2.5			53.92	
28	1880	2.3			52.01	191	275	2.00			7.62	78	925	2.5			18.76	32	2760	2.9			46.25	
31	1670	2.6			46.38	217	240	2.4			6.71	87	825	2.7			16.81	<hr/>						
33	1590	2.7			43.99	248	210	2.6			5.87	98	735	2.9			14.91	K73A DA160MS4 IE2					190	
36	1440	3.0			40.01	282	186	2.8			5.16	111	645	3.2			13.10	K73B DA160MS4 IE2					190	
K63A DA132S4 IE2					118	7.5 kW						126	570	3.0			11.58	K73C DA160MS4 IE2					199	
K63B DA132S4 IE2					118	K93G42A DA132MX4 IE2					364	K53A DA132MX4 IE2					99	16	5340	0.80			89.29	
K63C DA132S4 IE2					124	K93G42B DA132MX4 IE2					364	K53B DA132MX4 IE2					99	18	4820	0.90			80.57	
16	3250	0.80			90.07	K93G42C DA132MX4 IE2					381	K53C DA132MX4 IE2					102	20	4370	1.00			73.10	
17	3010	0.85			83.27	4.5	15400	0.80			325.31	44	1630	0.85			33.17	23	3780	1.15			63.32	
19	2710	0.95			75.02	5.1	13500	0.90			284.64	49	1460	1.00			29.56	26	3420	1.25			57.29	
22	2430	1.05			67.22	5.8	11900	1.05			252.16	55	1310	1.10			26.68	28	3110	1.40			52.01	
24	2170	1.15			60.20	6.7	10300	1.20			218.74	59	1210	1.20			24.56	32	2770	1.55			46.38	
27	1960	1.30			54.18	7.6	9050	1.35			191.40	66	1080	1.30			21.95	33	2630	1.65			43.99	
31	1710	1.50			47.27	8.6	7970	1.55			168.61	75	960	1.50			19.49	37	2390	1.80			40.01	
34	1530	1.65			42.35	10	6810	1.80			144.17	84	850	1.60			17.27	41	2160	2.0			36.10	
39	1360	1.90			37.56	<hr/>						95	755	1.75			15.37	45	1960	2.2			32.75	
44	1190	2.1			33.00	K93A DA132MX4 IE2					348	111	650	1.95			13.17	52	1700	2.6			28.37	
49	1070	2.4			29.77	K93B DA132MX4 IE2					348	125	570	2.1			11.61	57	1530	2.8			25.67	
55	965	2.7			26.68	K93C DA132MX4 IE2					365	135	530	1.85			10.75	63	1390	3.1			23.31	
61	860	2.9			23.89	11	6760	1.80			137.36	152	470	2.1			9.55	71	1240	3.5			20.78	
<hr/>						12	6210	1.95			126.06	172	415	2.4			8.46	<hr/>						
<hr/>						13	5640	2.2			114.62	193	370	2.7			7.53	K63A DA160MS4 IE2					140	
<hr/>						14	5160	2.4			104.80	226	320	3.0			6.45	K63B DA160MS4 IE2					140	
<hr/>						16	4560	2.7			92.68	256	280	3.3			5.69	K63C DA160MS4 IE2					145	
<hr/>						17	4170	2.9			84.72	<hr/>						27	3240	0.80			54.18	
<hr/>						K83A DA132MX4 IE2					249	K43A DA132MX4 IE2					80	31	2830	0.90				47.27
<hr/>						K83B DA132MX4 IE2					249	K43B DA132MX4 IE2					80	35	2530	1.00				42.35
<hr/>						K83C DA132MX4 IE2					266	K43C DA132MX4 IE2					82	39	2250	1.15				37.56
<hr/>						10	7120	1.10			144.68	78	920	0.80			18.65	45	1970	1.25				33.00
<hr/>						11	6510	1.20			132.28	86	835	0.90			16.92	49	1780	1.45				29.77
<hr/>						12	6020	1.30			122.27	97	740	1.00			14.99	55	1590	1.60				26.68
<hr/>						13	5470	1.45			111.12	110	650	1.15			13.20	62						

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
9.2 kW					
K53A DA160MS4 IE2					114
K53B DA160MS4 IE2					114
K53C DA160MS4 IE2					117
67	1310	1.10	21.95		
75	1160	1.20	19.49		
85	1030	1.35	17.27		
96	920	1.45	15.37		
112	785	1.60	13.17		
127	695	1.75	11.61		
137	645	1.55	10.75		
154	570	1.75	9.55		
174	505	1.95	8.46		
195	450	2.2	7.53		
228	385	2.5	6.45		
258	340	2.7	5.69		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
11.0 kW					
K93G42A DA160M4 IE2					389
K93G42B DA160M4 IE2					389
K93G42C DA160M4 IE2					406
6.7	15100	0.80	218.74		
7.7	13200	0.95	191.40		
8.7	11600	1.05	168.61		
10	9920	1.25	144.17		
K93A DA160M4 IE2					372
K93B DA160M4 IE2					372
K93C DA160M4 IE2					389
11	9850	1.25	137.36		
12	9040	1.35	126.06		
13	8220	1.50	114.62		
14	7520	1.65	104.80		
16	6650	1.85	92.68		
17	6070	2.0	84.72		
19	5550	2.2	77.34		
21	5010	2.4	69.93		
24	4350	2.8	60.66		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
K83A DA160M4 IE2					273
K83B DA160M4 IE2					273
K83C DA160M4 IE2					290
13	7970	1.00	111.12		
14	7270	1.10	101.42		
16	6590	1.20	91.87		
18	6000	1.35	83.68		
20	5260	1.50	73.30		
22	4780	1.65	66.68		
24	4310	1.85	60.06		
27	3870	2.1	53.92		
32	3320	2.4	46.25		
37	2870	2.8	39.98		
45	2360	3.4	32.84		
K73A DA160M4 IE2					200
K73B DA160M4 IE2					200
K73C DA160M4 IE2					209
20	5240	0.85	73.10		
23	4540	0.95	63.32		
26	4110	1.05	57.29		
28	3730	1.15	52.01		
32	3330	1.30	46.38		
33	3150	1.35	43.99		
37	2870	1.50	40.01		
41	2590	1.65	36.10		
45	2350	1.85	32.75		
52	2030	2.1	28.37		
57	1840	2.4	25.67		
63	1670	2.6	23.31		
71	1490	2.9	20.78		
83	1260	3.4	17.62		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
11.0 kW					
K63A DA160M4 IE2					150
K63B DA160M4 IE2					150
K63C DA160M4 IE2					155
35	3040	0.85	42.35		
39	2690	0.95	37.56		
44	2370	1.05	33.00		
49	2130	1.20	29.77		
55	1910	1.35	26.68		
61	1710	1.45	23.89		
68	1540	1.55	21.50		
78	1350	1.70	18.76		
87	1210	1.85	16.81		
98	1070	2.0	14.91		
112	940	2.2	13.10		
126	830	2.0	11.58		
141	750	2.2	10.43		
161	650	2.6	9.10		
180	585	2.9	8.15		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
K53A DA160M4 IE2					124
K53B DA160M4 IE2					124
K53C DA160M4 IE2					127
67	1570	0.90	21.95		
75	1400	1.00	19.49		
85	1240	1.10	17.27		
95	1100	1.20	15.37		
111	945	1.35	13.17		
126	835	1.45	11.61		
136	770	1.30	10.75		
153	685	1.45	9.55		
173	605	1.60	8.46		
195	540	1.85	7.53		
227	465	2.1	6.45		
257	410	2.3	5.69		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
15.0 kW					
K93A DA160L4 IE2					389
K93B DA160L4 IE2					389
K93C DA160L4 IE2					406
11	13400	0.90	137.36		
12	12300	1.00	126.06		
13	11200	1.10	114.62		
14	10200	1.20	104.80		
16	9060	1.35	92.68		
17	8280	1.50	84.72		
19	7560	1.60	77.34		
21	6840	1.80	69.93		
24	5930	2.1	60.66		
28	5190	2.4	53.08		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
K83A DA160L4 IE2					290
K83B DA160L4 IE2					290
K83C DA160L4 IE2					307
14	9920	0.80	101.42		
16	8980	0.90	91.87		
18	8180	0.95	83.68		
20	7170	1.10	73.30		
22	6520	1.20	66.68		
24	5870	1.35	60.06		
27	5270	1.50	53.92		
32	4520	1.75	46.25		
37	3910	2.0	39.98		
45	3210	2.5	32.84		
49	2920	2.7	29.88		
54	2630	3.0	26.91		
61	2360	3.4	24.16		
71	2030	3.8	20.73		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
15.0 kW					
K73A DA160L4 IE2					217
K73B DA160L4 IE2					217
K73C DA160L4 IE2					226
28	5090	0.85	52.01		
32	4530	0.95	46.38		
33	4300	1.00	43.99		
37	3910	1.10	40.01		
41	3530	1.25	36.10		
45	3200	1.35	32.75		
52	2770	1.55	28.37		
57	2510	1.70	25.67		
63	2280	1.90	23.31		
71	2030	2.1	20.78		
83	1720	2.5	17.62		
97	1470	2.8	15.04		
106	1350	2.3	13.76		
118	1220	2.5	12.45		
130	1100	2.8	11.30		
145	985	3.1	10.08		
171	835	3.7	8.54		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
K63A DA160L4 IE2					167
K63B DA160L4 IE2					167
K63C DA160L4 IE2					173
49	2910	0.90	29.77		
55	2610	1.00	26.68		
61	2340	1.05	23.89		
68	2100	1.15	21.50		
78	1830	1.25	18.76		
87	1640	1.35	16.81		
98	1460	1.45	14.91		
112	1280	1.60	13.10		
126	1130	1.50	11.58		
141	1020	1.65	10.43		
161	890	1.90	9.10		
180	795	2.1	8.15		
203	705	2.3	7.23		
231	620	2.5	6.35		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
K53A DA160L4 IE2					141
K53B DA160L4 IE2					141
K53C DA160L4 IE2					145
85	1690	0.80	17.27		
95	1500	0.90	15.37		
111	1290	1.00	13.17		
126	1140	1.05	11.61		
136	1050	0.95	10.75		
153	935	1.05	9.55		
173	825	1.20	8.46		
195	735	1.35	7.53		
227	630	1.50	6.45		
257	555	1.65	5.69		

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
18.5 kW					
K93A DA180MC4 IE2					395
K93B DA180MC4 IE2					395
K93C DA180MC4 IE2					412
13	13800	0.90	114.62		
14	12600	0.95	104.80		
16	11200	1.10	92.68		
17	10200	1.20	84.72		
19	9330	1.30	77.34		
21	8430	1.45	69.93		
24	7320	1.65	60.66		
28	6400	1.90	53.08		
31	5640	2.1	46.76		

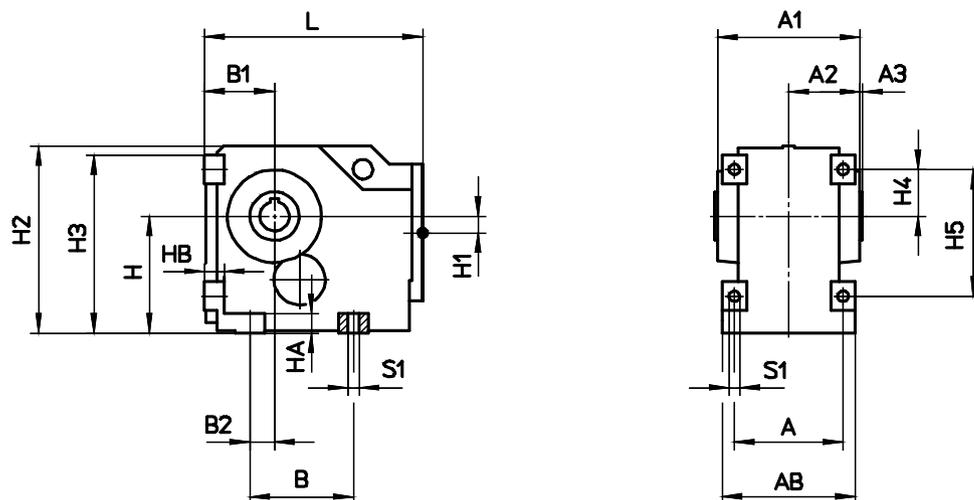
Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
18.5 kW					
K83A DA180MC4 IE2					296
K83B DA180MC4 IE2					296
K83C DA180MC4 IE2					313
18	10100	0.80	83.68		
20	8840	0.90	73.30		
22	8040	1.00	66.68		
24	7240	1.10	60.06		

Helical bevel gear units K

Type	n2 [1/min]	T2 [Nm]	cG	i	-kg	Type	n2 [1/min]	T2 [Nm]	cG	i	-kg
22.0 kW						30.0 kW					
K83A DA180LC4 IE2					308	K83A DA200L4 IE2					433
K83B DA180LC4 IE2					308	K83B DA200L4 IE2					433
K83C DA180LC4 IE2					325	K83C DA200L4 IE2					450
22	9560	0.85	66.68			32	8950	0.90	46.25		
24	8610	0.90	60.06			37	7740	1.05	39.98		
27	7730	1.05	53.92			43	6730	1.20	34.75		
32	6630	1.20	46.25			45	6360	1.25	32.84		
37	5730	1.40	39.98			50	5780	1.40	29.88		
42	4980	1.60	34.75			55	5210	1.55	26.91		
45	4710	1.70	32.84			61	4680	1.70	24.16		
49	4280	1.85	29.88			71	4010	1.95	20.73		
54	3860	2.1	26.91			83	3470	2.1	17.91		
61	3470	2.3	24.16			95	3010	2.4	15.57		
71	2970	2.6	20.73			106	2710	1.80	14.01		
82	2570	2.9	17.91			118	2430	2.00	12.58		
94	2230	3.2	15.57			137	2090	2.3	10.79		
105	2010	2.4	14.01			159	1810	2.7	9.32		
116	1800	2.7	12.58			183	1570	3.1	8.11		
136	1550	3.1	10.79			<hr/>					
157	1340	3.6	9.32			K73A DA200L4 IE2					362
K73A DA180LC4 IE2					235	K73B DA200L4 IE2					362
K73B DA180LC4 IE2					235	K73C DA200L4 IE2					371
K73C DA180LC4 IE2					244	52	5490	0.80	28.37		
41	5180	0.85	36.10			58	4970	0.85	25.67		
45	4700	0.90	32.75			64	4510	0.95	23.31		
52	4070	1.05	28.37			71	4020	1.10	20.78		
57	3680	1.20	25.67			84	3410	1.25	17.62		
63	3340	1.30	23.31			98	2910	1.45	15.04		
71	2980	1.45	20.78			108	2660	1.15	13.76		
83	2530	1.70	17.62			119	2410	1.30	12.45		
97	2160	1.95	15.04			131	2190	1.40	11.30		
106	1970	1.55	13.76			147	1950	1.60	10.08		
118	1790	1.75	12.45			173	1650	1.90	8.54		
130	1620	1.90	11.30			203	1410	2.2	7.29		
145	1440	2.1	10.08			<hr/>					
171	1230	2.5	8.54			37.0 kW					
201	1050	3.0	7.29			K93A DA225SX4 IE2					580
K63A DA180LC4 IE2					185	K93B DA225SX4 IE2					580
K63B DA180LC4 IE2					185	K93C DA225SX4 IE2					597
K63C DA180LC4 IE2					191	24	14500	0.85	60.66		
68	3080	0.80	21.50			28	12700	0.95	53.08		
78	2690	0.85	18.76			32	11200	1.10	46.76		
87	2410	0.90	16.81			37	9580	1.20	39.98		
98	2140	1.00	14.91			42	8330	1.35	34.75		
112	1880	1.10	13.10			47	7510	1.65	31.33		
126	1660	1.00	11.58			54	6510	1.90	27.18		
141	1500	1.10	10.43			62	5700	2.1	23.78		
161	1300	1.30	9.10			70	5020	2.3	20.95		
180	1170	1.45	8.15			82	4290	2.5	17.91		
203	1040	1.60	7.23			95	3730	2.8	15.57		
231	910	1.70	6.35			103	3440	2.1	14.34		
<hr/>						118	3010	2.4	12.55		
30.0 kW						133	2650	2.8	11.06		
K93A DA200L4 IE2					532	<hr/>					
K93B DA200L4 IE2					532	K83A DA225SX4 IE2					481
K93C DA200L4 IE2					549	K83B DA225SX4 IE2					481
19	15000	0.80	77.34			K83C DA225SX4 IE2					498
21	13500	0.90	69.93			37	9580	0.85	39.98		
24	11700	1.05	60.66			42	8330	0.95	34.75		
28	10300	1.20	53.08			45	7870	1.00	32.84		
32	9050	1.35	46.76			49	7160	1.10	29.88		
37	7740	1.50	39.98			55	6450	1.25	26.91		
43	6730	1.70	34.75			61	5790	1.35	24.16		
47	6070	2.0	31.33			71	4970	1.55	20.73		
54	5260	2.3	27.18			82	4290	1.70	17.91		
62	4600	2.6	23.78			95	3730	1.90	15.57		
71	4060	2.8	20.95			105	3360	1.45	14.01		
83	3470	3.1	17.91			117	3010	1.60	12.58		
95	3010	3.4	15.57			137	2580	1.90	10.79		
103	2780	2.6	14.34			158	2230	2.2	9.32		
118	2430	3.0	12.55			182	1940	2.5	8.11		

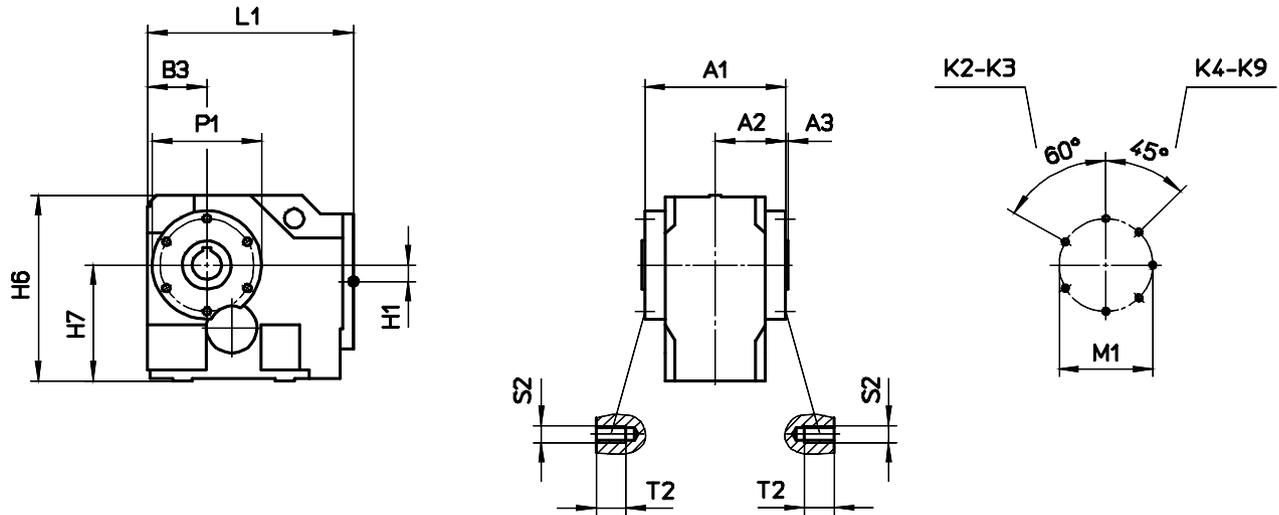
Dimensions

A - Foot mounted version



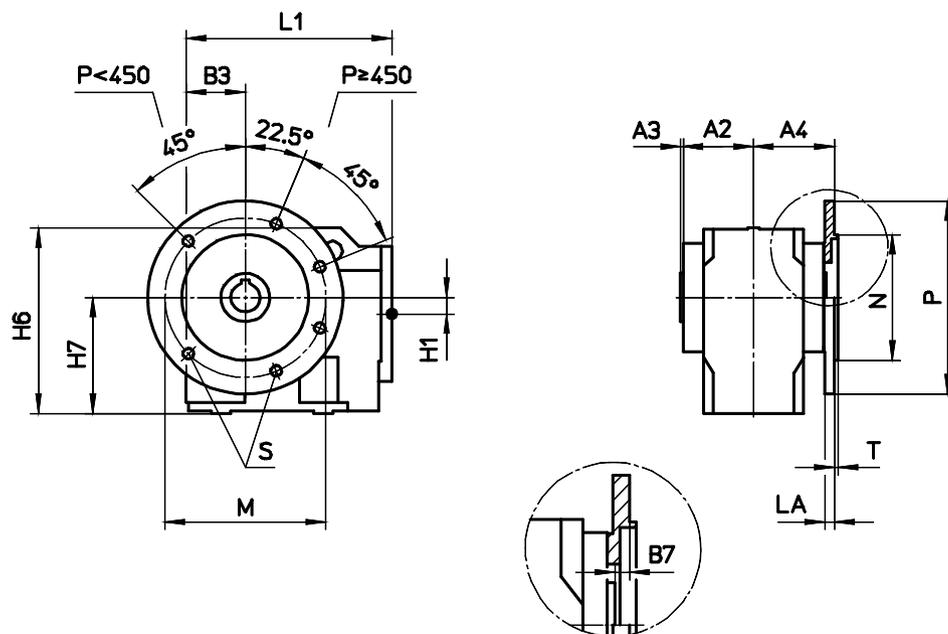
	A	AB	A1	A2	A3	B	B1	B2	H	HA	HB	H1	H2	H3	H4	H5	L	S1
K2	90	110	116	58	2	90	65-0.5	25	100-0.5	20	20	12	163.5	160.5	48	110	192	Ø9
K3	110	135	144	72	3	105	75-0.5	25	120-0.5	20	20	17	192	183	48	130	225	Ø11
K4	125	155	168	84	3.5	125	90-0.5	25	145-0.5	25	25	18	230	223	58	150	266	Ø13.5
K5	150	190	202	101	4	160	110-0.5	40	180-0.5	30	30	23.5	283.5	274.5	72	190	322	Ø17.5
K6	175	220	230	115	5	200	130-0.5	49	220-0.5	35	35	29	344.5	334.5	87	230	370	Ø22
K7	220	280	288	144	6	240	150-0.5	75	250-1	40	40	31	398.5	396	120	280	430	Ø26
K8	270	330	338	169	6	270	180-0.5	70	290-1	45	45	39	463	447.5	120	310	510	Ø33
K9	300	370	398	199	6	320	200-0.5	90	340-1	50	50	42	537	525	140	360	578	Ø39

B - Shaft mounted version



	A1	A2	A3	B3	H1	H6	H7	L1	M1	P1	S2	T2
K2	116	58	2	61	12	165.5	102	188	87	99	M6	9
K3	144	72	3	70.5	17	194	122	220.5	96	112	M8	12
K4	168	84	3.5	85	18	232	147	261	106	122	M8	12
K5	202	101	4	106.5	23.5	286	182.5	318.5	130	150	M10	15
K6	230	115	5	126	29	347	222.5	366	154	178	M12	18
K7	288	144	6	146	31	398.5	250	426	182	214	M16	24
K8	338	169	6	171.5	39	463	290	501.5	220	260	M20	30
K9	398	199	6	193.5	42	537	340	571.5	258	306	M24	36

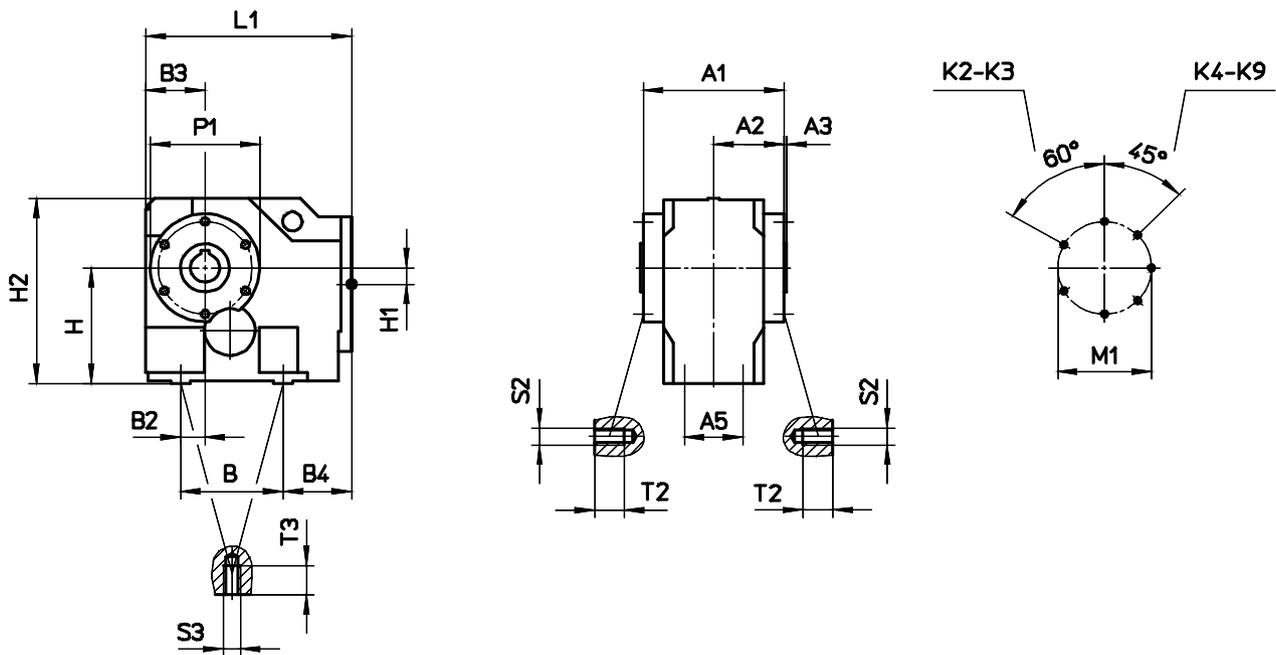
C - Flange mounted version



	A2	A3	A4	B3	B7	H1	H6	H7	L1
K2	58	2	70	61	10	12	165.5	102	188
K3	72	3	83	70.5	8	17	194	122	220.5
K4	84	3.5	95	85	7.5	18	232	147	261
K5	101	4	113	106.5	8	23.5	286	182.5	318.5
K6	115	5	128	126	8	29	347	222.5	366
K7	144	6	160	146	10	31	398.5	250	426
K8	169	6	190	171.5	15	39	463	290	501.5
K9	199	6	222	193.5	17	42	537	340	571.5

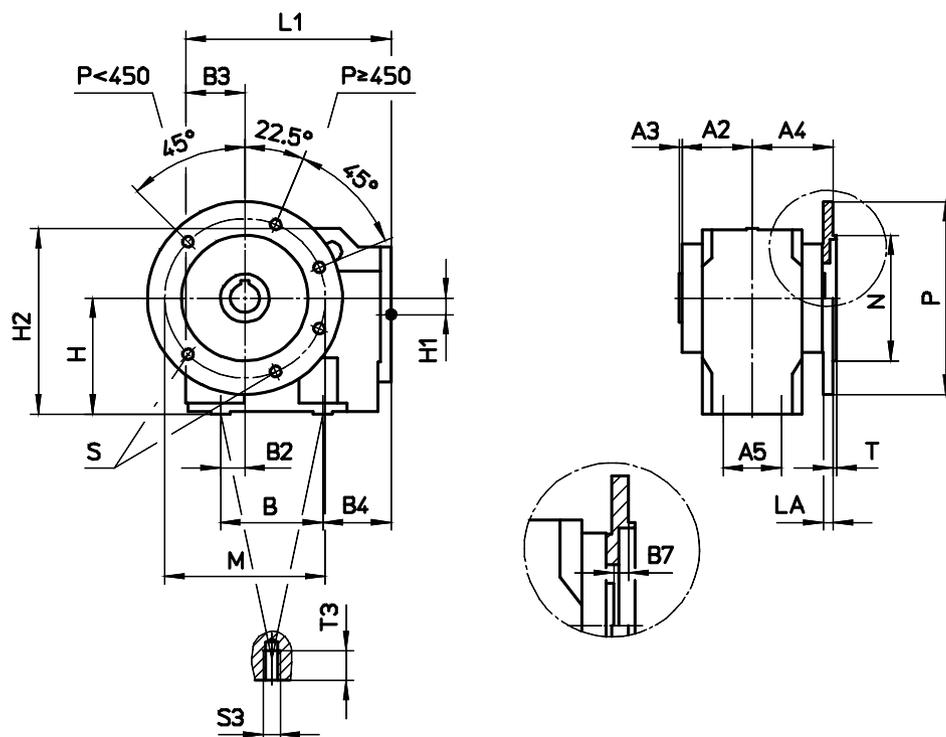
	M	N	P	LA	T	S
K2	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
K3	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
K4	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
K5	Ø215	Ø180 j6	Ø250	11	4	Ø13.5
K6	Ø265	Ø230 j6	Ø300	12	4	Ø13.5
K7	Ø300	Ø250 h6	Ø350	13	5	Ø17.5
K8	Ø400	Ø350 h6	Ø450	16	5	Ø17.5
K9	Ø400	Ø350 h6	Ø450	16	5	Ø17.5

D - Shaft mounted version + foot area



	A1	A2	A3	A5	B	B2	B3	B4	H	H1	H2	L1	M1	P1	S2	T2	S3	T3
K2	116	58	2	50	90	25	61	62	100	12	163.5	188	87	99	M6	9	M8	12
K3	144	72	3	60	105	25	70.5	70	120	17	192	220.5	96	112	M8	12	M10	15
K4	168	84	3.5	70	125	25	85	76	145	18	230	261	106	122	M8	12	M12	18
K5	202	101	4	80	160	40	106.5	92	180	23.5	283.5	318.5	130	150	M10	15	M16	24
K6	230	115	5	95	200	49	126	89	220	29	344.5	366	154	178	M12	18	M16	24
K7	288	144	6	125	240	75	146	115	250	31	398.5	426	182	214	M16	24	M20	30
K8	338	169	6	150	270	70	171.5	130	290	39	463	501.5	220	260	M20	30	M24	36
K9	398	199	6	160	320	90	193.5	148	340	42	537	571.5	258	306	M24	36	M30	45

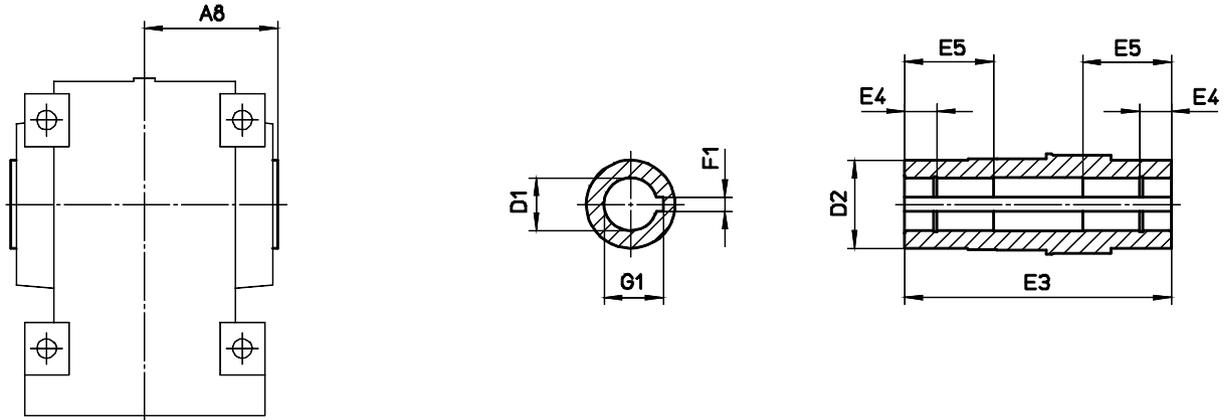
E - Flange mounted version + foot area



	A2	A3	A4	A5	B	B2	B3	B4	B7	H	H1	H2	L1	S3	T3
K2	58	2	70	50	90	25	61	62	10	100	12	163.5	188	M8	12
K3	72	3	83	60	105	25	70.5	70	8	120	17	192	220.5	M10	15
K4	84	3.5	95	70	125	25	85	76	7.5	145	18	230	261	M12	18
K5	101	4	113	80	160	40	106.5	92	8	180	23.5	283.5	318.5	M16	24
K6	115	5	128	95	200	49	126	89	8	220	29	344.5	366	M16	24
K7	144	6	160	125	240	75	146	115	10	250	31	398.5	426	M20	30
K8	169	6	190	150	270	70	171.5	130	15	290	39	463	501.5	M24	36
K9	199	6	222	160	320	90	193.5	148	17	340	42	537	571.5	M30	45

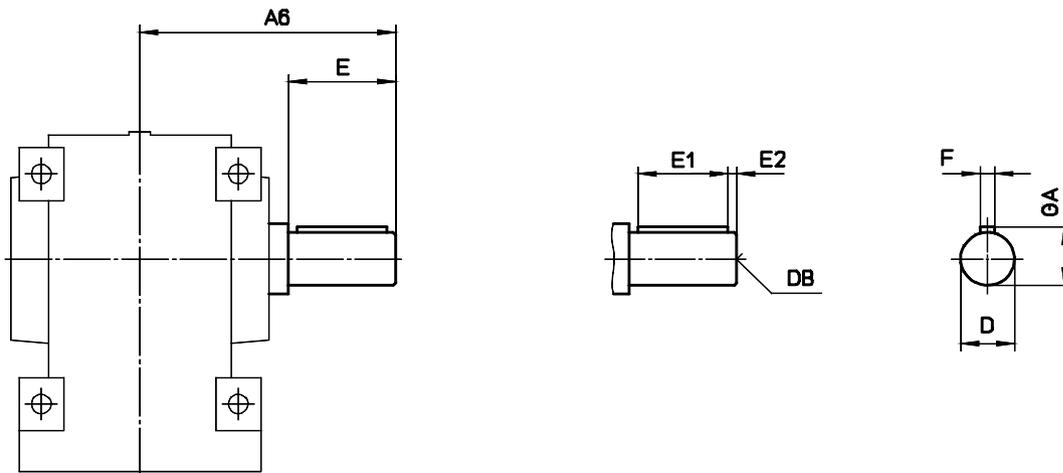
	M	N	P	LA	T	S
K2	Ø130	Ø110 j6	Ø160	9	3.5	Ø9
K3	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
K4	Ø165	Ø130 j6	Ø200	10	3.5	Ø11
K5	Ø215	Ø180 j6	Ø250	11	4	Ø13.5
K6	Ø265	Ø230 j6	Ø300	12	4	Ø13.5
K7	Ø300	Ø250 h6	Ø350	13	5	Ø17.5
K8	Ø400	Ø350 h6	Ø450	16	5	Ø17.5
K9	Ø400	Ø350 h6	Ø450	16	5	Ø17.5

Hollow shaft with keyway



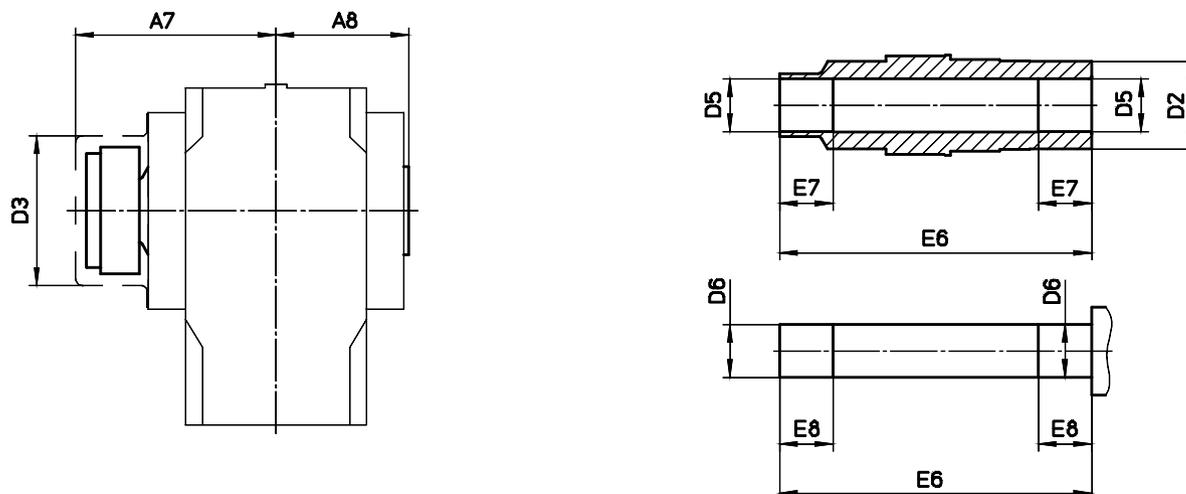
	A8	D1	D2	E3	E4	E5	F1	G1
K2	60	Ø25H7	45	120	15	-	8	28.3
K3	75	Ø30H7 Ø35H7	50	150	18	-	8 10	33.3 38.3
K4	87.5	Ø40H7	55	175	20	-	12	43.3
K5	105	Ø50H7	70	210	25	70	14	53.8
K6	120	Ø60H7	85	240	30	80	18	64.4
K7	150	Ø70H7	100	300	30	100	20	74.9
K8	175	Ø90H7	120	350	35	120	25	95.4
K9	205	Ø100H7	140	410	35	140	28	106.4

V - Output shaft with key



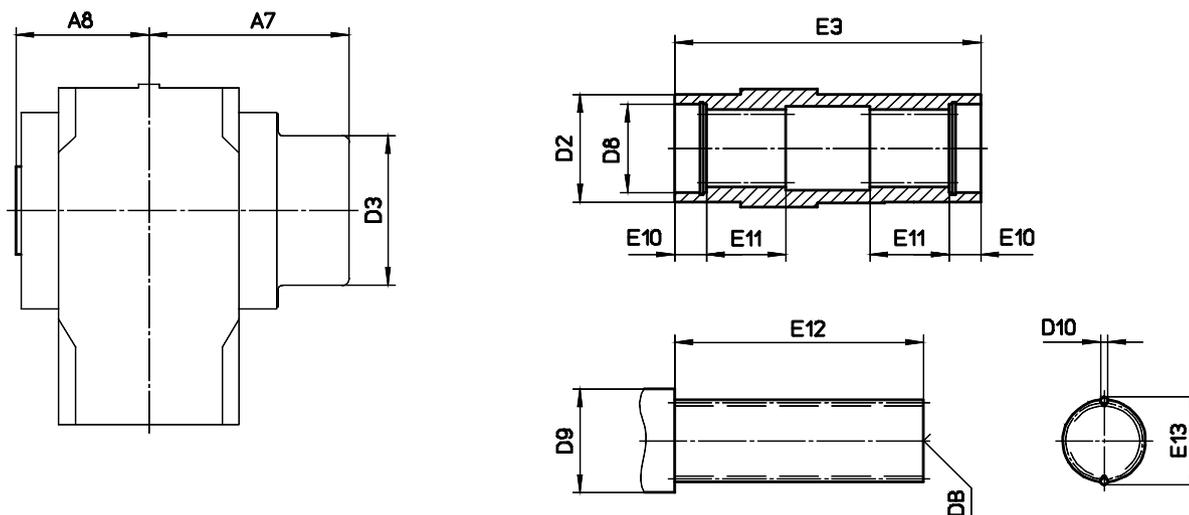
	A6	D	DB	E	E1	E2	F	GA
K2	120	Ø25k6	M10	50	40	5	8	28
K3	143 153	Ø30k6 Ø35k6	M10 M12	60 70	50 60	5	8 10	33 38
K4	175	Ø40k6	M16	80	70	5	12	43
K5	213	Ø50k6	M16	100	80	10	14	53.5
K6	248	Ø60m6	M20	120	100	10	18	64
K7	300	Ø75m6	M20	140	125	7.5	20	79.5
K8	360	Ø90m6	M24	170	140	15	25	95
K9	432	Ø110m6	M24	210	180	15	28	116

S - Hollow shaft with shrink disc



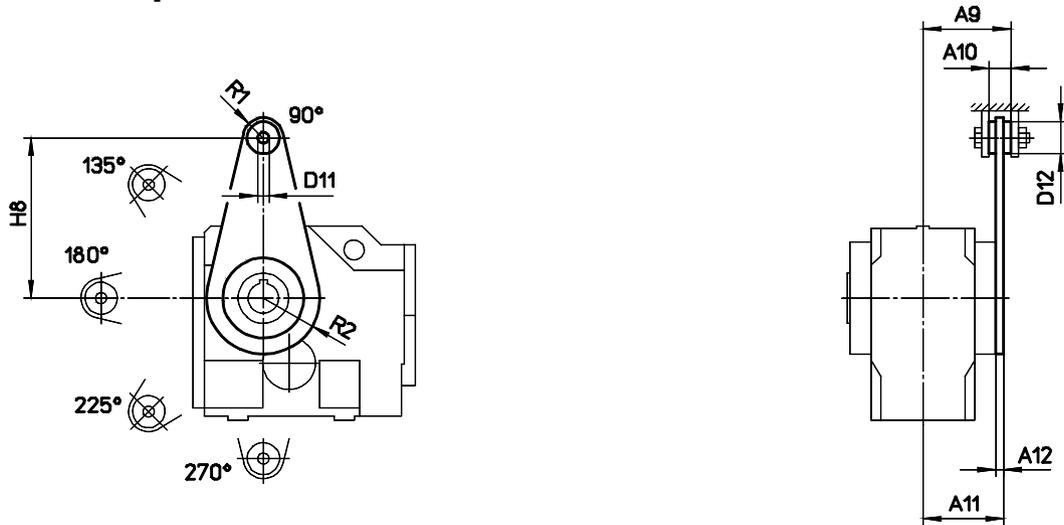
	A7	A8	D2	D3	D5	D6	E6	E7	E8
K2	97	60	45	77	Ø25H7	Ø25H6	143	25	27
K3	113	75	50	86	Ø30H7 Ø35H7	Ø30h6 Ø35h6	176	30	32
K4	127	87.5	55	96	Ø40H7	Ø40h6	202	40	42
K5	150	105	70	117	Ø50H7	Ø50h6	242	50	52
K6	172	120	85	148	Ø60H7	Ø60h6	274	60	62
K7	209	150	100	180	Ø70H7	Ø70h6	343	70	72
K8	247	175	120	225	Ø90H7	Ø90h6	402	80	82
K9	288	205	140	242	Ø110H7	Ø110h6	473	100	102

Z - Splined hollow shaft



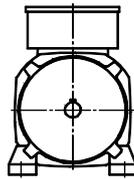
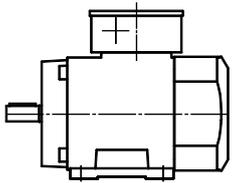
	DIN5480	A7	A8	D2	D3	D8	D9	D10	E3	E10	E11	E12	E13	DB
K2	30x1.25x30x22	97	60	45	77	35	40	2.75	120	18	25	88	33.05 -0.04	M10
K3	35x2x30x16	113	75	50	86	40	46	4	150	18	32	118	38.94 -0.04	M12
K4	40x2x30x18	127	87.5	55	96	42	50	4.5	175	23	42	140	45.08 -0.04	M16
K5	50x2x30x24	150	105	70	117	52	62	4	210	23	52	174	54.16 -0.05	M16
K6	65x2x30x31	172	120	85	148	70	82	4	240	25	62	195	68.99 -0.06	M20
K7	70x2x30x34	209	150	100	180	72	85	4	300	25	72	255	74.18 -0.06	M20
K8	85x3x30x27	247	175	120	225	90	105	6	350	27	88	298	91.02 -0.06	M20

T1 - Torque arm

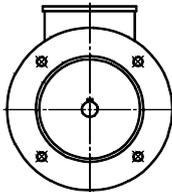
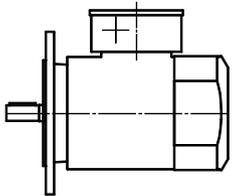


	A9	A10	A11	A12	D11	D12	H8	R1	R2
K2	68.5	15	64	6	11	32	130	20	49.5
K3	87	22	80	8	11	32	160	20	56
K4	99	22	92	8	11	32	200	23	61
K5	121	32	109	8	17	40	250	30	75
K6	155.5	66	130	15	16	32	300	30	89
K7	202	96	164	20	24	42	350	36	107
K8	229.5	96	194	25	24	42	450	36	130
K9	281.5	135	229	30	38	64	550	56	153

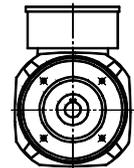
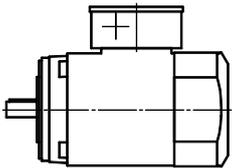
Three phase motors



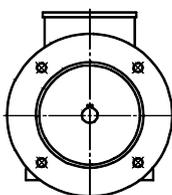
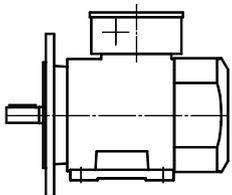
Foot mounted version
Example: DM80G4 – B3



Flange mounted version B5
Example: DA132M4 – B5



Flange mounted version B14
Example: DM71G6 – B14K



Foot-flange mounted version
Example: DM90S4 – B3/B5

Three phase motors

Technical characteristics

The motors correspond to the following standards:

DIN EN 60034	Rotating electrical machines, rating and performance.
IEC60072	Totally enclosed fan-cooled motors with squirrel cage, fixing dimensions and allocation of rating.
DIN42948	Mounting flanges for electrical machines

- Number of poles: 2 pole, 4 pole, 6 pole, 8 pole, 4/2 pole, 8/4 pole, 8/2 pole
 - Protection standard IP54 (Motor), IP55 (Geared motor)
 - Insulation class 155
 - Voltage/Frequency
 - Δ/Y 230/400V 50Hz 1)
 - Δ/Y 230/400V 50Hz // Y 460V 60Hz 1)
 - Δ/Y 400/690 V 50 Hz
 - Δ/Y 400/690 V 50 Hz // Δ 460V 60Hz
 - Δ/Y 290/500 V 50Hz (DM63..DM112)
 - Δ 500V 50Hz (DA132..DA225)
 - 200V 50Hz
 - 1) Standard voltages
- Different voltages and frequencies are available.

Options:

- UL-Version
- Dust- and water protection IP65

More Motor Options:

- Explosion proof motor in accordance with ATEX, for use in zone 1, 2, 21, or 22
- Flame proof Motor EExd
- motors with noise reduced brake or with double brake

Motor Power Pn

The values given in the tables are valid for the following conditions:

- Duty cycle S1
- Maximum ambient temperature +40°C
- Installation altitude up to 1000m above mean sea level

The available motor power for different conditions is calculated as follows: $P = P_n \times f_s \times f_t \times f_h$

Factor fs for different duty type

Duty type		fs
S1	Continuous duty. Operation with constant load. The motor reaches the thermal equilibrium.	1.0
S2-10min	Short term duty. Operation with constant load followed by a stop. During the stop the motor returns to the ambient temperature. Described by the duration of the load period in min.	1.4
S2-30min		1.25
S2-60min		1.1
S3-15%ED	Intermittent periodic duty. Operation with a sequence of identical cycles including a time of operation with constant load and a stop. Described by the cyclic duration factor in %.	1.4
S3-25%ED		1.3
S3-40%ED		1.2
S3-60%ED		1.1
S4 .. S10	Intermittent periodic duty. The start or stop phase of the motor is effecting the temperature raise. More data of the duty cycle are necessary.	On request

Factor ft for different ambient temperature θ

θ ≤ 40°C	ft=1.0
40°C < θ ≤ 50°C	ft=0.87
50°C < θ ≤ 60°C	ft=0.75

Factor fh for different altitude h

h ≤ 1000m	fh=1.0
1000m < h ≤ 2000m	fh=0.95
2000m < h ≤ 3000m	fh=0.87
3000m < h ≤ 4000m	fh=0.80

Permissible Radial Forces for the Output Shaft

Motor	Output shaft dxl [mm]	K1 [mm]	FR1 [N]			
			3000 1/min	1500 1/min	1000 1/min	750 1/min
DM63	11x23	155.5	430	540	620	680
DM71	14x30	176	420	530	610	670
DM80	19x40	200	700	880	1010	1110
DM90	24x50	217	750	950	1080	1190
DM100	28x60	275	1050	1330	1520	1670
DM112	28x60	286	1520	1920	2190	2410
DA132	38x80	368.5	1670	2100	2410	2650
DA160	42x110	495	1790	2250	2580	2840
DA180	48x110	495	1870	2360	2060	2970
DA200	55x110	590.5	2820	3550	4070	4480
DA225	60x140	665.5	4910	6190	7090	7800

For selection condition formulas, see page 6/7

Selection table

Three phase motors 4 pole

Motor	P _n [kW]	n ₁ [1/min]	I _n (400V)	cos φ	η -P _n [%]	η -3/4 P _n [%]	η -1/2 P _n [%]	Ma/Mn	Ia/I _n	Mk/Mn	JE [kgcm ²]	~kg	Brake
DM63K4	0.12	1380	0.47	0.61	61.3	60.7	53.6	2.1	3.0	2.4	2.1	3.5	B02
DM63G4	0.18	1380	0.67	0.66	58.2	57.6	52.4	1.8	2.7	2.0	2.8	4	B02
DM71K4	0.25	1410	0.79	0.64	71.4	69.8	63.9	2.5	4.3	2.9	5.6	5.5	B02
DM71G4	0.37	1410	1.00	0.71	75.5	75.9	72.1	2.5	4.6	2.8	7.3	6.5	B02
DM80K4	0.55	1405	1.48	0.72	76.1	75.9	71.8	2.3	4.3	2.5	12.8	8.5	B03/B02
DM80G4	0.75	1410	1.9	0.74	77.5	76.6	72.8	2.5	4.7	2.6	16.5	10	B04/B03
DM80GC4 IE2	0.75	1410	1.88	0.72	80.0	80.5	77.4	2.5	4.7	2.6	16.5	10	B04/B03
DM90S4	1.1	1415	2.7	0.75	78.6	78.8	76.8	2.6	4.7	2.8	23.5	12	B04/B03
DM90L4 IE2	1.1	1415	2.55	0.76	81.9	82.3	80.0	2.8	5.4	3.0	31.3	15	B04/B03
DM90L4	1.5	1410	3.4	0.79	80.0	80.6	80.0	2.4	4.5	2.6	31.3	15	B04/B03
DM100L4 IE2	1.5	1410	3.3	0.78	83.2	84.1	82.9	2.4	5.4	2.7	45	20	B04
DM100L4	2.2	1410	5.1	0.77	80.4	81.7	80.8	2.0	4.5	2.4	45	20	B05/B04
DM100LX4 IE2	2.2	1410	4.9	0.76	84.7	85.7	84.5	2.8	5.7	3.0	60	23	B05/B04
DM100LX4	3	1410	6.9	0.77	82.5	83.5	81.9	2.4	5.1	2.7	60	23	B05/B04
DM112M4 IE2	3	1410	6.2	0.8	87.1	87.4	86.1	2.7	6.2	3.2	119	29	B05
DM112M4	4	1425	8.1	0.83	85.6	86.4	86.1	2.4	5.6	2.7	119	29	B06/B05
DM112MX4 IE2	4	1425	8.4	0.8	86.7	87.5	86.8	2.7	6.0	3.0	119	29	B06/B05
DA132S4 IE2	5.5	1455	10.9	0.83	87.7	87.9	86.3	2.6	8.0	3.3	180	45.4	B07/B06
DA132MX4 IE2	7.5	1455	14.5	0.84	88.7	88.9	87.3	2.5	8.0	3.2	240	51.8	
DA160MS4 IE2	9.2	1470	16.9	0.88	89.3	88.9	86.5	1.9	7.2	3.0	520	65.3	B08/B07
DA160M4 IE2	11	1465	20.5	0.86	89.8	90.3	89.3	2.3	7.9	3.3	580	75.3	B08/B07
DA160L4 IE2	15	1465	27	0.88	90.6	90.9	90.5	2.7	8.2	3.4	780	92.6	B09/B08
DA180MC4 IE2	18.5	1465	34.5	0.85	91.2	91.5	91.0	2.7	7.8	3.3	750	98.6	B09/B08
DA180LC4 IE2	22	1465	41	0.85	91.6	91.7	91.2	2.8	7.9	3.4	940	111	
DA200L4 IE2	30	1480	54.5	0.86	92.3	92.5	91.8	3.2	8.9	3.3	2700	232	B10/B09
DA225SX4 IE2	37	1475	68	0.85	92.7	92.7	92.0	2.9	8.5	3.1	2880	280	

Three phase motors

Three phase motors 6 pole

Motor	Pn [kW]	n1 [1/min]	In (400V)	cos φ	η [%]	η -3/4 Pn [%]	η -1/2 Pn [%]	Ma/Mn	Ia/In	Mk/Mn	JE [kgcm ²]	~kg	Brake
DM63G6	0.12	910	0.54	0.67	57.4	53.3	45.0	2.7	2.8	2.8	4.2	4	B02
DM71K6	0.18	925	0.59	0.67	65.7	63.9	57.8	1.8	3.3	2.2	9.1	5.5	B02
DM71G6	0.25	930	0.82	0.65	68.0	65.5	59.4	2.1	3.3	2.4	12	6.5	B02
DM80K6	0.37	930	1.28	0.64	66.5	63.5	56.1	2.2	3.4	2.6	22	9	B03/B02
DM80G6	0.55	940	1.76	0.63	71.0	69.2	63.5	2.4	3.6	2.6	28	10.5	B03/B02
DM90S6	0.75	930	2.3	0.66	71.4	70.1	64.5	2.2	3.6	2.5	37	12	B04/B03
DM90L6 IE2	0.75	950	2.2	0.64	77.8	76.9	72.2	2.7	4.5	3.1	50	15	B04/B03
DM90L6	1.1	920	3.1	0.68	74.8	75.1	71.5	2.3	3.8	2.4	50	15	B04/B03
DM100L6 IE2	1.1	965	3.1	0.65	79.9	78.0	72.7	3.1	6.0	3.8	100	23	B04
DM100LX6 IE2	1.5	950	3.95	0.68	79.8	79.6	76.2	2.3	4.5	2.7	100	23	B05/B04
DM112M6 IE2	2.2	950	5.6	0.68	82.7	82.8	80.0	2.5	4.8	2.6	180	30	B06/B05

Three phase motors 8 pole

Motor	Pn [kW]	n1 [1/min]	In (400V)	cos φ	η [%]	Ma/Mn	Ia/In	Mk/Mn	JE [kgcm ²]	~kg	Brake
DM71K8	0.12	690	0.56	0.58	52.9	1.7	2.4	2.0	9.1	5.5	B02
DM71G8	0.18	670	0.78	0.62	54.9	1.7	2.4	1.9	12	6.5	B02
DM80K8	0.25	690	1.23	0.56	52.8	1.9	2.3	2.2	22	9	B03/B02
DM80G8	0.37	690	1.75	0.55	55.1	2.1	2.4	2.3	28	10.5	B03/B02
DM90L8	0.55	680	1.84	0.65	66.9	1.6	2.7	1.8	50	15	B04/B03
DM100L8	0.75	700	2.35	0.65	70.2	1.5	3.4	2.1	77	20	B05/B04
DM100LX8	1.1	690	3.5	0.65	69.5	1.5	3.0	1.9	100	23	B05/B04
DM112M8	1.5	700	4.9	0.62	71.7	1.7	3.1	1.9	180	30	B06/B05

Pn	Nominal power
n1	Nominal speed
In	Nominal current
cos φ	Power factor
η	Efficiency
Ma/Mn	Relative starting torque
Ia/In	Relative starting current
Mk/Mn	Relative pull-out torque
JE	Inertia

Motor options

B - Brake COMBISTOP

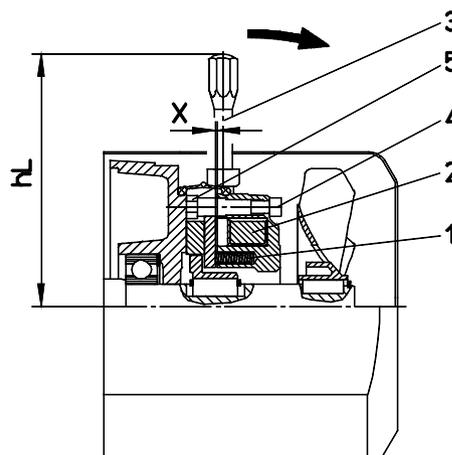
- spring-set twin-disc safety brake
- Protection standard: IP54
- connection via contacts in terminal box
- adjustment provision for wear of friction linings without dismantling
- torque reduction possible
- Standard voltages: 230VAC, 400VAC, 24VDC

Options:

- Manual brake release MB
- Dust- and water protection IP65

Mode of Operation

The brake is released by direct-current excitation of the brake coil (2) or by a manual release unit MB (3) which can be attached as an option. Braking is achieved in power off condition by means of spring force (1). The adjusting screws (5) are used to adjust the nominal air gap (X) in case of wear.



Technical Data

Brake	Mbr [Nm]	Mbred [Nm]		JB [kgcm ²]	P20 [W]	t2 [ms]	t11~ [ms]	t11= [ms]	WR0.1 [J*10 ⁶]	WRmax [J*10 ³]	X [mm]	Xn [mm]	hL [mm]	~kg	
B02	5	2.5	1.5	0.3	25	40	70	10	7.5	5.3	0.2	0.4	106	1.4	
B03	10	7.5	5	3	0.7	30	55	100	15	12.5	7.5	0.2	0.5	114	2.0
B04	20	15	10	6	1.4	30	90	180	25	19.1	18	0.2	0.6	128	3.6
B05	36	27	18	11	3.5	48	110	220	25	28.0	28	0.2	0.6	168	5.7
B06	70	53	35	21	5.6	62	240	260	25	28.8	38	0.3	1.0	176	9.1
B07	100	75	50	30	16	65	220	400	40	35.7	49	0.3	1.0	225	15
B08	150	113	75	45	30	75	320	700	50	44.2	56	0.4	1.2	235	24
B09	250	188	125	75	75	80	350	900	60	69.0	78	0.4	1.2	256	34
B10	500	375	250	150	210	130	400	1400	100	80.0	100	0.5	1.5	335	49

Mbr	Static braking torque after completed run-in phase
Mbred	possible reduced brake torques
JB	Inertia
P20	Excitation rating at 20°C
t2	Release time, time from connecting the current to the beginning of torque decrease
t11~	Engagement delay time for AC side switching (Fig. 1,3) Time from disconnecting the side switching (Fig. 1,3) Time from disconnecting the current to the raise of the torque
t11=	Engagement delay time for DC side switching (Fig. 2) Time from disconnecting the current to the raise of the torque
WR0.1	friction work until 0.1mm abrasion
WRmax	permissible friction work for emergency stop from 3000 1/min (B08..B10 - 1500 1/min)
X	Nominal clearance
Xn	Clearance, at which a readjustment is recommended

The specified switching times apply to nominal clearance and nominal torque. It relates to average values and depends on the type of rectification and coil temperature.

Electrical Connection

Figure 1: AC side switching

- The brake is switched independent from the motor voltage, Engagement delay time t_{11} ~
- Suitable for operation with frequency inverter

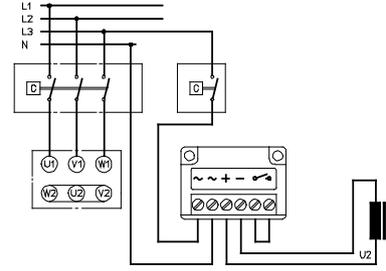


Figure 2: DC side switching

- The switching of the brake on AC and DC side leads to faster Engagement delay times t_{11} ~.

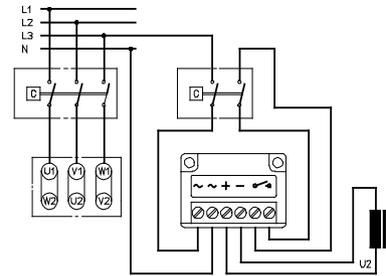
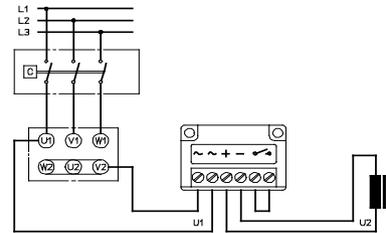


Figure 3: Brake ready for connection

- Voltage supply from motor terminal board.
- The brake is switched together with the motor voltage, Engagement delay time t_{11} ~
- In comparison to Figure 1 the connection to the brake is made within the motor terminal box
- Not suitable for frequency inverter operation and for pole changing motors

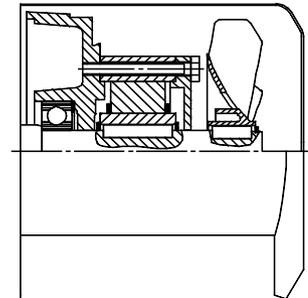


RS - Backstop

The mechanical backstop RS prevents the reverse motion of the drive when the motor is switched off.
 Specify the direction of rotation of the motor or geared motor when ordering.
 For Helical worm geared motors S and Helical bevel geared motors K, the position of mounting face has to be specified.
 The backstop applies for ambient temperatures of -40..+60°C.

Motor	Nominal locking torque 1) [Nm]	Minimum speed 2) n_{min} [1/min]
DM63 RS, DM71 RS	16.9	875
DM80 RS .. DM112 RS	150	875
DA132 RS, DA160 RS	562	720
DA180 RS, DA200 RS	1025	610

1) maximum locking torque = 2* nominal locking torque
 2) the continuous operating speed shall not be lower than the minimum allowable overrunning speed

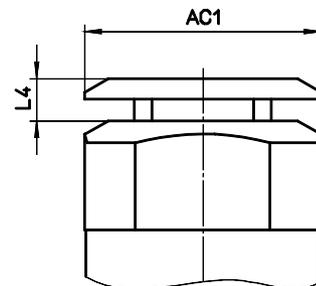


Protection cowl

The protection cowl prevents the penetration of foreign objects or liquids when the motor is mounted in vertical position.

Motor	L4	AC1
DM63..DM80	26	122
DM90..DM112	30	176
DA132	42	230
DA160..DA225	43	240/338 1)

1) Dimension for forced ventilation



F - Forced ventilation

- Protection standard IP65
- Nominal voltage $U_f=3 \sim 400V$ 50Hz // $3 \sim 460V$ 60Hz
- DM71 .. DM112: connection via contacts in terminal box
- DA132 .. DA225: The connection is in a extra terminal box mounted on the fan cowl.

Motor	If
	3 ~ 400V 50Hz
	3 ~ 460V 60Hz
DM71 .. DM112	0.14A
DA132	0.14A
DA160 .. DA225	0.35A

If Rated current of forced ventilation

Motor protection

The following motor protection can be supplied:

- TW - PTC thermistor sensor
- TS - Thermorelay (closed)
- KTY - KTY sensor

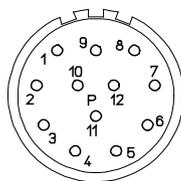
I - Incremental encoder

Standard version

Pulses/Rev.	1024
Signals	A, /A, B, /B, 0, /0
Interface	RS422 (TTL)
Supply voltage	5VDC \pm 5%
Current consumption	40mA / max. 90mA
Permissible load / channel	\pm 20 mA
Protection standard	IP65

The encoder is mounted under the motor fan cowl for added protection

Signal connector 12pole



Counterplug optional

Pin	Signal
10	0V
11	0V Sensor
12	+5V
2	+5V Sensor
5	A
6	/A
8	B
1	/B
3	0
4	/0

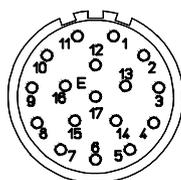
EAM - Absolute encoder multiturn

Standard version

Resolution singleturn	13bit
Resolution multiturn	12bit (4096 rev)
Code type	SSI-Gray-Code
Sin/Cos-periods	2048ppr 1Vpp
Supply voltage	5VDC \pm 5%
Current consumption	max. 70mA
Permissible load / channel	\pm 20 mA
Protection standard	IP65
Encoder system position	
KEB F5-Multi	ec02 = 0

The encoder is mounted under the motor fan cowl for added protection

Signal connector 17pole



Counterplug optional

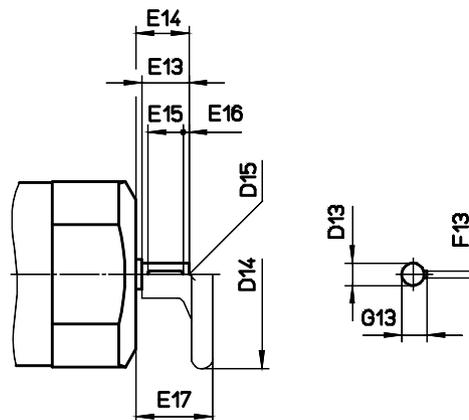
Pin	Signal
10	0V
7	+5V
8	clock
9	/clock
14	data
17	/data
1	set
2	dir
15	A
16	/A
12	B
13	/B

Second shaft end WE and handwheel

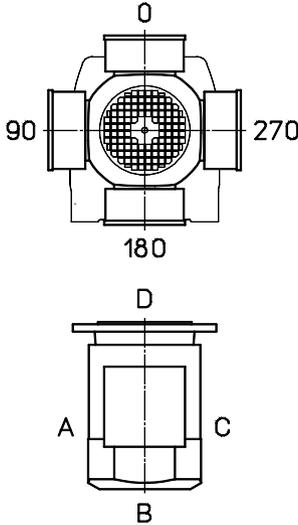
The second shaft end can be used for fixing a handwheel or for radial force free transmission of the motor torque.

If radial forces apply to the second shaft end, please consult the manufacturer.

	D13	D14	D15	E13	E14	E15	E16	E17	F13	G13
DM63	11	100	M4	23	28	18	2.5	46	4	12.5
DM71										
DM80	14	100	M5	30	35	25	2.5	52	5	16
DM90	19	160	M6	40	45	32	4	66	6	21.5
DM100										
DM112	24	160	M8	50	55	40	5	75	8	27
DA132	32	225	M12	80	85	70	5	108	10	35
DA160	38	225	M12	80	90	70	5	113	10	41
DA180										
DA200	42	280	M16	110	120	100	5	144	12	45
DA225										



Position of terminal box



Example: 270C is for terminal box at 270
Cable lead in C

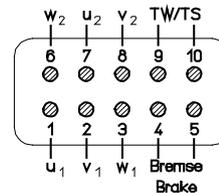
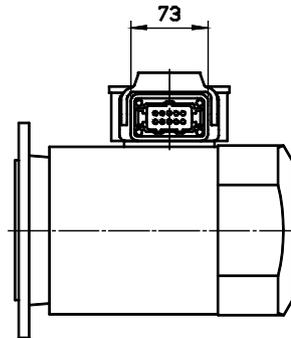
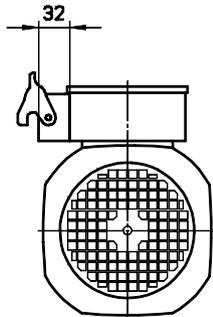
The position of other motor options (manual brake release, connection of forced ventilation, connection of encoder) is specified with the same method, independently, if different from position of terminal box.

Example: 90A, Manual brake release 270

Cable lead in

	normal	Brake or TW/TS or Forced ventilation	Brake + TW/TS or Brake + Forced ventilation or Forced ventilation + TW/TS	Brake + TW/TS + Forced ventilation
DM63..DM112	1xM25	2xM25	2xM25+1xM16	1xM25+3xM16
DA132	2xM32	2xM32	2xM32+1xM16	2xM32+1xM16
DA160..DA180	2xM40	2xM40	2xM40+1xM16	2xM40+1xM16
DA225	2xM50	2xM50	2xM50+1xM16	2xM50+1xM16

Plug connector HAN 10ES

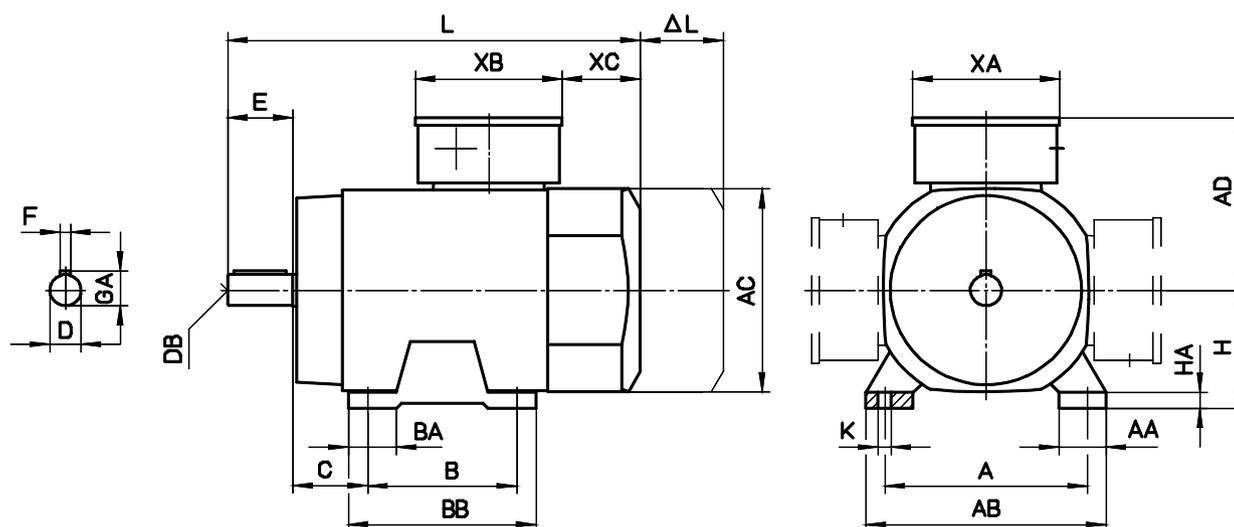


System: HAN 10ES (Harting)
U_{max}=500VAC, I_{max} = 16A

Forced ventilation, incremental encoder or brake with manual release are mounted 90° or 270° to the plug connector.

Dimensions

B3 - Foot mounted version



	DM71	DM80	DM90S/L	DM100	DM112	DA132S/M/MX	DA160M/L	DA180MC/LC	DA200	DA225S/SX/M
A	112	125	140	160	190	216	254	279	318	356
AA	21	24	24	30	32	55	69	85	100	87
AB	132	150	165	190	220	256	320	352	403	440
B	90	100	100/125	140	140	140/178/178	210/254	241/279	305	286/286/311
BA	-	-	-	-	-	50	62	75	95	70
BB	102	120	125/150	168	175	180/218/218	260/304	300/338	380	341/341/366
C	45	50	56	63	70	89	108	121	133	149
H	71	80	90	100	112	132	160	180	200	225
HA	5	5	5	6	6	18.5	22	22	27	35
K	Ø7	Ø10	Ø10	Ø12	Ø12	Ø12	Ø14	Ø14	Ø18	Ø18

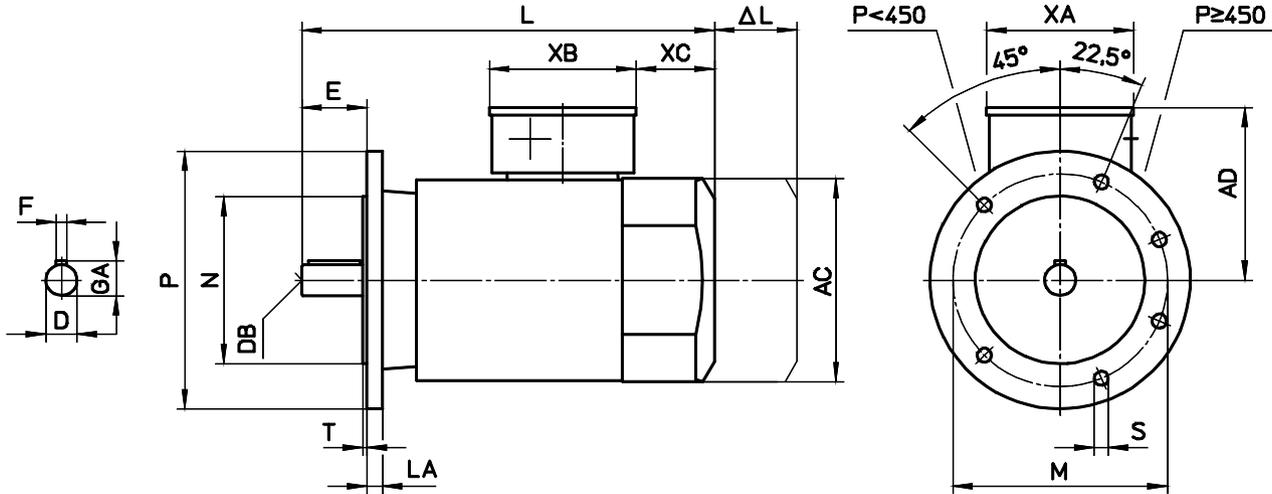
D	14	19	24	28	28	38	42	48	55	60
DB	M5	M6	M8	M10	M10	M12	M16	M16	M20	M20
E	30	40	50	60	60	80	110	110	110	140
F	5	6	8	8	8	10	12	14	16	18
GA	16	21.5	27	31	31	41	45	51.5	59	64

AC	124	140	158	178	198	245	311	311	356	356
AD	122	129	136.5	145.5	155.5	188	250	250	291	299
XA	113	113	113	113	113	117	140	140	226	226
XB	113	113	113	113	113	142	140	140	226	226
XC	56.5	54	60	73	72.5	143.5/143.5/194.5	107.5	107.5/346.5	230	230/260/260
L	238.5	268	292/317	360.5	374	485/485/536	627	627/657	738	768/798/828
ΔL1	57	66	74	79	86	99	120	120	139	139
ΔL2	87	95	105	119	124	99/99/105	120	120/90	139	139/169/139
ΔL3	135	143	170	187	199	98/98/165	151	151/121	154	154/264/154
ΔL4	145	161	179	198	210	156	176	176	199	199
ΔL5	135	143	170	187	199	216	286	286	294	294
ΔL6	135	143	170	187	199	216	286	286/256	294	294/264/294
ΔL7	213	220	266	295	312	216	286	286	294	294

L+ΔL1	B or RS
L+ΔL2	I or EAM
L+ΔL3	F
L+ΔL4	B I or B EAM
L+ΔL5	B F
L+ΔL6	F I or F EAM (DM90..DA225)
L+ΔL7	B F I or B F EAM or F EAM (DM71..DM80)

B Brake
 F Forced ventilation
 I Incremental encoder
 EAM Absolute encoder multiturn
 RS Backstop

B5 - Flange mounted version



	DM71	DM80	DM90S/L	DM100	DM112	DA132S/M/MX	DA160M/L	DA180MC/LC	DA200	DA225S/SX/M
LA	10	10	10	11	11	12	13	13	15	16
M	130	165	165	215	215	265	300	300	350	400
N	110	130	130	180	180	230	250	250	300	350
P	160	200	200	250	250	300	350	350	400	450
S	Ø10	Ø11	Ø12	Ø14	Ø14	Ø14	Ø18	Ø18	Ø18	Ø18
T	3.5	3.5	3.5	4	4	4	5	5	5	5

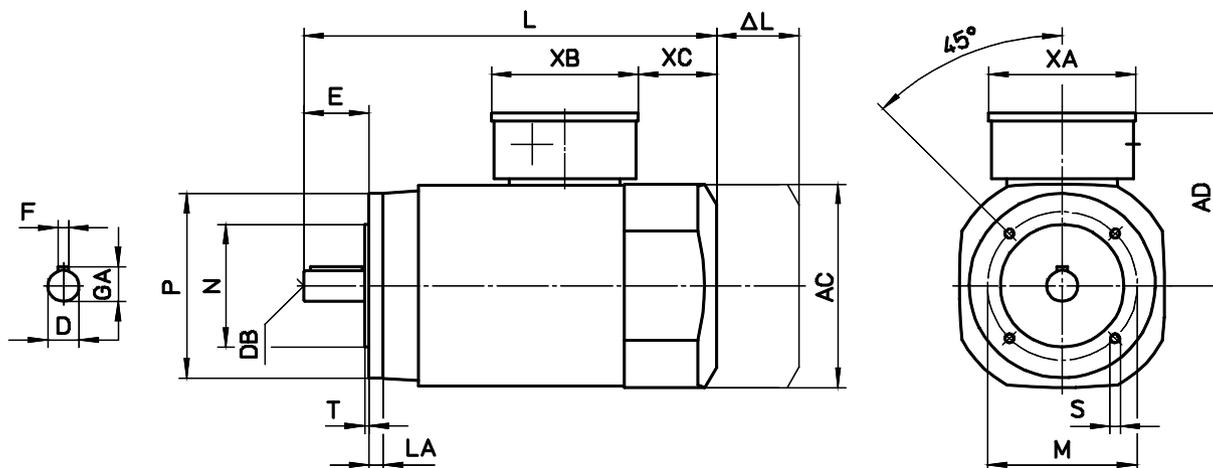
D	14	19	24	28	28	38	42	48	55	60
DB	M5	M6	M8	M10	M10	M12	M16	M16	M20	M20
E	30	40	50	60	60	80	110	110	110	140
F	5	6	8	8	8	10	12	14	16	18
GA	16	21.5	27	31	31	41	45	51.5	59	64

AC	124	140	158	178	198	245	311	311	356	356
AD	122	129	136.5	145.5	155.5	188	250	250	291	299
XA	113	113	113	113	113	117	140	140	226	226
XB	113	113	113	113	113	142	140	140	226	226
XC	56.5	54	60	73	72.5	143.5/143.5/194.5	107,5	107.5/346.5	230	230/260/260
L	238.5	268	292/317	360.5	374	485/485/536	627	627/657	738	768/798/828
ΔL1	57	66	74	79	86	99	120	120	139	139
ΔL2	87	95	105	119	124	99/99/105	120	120/90	139	139/169/139
ΔL3	135	143	170	187	199	98/98/165	151	151/121	154	154/264/154
ΔL4	145	161	179	198	210	156	176	176	199	199
ΔL5	135	143	170	187	199	216	286	286	294	294
ΔL6	135	143	170	187	199	216	286	286/256	294	294/264/294
ΔL7	213	220	266	295	312	216	286	286	294	294

L+ΔL1	B or RS
L+ΔL2	I or EAM
L+ΔL3	F
L+ΔL4	B I or B EAM
L+ΔL5	B F
L+ΔL6	F I or F EAM (DM90..DA225)
L+ΔL7	B F I or B F EAM or F EAM (DM71..DM80)

- B Brake
- F Forced ventilation
- I Incremental encoder
- EAM Absolute encoder multiturn
- RS Backstop

B14 - Flange mounted version



	DM63	DM71	DM80	DM90S/L	DM100	DM112
--	------	------	------	---------	-------	-------

B14G

M		Ø115	Ø130	Ø130	Ø165	Ø165
N		Ø95	Ø110	Ø110	Ø130	Ø130
P		Ø140	Ø160	Ø160	Ø200	Ø200
S		M8	M8	M8	M10	M10
T		3	3.5	3.5	3.5	3.5

B14K

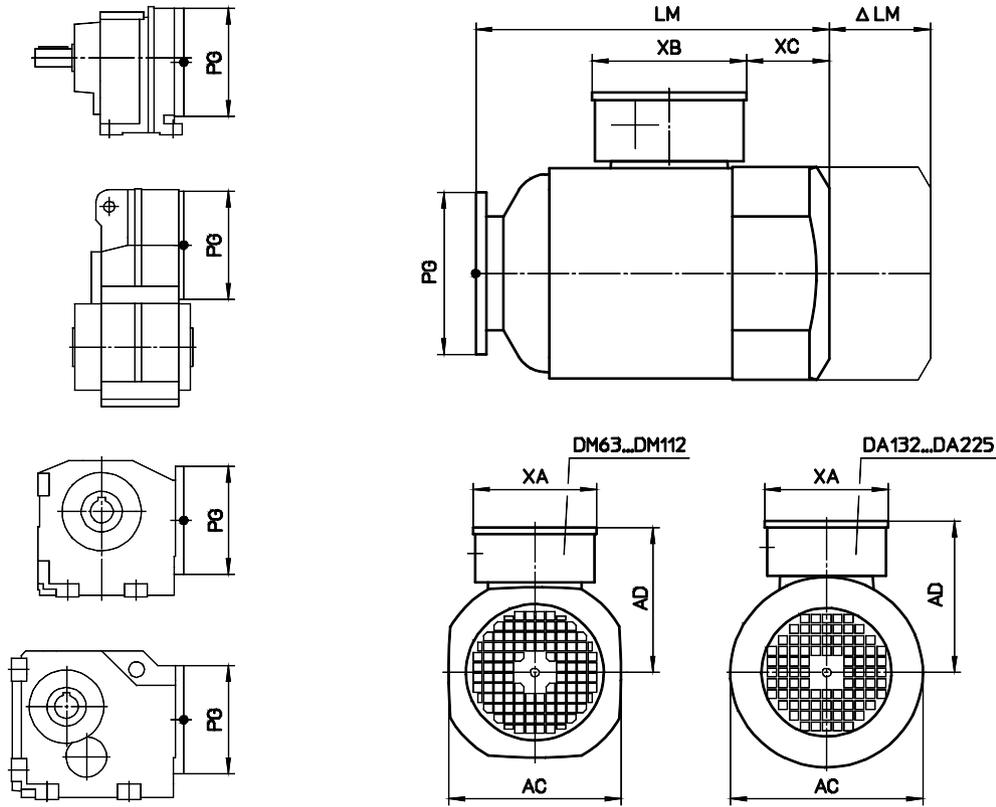
M	Ø75	Ø85	Ø100	Ø115	Ø130	Ø130
N	Ø60	Ø70	Ø80	Ø95	Ø110	Ø110
P	Ø90	Ø105	Ø120	Ø140	Ø160	Ø160
S	M5	M6	M6	M8	M8	M8
T	2.5	2.5	3	3	3.5	3.5

D	11	14	19	24	28	28
DB	M4	M5	M6	M8	M10	M10
E	23	30	40	50	60	60
F	4	5	6	8	8	8
GA	12.5	16	21.5	27	31	31

AC	110	124	140	158	178	198
AD	113.5	122	129	136.5	145.5	155.5
XA	113	113	113	113	113	113
XB	113	113	113	113	113	113
XC	45.5	56.5	54	60	73	72.5
L	210.5	238.5	268	292/317	360.5	374
ΔL1	59	57	66	74	79	86
ΔL2	82	87	95	105	119	124
ΔL3		135	143	170	187	199
ΔL4	141	145	161	179	198	210
ΔL5		135	143	170	187	199
ΔL6		135	143	170	187	199
ΔL7		213	220	266	295	312

L+ΔL1	B or RS
L+ΔL2	I or EAM
L+ΔL3	F
L+ΔL4	B I or B EAM
L+ΔL5	B F
L+ΔL6	F I or F EAM (DM90..DA225)
L+ΔL7	B F I or B F EAM or F EAM (DM71..DM80)

- B Brake
- F Forced ventilation
- I Incremental encoder
- EAM Absolute encoder multiturn
- RS Backstop

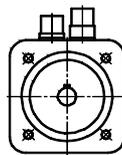
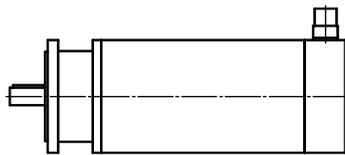


	DM63	DM71	DM80	DM90S/L	DM100	DM112	DA132S/M/MX	DA160	DA180MC/LC	DA200	DA225S/SX/M	PG	Gear unit
AC	110	124	140	158	178	198	245	311	311	356	356		
AD	113.5	122	129	136.5	145.5	155.5	188	250	250	291	299		
XA	113	113	113	113	113	113	117	140	140	226	226		
XB	113	113	113	113	113	113	142	140	140	226	226		
XC	45.5	56.5	54	60	73	72.5	143.5/143.5/194.5	107,5	107.5/346.5	230	230/260/260		
LM	202	224.5	245.5									105	G0, S0
	201	224.5	244.5	258/283	320							120	G1, S1, F2, K2
	198	220.5	241.5	253/278	314.5	334.5						140	G2, S2, F3, K3
	198.5	220	242	253.5/278.5	314.5	333.5	435/435/486					160	G3, S3, F4, K4
		216.5	237.5	251/276	309.5	329	431.5/431.5/482.5	539.5				200	G4, S4, F5, K5
			232.5	246/271	303.5	324	428/428/479	532	532/562	639		250	G5, F6, K6
				239/264	299.5	317	421/421/472	526	526/556	633		300	G6, F7, K7
					294.5	312	413/413/464	522	522/552	627.5	627.5/657.5/687.5	350	G7, F8, K8
						396.5/396.5/447.5	503.5	503.5/533.5	610.5	610.5/640.5/670.5	400	G8, K9	
							491.5	491.5/521.5	598	598/628/658	450	G9	
ΔLM1	59	57	66	74	79	86	99	120	120	139	139		
ΔLM2	82	87	95	105	119	124	99/99/105	120	120/90	139	139/169/139		
ΔLM3		135	143	170	187	199	98/98/165	151	151/121	154	154/264/154		
ΔLM4	141	145	161	179	198	210	156	176	176	199	199		
ΔLM5		135	143	170	187	199	216	286	286	294	294		
ΔLM6		135	143	170	187	199	216	286	286/256	294	294/264/294		
ΔLM7		213	220	266	295	312	216	286	286	294	294		

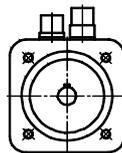
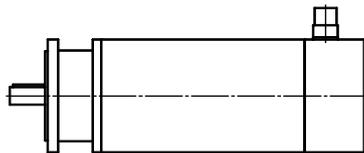
LM + ΔLM1	B or RS
LM + ΔLM2	I or EAM
LM + ΔLM3	F
LM + ΔLM4	B I or B EAM
LM + ΔLM5	B F
LM + ΔLM6	F I or F EAM (DM90...DA225)
LM + ΔLM7	B F I or B F EAM or F EAM (DM71...DM80)

B Brake
 F Forced ventilation
 I Incremental encoder
 EAM Absolute encoder multiturn
 RS Backstop

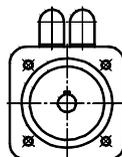
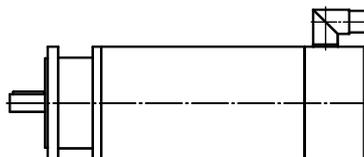
Servo motors TA



Encoder system ER
 Resolver
 Plug connector radial
 Example: TA21 VD0 ER TW



Encoder system EAS
 Absolute encoder singleturn
 Plug connector radial
 Example: TA52 V30 EAS TW



Encoder system EAM
 Absolute encoder multiturn
 Right angle plug connector, turnable
 Example: TA41 V40 EAM TW

Technical characteristics

AC servo-motor, suitable for frequency inverter F5-Multi
Standard version:

- Protection standard IP54 (Motor), IP55 (Geared motor)
- Insulation class 155
- PTC thermistor sensor
- Nominal voltage Un=400V
optional for motors TA2, TA3 and TA4: Nominal voltage Un=230V
- Number of poles: TA2 4-pole, TA3..TA6 6-pole

Options:

- UL-Version

The motors correspond to the following standards:

- DIN EN 60034 Rotating electrical machines, rating and performance.
- DIN 42948 Mounting flanges for electrical machines

Nominal torque Mn

The values given in the tables are valid for the following conditions:

- Duty cycle S1
- Maximum ambient temperature +40°C

reduced motor torque at ambient temperature 40°C < θ ≤ 80°C: $M_{th} = M_n \times \frac{145^\circ\text{C} - \theta}{105^\circ\text{C}}$

- Installation altitude up to 1000m above mean sea level

selection conditions at periodical load

$$M_a = \sqrt{\frac{1}{t} \sum_i M_{ai}^2} \leq M_n$$

$$M_{amax} = \max(M_{ai}) \leq M_{max}$$

- Mn [Nm] Nominal torque Servo motor
- Mmax [Nm] Maximum torque Servo motor
- Ma [Nm] Actual average load torque
- Mamax [Nm] Maximum load torque
- Mai [Nm] Load torque of cycle i
- ti [s] Duration of cycle i
- t [s] Total time $t = \sum_i t_i$

Permissible Radial Forces for the Output Shaft

Motor	Output shaft d _{xl} [mm]	K1 [mm]	FR1 [N]				
			1500 1/min	2000 1/min	3000 1/min	4500 1/min	6000 1/min
TA2	11x23	166	370	340	300	260	240
TA3	14x30	196	410	380	330	290	260
TA4	19x40	261.5	690	630	550	480	440
TA5	24x50	296.5	1040	950	830	720	660
TA6	32x58	401	1390	1260	1100	960	870

For selection condition formulas, see page 6/7

Selection table

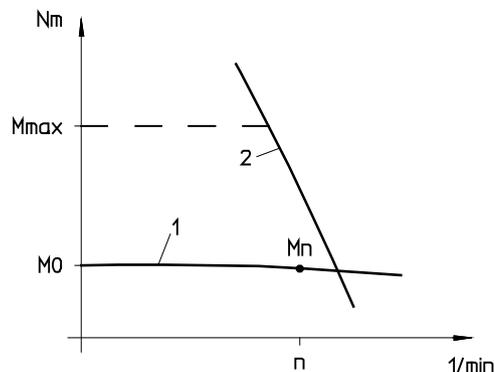
Selection table 400V

Motor	M0 [Nm]	Mn [Nm]	Mmax [Nm]	~kg	Jm [kgcm ²]	I0 [A]	R _{u-v} [Ω]	L _{u-v} [mH]	kEpk [mV*min]	F5 MULTI - Mmax/M0
1500 1/min										
TA61 V10	34.5	31.5	103.5	38.7	77.71	11.1	2.323	19.302	278.64	13-1.6 14-2.2 15-3.0
TA62 V10	50	44	150	50.4	113.71	16.4	1.200	12.356	273.51	14-1.5 15-2.2 16-3.0 17-3.0
TA63 V10	64	55	192	63.4	149.7	21.5	0.783	8.867	267.65	15-1.7 16-2.3 17-2.9 18-3.0
TA63 V10 F	90	82	192	66	149.7	30	0.783	8.867	267.65	16-1.6 17-2.1 18-2.1
2000 1/min										
TA41 V20	6.9	6.6	20.7	10.3	5.65	3.15	13.812	32.931	198.16	09-2.0 10-2.8 12-3.0
TA42 V20	9.2	8.6	27.6	12.9	8.15	4.0	8.388	23.631	205.81	09-1.5 10-2.2 12-3.0
TA43 V20	11.7	10.8	35.1	15.2	10.65	5.00	5.554	18.360	209.53	10-1.7 12-2.9 13-3.0
TA51 V20	11.5	10.8	34.5	16.8	14.9	5.00	7.336	27.341	205.42	10-1.7 12-2.9 13-3.0
TA52 V20	16.1	14.7	48.3	21	21.53	6.9	4.114	19.124	210.74	12-2.1 13-2.6 14-3.0
TA53 V20	20	17.7	60	25	28.15	8.7	2.553	13.752	206.64	12-1.6 13-2.1 14-2.8 15-3.0
TA61 V20	34.5	30	103.5	38.7	77.71	15.1	1.259	10.558	206.20	14-1.6 15-2.4 16-3.0
TA62 V20	50	41	150	50.4	113.71	22.5	0.649	6.638	200.37	15-1.6 16-2.2 17-2.8 18-3.0
TA63 V20	64	50	192	63.4	149.7	29.5	0.413	4.687	194.54	16-1.7 17-2.1 18-2.5 19-3.0 20-3.0
TA63 V20 F	90	75	192	66	149.7	41.5	0.413	4.687	194.54	17-1.5 18-1.8 19-2.1 20-2.1
3000 1/min										
TA31 V30	1.5	1.45	4.5	4	0.82	1.10	83.179	43.928	122.73	07-3.0
TA32 V30	2.75	2.55	8.25	5.5	1.51	1.85	31.805	26.072	133.55	07-2.1 09-3.0
TA33 V30	3.9	3.55	11.7	6.8	2.19	2.60	17.874	17.906	135.88	07-1.5 09-2.4 10-3.0
TA41 V30	6.9	6.3	20.7	10.3	5.65	4.45	6.995	16.493	139.96	10-2.0 12-3.0
TA42 V30	9.2	8.1	27.6	12.9	8.15	5.9	3.727	11.042	140.55	10-1.5 12-2.4 13-3.0
TA43 V30	11.7	10.1	35.1	15.2	10.65	7.3	2.611	8.735	144.54	12-2.0 13-2.5 14-3.0
TA51 V30	11.5	10.2	34.5	16.8	14.9	7.4	3.441	12.710	140.06	12-1.9 13-2.4 14-3.0
TA52 V30	16.1	13.5	48.3	21	21.53	10.3	1.815	8.498	140.47	13-1.7 14-2.4 15-3.0
TA53 V30	20	16.1	60	25	28.15	12.8	1.279	6.390	140.83	14-1.9 15-2.8 16-3.0
TA61 V30	34.5	26	103.5	38.7	77.71	21.5	0.635	5.256	145.43	15-1.7 16-2.3 17-2.9 18-3.0
TA62 V30	50	33	150	50.4	113.71	31.0	0.345	3.515	145.89	16-1.6 17-2.0 18-2.4 19-2.9 20-3.0
TA63 V30	64	37	192	63.4	149.7	39.5	0.232	2.637	145.90	17-1.6 18-1.9 19-2.3 20-2.8 21-3.0
TA63 V30 F	90	55	192	66	149.7	55	0.232	2.637	145.90	19-1.6 20-2.0 21-2.1
4500 1/min										
TA21 V40	0.85	0.82	2.55	2.5	0.37	0.90	81.799	52.994	85.00	07-3.0
TA22 V40	1.55	1.45	4.65	3.4	0.7	1.52	29.433	30.423	91.72	07-2.6 09-3.0
TA31 V40	1.5	1.41	4.5	4	0.82	1.57	41.481	21.871	86.17	07-2.5 09-3.0
TA32 V40	2.75	2.4	8.25	5.5	1.51	2.70	14.624	12.177	91.28	09-2.3 10-3.0
TA33 V40	3.9	3.25	11.7	6.8	2.19	3.80	8.226	8.252	92.23	09-1.6 10-2.3 12-3.0
TA41 V40	6.9	5.7	20.7	10.3	5.65	6.5	3.165	7.611	95.05	12-2.2 13-2.8 14-3.0
TA42 V40	9.2	7.1	27.6	12.9	8.15	8.5	1.766	5.295	97.35	12-1.7 13-2.1 14-2.9 15-3.0
TA43 V40	11.7	8.6	35.1	15.2	10.65	11.2	1.120	3.690	93.94	13-1.6 14-2.2 15-3.0
TA51 V40	11.5	9	34.5	16.8	14.9	11.0	1.521	5.679	93.88	13-1.6 14-2.3 15-3.0
TA52 V40	16.1	11.3	48.3	21	21.53	15.8	0.828	3.594	91.40	14-1.6 15-2.3 16-3.0
TA53 V40	20	10.4	60	25	28.15	19.2	0.513	2.839	93.84	15-1.9 16-2.6 17-3.0
6000 1/min										
TA21 V60	0.85	0.81	2.55	2.5	0.37	1.14	50.88	32.935	67.30	07-3.0
TA22 V60	1.55	1.39	4.65	3.4	0.7	1.98	17.821	17.866	70.32	07-2.0 09-3.0
TA31 V60	1.5	1.35	4.5	4	0.82	1.98	25.718	13.751	68.16	07-2.0 09-3.0
TA32 V60	2.75	2.15	8.25	5.5	1.51	3.60	8.126	6.976	69.16	09-1.7 10-2.4 12-3.0
TA33 V60	3.9	2.75	11.7	6.8	2.19	5.00	4.701	4.813	70.44	10-1.7 12-2.9 13-3.0

Selection table 230V

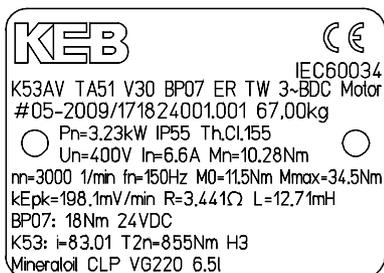
Motor	M0 [Nm]	Mn [Nm]	Mmax [Nm]	~kg	Jm [kgcm ²]	I0 [A]	R _{u-v} [Ω]	L _{u-v} [mH]	kEpk [mV*min]	F5 MULTI - Mmax/M0
2000 1/min										
TA41 VB0	6.9	6.6	20.7	10.3	5.65	6.2	3.601	8.499	100.46	09-1.7 10-2.4 12-3.0
TA42 VB0	9.2	8.6	27.6	12.9	8.15	8.0	2.096	5.905	102.86	10-1.9 12-3.0
TA43 VB0	11.7	10.8	35.1	15.2	10.65	10.4	1.309	4.278	101.12	12-2.4 13-3.0
3000 1/min										
TA31 VC0	1.5	1.45	4.5	4	0.82	2.20	20.355	10.899	60.90	05-1.6 07-2.7 09-3.0
TA32 VC0	2.75	2.55	8.25	5.5	1.51	3.70	7.961	6.521	66.80	07-1.6 09-2.8 10-3.0
TA33 VC0	3.9	3.55	11.7	6.8	2.19	5.2	4.416	4.372	67.18	09-2.0 10-2.9 12-3.0
TA41 VC0	6.9	6.3	20.7	10.3	5.65	9.1	1.674	3.919	68.26	10-1.6 12-2.7 13-3.0
TA42 VC0	9.2	8.1	27.6	12.9	8.15	11.8	0.955	2.761	70.28	12-2.1 13-3.0
TA43 VC0	11.7	10.1	35.1	15.2	10.65	14.6	0.654	2.183	72.25	12-1.7 13-2.5 14-3.0
4500 1/min										
TA21 VD0	0.85	0.82	2.55	2.5	0.37	1.82	18.721	12.832	41.96	05-1.9 07-3.0
TA22 VD0	1.55	1.45	4.65	3.4	0.7	3.05	6.723	7.491	45.49	07-2.0 09-3.0
TA31 VD0	1.5	1.41	4.5	4	0.82	3.15	10.245	5.341	42.63	07-1.9 09-3.0
TA32 VD0	2.75	2.4	8.25	5.5	1.51	5.4	3.753	3.044	45.64	09-1.9 10-2.8 12-3.0
TA33 VD0	3.9	3.25	11.7	6.8	2.19	7.5	2.131	2.139	46.96	10-2.0 12-3.0
TA41 VD0	6.9	5.7	20.7	10.3	5.65	13.3	0.760	1.835	46.73	12-1.9 13-2.7 14-3.0
TA42 VD0	9.2	7.1	27.6	12.9	8.15	17.0	0.446	1.324	48.68	12-1.5 13-2.1 14-2.9 15-3.0
TA43 VD0	11.7	8.6	35.1	15.2	10.65	24.5	0.233	0.786	43.36	13-1.5 14-2.0 15-3.0 16-3.0
6000 1/min										
TA21 VF0	0.85	0.81	2.55	2.5	0.37	2.30	12.614	8.107	33.46	05-1.5 07-2.6 09-3.0
TA22 VF0	1.55	1.39	4.65	3.4	0.7	4.05	4.373	4.304	34.52	07-1.5 09-2.6 10-3.0
TA31 VF0	1.5	1.35	4.5	4	0.82	3.95	6.354	3.437	34.08	07-1.5 09-2.7 10-3.0
TA32 VF0	2.75	2.15	8.25	5.5	1.51	6.9	2.097	1.859	35.70	09-1.5 10-2.2 12-3.0
TA33 VF0	3.9	2.75	11.7	6.8	2.19	10.0	1.175	1.203	35.22	10-1.5 12-2.5 13-3.0

- n Nominal speed
- M0 Stall torque
- Mn Nominal torque S1
- Mmax Maximum torque
- ~kg Weight
- Jm Inertia
- I0 Current at stall torque
- R_{u-v} Winding resistance
- L_{u-v} Winding inductance
- kEpk Voltage constant, Peak value
mV*min = V/(1000 1/min)
- Effective value $kE = kEpk / \sqrt{2}$
- nmax Maximum speed
n ≤ 2000 1/min → nmax = 3000 1/min
n = 3000 1/min → nmax = 4500 1/min
n ≤ 6000 1/min → nmax = 6000 1/min
- F5 MULTI - Mmax/M0 Available maximum torque of the servo-motor for operation with frequency inverter COMBIVERT F5-MULTI
Current at maximum torque $I_{max} = 1.5 * I_{n_F5}$



1 - Characteristic curve for S1-duty cycle
2 - Voltage limit curve 400V or 230V

Rating plate (Example)



Electrical Connection

Motor TA2..TA5

Power connector Size 1, 8pole 1)	Pin	Signal
	1	U
	⊖	PE
	3	W
	4	V
	A	Brake +
	B	Brake -
	C	TW
	D	TW

Motor TA6

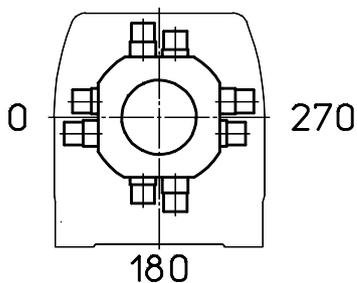
Power connector Size 1.5, 8pole 1)	Pin	Signal
	U	U
	V	V
	W	W
	⊖	PE
	+	Brake +
	-	Brake -
	1	TW
	2	TW

F – Forced ventilation

Power connector 4pole 2)	Pin	Signal
	1	U
	2	V
	3	W
	⊖	PE

Voltage/Frequency: 3 ~ 400V 50Hz
 Rated current of forced ventilation: 0.14A
 Counterplug included

Position of motor connection for geared motors



Example: Motor connection 90, Plug connector radial

Motor options

Brake COMBIPERM

- Permanent magnet holding brake with emergency-stop-function
- Standard voltages: 24VDC
- Insulation class: F

Connection with power connector

Technical Data

Motor	Brake	Mbr [Nm]	JB [kgcm ²]	P20 [W]	t2 [ms]	t1= [ms]	t11= [ms]	WR0.1 [J*10 ⁶]	WRmax [J*10 ³]	~kg
TA2	BP03	2	0.068	11	25	8	2	0.41	5.3	0.2
TA3	BP05	4.5	0.18	12	35	15	2.5	0.58	8.0	0.4
TA4	BP06	9	0.54	18	40	20	2	0.89	11	0.6
TA5	BP07	18	1.66	24	60	30	5	1.29	14	1.0
TA6	BP08	36	5.56	26	100	25	5	2.90	30	2.0

Mbr	Static braking torque after completed run-in phase (20°C)
JB	Inertia
P20	Excitation rating at 20°C
t2	Release time, time from connecting the current to the beginning of torque decrease
t1=	Engaging time: Time from disconnecting of current until the rated torque is attained
t11=	Engaging delay time: Time from disconnecting of current until the torque rises
WR0.1	friction work until 0.1mm abrasion
WRmax	permissible friction work for emergency stop from 3000 1/min

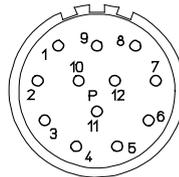
The specified switching times apply to nominal clearance and nominal torque. It relates to average values and depends on the type of rectification and coil temperature.

Encoder system

ER – Resolver

Type	BRX 2-pole
Voltage	7Vrms
Frequency	10kHz
Transformation factor	0.5
Encoder system position	
KEB F5-Multi	ec02 = 57344

Signal connector 12pole



Pin	Signal
1	/sin
2	/cos
5	/sin-ref
7	sin-ref
10	sin
11	cos

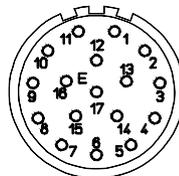
Counterplug optional

EAS – Absolute encoder singleturn

EAM - Absolute encoder multiturn

Standard version	
Resolution singleturn	13bit
Resolution multiturn	12bit (4096 rev)
Code type	SSI-Gray-Code
Sin/Cos-periods	2048ppr 1Vpp
Supply voltage	5VDC ± 5%
Current consumption	max. 70mA
Permissible load / channel	± 20 mA
Protection standard	IP65
Encoder system position	
KEB F5-Multi	ec02 = 0

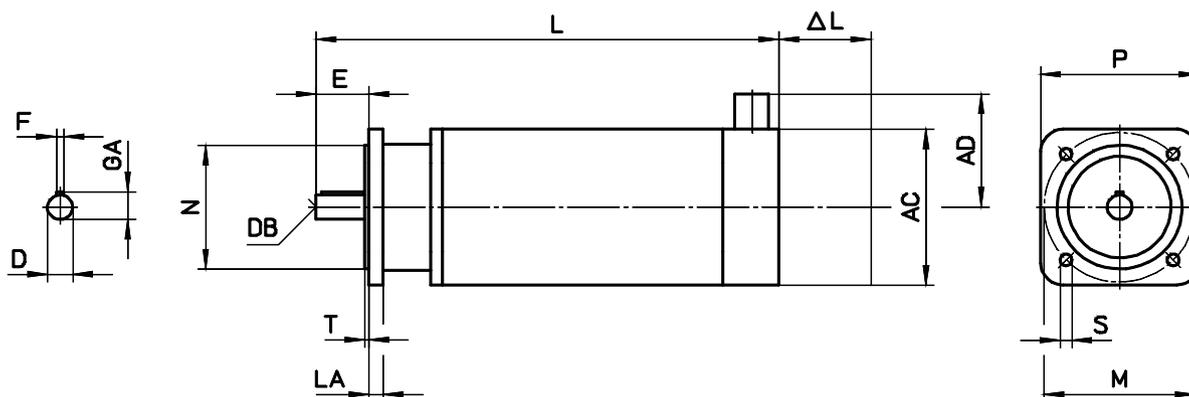
Signal connector 17pole



Pin	Signal
10	0V
7	+5V
8	clock
9	/clock
14	data
17	/data
15	A
16	/A
12	B
13	/B

Counterplug optional

Dimensions



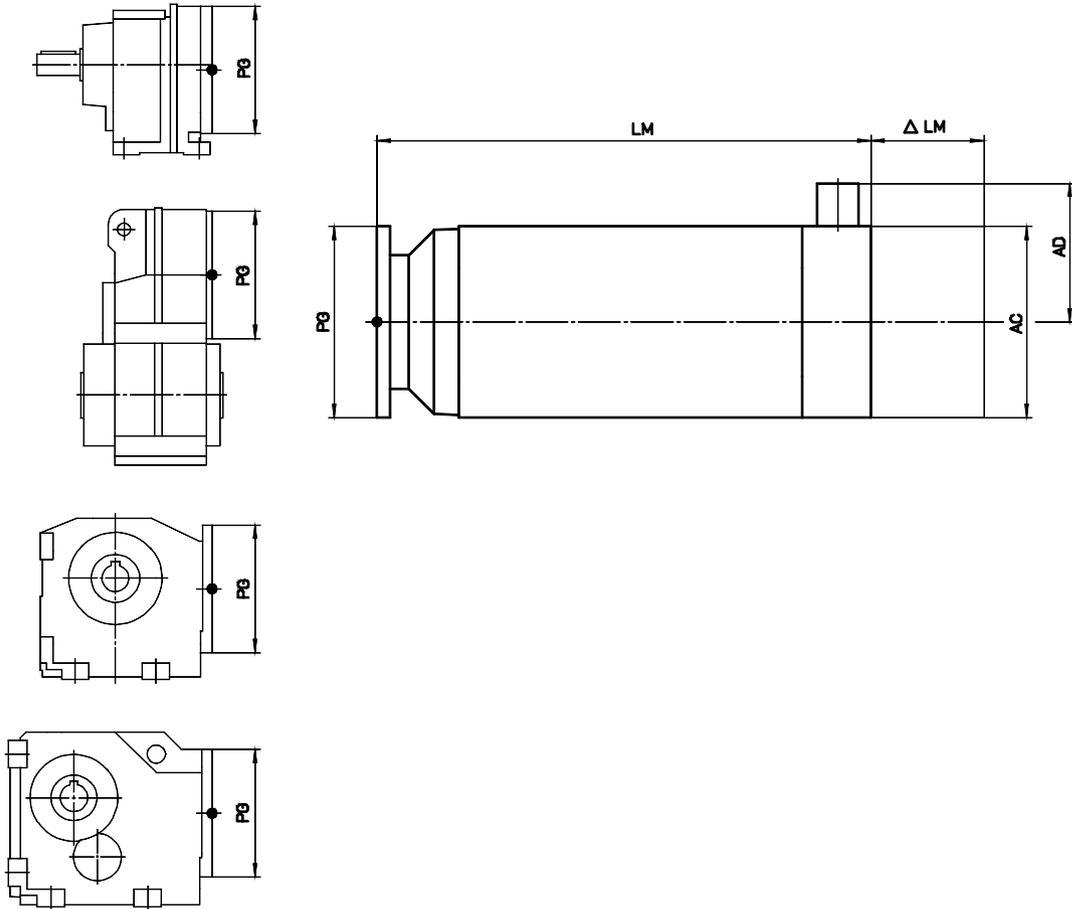
	TA21/TA22	TA31/TA32/TA33	TA41/TA42/TA43	TA51/TA52/TA53	TA61/TA62/TA63	TA63 F
LA	8	10	11	12	14	14
M	Ø75	Ø100	Ø115	Ø165	Ø215	Ø215
N	Ø60	Ø80	Ø95	Ø130	Ø180	Ø180
P	73	88	115.5	145	190	190
S	5.8	7	9	11	14	14
T	2.5	3	3	3.5	4	4

D	Ø11k6	Ø14k6	Ø19k6	Ø24k6	Ø32k6	Ø32k6
DB	M4	M5	M6	M8	M12	M12
E	23	30	40	50	58	58
F	4	5	6	8	10	10
GA	12.5	16	21.5	27	35	35

AC	75	90	120	150	182	200
AD	77	84.5	99.5	114.5	144	144
L	186/221	211.5/246.5/281.5	281/316/351	323/358/393	425/495/565	748
ΔL1	25	35	35	35	40	40
ΔL2	20	20	20	20	20	0
ΔL3	45	55	55	55	60	40

L	ER
L+ΔL1	BP ER
L+ΔL2	EAS or EAM
L+ΔL3	BP EAS or BP EAM

ER Resolver
 BP Permanent magnet brake
 EAS Absolute encoder singleturn
 EAM Absolute encoder multiturn



	TA31/TA32/TA33	TA41/TA42/TA43	TA51/TA52/TA53	TA61/TA62/TA63	TA63 F		
AC	90	120	150	182	200		
AD	84.5	99.5	114.5	144	144	PG	Gear unit
LM	172/207/242					105	G0, S0
	171/206/241	235.5/270.5/305.5				120	G1, S1, F2, K2
	168/203/238	231.5/266.5/301.5	257/292/327			140	G2, S2, F3, K3
	167.5/202.5/237.5	231/266/301	257.5/292.5/327.5	356/426/496	679	160	G3, S3, F4, K4
		227.5/262.5/297.5	255/290/325	351.5/421.5/491.5	574	200	G4, S4, F5, K5
			250/285/320	346.5/416.5/486.5	669.5	250	G5, F6, K6
			243/278/313	339.5/409.5/479.5	662.5	300	G6, F7, K7
			334.5/404.5/474.5	657.5	350	G7, K8	
ΔLM1	35	35	35	40	40		
ΔLM2	20	20	20	20	0		
ΔLM3	55	55	55	60	40		

LM	ER
LM+ΔLM1	BP ER
LM+ΔLM2	EAS or EAM
LM+ΔLM3	BP EAS or BP EAM

ER Resolver
 BP Permanent magnet brake
 EAS Absolute encoder singleturn
 EAM Absolute encoder multiturn