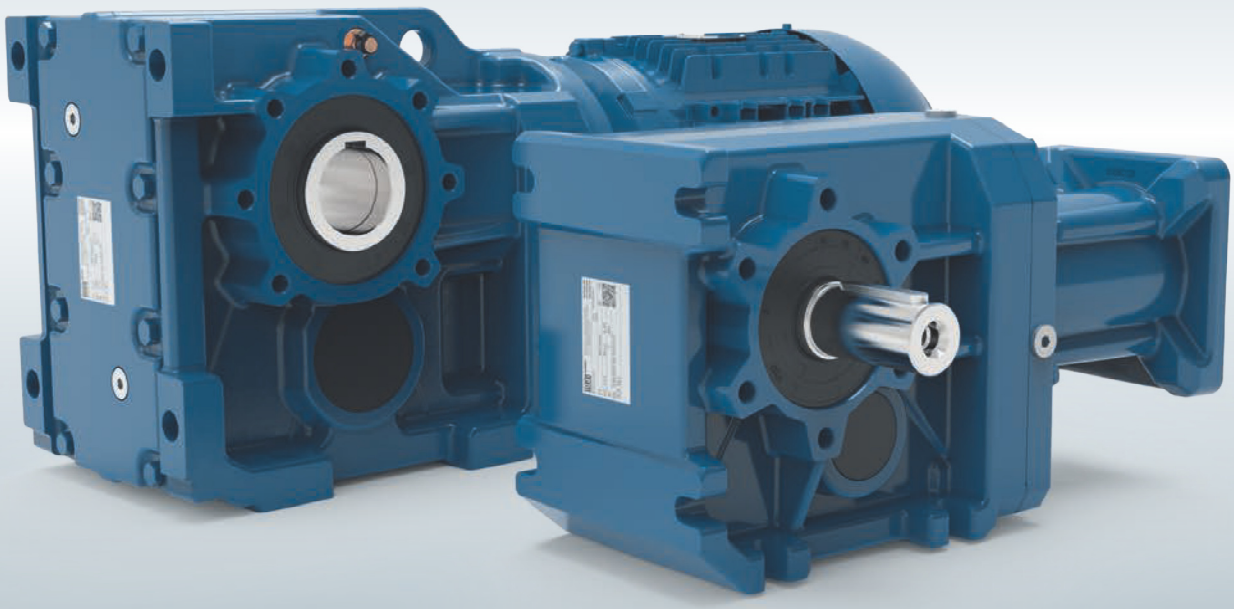


Helical bevel gear units and Helical bevel geared motors K

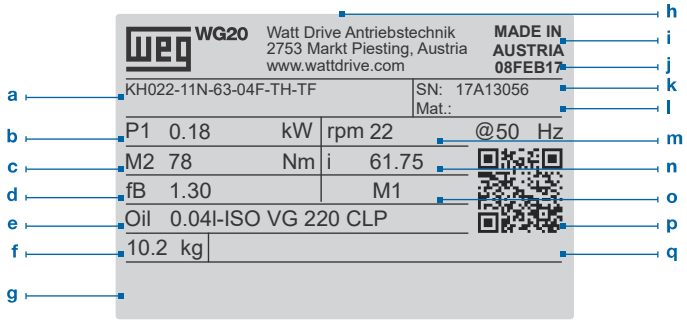
Technical data

Size		K02	K03	K04	K05	K06	K07	K08	K09	K10	K12	K15
Power [kW]		0.12 - 1.5	0.12 - 3	0.12 - 4	0.12 - 9.2	0.18 - 9.2	0.12 - 15	0.12 - 22	0.12 - 37	0.12 - 55	0.12 - 55	0.12 - 75
Torque [Nm]		110	200	400	600	820	1550	3000	4500	8000	13000	18000
Ratio		3.82 - 68.88	4.17 - 217.88	4.87 - 277.79	4.27 - 245.7	4.94 - 198	7.91 - 256.14	7.45 - 2205.52	6.94 - 1810.95	6.64 - 1301.54	6.60 - 1579.81	8.61 - 14005.40
Number of stages		2	3	3	3	3	3	3 / 4	3 / 4	3 / 4	3 / 4	3 / 4 / 5
Housing material		aluminium				cast iron						
Solid shaft	Type	with key acc. to DIN 6885.1 and threaded bore acc. to DIN 332 sheet 2										
	Tolerance	< Ø 55: k6 / ≥ Ø 55: m6										
	Material	standard: C45E (1.1191) / stainless steel on request										
Hollow shaft	Type	with key acc. to DIN 6885.1										
	Tolerance	H7										
	Material	standard: C45E (1.1191) / stainless steel on request										
Flanges	Tolerance	centring ≤ 250: j6 / > 250: h6 acc. to DIN EN 50347										
	Material	cast iron										
Gear wheels	Type	honed - designed and produced according to DIN 3990/3991 - Q7										
	Material	16MnCr5 (1.7131) case hardened – minimum 58HRC										
Shaft seals	Type	type AS acc. to DIN 3760										
	Material	standard NBR / special FKM										
Bearing		standard / reinforced										
Lubricants	Type	standard CLP 220 / special CLP HC 220										
	Quantity	depending on mounting position										
Axle height		acc. to DIN 747: ≤ 50: -0.4; > 50 bis ≤ 250: -0.5; > 250: -1 for foot-mounted geard motors, the motor may extend below the mounting surface										

K

General information

1. Nameplate



a	Type code	j	Production date
b	Motor power	k	Serial number
c	Output torque	l	Material number
d	Service factor	m	Output speed and Frequency
e	Type and quantity of lubricant	n	Total gear ratio
f	Weight	o	Mounting position
g	Space for ATEX code (if applicable)	p	QR-Code linked online to additional information
h	Manufacturer address	q	Space for additional information
i	Country of origin		

2. Type code

KH073-EX-11P-90S/L-04F ...

1 2 3 4 5 6 7 8 9 10

KH073-EX-I112-HT

1 2 3 4 5 11 12

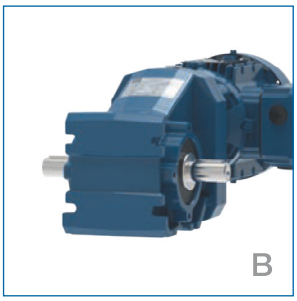
1	Type:	K = Helical bevel gear unit
2	Design:	B = Output shaft on both sides D = Hollow shaft with shrink disc F = B5 flange type with output shaft H = Hollow shaft O = B5 flange type with hollow shaft P = B5 flange type with hollow shaft and shrink disc S = Output shaft T = Hollow shaft with torque arm U = Hollow shaft with shrink disc and torque arm
3	Size:	02 03 04 05 06 07 08 09 10 12 15
4	Number of stages:	2 = 2 gear stages 3 = 3 gear stages 4 = 4 gear stages 5 = 5 gear stages
5	ATEX execution:	when operated in explosive atmospheres, see page 15
6	Motor type:	14P = Integral motor aluminium IE3 11P = Integral motor aluminium IE3 22P = Integral motor cast iron IE3
7	Motor frame size:	63 71 80 L80 90S/L 100L L100L 112M 132S 132M L132M 160M 160L 180M 180L 200L 225S/M 250S/M
8	Number of poles:	04 = 4 poles 06 = 6 poles
9	Power indicator:	D E F G
10	Motor modules:	see from page 501
11	Adapters, Input unit:	IEC adapter I63 I71 I80 I90 I100 I112 I132 I160 I180 I200 I225 I250 I280 NEMA adapter N56 N143 N182 N184 N213 N254 N284 N324 N364 SERVO adapter S92 S105 S114 S115 S130 S141 S142 S180 S189 S190 Input unit U2 U3 U5 U6 U7
	Direct mounting (IEC):	IEC63 IEC71 IEC80 IEC90 IEC100 IEC112 IEC132 IEC160 IEC180 IEC200 IEC225 IEC250
12	High/Low temperature execution:	HT LT

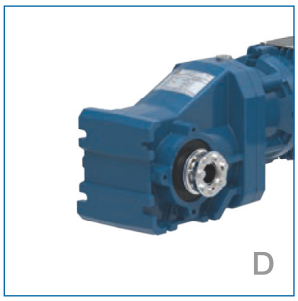
Type code Motor see page 477

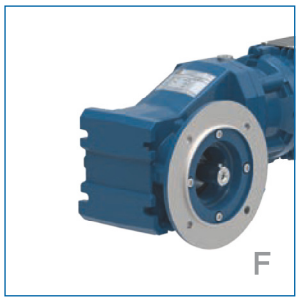
3. Range

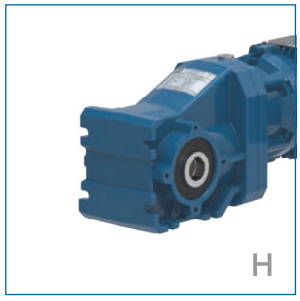
Size	K02	K03	K04	K05	K06	K07	K08	K09	K10	K12	K15
Housing material	Aluminium				Cast iron						

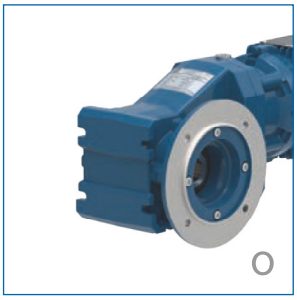
4. Design

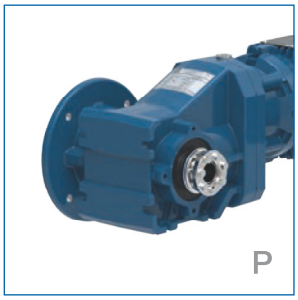


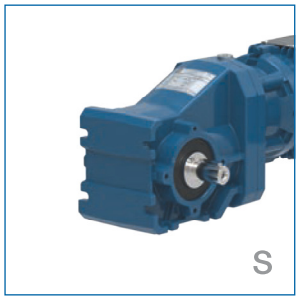










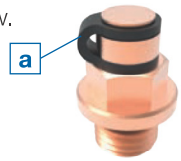


B	Output shaft on both sides
D	Hollow shaft with shrink disc
F	B5 flange type with output shaft
H	Hollow shaft
O	B5 flange type with hollow shaft

P	B5 flange type with hollow shaft and shrink disc
S	Output shaft
T	Hollow shaft with torque arm
U	Hollow shaft with shrink disc and torque arm

5. Venting the gear unit

The helical bevel gear unit sizes K02 to K05 are neither equipped with a venting nor an oil drain screw. They are supplied with lifetime-lubrication.
By default, the helical bevel gear units from K06 are equipped with venting screws with a safety strap for transportation (see illustration). The rubber strap (a) of the venting screw must be removed entirely before the initial startup. The venting screw is placed accordingly to the mounting position (see chapter Mounting positions, page 335)



6. Overhung and axial loads

The overhung loads (F_{rN}) indicated in the respective selection tables apply to gear units with the force acting on the shaft center (x=l/2). The permissible overhung loads listed are based on the least favourable loading direction and calculated for standard shafts and standard bearings. Other load directions and action can be calculated with equations Q1 to Q3. If transmission elements are placed on the output shaft, an appropriate factor (f_z) has to be taken into consideration when determining the overhung load.

Gear wheels	Sprockets		V-belts	Flat belts
				
f_z=1.1 (z≤17)	f_z=1.2 (z≤13)	f_z=1.1 (z>13)	f_z=1.8	f_z=2.5

Use the following equations Q1 and Q2 to calculate the permissible radial loads on the output shaft. Q3 is to calculate the real existing shaft loads for your application. The results are to be compared by using the equation Q4.

Q1	$F_{zL} = F_{rN} \cdot a_1$
Q2	$F_{zW} = F_W \cdot a_2$
Q3	$F_{Qvorh} = \frac{2 \cdot M_2}{d_0} \cdot f_z$
Q4	$F_{Qvorh} \leq F_{zL}$
	$F_{Qvorh} \leq F_{zW}$

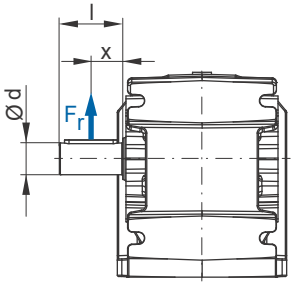
Variable	Unit	Description
a_1		Load action factor - output shaft bearing from Table 1
a_2		Load action factor - output shaft from Table 1
d_0	[m]	Effective diameter of the transmission element
M_2	[Nm]	Geared motor output torque (from selection tables) or required calculated output torque
F_{zL}	[N]	Permissible overhung load for output shaft bearings
F_{zW}	[N]	Permissible overhung load for output shaft
F_{rN}	[N]	Permissible overhung load from selection tables
F_W	[N]	Permissible overhung load - Output shaft x=l/2 from Table 2
F_{Qvorh}	[N]	Existing overhung load at gear shaft
f_z		Factor for transmission element
M_{max}	[Nm]	Highest possible output torque for coupling operation (Table 2)

Always use both equations Q1 and Q2 for your calculations.

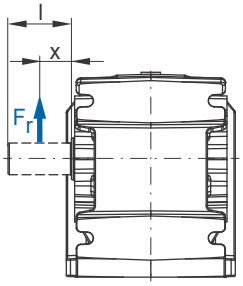
x / l						
0	0.25	0.5	0.75	1	1.5	2
$a_1 \rightarrow$ Equation Q1						
1.39	1.18	1.00	0.85	0.73	0.52	0.38
$a_2 \rightarrow$ Equation Q2						
2.00	2.00	1.00	0.55	0.38	0.23	0.17

Table 1: Load action factors a_1, a_2

Output shaft



Hollow shaft



Intermediate values can be interpolated linearly. Combined load ($F_r \neq 0$; $F_a = 0$) on request.

Output shaft [mm]		M_{max} at $F_r = 0$	Output torque M_2 [Nm]										
			110	200	400	600	820	1550	3000	4500	8000	13000	18000
Ø d	l		F_W [kN] at x/l = 0.5 → Equation Q2										
20	40	160	2.6										
25	50	300	5.6	4.8									
30	60	500	7.5	7.1	5.0								
35	70	800		11.0	10.0	8.3							
40	80	1170			13.0	12.0	10.7						
50	100	2250			24.0	24.0	23.0	20.0					
60	120	3740					31.0	30.0	23.0				
70	140	5850						44.0	41.0	36.0			
90	170	11700							72.0	70.0	61.0		
110	210	20800								106.0	103.0	93.0	
120	210	26700									129.0	121.0	109.0

Table 2: Permissible overhung load - output shaft x = l/2

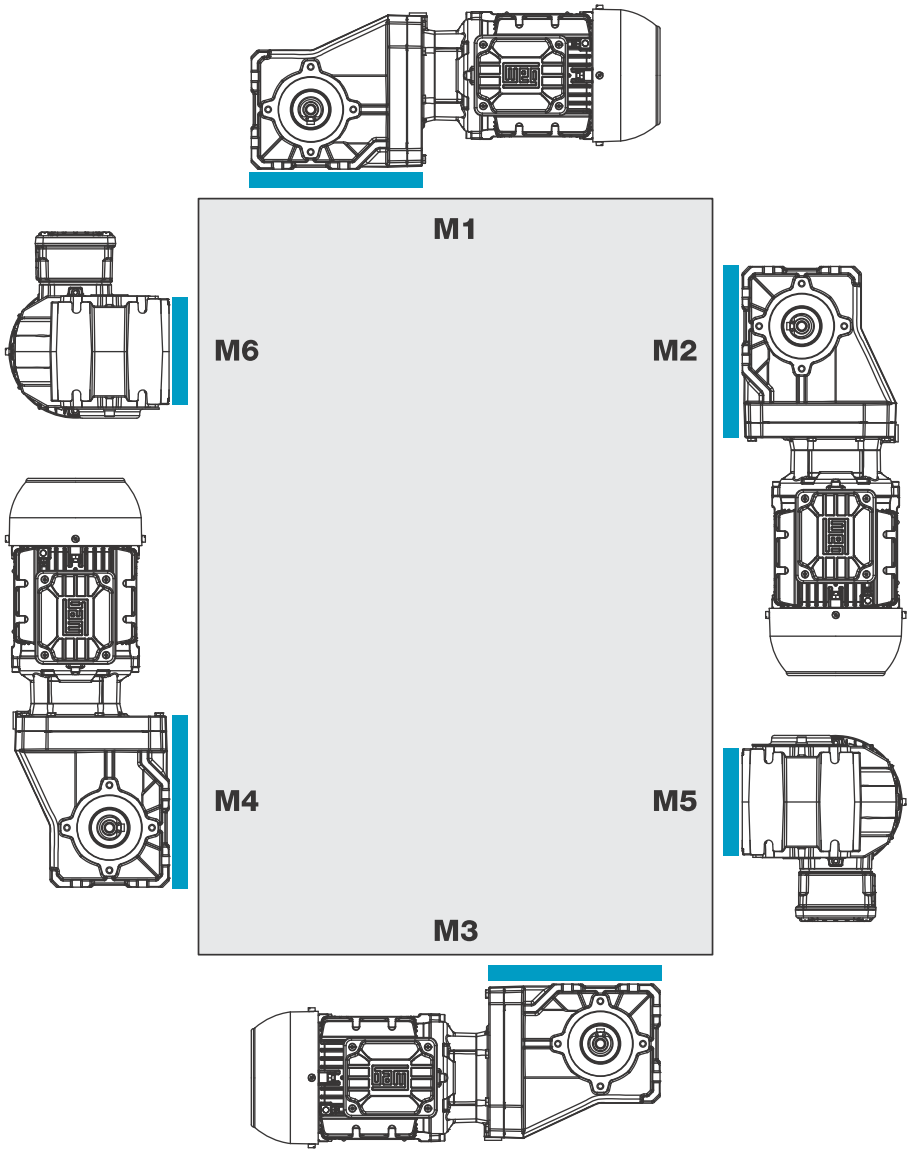
The axial loads (F_{aN}) for the respective execution (output shaft or hollow shaft), given in the following selection tables, are valid at radial force $F_{rN} = 0$. If there are axial loads or radial and axial components acting on the drive which are extraordinarily high, we recommend to contact the manufacturer.

7. Mounting positions, Position of the terminal box and Cable entry

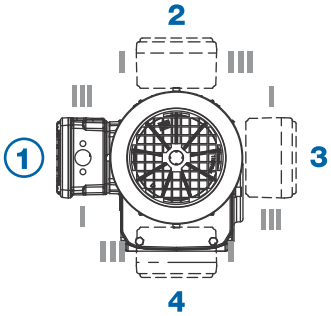
Mounting positions - Sizes K02 to K05

Gear units K02 to K05 are not ventilated and supplied with lifetime lubrication

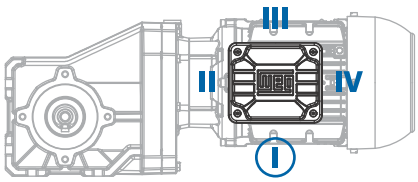
Reference area



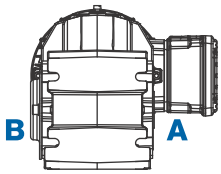
Position of the terminal box
Standard: Position 1



Cable entry
Standard: Position I



Side indication



Mounting positions - Sizes K06 to K15

Venting screw

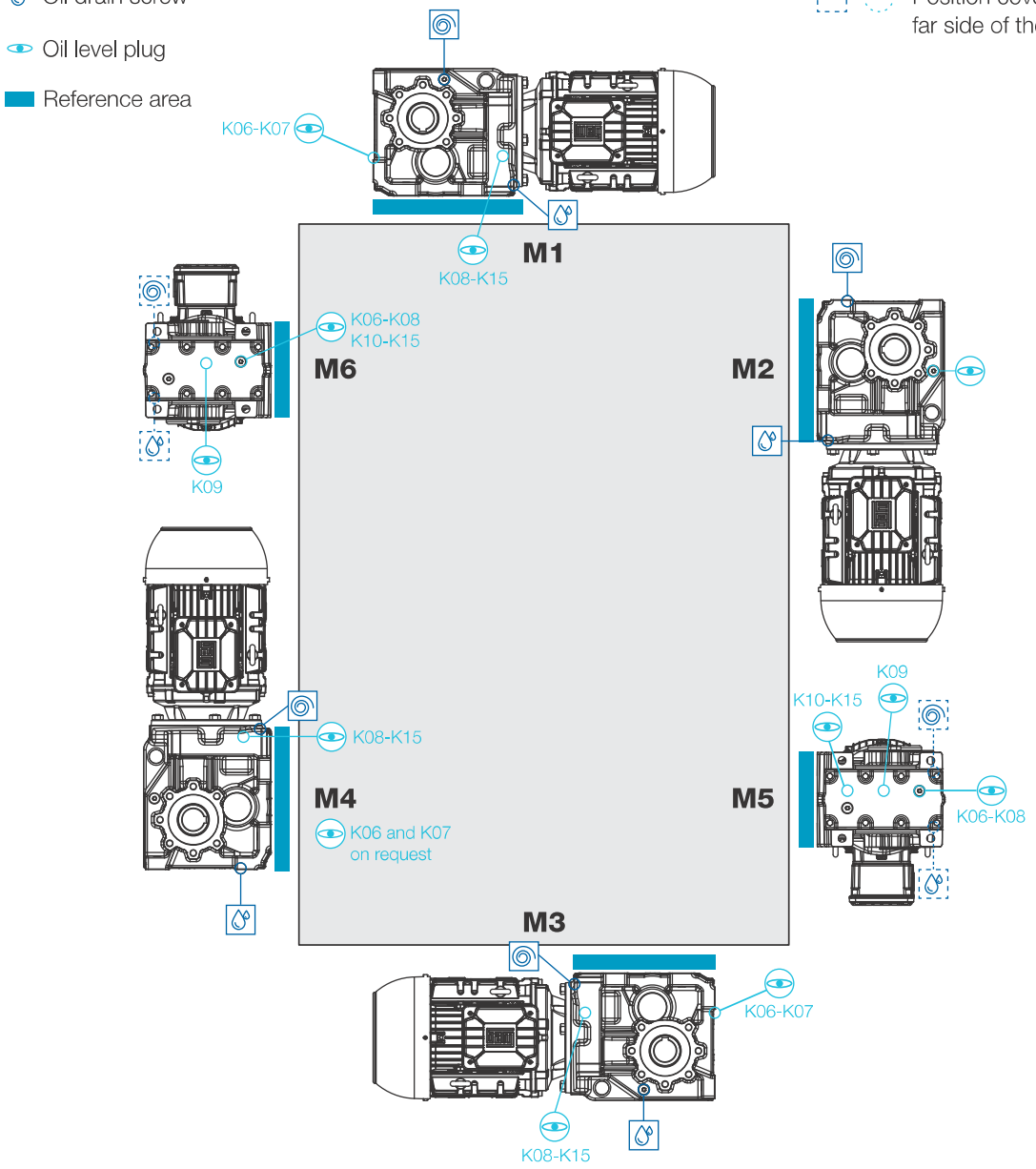
Oil drain screw

Oil level plug

Reference area

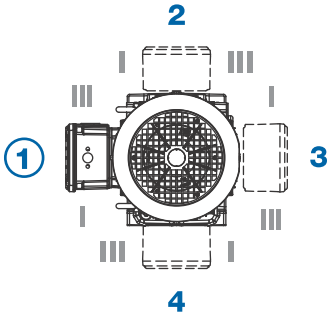
Position visible on this side

Position covered or on the far side of the gear unit



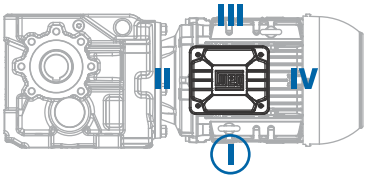
Position of the terminal box

Standard: Position 1

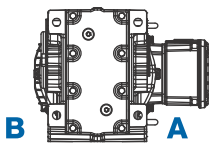


Cable entry

Standard: Position I



Side indication



Selection tables - Geared motors

The technical data of the geared motors shown in the selection tables apply to an ambient temperature of +20 °C.

The selection tables are calculated with following motor data:

Power (IEC frame size)	Motor series (IE class)
up to 0.55 kW (63 - 80)	14P (IE3) - aluminium
0.75 - 9.2 kW (80 - 132)	11P (IE3) - aluminium
11 - 75 kW (160 - 250)	22P (IE3) - cast iron

Structure of the selection tables

1										2		
P_N = 0.12 kW										IE3		
50 Hz	60 Hz				at 50 Hz							
0.12 kW	0.14 kW				Output shaft		Hollow shaft					
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page	
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg		
3	4	5	6	7	8	9	10	11	12	13	14	

1 Rated power of the motor

2 Given values are based on the respective efficiency class

3 Output speed at 50 Hz

4 Output speed at 60 Hz

5 Output torque

6 Service factor

7 Total ratio

8 Permissible radial load - Execution with output shaft at midpoint of the shaft (standard bearing) at axial load=0

9 Permissible axial load - Execution with output shaft (standard bearing) at axial load=0

10 Permissible radial load - Execution with hollow shaft at midpoint of x=l/2 (standard bearing) at axial load=0

11 Permissible axial load - Execution with hollow shaft (standard bearing) at axial load=0

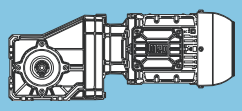
12 Geared motor type

13 Weight

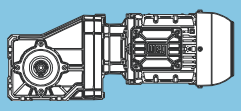
14 Page refererence for dimension sheet

*) Increased rated power at 60 Hz can only be reached together with increased voltage within the wide range (for details see page 485).

Increased rated power
1.2 x P_N

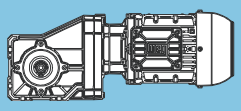
P_N = 0.12 kW										IE3
50 Hz	60 Hz				at 50 Hz					
0.12 kW	0.14 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.07	0.08	15132	1.20	14005.40	88.3	118.5	88.3	118.5			
0.08	0.10	12185	1.50	11453.02	96.1	120.7	96.1	120.7			
0.10	0.13	9400	1.95	9043.42	101.5	122.8	101.5	122.8	**KH155-14P-63-06F**	677	464
0.12	0.14	8100	2.25	7915.09	103.5	123.8	103.5	123.8			
0.13	0.16	7065	2.55	7012.05	104.9	124.6	104.9	124.6			
0.15	0.18	6167	2.95	6249.84	105.9	125.3	105.9	125.3			
0.10	0.12	9609	1.90	14005.40	101.2	122.7	101.2	122.7			
0.12	0.15	7677	2.35	11453.02	104.1	124.1	104.1	124.1	**KH155-14P-63-04E**	677	464
0.15	0.18	6321	2.85	9679.02	105.7	125.2	105.7	125.2			
0.51	0.63	1918	2.35	1810.95	38.0	42.6	38.0	42.6			
0.60	0.74	1588	2.85	1531.00	38.6	43.0	38.6	43.0	**KH094-14P-63-06F**	158	450
0.62	0.77	1529	2.95	1480.92	38.7	43.1	38.7	43.1			
0.42	0.52	2444	1.25	2205.52	23.2	41.4	23.2	8.9			
0.51	0.63	1974	1.55	1803.58	25.6	42.1	25.6	9.6			
0.53	0.65	1907	1.60	1745.64	25.8	42.2	25.8	9.7			
0.61	0.75	1648	1.85	1524.22	26.8	42.6	26.8	10.1			
0.65	0.8	1530	2.00	1424.12	27.2	42.7	27.2	10.2	**KH084-14P-63-06F**	108	446
0.65	0.8	1534	2.00	1427.51	27.2	42.7	27.2	10.2			
0.74	0.91	1323	2.30	1246.44	27.8	43.0	27.8	10.5			
0.82	1.0	1184	2.55	1127.18	28.1	43.3	28.1	10.8			
0.84	1.0	1157	2.60	1104.23	28.2	43.3	28.2	10.8			
0.94	1.2	1014	3.00	984.20	28.5	43.5	28.5	11.0			
0.64	0.78	1563	1.95	2205.52	27.1	42.7	27.1	10.2			
0.78	0.95	1255	2.40	1803.58	27.9	43.1	27.9	10.6	**KH084-14P-63-04E**	108	446
0.80	0.99	1209	2.50	1745.64	28.1	43.2	28.1	10.7			
0.92	1.1	1038	2.90	1524.22	28.4	43.5	28.4	11.0			
3.8	4.6	304	2.00	245.70	8.9	11.1	8.9	4.4	**KH053-14P-63-06F**	21	438
4.8	5.9	241	2.50	194.73	9.3	11.3	9.3	4.6			
5.7	7	200	3.00	245.70	9.4	11.4	9.4	4.7	**KH053-14P-63-04E**	21	438
3.3	4.1	344	1.20	277.79	4.9	8.1	4.9	2.5			
4.1	5.0	281	1.45	227.16	5.7	8.4	5.7	2.8			
5.2	6.4	222	1.80	179.37	6.2	8.6	6.2	3.0	**KH043-14P-63-06F**	18	436
6.7	8.2	172	2.35	139.08	6.6	8.8	6.6	3.2			
8.1	10	141	2.85	113.83	6.7	8.9	6.7	3.3			
5.1	6.2	227	1.80	277.79	6.2	8.6	6.2	3.0			
6.2	7.6	185	2.20	227.16	6.5	8.8	6.5	3.2	**KH043-14P-63-04E**	17	436
7.8	9.6	146	2.75	179.37	6.7	8.9	6.7	3.3			
5.2	6.4	220	0.95	177.19	3.4	2.4	3.4	2.4			
6.6	8.1	174	1.15	140.80	4.1	2.7	4.1	2.7			
8.5	10	135	1.50	108.75	4.6	2.9	4.6	2.9			
11	13	108	1.90	86.83	4.8	3.0	4.8	3.0	**KH033-14P-63-06F**	14	434
13	16	89	2.25	71.93	4.9	3.1	4.9	3.1			
14	17	81	2.50	65.63	4.9	3.2	4.9	3.2			
16	19	72	2.80	58.50	5.0	3.2	5.0	3.2			
6.4	7.9	178	1.15	217.88	4.1	2.6	4.1	2.6			
7.9	9.7	145	1.40	177.19	4.5	2.8	4.5	2.8			
10	12	115	1.75	140.80	4.7	3.0	4.7	3.0	**KH033-14P-63-04E**	14	434
13	16	89	2.30	108.75	4.9	3.1	4.9	3.1			
16	20	71	2.85	86.83	5.0	3.3	5.0	3.3			
13	17	85	1.30	68.88	5.1	2.8	5.1	2.8			
15	18	77	1.35	61.75	5.1	2.8	5.1	2.8			
17	21	66	1.70	53.65	5.2	2.8	5.2	2.8			
19	24	60	1.85	48.10	5.2	2.8	5.2	2.8			
21	26	54	2.05	43.50	5.2	2.8	5.2	2.8	**KH022-14P-63-06F**	12	432
24	29	48	2.30	39.00	5.2	2.8	5.2	2.8			
27	33	42	2.60	34.27	5.3	2.8	5.3	2.8			
30	37	38	1.35	30.88	5.3	2.8	5.3	2.8			
38	47	30	2.75	24.05	5.3	2.8	5.3	2.8			

Legend see page 337

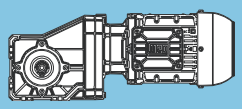
P_N = 0.12 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.12 kW	0.14 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
20	25	56	2.00	68.88	5.2	2.8	5.2	2.8			
23	28	50	2.05	61.75	5.2	2.8	5.2	2.8			
26	32	44	2.55	53.65	5.2	2.8	5.2	2.8			
29	36	39	2.85	48.10	5.3	2.8	5.3	2.8			
32	40	35	3.15	43.50	5.3	2.8	5.3	2.8			
36	44	32	3.50	39.00	5.3	2.8	5.3	2.8			
41	50	28	3.95	34.27	5.3	2.8	5.3	2.8			
45	56	25	2.05	30.88	5.3	2.8	5.3	2.8			
46	56	25	4.40	30.73	5.3	2.8	5.3	2.8			
53	65	22	5.15	26.41	5.3	2.8	5.3	2.8			
58	72	20	4.15	24.05	5.3	2.8	5.3	2.8			
59	73	19	5.70	23.68	5.3	2.8	5.3	2.8			
68	83	17	6.15	20.63	5.3	2.8	5.3	2.8			
72	88	16	5.10	19.50	5.3	2.8	5.3	2.8	**KH022-14P-63-04E**	12	432
76	93	15	6.80	18.50	5.3	2.8	5.3	2.8			
91	112	13	6.50	15.36	5.3	2.8	5.3	2.8			
102	125	11	8.30	13.81	5.3	2.8	5.3	2.8			
119	145	10	8.40	11.84	5.1	2.8	5.1	2.8			
121	148	9	9.00	11.60	5.0	2.8	5.0	2.8			
135	165	8	10.05	10.40	4.8	2.8	4.8	2.8			
152	186	8	10.75	9.25	4.7	2.8	4.7	2.8			
165	202	7	11.10	8.51	4.5	2.8	4.5	2.8			
184	225	6	12.40	7.63	4.4	2.8	4.4	2.8			
203	249	6	13.15	6.91	4.2	2.8	4.2	2.8			
270	331	4	15.35	5.20	3.8	2.8	3.8	2.8			
368	450	3	18.30	3.82	3.5	2.8	3.5	2.8			

Legend see page 337

P_N = 0.18 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.18 kW	0.22 kW				Output shaft		Hollow shaft			m	Dimension sheet see page
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}			
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.06	0.08	23812	0.80	14005.40	**	**	**	**			
0.08	0.10	19324	0.95	11453.02	72.3	115.3	72.3	115.3			
0.09	0.11	16164	1.15	9679.02	85.0	117.7	85.0	117.7			
0.10	0.12	15064	1.20	9043.42	88.5	118.5	88.5	118.5			
0.11	0.14	13049	1.40	7915.09	94.1	120.0	94.1	120.0			
0.13	0.16	11442	1.60	7012.05	97.7	121.3	97.7	121.3	**KH155-14P-71-06E**	680	464
0.14	0.18	10093	1.80	6249.84	100.4	122.3	100.4	122.3			
0.16	0.19	9173	2.00	5739.09	101.9	123.0	101.9	123.0			
0.19	0.23	7586	2.40	4845.97	104.2	124.2	104.2	124.2			
0.20	0.25	6826	2.65	4417.59	105.1	124.8	105.1	124.8			
0.23	0.28	6018	3.00	3966.24	106.0	125.4	106.0	125.4			
0.10	0.12	15214	1.20	14005.40	88.1	118.4	88.1	118.4			
0.12	0.15	12251	1.50	11453.02	96.0	120.7	96.0	120.7			
0.14	0.18	10194	1.80	9679.02	100.2	122.2	100.2	122.2			
0.15	0.19	9476	1.90	9043.42	101.4	122.8	101.4	122.8	**KH155-14P-63-04F**	677	464
0.17	0.21	8144	2.25	7915.09	103.5	123.8	103.5	123.8			
0.20	0.24	7103	2.55	7012.05	104.8	124.6	104.8	124.6			
0.22	0.27	6217	2.90	6249.84	105.8	125.3	105.8	125.3			
0.50	0.61	3062	1.50	1810.95	34.9	41.1	34.9	41.1			
0.59	0.73	2557	1.80	1531.00	36.5	41.7	36.5	41.7			
0.61	0.75	2468	1.85	1480.92	36.7	41.9	36.7	41.9	**KH094-14P-71-06E**	161	450
0.72	0.89	2057	2.20	1251.99	37.7	42.4	37.7	42.4			
0.77	0.95	1905	2.40	1169.35	38.1	42.6	38.1	42.6			
0.91	1.1	1580	2.85	988.58	38.6	43.0	38.6	43.0			
0.76	0.94	1928	2.35	1810.95	38.0	42.5	38.0	42.5			
0.90	1.1	1596	2.85	1531.00	38.6	43.0	38.6	43.0	**KH094-14P-63-04F**	158	450
0.93	1.1	1538	2.95	1480.92	38.7	43.0	38.7	43.0			
0.41	0.50	3838	0.80	2205.52	**	**	**	**			
0.50	0.62	3113	1.00	1803.58	18.4	32.2	18.4	7.9			
0.52	0.64	3013	1.00	1745.64	19.3	34.1	19.3	8.0			
0.59	0.73	2615	1.15	1524.22	22.2	40.5	22.2	8.6			
0.63	0.78	2439	1.25	1427.51	23.3	41.4	23.3	8.9			
0.72	0.89	2112	1.45	1246.44	25.0	41.9	25.0	9.4	**KH084-14P-71-06E**	111	446
0.80	0.98	1898	1.60	1127.18	25.9	42.2	25.9	9.7			
0.82	1.0	1856	1.65	1104.23	26.1	42.3	26.1	9.8			
0.91	1.1	1640	1.85	984.20	26.8	42.6	26.8	10.1			
1.0	1.2	1494	2.05	903.77	27.3	42.8	27.3	10.3			
1.2	1.5	1241	2.45	763.13	28.0	43.2	28.0	10.7			
1.3	1.6	1156	2.60	715.32	28.2	43.3	28.2	10.8			
0.63	0.77	2457	1.25	2205.52	23.2	41.4	23.2	8.9			
0.77	0.94	1985	1.55	1803.58	25.5	42.1	25.5	9.6			
0.79	0.97	1917	1.60	1745.64	25.8	42.2	25.8	9.7			
0.91	1.1	1657	1.85	1524.22	26.8	42.6	26.8	10.1	**KH084-14P-63-04F**	108	446
0.97	1.2	1545	1.95	1427.51	27.1	42.7	27.1	10.2			
1.1	1.4	1330	2.30	1246.44	27.8	43.0	27.8	10.5			
1.2	1.5	1190	2.55	1127.18	28.1	43.2	28.1	10.7			
1.4	1.7	1022	2.95	984.20	28.5	43.5	28.5	11.0			
4.5	5.6	378	2.20	198,00	11.7	14.1	11.7	4.1	**KH063-14P-71-06E**	37	440
5.7	7.1	300	2.75	156.92	12.0	14.3	12.0	4.4			
3.7	4.5	469	1.30	245.70	7.7	10.6	7.7	3.9			
4.6	5.7	372	1.65	194.73	8.5	10.9	8.5	4.2	**KH053-14P-71-06E**	23	438
6.0	7.3	289	2.10	151.20	9.0	11.1	9.0	4.4			
7.3	8.9	237	2.55	124.06	9.3	11.3	9.3	4.6			
5.6	6.9	306	2.00	245.70	8,9	11,1	8,9	4,4	**KH053-14P-63-04F**	21	438
7.1	8.7	243	2.50	194.73	9.2	11.3	9.2	4.6			
3.2	4.0	531	0.80	277.79	**	**	**	**			
4.0	4.9	434	0.95	227.16	2.9	4.1	2.9	2.2			
5.0	6.2	343	1.20	179.37	4.9	8.1	4.9	2.5			
6.5	8.0	266	1.55	139.08	5.8	8.4	5.8	2.8	**KH043-14P-71-06E**	20	436
7.9	9.8	217	1.85	113.83	6.3	8.6	6.3	3.0			
10	12	170	2.25	89.17	6.6	8.8	6.6	3.2			
12	15	139	2.90	72.92	6.7	8.9	6.7	3.3			
19	24	90	2.25	47.07	6.9	9.0	6.9	3.4			

P_N = 0.18 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.18 kW	0.22 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
5.0	6.1	346	1.20	277.79	4.8	8.1	4.8	2.5			
6.1	7.5	283	1.45	227.16	5.7	8.4	5.7	2.8			
7.7	9.5	223	1.80	179.37	6.2	8.6	6.2	3.0	**KH043-14P-63-04F**	17	436
9.9	12	173	2.35	139.08	6.6	8.8	6.6	3.2			
12	15	142	2.85	113.83	6.7	8.9	6.7	3.3			
8.3	10	208	1.00	108.75	3.6	2.5	3.6	2.5			
10	13	166	1.25	86.83	4.2	2.7	4.2	2.7			
13	15	137	1.50	71.93	4.5	2.9	4.5	2.9			
14	17	125	1.60	65.63	4.6	2.9	4.6	2.9			
15	19	112	1.80	58.50	4.8	3.0	4.8	3.0			
18	22	95	2.10	49.88	4.9	3.1	4.9	3.1	**KH033-14P-71-06E**	16	434
19	24	89	2.30	46.48	4.9	3.1	4.9	3.1			
23	29	74	2.70	38.80	5.0	3.2	5.0	3.2			
25	31	69	2.95	35.90	5.0	3.3	5.0	3.3			
30	37	57	2.30	29.97	5.0	3.2	5.0	3.2			
7.8	9.6	221	0.95	177.19	3.3	2.4	3.3	2.4			
9.8	12	175	1.15	140.80	4.1	2.7	4.1	2.7			
13	16	135	1.50	108.75	4.6	2.9	4.6	2.9			
16	20	108	1.85	86.83	4.8	3.0	4.8	3.0	**KH033-14P-63-04F**	14	434
19	24	90	2.25	71.93	4.9	3.1	4.9	3.1			
21	26	82	2.45	65.63	4.9	3.2	4.9	3.2			
24	29	73	2.75	58.50	5.0	3.2	5.0	3.2			
13	16	132	0.85	68.88	4.8	2.8	4.8	2.8			
15	18	118	0.90	61.75	4.9	2.8	4.9	2.8			
17	21	102	1.10	53.65	5.0	2.8	5.0	2.8			
19	23	92	1.20	48.10	5.0	2.8	5.0	2.8			
21	26	83	1.35	43.50	5.1	2.8	5.1	2.8			
23	28	74	1.50	39.00	5.1	2.8	5.1	2.8			
26	32	65	1.70	34.27	5.2	2.8	5.2	2.8			
29	36	59	1.90	30.73	5.2	2.8	5.2	2.8	**KH022-14P-71-06E**	14	432
34	42	50	2.20	26.41	5.2	2.8	5.2	2.8			
37	46	46	1.80	24.05	5.2	2.8	5.2	2.8			
38	47	45	2.45	23.68	5.2	2.8	5.2	2.8			
44	54	39	2.65	20.63	5.3	2.8	5.3	2.8			
46	57	37	2.20	19.50	5.3	2.8	5.3	2.8			
49	60	35	2.90	18.50	5.3	2.8	5.3	2.8			
59	72	29	2.80	15.36	5.3	2.8	5.3	2.8			
20	25	86	1.30	68.88	5.1	2.8	5.1	2.8			
22	28	77	1.35	61.75	5.1	2.8	5.1	2.8			
26	32	67	1.65	53.65	5.2	2.8	5.2	2.8			
29	35	60	1.85	48.10	5.2	2.8	5.2	2.8			
32	39	54	2.05	43.50	5.2	2.8	5.2	2.8			
35	44	49	2.30	39.00	5.2	2.8	5.2	2.8			
40	50	43	2.60	34.27	5.3	2.8	5.3	2.8			
45	55	38	2.90	30.73	5.3	2.8	5.3	2.8			
52	64	33	3.35	26.41	5.3	2.8	5.3	2.8			
57	71	30	2.75	24.05	5.3	2.8	5.3	2.8			
58	72	29	3.75	23.68	5.3	2.8	5.3	2.8			
67	82	26	4.05	20.63	5.3	2.8	5.3	2.8			
71	87	24	3.35	19.50	5.3	2.8	5.3	2.8	**KH022-14P-63-04F**	12	432
75	92	23	4.45	18.50	5.3	2.8	5.3	2.8			
90	110	19	4.85	15.41	5.3	2.8	5.3	2.8			
100	123	17	5.45	13.81	5.3	2.8	5.3	2.8			
117	144	15	5.50	11.84	5.1	2.8	5.1	2.8			
119	147	14	5.90	11.60	5.1	2.8	5.1	2.8			
133	163	13	6.60	10.40	4.9	2.8	4.9	2.8			
149	184	12	7.05	9.25	4.7	2.8	4.7	2.8			
162	200	11	7.30	8.51	4.6	2.8	4.6	2.8			
181	223	10	8.15	7.63	4.4	2.8	4.4	2.8			
200	246	9	8.60	6.91	4.3	2.8	4.3	2.8			
265	327	6	10.05	5.20	3.9	2.8	3.9	2.8			
361	445	5	12.00	3.82	3.5	2.8	3.5	2.8			

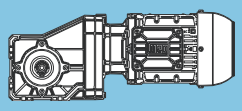
Legend see page 337

P_N = 0.25 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.25 kW	0.33 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.10	0.12	21485	0.85	9679.02	60.5	104.6	60.5	104.6	**KH155-14P-80-06D**	680	464
0.11	0.13	20023	0.90	9043.42	68.8	114.7	68.8	114.7			
0.12	0.15	17390	1.05	7915.09	80.6	116.7	80.6	116.7			
0.14	0.17	15288	1.20	7012.05	87.9	118.3	87.9	118.3			
0.15	0.19	13521	1.35	6249.84	92.9	119.7	92.9	119.7			
0.17	0.21	12321	1.50	5739.09	95.8	120.6	95.8	120.6			
0.20	0.24	10244	1.80	4845.97	100.1	122.2	100.1	122.2			
0.22	0.27	9266	1.95	4417.59	101.8	122.9	101.8	122.9			
0.24	0.30	8212	2.20	3966.24	103.4	123.7	103.4	123.7			
0.29	0.36	6733	2.70	3337.74	105.3	124.9	105.3	124.9			
0.31	0.39	6063	3.00	3052.96	106.0	125.4	106.0	125.4			
0.10	0.12	21514	0.85	14005.40	60.3	104.2	60.3	104.2	**KH155-14P-71-04E**	678	464
0.12	0.15	17414	1.05	11453.02	80.5	116.7	80.5	116.7			
0.14	0.18	14566	1.25	9679.02	90.0	118.9	90.0	118.9			
0.15	0.19	13540	1.35	9043.42	92.8	119.7	92.8	119.7			
0.17	0.21	11729	1.55	7915.09	97.1	121.1	97.1	121.1			
0.20	0.24	10258	1.80	7012.05	100.1	122.2	100.1	122.2			
0.22	0.27	9048	2.00	6249.84	102.1	123.1	102.1	123.1			
0.24	0.30	8223	2.20	5739.09	103.4	123.7	103.4	123.7			
0.28	0.35	6765	2.70	4845.97	105.2	124.8	105.2	124.8			
0.31	0.38	6071	3.00	4417.59	106.0	125.4	106.0	125.4			
0.73	0.91	2712	2.95	1301.54	60.3	66.1	60.3	66.1	**KH104-14P-80-06D**	290	454
0.53	0.65	4066	1.15	1810.95	30.5	39.8	30.5	39.8	**KH094-14P-80-06D**	161	450
0.62	0.77	3409	1.35	1531.00	33.6	40.7	33.6	40.7			
0.64	0.80	3291	1.40	1480.92	34.0	40.8	34.0	40.8			
0.76	0.95	2754	1.65	1251.99	35.9	41.5	35.9	41.5			
0.82	1.0	2556	1.80	1169.35	36.5	41.7	36.5	41.7			
0.97	1.2	2130	2.15	988.58	37.6	42.3	37.6	42.3			
1.1	1.3	1937	2.35	906.69	38.0	42.5	38.0	42.5			
1.2	1.5	1607	2.80	766.52	38.6	43.0	38.6	43.0			
1.3	1.6	1546	2.95	742.09	38.7	43.0	38.7	43.0			
0.76	0.94	2757	1.65	1810.95	35.9	41.5	35.9	41.5	**KH094-14P-71-04E**	159	450
0.90	1.1	2297	2.00	1531.00	37.2	42.1	37.2	42.1			
0.93	1.1	2217	2.05	1480.92	37.4	42.2	37.4	42.2			
1.1	1.4	1844	2.45	1251.99	38.2	42.7	38.2	42.7			
1.2	1.5	1708	2.65	1169.35	38.4	42.8	38.4	42.8			
0.55	0.68	3976	0.80	1745.64	**	**	**	**	**KH084-14P-80-06D**	111	446
0.63	0.78	3458	0.90	1524.22	14.6	24.1	14.6	7.4			
0.67	0.83	3232	0.95	1427.51	17.2	29.6	17.2	7.7			
0.77	0.95	2804	1.10	1246.44	20.9	37.7	20.9	8.4			
0.85	1.1	2526	1.20	1127.18	22.8	41.3	22.8	8.8			
0.86	1.1	2469	1.25	1104.23	23.1	41.4	23.1	8.9			
0.97	1.2	2187	1.40	984.20	24.6	41.8	24.6	9.3			
1.1	1.3	2000	1.50	903.77	25.5	42.0	25.5	9.5			
1.3	1.6	1668	1.80	763.13	26.7	42.5	26.7	10.0			
1.4	1.7	1508	2.00	695.67	27.2	42.8	27.2	10.3			
1.5	1.9	1340	2.25	624.59	27.7	43.0	27.7	10.5			
1.7	2.2	1164	2.60	550.61	28.2	43.3	28.2	10.8			
1.8	2.3	1104	2.75	525.61	28.3	43.4	28.3	10.9			
0.63	0.77	3462	0.90	2205.52	14.6	24.1	14.6	7.4	**KH084-14P-71-04E**	109	446
0.77	0.94	2808	1.10	1803.58	20.9	37.7	20.9	8.4			
0.79	0.97	2712	1.15	1745.64	21.6	39.2	21.6	8.5			
0.91	1.1	2354	1.30	1524.22	23.8	41.5	23.8	9.0			
0.97	1.2	2190	1.40	1424.12	24.6	41.8	24.6	9.3			
0.97	1.2	2195	1.40	1427.51	24.6	41.8	24.6	9.3			
1.1	1.4	1901	1.60	1246.44	25.9	42.2	25.9	9.7			
1.2	1.5	1705	1.80	1127.18	26.6	42.5	26.6	10.0			
1.4	1.7	1474	2.05	984.20	27.4	42.8	27.4	10.3			
1.5	1.9	1342	2.25	903.77	27.7	43.0	27.7	10.5			
1.6	1.9	1292	2.35	873.98	27.8	43.1	27.8	10.6			
1.8	2.2	1112	2.70	763.13	28.3	43.4	28.3	10.9			
1.9	2.4	1032	2.95	715.32	28.4	43.5	28.4	11.0			
2.0	2.4	1001	3.00	695.67	28.5	43.5	28.5	11.0			

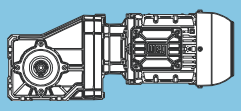
P_N = 0.25 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.25 kW	0.33 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
3.7	4.6	640	2.45	256.14	19.7	17.7	19.7	6.4	**KH073-14P-80-06D**	57	442
4.8	6.0	495	1.70	198.00	11.2	13.7	11.2	3.7			
6.1	7.6	392	2.10	156.92	11.7	14.0	11.7	4.1			
7.8	9.7	305	2.70	121.85	12.0	14.3	12.0	4.3	**KH063-14P-80-06D**	37	440
12	15	204	2.85	81.53	12.3	14.6	12.3	4.7			
22	27	111	2.85	44.35	12.4	14.8	11.4	4.8			
7	8.6	343	2.40	198.00	11.9	14.2	11.9	4.2	**KH063-14P-71-04E**	35	440
3.9	4.8	614	1.00	245.70	5.9	9.9	5.9	3.4			
4.9	6.1	487	1.25	194.73	7.5	10.5	7.5	3.8			
6.3	7.8	378	1.60	151.20	8.5	10.9	8.5	4.2			
7.7	9.6	310	1.95	124.06	8.9	11.1	8.9	4.4	**KH053-14P-80-06D**	24	438
9.9	12	240	2.50	96.08	9.3	11.3	9.3	4.6			
12	15	201	2.85	80.46	9.4	11.4	9.4	4.7			
25	31	96	2.80	38.32	9.7	11.6	9.7	4.9			
5.6	6.9	425	1.45	245.70	8.1	10.7	8.1	4.0			
7.1	8.7	337	1.80	194.73	8.8	11.0	8.8	4.3	**KH053-14P-71-04E**	22	438
9.1	11	262	2.30	151.20	9.2	11.2	9.2	4.5			
11	14	215	2.80	124.06	9.4	11.4	9.4	4.7			
5.3	6.6	448	0.90	179.37	2.4	3.0	2.4	2.1			
6.9	8.5	348	1.20	139.08	4.8	8.1	4.8	2.5			
8.4	10	285	1.45	113.83	5.6	8.4	5.6	2.8			
11	13	223	1.70	89.17	6.2	8.6	6.2	3.0			
13	16	182	2.20	72.92	6.5	8.8	6.5	3.2	**KH043-14P-80-06D**	21	436
14	18	166	2.45	66.20	6.6	8.8	6.6	3.2			
17	21	144	2.80	57.58	6.7	8.9	6.7	3.3			
18	22	135	3.00	54.18	6.7	9.0	6.7	3.4			
20	25	118	1.70	47.07	6.8	8.9	6.8	3.3			
25	31	96	2.85	38.49	6.9	9.0	6.9	3.4			
5.0	6.1	481	0.85	277.79	**	**	**	**			
6.1	7.5	393	1.05	227.16	4.0	6.4	4.0	2.3			
7.7	9.5	310	1.30	179.37	5.3	8.3	5.3	2.7			
9.9	12	241	1.70	139.08	6.1	8.5	6.1	2.9	**KH043-14P-71-04E**	18	436
12	15	197	2.05	113.83	6.4	8.7	6.4	3.1			
15	19	154	2.50	89.17	6.7	8.9	6.7	3.3			
16	19	152	2.65	87.62	6.7	8.9	6.7	3.3			
29	36	81	2.50	47.07	6.9	9.1	6.9	3.5			
11	14	217	0.95	86.83	3.4	2.4	3.4	2.4			
13	16	180	1.15	71.93	4.0	2.6	4.0	2.6			
15	18	164	1.25	65.63	4.2	2.7	4.2	2.7			
16	20	146	1.40	58.50	4.4	2.8	4.4	2.8			
19	24	125	1.65	49.88	4.6	2.9	4.6	2.9			
21	26	116	1.75	46.48	4.7	3.0	4.7	3.0	**KH033-14P-80-06D**	17	434
25	31	97	2.10	38.80	4.9	3.1	4.9	3.1			
27	33	90	2.25	35.90	4.9	3.1	4.9	3.1			
32	39	76	2.65	30.29	5.0	3.2	5.0	3.2			
33	41	72	2.80	28.67	5.0	3.2	5.0	3.2			
39	49	61	2.65	24.38	5.0	3.2	5.0	3.2			
9.8	12	244	0.85	140.80	2.8	2.3	2.8	2.3			
13	16	188	1.10	108.75	3.9	2.6	3.9	2.6			
16	20	150	1.35	86.83	4.4	2.8	4.4	2.8			
19	24	124	1.65	71.93	4.7	2.9	4.7	2.9			
21	26	114	1.80	65.63	4.7	3.0	4.7	3.0	**KH033-14P-71-04E**	15	434
24	29	101	2.00	58.50	4.8	3.1	4.8	3.1			
28	34	86	2.35	49.88	4.9	3.2	4.9	3.2			
30	37	80	2.50	46.48	4.9	3.2	4.9	3.2			
36	44	67	3.00	38.80	5.0	3.3	5.0	3.3			
46	57	52	2.50	29.97	5.1	3.3	5.1	3.3			

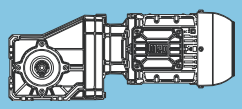
Legend see page 337

*** ... on request*

P_N = 0.25 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.25 kW	0.33 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
18	22	134	0.85	53.65	4.7	2.8	4.7	2.8			
20	25	120	0.95	48.10	4.9	2.8	4.9	2.8			
22	27	109	1.05	43.50	4.9	2.8	4.9	2.8			
24	30	98	1.15	39.00	5.0	2.8	5.0	2.8			
28	35	86	1.30	34.27	5.1	2.8	5.1	2.8			
31	39	77	1.45	30.73	5.1	2.8	5.1	2.8			
36	45	66	1.70	26.41	5.2	2.8	5.2	2.8			
40	49	60	1.35	24.05	5.2	2.8	5.2	2.8			
46	57	52	2.00	20.63	5.2	2.8	5.2	2.8	**KH022-14P-80-06D**	15	432
49	61	49	1.70	19.50	5.2	2.8	5.2	2.8			
52	64	46	2.25	18.50	5.2	2.8	5.2	2.8			
62	77	39	2.45	15.41	5.3	2.8	5.3	2.8			
69	86	35	2.70	13.81	5.3	2.8	5.3	2.8			
72	89	33	2.70	13.29	5.3	2.8	5.3	2.8			
80	99	30	3.00	11.92	5.3	2.8	5.3	2.8			
81	100	30	2.75	11.84	5.3	2.8	5.3	2.8			
82	102	29	2.95	11.60	5.3	2.8	5.3	2.8			
20	25	119	0.95	68.88	4.9	2.8	4.9	2.8			
22	28	107	1.00	61.75	5.0	2.8	5.0	2.8			
26	32	93	1.20	53.65	5.0	2.8	5.0	2.8			
29	35	83	1.35	48.10	5.1	2.8	5.1	2.8			
32	39	75	1.50	43.50	5.1	2.8	5.1	2.8			
35	44	67	1.65	39.00	5.2	2.8	5.2	2.8			
40	50	59	1.90	34.27	5.2	2.8	5.2	2.8			
45	55	53	2.10	30.73	5.2	2.8	5.2	2.8			
52	64	46	2.45	26.41	5.2	2.8	5.2	2.8			
57	71	42	1.95	24.05	5.3	2.8	5.3	2.8			
58	72	41	2.70	23.68	5.3	2.8	5.3	2.8			
67	82	36	2.90	20.63	5.3	2.8	5.3	2.8			
71	87	34	2.45	19.50	5.3	2.8	5.3	2.8	**KH022-14P-71-04E**	13	432
75	92	32	3.20	18.50	5.3	2.8	5.3	2.8			
90	110	27	3.50	15.41	5.3	2.8	5.3	2.8			
100	123	24	3.90	13.81	5.3	2.8	5.3	2.8			
117	144	20	4.00	11.84	5.1	2.8	5.1	2.8			
119	147	20	4.25	11.60	5.1	2.8	5.1	2.8			
133	163	18	4.75	10.40	4.9	2.8	4.9	2.8			
149	184	16	5.10	9.25	4.7	2.8	4.7	2.8			
162	200	15	5.25	8.51	4.6	2.8	4.6	2.8			
181	223	13	5.85	7.63	4.4	2.8	4.4	2.8			
200	246	12	6.20	6.91	4.3	2.8	4.3	2.8			
265	327	9	7.25	5.20	3.9	2.8	3.9	2.8			
361	445	7	8.65	3.82	3.5	2.8	3.5	2.8			

Legend see page 337

P_N = 0.37 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.37 kW	0.44 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.13	0.16	23844	0.80	7012.05	**	**	**	**			
0.15	0.18	21198	0.85	6249.84	62.2	108.2	62.2	108.2			
0.16	0.2	19366	0.95	5739.09	72.1	115.2	72.1	115.2			
0.19	0.24	16185	1.15	4845.97	84.9	117.6	84.9	117.6			
0.21	0.26	14679	1.25	4417.59	89.7	118.8	89.7	118.8			
0.23	0.29	13078	1.40	3966.24	94.0	120.0	94.0	120.0	**KH155-14P-80-06E**	682	464
0.28	0.34	10837	1.70	3337.74	99.0	121.7	99.0	121.7			
0.30	0.37	9835	1.85	3052.96	100.8	122.5	100.8	122.5			
0.34	0.42	8687	2.10	2731.65	102.7	123.4	102.7	123.4			
0.40	0.49	7166	2.55	2306.68	104.7	124.5	104.7	124.5			
0.42	0.51	6846	2.65	2215.09	105.1	124.8	105.1	124.8			
0.14	0.18	21768	0.85	9679.02	58.6	100.6	58.6	100.6			
0.15	0.19	20287	0.90	9043.42	67.4	114.5	67.4	114.5			
0.18	0.22	17620	1.05	7915.09	79.7	116.6	79.7	116.6			
0.20	0.24	15490	1.20	7012.05	87.2	118.2	87.2	118.2			
0.22	0.27	13700	1.35	6249.84	92.4	119.5	92.4	119.5			
0.24	0.30	12516	1.45	5739.09	95.4	120.4	95.4	120.4	**KH155-14P-71-04F**	679	464
0.29	0.35	10406	1.75	4845.97	99.8	122.1	99.8	122.1			
0.32	0.39	9388	1.95	4417.59	101.6	122.8	101.6	122.8			
0.35	0.43	8320	2.20	3966.24	103.2	123.7	103.2	123.7			
0.42	0.51	6840	2.65	3337.74	105.1	124.8	105.1	124.8			
0.46	0.56	6159	2.95	3052.96	105.9	125.3	105.9	125.3			
0.59	0.72	5115	2.55	1579.81	86.7	92.4	86.7	92.4	**KH124-14P-80-06E**	415	458
0.67	0.83	4377	3.00	1377.44	87.4	93.1	87.4	93.1			
0.71	0.88	4338	1.85	1301.54	57.7	64.2	57.7	64.2			
0.82	1.0	3712	2.20	1129.81	58.8	64.9	58.8	64.9			
0.92	1.1	3267	2.45	1004.85	59.5	65.4	59.5	65.4	**KH104-14P-80-06E**	292	454
0.95	1.2	3161	2.55	976.16	59.7	65.6	59.7	65.6			
1.1	1.3	2783	2.90	872.27	60.2	66.0	60.2	66.0			
1.1	1.3	2748	2.95	1301.54	60.3	66.0	60.3	66.0	**KH104-14P-71-04F**	289	454
0.60	0.74	5318	0.85	1531.00	21.4	36.0	21.4	36.0			
0.62	0.77	5133	0.90	1480.92	23.2	38.5	23.2	38.5			
0.74	0.91	4313	1.05	1251.99	29.1	39.5	29.1	39.5			
0.79	0.97	4012	1.15	1169.35	30.8	39.9	30.8	39.9			
0.94	1.2	3364	1.35	988.58	33.8	40.7	33.8	40.7	**KH094-14P-80-06E**	163	450
1.0	1.3	3066	1.50	906.69	34.9	41.1	34.9	41.1			
1.2	1.5	2560	1.80	766.52	36.5	41.7	36.5	41.7			
1.5	1.8	2061	2.20	627.37	37.7	42.4	37.7	42.4			
1.6	2.0	1857	2.45	571.21	38.1	42.6	38.1	42.6			
1.9	2.4	1538	2.95	482.91	38.7	43.0	38.7	43.0			
0.77	0.94	4128	1.10	1810.95	30.2	39.7	30.2	39.7			
0.91	1.1	3462	1.30	1531.00	33.4	40.6	33.4	40.6			
0.94	1.2	3341	1.35	1480.92	33.8	40.8	33.8	40.8			
1.1	1.4	2790	1.65	1251.99	35.8	41.5	35.8	41.5			
1.2	1.5	2595	1.75	1169.35	36.4	41.7	36.4	41.7	**KH094-14P-71-04F**	160	450
1.4	1.7	2162	2.10	988.58	37.5	42.3	37.5	42.3			
1.5	1.9	1967	2.30	906.69	37.9	42.5	37.9	42.5			
1.8	2.2	1629	2.80	766.52	38.6	42.9	38.6	42.9			
1.9	2.3	1570	2.90	742.09	38.7	43.0	38.7	43.0			
0.82	1.0	3923	0.80	1127.18	**	**	**	**			
0.84	1.0	3843	0.80	1104.23	**	**	**	**			
0.94	1.2	3412	0.90	984.20	15.2	25.4	15.2	7.5			
1.0	1.3	3120	1.00	903.77	18.3	32.0	18.3	7.9			
1.1	1.3	3017	1.00	873.98	19.2	33.9	19.2	8.0			
1.2	1.5	2618	1.15	763.13	22.2	40.5	22.2	8.6			
1.3	1.6	2444	1.25	715.32	23.2	41.4	23.2	8.9			
1.5	1.8	2117	1.45	624.59	24.9	41.9	24.9	9.4	**KH084-14P-80-06E**	113	446
1.7	2.1	1851	1.65	550.61	26.1	42.3	26.1	9.8			
1.8	2.2	1759	1.75	525.61	26.4	42.4	26.4	9.9			
1.9	2.4	1599	1.90	480.77	27.0	42.6	27.0	10.1			
2.2	2.7	1416	2.15	430.17	27.5	42.9	27.5	10.4			
2.5	3.1	1174	2.60	363.25	28.1	43.3	28.1	10.8			
2.7	3.3	1122	2.70	348.82	28.2	43.3	28.2	10.8			

P_N = 0.37 kW										IE3
50 Hz 0.37 kW	60 Hz 0.44 kW				at 50 Hz					
					Output shaft		Hollow shaft			
n_{50} min^{-1}	n_{60} min^{-1}	M_2 Nm	f_B	i	F_{rN} kN	F_{aN} kN	F_{rN} kN	F_{aN} kN		m kg	Dimension sheet see page
0.92	1.1	3503	0.90	1524.22	14.0	22.8	14.0	7.3			
0.98	1.2	3274	0.95	1427.51	16.8	28.8	16.8	7.7			
1.1	1.4	2841	1.10	1246.44	20.6	37.0	20.6	8.3			
1.2	1.5	2559	1.20	1127.18	22.6	41.2	22.6	8.7			
1.3	1.5	2507	1.20	1104.23	22.9	41.3	22.9	8.8			
1.4	1.7	2216	1.40	984.20	24.5	41.7	24.5	9.2			
1.5	1.9	2027	1.50	903.77	25.3	42.0	25.3	9.5			
1.6	2.0	1956	1.55	873.98	25.6	42.1	25.6	9.6	**KH084-14P-71-04F**	110	446
1.8	2.2	1690	1.80	763.13	26.7	42.5	26.7	10.0			
2.0	2.4	1574	1.95	715.32	27.0	42.7	27.0	10.2			
2.2	2.7	1358	2.25	624.59	27.7	43.0	27.7	10.5			
2.5	3.1	1182	2.55	550.61	28.1	43.3	28.1	10.8			
2.7	3.3	1121	2.70	525.61	28.2	43.3	28.2	10.8			
2.9	3.6	1013	3.00	480.77	28.5	43.5	28.5	11.0			
3.6	4.5	978	1.60	256.14	18.5	17.0	18.5	5.7			
4.7	5.8	755	2.10	197.75	19.3	17.4	19.3	6.2	**KH073-14P-80-06E**	59	442
5.6	6.9	634	2.45	165.85	19.7	17.7	19.7	6.4			
5.4	6.7	649	2.40	256.14	19.6	17.7	19.6	6.4	**KH073-14P-71-04F**	56	442
4.7	5.8	756	1.10	198.00	9.2	12.9	9.2	2.9			
5.9	7.3	599	1.40	156.92	10.6	13.4	10.6	3.4			
7.6	9.4	465	1.80	121.85	11.4	13.8	11.4	3.8			
9.3	11	382	2.15	99.98	11.7	14.0	11.7	4.1	**KH063-14P-80-06E**	39	440
11	14	311	1.85	81.53	12.0	14.3	12.0	4.3			
12	15	296	2.80	77.42	12.0	14.3	12.0	4.4			
21	26	169	1.85	44.35	12.3	14.5	11.9	4.5			
7.0	8.6	502	1.65	198.00	11.2	13.7	11.2	3.7			
8.9	11	397	2.10	156.92	11.7	14.0	11.7	4.0			
11	14	309	2.70	121.85	12.0	14.3	12.0	4.3	**KH063-14P-71-04F**	36	440
17	21	207	2.80	81.53	12.3	14.6	12.3	4.6			
31	39	112	2.80	44.35	12.4	14.7	10.2	4.8			
4.8	5.9	744	0.85	194.73	2.5	2.7	2.5	2.7			
6.1	7.5	578	1.05	151.20	6.4	10.3	6.4	3.6			
7.5	9.2	474	1.30	124.06	7.7	10.6	7.7	3.9			
9.6	12	367	1.65	96.08	8.6	10.9	8.6	4.2	**KH053-14P-80-06E**	26	438
11	14	307	1.85	80.46	8.9	11.1	8.9	4.4			
13	16	279	2.15	73.08	9.1	11.2	9.1	4.5			
15	18	244	2.50	63.77	9.2	11.3	9.2	4.6			
24	30	146	1.85	38.32	9.6	11.3	9.6	4.6			
5.7	7.0	622	1.00	245.70	5.7	9.5	5.7	3.4			
7.2	8.8	493	1.25	194.73	7.5	10.5	7.5	3.8			
9.2	11	383	1.60	151.20	8.5	10.8	8.5	4.1			
11	14	314	1.95	124.06	8.9	11.0	8.9	4.3	**KH053-14P-71-04F**	23	438
15	18	243	2.50	96.08	9.2	11.3	9.2	4.6			
17	21	204	2.80	80.46	9.4	11.4	9.4	4.7			
36	45	97	2.80	38.32	9.7	11.6	9.7	4.9			
6.7	8.2	531	0.80	139.08	**	**	**	**			
8.1	10	435	0.95	113.83	2.9	4.1	2.9	2.2			
10	13	341	1.15	89.17	4.9	8.1	4.9	2.5			
11	13	335	1.20	87.62	5.0	8.2	5.0	2.6			
13	16	279	1.45	72.92	5.7	8.4	5.7	2.8			
14	17	253	1.60	66.20	6.0	8.5	6.0	2.9			
16	20	220	1.85	57.58	6.2	8.6	6.2	3.0	**KH043-14P-80-06E**	22	436
17	21	207	1.95	54.18	6.3	8.7	6.3	3.1			
20	24	180	1.15	47.07	6.5	8.6	6.5	3.0			
21	26	171	2.35	44.64	6.6	8.8	6.6	3.2			
24	30	147	1.85	38.49	6.7	8.7	6.7	3.1			
25	31	140	2.75	36.78	6.7	8.9	6.7	3.3			
30	38	116	2.80	30.39	6.8	8.9	6.8	3.3			

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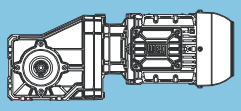
P_N = 0.37 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.37 kW	0.44 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
7.8	9.5	454	0.90	179.37	2.1	2.4	2.1	2.1			
10	12	352	1.15	139.08	4.7	8.0	4.7	2.5			
12	15	288	1.40	113.83	5.6	8.3	5.6	2.7			
16	19	226	1.70	89.17	6.2	8.6	6.2	3.0			
19	23	185	2.20	72.92	6.5	8.8	6.5	3.2			
21	26	168	2.40	66.20	6.6	8.8	6.6	3.2	**KH043-14P-71-04F**	19	436
24	30	146	2.75	57.58	6.7	8.9	6.7	3.3			
26	32	137	2.95	54.18	6.7	9.0	6.7	3.4			
30	36	119	1.70	47.07	6.8	8.9	6.8	3.3			
36	44	97	2.80	38.49	6.9	9.0	6.9	3.4			
14	17	251	0.80	65.63	**	**	**	**			
16	19	223	0.90	58.50	3.3	2.4	3.3	2.4			
19	23	191	1.05	49.88	3.9	2.6	3.9	2.6			
20	25	178	1.15	46.48	4.1	2.6	4.1	2.6			
24	29	148	1.35	38.80	4.4	2.8	4.4	2.8			
26	32	137	1,50	35,90	4,5	2,9	4,5	2,9			
31	38	116	1.75	30.29	4.7	3.0	4.7	3.0	**KH033-14P-80-06E**	19	434
32	40	110	1.85	28.67	4.8	3.0	4.8	3.0			
38	47	93	1.75	24.38	4.9	3.0	4.9	3.0			
43	53	83	2.45	21.67	4.9	3.2	4.9	3.2			
48	59	74	2.25	19.37	5.0	3.1	5.0	3.1			
62	76	57	2.90	14.96	5.0	3.2	5.0	3.2			
16	20	220	0.95	86.83	3.4	2.4	3.4	2.4			
19	24	182	1.10	71.93	4.0	2.6	4.0	2.6			
21	26	166	1.25	65.63	4.2	2.7	4.2	2.7			
24	29	148	1.35	58.50	4.4	2.8	4.4	2.8			
28	34	126	1.60	49.88	4.6	2.9	4.6	2.9			
30	37	118	1.70	46.48	4.7	3.0	4.7	3.0	**KH033-14P-71-04F**	16	434
36	44	98	2.05	38.80	4.8	3.1	4.8	3.1			
39	48	91	2.20	35.90	4.9	3.1	4.9	3.1			
47	57	76	1.70	29.97	5.0	3.1	5.0	3.1			
49	60	73	2.80	28.67	5.0	3.2	5.0	3.2			
57	70	62	2.60	24.38	5.0	3.2	5.0	3.2			
27	33	131	0.85	34.27	4.8	2.8	4.8	2.8			
30	37	117	0.95	30.73	4.9	2.8	4.9	2.8			
35	43	101	1.10	26.41	5.0	2.8	5.0	2.8			
38	47	92	0.90	24.05	5.0	2.8	5.0	2.8			
39	48	90	1.25	23.68	5.1	2.8	5.1	2.8			
45	55	79	1.35	20.63	5.1	2.8	5.1	2.8			
47	58	74	1.10	19.50	5.1	2.8	5.1	2.8			
50	62	71	1.45	18.50	5.2	2.8	5.2	2.8			
60	74	59	1.60	15.41	5.2	2.8	5.2	2.8			
67	83	53	1.80	13.81	5.2	2.8	5.2	2.8	**KH022-14P-80-06E**	17	432
70	86	51	1.80	13.29	5.2	2.8	5.2	2.8			
78	96	45	1.80	11.84	5.2	2.8	5.2	2.8			
80	98	44	1.95	11.60	5.2	2.8	5.2	2.8			
89	110	40	2.15	10.40	5.3	2.8	5.3	2.8			
100	123	35	2,30	9,25	5,3	2.8	5,3	2,8			
109	134	33	2.40	8.51	5.3	2.8	5.3	2.8			
121	149	29	2.65	7.63	5.1	2.8	5.1	2.8			
134	165	26	2.85	6.91	4,9	2,8	4,9	2,8			

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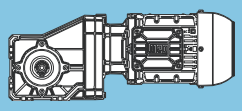
P_N = 0.37 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.37 kW	0.44 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
26	32	136	0.85	53.65	4.7	2.8	4.7	2.8			
29	36	122	0.95	48.10	4.8	2.8	4.8	2.8			
32	39	110	1.00	43.50	4.9	2.8	4.9	2.8			
36	44	99	1.15	39.00	5.0	2.8	5.0	2.8			
41	50	87	1.30	34.27	5.1	2.8	5.1	2.8			
45	56	78	1.45	30.73	5.1	2.8	5.1	2.8			
53	65	67	1.65	26.41	5.2	2.8	5.2	2.8			
58	71	61	1.35	24.05	5.2	2.8	5.2	2.8			
59	72	60	1.85	23.68	5.2	2.8	5.2	2.8			
68	83	52	2.00	20.63	5.2	2.8	5.2	2.8			
72	88	49	1.65	19.50	5.2	2.8	5.2	2.8			
75	92	47	2.20	18.50	5.2	2.8	5.2	2.8	**KH022-14P-71-04F**	14	432
91	111	39	2.40	15.41	5.3	2.8	5.3	2.8			
101	124	35	2.70	13.81	5.3	2.8	5.3	2.8			
118	144	30	2.75	11.84	5.2	2.8	5.2	2.8			
120	147	29	2.90	11.60	5.1	2.8	5.1	2.8			
134	164	26	3.25	10.40	4.9	2.8	4.9	2.8			
151	185	23	3.50	9.25	4.7	2.8	4.7	2.8			
164	201	22	3.60	8.51	4.6	2.8	4.6	2.8			
183	224	19	4.00	7.63	4.4	2.8	4.4	2.8			
202	247	18	4.25	6.91	4.3	2.8	4.3	2.8			
268	329	13	4.95	5.20	3.9	2.8	3.9	2.8			
365	448	10	5.90	3.82	3.5	2.8	3.5	2.8			

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P_N = 0.55 kW										IE3
50 Hz	60 Hz				at 50 Hz					
0.55 kW	0.66 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
0.21	0.26	21801	0.85	4417.59	58.4	100.2	58.4	100.2	**KH155-14P-L80-06F**	683	464
0.24	0.29	19474	0.95	3966.24	71.6	115.1	71.6	115.1			
0.28	0.35	16221	1.15	3337.74	84.8	117.6	84.8	117.6			
0.31	0.38	14761	1.25	3052.96	89.5	118.7	89.5	118.7			
0.35	0.42	13106	1.40	2731.65	93.9	120.0	93.9	120.0			
0.41	0.50	10925	1.65	2306.68	98.8	121.7	98.8	121.7			
0.43	0.52	10437	1.75	2215.09	99.7	122.0	99.7	122.0			
0.50	0.61	8735	2.10	1887.82	102.6	123.3	102.6	123.3			
0.51	0.62	8580	2.10	1854.30	102.8	123.5	102.8	123.5			
0.62	0.75	6884	2.65	1530.83	105.1	124.7	105.1	124.7			
0.63	0.77	6740	2.70	1502.83	105.2	124.9	105.2	124.9			
0.20	0.25	23088	0.80	7012.05	**	**	**	**	**KH155-14P-80-04E**	681	464
0.23	0.28	20474	0.90	6249.84	66.4	114.4	66.4	114.4			
0.25	0.30	18704	1.00	5739.09	75.2	115.7	75.2	115.7			
0.29	0.35	15672	1.15	4845.97	86.6	118.0	86.6	118.0			
0.32	0.39	14177	1.30	4417.59	91.1	119.2	91.1	119.2			
0.36	0.43	12631	1.45	3966.24	95.1	120.4	95.1	120.4			
0.43	0.52	10466	1.75	3337.74	99.7	122.0	99.7	122.0			
0.47	0.56	9499	1.90	3052.96	101.4	122.8	101.4	122.8			
0.52	0.63	8390	2.15	2731.65	103.1	123.6	103.1	123.6			
0.62	0.75	6903	2.65	2306.68	105.1	124.7	105.1	124.7			
0.64	0.78	6594	2.75	2215.09	105.4	125.0	105.4	125.0			
0.72	0.88	6051	3.00	1308.92	106.0	125.4	106.0	125.4	**KH154-14P-L80-06F**	670	462
0.60	0.73	7710	1.70	1579.81	83.2	89.8	83.2	89.8	**KH124-14P-L80-06F**	416	458
0.69	0.84	6639	2.00	1377.44	84.8	90.8	84.8	90.8			
0.77	0.95	5818	2.25	1219.69	85.9	91.7	85.9	91.7			
0.80	0.97	5636	2.35	1186.50	86.1	91.9	86.1	91.9			
0.89	1.1	4989	2.65	1063.46	86.8	92.5	86.8	92.5			
0.92	1.1	4779	2.75	1022.92	87.0	92.7	87.0	92.7			
0.90	1.1	4932	2.65	1579.81	86.9	92.6	86.9	92.6	**KH124-14P-80-04E**	414	458
0.73	0.89	6471	1.25	1301.54	51.9	61.8	51.9	61.8	**KH104-14P-L80-06F**	293	454
0.84	1.0	5571	1.45	1129.81	54.7	62.8	54.7	62.8			
0.94	1.1	4914	1.65	1004.85	56.4	63.6	56.4	63.6			
0.97	1.2	4764	1.70	976.16	56.7	63.7	56.7	63.7			
1.1	1.3	4222	1.90	872.27	57.9	64.3	57.9	64.3			
1.3	1.5	3595	2.25	753.64	59.0	65.1	59.0	65.1			
1.4	1.7	3109	2.60	661.38	59.8	65.6	59.8	65.6			
1.5	1.8	2953	2.75	632.05	60.0	65.8	60.0	65.8			
1.1	1.3	4184	1.95	1301.54	58,0	64,4	58,0	64,4	**KH104-14P-80-04E**	291	454
1.3	1.5	3587	2.25	1129.81	59.0	65.1	59.0	65.1			
1.4	1.7	3150	2.55	1004.85	59.7	65.6	59.7	65.6			
1.5	1.8	3048	2,65	976,16	59,9	65,7	59,9	65,7			
1.6	2.0	2684	3.00	872.27	60.3	66.1	60.3	66.1			
0.81	0.99	5922	0.80	1169.35	**	**	**	**	**KH094-14P-L80-06F**	164	450
0.96	1.2	4976	0.95	988.58	24.5	38.7	24.5	38.7			
1.0	1.3	4554	1.00	906.69	27.6	39.2	27.6	39.2			
1.2	1.5	3819	1.20	766.52	31.8	40.1	31.8	40.1			
1.3	1.6	3689	1.25	742,09	32,4	40,3	32,4	40,3			
1.5	1.8	3087	1.50	627.37	34.8	41.1	34.8	41.1			
1.7	2.0	2793	1.65	571.21	35.8	41.4	35.8	41.4			
2.0	2.4	2332	1.95	482.91	37.1	42.0	37.1	42.0			
2.2	2.7	2063	2.20	431.58	37.7	42.4	37.7	42.4			
2.6	3.2	1712	2.65	364.86	38.4	42.8	38.4	42.8			
2.7	3.3	1650	2.75	353.21	38.5	42.9	38.5	42.9			
0.93	1.1	5139	0.90	1531.00	23.1	38.5	23.1	38.5	**KH094-14P-80-04E**	162	450
0.96	1.2	4960	0.95	1480.92	24.6	38.7	24.6	38.7			
1.1	1.4	4168	1.10	1251.99	29.9	39.7	29.9	39.7			
1.2	1.5	3877	1.20	1169.35	31.5	40.1	31.5	40.1			
1.4	1.7	3251	1.40	988.58	34.2	40.9	34.2	40.9			
1.6	1.9	2963	1.55	906.69	35.2	41.2	35.2	41.2			
1.9	2.2	2474	1.85	766.52	36.7	41.9	36.7	41.9			
2.3	2.7	1987	2.30	627.37	37.9	42.5	37.9	42.5			
2.5	3.0	1791	2.55	571.21	38.3	42.7	38.3	42.7			

P_N = 0.55 kW										IE3
50 Hz	60 Hz				at 50 Hz					
0.55 kW	0.66 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
1.2	1.5	3865	0.80	763.13	**	**	**	**		
1.3	1.6	3615	0.85	715.32	12.4	19.5	12.4	7.2		
1.4	1.7	3509	0.90	695.67	13.9	22.6	13.9	7.3		
1.5	1.8	3137	1.00	624.59	18.1	31.6	18.1	7.9		
1.7	2.1	2754	1.10	550.61	21.3	38.5	21.3	8.4		
1.8	2.2	2624	1.15	525.61	22.2	40.5	22.2	8.6		
2.0	2.4	2385	1.30	480.77	23.6	41.5	23.6	9.0		
2.2	2.7	2121	1.45	430.17	24.9	41.9	24.9	9.4		
2.3	2.8	2047	1.50	416.02	25.3	42.0	25.3	9.5	**KH084-14P-L80-06F**	114	446
2.6	3.2	1773	1.70	363.25	26.4	42.4	26.4	9.9		
2.7	3.3	1695	1.80	348.82	26.6	42.5	26.6	10.0		
2.8	3.4	1651	1.85	340.47	26.8	42.6	26.8	10.1		
3.2	3.9	1424	2.15	297.29	27.5	42.9	27.5	10.4		
3.4	4.2	1314	2.30	276.09	27.8	43.1	27.8	10.6		
3.9	4.8	1129	2.70	241.07	28.2	43.3	28.2	10.8		
4.0	4.9	1106	2.75	236.66	28.3	43.4	28.3	10.9		
4.1	5.0	1078	2.80	231.12	28.3	43.4	28.3	10.9		
1.3	1.5	3799	0.80	1127.18	**	**	**	**		
1.4	1.7	3297	0.95	984.20	16.5	28.1	16.5	7.6		
1.6	1.9	3021	1.00	903.77	19.2	33.9	19.2	8.0		
1.9	2.3	2530	1.20	763.13	22.7	41.3	22.7	8.8		
2.0	2.4	2362	1.30	715.32	23.7	41.5	23.7	9.0		
2.3	2.8	2045	1.50	624.59	25.3	42.0	25.3	9.5		
2.6	3.1	1788	1.70	550.61	26.3	42.4	26.3	9.9	**KH084-14P-80-04E**	112	446
2.7	3.3	1700	1.80	525.61	26.6	42.5	26.6	10.0		
3.0	3.6	1545	1.95	480.77	27.1	42.7	27.1	10.2		
3.3	4.0	1368	2.20	430.17	27.6	43.0	27.6	10.5		
3.4	4.1	1318	2.30	416.02	27.8	43.1	27.8	10.6		
3.9	4.7	1134	2.65	363.25	28.2	43.3	28.2	10.8		
4.1	4.9	1082	2.80	348.82	28.3	43.4	28.3	10.9		
4.2	5.1	1054	2.85	340.47	28.4	43.4	28.4	10.9		
4.6	5.6	1146	2.65	206.12	28.2	43.3	28.2	10.8	**KH083-14P-L80-06F**	101	444
3.7	4.5	1424	1.10	256.14	16.1	16.1	16.1	4.8		
4.8	5.8	1099	1.45	197.75	18.0	16.7	18.0	5.5		
5.7	7.0	922	1.70	165.85	18.8	17.1	18.8	5.8		
7.3	8.9	723	2.15	130.16	19.4	17.5	19.4	6.3	**KH073-14P-L80-06F**	60	442
9.4	11	558	2.80	100.45	19.9	17.8	19.4	6.6		
9.5	12	555	2.35	99.87	19.9	17.9	19.4	6.6		
20	24	264	2.35	47.56	20.3	18.2	14.6	6.9		
5.5	6.7	947	1.65	256.14	18.7	17.0	18.7	5.8		
7.2	8.7	731	2.15	197.75	19.4	17.5	19.4	6.2	**KH073-14P-80-04E**	58	442
8.6	10	613	2.55	165.85	19.7	17.7	19.7	6.5		
6.0	7.4	872	0.95	156.92	7.9	12.5	7.9	2.6		
7.8	9.5	677	1.25	121.85	10.0	13.1	10.0	3.2		
9.5	12	556	1.50	99.98	10.8	13.5	10.8	3.5		
12	14	453	1.30	81.53	11.4	13.8	11.4	3.9		
15	18	359	2.30	64.62	11.8	14.1	11.8	4.2	**KH063-14P-L80-06F**	40	440
16	20	327	2.55	58.89	11.9	14.2	11.9	4.3		
19	23	279	2.95	50.17	12.1	14.4	12.1	4.4		
21	26	247	1.30	44.35	12.2	14.2	12.2	4.2		
27	33	195	2.35	35.15	12.3	14.4	11.2	4.4		
7.2	8.7	732	1.15	198.00	9.5	12.9	9.5	3.0		
9.0	11	580	1.45	156.92	10.7	13.4	10.7	3.5		
12	14	451	1.85	121.85	11.4	13.8	11.4	3.9		
14	17	370	2.25	99.98	11.8	14.1	11.8	4.1	**KH063-14P-80-04E**	38	440
17	21	302	1.90	81.53	12.0	14.3	12.0	4.4		
18	22	286	2.90	77.42	12.1	14.3	12.1	4.4		
32	39	164	1.90	44.35	12.3	14.5	10.4	4.6		

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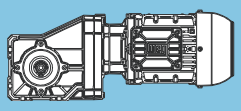
P_N = 0.55 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.55 kW	0.66 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
7.6	9.3	690	0.90	124.06	4.3	6.5	4.3	3.2			
9.8	12	534	1.15	96.08	7.0	10.4	7.0	3.7			
12	14	447	1.30	80.46	7.9	10.6	7.9	3.9			
13	16	406	1.50	73.08	8.3	10.8	8.3	4.1			
15	18	354	1.70	63.77	8.6	10.9	8.6	4.2			
16	19	335	1.80	60.26	8.8	11.0	8.8	4.3	**KH053-14P-L80-06F**	27	438
19	23	275	2.20	49.52	9.1	11.2	9.1	4.5			
23	28	233	2.60	42.00	9.3	11.3	9.3	4.6			
25	30	213	1.30	38.32	9.4	11.0	9.4	4.3			
31	38	169	2.35	30.37	9.5	11.2	9.5	4.5			
7.3	8.8	720	0.85	194.73	3.4	4.6	3.4	3.1			
9.4	11	559	1.10	151.20	6.7	10.3	6.7	3.6			
11	14	459	1.35	124.06	7.8	10.6	7.8	3.9			
15	18	355	1.70	96.08	8.6	10.9	8.6	4.2			
18	21	298	1.90	80.46	9.0	11.1	9.0	4.4	**KH084-14P-80-04E**	25	446
19	24	270	2,25	73,08	9,1	11,2	9,1	4,5			
22	27	236	2.55	63.77	9.3	11.3	9.3	4.6			
24	29	223	2.70	60.26	9.3	11.3	9.3	4.6			
37	45	142	1.90	38.32	9,6	11,4	9,6	4,7			
11	13	496	0.80	89.17	**	**	**	**			
13	16	405	1.00	72.92	3.7	5.8	3.7	2.3			
14	17	368	1.10	66.20	4.5	7.5	4.5	2.4			
16	20	320	1.25	57.58	5.2	8.2	5.2	2.6			
17	21	301	1.35	54.18	5.4	8.3	5.4	2.7			
20	25	262	0,80	47,07	**	**	**	**			
21	26	248	1.65	44.64	6.0	8.5	6.0	2.9			
22	26	244	1.65	43.93	6.0	8.5	6.0	2.9	**KH043-14P-L80-06F**	24	436
25	30	214	1.30	38.49	6.3	8.4	6.3	2.8			
26	31	204	1.90	36.78	6.4	8.7	6.4	3.1			
31	38	169	1.95	30.39	6.6	8.6	6.6	3.0			
32	39	166	2.20	29.81	6.6	8.8	6.6	3.2			
34	41	156	2.60	28.13	6.6	8.9	6.6	3.3			
40	49	131	2.35	23.57	6.8	8.8	6.8	3.2			
49	60	107	2,75	19,29	6,9	8,9	6,9	3,3			
10	12	514	0.80	139.08	**	**	**	**			
12	15	421	1.00	113.83	3.3	4.9	3.3	2.2			
16	19	330	1.15	89.17	5.1	8.2	5.1	2.6			
19	24	270	1.50	72.92	5.8	8.4	5.8	2.8			
21	26	245	1.65	66.20	6.0	8.5	6.0	2.9			
25	30	213	1.90	57.58	6.3	8.6	6.3	3.0			
26	32	200	2.00	54.18	6.4	8.7	6.4	3.1	**KH084-14P-80-04E**	21	446
30	37	174	1.15	47,07	6,5	8,6	6,5	3,0			
32	39	165	2.45	44.64	6.6	8.8	6.6	3.2			
37	45	142	1.90	38.49	6.7	8.8	6.7	3.2			
39	47	136	2.85	36,78	6.7	9,0	6.7	3.4			
47	57	112	2.90	30.39	6.8	8.9	6.8	3.3			
20	25	258	0.80	46.48	**	**	**	**			
24	30	216	0,95	38,80	3,4	2,4	3,4	2,4			
26	32	200	1.05	35.90	3.7	2.5	3.7	2.5			
31	38	168	1.20	30.29	4.2	2.7	4.2	2.7			
32	39	167	0,80	29,97	**	**	**	**			
33	40	159	1.30	28.67	4.3	2.7	4.3	2.7			
39	47	136	1.20	24.38	4.6	2.7	4.6	2.7	**KH033-14P-L80-06F**	20	434
44	53	120	1.70	21.67	4.7	3.0	4.7	3.0			
49	60	108	1.55	19.37	4.8	2.9	4.8	2.9			
57	70	92	2.20	16.47	4.9	3.1	4.9	3.1			
63	77	83	2,00	14,96	4,9	3,1	4,9	3,1			
74	90	71	2.85	12.81	5.0	3.2	5.0	3.2			
79	97	66	2.50	11.94	5.0	3.2	5.0	3.2			

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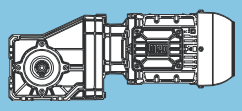
P_N = 0.55 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.55 kW	0.66 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
20	24	266	0.80	71.93	**	**	**	**	**KH033-14P-80-04E**	18	434
22	26	243	0.85	65.63	2.8	2.3	2.8	2.3			
24	29	216	0.95	58.50	3.4	2.4	3.4	2.4			
28	34	185	1.10	49.88	4.0	2.6	4.0	2.6			
31	37	172	1.20	46.48	4.1	2.7	4.1	2.7			
37	44	144	1.40	38.80	4.5	2.8	4.5	2.8			
40	48	133	1.55	35.90	4.6	2.9	4.6	2.9			
47	57	112	1.80	30.29	4.7	3.0	4.7	3.0			
50	60	106	1.90	28.67	4.8	3.1	4.8	3.1			
58	71	90	1.80	24.38	4.9	3.0	4.9	3.0			
66	79	80	2.50	21.67	4.9	3.2	4.9	3.2			
73	89	72	2.30	19.37	5.0	3.1	5.0	3.1			
95	115	55	2.95	14.96	5.1	3.3	5.1	3.3			
40	49	132	0.85	23.68	4.8	2.8	4.8	2.8	**KH022-14P-L80-06F**	18	432
46	56	115	0.90	20.63	4.9	2.8	4.9	2.8			
51	62	103	1.00	18.50	5.0	2.8	5.0	2.8			
61	75	86	1.10	15.41	5.1	2.8	5.1	2.8			
62	75	85	0.95	15.36	5.1	2.8	5.1	2.8			
68	84	77	1.25	13.81	5.1	2.8	5.1	2.8			
71	87	74	1.25	13.29	5.1	2.8	5.1	2.8			
79	97	66	1.35	11.92	5.2	2.8	5.2	2.8			
80	98	66	1.25	11.84	5.2	2.8	5.2	2.8			
81	100	64	1.35	11.60	5.2	2.8	5.2	2.8			
91	111	58	1.50	10.40	5.2	2.8	5.2	2.8			
102	125	51	1.60	9.25	5.2	2.8	5.2	2.8			
111	136	47	1.65	8.51	5.2	2.8	5.2	2.8			
124	151	42	1.85	7.63	5.1	2.8	5.1	2.8			
137	167	38	1.95	6.91	4.9	2.8	4.9	2.8			
159	194	33	2.10	5.96	4.7	2.8	4.7	2.8			
182	222	29	2.25	5.20	4.5	2.8	4.5	2.8			
247	302	21	2.70	3.82	4.0	2.8	4.0	2.8			
36	44	144	0.80	39.00	**	**	**	**	**KH022-14P-80-04E**	16	432
41	50	127	0.90	34.27	4.8	2.8	4.8	2.8			
46	56	114	1.00	30.73	4.9	2.8	4.9	2.8			
54	65	98	1.15	26.41	5.0	2.8	5.0	2.8			
59	72	89	0.95	24.05	5.1	2.8	5.1	2.8			
60	73	88	1.30	23.68	5.1	2.8	5.1	2.8			
69	83	76	1.35	20.63	5.1	2.8	5.1	2.8			
73	88	72	1.15	19.50	5.1	2.8	5.1	2.8			
77	93	68	1.50	18.50	5.2	2.8	5.2	2.8			
92	112	57	1.65	15.41	5.2	2.8	5.2	2.8			
103	125	51	1.85	13.81	5.2	2.8	5.2	2.8			
107	129	49	1.85	13.29	5.2	2.8	5.2	2.8			
119	144	44	2.05	11.92	5.2	2.8	5.2	2.8			
120	145	44	1.85	11.84	5.2	2.8	5.2	2.8			
122	148	43	2.00	11.60	5.2	2.8	5.2	2.8			
137	165	38	2.25	10.40	4.9	2.8	4.9	2.8			
154	186	34	2.40	9.25	4.7	2.8	4.7	2.8			
167	202	31	2.45	8.51	4.6	2.8	4.6	2.8			
186	225	28	2.75	7.63	4.4	2.8	4.4	2.8			
205	249	26	2.90	6.91	4.3	2.8	4.3	2.8			
238	289	22	3.15	5.96	4.1	2.8	4.1	2.8			
273	331	19	3.40	5.20	3.9	2.8	3.9	2.8			
372	450	14	4.05	3.82	3.5	2.8	3.5	2.8			

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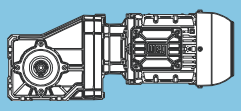
P_N = 0.75 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.75 kW	0.90 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.28	0.34	22639	0.80	3337.74	**	**	**	**	**KH155-11P-90S/L-06E**	689	464
0.31	0.38	20602	0.90	3052.96	65.7	114.3	65.7	114.3			
0.34	0.42	18339	1.00	2731.65	76.7	116.0	76.7	116.0			
0.41	0.5	15328	1.20	2306.68	87.7	118.3	87.7	118.3			
0.42	0.52	14682	1.25	2215.09	89.7	118.8	89.7	118.8			
0.50	0.61	12353	1.50	1887.82	95.7	120.6	95.7	120.6			
0.51	0.62	12133	1.50	1854.30	96.2	120.7	96.2	120.7			
0.61	0.75	9837	1.85	1530.83	100.8	122.5	100.8	122.5			
0.63	0.76	9632	1.90	1502.83	101.2	122.7	101.2	122.7			
0.73	0.89	8066	2.25	1281.49	103.6	123.8	103.6	123.8			
0.91	1.10	6336	2.85	1038.59	105.7	125.2	105.7	125.2			
0.30	0.36	21551	0.85	4845.97	60.0	103.6	60.0	103.6	**KH155-11P-80-04F**	683	464
0.32	0.39	19546	0.95	4417.59	71.2	115.1	71.2	115.1			
0.36	0.44	17459	1.05	3966.24	80.3	116.7	80.3	116.7			
0.43	0.52	14542	1.25	3337.74	90.1	118.9	90.1	118.9			
0.47	0.57	13199	1.40	3052.96	93.7	119.9	93.7	119.9			
0.52	0.64	11719	1.55	2731.65	97.1	121.1	97.1	121.1			
0.62	0.75	9744	1.85	2306.68	101.0	122.6	101.0	122.6			
0.65	0.79	9309	1.95	2215.09	101.7	122.9	101.7	122.9			
0.76	0.92	7770	2.35	1887.82	104.0	124.1	104.0	124.1			
0.77	0.94	7612	2.40	1854.30	104.2	124.2	104.2	124.2			
0.93	1.1	6107	2.95	1530.83	105.9	125.3	105.9	125.3			
0.72	0.87	8613	2.10	1308.92	102.8	123.4	102.8	123.4	**KH154-11P-90S/L-06E**	676	462
0.83	1.0	7296	2.50	1127.36	104.6	124.4	104.6	124.4			
0.91	1.1	6635	2.75	1035.99	105.4	124.9	105.4	124.9			
0.96	1.2	6193	2.95	975.12	105.8	125.3	105.8	125.3			
0.60	0.72	10767	1.25	1579.81	76.9	86.7	76.9	86.7	**KH154-11P-90S/L-06E**	422	462
0.68	0.83	9330	1.40	1377.44	80.2	88.1	80.2	88.1			
0.77	0.94	8194	1.60	1219.69	82.3	89.3	82.3	89.3			
0.79	0.97	7954	1.65	1186.50	82.8	89.5	82.8	89.5			
0.88	1.1	7071	1.85	1063.46	84.2	90.4	84.2	90.4			
0.92	1.1	6773	1.95	1022.92	84.6	90.7	84.6	90.7			
1.0	1.2	6003	2.20	916.04	85.6	91.5	85.6	91.5			
1.1	1.3	5832	2.25	891.88	85.9	91.7	85.9	91.7			
1.2	1.4	5185	2.55	802.79	86.6	92.3	86.6	92.3			
1.3	1.6	4446	2.95	699.95	87.3	93.0	87.3	93.0			
0.91	1.1	6890	1.90	1579.81	84.4	90.6	84.4	90.6	**KH124-11P-80-04F**	416	458
1.0	1.3	5933	2.20	1377.44	85.7	91.6	85.7	91.6			
1.2	1.4	5178	2.55	1219.69	86.6	92.3	86.6	92.3			
1.3	1.6	4440	2.95	1063.46	87.3	93.1	87.3	93.1			
0.72	0.88	8999	0.90	1301.54	40.4	58.9	40.4	58.9	**KH104-11P-90S/L-06E**	299	454
0.83	1.0	7764	1.05	1129.81	46.9	60.3	46.9	60.3			
0.94	1.1	6863	1.20	1004.85	50.5	61.3	50.5	61.3			
0.96	1.2	6667	1.20	976.16	51.3	61.6	51.3	61.6			
1.1	1.3	5908	1.40	872.27	53.7	62.4	53.7	62.4			
1.2	1.5	5063	1.60	753.64	56.0	63.4	56.0	63.4			
1.3	1.6	4904	1.65	731.54	56.4	63.6	56.4	63.6			
1.4	1.7	4397	1.85	661.38	57.5	64.1	57.5	64.1			
1.5	1.8	4185	1.95	632.05	58.0	64.4	58.0	64.4			
1.6	2.0	3770	2.15	574.12	58.7	64.9	58.7	64.9			
1.8	2.2	3310	2.45	510.43	59.5	65.4	59.5	65.4			
1.9	2.3	3210	2.50	496.04	59.6	65.5	59.6	65.5			
2.1	2.6	2826	2.85	443.08	60.2	65.9	60.2	65.9			
2.2	2.7	2676	3.00	422.20	60.3	66.1	60.3	66.1			
1.1	1.3	5795	1.40	1301.54	54.1	62.5	54.1	62.5	**KH104-11P-80-04F**	293	454
1.3	1.5	4979	1.65	1129.81	56.2	63.5	56.2	63.5			
1.4	1.7	4392	1.85	1004.85	57.5	64.1	57.5	64.1			
1.5	1.8	4258	1.90	976.16	57.8	64.3	57.8	64.3			
1.6	2.0	3765	2.15	872.27	58.7	64.9	58.7	64.9			
1.7	2.1	3623	2.25	842.74	59.0	65.0	59.0	65.0			
1.9	2.3	3206	2.50	753.64	59.6	65.5	59.6	65.5			
2.0	2.4	3099	2.60	731.54	59.8	65.6	59.8	65.6			
2.2	2.6	2767	2.90	661.38	60.2	66.0	60.2	66.0			

P_N = 0.75 kW										IE3
50 Hz	60 Hz				at 50 Hz					
0.75 kW	0.90 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
1.2	1.5	5311	0.85	766.52	21.5	36.2	21.5	36.2			
1.3	1.5	5131	0.90	742.09	23.2	38.5	23.2	38.5			
1.5	1.8	4311	1.05	627.37	29.1	39.5	29.1	39.5			
1.6	2.0	3901	1.20	571.21	31.4	40.0	31.4	40.0			
1.9	2.4	3271	1.40	482.91	34.1	40.8	34.1	40.8			
2.2	2.7	2905	1.55	431.58	35.4	41.3	35.4	41.3	**KH094-11P-90S/L-06E**	170	450
2.6	3.1	2421	1.90	364.86	36.9	41.9	36.9	41.9			
2.7	3.2	2339	1.95	353.21	37.1	42.0	37.1	42.0			
3.1	3.8	1945	2.35	298.61	38.0	42.5	38.0	42.5			
3.3	4.0	1858	2.45	286.42	38.1	42.6	38.1	42.6			
3.9	4.7	1538	2.95	242.14	38.7	43.0	38.7	43.0			
1.1	1.4	5714	0.80	1251.99	**	**	**	**			
1.2	1.5	5326	0.85	1169.35	21.3	35.8	21.3	35.8			
1.4	1.8	4465	1.05	988.58	28.2	39.3	28.2	39.3			
1.6	1.9	4079	1.15	906.69	30.4	39.8	30.4	39.8			
1.9	2.3	3420	1.35	766.52	33.5	40.7	33.5	40.7	**KH094-11P-80-04F**	164	450
2.3	2.8	2765	1.65	627.37	35.9	41.5	35.9	41.5			
2.5	3.0	2502	1.80	571.21	36.6	41.8	36.6	41.8			
3.0	3.6	2080	2.20	482.91	37.7	42.4	37.7	42.4			
3.3	4.0	1840	2.45	431.58	38.2	42.7	38.2	42.7			
3.9	4.8	1520	3.00	364.86	38.7	43.1	38.7	43.1			
1.7	2.1	3823	0.80	550.61	**	**	**	**			
1.8	2.2	3642	0.85	525.61	11.9	18.4	11.9	7.1			
2.0	2.4	3317	0.95	480.77	16.3	27.7	16.3	7.6			
2.2	2.7	2956	1.05	430.17	19.7	35.0	19.7	8.1			
2.3	2.8	2859	1.05	416.02	20.5	36.8	20.5	8.3			
2.6	3.2	2476	1.25	363.25	23.1	41.3	23.1	8.8			
2.7	3.3	2372	1.30	348.82	23.7	41.5	23.7	9.0			
2.8	3.4	2316	1.30	340.47	24.0	41.6	24.0	9.1			
3.2	3.9	2005	1.50	297.29	25.4	42.0	25.4	9.5	**KH084-11P-90S/L-06E**	120	446
3.4	4.1	1851	1.65	276.09	26.1	42.3	26.1	9.8			
3.9	4.7	1600	1.90	241.07	27.0	42.6	27.0	10.1			
4.0	4.8	1567	1.95	236.66	27.1	42.7	27.1	10.2			
4.1	5.0	1527	2.00	231.12	27.2	42.7	27.2	10.2			
4.7	5.7	1317	2.30	201.80	27.8	43.1	27.8	10.6			
5.0	6.1	1212	2.50	187.31	28.0	43.2	28.0	10.7			
5.7	7.0	1041	2.90	163.55	28.4	43.5	28.4	11.0			
1.6	2.0	3988	0.80	873.98	**	**	**	**			
1.9	2.3	3468	0.90	763.13	14.5	23.9	14.5	7.4			
2.0	2.4	3244	0.95	715.32	17.1	29.4	17.1	7.7			
2.1	2.5	3149	1.00	695.67	18.0	31.3	18.0	7.8			
2.3	2.8	2816	1.10	624.59	20.8	37.4	20.8	8.3			
2.6	3.2	2467	1.25	550.61	23.1	41.4	23.1	8.9			
2.7	3.3	2350	1.30	525.61	23.8	41.5	23.8	9.0			
3.0	3.6	2136	1.45	480.77	24.8	41.8	24.8	9.3			
3.3	4.0	1900	1.60	430.17	25.9	42.2	25.9	9.7	**KH084-11P-80-04F**	114	446
3.4	4.2	1833	1.65	416.02	26.1	42.3	26.1	9.8			
3.9	4.8	1584	1.90	363.25	27.0	42.7	27.0	10.2			
4.1	5.0	1515	2.00	348.82	27.2	42.8	27.2	10.3			
4.2	5.1	1476	2.05	340.47	27.3	42.8	27.3	10.3			
4.8	5.9	1270	2.40	297.29	27.9	43.1	27.9	10.6			
4.9	6.0	1245	2.45	292.01	28.0	43.2	28.0	10.7			
5.2	6.3	1170	2.60	276.09	28.1	43.3	28.1	10.8			
5.9	7.2	1004	3.00	241.07	28.5	43.5	28.5	11.0			
4.6	5.6	1571	1.95	206.12	27.1	42.7	27.1	10.2			
5.8	7.0	1243	2.45	163.14	28.0	43.2	28.0	10.7	**KH083-11P-90S/L-06E**	107	444
6.6	8.0	1085	2.80	142.45	28.3	43.4	28.3	10.9			
6.9	8.4	1032	2.95	206.12	28.4	43.5	28.4	11.0	**KH083-11P-80-04F**	101	444

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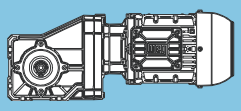
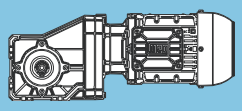
P_N = 0.75 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.75 kW	0.90 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
3.7	4.5	1952	0.80	256.14	**	**	**	**	**KH073-11P-90S/L-06E**	66	442
4.8	5.8	1507	1.05	197.75	15.5	15.9	15.5	4.6			
5.7	6.9	1264	1.25	165.85	17.1	16.4	17.1	5.1			
7.2	8.8	992	1.60	130.16	18.5	17.0	18.5	5.7			
9.4	11	765	2.05	100.45	19.3	17.4	19.3	6.2			
11	14	633	2.45	83.09	19.7	17.7	18.9	6.4			
12	15	588	2.65	77.11	19.8	17.8	18.2	6.5			
13	16	538	2.90	70.67	19.9	17.9	17.6	6.6			
20	24	362	1.70	47.56	20.2	17.9	15.0	6.6			
26	31	280	2.75	36.72	20.3	18.1	13.5	6.9			
5.6	6.8	1283	1.25	256.14	17.0	16.3	17.0	5.1	**KH073-11P-80-04F**	60	442
7.2	8.8	990	1.60	197.75	18.5	17.0	18.5	5.7			
8.6	10	831	1.90	165.85	19.1	17.3	19.1	6.0			
11	13	652	2.40	130.16	19.6	17.7	18.9	6.4			
14	17	500	2.60	99.87	20.0	18.0	17.1	6.7			
30	37	238	2,60	47,56	20.4	18,3	12,8	7.0			
7.7	9.4	928	0.90	121.85	7.0	11.1	7.0	2.4	**KH063-11P-90S/L-06E**	46	440
9.4	11	762	1.10	99.98	9.2	12.9	9.2	2.9			
12	14	621	0.95	81.53	10.4	13.3	10.4	3.3			
15	18	492	1.70	64.62	11.2	13.7	11.2	3.7			
16	19	449	1.85	58.89	11.4	13.8	11.4	3.9			
19	23	382	2.15	50.17	11.7	14.0	11.7	4.1			
21	26	338	0.95	44.35	11.9	13.7	11.9	3.8			
23	28	314	2.65	41.17	12.0	14.3	12.0	4.3			
24	29	303	2,65	39,83	12,0	14,3	12,0	4,3			
27	33	268	1.70	35.15	12.1	14.1	11.6	4.1			
28	34	258	2.95	33.85	12.1	14.4	11.2	4.5			
34	42	208	2.45	27.29	12.3	14.3	10.5	4.4			
42	51	171	2.95	22.40	12.3	14.5	9.6	4.5			
7.2	8.8	992	0.85	198.00	5.9	8.7	5.9	2.2	**KH063-11P-80-04F**	40	440
9.1	11	786	1.05	156.92	8.9	12.8	8.9	2.8			
12	14	610	1.35	121.85	10.5	13.3	10.5	3.4			
14	17	501	1.65	99.98	11.2	13.7	11.2	3.7			
18	21	408	1.40	81.53	11.6	14.0	11.6	4.0			
22	27	324	2.55	64.62	11.9	14.2	11.9	4.3			
24	30	295	2.80	58.89	12.0	14.3	12.0	4.4			
32	39	222	1.45	44.35	12.2	14.3	10.8	4.3			
41	50	176	2.60	35.15	12.3	14.5	9.7	4.5			
9.8	12	732	0.85	96.08	3.0	3.8	3.0	3.1	**KH053-11P-90S/L-06E**	33	438
12	14	613	0.95	80.46	5.9	9.9	5.9	3.4			
13	16	557	1.10	73.08	6.7	10.3	6.7	3.6			
15	18	486	1.25	63.77	7.6	10.5	7.6	3.8			
16	19	459	1.35	60.26	7.8	10.6	7.8	3.9			
19	23	377	1.60	49.43	8.5	10.9	8.5	4.2			
22	27	320	1.90	42.00	8.9	11.0	8.9	4.3			
23	28	310	1.95	40.63	8.9	11.1	8.9	4.4			
25	30	292	0.95	38.32	9.0	10.7	9.0	4.0			
27	33	263	2,30	34,53	9,2	11.2	9,2	4,5			
30	36	240	2.55	31.46	9.3	11.3	9.3	4.6			
31	38	231	1.70	30.37	9.3	11.0	9.3	4.3			
34	42	209	2.80	27.39	9.4	11.4	9.4	4.7			
40	49	180	2.30	23.58	9.5	11.2	9.5	4.5			
49	59	147	2.85	19.35	9.6	11.3	9.6	4.6			
9.5	12	757	0.80	151.20	**	**	**	**	**KH053-11P-80-04F**	26	438
12	14	621	1.00	124.06	5.7	9.5	5.7	3.4			
15	18	481	1.25	96.08	7.6	10.5	7.6	3.8			
18	22	403	1.40	80.46	8,3	10,8	8,3	4.1			
20	24	366	1.65	73.08	8.6	10.9	8.6	4.2			
22	27	319	1.90	63.77	8.9	11.0	8.9	4.3			
24	29	302	2.00	60.26	9.0	11.1	9.0	4.4			
29	35	248	2.45	49.43	9.2	11.3	9.2	4.6			
34	41	210	2.90	42.00	9.4	11.4	9.4	4.7			
35	43	204	2.95	40.63	9.4	11.4	9.4	4.7			
37	45	192	1.40	38.32	9.4	11.1	9.4	4.4			
47	57	152	2.60	30.37	9.6	11.3	9.6	4.6			

P_N = 0.75 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.75 kW	0.90 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
14	17	504	0.80	66.20	**	**	**	**			
16	20	439	0.95	57.58	2.7	3.6	2.7	2.1			
17	21	413	1.00	54.18	3.5	5.3	3.5	2.2			
21	26	340	1.20	44.64	4.9	8.1	4.9	2.5			
24	30	293	0.95	38.49	5.5	8.0	5.5	2.4			
26	31	280	1.40	36.78	5.7	8.4	5.7	2.8			
31	38	232	1.40	30.39	6.1	8.3	6.1	2.7	**KH043-11P-90S/L-06E**	29	436
32	38	227	1.60	29.81	6.2	8.6	6.2	3.0			
33	41	214	1.90	28.13	6.3	8.6	6.3	3.0			
40	49	180	1.75	23.57	6.5	8.6	6.5	3.0			
44	54	162	2.50	21.25	6.6	8.9	6.6	3.3			
49	59	147	2.05	19.29	6.7	8.7	6.7	3.1			
63	77	113	2.50	14.85	6.8	8.9	6.8	3.3			
16	20	447	0.85	89.17	2.4	3.0	2.4	2.1			
20	24	365	1.10	72.92	4.5	7.5	4.5	2.4			
22	26	332	1.25	66.20	5.0	8.2	5.0	2.6			
25	30	288	1.40	57.58	5.6	8.3	5.6	2.7			
26	32	271	1.50	54.18	5.8	8.4	5.8	2.8			
30	37	236	0.85	47.07	6.1	8.3	6.1	2.7			
32	39	224	1.80	44.64	6.2	8.6	6.2	3.0			
33	40	220	1.85	43.93	6.2	8.6	6.2	3.0	**KH043-11P-80-04F**	23	436
37	45	193	1.45	38.49	6.4	8.5	6.4	2.9			
39	47	184	2.10	36.78	6.5	8.8	6.5	3.2			
39	48	183	2.20	36.54	6.5	8.8	6.5	3.2			
47	57	152	2.15	30.39	6.7	8.7	6.7	3.1			
48	58	149	2.45	29.81	6.7	8.9	6.7	3.3			
51	62	141	2.85	28.13	6.7	8.9	6.7	3.3			
61	74	118	2.65	23.57	6.8	8.9	6.8	3.3			
31	38	231	0.90	30.29	3.1	2.3	3.1	2.3			
33	40	218	0.95	28.67	3.4	2.4	3.4	2.4			
39	47	186	0.90	24.38	4.0	2.3	4.0	2.3			
43	53	165	1.25	21.67	4.2	2.7	4.2	2.7			
49	59	148	1.15	19.37	4.4	2.6	4.4	2.6			
57	70	125	1.60	16.47	4.6	2.9	4.6	2.9			
63	77	114	1.45	14.96	4.7	2.8	4.7	2.8	**KH033-11P-90S/L-06E**	26	434
73	89	98	2.05	12.81	4.8	3.1	4.8	3.1			
79	96	91	1.80	11.94	4.9	3.0	4.9	3.0			
94	115	76	2.65	10.00	5.0	3.2	5.0	3.2			
104	127	69	2.40	9.03	5.0	3.2	5.0	3.2			
137	167	52	2.90	6.86	5.1	3.3	5.1	3.3			
29	35	250	0.85	49.88	2.6	2.2	2.6	2.2			
31	37	233	0.90	46.48	3.1	2.3	3.1	2.3			
37	45	194	1.05	38.80	3.8	2.6	3.8	2.6			
40	48	180	1.15	35.90	4.0	2.6	4.0	2.6			
47	57	152	1.35	30.29	4.4	2.8	4.4	2.8			
48	58	150	0.90	29.97	4.4	2.6	4.4	2.6			
50	61	144	1.40	28.67	4.5	2.8	4.5	2.8	**KH033-11P-80-04F**	19	434
59	71	122	1.35	24.38	4.7	2.8	4.7	2.8			
66	80	109	1.85	21.67	4.8	3.0	4.8	3.0			
74	90	97	1.70	19.37	4.9	3.0	4.9	3.0			
87	106	82	2.45	16.47	4.9	3.2	4.9	3.2			
96	116	75	2.20	14.96	5.0	3.1	5.0	3.1			
120	146	60	2.75	11.94	5.0	3.2	5.0	3.2			

Legend see page 337

*** ... on request*

P_N = 0.75 kW											IE3
50 Hz	60 Hz				at 50 Hz						
0.75 kW	0.90 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
61	74	117	0.80	15.41	**	**	**	**			
68	83	105	0.90	13.81	5.0	2.8	5.0	2.8			
71	86	101	0.90	13.29	5.0	2.8	5.0	2.8			
79	96	91	1.00	11.92	5.1	2.8	5.1	2.8			
81	99	88	1.00	11.60	5.1	2.8	5.1	2.8			
90	110	79	1.10	10.40	5.1	2.8	5.1	2.8			
102	124	70	1.15	9.25	5.2	2.8	5.2	2.8	**KH022-11P-90S/L-06E**	24	432
110	135	65	1.20	8.51	5.2	2.8	5.2	2.8			
123	150	58	1.35	7.63	5.2	2.8	5.2	2.8			
136	166	53	1.45	6.91	5.0	2.8	5.0	2.8			
158	192	45	1.55	5.96	4.8	2.8	4.8	2.8			
181	220	40	1.65	5.20	4.5	2.8	4.5	2.8			
246	300	29	2.00	3.82	4.1	2.8	4.1	2.8			
54	66	132	0.85	26.41	4.8	2.8	4.8	2.8			
60	73	119	0.95	23.68	4.9	2.8	4.9	2.8			
69	84	103	1,00	20,63	5,0	2,8	5,0	2,8			
73	89	98	0.85	19.50	5.0	2.8	5.0	2.8			
77	94	93	1.15	18.50	5.0	2.8	5.0	2.8			
93	113	77	1.25	15.41	5.1	2.8	5.1	2.8			
104	126	69	1.35	13.81	5.2	2.8	5.2	2.8			
108	131	67	1.35	13.29	5.2	2.8	5.2	2.8			
120	146	60	1.50	11.92	5.2	2.8	5.2	2.8			
121	147	59	1.40	11.84	5.2	2.8	5.2	2.8	**KH022-11P-80-04F**	17	432
123	150	58	1.50	11.60	5.2	2.8	5.2	2.8			
138	167	52	1.65	10,40	5,0	2,8	5,0	2,8			
155	188	46	1.75	9.25	4.8	2.8	4.8	2.8			
168	204	43	1.85	8.51	4.6	2.8	4.6	2.8			
187	228	38	2.05	7.63	4.5	2.8	4.5	2.8			
207	252	35	2.15	6.91	4.3	2.8	4.3	2.8			
240	292	30	2.35	5.96	4.1	2.8	4.1	2.8			
275	335	26	2.50	5.20	3.9	2.8	3.9	2.8			
374	455	19	3.00	3.82	3.5	2.8	3.5	2.8			

Legend see page 337

*** ... on request*

P_N = 1.1 kW										IE3
50 Hz	60 Hz				at 50 Hz					
1.1 kW	1.3 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
0.44	0.53	21397	0.85	3337.74	61.0	105.7	61.0	105.7	**KH155-11P-90S/L-04E**	687	464
0.48	0.58	19471	0.95	3052.96	71.6	115.1	71.6	115.1			
0.53	0.64	17333	1.05	2731.65	80.8	116.8	80.8	116.8			
0.63	0.76	14487	1.25	2306.68	90.2	118.9	90.2	118.9			
0.66	0.79	13876	1.30	2215.09	91.9	119.4	91.9	119.4			
0.77	0.93	11674	1.55	1887.82	97.2	121.1	97.2	121.1			
0.78	0.95	11438	1.60	1854.30	97.7	121.3	97.7	121.3			
0.95	1.1	9273	1.95	1530.83	101.8	122.9	101.8	122.9			
0.97	1.2	9080	2.00	1502.83	102.1	123.1	102.1	123.1			
1.1	1.4	7583	2.40	1281.49	104.2	124.2	104.2	124.2			
0.42	0.51	22412	0.85	2306.68	54.1	91.1	54.1	91.1	**KH155-11P-100L-06D**	693	464
0.43	0.53	21522	0.85	2215.09	60.2	104.0	60.2	104.0			
0.51	0.62	18202	1.00	1887.82	77.3	116.1	77.3	116.1			
0.52	0.63	17833	1.05	1854.30	78.8	116.4	78.8	116.4			
0.63	0.76	14571	1.25	1530.83	90.0	118.9	90.0	118.9			
0.64	0.78	14268	1.30	1502.83	90.9	119.1	90.9	119.1			
0.75	0.91	12042	1.50	1281.49	96.4	120.8	96.4	120.8			
0.92	1.1	9560	1.90	1038.59	101.3	122.7	101.3	122.7			
1.1	1.3	8111	2.25	1308.92	103.5	123.8	103.5	123.8	**KH154-11P-90S/L-04E**	674	462
1.3	1.6	6870	2.65	1127.36	105.1	124.8	105.1	124.8			
1.4	1.7	6248	2.90	1035.99	105.8	125.2	105.8	125.2			
0.73	0.89	12706	1.45	1308.92	94.9	120.3	94.9	120.3	**KH154-11P-100L-06D**	680	462
0.85	1.0	10832	1.70	1127.36	99.0	121.7	99.0	121.7			
0.93	1.1	9892	1.85	1035.99	100.7	122.5	100.7	122.5			
0.98	1.2	9272	1.95	975.12	101.8	122.9	101.8	122.9			
1.1	1.3	8531	2.15	904.58	102.9	123.5	102.9	123.5			
1.2	1.5	7446	2.45	799.45	104.4	124.3	104.4	124.3			
1.4	1.7	6294	2.90	688.57	105.7	125.2	105.7	125.2			
0.92	1.1	10181	1.30	1579.81	78.3	87.3	78.3	87.3	**KH124-11P-90S/L-04E**	420	458
1.1	1.3	8804	1.50	1377.44	81.2	88.7	81.2	88.7			
1.2	1.4	7732	1.70	1219.69	83.1	89.8	83.1	89.8			
1.4	1.7	6672	1.95	1063.46	84.8	90.8	84.8	90.8			
1.6	1.9	5664	2.30	916.04	86.1	91.8	86.1	91.8			
1.8	2.2	4882	2.70	802.79	86.9	92.6	86.9	92.6			
1.9	2.3	4652	2.80	768.25	87.1	92.8	87.1	92.8			
0.61	0.74	15719	0.85	1579.81	59.8	81.7	59.8	81.7	**KH124-11P-100L-06D**	426	458
0.70	0.85	13621	1.00	1377.44	68.3	83.8	68.3	83.8			
0.79	0.96	12012	1.10	1219.69	73.5	85.5	73.5	85.5			
0.81	0.98	11661	1.15	1186.50	74.5	85.8	74.5	85.8			
0.90	1.1	10409	1.25	1063.46	77.8	87.1	77.8	87.1			
0.94	1.1	9971	1.35	1022.92	78.8	87.5	78.8	87.5			
1.0	1.3	8874	1.50	916.04	81.1	88.6	81.1	88.6			
1.1	1.3	8622	1.55	891.88	81.6	88.9	81.6	88.9			
1.2	1.5	7713	1.70	802.79	83.2	89.8	83.2	89.8			
1.4	1.7	6642	2.00	699.95	84.8	90.8	84.8	90.8			
1.5	1.8	6252	2.10	661.56	85.3	91.2	85.3	91.2			
1.6	1.9	5639	2.35	602.92	86.1	91.8	86.1	91.8			
1.8	2.2	4989	2.65	540.20	86.8	92.5	86.8	92.5			
1.9	2.3	4704	2.80	512.47	87.1	92.8	87.1	92.8			
1.1	1.4	8509	0.95	1301.54	43.2	59.4	43.2	59.4	**KH104-11P-90S/L-04E**	297	454
1.3	1.6	7341	1.10	1129.81	48.7	60.8	48.7	60.8			
1.4	1.8	6489	1.25	1004.85	51.9	61.8	51.9	61.8			
1.5	1.8	6291	1.30	976.16	52.5	62.0	52.5	62.0			
1.7	2.0	5587	1.45	872.27	54.7	62.8	54.7	62.8			
1.9	2.3	4777	1.70	753.64	56.7	63.7	56.7	63.7			
2.0	2.4	4628	1.75	731.54	57.0	63.9	57.0	63.9			
2.2	2.7	4149	1.95	661.38	58.0	64.4	58.0	64.4			
2.3	2.8	3949	2.05	632.05	58.4	64.7	58.4	64.7			
2.5	3.1	3557	2.25	574.12	59.1	65.1	59.1	65.1			
2.9	3.4	3117	2.60	510.43	59.8	65.6	59.8	65.6			

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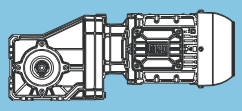
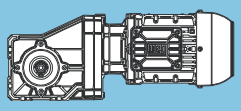
P_N = 1.1 kW										IE3
50 Hz	60 Hz				at 50 Hz					
1.1 kW	1.3 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
0.96	1.2	10019	0.80	1004.85	**	**	**	**		
0.98	1.2	9713	0.85	976.16	35.6	58.1	35.6	58.1		
1.1	1.3	8643	0.95	872.27	42.5	59.3	42.5	59.3		
1.3	1.5	7422	1.10	753.64	48.3	60.7	48.3	60.7		
1.5	1.8	6473	1.25	661.38	51.9	61.8	51.9	61.8		
1.7	2.0	5573	1.45	574.12	54.7	62.8	54.7	62.8		
1.9	2.3	4914	1.65	510.43	56.4	63.6	56.4	63.6		
2.2	2.6	4222	1.90	443.08	57.9	64.3	57.9	64.3	**KH104-11P-100L-06D**	303 454
2.3	2.8	4006	2.00	422.20	58.3	64.6	58.3	64.6		
2.5	3.0	3595	2.25	382.82	59.0	65.1	59.0	65.1		
2.6	3.2	3428	2.35	366.49	59.3	65.3	59.3	65.3		
2.7	3.2	3352	2.40	359.12	59.4	65.3	59.4	65.3		
3.0	3.7	2912	2.75	316.65	60.0	65.8	60.0	65.8		
3.1	3.7	2861	2.80	311.74	60.1	65.9	60.1	65.9		
1.6	1.9	5964	0.80	906.69	**	**	**	**		
1.9	2.3	5022	0.90	766.52	24.1	38.6	24.1	38.6		
2.0	2.4	4852	0.95	742.09	25.5	38.8	25.5	38.8		
2.3	2.8	4068	1.15	627.37	30.5	39.8	30.5	39.8		
2.5	3.1	3689	1.25	571.21	32.4	40.3	32.4	40.3		
3.0	3.6	3087	1.50	482.91	34.8	41.1	34.8	41.1	**KH124-11P-90S/L-04E**	168 458
3.4	4.1	2742	1.65	431.58	35.9	41.5	35.9	41.5		
4.0	4.8	2284	2.00	364.86	37.2	42.1	37.2	42.1		
4.1	5.0	2207	2.05	353.21	37.4	42.2	37.4	42.2		
4.9	5.9	1831	2.50	298.61	38.2	42.7	38.2	42.7		
5.1	6.1	1749	2.60	286.42	38.4	42.8	38.4	42.8		
1.7	2.0	5695	0.80	571.21	**	**	**	**		
2.0	2.4	4785	0.95	482.91	26.0	38.9	26.0	38.9		
2.2	2.7	4250	1.10	431.58	29.5	39.6	29.5	39.6		
2.6	3.2	3564	1.30	364.86	32.9	40.5	32.9	40.5		
2.7	3.3	3443	1.35	353.21	33.4	40.6	33.4	40.6		
3.2	3.9	2881	1.60	298.61	35.5	41.3	35.5	41.3	**KH094-11P-100L-06D**	174 450
3.4	4.1	2758	1.65	286.42	35.9	41.5	35.9	41.5		
4.0	4.8	2298	2.00	242.14	37.2	42.1	37.2	42.1		
4.7	5.7	1892	2.40	202.70	38.1	42.6	38.1	42.6		
4.9	6.0	1806	2.50	194.32	38.2	42.7	38.2	42.7		
5.7	6.9	1852	2.45	169.25	38.2	42.6	38.2	42.6		
6.7	8.1	1566	2.90	143.08	38.7	43.0	38.7	43.0	**KH093-11P-100L-06D**	161 448
2.6	3.2	3615	0.85	550.61	12.4	19.5	12.4	7.2		
2.8	3.3	3443	0.90	525.61	14.8	24.5	14.8	7.4		
3.0	3.7	3137	1.00	480.77	18.1	31.6	18.1	7.9		
3.4	4.1	2795	1.10	430.17	21.0	37.9	21.0	8.4		
3.5	4.2	2698	1.15	416.02	21.7	39.4	21.7	8.5		
4.0	4.8	2341	1.30	363.25	23.8	41.5	23.8	9.0		
4.2	5.0	2243	1.35	348.82	24.3	41.7	24.3	9.2		
4.3	5.2	2185	1.40	340.47	24.6	41.8	24.6	9.3		
4.9	5.9	1892	1.60	297.29	25.9	42.2	25.9	9.7	**KH084-11P-90S/L-04E**	118 446
5.0	6.0	1855	1.65	292.01	26.1	42.3	26.1	9.8		
5.3	6.4	1747	1.75	276.09	26.5	42.4	26.5	9.9		
6.0	7.3	1509	2.00	241.07	27.2	42.8	27.2	10.3		
6.1	7.4	1479	2.05	236.66	27.3	42.8	27.3	10.3		
6.3	7.6	1441	2.10	231.12	27.4	42.9	27.4	10.4		
7.2	8.7	1240	2.45	201.80	28.0	43.2	28.0	10.7		
7.8	9.4	1141	2.65	187.31	28.2	43.3	28.2	10.8		
2.6	3.2	3614	0.85	363.25	12.4	19.5	12.4	7.2		
2.8	3.3	3464	0.90	348.82	14.5	23.9	14.5	7.4		
3.2	3.9	2934	1.05	297.29	19.9	35.5	19.9	8.2		
3.3	4.0	2882	1.05	292.01	20.3	36.3	20.3	8.2		
3.5	4.2	2713	1.15	276.09	21.6	39.2	21.6	8.5		
4.0	4.8	2355	1.30	241.07	23.7	41.5	23.7	9.0	**KH093-11P-100L-06D**	124 448
4.1	4.9	2312	1.30	236.66	24.0	41.6	24.0	9.1		
4.2	5.0	2253	1.35	231.12	24.3	41.7	24.3	9.2		
4.8	5.8	1951	1.55	201.80	25.7	42.1	25.7	9.6		
5.1	6.2	1800	1.70	187.31	26.3	42.3	26.3	9.8		
5.9	7.1	1555	1.95	163.55	27.1	42.7	27.1	10.2		

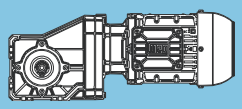
P_N = 1.1 kW										IE3
50 Hz	60 Hz				at 50 Hz					
1.1 kW	1.3 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
7.1	8.5	1488	2.05	206.12	27.3	42.8	27.3	10.3			
8.9	11	1178	2.55	163.14	28.1	43.3	28.1	10.8	**KH083-11P-90S/L-04E**	105	444
10	12	1028	2.95	142.45	28.4	43.5	27.9	11.0			
4.7	5.7	2256	1.35	206.12	24.3	41.7	24.3	9.2			
5.9	7.1	1785	1.70	163.14	26.3	42.4	26.3	9.9			
6.7	8.2	1559	1.95	142.45	27.1	42.7	27.1	10.2	**KH083-11P-100L-06D**	111	444
7.6	9.3	1378	2.20	125.90	27.6	43.0	27.6	10.5			
9.0	11	1165	2.60	106.46	28.2	43.3	28.2	10.8			
10	13	1001	3.00	91.51	28.5	43.5	27.8	11.0			
5.7	6.9	1849	0.85	256.14	12.3	15.2	12.3	3.9			
7.4	8.9	1428	1.10	197.75	16.1	16.0	16.1	4.8			
8.8	11	1197	1.30	165.85	17.5	16.5	17.5	5.3			
11	14	940	1.65	130.16	18.7	17.1	18.7	5.8			
14	18	725	2.15	100.45	19.4	17.5	18.0	6.3			
15	18	721	1.80	99.87	19.4	17.5	17.6	6.3	**KH073-11P-90S/L-04E**	64	442
18	21	600	2.60	83.09	19.8	17.8	16.3	6.5			
19	23	557	2.80	77.11	19.9	17.8	15.8	6.6			
31	37	343	1.80	47.56	20.2	17.9	13.1	6.7			
40	48	265	2.90	36.72	20.3	18.2	11.8	6.9			
5.8	7	1815	0.90	165.85	12.6	15.2	12.6	4.0			
7.4	9	1424	1.10	130.16	16.1	16.1	16.1	4.8			
9.6	12	1099	1.45	100.45	18.0	16.7	18.0	5.5			
12	14	909	1.75	83.09	18.8	17.1	18.8	5.9			
14	16	773	2.05	70.67	19.3	17.4	18.2	6.2			
15	18	708	2.20	64.67	19.5	17.5	17.6	6.3	**KH073-11P-100L-06D**	70	442
16	19	670	2.35	61.25	19.6	17.6	17.1	6.4			
19	23	566	2.75	51.72	19.8	17.8	15.9	6.6			
20	24	520	1.20	47.56	19.9	17.4	15.8	6.1			
26	32	402	1.90	36.72	20.2	17.7	14.1	6.5			
31	38	337	2.75	30.79	20.3	17.9	13.1	6.7			
12	14	880	0.95	121.85	7.8	12.5	7.8	2.5			
15	18	722	1.15	99.98	9.6	13.0	9.6	3.0			
18	22	589	1.00	81.53	10.6	13.4	10.6	3.4			
19	23	559	1.50	77.42	10.8	13.5	10.8	3.5			
23	27	467	1.80	64.62	11.4	13.8	11.4	3.8			
25	30	425	1.95	58.89	11.5	13.9	11.5	4.0			
29	35	362	2.30	50.17	11.8	14.1	11.7	4.2	**KH063-11P-90S/L-04E**	44	440
30	36	351	2.35	48.56	11.9	14.1	11.5	4.2			
33	40	320	1.00	44.35	12.0	13.8	11.3	3.9			
35	43	297	2.80	41.17	12.0	14.3	10.8	4.4			
37	44	288	2.80	39.83	12.1	14.3	10.5	4.4			
41	50	254	1.80	35.15	12.2	14.1	10.2	4.2			
53	64	197	2.55	27.29	12.3	14.4	9.2	4.4			
12	15	847	1.00	77.42	8.2	12.6	8.2	2.6			
15	18	707	1.20	64.62	9.7	13.0	9.7	3.1			
16	20	644	1.30	58.89	10.2	13.2	10.2	3.3			
19	23	549	1.50	50.17	10.9	13.5	10.9	3.6			
20	24	531	1.55	48.56	11.0	13.6	11.0	3.6			
23	28	451	1.85	41.17	11.4	13.8	11.4	3.9			
24	29	436	1.85	39.83	11.5	13.9	11.5	3.9			
27	33	385	1.20	35.15	11.7	13.5	11.7	3.6	**KH063-11P-100L-06D**	50	440
28	34	370	2.05	33.85	11.8	14.1	11.8	4.1			
30	37	349	2.40	31.88	11.9	14.2	11.5	4.2			
34	42	305	2.35	27.83	12.0	14.3	10.9	4.3			
35	43	299	1.70	27.29	12.0	13.9	11.0	4.0			
40	48	265	2.95	24.25	12.1	14.4	10.2	4.5			
43	52	245	2.05	22.40	12.2	14.2	10.0	4.2			
55	67	190	2.65	17.34	12.3	14.4	9.0	4.5			

Legend see page 337

P_N = 1.1 kW											IE3
50 Hz	60 Hz				at 50 Hz						
1.1 kW	1.3 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
15	18	694	0.90	96.08	4.2	6.3	4.2	3.2			
18	22	581	1.00	80.46	6.4	10.2	6.4	3.5			
20	24	528	1.15	73.08	7.1	10.4	7.1	3.7			
23	28	460	1.35	63.77	7.8	10.6	7.8	3.9			
24	29	435	1.40	60.26	8.0	10.7	8.0	4.0			
29	36	358	1.70	49.52	8.6	10.9	8.6	4.2			
35	42	303	2.00	42.00	9.0	11.1	9.0	4.4			
36	43	293	2.05	40.63	9.0	11.1	9.0	4.4	**KH053-11P-90S/L-04E**	31	438
38	46	277	1.00	38.32	9.1	10.8	9.1	4.1			
42	51	249	2.45	34.53	9.2	11.2	9.2	4.5			
46	56	227	2.65	31.46	9.3	11.3	9.3	4.6			
48	58	219	1.80	30.37	9.3	11.0	9.3	4.3			
53	64	198	2.95	27.39	9.4	11.4	9.4	4.7			
62	75	170	2.45	23.58	9.5	11.2	9.5	4.5			
75	91	140	3.00	19.35	9.6	11.4	9.6	4.7			
13	16	800	0,80	73,08	**	**	**	**			
15	18	698	0.90	63.77	4.1	6.1	4.1	3.2			
16	19	659	0.95	60.26	5.0	8.0	5.0	3.3			
19	24	542	1,15	49,52	6,9	10.4	6,9	3.7			
23	28	460	1.35	42.00	7.8	10.6	7.8	3.9			
24	29	445	1.35	40.63	8.0	10.7	8.0	4.0			
28	34	378	1.60	34.53	8.5	10.9	8.5	4.2			
31	37	344	1.75	31.46	8.7	11.0	8.7	4.3	**KH053-11P-100L-06D**	36	438
32	38	332	1.20	30.37	8.8	10.5	8.8	3.8			
35	43	300	1,95	27,39	9,0	11,1	9,0	4,4			
40	49	262	2.30	23.93	9.2	11.2	9.2	4.5			
41	49	258	1.65	23.58	9.2	10.8	9.2	4.1			
49	59	216	2.80	19.73	9.4	11,3	9.4	4.6			
50	60	212	2.00	19.35	9.4	11.1	9.4	4.4			
64	78	164	2.55	14.98	9.5	11.3	9.5	4.6			
20	24	526	0.80	72.92	**	**	**	**			
22	27	478	0.85	66.20	**	**	**	**			
25	31	416	1.00	57.58	3.4	5.1	3.4	2.2			
27	32	391	1.05	54.18	4,0	6,4	4,0	2.3			
33	39	322	1.25	44.64	5.2	8.2	5.2	2.6			
38	46	278	1.00	38.49	5.7	8.1	5.7	2.5			
40	48	266	1.45	36.78	5.8	8.4	5.8	2.8	**KH043-11P-90S/L-04E**	27	436
48	58	219	1.50	30.39	6.2	8.4	6.2	2.8			
49	59	215	1.70	29.81	6.3	8.6	6.3	3.0			
52	63	203	2,00	28.13	6.4	8.7	6.4	3.1			
62	75	170	1.85	23.57	6.6	8.6	6.6	3.0			
68	83	153	2,65	21.25	6,7	8,9	6,7	3,3			
75	91	139	2.15	19.29	6.7	8.8	6.7	3.2			
98	119	107	2.60	14.85	6.9	8.9	6.9	3.3			
22	26	488	0.85	44.64	**	**	**	**			
26	32	402	1.00	36.78	3.8	6.0	3.8	2.3			
32	38	333	1.00	30.39	5.0	7.8	5.0	2.2			
34	41	308	1,30	28,13	5,4	8,3	5,4	2,7			
41	49	258	1.20	23.57	5.9	8.2	5.9	2.6			
45	55	233	1.75	21.25	6.1	8.6	6.1	3.0			
50	60	211	1.40	19.29	6,3	8.4	6,3	2,8	**KH043-11P-100L-06D**	33	436
55	67	190	2.15	17.39	6.4	8.7	6.4	3.1			
65	78	162	1.75	14.85	6.6	8.7	6.6	3.1			
68	83	154	2.60	14.10	6.7	8.9	6.7	3.3			
86	104	123	2.15	11.22	6.8	8.9	6.8	3.3			
105	127	100	2.50	9.18	6.9	9.0	6.9	3.4			
129	157	81	2.95	7.44	6.9	9.1	6.4	3.5			

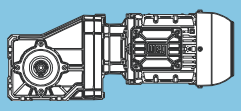
Legend see page 337

** ... *on request*

P_N = 1.1 kW											IE3
50 Hz	60 Hz				at 50 Hz						
1.1 kW	1.3 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
41	49	259	0.80	35.90	**	**	**	**			
48	58	219	0.95	30.29	3.4	2.4	3.4	2.4			
51	61	207	1.00	28.67	3.6	2.5	3.6	2.5			
60	72	176	0.95	24.38	4.1	2.4	4.1	2.4			
67	81	156	1.30	21.67	4.3	2.8	4.3	2.8			
75	91	140	1.20	19.37	4.5	2.6	4.5	2.6	**KH033-11P-90S/L-04E**	24	434
88	107	119	1.70	16.47	4.7	3.0	4.7	3.0			
97	118	108	1.55	14.96	4.8	2.9	4.8	2.9			
114	137	92	2.20	12.81	4.9	3.1	4.9	3.1			
122	147	86	1.90	11.94	4.9	3.0	4.9	3.0			
146	176	72	2.80	10.00	5.0	3.2	5.0	3.2			
161	195	65	2.55	9.03	5.0	3.2	5.0	3.2			
44	54	237	0.85	21.67	3.0	2.3	3.0	2.3			
50	60	212	0.80	19.37	**	**	**	**			
58	71	180	1.15	16.47	4.0	2.6	4.0	2.6			
64	78	164	1.00	14.96	4.3	2.5	4.3	2.5			
75	91	140	1.45	12.81	4.5	2.9	4.5	2.9			
80	98	131	1.25	11.94	4.6	2.7	4.6	2.7	**KH033-11P-100L-06D**	29	434
96	117	109	1.85	10.00	4.8	3.0	4.8	3.0			
106	129	99	1.65	9.03	4.8	2.9	4.8	2.9			
140	170	75	2.00	6.86	5.0	3.1	5.0	3.1			
180	218	58	2.35	5.34	5.0	3.2	5.0	3.2			
230	279	46	2.80	4.17	5.1	3.3	5.1	3.3			
79	95	134	0.80	18.50	**	**	**	**			
94	114	111	0.85	15.41	4.9	2.8	4.9	2.8			
105	127	100	0.95	13.81	5.0	2.8	5.0	2.8			
109	132	96	0.95	13.29	5.0	2.8	5.0	2.8			
122	148	86	1.05	11.92	5.1	2.8	5.1	2.8			
123	149	85	0.95	11.84	5.1	2.8	5.1	2.8			
125	152	84	1.05	11.60	5.1	2.8	5.1	2.8			
140	169	75	1.15	10.40	5.1	2.8	5.1	2.8	**KH022-11P-90S/L-04E**	22	432
157	190	67	1.25	9.25	4.9	2.8	4.9	2.8			
171	207	61	1.30	8.51	4.7	2.8	4.7	2.8			
191	231	55	1.40	7.63	4,5	2,8	4,5	2,8			
211	255	50	1.50	6.91	4.4	2.8	4.4	2.8			
244	295	43	1.65	5.96	4.1	2.8	4.1	2.8			
280	338	38	1.75	5.20	3.9	2.8	3.9	2.8			
381	461	28	2.10	3.82	3.5	2.8	3.5	2.8			

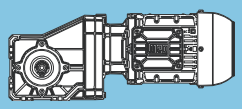
Legend see page 337

*** ... on request*

P_N = 1.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
1.5 kW	1.8 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.63	0.76	20182	0.90	2306.68	68.0	114.6	68.0	114.6			
0.65	0.79	19331	0.95	2215.09	72.3	115.2	72.3	115.2			
0.77	0.93	16307	1.15	1887.82	84.5	117.6	84.5	117.6			
0.78	0.95	16017	1.15	1854.30	85.5	117.8	85.5	117.8			
0.95	1.1	13054	1.40	1530.83	94.1	120.0	94.1	120.0	**KH155-11P-90S/L-04F**	688	464
0.96	1.2	12782	1.45	1502.83	94.7	120.2	94.7	120.2			
1.1	1.4	10760	1.70	1281.49	99.1	121.8	99.1	121.8			
1.4	1.7	8520	2.15	1038.59	102.9	123.5	102.9	123.5			
1.1	1.3	11401	1.60	1308.92	97.8	121.3	97.8	121.3			
1.3	1.6	9698	1.90	1127.36	101.0	122.6	101.0	122.6			
1.4	1.7	8857	2.05	1035.99	102.4	123.2	102.4	123.2			
1.5	1.8	8285	2.20	975.12	103.3	123.7	103.3	123.7	**KH154-11P-90S/L-04F**	675	462
1.6	1.9	7622	2.40	904.58	104.2	124.2	104.2	124.2			
1.8	2.2	6639	2.75	799.45	105.4	124.9	105.4	124.9			
1.9	2.3	6456	2.80	779.11	105.6	125.1	105.6	125.1			
0.92	1.1	14133	0.95	1579.81	66.5	83.3	66.5	83.3			
1.1	1.3	12247	1.10	1377.44	72.8	85.2	72.8	85.2			
1.2	1.5	10485	1.25	1186.50	77.6	87.0	77.6	87.0			
1.4	1.7	9340	1.40	1063.46	80.1	88.1	80.1	88.1			
1.6	1.9	7962	1.65	916.04	82.7	89.5	82.7	89.5			
1.8	2.2	6906	1.90	802.79	84.4	90.6	84.4	90.6			
1.9	2.3	6582	2.00	768.25	84.9	90.9	84.9	90.9	**KH124-11P-90S/L-04F**	421	458
2.1	2.5	5947	2.20	699.95	85.7	91.5	85.7	91.5			
2.2	2.7	5586	2.35	661.56	86.1	91.9	86.1	91.9			
2.3	2.8	5188	2.55	619.56	86.6	92.3	86.6	92.3			
2.4	2.9	5038	2.60	602.92	86.7	92.5	86.7	92.5			
2.7	3.2	4448	2.95	540.20	87.3	93.0	87.3	93.0			
1.3	1.6	10170	0.80	1129.81	**	**	**	**			
1.4	1.7	9008	0.90	1004.85	40.3	58.9	40.3	58.9			
1.5	1.8	8733	0.95	976.16	42.0	59.2	42.0	59.2			
1.7	2.0	7772	1.05	872.27	46.8	60.3	46.8	60.3			
1.9	2.3	6673	1.20	753.64	51.2	61.5	51.2	61.5			
2.0	2.4	6464	1.25	731.54	52.0	61.8	52.0	61.8			
2.2	2.7	5808	1.40	661.38	54.0	62.5	54.0	62.5			
2.3	2.8	5539	1.45	632.05	54.8	62.8	54.8	62.8	**KH104-11P-90S/L-04F**	298	454
2.5	3.1	5001	1.60	574.12	56.2	63.5	56.2	63.5			
2.8	3.4	4400	1.85	510.43	57.5	64.1	57.5	64.1			
2.9	3.5	4267	1.90	496.04	57.8	64.3	57.8	64.3			
3.3	4.0	3772	2.15	443.08	58.7	64.9	58.7	64.9			
3.4	4.2	3580	2.25	422.20	59.1	65.1	59.1	65.1			
3.8	4.6	3212	2.50	382.82	59.6	65.5	59.6	65.5			
4.0	4.8	3056	2.65	366.49	59.8	65.7	59.8	65.7			
2.3	2.8	5647	0.80	627.37	**	**	**	**			
2.5	3.1	5121	0.90	571.21	23.3	38.5	23.3	38.5			
3.0	3.6	4302	1.05	482.91	29.2	39.5	29.2	39.5			
3.4	4.1	3822	1.20	431.58	31.7	40.1	31.7	40.1			
4.0	4.8	3198	1.45	364.86	34.4	40.9	34.4	40.9			
4.1	5.0	3089	1.50	353.21	34.8	41.1	34.8	41.1	**KH094-11P-90S/L-04F**	169	450
4.9	5.9	2585	1.75	298.61	36.4	41.7	36.4	41.7			
5.1	6.1	2469	1.85	286.42	36.7	41.9	36.7	41.9			
6.0	7.2	2057	2.20	242.14	37.7	42.4	37.7	42.4			
7.2	8.7	1687	2.70	202.70	38.5	42.9	38.5	42.9			
7.5	9.0	1610	2.80	194.32	38.6	43.0	38.6	43.0			
8.6	10	1672	2.70	169.25	38.5	42.9	38.5	42.9	**KH093-11P-90S/L-04F**	156	448

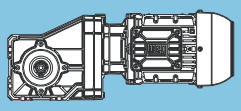
Legend see page 337

*** ... on request*

P_N = 1.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
1.5 kW	1.8 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
3.4	4.1	3872	0.80	430.17	**	**	**	**	**KH084-11P-90S/L-04F**	119	446
3.5	4.2	3737	0.85	416.02	10.2	14.9	10.2	7.0			
4.0	4.8	3250	0.95	363.25	17.0	29.2	17.0	7.7			
4.2	5.0	3114	1.00	348.82	18.4	32.2	18.4	7.9			
4.3	5.2	3040	1.00	340.47	19.0	33.5	19.0	8.0			
4.9	5.9	2638	1.15	297.29	22.1	40.3	22.1	8.6			
5.0	6.0	2586	1.20	292.01	22.4	41.0	22.4	8.7			
5.3	6.4	2440	1.25	276.09	23.3	41.4	23.3	8.9			
6.0	7.3	2113	1.45	241.07	25.0	41.9	25.0	9.4			
6.1	7.4	2074	1.45	236.66	25.1	41.9	25.1	9.4			
6.3	7.6	2021	1.50	231.12	25.4	42.0	25.4	9.5			
7.2	8.7	1747	1.75	201.80	26.5	42.4	26.5	9.9			
7.7	9.4	1611	1.90	187.31	26.9	42.6	26.9	10.1			
8.9	11	1390	2.20	163.55	27.6	42.9	27.6	10.4			
7.0	8.5	2036	1.50	206.12	25.3	42.0	25.3	9.5	**KH083-11P-90S/L-04F**	106	444
8.9	11	1612	1.90	163.14	26.9	42.6	26.9	10.1			
10	12	1407	2.15	142.45	27.5	42.9	27.5	10.4			
12	14	1244	2.45	125.90	28.0	43.2	27.2	10.7			
14	16	1052	2.90	106.46	28.4	43.4	25.4	10.9			
7.3	8.9	1954	0.80	197.75	**	**	**	**	**KH073-11P-90S/L-04F**	65	442
8.7	11	1638	0.95	165.85	14.4	15.6	14.4	4.4			
11	13	1286	1.25	130.16	17.0	16.3	17.0	5.1			
14	17	992	1.60	100.45	18.5	16.9	18.5	5.7			
15	18	987	1.35	99.87	18.5	17.0	18.5	5.7			
17	21	821	1.90	83.09	19.1	17.3	17.4	6.1			
19	23	762	2.05	77.11	19.3	17.4	16.7	6.2			
21	25	698	2.25	70.67	19.5	17.6	16.0	6.3			
22	27	639	2.45	64.67	19.7	17.7	15.5	6.4			
24	29	605	2.60	61.25	19.8	17.7	15.0	6.5			
30	37	470	1.35	47.56	20.0	17.5	13.9	6.3			
39	48	363	2.10	36.72	20.2	17.9	12.4	6.6			
47	57	304	3.00	30.79	20.3	18.1	11.5	6.8			
15	18	988	0.85	99.98	6.0	8.9	6.0	2.2	**KH073-11P-90S/L-04F**	45	442
19	23	765	1.10	77.42	9.1	12.8	9.1	2.9			
22	27	638	1.30	64.62	10.3	13.2	10.3	3.3			
25	30	582	1.45	58.89	10.7	13.4	10.7	3.5			
29	35	496	1.70	50.17	11.2	13.7	11.2	3.7			
30	36	480	1.75	48.56	11.3	13.7	11.3	3.8			
35	43	407	2.05	41.17	11.6	14.0	11.3	4.0			
36	44	393	2.05	39.83	11.7	14.0	11.2	4.1			
41	50	347	1.35	35.15	11.9	13.7	10.8	3.8			
43	52	334	2.30	33.85	11.9	14.2	10.3	4.2			
45	55	315	2.65	31.88	12.0	14.3	10.1	4.3			
52	63	275	2.60	27.83	12.1	14.4	9.5	4.4			
53	64	270	1.90	27.29	12.1	14	9.6	4.1			
65	78	221	2.30	22.40	12.2	14.3	8.8	4.3			
84	101	171	2.95	17.34	12.3	14.5	7.9	4.5			
20	24	722	0.85	73.08	3.4	4.6	3.4	3.1	**KH053-11P-90S/L-04F**	32	438
23	28	630	1.00	63.77	5.6	9.3	5.6	3.4			
24	29	595	1.05	60.26	6.2	10.2	6.2	3.5			
29	35	489	1.25	49.52	7.5	10.5	7.5	3.8			
35	42	415	1.45	42.00	8.2	10.7	8.2	4.0			
36	43	401	1.50	40.63	8.3	10.8	8.3	4.1			
42	51	341	1.80	34.53	8.7	11.0	8.7	4.3			
46	56	311	1.95	31.46	8.9	11.1	8.9	4.4			
48	58	300	1.35	30.37	9.0	10.7	9.0	4.0			
53	64	271	2.15	27.39	9.1	11.2	9.1	4.5			
61	73	236	2.55	23.93	9.3	11.3	9.3	4.6			
75	91	191	2.20	19.35	9.4	11.1	9.4	4.4			
97	117	148	2.80	14.98	9.6	11.3	9.1	4.6			

Legend see page 337

*** ... on request*

P_N = 1.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
1.5 kW	1.8 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
32	39	441	0.95	44.64	2.6	3.4	2.6	2.1			
33	40	434	0.95	43.93	2.9	4.1	2.9	2.2			
39	48	363	1.10	36.78	4.5	7.5	4.5	2.4			
40	48	361	1.15	36.54	4.6	7.8	4.6	2.5			
48	58	300	1.10	30.39	5.5	8.0	5.5	2.4			
49	59	295	1.25	29.81	5.5	8.3	5.5	2.7			
52	62	278	1.45	28.13	5.7	8.4	5.7	2.8			
62	74	233	1.35	23.57	6.1	8.3	6.1	2.7	**KH043-11P-90S/L-04F**	29	436
68	83	210	1.95	21.25	6.3	8.7	6.3	3.1			
75	91	191	1.55	19.29	6.4	8.5	6.4	2.9			
83	101	172	2.35	17.39	6.6	8.8	6.6	3.2			
98	118	147	1.90	14.85	6.7	8.7	6.7	3.1			
103	124	139	2.90	14.10	6.7	8.9	6.7	3.3			
129	156	111	2.40	11.22	6.8	8.9	6.7	3.3			
158	191	91	2.80	9.18	6.9	9.0	6.1	3.4			
67	81	214	0,95	21,67	3.5	2.4	3.5	2.4			
75	91	191	0.90	19.37	3.9	2.3	3.9	2.3			
88	107	163	1.25	16.47	4.3	2.7	4.3	2.7			
97	117	148	1,15	14,96	4.4	2.6	4.4	2.6			
113	137	127	1.60	12.81	4.6	2.9	4.6	2.9	**KH033-11P-90S/L-04F**	25	434
121	147	118	1.40	11.94	4.7	2.8	4.7	2.8			
145	176	99	2.05	10.00	4.8	3.1	4.8	3.1			
161	194	89	1.85	9.03	4.9	3.0	4.9	3.0			
211	256	68	2.20	6.86	5.0	3.2	5.0	3.2			
272	329	53	2,60	5,34	5.0	3,3	5.0	3.3			
122	147	118	0.80	11.92	**	**	**	**			
139	169	103	0.85	10.40	5.0	2.8	5.0	2.8			
157	190	91	0.90	9.25	5.0	2.8	5.0	2.8			
170	206	84	0.95	8.51	4.8	2.8	4.8	2.8			
190	230	75	1.05	7.63	4.6	2.8	4.6	2.8	**KH022-11P-90S/L-04F**	23	432
210	254	68	1.10	6.91	4.4	2.8	4.4	2.8			
243	294	59	1.20	5.96	4.2	2.8	4.2	2.8			
279	338	51	1.30	5.20	4.0	2.8	4.0	2.8			
380	459	38	1.55	3.82	3,6	2,8	3,6	2,8			

Legend see page 337

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P_N = 2.2 kW										IE3
50 Hz	60 Hz				at 50 Hz					
2.2 kW	2.6 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
0.94	1.1	19799	0.95	1530.83	70.0	114.9	70.0	114.9			
0.95	1.2	19437	0.95	1502.83	71.8	115.2	71.8	115.2			
0.99	1.2	18694	1.00	1449.16	75.2	115.7	75.2	115.7	**KH155-11P-100L-04E**	698	464
1.1	1.4	16447	1.10	1281.49	84.0	117.4	84.0	117.4			
1.4	1.7	13125	1.40	1038.59	93.9	120.0	93.9	120.0			
1.1	1.3	17283	1.05	1308.92	81.0	116.8	81.0	116.8			
1.3	1.5	14764	1.25	1127.36	89.4	118.7	89.4	118.7			
1.4	1.7	13511	1.35	1035.99	92.9	119.7	92.9	119.7			
1.5	1.8	12665	1.45	975.12	95.0	120.3	95.0	120.3			
1.6	1.9	11701	1.55	904.58	97.2	121.1	97.2	121.1			
1.8	2.2	10235	1.80	799.45	100.1	122.2	100.1	122.2	**KH154-11P-100L-04E**	685	462
1.9	2.3	9860	1.85	771.80	100.8	122.5	100.8	122.5			
2.1	2.5	8706	2.10	688.57	102.6	123.4	102.6	123.4			
2.4	2.9	7422	2.45	595.58	104.4	124.3	104.4	124.3			
2.5	3.0	7241	2.50	582.27	104.7	124.5	104.7	124.5			
2.8	3.4	6191	2.95	507.30	105.8	125.3	105.8	125.3			
2.9	3.5	6108	2.95	500.51	105.9	125.3	105.9	125.3			
1.2	1.4	16271	0.80	1219.69	**	**	**	**			
1.3	1.6	14100	0.95	1063.46	66.6	83.4	66.6	83.4			
1.4	1.7	13534	1.00	1022.92	68.6	83.9	68.6	83.9			
1.6	1.9	12070	1.10	916.04	73.3	85.4	73.3	85.4			
1.8	2.2	10513	1.25	802.79	77.5	87.0	77.5	87.0			
1.9	2.3	10040	1.30	768.25	78.6	87.4	78.6	87.4			
2.1	2.5	9091	1.45	699.95	80.6	88.4	80.6	88.4			
2.2	2.6	8557	1.55	661.56	81.7	88.9	81.7	88.9			
2.3	2.8	7981	1.65	619.56	82.7	89.5	82.7	89.5	**KH124-11P-100L-04E**	431	458
2.4	2.9	7751	1.70	602.92	83.1	89.7	83.1	89.7			
2.7	3.2	6887	1.90	540.20	84.5	90.6	84.5	90.6			
2.8	3.4	6592	2.00	519.19	84.9	90.9	84.9	90.9			
3.1	3.8	5847	2.25	465.31	85.8	91.6	85.8	91.6			
3.2	3.9	5591	2.35	446.82	86.1	91.9	86.1	91.9			
3.3	4.0	5443	2.40	435.90	86.3	92.0	86.3	92.0			
3.6	4.4	4952	2.65	400.70	86.8	92.5	86.8	92.5			
3.7	4.5	4736	2.75	384.88	87.1	92.8	87.1	92.8			
3.8	4.6	4667	2.80	380.06	87.1	92.8	87.1	92.8			
1.9	2.3	10053	0.80	753.64	**	**	**	**			
2.0	2.4	9739	0.85	731.54	35.4	58.0	35.4	58.0			
2.2	2.6	8769	0.95	661.38	41.8	59.1	41.8	59.1			
2.3	2.8	8363	1.00	632.05	44.0	59.6	44.0	59.6			
2.5	3.0	7565	1.10	574.12	47.7	60.5	47.7	60.5			
2.8	3.4	6698	1.20	510.43	51.1	61.5	51.1	61.5			
2.9	3.5	6496	1.25	496.04	51.8	61.7	51.8	61.7			
3.2	3.9	5767	1.40	443.08	54.1	62.6	54.1	62.6			
3.4	4.1	5472	1.50	422.20	55.0	62.9	55.0	62.9			
3.7	4.6	4931	1.65	382.82	56.3	63.5	56.3	63.5			
3.9	4.8	4711	1.70	366.49	56.9	63.8	56.9	63.8	**KH104-11P-100L-04E**	308	454
4.0	4.9	4607	1.75	359.12	57.1	63.9	57.1	63.9			
4.5	5.5	4020	2.00	316.65	58.3	64.6	58.3	64.6			
4.6	5.6	3950	2.05	311.74	58.4	64.7	58.4	64.7			
5.3	6.5	3374	2.40	270.17	59.4	65.3	59.4	65.3			
5.5	6.6	3275	2.45	262.82	59.5	65.4	59.5	65.4			
5.7	6.9	3145	2.55	253.44	59.7	65.6	59.7	65.6			
6.1	7.5	2867	2.80	233.43	60.1	65.9	60.1	65.9			
6.3	7.6	2790	2.90	228.15	60.2	66.0	60.2	66.0			
6.5	7.9	2679	3.00	220.00	60.3	66.1	60.3	66.1			

Legend see page 337

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P_N = 2.2 kW											IE3
50 Hz	60 Hz				at 50 Hz						
2.2 kW	2.6 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
3.3	4.0	5757	0.80	431.58	**	**	**	**	KH094-11P-100L-04E	179	450
3.9	4.8	4837	0.95	364.86	25.6	38.8	25.6	38.8			
4.1	4.9	4673	1.00	353.21	26.8	39.1	26.8	39.1			
4.8	5.8	3927	1.15	298.61	31.2	40.0	31.2	40.0			
5.0	6.1	3759	1.20	286.42	32.0	40.2	32.0	40.2			
5.9	7.2	3145	1.45	242.14	34.6	41.0	34.6	41.0			
6.0	7.3	3114	1.45	239.77	34.7	41.0	34.7	41.0			
7.1	8.6	2600	1.75	202.70	36.4	41.7	36.4	41.7			
7.4	9.0	2483	1.85	194.32	36.7	41.8	36.7	41.8			
7.7	9.3	2389	1.90	187.38	36.9	42.0	36.9	42.0			
8.7	11	2069	2.20	164.28	37.7	42.4	37.7	42.4			
9.1	11	1986	2.30	158.41	37.9	42.5	37.9	42.5			
8.5	10	2478	1.85	169.25	36.7	41.8	36.7	41.8	KH093-11P-100L-04E	166	448
10	12	2095	2.15	143.08	37.7	42.3	37.7	42.3			
12	14	1813	2.50	123.86	38.2	42.7	38.2	42.7			
13	16	1606	2,85	109,70	38.6	43.0	38.6	43.0			
4.8	5.9	3966	0.80	297.29	**	**	**	**	KH084-11P-100L-04E	129	446
4.9	6.0	3895	0.80	292.01	**	**	**	**			
5.2	6.3	3675	0.85	276.09	11.4	17.4	11.4	7.1			
6.0	7.2	3196	0.95	241.07	17.6	30.5	17.6	7.8			
6.1	7.4	3131	1.00	236.66	18.2	31.8	18.2	7.9			
6.2	7.6	3058	1.00	231.12	18.9	33.3	18.9	8.0			
6.3	7.6	3019	1.00	228.21	19.2	33.9	19.2	8.0			
7.1	8.6	2654	1.15	201.80	22.0	40.1	22.0	8.6			
7.7	9,3	2453	1,25	187,31	23,2	41,4	23,2	8,9			
7.9	9.7	2361	1.30	180.62	23.7	41.5	23.7	9.0			
8.8	11	2124	1.45	163.55	24.9	41.9	24.9	9.4			
9.1	11	2044	1.50	157.71	25,3	42.0	25,3	9.5			
7.0	8.5	3018	1.00	206.12	19.2	33.9	19.2	8.0	KH083-11P-100L-04E	116	444
8.8	11	2389	1.30	163.14	23.6	41.5	23.6	9.0			
10	12	2086	1.45	142.45	25.1	41.9	25.1	9.4			
11	14	1843	1.65	125.90	26.1	42.3	26.1	9.8			
13	16	1559	1.95	106.46	27.1	42.7	27.1	10.2			
16	19	1340	2.25	91.51	27.7	43,0	25,5	10.5			
18	22	1170	2.60	79.89	28.1	43.3	24.1	10.8			
21	25	1002	3.00	68.44	28.5	43.5	22.5	11.0			
32	38	666	2.45	45.48	29.0	43,7	19,1	11.2			
11	13	1906	0.85	130.16	11.6	15.1	11.6	3.8	KH073-11P-100L-04E	75	442
14	17	1471	1.10	100.45	15.8	16.0	15.8	4.7			
17	21	1217	1.30	83.09	17.4	16.5	17.4	5.2			
19	23	1129	1.40	77.11	17.9	16.7	17.9	5.4			
20	25	1035	1.50	70,67	18,3	16,9	17,6	5,6			
22	27	947	1.65	64.67	18.7	17.0	16.8	5.8			
23	28	897	1.75	61.25	18.9	17.1	16.4	5.9			
28	34	757	2.05	51.72	19.3	17.4	15.0	6.2			
29	35	730	2.15	49.88	19.4	17.5	14.8	6.2			
34	41	624	2.50	42.61	19.7	17.7	13.7	6.5			
37	45	573	2,75	39,17	19,8	17.8	13,2	6,6			
39	48	538	1.45	36.72	19.9	17.3	13.2	6.1			
47	57	451	2.05	30.79	20.1	17.6	12.2	6.3			
59	72	354	2,60	24,17	20.2	17.9	11.0	6.6			

Legend see page 337

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P_N = 2.2 kW										IE3
50 Hz	60 Hz				at 50 Hz					
2.2 kW	2.6 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
24	30	862	1.00	58.89	8.0	12.5	8.0	2.6		
29	35	735	1.15	50.17	9.4	12.9	9.4	3.0		
30	36	711	1.20	48.56	9.7	13.0	9.7	3.1		
35	42	603	1.40	41.17	10.5	13.4	10.5	3.4		
36	44	583	1.40	39.83	10.7	13.4	10.7	3.5		
42	52	496	1.55	33.85	11.2	13.7	11.2	3.7		
45	55	467	1.80	31.88	11.4	13.8	10.9	3.8		
52	63	407	1.80	27.83	11.6	14.0	10.2	4.0		
53	64	400	1.30	27.29	11.7	13.5	10.4	3.5	**KH063-11P-100L-04E**	55	440
59	72	355	2.25	24.25	11.8	14.1	9.6	4.2		
64	78	328	1.55	22.40	11.9	13.8	9.5	3.8		
65	79	323	2.10	22.07	11.9	14.2	9.2	4.3		
72	87	293	2.55	20.00	12.0	14.3	8.8	4.4		
83	101	254	2.00	17.34	12.2	14.1	8.4	4.2		
88	106	240	2.90	16.40	12.2	14.5	8.0	4.5		
109	132	193	2.60	13.19	12.3	14.4	7.4	4.4		
29	35	725	0.85	49.52	3.3	4.4	3.3	3.1		
34	42	615	1.00	42.00	5.9	9.9	5.9	3.4		
35	43	595	1.05	40.63	6.2	10.2	6.2	3.5		
42	51	506	1.20	34.53	7.3	10.5	7.3	3.8		
43	52	488	1.25	33.30	7.5	10.5	7.5	3.8		
46	55	461	1.35	31.46	7.8	10.6	7.8	3.9		
52	64	401	1.45	27.39	8.3	10.8	8.3	4.1		
60	73	350	1.75	23.93	8.7	10.9	8.7	4.2	**KH053-11P-100L-04E**	42	438
61	74	345	1.20	23.58	8.7	10.5	8.7	3.8		
73	88	289	2.10	19.73	9.0	11.1	9.0	4.4		
74	90	283	1.50	19.35	9.1	10.7	9.1	4.0		
89	108	237	2.55	16.19	9.3	11.3	9.3	4.6		
96	116	219	1.90	14.98	9.3	11.0	9.3	4.3		
104	127	201	3.00	13.75	9.4	11.4	9.1	4.7		
126	153	167	2.50	11.40	9.5	11.3	8.5	4.6		
48	59	436	0.85	29.81	2.8	3.9	2.8	2.2		
50	61	421	0.85	28.74	3.3	4.9	3.3	2.2		
51	62	412	1.00	28.13	3.5	5.4	3.5	2.3		
61	74	345	0.90	23.57	4.8	7.7	4.8	2.1		
68	82	311	1.30	21.25	5.3	8.3	5.3	2.7		
74	90	282	1.05	19.29	5.7	8.0	5.7	2.4		
83	100	255	1.60	17.39	5.9	8.5	5.9	2.9		
97	118	217	1.30	14.85	6.3	8.4	6.3	2.8		
102	124	206	1.95	14.10	6.3	8.7	6.3	3.1	**KH043-11P-100L-04E**	38	436
122	148	173	2.35	11.81	6.6	8.8	6.6	3.2		
128	156	164	1.60	11.22	6.6	8.7	6.6	3.1		
150	182	140	2.70	9.57	6.7	8.9	6.5	3.3		
155	189	135	2.75	9.23	6.7	9.0	6.4	3.4		
156	190	134	1.90	9.18	6.7	8.8	6.5	3.2		
193	235	109	2.25	7.44	6.8	8.9	5.9	3.3		
230	280	91	2.55	6.23	6.9	9.0	5.5	3.4		
284	346	74	3.00	5.05	6.9	9.1	5.0	3.5		
87	106	241	0.85	16.47	2.9	2.3	2.9	2.3		
112	136	188	1.10	12.81	3.9	2.6	3.9	2.6		
120	146	175	0.95	11.94	4.1	2.4	4.1	2.4		
144	175	146	1.40	10.00	4.4	2.8	4.4	2.8	**KH033-11P-100L-04E**	35	434
159	193	132	1.25	9.03	4.6	2.7	4.6	2.7		
209	254	100	1.50	6.86	4.8	2.9	4.8	2.9		
269	327	78	1.80	5.34	5.0	3.1	5.0	3.1		
344	418	61	2.10	4.17	4.7	3.2	4.7	3.2		

Legend see page 337

P_N = 3.0 kW										IE3
50 Hz	60 Hz				at 50 Hz					
3.0 kW	3.6 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
1.1	1.4	22696	0.80	1281.49	**	**	**	**	**KH155-11P-L100L-04F**	705	464
1.4	1.7	18207	1.00	1038.59	77.3	116.1	77.3	116.1			
1.1	1.3	23728	0.80	1308.92	**	**	**	**			
1.3	1.5	20353	0.90	1127.36	67.1	114.5	67.1	114.5			
1.4	1.7	18627	1.00	1035.99	75.5	115.8	75.5	115.8			
1.5	1.8	17496	1.05	975.12	80.2	116.6	80.2	116.6			
1.6	1.9	16164	1.15	904.58	85.0	117.7	85.0	117.7			
1.8	2.2	14198	1.30	799.45	91.1	119.2	91.1	119.2			
1.9	2.3	13678	1.35	771.80	92.5	119.6	92.5	119.6			
2.1	2.5	12128	1.50	688.57	96.2	120.7	96.2	120.7	**KH154-11P-L100L-04F**	692	462
2.4	2.9	10383	1.75	595.58	99.8	122.1	99.8	122.1			
2.5	3.0	10130	1.80	582.27	100.3	122.3	100.3	122.3			
2.8	3.4	8716	2.10	507.30	102.6	123.3	102.6	123.3			
2.9	3.5	8653	2.10	503.64	102.7	123.4	102.7	123.4			
3.3	4.0	7399	2.45	436.93	104.5	124.4	104.5	124.4			
3.4	4.2	7068	2.55	419.11	104.9	124.6	104.9	124.6			
3.8	4.6	6281	2.90	377.93	105.8	125.2	105.8	125.2			
3.9	4.7	6135	2.95	369.91	105.9	125.3	105.9	125.3			
1.6	1.9	16606	0.80	916.04	**	**	**	**			
1.8	2.2	14493	0.90	802.79	65.1	83.0	65.1	83.0			
1.9	2.3	13841	0.95	768.25	67.5	83.6	67.5	83.6			
2.1	2.5	12559	1.05	699.95	71.9	84.9	71.9	84.9			
2.2	2.6	11846	1.10	661.56	74.0	85.6	74.0	85.6			
2.3	2.8	11048	1.20	619.56	76.2	86.4	76.2	86.4			
2.4	2.9	10730	1.25	602.92	77.0	86.7	77.0	86.7			
2.7	3.2	9554	1.40	540.20	79.7	87.9	79.7	87.9			
2.8	3.4	9164	1.45	519.19	80.5	88.3	80.5	88.3			
3.1	3.7	8162	1.60	465.31	82.4	89.3	82.4	89.3			
3.2	3.9	7805	1.70	446.82	83.0	89.7	83.0	89.7			
3.3	4.0	7599	1.75	435.90	83.4	89.9	83.4	89.9	**KH124-11P-L100L-04F**	438	458
3.6	4.3	6942	1.90	400.70	84.4	90.5	84.4	90.5			
3.7	4.5	6640	2.00	384.88	84.8	90.8	84.8	90.8			
3.8	4.6	6557	2.00	380.06	84.9	90.9	84.9	90.9			
4.3	5.2	5636	2.35	331.43	86.1	91.9	86.1	91.9			
4.4	5.3	5601	2.35	329.39	86.1	91.9	86.1	91.9			
4.5	5.5	5402	2.45	319.02	86.4	92.1	86.4	92.1			
4.7	5.7	5187	2.55	307.62	86.6	92.3	86.6	92.3			
5.1	6.1	4745	2.75	283.73	87.0	92.7	87.0	92.7			
5.2	6.3	4632	2.85	278.15	87.2	92.9	87.2	92.9			
5.4	6.5	4448	2.95	268.22	87.3	93.0	87.3	93.0			
5.5	6.6	4349	3.00	262.80	87.4	93.1	87.4	93.1			
2.5	3	10407	0.80	574.12	**	**	**	**			
2.8	3.4	9215	0.90	510.43	39.1	58.6	39.1	58.6			
2.9	3.5	8955	0.90	496.04	40.7	58.9	40.7	58.9			
3.2	3.9	7950	1.05	443.08	46.0	60.1	46.0	60.1			
3.4	4.1	7560	1.10	422.20	47.8	60.5	47.8	60.5			
3.8	4.5	6827	1.20	382.82	50.7	61.4	50.7	61.4			
3.9	4.7	6522	1.25	366.49	51.8	61.7	51.8	61.7			
4.0	4.8	6378	1.30	359.12	52.2	61.9	52.2	61.9			
4.5	5.5	5589	1.45	316.65	54.6	62.8	54.6	62.8			
4.6	5.6	5491	1.50	311.74	54.9	62.9	54.9	62.9			
5.3	6.4	4720	1.70	270.17	56.8	63.8	56.8	63.8	**KH104-11P-L100L-04F**	315	454
5.5	6.6	4582	1.75	262.82	57.1	63.9	57.1	63.9			
5.7	6.9	4400	1.85	253.44	57.5	64.1	57.5	64.1			
6.2	7.5	4027	2.00	233.43	58.3	64.6	58.3	64.6			
6.3	7.6	3928	2.05	228.15	58.4	64.7	58.4	64.7			
6.5	7.9	3772	2.15	220.00	58.7	64.9	58.7	64.9			
6.7	8	3705	2.20	216.51	58.8	64.9	58.8	64.9			
7.3	8.8	3345	2.40	197.12	59.4	65.3	59.4	65.3			
7.6	9.2	3212	2.50	190.08	59.6	65.5	59.6	65.5			
7.7	9.3	3169	2.55	187.95	59.7	65.5	59.7	65.5			
8.9	11	2687	3.00	162.39	60.3	66.1	60.3	66.1			

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P_N = 3.0 kW										IE3
50 Hz	60 Hz				at 50 Hz					
3.0 kW	3.6 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
4.8	5.8	5402	0.85	298.61	20.6	34.3	20.6	34.3			
5.0	6.1	5171	0.90	286.42	22.8	38.4	22.8	38.4			
5.9	7.2	4345	1.05	242.14	28.9	39.5	28.9	39.5			
6.0	7.3	4302	1.05	239.77	29.2	39.5	29.2	39.5			
7.1	8.6	3607	1.25	202.70	32.7	40.4	32.7	40.4	**KH094-11P-L100L-04F**	186	450
7.4	9.0	3444	1.35	194.32	33.4	40.6	33.4	40.6			
7.7	9.3	3314	1.40	187.38	34.0	40.8	34.0	40.8			
8.8	11	2882	1.60	164.28	35.5	41.3	35.5	41.3			
9.1	11	2773	1.65	158.41	35.8	41.5	35.8	41.5			
8.5	10	3367	1.35	169.25	33.7	40.7	33.7	40.7			
10	12	2847	1.60	143.08	35.6	41.4	35.6	41.4			
12	14	2464	1.85	123.86	36.7	41.9	36.7	41.9			
13	16	2183	2.10	109.70	37.5	42.2	37.5	42.2	**KH093-11P-L100L-04F**	173	448
15	18	1888	2.40	94.90	38.1	42.6	38.1	42.6			
16	19	1821	2.50	91.51	38.2	42.7	38.2	42.7			
18	22	1606	2,85	80,74	38,6	43,0	38,6	43,0			
7.1	8.6	3651	0.85	201.80	11.8	18.2	11.8	7.1			
7.7	9.3	3382	0.90	187.31	15.6	26.2	15.6	7.5			
8.0	9.6	3254	0.95	180.62	17.0	29.2	17.0	7.7	**KH084-11P-L100L-04F**	136	446
8.8	11	2935	1.05	163.55	19.9	35.5	19.9	8.2			
9.1	11	2824	1.10	157.71	20.8	37.4	20.8	8.3			
8.8	11	3246	0.95	163.14	17.1	29.4	17.1	7.7			
10	12	2834	1.10	142.45	20.7	37.2	20.7	8.3			
11	14	2505	1.20	125.90	22.9	41.3	22.9	8.8			
14	16	2118	1.45	106.46	24.9	41.9	24.9	9.4			
16	19	1821	1.65	91.51	26.2	42.3	26.2	9.8			
18	22	1589	1.90	79.89	27.0	42.7	25.5	10.2			
21	25	1362	2.25	68.44	27.7	43.0	23.7	10.5	**KH083-11P-L100L-04F**	123	444
22	26	1313	2.30	66.00	27.8	43.1	23.3	10.6			
23	28	1256	2.30	63.12	27.9	43.1	22.8	10.6			
25	30	1159	2.60	58.25	28.2	43.3	21.9	10.8			
26	32	1096	2.75	55.11	28.3	43.4	21.5	10.9			
32	38	905	1.80	45.48	28.7	43.2	20	10.7			
40	48	716	2,30	35,99	29,0	43,6	18,1	11,1			
14	17	1999	0.80	100.45	**	**	**	**			
17	21	1653	0.95	83.09	14.3	15.6	14.3	4.3			
19	23	1534	1.05	77.11	15.3	15.8	15.3	4.6			
20	25	1406	1.15	70.67	16.2	16.1	16.2	4.8			
22	27	1287	1.25	64.67	17.0	16.3	17.0	5.1			
24	28	1219	1.30	61.25	17.4	16.5	17.4	5.2			
28	34	1029	1.55	51.72	18.3	16.9	16.2	5.6			
29	35	992	1.60	49,88	18,5	16,9	15,9	5,7			
34	41	848	1.85	42.61	19.0	17.2	14.7	6.0	**KH073-11P-L100L-04F**	82	442
37	44	779	2.00	39.17	19.3	17.4	14.1	6.1			
39	47	731	1.05	36,72	19.4	16.7	14.1	5.5			
44	54	645	2.45	32.40	19.7	17.7	12.9	6.4			
47	57	613	1.50	30.79	19.7	17.1	12.9	5.8			
52	63	548	2,85	27,56	19,9	17,9	11,9	6,6			
60	72	481	1.90	24.17	20.0	17.5	11.5	6.2			
77	93	371	2.50	18.65	20.2	17.8	10.3	6.6			
93	113	307	3,00	15,43	20.3	18.0	9.4	6.8			

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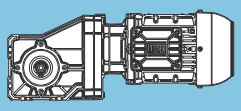
P_N = 3.0 kW											IE3
50 Hz	60 Hz				at 50 Hz						
3.0 kW	3.6 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
29	35	998	0.85	50.17	5.8	8.5	5.8	2.2			
30	36	966	0.85	48.56	6.4	9.8	6.4	2.3			
35	42	819	1.05	41.17	8.6	12.7	8.6	2.7			
36	44	792	1.05	39.83	8.9	12.8	8.9	2.8			
43	51	673	1.15	33.85	10.0	13.1	10.0	3.2			
45	55	634	1.30	31.88	10.3	13.3	10.3	3.3			
52	63	554	1.30	27.83	10.9	13.5	10.9	3.6			
53	64	543	0.95	27.29	10.9	12.8	10.9	2.9			
54	65	534	1.35	26.84	11.0	13.6	10.8	3.6			
59	72	482	1.65	24.25	11.3	13.7	10.3	3.8			
64	78	446	1.15	22.40	11.5	13.3	10.2	3.3	**KH063-11P-L100L-04F**	62	440
65	79	439	1.55	22.07	11.5	13.9	9.8	3.9			
72	87	398	1.90	20.00	11.7	14.0	9.3	4.0			
83	100	345	1.45	17.34	11.9	13.7	9.0	3.8			
88	106	326	2.15	16.40	11.9	14.2	8.5	4.3			
103	125	277	2,40	13,94	12,1	14,4	7,9	4,4			
109	132	262	1.95	13.19	12.1	14.1	7.9	4.1			
126	152	228	2.75	11.46	12.2	14.5	7.2	4.6			
130	157	220	2.85	11.05	12.2	14.6	7.1	4.6			
132	160	216	2.35	10.88	12.2	14.3	7.2	4.3			
161	195	177	2.85	8.92	12.3	14.5	6.6	4.5			
42	50	687	0.90	34.53	4.4	6.7	4.4	3.2			
43	52	663	0.95	33.30	5.0	8.0	5.0	3.3			
46	55	626	1.00	31.46	5.7	9.5	5.7	3.4			
53	64	545	1,10	27,39	6,9	10,3	6,9	3,6			
60	73	476	1.30	23.93	7.7	10.6	7.7	3.9			
61	74	469	0.90	23.58	7.7	9.9	7.7	3.2			
73	88	393	1.55	19.73	8.4	10.8	8.4	4.1			
74	90	385	1.10	19.35	8.4	10.3	8.4	3.6	**KH053-11P-L100L-04F**	48	438
89	107	322	1.90	16.19	8.8	11.0	8.8	4.3			
96	116	298	1.40	14.98	9.0	10.7	9.0	4.0			
105	127	274	2.20	13.75	9.1	11.2	9.1	4.5			
126	153	227	1.85	11.40	9.3	11.0	9.0	4.3			
127	154	225	2.70	11.31	9,3	11,3	8,7	4,6			
132	159	217	2.80	10.91	9.3	11.3	8.6	4.6			
153	185	187	2.25	9.40	9.5	11.2	8.2	4.5			
187	226	153	2.70	7.71	9.5	11.3	7.5	4.6			
68	82	423	0.95	21.25	3.2	4.7	3.2	2.2			
75	90	384	0.80	19.29	**	**	**	**			
83	100	346	1,20	17.39	4.8	8.1	4.8	2.5			
97	117	295	0.95	14.85	5.5	8.0	5.5	2.4			
102	123	281	1.45	14,10	5,7	8,4	5,7	2,8			
122	147	235	1.75	11.81	6.1	8.6	6.1	3.0			
128	155	223	1.20	11.22	6.2	8.4	6.2	2.8	**KH043-11P-L100L-04F**	45	436
150	182	190	2.00	9.57	6.4	8.7	6.4	3.1			
156	189	184	2.05	9.23	6.5	8.8	6.5	3.2			
157	190	183	1.40	9.18	6.5	8.6	6.5	3.0			
194	234	148	1.65	7.44	6,7	8,7	6,2	3,1			
231	279	124	1.90	6.23	6.8	8.9	5.7	3.3			
285	345	100	2.20	5.05	6.9	9.0	5.2	3.4			
296	357	97	2.30	4,87	6,9	9,0	5,2	3,4			
112	136	255	0.80	12.81	**	**	**	**			
144	174	199	1.05	10.00	3.7	2.5	3.7	2.5			
159	193	180	0.95	9.03	4.0	2.4	4.0	2.4	**KH033-11P-L100L-04F**	41	434
210	254	136	1.10	6.86	4.5	2.7	4.5	2.7			
270	326	106	1.30	5.34	4.8	2.9	4.8	2.9			
345	417	83	1.55	4.17	4.9	3.1	4.9	3.1			

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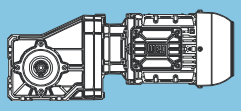
P_N = 4.0 kW										IE3
50 Hz	60 Hz				at 50 Hz					
4.0 kW	4.8 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
1.4	1.8	23487	0.80	1001.50	**	**	**	**	**KH155-11P-112M-04E**	706	464
1.5	1.8	23406	0.80	975.12	**	**	**	**			
1.6	1.9	21669	0.85	904.58	59.3	102.1	59.3	102.1			
1.8	2.2	19072	0.95	799.45	73.5	115.4	73.5	115.4			
1.9	2.3	18549	1.00	779.11	75.8	115.8	75.8	115.8			
2.1	2.5	16292	1.15	688.57	84.6	117.6	84.6	117.6			
2.2	2.6	15945	1.15	673.90	85.7	117.8	85.7	117.8			
2.4	2.9	14006	1.30	595.58	91.6	119.3	91.6	119.3			
2.5	3.0	13664	1.35	582.27	92.5	119.6	92.5	119.6			
2.9	3.5	11807	1.55	507.30	97.0	121.0	97.0	121.0			
3.3	4.0	10065	1.80	436.93	100.4	122.3	100.4	122.3	**KH154-11P-112M-04E**	693	462
3.5	4.2	9615	1.90	419.11	101.2	122.7	101.2	122.7			
3.8	4.6	8598	2.10	377.93	102.8	123.4	102.8	123.4			
3.9	4.7	8499	2.15	374.35	103.0	123.5	103.0	123.5			
4.0	4.9	8162	2.25	360.98	103.4	123.8	103.4	123.8			
4.5	5.4	7245	2.50	323.79	104.6	124.5	104.6	124.5			
4.6	5.5	7114	2.55	318.60	104.8	124.6	104.8	124.6			
4.7	5.7	6900	2.65	310.30	105.1	124.7	105.1	124.7			
5.3	6.4	6039	3.00	275.58	106.0	125.4	106.0	125.4			
2.1	2.5	16801	0.80	699.95	**	**	**	**			
2.2	2.7	15847	0.85	661.56	59.2	81.6	59.2	81.6			
2.3	2.8	14811	0.90	619.56	63.8	82.7	63.8	82.7			
2.4	2.9	14383	0.95	602.92	65.5	83.1	65.5	83.1			
2.7	3.2	12834	1.05	540.20	71.0	84.6	71.0	84.6			
2.8	3.4	12310	1.10	519.19	72.6	85.2	72.6	85.2			
3.1	3.8	10987	1.20	465.31	76.3	86.5	76.3	86.5			
3.2	3.9	10529	1.25	446.82	77.5	86.9	77.5	86.9			
3.3	4.0	10251	1.30	435.90	78.1	87.2	78.1	87.2			
3.6	4.4	9384	1.40	400.70	80.0	88.1	80.0	88.1			
3.8	4.6	8995	1.45	384.88	80.8	88.5	80.8	88.5			
4.4	5.3	7666	1.70	331.43	83.2	89.8	83.2	89.8	**KH124-11P-112M-04E**	439	458
4.5	5.5	7349	1.80	319.02	83.8	90.1	83.8	90.1			
4.7	5.7	7072	1.85	307.62	84.2	90.4	84.2	90.4			
5.1	6.2	6469	2.05	283.73	85.0	91.0	85.0	91.0			
5.2	6.3	6328	2.10	278.15	85.2	91.2	85.2	91.2			
5.4	6.5	6090	2.15	268.22	85.5	91.4	85.5	91.4			
5.5	6.7	5954	2.20	262.80	85.7	91.5	85.7	91.5			
5.9	7.2	5490	2.40	244.33	86.3	92.0	86.3	92.0			
6.1	7.3	5372	2.45	239.59	86.4	92.1	86.4	92.1			
6.3	7.6	5159	2.55	231.04	86.6	92.3	86.6	92.3			
7.0	8.5	4540	2.90	206.32	87.2	92.9	87.2	92.9			
7.3	8.8	4360	3.00	198.95	87.4	93.1	87.4	93.1			
3.3	4.0	10635	0.80	443.08	**	**	**	**			
3.4	4.2	10134	0.80	422.20	**	**	**	**			
3.8	4.6	9151	0.90	382.82	39.5	58.7	39.5	58.7			
4.0	4.8	8743	0.95	366.49	41.9	59.2	41.9	59.2			
4.6	5.5	7508	1.10	316.65	48.0	60.6	48.0	60.6			
4.7	5.6	7391	1.10	311.74	48.5	60.7	48.5	60.7			
5.4	6.5	6353	1.30	270.17	52.3	61.9	52.3	61.9			
5.5	6.7	6180	1.30	262.82	52.9	62.1	52.9	62.1			
5.7	6.9	5948	1.35	253.44	53.6	62.4	53.6	62.4	**KH104-11P-112M-04E**	316	454
6.2	7.5	5444	1.50	233.43	55.0	62.9	55.0	62.9			
6.4	7.7	5310	1.55	228.15	55.4	63.1	55.4	63.1			
6.6	8.0	5110	1.60	220.00	55.9	63.3	55.9	63.3			
6.7	8.1	5029	1.60	216.51	56.1	63.4	56.1	63.4			
7.4	8.9	4541	1.80	197.12	57.2	64.0	57.2	64.0			
7.6	9.2	4370	1.85	190.08	57.6	64.2	57.6	64.2			
7.7	9.3	4312	1.90	187.95	57.7	64.2	57.7	64.2			
8.9	11	3679	2.20	162.39	58.9	65.0	58.9	65.0			
10	12	3713	2.20	140.95	58.8	64.9	58.8	64.9			
12	14	3280	2.45	124.50	59.5	65.4	59.5	65.4	**KH103-11P-112M-04E**	292	452
13	16	2847	2.85	108.07	60.1	65.9	60.1	65.9			
14	17	2745	2.95	104.21	60.3	66.0	60.3	66.0			

Legend see page 337

P_N = 4.0 kW											IE3
50 Hz	60 Hz				at 50 Hz						
4.0 kW	4.8 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
6.0	7.2	5812	0.80	242.14	**	**	**	**	**KH094-11P-112M-04E**	187	450
7.2	8.7	4836	0.95	202.70	25.6	38.9	25.6	38.9			
7.5	9.0	4626	1.00	194.32	27.1	39.1	27.1	39.1			
7.7	9.4	4452	1.05	187.38	28.3	39.3	28.3	39.3			
8.8	11	3879	1.20	164.28	31.5	40.1	31.5	40.1			
9.2	11	3733	1.25	158.41	32.2	40.3	32.2	40.3			
8.6	10	4459	1.05	169.25	28.2	39.3	28.2	39.3	**KH093-11P-112M-04E**	174	448
10	12	3769	1.20	143.08	32.0	40.2	32.0	40.2			
12	14	3263	1.40	123.86	34.2	40.9	34.2	40.9			
13	16	2890	1.60	109.70	35.5	41.3	35.5	41.3			
15	18	2500	1.80	94.90	36.6	41.8	36.6	41.8			
16	19	2411	1.90	91.51	36.9	41.9	36.9	41.9			
18	22	2127	2.15	80.74	37.6	42.3	37.6	42.3			
21	26	1810	2.50	68.71	38.2	42.7	38.2	42.7			
23	27	1685	2.70	63.96	38.5	42.9	38.5	42.9			
24	30	1562	2.90	59.28	38.7	43.0	38.7	43.0			
39	47	978	2.85	37.13	39.4	43.3	39.4	43.3			
8.9	11	3926	0.80	163.55	**	**	**	**	**KH084-11P-112M-04E**	137	446
9.2	11	3786	0.80	157.71	**	**	**	**			
10	12	3753	0.80	142.45	**	**	**	**	**KH083-11P-112M-04E**	124	444
12	14	3317	0.95	125.90	16.3	27.7	16.3	7.6			
14	16	2805	1.10	106.46	20.9	37.7	20.9	8.4			
16	19	2411	1.25	91.51	23.4	41.4	23.4	8.9			
18	22	2105	1.45	79.89	25.0	41.9	25.0	9.4			
21	26	1803	1.70	68.44	26.3	42.3	25.3	9.8			
22	27	1739	1.75	66.00	26.5	42.4	24.7	9.9			
23	28	1663	1.75	63.12	26.8	42.5	24.2	10.0			
25	30	1535	2.00	58.25	27.2	42.7	23.3	10.2			
26	32	1452	2.10	55.11	27.4	42.9	22.7	10.4			
30	36	1287	2.35	48.87	27.9	43.1	21.3	10.6			
32	39	1198	1.40	45.48	28.1	42.6	21.1	10.1			
35	43	1085	2.80	41.18	28.3	43.4	19.8	10.9			
40	49	948	1.75	35.99	28.6	43.1	19.0	10.6			
46	56	828	2.35	31.43	28.8	43.3	17.8	10.8			
52	63	732	2.60	27.78	28.9	43.5	16.9	11.0			
19	23	2031	0.80	77.11	**	**	**	**	**KH073-11P-112M-04E**	83	442
21	25	1862	0.85	70.67	12.1	15.2	12.1	3.9			
22	27	1704	0.95	64.67	13.8	15.5	13.8	4.2			
24	29	1614	1.00	61.25	14.6	15.7	14.6	4.4			
28	34	1363	1.15	51.72	16.5	16.2	16.5	4.9			
29	35	1337	1.20	50.75	16.7	16.2	16.7	5.0			
34	41	1123	1.40	42.61	17.9	16.7	15.8	5.4			
37	45	1032	1.55	39.17	18.3	16.9	15.1	5.6			
39	48	967	0.80	36.72	**	**	**	**			
45	54	854	1.85	32.40	19.0	17.2	13.7	6.0			
47	57	811	1.15	30.79	19.2	16.5	13.9	5.2			
53	64	726	2.15	27.56	19.4	17.5	12.6	6.2			
60	73	637	1.45	24.17	19.7	17.0	12.3	5.8			
61	73	629	2.50	23.88	19.7	17.7	11.8	6.5			
72	87	531	2.95	20.17	19.9	17.9	10.9	6.7			
78	94	491	1.90	18.65	20.0	17.5	10.8	6.2			
94	114	407	2.25	15.43	20.2	17.7	9.9	6.5			
111	134	346	2.65	13.12	20.2	17.9	9.2	6.7			

Legend see page 337

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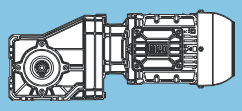
P_N = 4.0 kW										IE3
50 Hz	60 Hz				at 50 Hz					
4.0 kW	4.8 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
35	43	1085	0.80	41.17	**	**	**	**			
36	44	1049	0.80	39.83	**	**	**	**			
43	52	892	0.85	33.85	7.6	12.4	7.6	2.5			
45	55	840	1.00	31.88	8.3	12.6	8.3	2.7			
52	63	733	1.00	27.83	9.5	12.9	9.5	3.0			
54	65	707	1.00	26.84	9.7	13.0	9.7	3.1			
60	72	639	1.25	24.25	10.3	13.2	10.3	3.3			
65	78	590	0.85	22.40	10.6	12.6	10.6	2.7			
66	80	581	1.15	22.07	10.7	13.4	10.5	3.5			
73	88	527	1.45	20.00	11.0	13.6	10.0	3.6			
84	101	457	1.10	17.34	11.4	13.2	9.6	3.3			
88	107	432	1.65	16.40	11.5	13.9	9.1	3.9	**KH063-11P-112M-04E**	63	440
104	126	367	1.85	13.94	11.8	14.1	8.3	4.1			
110	133	347	1.45	13.19	11.9	13.7	8.4	3.7			
127	153	302	2.10	11.46	12.0	14.3	7.6	4.3			
131	159	291	2.15	11.05	12.0	14.3	7.5	4.4			
133	161	287	1.75	10.88	12.1	14.0	7.6	4.0			
160	193	239	2.45	9.09	12.2	14.5	6.8	4.5			
163	197	235	2.15	8.92	12.2	14.2	6.9	4.3			
191	232	200	2.45	7.58	12.3	14.4	6.4	4.4			
233	282	164	2.80	6.23	12.3	14.5	5.9	4.6			
241	292	158	2.90	6.01	12.3	14.5	5.8	4.6			
53	64	722	0.80	27.39	**	**	**	**			
61	73	630	1.00	23.93	5.6	9.3	5.6	3.4			
73	89	520	1.20	19.73	7.2	10.4	7.2	3.7			
75	91	510	0.85	19.35	7.3	9.7	7.3	3.0			
90	108	427	1.45	16.19	8.1	10.7	8.1	4.0			
97	117	395	1.05	14.98	8.4	10.2	8.4	3.5			
105	128	362	1.70	13.75	8.6	10.9	8.6	4.2			
127	154	300	1.40	11.40	9.0	10.7	9.0	4.0	**KH053-11P-112M-04E**	49	438
128	155	298	2.05	11.31	9.0	11.1	9.0	4.4			
133	161	287	2.10	10.91	9.0	11.1	9.0	4.4			
154	187	248	1.70	9.40	9.2	10.9	8.6	4.2			
162	196	236	2.40	8.97	9.3	11.3	8.2	4.6			
188	228	203	2.05	7.71	9.4	11.1	7.9	4.4			
221	268	173	2.40	6.55	9.5	11.2	7.3	4.5			
269	326	142	2.95	5.39	9.2	11.4	6.7	4.7			
83	101	458	0.90	17.39	1.9	2.0	1.9	2.0			
103	124	371	1.10	14.10	4.4	7.3	4.4	2.4			
123	149	311	1.30	11.81	5.3	8.3	5.3	2.7			
129	156	296	0.90	11.22	5.5	8.0	5.5	2.4			
152	183	252	1.50	9.57	6.0	8.5	6.0	2.9			
157	190	243	1.55	9.23	6.0	8.5	6.0	2.9	**KH043-11P-112M-04E**	46	436
158	191	242	1.05	9.18	6.1	8.3	6.1	2.7			
195	236	196	1.25	7.44	6.4	8.5	6.4	2.9			
233	282	164	1.45	6.23	6.6	8.7	6.0	3.1			
287	348	133	1.70	5.05	6.8	8.8	5.5	3.2			
298	360	128	1.75	4.87	6.8	8.8	5.4	3.2			

Legend see page 337

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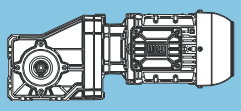
P_N = 5.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
5.5 kW	6.6 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
2.1	2.6	22447	0.85	688.57	53.9	90.7	53.9	90.7			
2.2	2.6	22039	0.85	676.04	56.8	96.8	56.8	96.8			
2.5	3.0	19336	0.95	595.58	72.2	115.2	72.2	115.2			
2.9	3.5	16369	1.10	507.30	84.3	117.5	84.3	117.5			
3.4	4.0	13983	1.30	436.93	91.7	119.3	91.7	119.3			
3.5	4.2	13385	1.35	419.11	93.2	119.8	93.2	119.8			
3.9	4.7	11971	1.55	377.93	96.6	120.9	96.6	120.9			
4.0	4.8	11717	1.55	369.91	97.2	121.1	97.2	121.1			
4.1	4.9	11411	1.60	360.98	97.8	121.3	97.8	121.3	**KH154-11P-132S-04E**	711	462
4.5	5.5	10151	1.80	323.79	100.2	122.3	100.2	122.3			
4.6	5.5	9967	1.85	318.60	100.6	122.4	100.6	122.4			
4.7	5.7	9768	1.85	312.23	100.9	122.5	100.9	122.5			
5.3	6.4	8515	2.15	275.58	102.9	123.5	102.9	123.5			
5.5	6.6	8241	2.20	267.26	103.3	123.7	103.3	123.7			
5.6	6.7	8046	2.25	261.49	103.6	123.9	103.6	123.9			
6.3	7.6	7010	2.60	231.17	104.9	124.7	104.9	124.7			
6.5	7.8	6816	2.65	225.22	105.2	124.8	105.2	124.8			
2.8	3.4	16960	0.80	519.19	**	**	**	**			
2.9	3.4	16741	0.80	512.47	**	**	**	**			
3.1	3.8	15138	0.90	465.31	62.4	82.3	62.4	82.3			
3.3	4.0	14537	0.90	446.82	64.9	82.9	64.9	82.9			
3.4	4.0	14152	0.95	435.90	66.4	83.3	66.4	83.3			
3.7	4.4	12956	1.05	400.70	70.6	84.5	70.6	84.5			
3.8	4.6	12445	1.05	384.88	72.2	85.0	72.2	85.0			
3.9	4.6	12264	1.10	380.06	72.8	85.2	72.8	85.2			
4.4	5.3	10629	1.25	331.43	77.2	86.8	77.2	86.8			
4.5	5.4	10499	1.25	327.38	77.5	87.0	77.5	87.0			
4.6	5.5	10210	1.30	319.02	78.2	87.3	78.2	87.3			
4.8	5.7	9825	1.35	307.62	79.1	87.7	79.1	87.7	**KH124-11P-132S-04E**	457	458
5.2	6.2	9024	1.45	283.73	80.8	88.5	80.8	88.5			
5.3	6.3	8829	1.50	278.15	81.2	88.7	81.2	88.7			
5.5	6.6	8496	1.55	268.22	81.8	89.0	81.8	89.0			
5.6	6.7	8307	1.60	262.80	82.1	89.2	82.1	89.2			
6.0	7.2	7691	1.70	244.33	83.2	89.8	83.2	89.8			
6.1	7.4	7527	1.75	239.59	83.5	90.0	83.5	90.0			
6.3	7.6	7243	1.80	231.04	83.9	90.2	83.9	90.2			
6.4	7.7	7169	1.85	229.14	84.0	90.3	84.0	90.3			
7.1	8.6	6401	2.05	206.32	85.1	91.1	85.1	91.1			
7.4	8.9	6147	2.15	198.95	85.5	91.3	85.5	91.3			
8.6	10	5165	2.55	169.97	86.6	92.3	86.6	92.3			
9.7	12	5418	2.40	151.11	86.3	92.1	86.3	92.1			
11	13	4724	2.80	131.76	87.1	92.8	87.1	92.8	**KH123-11P-132S-04E**	433	456
12	14	4555	2.90	127.05	87.2	92.9	87.2	92.9			
4.6	5.6	10344	0.80	316.65	**	**	**	**			
4.7	5.7	10184	0.80	311.74	**	**	**	**			
5.4	6.5	8772	0.95	270.17	41.7	59.1	41.7	59.1			
5.6	6.7	8533	0.95	262.82	43.1	59.4	43.1	59.4			
5.8	7.0	8211	1.00	253.44	44.7	59.8	44.7	59.8			
6.3	7.6	7532	1.10	233.43	47.9	60.6	47.9	60.6			
6.4	7.7	7362	1.10	228.15	48.6	60.8	48.6	60.8	**KH104-11P-132S-04E**	334	454
6.7	8.0	7084	1.15	220.00	49.7	61.1	49.7	61.1			
6.8	8.2	6972	1.15	216.51	50.1	61.2	50.1	61.2			
7.4	9.0	6308	1.30	197.12	52.5	62.0	52.5	62.0			
7.7	9.3	6071	1.35	190.08	53.2	62.2	53.2	62.2			
7.8	9.4	6003	1.35	187.95	53.4	62.3	53.4	62.3			
9.0	11	5133	1.60	162.39	55.8	63.3	55.8	63.3			
10	13	5054	1.60	140.95	56.0	63.4	56.0	63.4			
12	14	4464	1.80	124.50	57.4	64.1	57.4	64.1			
14	16	3875	2.10	108.07	58.5	64.7	58.5	64.7	**KH103-11P-132S-04E**	310	452
16	19	3348	2.40	93.37	59.4	65.3	59.4	65.3			
18	22	2865	2.80	79.90	60.1	65.9	60.1	65.9			
8.9	11	5356	0.85	164.28	21.0	35.2	21.0	35.2	**KH094-11P-132S-04E**	205	450
9.2	11	5154	0.90	158.41	23.0	38.4	23.0	38.4			

P_N = 5.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
5.5 kW	6.6 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
10	12	5130	0.90	143.08	23.2	38.5	23.2	38.5			
12	14	4441	1.05	123.86	28.3	39.4	28.3	39.4			
13	16	3933	1.15	109.70	31.2	40.0	31.2	40.0			
15	19	3402	1.35	94.90	33.6	40.7	33.6	40.7			
16	19	3281	1.40	91.51	34.1	40.8	34.1	40.8			
18	22	2895	1.60	80.74	35.5	41.3	35.5	41.3			
21	26	2463	1.85	68.71	36.7	41.9	36.7	41.9			
23	28	2293	2.00	63.96	37.2	42.1	37.2	42.1	**KH093-11P-132S-04E**	192	448
25	30	2125	2.15	59.28	37.6	42.3	37.6	42.3			
27	33	1939	2.35	54.07	38.0	42.5	38.0	42.5			
31	38	1678	2.70	46.81	38.5	42.9	38.5	42.9			
39	48	1331	2.10	37.13	39.0	42.7	39.0	42.7			
47	56	1125	2.50	31.39	39.3	43.0	39.3	43.0			
54	65	974	2.90	27.18	39.4	43.3	39.4	43.3			
14	17	3817	0.80	106.46	**	**	**	**			
16	19	3281	0.95	91.51	16.7	28.6	16.7	7.7			
18	22	2864	1.05	79.89	20.5	36.8	20.5	8.3			
21	26	2454	1.25	68.44	23.2	41.4	23.2	8.9			
22	27	2366	1.30	66.00	23.7	41.5	23.7	9.0			
23	28	2263	1.30	63.12	24.2	41.7	24.2	9.2			
25	30	2088	1.45	58.25	25.1	41.9	25.1	9.4			
27	32	1976	1.55	55.11	25.6	42.1	24.3	9.6			
30	36	1752	1.75	48.87	26.4	42.4	23.0	9.9	**KH083-11P-132S-04E**	142	444
32	39	1631	1.00	45.48	26.9	41.7	22.8	9.2			
36	43	1477	2.05	41.19	27.3	42.8	21.0	10.3			
41	49	1290	1.30	35.99	27.9	42.4	20.2	9.9			
47	56	1127	1.75	31.43	28.2	42.7	18.9	10.2			
53	64	996	1.95	27.78	28.5	43.0	17.8	10.5			
62	75	842	2.30	23.49	28.8	43.3	16.5	10.8			
73	87	724	2.65	20.19	29.0	43.5	15.3	11.0			
28	34	1854	0.85	51.72	12.2	15.2	12.2	3.9			
29	35	1820	0.90	50.75	12.6	15.2	12.6	4.0			
34	41	1528	1.05	42.61	15.3	15.8	15.3	4.6			
37	45	1404	1.15	39.17	16.2	16.1	15.7	4.8			
45	54	1162	1.35	32.40	17.7	16.6	15.0	5.3			
48	57	1104	0.85	30.79	18.0	15.6	14.4	4.3			
53	64	988	1.60	27.56	18.5	17.0	13.7	5.7			
61	73	867	1.10	24.17	19.0	16.3	13.3	5.0			
73	88	723	2.15	20.17	19.4	17.5	11.6	6.3	**KH073-11P-132S-04E**	101	442
75	91	697	2.25	19.45	19.5	17.6	11.5	6.3			
79	95	669	1.40	18.65	19.6	16.9	11.6	5.7			
88	106	596	2.65	16.61	19.8	17.8	10.6	6.5			
95	114	553	1.65	15.43	19.9	17.3	10.6	6.0			
112	135	470	1.95	13.12	20.0	17.5	9.7	6.3			
129	155	408	2.25	11.37	20.1	17.7	9.1	6.5			
153	184	344	2.65	9.60	20.2	17.9	8.4	6.7			
158	191	332	2.75	9.26	20.3	18.0	8.3	6.7			
60	73	869	0.90	24.25	7.9	12.5	7.9	2.6			
66	80	791	0.85	22.07	8.9	12.8	8.9	2.8			
73	88	717	1.05	20.00	9.6	13.0	9.6	3.0			
84	102	622	0.85	17.34	10.4	12.5	10.1	2.5			
89	108	588	1.20	16.40	10.6	13.4	9.9	3.4			
105	127	500	1.35	13.94	11.2	13.7	9.0	3.7			
111	134	473	1.10	13.19	11.3	13.1	9.1	3.2			
128	154	411	1.55	11.46	11.6	14.0	8.2	4.0			
133	160	396	1.60	11.05	11.7	14.0	8.0	4.1	**KH063-11P-132S-04E**	81	440
135	162	390	1.30	10.88	11.7	13.5	8.2	3.6			
161	194	326	1.80	9.09	11.9	14.2	7.3	4.3			
164	198	320	1.60	8.92	12.0	13.8	7.4	3.9			
193	233	272	1.80	7.58	12.1	14.0	6.8	4.1			
235	283	223	2.10	6.23	12.2	14.3	6.2	4.3			
244	294	215	2.15	6.01	12.2	14.3	6.1	4.3			
297	357	177	2.45	4.94	12.3	14.5	5.6	4.5			

P_N = 5.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
5.5 kW	6.6 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
74	89	707	0.85	19.73	3.8	5.5	3.8	3.2			
90	109	580	1.05	16.19	6.4	10.2	6.4	3.5			
98	118	537	0.80	14.98	**	**	**	**			
107	128	493	1.25	13.75	7.5	10.5	7.5	3.8			
129	155	409	1.05	11.40	8.3	10.2	8.3	3.5			
130	156	406	1.50	11.31	8.3	10.8	8.3	4.1			
134	162	391	1.55	10.91	8.4	10.8	8.4	4.1	**KH053-11P-132S-04E**	68	438
156	188	337	1.25	9.40	8.8	10.5	8.8	3.8			
163	197	322	1.80	8.97	8.9	11.0	8.7	4.3			
190	229	276	1.50	7.71	9.1	10.8	8.4	4.1			
224	269	235	1.80	6.55	9.3	10.9	7.7	4.2			
272	327	193	2.15	5.39	9.4	11.1	7.1	4.4			
282	340	186	2.25	5.19	9.4	11.2	6.9	4.5			
343	413	153	2.70	4.27	8.6	11.3	6.4	4.6			

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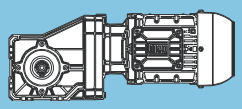
P_N = 7.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
7.5 kW	9.0 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
2.9	3.5	22598	0.80	507.30	**	**	**	**			
3.4	4.1	19344	0.95	436.93	72.2	115.2	72.2	115.2			
3.5	4.2	18517	1.00	419.11	76.0	115.9	76.0	115.9			
3.9	4.7	16629	1.10	377.93	83.4	117.3	83.4	117.3			
4.0	4.8	16243	1.15	369.91	84.7	117.6	84.7	117.6			
4.1	4.9	15851	1.15	360.98	86.1	117.9	86.1	117.9			
4.5	5.5	14130	1.30	323.79	91.2	119.2	91.2	119.2			
4.6	5.6	13904	1.30	318.60	91.9	119.4	91.9	119.4	**KH154-11P-L132M-04F**	725	462
4.7	5.7	13598	1.35	312.23	92.7	119.6	92.7	119.6			
5.3	6.4	11903	1.55	275.58	96.7	120.9	96.7	120.9			
5.5	6.6	11520	1.60	267.26	97.6	121.2	97.6	121.2			
5.6	6.8	11271	1.60	261.49	98.1	121.4	98.1	121.4			
6.3	7.7	9862	1.85	231.17	100.8	122.5	100.8	122.5			
6.5	7.9	9588	1.90	225.22	101.2	122.7	101.2	122.7			
7.5	9.1	8191	2.20	194.80	103.4	123.8	103.4	123.8			
3.8	4,6	17145	0,80	384,88	**	**	**	**			
3.9	4.7	16930	0.80	380.06	**	**	**	**			
4.4	5.3	14703	0.90	331.43	64.2	82.8	64.2	82.8			
4.5	5.4	14524	0.90	327.38	64.9	82.9	64.9	82.9			
4.6	5.5	14124	0.95	319.02	66.5	83.3	66.5	83.3			
4.8	5.8	13591	1.00	307.62	68.4	83.9	68.4	83.9			
5.2	6.2	12510	1.05	283.73	72.0	85.0	72.0	85.0			
5.3	6.4	12239	1.10	278.15	72.8	85.2	72.8	85.2			
5.5	6.6	11778	1.15	268.22	74.2	85.7	74.2	85.7	**KH124-11P-L132M-04F**	471	458
5.6	6.7	11540	1.15	262.80	74.9	85.9	74.9	85.9			
6.0	7.2	10685	1.25	244.33	77.1	86.8	77.1	86.8			
6.1	7.4	10477	1.25	239.59	77.6	87.0	77.6	87.0			
6.3	7.7	10083	1.30	231.04	78.5	87.4	78.5	87.4			
6.4	7.7	9979	1.35	229.14	78.8	87.5	78.8	87.5			
7.1	8.6	8930	1.50	206.32	81.0	88.5	81.0	88.5			
7.4	8.9	8593	1.55	198.95	81.6	88.9	81.6	88.9			
8.6	10	7266	1.80	169.97	83.9	90.2	83.9	90.2			
9.7	12	7388	1.80	151.11	83.7	90.1	83.7	90.1			
11	13	6442	2.05	131.76	85.1	91.0	85.1	91.0			
12	14	6212	2.10	127.05	85.4	91.3	85.4	91.3			
13	16	5549	2.35	113.49	86.2	91.9	86.2	91.9	**KH123-11P-L132M-04F**	447	456
15	18	4778	2.75	97.73	87.0	92.7	87.0	92.7			
30	36	2403	2.50	49.16	88.7	95.1	88.7	95.1			
52	63	1370	2.50	28.03	87.3	95.8	87.3	95.8			
6.3	7,6	10398	0,80	233.43	**	**	**	**			
6.4	7.8	10163	0.80	228.15	**	**	**	**			
6.7	8.0	9780	0.85	220.00	35.1	58.0	35.1	58.0			
6.8	8.2	9625	0.85	216.51	36.3	58.2	36.3	58.2	**KH104-11P-L132M-04F**	348	454
7.4	9.0	8727	0.95	197.12	42.0	59.2	42.0	59.2			
7.7	9.3	8398	1.00	190.08	43.8	59.6	43.8	59.6			
7.8	9.4	8304	1.00	187.95	44.3	59.7	44.3	59.7			
9.0	11	7131	1.15	162.39	49.5	61.0	49.5	61.0			
10	13	6891	1.20	140.95	50.4	61.3	50.4	61.3			
12	14	6087	1.35	124.50	53.2	62.2	53.2	62.2			
14	16	5284	1.55	108.07	55.5	63.1	55.5	63.1			
16	19	4565	1.80	93.37	57.2	64.0	57.2	64.0			
18	22	3906	2.05	79.90	58.5	64.7	58.5	64.7	**KH103-11P-L132M-04F**	324	452
21	26	3374	2.40	69.01	59.4	65.3	59.4	65.3			
28	33	2604	2.30	53.27	60.4	66.2	60.4	66.2			
37	45	1925	2.50	39.38	61.1	67.0	61.1	67.0			
48	58	1483	2.30	30.33	61.1	67.1	61.1	67.1			
65	79	1096	2.50	22.42	55.1	67.6	55.1	67.6			

Legend see page 337

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P_N = 7.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
7.5 kW	9.0 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
13	16	5363	0.85	109.70	21.0	35.2	21.0	35.2			
15	19	4640	1.00	94.90	27.0	39.1	27.0	39.1			
16	19	4474	1.05	91.51	28.1	39.3	28.1	39.3			
18	22	3947	1.15	80.74	31.1	40.0	31.1	40.0			
21	26	3359	1.35	68.71	33.8	40.7	33.8	40.7			
23	28	3127	1.45	63.96	34.7	41.0	34.7	41.0			
25	30	2898	1.60	59.28	35.4	41.3	35.4	41.3			
27	33	2644	1.75	54.07	36.2	41.6	36.2	41.6			
31	38	2289	2.00	46.81	37.2	42.1	37.2	42.1	**KH093-11P-L132M-04F**	206	448
35	43	2027	2.25	41.46	37.8	42.4	37.8	42.4			
39	48	1815	1.55	37.13	38.2	41.8	38.2	41.8			
41	49	1753	2.60	35.86	38.3	42.8	38.3	42.8			
42	51	1691	2.50	34.58	38.5	42.9	38.5	42.9			
47	56	1535	1.85	31.39	38.7	42.3	38.7	42.3			
54	65	1329	2.15	27.18	39.0	42.7	39.0	42.7			
61	74	1177	2,55	24,07	39,2	42,9	39,2	42,9			
70	85	1018	2.95	20.82	39.4	43.2	39.4	43.2			
73	88	982	2.50	20.08	39.4	43.3	39.4	43.3			
18	22	3906	0.80	79.89	**	**	**	**			
21	26	3346	0.90	68.44	16.0	27.1	16.0	7.6			
22	27	3227	0.95	66.00	17.3	29.8	17.3	7.7			
23	28	3086	0.95	63.12	18.6	32.6	18.6	7.9			
25	30	2848	1.10	58.25	20.6	37.0	20.6	8.3			
27	32	2694	1.15	55.11	21.7	39.4	21.7	8.5			
30	36	2381	1,30	48,71	23,6	41,5	23,6	9,0			
36	43	2013	1.50	41.18	25.4	42.0	22.9	9.5			
36	43	2014	1.50	41.19	25.4	42.0	22.9	9.5			
41	49	1760	0.95	35.99	26.4	41.5	22.0	9.0			
47	56	1537	1.25	31.43	27.2	41.9	20.5	9.4			
47	57	1511	2.00	30.91	27.2	42.8	19.8	10.3	**KH083-11P-L132M-04F**	156	444
53	64	1358	1.40	27.78	27.7	42.3	19.2	9.8			
55	67	1295	2.30	26.48	27.8	43.1	18.3	10.6			
57	69	1249	2.40	25.54	28.0	43.2	18.0	10.7			
62	75	1148	1.70	23.49	28,2	42,7	17.7	10,2			
65	79	1102	2.60	22.54	28.3	43.4	16.9	10.9			
73	88	987	1.95	20.19	28.5	43.0	16.3	10.5			
77	94	925	2.95	18.91	28.6	43.6	15.5	11.1			
83	100	862	2.25	17.63	28.7	43.3	15.3	10.8			
97	117	738	2.65	15.10	28.9	43.5	14.3	11.0			
101	122	712	2,50	14,56	29.0	43.6	14.0	11.1			
37	45	1915	0.85	39.17	11.4	15.0	11.4	3.8			
45	55	1584	1.00	32.40	14.9	15.7	13.3	4.5			
53	64	1347	1.20	27.56	16.6	16.2	13.4	5.0			
61	73	1182	0.80	24.17	**	**	**	**			
73	88	986	1.60	20.17	18.5	17.0	12.7	5.7			
75	91	951	1.65	19.45	18.7	17.0	12.5	5.8			
79	95	912	1.00	18.65	18.8	16.2	12.3	4.9			
88	107	812	1.95	16.61	19.2	17.3	11.5	6.1	**KH073-11P-L132M-04F**	115	442
95	115	754	1.25	15.43	19.3	16.6	11.5	5.4			
112	135	641	1.45	13.12	19.7	17.0	10.6	5.7			
129	156	556	1.65	11.37	19,9	17.3	9.8	6.0			
153	184	469	1.95	9.60	20.0	17.5	9.0	6.3			
158	191	453	2.05	9.26	20.1	17.6	8.8	6.3			
185	224	387	2.40	7.91	20.2	17.8	8.2	6.5			

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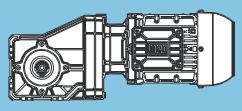
P_N = 7.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
7.5 kW	9.0 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
73	89	978	0.80	20.00	**	**	**	**			
89	108	802	0.90	16.40	8.8	12.7	8.8	2.8			
105	127	682	1.00	13.94	9.9	13.1	9.2	3.2			
111	134	645	0.80	13.19	**	**	**	**			
128	154	560	1.15	11.46	10.8	13.5	9.0	3.5			
133	160	540	1.15	11.05	10.9	13.5	8.8	3.6			
135	163	532	0.95	10.88	11.0	12.9	8.6	2.9	**KH063-11P-L132M-04F**	95	440
161	195	444	1.35	9.09	11.5	13.9	7.9	3.9			
164	198	436	1.15	8.92	11.5	13.3	8.1	3.4			
193	234	371	1.35	7.58	11.8	13.6	7.4	3.6			
235	284	305	1.55	6.23	12.0	13.9	6.7	3.9			
244	295	294	1.55	6.01	12.0	13.9	6.6	4.0			
297	358	242	1.80	4.94	12.2	14.2	6.0	4.2			
90	109	792	0.80	16.19	**	**	**	**			
107	129	672	0.90	13.75	4.7	7.4	4.7	3.3			
130	156	553	1.10	11.31	6.8	10.3	6.8	3.6			
134	162	533	1.15	10.91	7.0	10.4	7.0	3.7			
156	188	460	0.90	9.40	7.8	9.9	7.8	3.2			
163	197	439	1.30	8.97	8.0	10.7	8.0	4.0	**KH053-11P-L132M-04F**	82	438
190	230	377	1.10	7.71	8.5	10.3	8.5	3.6			
224	270	320	1.30	6.55	8.9	10.6	8.3	3.9			
272	328	264	1.60	5.39	9.2	10.8	7.5	4.1			
282	341	254	1.65	5.19	9.2	10.9	7.4	4.2			
343	415	209	2.00	4.27	9.0	11.1	6.7	4.4			

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P_N = 9.2 kW										IE3
50 Hz	60 Hz				at 50 Hz					
9.2 kW	11 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
3.4	4.1	23831	0.80	434.63	**	**	**	**			
3.5	4.2	22980	0.80	419.11	**	**	**	**			
3.9	4.7	20637	0.90	377.93	65.5	114.3	65.5	114.3			
4.0	4.9	19671	0.95	360.98	70.6	115.0	70.6	115.0			
4.5	5.5	17572	1.05	323.79	79.9	116.6	79.9	116.6			
4.6	5.5	17291	1.05	318.60	81.0	116.8	81.0	116.8			
4.7	5.7	16910	1.10	312.23	82.4	117.1	82.4	117.1	**KH154-11P-L132M-04G**	730	462
5.3	6.4	14834	1.25	275.58	89.2	118.7	89.2	118.7			
5.5	6.6	14356	1.30	267.26	90.6	119.0	90.6	119.0			
5.6	6.7	14046	1.30	261.49	91.5	119.3	91.5	119.3			
6.3	7.6	12316	1.50	231.17	95.8	120.6	95.8	120.6			
6.5	7.8	11974	1.55	225.22	96.6	120.9	96.6	120.9			
7.5	9.1	10250	1.80	194.80	100.1	122.2	100.1	122.2			
4.7	5.7	16867	0.80	307.62	**	**	**	**			
5.1	6.2	15525	0.85	283.73	60.7	81.9	60.7	81.9			
5.2	6,3	15426	0,85	281,92	61,1	82,0	61,1	82,0			
5.4	6.6	14646	0.90	268.22	64.4	82.8	64.4	82.8			
5.6	6.7	14321	0.95	262.80	65.7	83.1	65.7	83.1			
6.0	7.2	13287	1.00	244.33	69.5	84.2	69.5	84.2			
6.1	7.4	13029	1.00	239.59	70.4	84.4	70.4	84.4	**KH124-11P-L132M-04G**	476	458
6.3	7.6	12539	1.05	231.04	71.9	84.9	71.9	84.9			
6.4	7.7	12436	1.05	229.14	72.3	85.0	72.3	85.0			
7.1	8.6	11128	1.20	206.32	76.0	86.3	76.0	86.3			
7.3	8.9	10709	1.25	198.95	77.0	86.8	77.0	86.8			
7.4	8,9	10624	1,25	197,38	77,2	86,9	77,2	86,9			
8.6	10	9074	1.45	169.97	80.7	88.4	80.7	88.4			
9.7	12	9094	1.45	151.11	80.6	88.4	80.6	88.4			
11	13	7929	1.65	131.76	82.8	89.6	82.8	89.6			
13	16	6830	1.95	113.49	84.5	90.7	84.5	90.7			
15	18	5881	2.25	97.73	85.8	91.6	85.8	91.6			
17	21	5137	2.55	85.37	86.6	92.4	86.6	92.4	**KH123-11P-L132M-04G**	452	456
25	30	3519	2.50	58.47	88.1	94.0	88.1	94.0			
30	36	2958	2.00	49.16	88.4	94.5	88.4	94.5			
44	53	2006	2.50	33.34	88,9	95,0	88,9	95,0			
52	63	1687	2.00	28.03	88.1	95.4	88.1	95.4			
7.7	9.3	10422	0.80	190.08	**	**	**	**			
7.8	9.4	10305	0.80	187.95	**	**	**	**	**KH104-11P-L132M-04G**	353	454
9.0	11	8849	0.95	162.39	41.3	59.1	41.3	59.1			
10	13	8482	0.95	140.95	43.3	59.5	43.3	59.5			
12	14	7492	1.10	124.50	48.0	60.6	48.0	60.6			
14	16	6503	1.25	108.07	51.8	61.7	51.8	61.7			
16	19	5619	1.45	93.37	54.6	62.7	54.6	62.7			
18	22	4808	1.70	79.90	56.6	63.7	56.6	63.7			
21	26	4153	1.95	69.01	58.0	64.4	58.0	64.4	**KH103-11P-L132M-04G**	329	452
27	33	3206	1.90	53.27	59.6	65.5	59.6	65.5			
31	38	2831	2.65	47.05	60.1	65.9	60.1	65.9			
37	45	2370	2.00	39.38	60.7	66.5	60.7	66.5			
48	58	1825	1.90	30,33	61,2	66,6	61,2	66,6			
54	66	1612	2.65	26.79	59.4	66.9	59.4	66.9			
65	79	1349	2.00	22.42	55.7	67.3	55.7	67.3			

Legend see page 337

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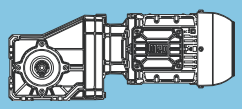
P_N = 9.2 kW											IE3
50 Hz	60 Hz				at 50 Hz						
9.2 kW	11 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
15	19	5711	0.80	94.90	**	**	**	**	**KH093-11P-L132M-04G**	211	448
16	19	5507	0.85	91.51	19.4	31.8	19.4	31.8			
18	22	4859	0.95	80.74	25.4	38.8	25.4	38.8			
21	26	4135	1.10	68.71	30.1	39.7	30.1	39.7			
23	28	3849	1.20	63.96	31.6	40.1	31.6	40.1			
25	30	3567	1.30	59.28	32.9	40.5	32.9	40.5			
27	33	3254	1.40	54.07	34.2	40.9	34.2	40.9			
31	38	2817	1.60	46.81	35.7	41.4	35.7	41.4			
35	43	2495	1.85	41.46	36.7	41.8	36.7	41.8			
39	48	2234	1.25	37.13	37.3	41.1	37.3	41.1			
41	49	2158	2.10	35.86	37.5	42.3	37.5	42.3			
42	51	2081	2.00	34.58	37.7	42.4	37.7	42.4			
47	56	1889	1.50	31.39	38.1	41.7	38.1	41.7			
48	58	1836	2.50	30.51	38.2	42.7	38.2	42.7			
54	65	1636	1.75	27.18	38.6	42.2	38.6	42.2			
56	68	1563	2.90	25.97	38.7	43.0	38.7	43.0			
61	73	1448	2.10	24.07	38.9	42.5	38.9	42.5			
70	85	1253	2.40	20.82	39.1	42.8	39.1	42.8			
73	88	1208	2.00	20.08	39.2	42.9	39.2	42.9			
82	100	1066	2.85	17.72	39.3	43.1	39.3	43.1			
22	27	3972	0.80	66.00	**	**	**	**	**KH083-11P-L132M-04G**	161	444
23	28	3798	0.80	63.12	**	**	**	**			
25	30	3505	0.90	58.25	14.0	22.8	14.0	7.3			
26	32	3316	0.95	55.11	16.3	27.7	16.3	7.6			
30	36	2941	1.05	48.87	19.9	35.5	19.9	8.2			
35	43	2479	1.25	41.19	23.0	41.3	23.0	8.8			
41	49	2166	0.80	35.99	**	**	**	**			
46	56	1891	1.05	31.43	25.9	41.2	21.9	8.7			
47	57	1860	1.65	30.91	26.0	42.3	21.0	9.8			
53	64	1672	1.15	27.78	26.7	41.6	20.4	9.1			
55	67	1594	1.90	26.48	27.0	42.6	19.3	10.1			
57	69	1537	1.95	25.54	27.2	42.7	19.0	10.2			
62	75	1414	1.40	23.49	27.5	42.2	18.7	9.7			
65	78	1356	2.10	22.54	27.7	43.0	17.8	10.5			
72	87	1215	1.60	20.19	28.0	42.6	17.3	10.1			
77	93	1138	2.40	18.91	28.2	43.3	16.3	10.8			
83	100	1061	1.85	17.63	28.4	42.9	16.1	10.4			
92	111	959	2.70	15.93	28.6	43.6	14.9	11.1			
97	117	909	2.15	15.10	28.7	43.2	14.9	10.7			
100	121	876	2.00	14.56	28.7	43.2	14.7	10.7			
114	137	773	2.55	12.85	28.9	43.4	13.8	10.9			
135	164	649	3.00	10.78	29.0	43.7	12.7	11.2			
45	54	1950	0.80	32.40	**	**	**	**	**KH073-11P-L132M-04G**	120	442
53	64	1659	0.95	27.56	14.2	15.6	11.8	4.3			
61	74	1437	1.10	23.88	16.0	16.0	12.0	4.8			
72	88	1214	1.30	20.17	17.4	16.5	12.1	5.2			
75	91	1170	1.35	19.45	17.6	16.6	12.1	5.3			
78	95	1122	0.85	18.65	17.9	15.5	11.2	4.2			
88	106	1000	1.60	16.61	18.5	16.9	12.0	5.7			
95	114	929	1.00	15.43	18.7	16.1	11.2	4.8			
111	135	790	1.20	13.12	19.2	16.5	11.2	5.3			
128	155	684	1.35	11.37	19.6	16.9	10.4	5.6			
152	184	578	1.60	9.60	19.8	17.2	9.5	5.9			
158	191	557	1.65	9.26	19.9	17.3	9.3	6.0			
185	223	476	1.95	7.91	20.0	17.5	8.6	6.3			
105	127	839	0.80	13.94	**	**	**	**			

Legend see page 337

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P_N = 9.2 kW											IE3
50 Hz	60 Hz				at 50 Hz						
9.2 kW	11 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
105	127	839	0.80	13.94	**	**	**	**			
127	154	690	0.95	11.46	9.9	13.1	8.3	3.1			
132	160	665	0.95	11.05	10.1	13.2	8.3	3.2			
134	162	655	0.80	10.88	**	**	**	**			
161	194	547	1.10	9.09	10.9	13.5	8.2	3.6			
164	198	537	0.95	8.92	11.0	12.9	7.8	2.9	**KH063-11P-L132M-04G**	100	440
193	233	456	1.10	7.58	11.4	13.2	7.8	3.3			
234	283	375	1.25	6.23	11.8	13.6	7.1	3.6			
243	294	362	1.30	6.01	11.8	13.6	7.0	3.7			
296	357	297	1.45	4.94	12	13.9	6.3	4.0			
129	156	681	0.90	11.31	4.5	6.9	4.5	3.2			
134	162	657	0.95	10.91	5.1	8.2	5.1	3.3			
163	197	540	1.05	8.97	6.9	10.4	6.9	3.7			
189	229	464	0.90	7.71	7.8	9.9	7.8	3.2			
223	269	394	1.05	6.55	8.4	10.2	8.4	3.5	**KH053-11P-L132M-04G**	87	438
271	327	324	1.30	5.39	8.8	10.5	8.0	3.8			
281	340	312	1.35	5.19	8.9	10.6	7.8	3.9			
342	413	257	1.65	4.27	9.2	10.8	7.1	4.1			

Legend see page 337

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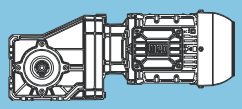
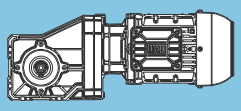
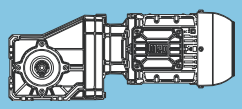
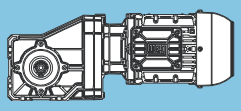
P_N = 11 kW											IE3
50 Hz	60 Hz				at 50 Hz						
11 kW	13 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
4.5	5.5	20996	0.90	323.79	63.4	110.8	63.4	110.8	**KH154-22P-160M-04E**	792	462
4.6	5.6	20660	0.90	318.60	65.4	114.2	65.4	114.2			
4.7	5.7	20121	0.90	310.30	68.3	114.6	68.3	114.6			
5.3	6.4	17760	1.05	275.58	79.1	116.4	79.1	116.4			
5.5	6.6	17224	1.05	267.26	81.2	116.9	81.2	116.9			
5.6	6.8	16818	1.10	261.49	82.7	117.2	82.7	117.2			
6.4	7.7	14776	1.25	231.17	89.4	118.7	89.4	118.7			
6.5	7.9	14366	1.30	225.22	90.6	119.0	90.6	119.0			
6.9	8.3	13648	1.35	214.39	92.6	119.6	92.6	119.6			
7.5	9.1	12324	1.50	194.80	95.8	120.6	95.8	120.6			
8.0	9.6	11658	1.55	184.65	97.3	121.1	97.3	121.1			
9.2	11	9960	1.85	159.72	100.6	122.4	100.6	122.4			
10	12	10483	1.75	146.69	99.6	122.0	99.6	122.0	**KH153-22P-160M-04E**	746	460
12	14	9029	2.00	126.34	102.1	123.1	102.1	123.1			
13	16	7809	2.35	109.28	103.9	124.0	103.9	124.0			
15	18	6888	2,65	96,39	105,1	124,7	105,1	124,7			
26	31	4056	2.70	56.75	107.7	126.9	107.7	126.9			
41	50	2546	2.70	35.63	108.5	127.4	108.5	127.4			
5.6	6.8	17111	0.80	262.80	**	**	**	**	**KH124-22P-160M-04E**	538	458
6.0	7.3	15876	0.85	244.33	59	81.6	59	81.6			
6.1	7.4	15568	0.85	239.59	60.5	81.9	60.5	81.9			
6.4	7.7	14859	0.90	229.14	63.6	82.6	63.6	82.6			
7.1	8.6	13324	1.00	206.32	69.4	84.1	69.4	84.1			
7.4	9	12721	1.05	197.38	71.4	84.8	71.4	84.8			
8.6	10	10887	1,20	169,97	76.6	86.6	76.6	86.6			
9.7	12	10799	1.25	151.11	76.8	86.7	76.8	86.7	**KH123-22P-160M-04E**	514	456
11	13	9416	1.40	131.76	80.0	88.1	80.0	88.1			
13	16	8110	1.65	113.49	82.5	89.4	82.5	89.4			
15	18	6984	1.90	97.73	84.3	90.5	84.3	90.5			
17	21	6101	2.15	85.37	85.5	91.4	85.5	91.4			
20	24	5270	2.50	73.74	86.5	92.2	86.5	92.2			
24	29	4358	3.00	60.98	87.4	93.1	87.4	93.1			
25	30	4178	2.10	58.47	87.6	93.3	87.6	93.3			
29	35	3643	2,70	50,98	88,0	93,8	88,0	93,8			
44	53	2383	2.10	33.34	88.8	94.6	88.8	94.6			
51	61	2077	2.70	29.07	88.9	94.9	88.9	94.9			
9.1	11	10573	0.80	162.39	**	**	**	**	**KH104-22P-160M-04E**	415	454
12	14	8897	0.90	124.50	41.0	59.0	41.0	59.0	**KH103-22P-160M-04E**	391	452
14	16	7723	1.05	108.07	47.0	60.3	47.0	60.3			
16	19	6672	1.20	93.37	51.2	61.5	51.2	61.5			
18	22	5710	1.45	79.90	54.3	62.6	54.3	62.6			
21	26	4932	1.65	69,01	56,3	63,5	56,3	63,5			
25	30	4171	1.95	58.36	58.0	64.4	58.0	64.4			
31	37	3403	2.40	47.62	59.3	65.3	59.3	65.3			
36	43	2919	2.60	40.84	60.0	65.8	60.0	65.8			
38	46	2761	2.90	38.64	60.2	66.0	60.2	66.0			
42	50	2522	3.00	35.29	60.5	66.3	60.5	66.3			
55	66	1914	2.25	26,79	59,9	66,5	59,9	66,5			
63	76	1662	2.60	23.25	57.1	66.8	57.1	66.8			
73	88	1436	3.00	20.09	54.2	67.2	54.2	67.2			
18	22	5770	0.80	80,74	**	**	**	**	**KH093-22P-160M-04E**	273	448
21	26	4910	0.95	68.71	25.0	38.8	25.0	38.8			
25	30	4236	1.10	59.28	29.6	39.6	29.6	39.6			
30	36	3554	1.30	49.73	33.0	40.5	33.0	40.5			
35	43	2963	1.55	41.46	35.2	41.2	35.2	41.2			
36	44	2889	1.60	40.43	35.5	41.3	35.5	41.3			
41	49	2563	1.80	35.86	36.5	41.7	36.5	41.7			
47	56	2259	2.00	31.61	37.3	42.1	37.3	42.1			
48	58	2180	2.10	30.51	37.5	42.2	37.5	42.2			
57	68	1856	2.45	25.97	38.2	42.6	38.2	42.6			
61	74	1720	1.75	24.07	38.4	42.0	38.4	42.0			
66	79	1601	2.85	22.40	38.6	43.0	38.6	43.0			
71	85	1488	2.05	20.82	38.8	42.4	38.8	42.4			
83	100	1266	2.40	17.72	39.1	42.8	39.1	42.8			
97	118	1078	2.80	15.08	39.3	43.1	39.3	43.1			

P_N = 11 kW											IE3
50 Hz	60 Hz				at 50 Hz						
11 kW	13 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
30	36	3492	0.90	48.87	14.2	23.2	14.2	7.3			
36	43	2943	1.05	41.18	19.8	35.3	19.8	8.2			
44	53	2413	1.25	33.76	23.4	41.4	22.4	8.9			
48	57	2209	1.40	30.91	24.5	41.7	22.1	9.2			
56	67	1892	1.60	26.48	25.9	42.2	20.3	9.7			
65	79	1611	1.80	22.54	26.9	42.6	18.6	10.1			
78	94	1351	2.00	18.91	27.7	43.0	17.0	10.5	**KH083-22P-160M-04E**	223	444
83	101	1260	1.55	17.63	27.9	42.5	16.9	10.0			
92	111	1138	2.25	15.93	28.2	43.3	15.6	10.8			
97	118	1079	1.80	15.10	28.3	42.8	15.6	10.3			
113	136	933	2.60	13.06	28.6	43.6	14.1	11.1			
114	138	918	2.15	12.85	28.6	43.2	14.4	10.7			
136	165	770	2.55	10.78	28.9	43.5	13.2	11.0			
162	195	650	3.00	9.09	29.0	43.7	12.1	11.2			
62	74	1707	0.95	23.88	13.8	15.5	10.5	4.2			
73	88	1441	1.10	20.17	16.0	16.0	10.8	4.8			
89	107	1187	1.35	16.61	17.6	16.5	11.0	5.3	**KH073-22P-160M-04E**	182	442
129	156	813	1.15	11.37	19.2	16.5	10.3	5.2			
153	185	686	1.35	9.60	19.5	16.9	10.0	5.6			
186	224	565	1.65	7.91	19.8	17.2	9.0	6.0			

Legend see page 337

P_N = 15 kW										IE3
50 Hz	60 Hz				at 50 Hz					
15 kW	18 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
5.5	6.6	23811	0.80	267.26	**	**	**	**	**KH154-22P-160L-04F**	815	462
5.6	6.8	23296	0.80	261.49	**	**	**	**			
6.3	7.7	20511	0.90	231.17	66.2	114.3	66.2	114.3			
6.5	7.9	19942	0.95	225.22	69.2	114.8	69.2	114.8			
6.8	8.3	18983	0.95	214.39	73.9	115.5	73.9	115.5			
7.5	9.1	17178	1.05	194.80	81.4	116.9	81.4	116.9			
7.9	9.6	16216	1.15	184.65	84.8	117.6	84.8	117.6			
9.2	11	13941	1.30	159.72	91.8	119.4	91.8	119.4			
10	12	14344	1.30	146.69	90.7	119.1	90.7	119.1	**KH153-22P-160L-04F**	769	460
12	14	12354	1.50	126.34	95.7	120.6	95.7	120.6			
13	16	10686	1.70	109.28	99.3	121.8	99.3	121.8			
15	18	9425	1.95	96.39	101.5	122.8	101.5	122.8			
18	21	8095	2.25	82.79	103.5	123.8	103.5	123.8			
21	26	6735	2.70	68.88	105.3	124.9	105.3	124.9			
26	31	5549	1.95	56.75	106.5	125.8	106.5	125.8			
30	36	4780	3.00	48.88	107.1	126.4	107.1	126.4			
41	50	3484	1.95	35.63	108.0	126.4	108.0	126.4			
48	58	3001	3.00	30.69	108.3	126.9	108.3	126.9			
8.6	10	15081	0.90	169.97	62.6	82.4	62.6	82.4	**KH124-22P-160L-04F**	561	458
9.7	12	14776	0.90	151.11	63.9	82.7	63.9	82.7	**KH123-22P-160L-04F**	537	456
11	13	12884	1.05	131.76	70.8	84.6	70.8	84.6			
13	16	11097	1.20	113.49	76.0	86.4	76.0	86.4			
15	18	9556	1.40	97.73	79.7	87.9	79.7	87.9			
17	21	8348	1.60	85.37	82.1	89.1	82.1	89.1			
20	24	7210	1.85	73.74	84.0	90.3	84.0	90.3			
24	29	5963	2.20	60.98	85.7	91.5	85.7	91.5			
25	30	5717	1.55	58.47	86.0	91.8	86.0	91.8			
29	35	4985	1.95	50.98	86.8	92.5	86.8	92.5			
33	40	4294	3.00	43.91	87.5	93.2	87.5	93.2			
44	53	3260	1.55	33.34	88.3	93.5	88.3	93.5			
50	61	2843	1.95	29.07	88.5	94.0	88.5	94.0			
59	71	2448	3.00	25.04	86.8	94.5	86.8	94.5			
14	16	10567	0.80	108.07	**	**	**	**	**KH103-22P-160L-04F**	414	452
16	19	9130	0.90	93.37	39.6	58.7	39.6	58.7			
18	22	7813	1.05	79.90	46.6	60.2	46.6	60.2			
21	26	6748	1.20	69.01	51.0	61.5	51.0	61.5			
25	30	5707	1.45	58.36	54.3	62.6	54.3	62.6			
31	37	4656	1.75	47.62	57.0	63.8	57.0	63.8			
36	43	3993	1.90	40.84	58.3	64.6	58.3	64.6			
38	46	3778	2.15	38.64	58.7	64.9	58.7	64.9			
42	50	3451	2.20	35.29	59.3	65.2	59.3	65.2			
49	59	2953	2.55	30.20	60.0	65.8	60.0	65.8			
55	66	2620	1.65	26.79	60.4	65.5	60.4	65.5			
56	68	2550	2.95	26.08	60.5	66.3	60.5	66.3			
63	76	2273	1.90	23.25	58.7	66.0	58.7	66.0			
73	88	1964	2.20	20.09	55.6	66.4	55.6	66.4			
85	103	1681	2.55	17.19	52.6	66.8	52.6	66.8			
99	120	1452	2.95	14.85	49.8	67.1	49.8	67.1			
25	30	5796	0.80	59.28	**	**	**	**	**KH093-22P-160L-04F**	296	448
29	36	4863	0.95	49.73	25.4	38.8	25.4	38.8			
35	43	4054	1.15	41.46	30.6	39.8	30.6	39.8			
36	44	3953	1.15	40.43	31.1	40.0	31.1	40.0			
41	49	3506	1.30	35.86	33.2	40.5	33.2	40.5			
46	56	3091	1.50	31.61	34.8	41.1	34.8	41.1			
48	58	2983	1.55	30.51	35.2	41.2	35.2	41.2			
56	68	2539	1.80	25.97	36.5	41.8	36.5	41.8			
61	74	2354	1.30	24.07	37.0	40.9	37.0	40.9			
65	79	2190	2.10	22.40	37.4	42.2	37.4	42.2			
70	85	2036	1.50	20.82	37.8	41.5	37.8	41.5			
78	94	1837	2.45	18.79	38.2	42.7	38.2	42.7			
83	100	1733	1.75	17.72	38.4	42.0	38.4	42.0			
97	118	1475	2.05	15.08	38.8	42.4	38.8	42.4			
113	136	1272	2.40	13.01	39.1	42.8	39.1	42.8			
134	163	1067	2.85	10.91	36.7	43.1	36.7	43.1			

P_N = 15 kW											IE3
50 Hz	60 Hz				at 50 Hz						
15 kW	18 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
43	53	3301	0.95	33.76	16.5	28.1	16.5	7.6			
47	57	3022	1.00	30.91	19.2	33.9	19.1	8.0			
55	67	2589	1.15	26.48	22.4	41.0	19.3	8.7			
65	79	2204	1.30	22.54	24.5	41.7	19.3	9.2			
77	94	1849	1.50	18.91	26.1	42.3	18.8	9.8			
83	101	1724	1.15	17.63	26.5	41.5	18.3	9.0			
92	111	1558	1.65	15.93	27.1	42.7	17.0	10.2	**KH083-22P-160L-04F**	246	444
97	118	1477	1.35	15.10	27.3	42.0	17.1	9.5			
112	136	1277	1.90	13.06	27.9	43.1	15.3	10.6			
114	138	1256	1.55	12.85	27.9	42.5	15.7	10.0			
136	165	1054	1.85	10.78	28.4	42.9	14.3	10.4			
161	195	889	2.20	9.09	28.7	43.2	13.1	10.7			
197	238	728	2.70	7.45	28.9	43.5	11.8	11.0			
73	88	1972	0.80	20.17	**	**	**	**			
88	107	1624	1.00	16.61	14.5	15.6	8.8	4.4			
129	156	1112	0.85	11.37	17.9	15.5	8.5	4.3	**KH073-22P-160L-04F**	205	442
153	185	939	1.00	9.60	18.7	16.1	8.7	4.8			
185	224	773	1.20	7.91	19.3	16.6	8.8	5.3			

Legend see page 337

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P_N = 18.5 kW										IE3
50 Hz	60 Hz				at 50 Hz					
18.5 kW	22 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
6.9	8.3	23477	0.80	214.39	**	**	**	**			
7.5	9.1	21288	0.85	194.80	61.7	107.2	61.7	107.2	**KH154-22P-180M-04E**	829	462
8.0	9.6	20138	0.90	184.65	68.2	114.6	68.2	114.6			
9.2	11	17312	1.05	159.72	80.9	116.8	80.9	116.8			
10	12	17630	1.05	146.69	79.7	116.5	79.7	116.5			
12	14	15184	1.20	126.34	88.2	118.4	88.2	118.4			
13	16	13134	1.40	109.28	93.9	120.0	93.9	120.0			
15	18	11585	1.60	96.39	97.4	121.2	97.4	121.2			
18	21	9950	1.85	82.79	100.6	122.4	100.6	122.4			
21	26	8278	2.20	68.88	103.3	123.7	103.3	123.7	**KH153-22P-180M-04E**	783	460
26	31	6821	1.60	56.75	105.2	124.8	105.2	124.8			
26	31	6869	2.65	57.15	105.1	124.8	105.1	124.8			
30	36	5875	2.45	48.88	106.2	125.5	106.2	125.5			
41	50	4282	1.60	35.63	107.5	125.6	107.5	125.6			
48	58	3689	2.45	30.69	107.9	126.2	107.9	126.2			
11	13	15836	0.85	131.76	59.2	81.6	59.2	81.6			
13	16	13640	1.00	113.49	68.3	83.8	68.3	83.8			
15	18	11746	1.15	97.73	74.3	85.7	74.3	85.7			
17	21	10260	1.30	85.37	78.1	87.2	78.1	87.2			
20	24	8863	1.50	73.74	81.1	88.6	81.1	88.6			
24	29	7329	1.80	60.98	83.8	90.2	83.8	90.2	**KH123-22P-180M-04E**	551	456
29	35	6127	1.60	50.98	85.5	91.4	85.5	91.4			
33	40	5277	2.45	43.91	86.5	92.2	86.5	92.2			
36	43	4958	2.65	41.25	86.8	92.5	86.8	92.5			
39	47	4544	2.90	37.81	87.2	92.9	87.2	92.9			
51	61	3494	1.60	29.07	88.1	93.2	88.1	93.2			
59	71	3009	2.45	25.04	88.2	93.8	88.2	93.8			
18	22	9603	0.85	79.90	36.4	58.2	36.4	58.2			
21	26	8294	1.00	69.01	44.3	59.7	44.3	59.7			
25	30	7014	1.15	58.36	50.0	61.2	50.0	61.2			
31	37	5723	1.40	47.62	54.3	62.6	54.3	62.6			
36	43	4908	1.55	40.84	56.4	63.6	56.4	63.6			
38	46	4644	1.75	38.64	57.0	63.9	57.0	63.9			
42	50	4241	1.80	35.29	57.9	64.3	57.9	64.3			
48	58	3708	2.20	30.85	58.8	64.9	58.8	64.9			
49	59	3630	2.10	30.20	59.0	65.0	59.0	65.0	**KH103-22P-180M-04E**	428	452
56	68	3134	2.40	26.08	59.7	65.6	59.7	65.6			
63	76	2794	1.55	23.25	60.1	65.2	60.1	65.2			
67	80	2650	2.85	22.05	58.0	66.1	58.0	66.1			
73	88	2415	1.80	20.09	56.8	65.8	56.8	65.8			
86	103	2066	2.10	17.19	53.5	66.3	53.5	66.3			
99	120	1785	2.40	14.85	50.7	66.7	50.7	66.7			
117	141	1510	2.85	12.56	47.8	67.0	47.8	67.0			
30	36	5977	0.80	49.73	**	**	**	**			
36	44	4859	0.95	40.43	25.4	38.8	25.4	38.8			
41	49	4310	1.05	35.86	29.1	39.5	29.1	39.5			
47	56	3799	1.20	31.61	31.9	40.2	31.9	40.2			
48	58	3667	1.25	30.51	32.5	40.3	32.5	40.3			
57	68	3121	1.45	25.97	34.7	41.0	34.7	41.0			
66	79	2692	1.70	22.40	36.1	41.6	36.1	41.6			
71	85	2502	1.20	20.82	36.6	40.6	36.6	40.6	**KH093-22P-180M-04E**	310	448
78	94	2258	2.00	18.79	37.3	42.1	37.3	42.1			
83	100	2130	1.45	17.72	37.6	41.3	37.6	41.3			
96	116	1836	2.50	15.28	38.2	42.7	38.2	42.7			
97	118	1812	1.70	15.08	38.2	41.8	38.2	41.8			
113	136	1564	1.95	13.01	38.7	42.3	38.7	42.3			
135	163	1311	2.30	10.91	37.5	42.7	37.5	42.7			
166	200	1066	2.85	8.87	34.6	43.1	34.6	43.1			

Legend see page 337

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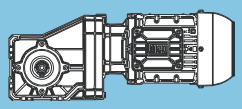
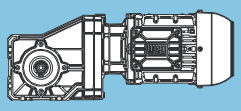
P_N = 18.5 kW											IE3
50 Hz	60 Hz				at 50 Hz						
18.5 kW	22 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
56	67	3183	0.95	26.48	17.7	30.7	16.6	7.8			
65	79	2709	1.05	22.54	21.6	39.2	17.2	8.5			
78	94	2273	1.20	18.91	24.2	41.6	17.3	9.1			
92	111	1915	1.35	15.93	25.8	42.2	17.4	9.7			
97	118	1815	1.10	15.10	26.2	41.4	16.5	8.9	**KH083-22P-180M-04E**	260	444
113	136	1570	1.55	13.06	27.1	42.7	16.3	10.2			
114	138	1544	1.30	12.85	27.1	41.9	16.4	9.4			
136	165	1296	1.50	10.78	27.8	42.4	15.2	9.9			
162	195	1093	1.80	9.09	28.3	42.8	13.8	10.3			
197	238	895	2.20	7.45	28.7	43.2	12.5	10.7			

Legend see page 337

P_N = 22 kW											IE3
50 Hz	60 Hz				at 50 Hz						
22 kW	26 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
9.2	11	20714	0.90	159.72	65.1	114.2	65.1	114.2	**KH154-22P-180L-04F**	850	462
10	12	20966	0.90	146.69	63.6	111.2	63.6	111.2			
12	14	18057	1.00	126.34	77.9	116.2	77.9	116.2			
13	16	15619	1.20	109.28	86.8	118.1	86.8	118.1			
15	18	13777	1.35	96.39	92.2	119.5	92.2	119.5			
18	21	11833	1.55	82.79	96.9	121.0	96.9	121.0			
21	26	9845	1.85	68.88	100.8	122.5	100.8	122.5			
26	31	8168	2.25	57.15	103.4	123.8	103.4	123.8	**KH153-22P-180L-04F**	804	460
30	36	6986	2.05	48.88	105.0	124.7	105.0	124.7			
31	37	6812	2.65	47.66	105.2	124.8	105.2	124.8			
35	42	6043	2.95	42.28	106.0	125.4	106.0	125.4			
41	50	5092	1.35	35.63	106.9	124.7	106.9	124.7			
48	58	4386	2.05	30.69	107.4	125.5	107.4	125.5			
55	67	3793	2.95	26.54	107.8	126.1	107.8	126.1			
13	16	16221	0.85	113.49	57.3	81.2	57.3	81.2			
15	18	13968	0.95	97.73	67.1	83.5	67.1	83.5			
17	21	12202	1.10	85.37	73.0	85.3	73.0	85.3			
20	24	10539	1.25	73.74	77.4	86.9	77.4	86.9			
24	29	8716	1.50	60.98	81.4	88.8	81.4	88.8			
29	35	7286	1.35	50.98	83.9	90.2	83.9	90.2			
33	40	6276	2.05	43.91	85.3	91.2	85.3	91.2	**KH123-22P-180L-04F**	572	456
36	43	5896	2.25	41.25	85.8	91.6	85.8	91.6			
39	47	5404	2.45	37.81	86.4	92.1	86.4	92.1			
42	51	5005	2.60	35.02	86.8	92.5	86.8	92.5			
45	54	4721	2.80	33.03	87.1	92.8	87.1	92.8			
51	61	4155	1.35	29.07	87.6	92.4	87.6	92.4			
59	71	3579	2.05	25.04	88.0	93.1	88.0	93.1			
68	82	3081	2.65	21.56	85.0	93.7	85.0	93.7			
21	26	9863	0.85	69.01	34.5	57.7	34.5	57.7			
25	30	8341	1.00	58.36	44.1	59.6	44.1	59.6			
31	37	6806	1.20	47.62	50.8	61.4	50.8	61.4			
36	43	5837	1.30	40.84	53.9	62.5	53.9	62.5			
38	46	5523	1.45	38.64	54.8	62.9	54.8	62.9			
42	50	5044	1.50	35.29	56.1	63.4	56.1	63.4			
48	58	4409	1.85	30.85	57.5	64.1	57.5	64.1			
49	59	4316	1.75	30.20	57.7	64.2	57.7	64.2			
56	68	3727	2.05	26.08	58.8	64.9	58.8	64.9	**KH103-22P-180L-04F**	449	452
63	76	3323	1.30	23.25	59.5	64.5	59.5	64.5			
67	80	3152	2.40	22.05	59.3	65.6	59.3	65.6			
73	88	2871	1.50	20.09	58.1	65.1	58.1	65.1			
82	99	2573	2.95	18.00	54.8	66.2	54.8	66.2			
86	103	2457	1.75	17.19	54.5	65.7	54.5	65.7			
99	120	2122	2.05	14.85	51.6	66.2	51.6	66.2			
117	141	1795	2.40	12.56	48.5	66.6	48.5	66.6			
143	173	1465	2.95	10.25	45.1	67.1	45.1	67.1			
36	44	5778	0.80	40.43	**	**	**	**			
41	49	5125	0.90	35.86	23.2	38.5	23.2	38.5			
47	56	4518	1.00	31.61	27.8	39.3	27.8	39.3			
48	58	4361	1.05	30.51	28.8	39.5	28.8	39.5			
57	68	3712	1.25	25.97	32.3	40.3	32.3	40.3			
66	79	3202	1.45	22.40	34.4	40.9	34.4	40.9			
71	85	2976	1.05	20.82	35.2	39.8	35.2	39.8			
78	94	2686	1.70	18.79	36.1	41.6	36.1	41.6	**KH093-22P-180L-04F**	331	448
83	100	2533	1.20	17.72	36.6	40.6	36.6	40.6			
96	116	2184	2.10	15.28	37.4	42.2	37.4	42.2			
97	118	2155	1.40	15.08	37.5	41.2	37.5	41.2			
113	136	1859	1.65	13.01	38.1	41.8	38.1	41.8			
123	149	1708	2.65	11.95	38.4	42.8	38.4	42.8			
135	163	1559	1.95	10.91	38.4	42.3	38.4	42.3			
166	200	1268	2.40	8.87	35.4	42.8	35.4	42.8			

Legend see page 337

*** ... on request*

P_N = 22 kW											IE3
50 Hz	60 Hz				at 50 Hz						
22 kW	26 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
56	67	3785	0.80	26.48	**	**	**	**	KH083-22P-180L-04F	281	444
65	79	3222	0.90	22.54	17.3	29.8	15.0	7.7			
78	94	2703	1.00	18.91	21.6	39.2	15.5	8.5			
92	111	2277	1.15	15.93	24.2	41.6	15.8	9.1			
97	118	2158	0.90	15.10	24.7	40.7	14.9	8.2			
113	136	1867	1.30	13.06	26.0	42.2	15.9	9.7			
114	138	1837	1.10	12.85	26.1	41.3	15.1	8.8			
136	165	1541	1.30	10.78	27.1	41.9	15.1	9.4			
162	195	1299	1.50	9.09	27.8	42.4	14.6	9.9			
197	238	1065	1.85	7.45	28.4	42.9	13.1	10.4			

Legend see page 337

*** ... on request*

P_N = 30 kW										IE3
50 Hz	60 Hz				at 50 Hz					
30 kW	36 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
14	16	21155	0.90	109.28	62.5	108.9	62.5	108.9		
15	18	18659	1.00	96.39	75.4	115.8	75.4	115.8		
18	22	16027	1.15	82.79	85.5	117.8	85.5	117.8		
21	26	13334	1.35	68.88	93.4	119.8	93.4	119.8		
26	31	11063	1.65	57.15	98.5	121.6	98.5	121.6		
31	37	9226	2.00	47.66	101.8	123.0	101.8	123.0		
35	42	8185	2.20	42.28	103.4	123.8	103.4	123.8	**KH153-22P-200L-04E**	862	460
36	43	7931	2.30	40.97	103.8	123.9	103.8	123.9			
40	48	7221	2.50	37.30	104.7	124.5	104.7	124.5			
42	50	6862	2.65	35.45	105.1	124.8	105.1	124.8			
46	56	6200	2.95	32.03	105.8	125.3	105.8	125.3			
56	67	5138	2.20	26.54	106.8	124.7	106.8	124.7			
63	76	4532	3.00	23.41	107.3	125.3	107.3	125.3			
17	21	16526	0.80	85.37	**	**	**	**		
20	24	14275	0.95	73.74	65.9	83.2	65.9	83.2		
24	29	11805	1.15	60.98	74.1	85.7	74.1	85.7		
29	35	9714	1.35	50.18	79.3	87.8	79.3	87.8		
36	43	7985	1.65	41.25	82.7	89.5	82.7	89.5		
39	47	7319	1.80	37.81	83.8	90.2	83.8	90.2		
42	51	6779	1.95	35.02	84.6	90.7	84.6	90.7		
45	54	6394	2.05	33.03	85.1	91.1	85.1	91.1	**KH123-22P-200L-04E**	630	456
50	60	5786	2.25	29.89	85.9	91.7	85.9	91.7			
52	62	5523	2.40	28.53	86.2	92.0	86.2	92.0			
63	75	4569	2.85	23.60	87.2	92.9	87.2	92.9			
69	83	4174	1.95	21.56	87.3	92.4	87.3	92.4			
79	94	3647	2.25	18.84	82.9	93.0	82.9	93.0			
91	109	3150	2.60	16.27	78.6	93.6	78.6	93.6			
31	37	9218	0.90	47.62	39.0	58.6	39.0	58.6		
38	46	7480	1.10	38.64	48.1	60.6	48.1	60.6		
48	58	5972	1.35	30.85	53.5	62.3	53.5	62.3		
49	59	5846	1.30	30.20	53.9	62.5	53.9	62.5		
57	68	5049	1.50	26.08	56.1	63.4	56.1	63.4		
67	81	4268	1.80	22.05	57.8	64.3	57.8	64.3		
82	99	3484	2.20	18.00	57.0	65.2	57.0	65.2	**KH103-22P-200L-04E**	507	452
86	104	3328	1.30	17.19	56.9	64.5	56.9	64.5			
100	120	2875	1.50	14.85	53.5	65.1	53.5	65.1			
101	122	2826	2.70	14.60	52.5	65.9	52.5	65.9			
118	142	2431	1.80	12.56	50.1	65.8	50.1	65.8			
144	174	1984	2.20	10.25	46.4	66.4	46.4	66.4			
178	214	1609	2.70	8.31	42.9	66.9	42.9	66.9			
57	69	5027	0.90	25.97	24.1	38.6	24.1	38.6		
66	79	4336	1.05	22.40	29.0	39.5	29.0	39.5		
79	95	3637	1.25	18.79	32.6	40.4	32.6	40.4		
97	116	2958	1.55	15.28	35.3	41.2	35.3	41.2		
98	118	2919	1.05	15.08	35.4	39.9	35.4	39.9		
114	137	2518	1.20	13.01	36.6	40.6	36.6	40.6	**KH093-22P-200L-04E**	389	448
124	149	2313	1.95	11.95	37.1	42.1	37.1	42.1			
136	163	2112	1.45	10.91	37.6	41.3	37.6	41.3			
167	201	1717	1.75	8.87	37.0	42.0	37.0	42.0			
213	256	1343	2.25	6.94	33.5	42.7	33.5	42.7			

Legend see page 337

*** ... on request*

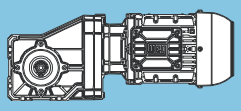
P_N = 37 kW											IE3
50 Hz	60 Hz				at 50 Hz						
37 kW	44 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
15	18	23013	0.80	96.39	**	**	**	**			
18	22	19766	0.95	82.79	70.1	114.9	70.1	114.9			
21	26	16445	1.10	68.88	84.0	117.5	84.0	117.5			
26	31	13645	1.35	57.15	92.6	119.6	92.6	119.6			
31	37	11379	1.60	47.66	97.9	121.3	97.9	121.3			
35	42	10094	1.80	42.28	100.3	122.3	100.3	122.3			
36	43	9782	1.85	40.97	100.9	122.5	100.9	122.5	**KH153-22P-200L-04F**	889	460
40	48	8905	2.05	37.30	102.3	123.2	102.3	123.2			
42	50	8464	2.15	35.45	103.0	123.5	103.0	123.5			
46	56	7647	2.40	32.03	104.1	124.2	104.1	124.2			
56	67	6336	1.80	26.54	105.7	123.5	105.7	123.5			
56	67	6363	2.85	26.65	105.7	125.1	105.7	125.1			
63	76	5589	2.45	23.41	106.4	124.2	106.4	124.2			
74	89	4801	2.80	20.11	107.1	125.0	107.1	125.0			
24	29	14559	0.90	60.98	64.8	82.9	64.8	82.9			
29	36	11980	1.10	50.18	73.6	85.5	73.6	85.5			
36	43	9848	1.35	41.25	79.0	87.6	79.0	87.6			
39	47	9027	1.45	37.81	80.8	88.5	80.8	88.5			
42	51	8361	1.60	35.02	82.0	89.1	82.0	89.1			
45	54	7886	1.65	33.03	82.9	89.6	82.9	89.6			
50	60	7136	1.85	29.89	84.1	90.3	84.1	90.3			
52	62	6812	1.95	28.53	84.6	90.7	84.6	90.7	**KH123-22P-200L-04F**	657	456
63	76	5635	2.35	23.60	86.1	91.9	86.1	91.9			
69	83	5147	1.60	21.56	86.6	91.2	86.6	91.2			
76	92	4637	2.85	19.42	85.0	92.9	85.0	92.9			
79	95	4498	1.85	18.84	85.0	92.0	85.0	92.0			
91	110	3884	2.10	16.27	80.4	92.7	80.4	92.7			
110	132	3214	2.55	13.46	74.9	93.6	74.9	93.6			
38	46	9225	0.90	38.64	39.0	58.6	39.0	58.6			
48	58	7365	1.10	30.85	48.6	60.8	48.6	60.8			
49	59	7210	1.05	30.20	49.2	60.9	49.2	60.9			
57	68	6227	1.25	26.08	52.7	62.1	52.7	62.1			
67	81	5264	1.45	22.05	55.5	63.2	55.5	63.2			
82	99	4298	1.75	18.00	57.7	64.3	57.7	64.3			
86	104	4104	1.05	17.19	58.1	63.4	58.1	63.4			
100	120	3545	1.25	14.85	55.3	64.2	55.3	64.2	**KH103-22P-200L-04F**	534	452
101	122	3486	2.20	14.60	54.1	65.2	54.1	65.2			
118	142	2999	1.45	12.56	51.7	65.0	51.7	65.0			
127	153	2784	2.70	11.66	49.4	66.0	49.4	66.0			
144	174	2447	1.75	10.25	47.6	65.7	47.6	65.7			
178	214	1984	2.20	8.31	43.9	66.4	43.9	66.4			
223	268	1585	2.70	6.64	40.3	66.9	40.3	66.9			

Legend see page 337

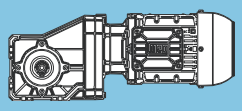
*** ... on request*

P_N = 45 kW										IE3
50 Hz	60 Hz				at 50 Hz					
45 kW	55 kW				Output shaft		Hollow shaft			
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}	m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN	kg	
21	26	20001	0.90	68.88	68.9	114.7	68.9	114.7		
26	31	16595	1.10	57.15	83.5	117.3	83.5	117.3		
31	37	13839	1.35	47.66	92.0	119.4	92.0	119.4		
35	42	12277	1.50	42.28	95.9	120.6	95.9	120.6		
36	43	11897	1.55	40.97	96.8	120.9	96.8	120.9		
40	48	10831	1.70	37.30	99.0	121.7	99.0	121.7		
42	50	10294	1.75	35.45	100.0	122.1	100.0	122.1	**KH153-22P-225S/M-04F**	1026	460
46	56	9301	1.95	32.03	101.7	122.9	101.7	122.9		
56	67	7738	2.35	26.65	104.0	124.1	104.0	124.1		
63	76	6798	2.00	23.41	105.2	123.0	105.2	123.0		
67	81	6420	2.85	22.11	105.6	125.1	105.6	125.1		
74	89	5839	2.30	20.11	106.2	124.0	106.2	124.0		
88	107	4858	2.95	16.73	107.1	125.0	107.1	125.0		
29	36	14571	0.90	50.18	64.7	82.9	64.7	82.9		
36	43	11978	1.10	41.25	73.6	85.5	73.6	85.5		
39	47	10979	1.20	37.81	76.3	86.5	76.3	86.5		
42	51	10169	1.30	35.02	78.3	87.3	78.3	87.3		
45	54	9591	1.40	33.03	79.6	87.9	79.6	87.9		
50	60	8679	1.50	29.89	81.5	88.8	81.5	88.8		
52	62	8284	1.60	28.53	82.2	89.2	82.2	89.2		
63	76	6853	1.90	23.60	84.5	90.6	84.5	90.6	**KH123-22P-225S/M-04F**	794	456
69	83	6260	1.30	21.56	85.3	89.8	85.3	89.8		
76	92	5639	2.35	19.42	86.1	91.8	86.1	91.8		
79	95	5471	1.50	18.84	86.3	90.8	86.3	90.8		
91	110	4724	1.75	16.27	82.4	91.7	82.4	91.7		
93	112	4634	2.85	15.96	80.6	92.9	80.6	92.9		
110	132	3908	2.10	13.46	76.5	92.7	76.5	92.7		
134	161	3214	2.55	11.07	71.0	93.5	71.0	93.5		
48	58	8958	0.90	30.85	40.7	58.9	40.7	58.9		
49	59	8769	0.90	30.20	41.8	59.1	41.8	59.1		
57	68	7573	1.00	26.08	47.7	60.5	47.7	60.5		
67	81	6403	1.20	22.05	52.2	61.9	52.2	61.9		
82	99	5227	1.45	18.00	55.6	63.2	55.6	63.2		
86	104	4991	0.90	17.19	56.2	62.2	56.2	62.2		
100	120	4312	1.00	14.85	57.4	63.1	57.4	63.1	**KH103-22P-225S/M-04F**	671	452
101	122	4239	1.80	14.60	55.9	64.3	55.9	64.3		
118	142	3647	1.20	12.56	53.4	64.0	53.4	64.0		
127	153	3386	2.25	11.66	50.8	65.3	50.8	65.3		
144	174	2976	1.45	10.25	49.1	65.0	49.1	65.0		
178	214	2413	1.80	8.31	45.0	65.8	45.0	65.8		
223	268	1928	2.25	6.64	41.2	66.5	41.2	66.5		

Legend see page 337

P_N = 55 kW											IE3
50 Hz	60 Hz				at 50 Hz						
55 kW	66 kW				Output shaft		Hollow shaft				
n_{50}	n_{60}	M_2	f_B	i	F_{rN}	F_{aN}	F_{rN}	F_{aN}		m	Dimension sheet see page
min^{-1}	min^{-1}	Nm			kN	kN	kN	kN		kg	
26	31	20282	0.90	57.15	67.5	114.5	67.5	114.5			
31	37	16914	1.10	47.66	82.4	117.1	82.4	117.1			
36	44	14540	1.25	40.97	90.1	118.9	90.1	118.9			
40	48	13238	1.40	37.30	93.6	119.9	93.6	119.9			
42	50	12581	1.45	35.45	95.2	120.4	95.2	120.4			
46	56	11367	1.60	32.03	97.9	121.3	97.9	121.3			
56	67	9458	1.95	26.65	101.4	122.8	101.4	122.8	**KH153-22P-225S/M-04G**	1074	460
63	76	8308	1.65	23.41	103.2	121.4	103.2	121.4			
67	81	7847	2.30	22.11	103.9	124.0	103.9	124.0			
74	89	7137	1.90	20.11	104.8	122.6	104.8	122.6			
80	97	6544	2.80	18.44	105.5	125.0	105.5	125.0			
88	107	5937	2.40	16.73	106.1	123.9	106.1	123.9			
107	129	4926	2.90	13.88	107.0	124.9	107.0	124.9			
36	43	14640	0.90	41.25	64.5	82.8	64.5	82.8			
42	51	12429	1.05	35.02	72.3	85.0	72.3	85.0			
45	54	11722	1.15	33.03	74.3	85.8	74.3	85.8			
50	60	10608	1.25	29.89	77.3	86.9	77.3	86.9			
52	63	10125	1.30	28.53	78.4	87.4	78.4	87.4			
63	76	8376	1.60	23.60	82.0	89.1	82.0	89.1			
76	92	6892	1.90	19.42	84.4	90.6	84.4	90.6			
79	95	6686	1.25	18.84	84.7	89.3	84.7	89.3	**KH123-22P-225S/M-04G**	842	456
91	110	5774	1.45	16.27	85.0	90.4	85.0	90.4			
93	112	5664	2.30	15.96	82.9	91.8	82.9	91.8			
109	132	4809	2.75	13.55	77.7	92.7	77.7	92.7			
110	133	4777	1.75	13.46	78.6	91.6	78.6	91.6			
134	161	3929	2.10	11.07	72.7	92.7	72.7	92.7			
163	196	3230	2.55	9.10	67.4	93.5	67.4	93.5			
191	231	2743	3.00	7.73	63.5	94.1	63.5	94.1			

Legend see page 337

P_N = 75 kW										IE3
50 Hz 75 kW n_{50} min^{-1}	60 Hz 90 kW n_{60} min^{-1}	M_2 Nm	f_B	i	at 50 Hz Output shaft F_{rN} kN	 F_{aN} kN	 Hollow shaft F_{rN} kN	 F_{aN} kN		m kg	Dimension sheet see page
31	37	23065	0.80	47.66	**	**	**	**			
36	43	19828	0.95	40.97	69.8	114.9	69.8	114.9			
40	48	18051	1.00	37.30	77.9	116.2	77.9	116.2			
42	50	17156	1.05	35.45	81.5	116.9	81.5	116.9			
46	56	15501	1.20	32.03	87.2	118.2	87.2	118.2			
56	67	12897	1.40	26.65	94.4	120.2	94.4	120.2			
63	76	11329	1.20	23.41	98.0	118.3	98.0	118.3			
67	81	10700	1.70	22.11	99.2	121.8	99.2	121.8			
74	89	9732	1.40	20.11	101.0	120.0	101.0	120.0	**KH153-22P-250S/M-04F**	1178	460
80	97	8924	2.05	18.44	102.3	123.2	102.3	123.2			
88	106	8097	1.75	16.73	103.5	121.6	103.5	121.6			
93	112	7671	2.35	15.85	104.1	124.1	104.1	124.1			
107	128	6717	2.15	13.88	105.3	123.1	105.3	123.1			
108	130	6640	2.75	13.72	105.4	124.9	105.4	124.9			
128	154	5604	2.50	11.58	106.4	124.2	106.4	124.2			
149	179	4815	2.80	9.95	105.6	125.0	105.6	125.0			

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Legend see page 337

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Selection tables - Gear units

Structure of the selection tables

1 Type	2 $i_{ges.}$	3 M_{2max}	4 n_2	5 i_{exakt}	6 n_{1max}	IEC motor frame size 7												
						63	71	80	90	100	112	132	160	180	200	225	250	-
						IEC adapter 8												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	I225	I250	I280
						NEMA adapter 9												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	N284/ 286	N324/ 326	N364	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K022																		
2 stages	10																	
n_1=1400 min^{-1}	11																	
Maximum torque 110 Nm	12																	

1 Type	2 $i_{ges.}$	SERVO adapter 13											15 Input unit							
		n_{1max}	Adapter size 14										n_{1max}	Input shaft [mm] 16						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110

1 Type of gear unit

2 Total ratio

3 Permissible output torque at S1 operation (f_B = 1.0)

4 Output speed (gear unit) at n_1 = 1400 min^{-1}

5 Exact mathematical ratio

6 Maximum permissible input speed gear unit. valid for direct mounting and IEC / NEMA adapter
Max. perm. input speed IEC / NEMA adapter: I63 - I132 / N56 - N213 = 3000 min^{-1}, I160 - I280 / N254 - N364 = 2500 min^{-1}
Max. perm. motor speed (Direct mounting): motor frame size 63 - 180 = 3000 min^{-1}, 200 - 250 = 2500 min^{-1}.
Higher motor speed on request

7 Possible motor frame sizes (Direct mounting)

8 Possible IEC adapter sizes

9 Possible NEMA adapter sizes

10 Number of gear stages

11 Motor speed

12 Maximum torque

13 Maximum input speed - SERVO adapter

14 Possible SERVO adapter sizes

15 Maximum input speed - direct mounting, IEC / NEMA adapter and input unit
Higher input speeds on request

16 Possible input shafts of the input unit

Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size											
						63	71	80	90	100	-	-	-	-	-	-	-
						IEC adapter											
						I63	I71	I80	I90	I100	-	-	-	-	-	-	-
						NEMA adapter											
						N56		N143/145		N182	-	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]												
K022	68.88	110	20	551/8	6000	■	■										
	61.75	102	23	247/4	6000	■	■										
	53.65	110	26	1073/20	6000	■	■	■	■								
	48.10	110	29	481/10	6000	■	■	■	■								
	43.50	110	32	87/2	6000	■	■	■	■								
	39.00	110	36	39/1	6000	■	■	■	■								
	34.27	110	41	377/11	6000	■	■	■	■								
	30.88	51	45	247/8	6000	■	■										
	30.73	110	46	338/11	6000	■	■	■	■								
	26.41	110	53	1479/56	6000	■	■	■	■								
	24.05	81	58	481/20	6000	■	■	■	■								
	23.68	110	59	663/28	6000	■	■	■	■								
2 stages	20.63	103	68	1073/52	6000	■	■	■	■								
	19.50	81	72	39/2	6000	■	■	■	■								
	18.50	102	76	37/2	6000	■	■	■	■								
n_1=1400 min^{-1}	15.41	93	91	493/32	6000	■	■	■	■								
	15.36	81	91	169/11	6000	■	■	■	■								
	13.81	93	101	221/16	6000	■	■	■	■								
Maximum torque 110 Nm	13.29	89	105	319/24	6000			■	■								
	11.92	89	117	143/12	6000			■	■								
	11.84	81	118	663/56	6000	■	■	■	■								
	11.60	85	121	58/5	6000	■	■	■	■								
	10.40	85	135	52/5	6000	■	■	■	■								
	9.25	81	151	37/4	6000	■	■	■	■								
	8.51	77	164	783/92	6000	■	■	■	■								
	7.63	77	183	351/46	6000	■	■	■	■								
	6.91	74	203	221/32	6000	■	■	■	■								
	5.96	69	235	143/24	6000			■	■								
	5.20	65	269	26/5	6000	■	■	■	■								
	3.82	57	367	351/92	6000	■	■	■	■								
K033	217.88	200	6.4	1743/8	6000	■	■	■	■								
	177.19	200	7.9	2835/16	6000	■	■	■	■								
	140.80	200	9.9	6195/44	6000	■	■	■	■								
	108.75	200	13	435/4	6000	■	■	■	■	■							
	86.83	200	16	4515/52	6000	■	■	■	■	■							
	71.93	200	19	1079/15	6000	■	■	■	■								
	65.63	200	21	525/8	6000	■	■	■	■	■							
	58.50	200	24	117/2	6000	■	■	■	■								
	49.88	200	28	399/8	6000	■	■	■	■	■							
	46.48	200	30	1534/33	6000	■	■	■	■								
	38.80	200	36	1785/46	6000	■	■	■	■	■							
3 stages	35.90	200	39	754/21	6000	■	■	■	■	■							
	30.29	200	46	1575/52	6000			■	■	■							
n_1=1400 min^{-1}	29.97	129	47	1079/36	6000	■	■	■	■								
	28.67	200	49	86/3	6000	■	■	■	■	■							
	24.38	160	57	195/8	6000	■	■	■	■								
Maximum torque 200 Nm	21.67	200	65	65/3	6000	■	■	■	■	■							
	19.37	163	72	3835/198	6000	■	■	■	■								
	16.47	200	85	247/15	6000	■	■	■	■	■							
	14.96	163	94	1885/126	6000	■	■	■	■	■							
	12.81	200	109	884/69	6000	■	■	■	■	■							
	11.94	163	117	215/18	6000	■	■	■	■	■							
	10.00	200	140	10/1	6000			■	■	■							
	9.03	163	155	325/36	6000	■	■	■	■	■							
	6.86	149	204	247/36	6000	■	■	■	■	■							
	5.34	137	262	1105/207	6000	■	■	■	■	■							
	4.17	126	336	25/6	6000			■	■	■							

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K022	68.88	5000	■										-							
	61.75	5000	■										-							
	53.65	5000	■	■	■	■	■	■					3000	■						
	48.10	5000	■	■	■	■	■	■					3000	■						
	43.50	5000	■	■	■	■	■	■					3000	■						
	39.00	5000	■	■	■	■	■	■					3000	■						
	34.27	5000	■	■	■	■	■	■					3000	■						
	30.88	5000	■										-							
	30.73	5000	■	■	■	■	■	■					3000	■						
	26.41	5000	■	■	■	■	■	■	■				3000	■						
	24.05	5000	■	■	■	■	■	■					3000	■						
	23.68	5000	■	■	■	■	■	■	■				3000	■						
	20.63	5000	■	■	■	■	■	■	■				3000	■						
	19.50	5000	■	■	■	■	■	■					3000	■						
	18.50	5000	■	■	■	■	■	■	■				3000	■						
	15.41	4900	■	■	■	■	■	■	■				3000	■						
	15.36	5000	■	■	■	■	■	■					3000	■						
	13.81	4900	■	■	■	■	■	■	■				3000	■						
	13.29	4300		■	■	■	■	■	■				3000	■						
	11.92	4300		■	■	■	■	■	■				3000	■						
	11.84	5000	■	■	■	■	■	■	■				3000	■						
	11.60	3900	■	■	■	■	■	■	■				3000	■						
	10.40	3900	■	■	■	■	■	■	■				3000	■						
	9.25	5000	■	■	■	■	■	■	■				3000	■						
	8.51	3400	■	■	■	■	■	■	■				3000	■						
	7.63	3400	■	■	■	■	■	■	■				3000	■						
	6.91	4900	■	■	■	■	■	■	■				3000	■						
	5.96	4300		■	■	■	■	■	■				3000	■						
	5.20	3900	■	■	■	■	■	■	■				3000	■						
	3.82	3400	■	■	■	■	■	■	■				3000	■						
K033	217.88	5000	■	■	■	■	■	■					3000	■						
	177.19	5000	■	■	■	■	■	■					3000	■						
	140.80	5000	■	■	■	■	■	■					3000	■						
	108.75	5000	■	■	■	■	■	■	■				3000	■						
	86.83	5000	■	■	■	■	■	■	■				3000	■						
	71.93	5000	■	■	■	■	■	■					3000	■						
	65.63	5000	■	■	■	■	■	■	■				3000	■						
	58.50	5000	■	■	■	■	■	■					3000	■						
	49.88	4400	■	■	■	■	■	■	■				3000	■						
	46.48	5000	■	■	■	■	■	■					3000	■						
	38.80	3800	■	■	■	■	■	■	■				3000	■						
	35.90	5000	■	■	■	■	■	■	■				3000	■						
	30.29	3400		■	■	■	■	■	■				3000	■						
	29.97	5000	■	■	■	■	■	■					3000	■						
	28.67	5000	■	■	■	■	■	■	■				3000	■						
	24.38	5000	■	■	■	■	■	■					3000	■						
	21.67	5000	■	■	■	■	■	■	■				3000	■						
	19.37	5000	■	■	■	■	■	■					3000	■						
	16.47	4400	■	■	■	■	■	■	■				3000	■						
	14.96	5000	■	■	■	■	■	■	■				3000	■						
	12.81	3800	■	■	■	■	■	■	■				3000	■						
	11.94	5000	■	■	■	■	■	■	■				3000	■						
	10.00	3400		■	■	■	■	■	■				3000	■						
	9.03	5000	■	■	■	■	■	■	■				3000	■						
	6.86	4400	■	■	■	■	■	■	■				3000	■						
	5.34	3800	■	■	■	■	■	■	■				3000	■						
	4.17	3400		■	■	■	■	■	■				3000	■						

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	-	-	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	-	-	-	-	-	-	-
						NEMA adapter												
		[Nm]	[min^{-1}]		[min^{-1}]	N56		N143/145		N182	N184	-	-	-	-	-	-	-
K043	277.79	400	5	14445/52	6000	■	■	■	■									
	227.16	400	6.2	23625/104	6000	■	■	■	■									
	179.37	400	7.8	25650/143	6000	■	■	■	■									
	139.08	400	10	50625/364	6000	■	■	■	■	■	■							
	113.83	400	12	38475/338	6000	■	■	■	■	■	■							
	89.17	378	16	535/6	6000	■	■	■	■									
	87.62	400	16	18225/208	6000	■	■	■	■	■	■							
	72.92	400	19	875/12	6000	■	■	■	■									
	66.20	400	21	6885/104	6000	■	■	■	■	■	■							
	57.58	400	24	1900/33	6000	■	■	■	■									
	54.18	400	26	16200/299	6000	■	■	■	■	■	■							
	47.07	200	30	93197/1980	6000	■	■	■	■									
	44.64	400	31	625/14	6000	■	■	■	■	■	■							
	43.93	400	32	7425/169	6000			■	■	■	■							
	38.49	270	36	30485/792	6000	■	■	■	■									
3 stages	36.78	384	38	3825/104	5600			■	■	■	■							
	36.54	400	38	475/13	6000	■	■	■	■	■	■							
	30.39	324	46	33098/1089	6000	■	■	■	■									
n_1=1400 min^{-1}	29.81	361	47	775/26	5000			■	■	■	■							
	28.74	357	49	20925/728	4800					■	■							
	28.13	400	50	225/8	6000	■	■	■	■	■	■							
Maximum torque 400 Nm	23.57	307	59	21775/924	6000	■	■	■	■	■	■							
	21.25	400	66	85/4	6000	■	■	■	■	■	■							
	19.29	294	73	1273/66	6000	■	■	■	■	■	■							
	17.39	400	81	400/23	6000	■	■	■	■	■	■							
	14.85	278	94	2613/176	6000	■	■	■	■	■	■							
	14.10	400	99	550/39	6000			■	■	■	■							
	11.81	400	119	425/36	5600			■	■	■	■							
	11.22	262	125	14807/1320	6000	■	■	■	■	■	■							
	9.57	373	146	775/81	5000			■	■	■	■							
	9.23	369	152	775/84	4800					■	■							
	9.18	251	152	6968/759	6000	■	■	■	■	■	■							
	7.44	240	188	67/9	6000			■	■	■	■							
	6.23	231	225	14807/2376	5600			■	■	■	■							
	5.05	221	277	27001/5346	5000			■	■	■	■							
	4.87	219	287	27001/5544	4800					■	■							

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K043	277.79	5000	■	■	■	■	■	■					3000	■						
	227.16	5000	■	■	■	■	■	■					3000	■						
	179.37	5000	■	■	■	■	■	■					3000	■						
	139.08	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	113.83	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	89.17	5000	■	■	■	■	■	■					3000	■						
	87.62	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	72.92	5000	■	■	■	■	■	■					3000	■						
	66.20	4900	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	57.58	5000	■	■	■	■	■	■					3000	■						
	54.18	4200	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	47.07	5000	■	■	■	■	■	■					3000	■						
	44.64	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	43.93	3700		■	■	■	■	■	■	■	■	■	3000	■	■					
	38.49	5000	■	■	■	■	■	■					3000	■						
	36.78	3400		■	■	■	■	■	■	■	■	■	3000	■	■					
	36.54	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	30.39	5000	■	■	■	■	■	■					3000	■						
	29.81	3000		■	■	■	■	■	■	■	■	■	3000	■	■					
	28.74	2900							■	■	■	■	2900		■					
	28.13	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	23.57	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	21.25	4900	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	19.29	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	17.39	4200	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	14.85	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	14.10	3700		■	■	■	■	■	■	■	■	■	3000	■	■					
	11.81	3400		■	■	■	■	■	■	■	■	■	3000	■	■					
	11.22	4900	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	9.57	3000		■	■	■	■	■	■	■	■	■	3000	■	■					
	9.23	2900							■	■	■	■	2900		■					
	9.18	4200	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	7.44	3700		■	■	■	■	■	■	■	■	■	3000	■	■					
	6.23	3400		■	■	■	■	■	■	■	■	■	3000	■	■					
	5.05	3000		■	■	■	■	■	■	■	■	■	3000	■	■					
	4.87	2900							■	■	■	■	2900		■					

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	-	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	-	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K053	245.70	600	5.7	2457/10	6000	■	■	■	■									
	194.73	600	7.2	2142/11	6000	■	■	■	■									
	151.20	600	9.3	756/5	6000	■	■	■	■	■	■	■						
	124.06	600	11	8064/65	6000	■	■	■	■	■	■	■						
	96.08	600	15	3843/40	6000	■	■	■	■	■	■	■						
	80.46	564	17	7644/95	6000	■	■	■	■									
	73.08	600	19	1827/25	6000	■	■	■	■	■	■	■						
	63.77	600	22	13328/209	6000	■	■	■	■									
	60.26	600	23	1386/23	6000	■	■	■	■	■	■	■						
	49.52	600	28	4704/95	6000	■	■	■	■	■	■	■						
	49.43	600	28	3213/65	6000			■	■	■	■	■						
	42.00	600	33	42/1	5600			■	■	■	■	■						
	40.63	600	34	50176/1235	6000	■	■	■	■	■	■	■						
	38.32	268	37	728/19	6000	■	■	■	■									
	34.53	600	41	518/15	5000			■	■	■	■	■						
3 stages	33.30	600	42	333/10	4800					■	■	■						
	31.46	600	44	2989/95	6000	■	■	■	■	■	■	■						
	30.37	392	46	19040/627	6000	■	■	■	■									
n_1=1400 min^{-1}	27.39	577	51	630/23	4400			■	■	■	■	■						
	23.93	600	58	11368/475	6000	■	■	■	■	■	■	■						
Maximum torque 600 Nm	23.58	413	59	448/19	6000	■	■	■	■	■	■	■						
	19.73	600	71	8624/437	6000	■	■	■	■	■	■	■						
	19.35	413	72	14336/741	6000	■	■	■	■	■	■	■						
	16.19	600	86	19992/1235	6000			■	■	■	■	■						
	14.98	413	93	854/57	6000	■	■	■	■	■	■	■						
	13.75	600	102	784/57	5600			■	■	■	■	■						
	11.40	413	123	3248/285	6000	■	■	■	■	■	■	■						
	11.31	600	124	29008/2565	5000			■	■	■	■	■						
	10.91	600	128	1036/95	4800					■	■	■						
	9.40	413	149	12320/1311	6000	■	■	■	■	■	■	■						
	8.97	565	156	3920/437	4400			■	■	■	■	■						
	7.71	413	182	1904/247	6000			■	■	■	■	■						
	6.55	413	214	1120/171	5600			■	■	■	■	■						
	5.39	413	260	8288/1539	5000			■	■	■	■	■						
	5.19	413	270	296/57	4800					■	■	■						
	4.27	413	328	5600/1311	4400			■	■	■	■	■						

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K053	245.70	5000	■	■	■	■	■	■					3000	■						
	194.73	5000	■	■	■	■	■	■					3000	■						
	151.20	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	124.06	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	96.08	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	80.46	5000	■	■	■	■	■	■					3000	■						
	73.08	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	63.77	5000	■	■	■	■	■	■					3000	■						
	60.26	4500	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	49.52	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	49.43	3900		■	■	■	■	■	■	■	■	■	3000	■	■					
	42.00	3600		■	■	■	■	■	■	■	■	■	3000	■	■					
	40.63	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	38.32	5000	■	■	■	■	■	■					3000	■						
	34.53	3200		■	■	■	■	■	■	■	■	■	3000	■	■					
	33.30	3100							■	■	■	■	3000		■					
	31.46	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	30.37	5000	■	■	■	■	■	■					3000	■						
	27.39	2800		■	■	■	■	■	■	■	■	■	2800	■	■					
	23.93	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	23.58	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	19.73	4500	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	19.35	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	16.19	3900		■	■	■	■	■	■	■	■	■	3000	■	■					
	14.98	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	13.75	3600		■	■	■	■	■	■	■	■	■	3000	■	■					
	11.40	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	11.31	3200		■	■	■	■	■	■	■	■	■	3000	■	■					
	10.91	3100							■	■	■	■	3000		■					
	9.40	4500	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	8.97	2800		■	■	■	■	■	■	■	■	■	2800	■	■					
	7.71	3900		■	■	■	■	■	■	■	■	■	3000	■	■					
	6.55	3600		■	■	■	■	■	■	■	■	■	3000	■	■					
	5.39	3200		■	■	■	■	■	■	■	■	■	3000	■	■					
	5.19	3100							■	■	■	■	3000		■					
	4.27	2800		■	■	■	■	■	■	■	■	■	2800	■	■					

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	-	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	-	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K063	198.00	820	7.1	198/1	6000	■	■	■	■									
	156.92	820	8.9	2040/13	6000	■	■	■	■									
	121.85	820	11	1584/13	6000	■	■	■	■	■	■	■						
	99.98	820	14	16896/169	6000	■	■	■	■	■	■	■						
	81.53	571	17	1386/17	6000	■	■	■	■									
	77.42	820	18	2013/26	6000	■	■	■	■	■	■	■						
	64.62	820	22	840/13	6000	■	■	■	■									
	58.89	820	24	3828/65	6000	■	■	■	■	■	■	■						
	50.17	820	28	11088/221	6000	■	■	■	■	■	■	■						
	48.56	820	29	14520/299	6000	■	■	■	■	■	■	■						
	44.35	311	32	754/17	6000	■	■	■	■									
	41.17	820	34	118272/2873	6000	■	■	■	■	■	■	■						
	39.83	795	35	6732/169	6000			■	■	■	■	■						
	35.15	454	40	1160/33	6000	■	■	■	■									
	33.85	757	41	440/13	5600			■	■	■	■	■						
3 stages	31.88	820	44	14091/442	6000	■	■	■	■	■	■	■						
	27.83	714	50	3256/117	5000			■	■	■	■	■						
n_1=1400 min^{-1}	27.29	500	51	464/17	6000	■	■	■	■	■	■	■						
	26.84	707	52	2442/91	4800					■	■	■						
	24.25	782	58	26796/1105	6000	■	■	■	■	■	■	■						
Maximum torque 820 Nm	22.40	500	63	14848/663	6000	■	■	■	■	■	■	■						
	22.07	666	63	6600/299	4400			■	■	■	■	■						
	20.00	738	70	101640/5083	6000	■	■	■	■	■	■	■						
	17.34	500	81	1769/102	6000	■	■	■	■	■	■	■						
	16.40	695	85	2772/169	6000			■	■	■	■	■						
	13.94	662	100	3080/221	5600			■	■	■	■	■						
	13.19	500	106	3364/255	6000	■	■	■	■	■	■	■						
	11.46	624	122	22792/1989	5000			■	■	■	■	■						
	11.05	618	127	2442/221	4800					■	■	■						
	10.88	500	129	12760/1173	6000	■	■	■	■	■	■	■						
	9.09	582	154	46200/5083	4400			■	■	■	■	■						
	8.92	500	157	116/13	6000			■	■	■	■	■						
	7.58	487	185	1160/153	5600			■	■	■	■	■						
	6.23	459	225	8584/1377	5000			■	■	■	■	■						
	6.01	454	233	2146/357	4800					■	■	■						
	4.94	428	283	5800/1173	4400			■	■	■	■	■						

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K063	198.00	5000	■	■	■	■	■	■					3000	■						
	156.92	5000	■	■	■	■	■	■					3000	■						
	121.85	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	99.98	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	81.53	5000	■	■	■	■	■	■					3000	■						
	77.42	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	64.62	5000	■	■	■	■	■	■					3000	■						
	58.89	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	50.17	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	48.56	4700	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	44.35	5000	■	■	■	■	■	■					3000	■						
	41.17	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	39.83	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	35.15	5000	■	■	■	■	■	■					3000	■						
	33.85	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	31.88	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	27.83	3300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	27.29	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	26.84	3200							■	■	■	■	2500		■	■				
	24.25	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	22.40	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	22.07	2900		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	20.00	4700	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	17.34	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	16.40	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	13.94	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	13.19	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	11.46	3300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	11.05	3200							■	■	■	■	2500		■	■				
	10.88	4700	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	9.09	2900		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	8.92	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	7.58	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	6.23	3300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	6.01	3200							■	■	■	■	2500		■	■				
	4.94	2900		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	-	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K073	256.14	1550	5.5	5635/22	6000	■	■	■	■									
	197.75	1550	7.1	791/4	6000	■	■	■	■	■	■	■						
	165.85	1550	8.4	2156/13	6000	■	■	■	■	■	■	■						
	130.16	1550	11	4165/32	6000	■	■	■	■	■	■	■						
	100.45	1550	14	2009/20	6000	■	■	■	■	■	■	■						
	99.87	1288	14	18676/187	6000	■	■	■	■									
	83.09	1550	17	1911/23	6000	■	■	■	■	■	■	■						
	77.11	1550	18	6554/85	6000	■	■	■	■	■	■	■						
	70.67	1550	20	3675/52	6000			■	■	■	■	■						
	64.67	1550	22	71456/1105	6000	■	■	■	■	■	■	■						
	61.25	1550	23	245/4	5600			■	■	■	■	■	■					
	51.72	1550	27	931/18	5000			■	■	■	■	■	■					
	50.75	1550	28	203/4	6000	■	■	■	■	■	■	■						
	49.88	1550	28	399/8	4800					■	■	■						
3 stages	47.56	613	29	26680/561	6000	■	■	■	■									
	42.61	1550	33	980/23	4400			■	■	■	■	■	■					
n_1=1400 min^{-1}	39.17	1550	36	16646/425	6000	■	■	■	■	■	■	■						
	36.72	757	38	13108/357	6000	■	■	■	■	■	■	■						
	32.40	1550	43	63336/1955	6000	■	■	■	■	■	■	■						
Maximum torque 1550 Nm	30.79	910	45	20416/663	6000	■	■	■	■	■	■	■						
	27.56	1550	51	6090/221	6000			■	■	■	■	■						
	24.17	910	58	145/6	6000	■	■	■	■	■	■	■						
	23.88	1550	59	406/17	5600			■	■	■	■	■	■					
	20.17	1550	69	15428/765	5000			■	■	■	■	■	■					
	19.45	1550	72	1653/85	4800					■	■	■						
	18.65	910	75	4756/255	6000	■	■	■	■	■	■	■						
	16.61	1550	84	6496/391	4400			■	■	■	■	■	■					
	15.43	910	91	6032/391	6000	■	■	■	■	■	■	■						
	13.12	910	107	2900/221	6000			■	■	■	■	■						
	11.37	910	123	580/51	5600			■	■	■	■	■	■					
	9.60	910	146	4408/459	5000			■	■	■	■	■	■					
	9.26	910	151	1102/119	4800					■	■	■						
	7.91	910	177	9280/1173	4400			■	■	■	■	■	■					

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K073	256.14	5000	■	■	■	■	■	■					3000	■						
	197.75	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	165.85	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	130.16	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	100.45	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	99.87	5000	■	■	■	■	■	■					3000	■						
	83.09	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	77.11	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	70.67	4600		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	64.67	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	61.25	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	51.72	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	50.75	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	49.88	3600							■	■	■	■	2500		■	■				
	47.56	5000	■	■	■	■	■	■					3000	■						
	42.61	3300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	39.17	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	36.72	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	32.40	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	30.79	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	27.56	4600		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	24.17	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	23.88	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	20.17	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	19.45	3600							■	■	■	■	2500		■	■				
	18.65	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	16.61	3300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	15.43	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	13.12	4600		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	11.37	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	9.60	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	9.26	3600							■	■	■	■	2500		■	■				
	7.91	3300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	180	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	N284/ 286	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K083	206.12	3000	6.8	13398/65	6000	■	■	■	■	■	■	■						
	163.14	3000	8.6	26103/160	6000	■	■	■	■	■	■	■						
	142.45	3000	9.8	2849/20	6000			■	■	■	■	■						
	125.90	3000	11	25179/200	6000	■	■	■	■	■	■	■						
	106.46	3000	13	12243/115	6000	■	■	■	■	■	■	■						
	91.51	3000	15	23793/260	6000			■	■	■	■	■						
	79.89	3000	18	6391/80	5600			■	■	■	■	■	■					
	79.75	2851	18	319/4	6000	■	■	■	■	■	■	■						
	68.44	3000	20	616/9	5000			■	■	■	■	■	■	■				
	66.00	3000	21	66/1	4800					■	■	■						
	63.12	2860	22	16159/256	6000	■	■	■	■	■	■	■						
	58.25	3000	24	6699/115	4400			■	■	■	■	■	■	■				
	55.11	3000	25	5291/96	6000			■	■	■	■	■						
	48.87	3000	29	2541/52	3900					■	■	■	■	■				
	48.71	3000	29	15587/320	6000	■	■	■	■	■	■	■						
	45.48	1626	31	2001/44	6000	■	■	■	■	■	■	■						
	41.19	3000	34	7579/184	6000	■	■	■	■	■	■	■						
3 stages	41.18	3000	34	9471/230	3500					■	■	■	■	■				
	35.99	1631	39	101361/2816	6000	■	■	■	■	■	■	■						
n_1=1400 min^{-1}	35.41	3000	40	1133/32	6000			■	■	■	■	■						
	33.76	3000	41	4389/130	3100								■	■				
	31.43	1916	45	11063/352	6000			■	■	■	■	■						
Maximum torque 3000 Nm	30.91	3000	45	11869/384	5600			■	■	■	■	■	■					
	27.78	1901	50	97773/3520	6000	■	■	■	■	■	■	■						
	26.48	2972	53	715/27	5000			■	■	■	■	■	■	■				
	25.54	2940	55	715/28	4800					■	■	■						
	23.49	1916	60	2067/88	6000	■	■	■	■	■	■	■						
	22.54	2832	62	4147/184	4400			■	■	■	■	■	■	■				
	20.19	1886	69	7107/352	6000			■	■	■	■	■						
	18.91	2686	74	605/32	3900					■	■	■	■	■				
	17.63	1937	79	24817/1408	5600			■	■	■	■	■	■					
	15.93	2552	88	5863/368	3500					■	■	■	■	■				
	15.10	1937	93	1495/99	5000			■	■	■	■	■	■	■				
	14.56	1748	96	4485/308	4800					■	■	■						
	13.06	2404	107	209/16	3100								■	■				
	12.85	1937	109	1131/88	4400			■	■	■	■	■	■	■				
	10.78	1937	130	345/32	3900					■	■	■	■	■				
	9.09	1937	154	1599/176	3500					■	■	■	■	■				
	7.45	1937	188	1311/176	3100								■	■				

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Type	$i_{ges.}$	SERVO adapter										Input unit							
		n_{1max}	Adapter size									n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K083	206.12	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	163.14	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	142.45	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	125.90	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	106.46	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	91.51	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	79.89	4500		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	79.75	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	68.44	4000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	66.00	3900							■	■	■	■	2500		■	■				
	63.12	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	58.25	3600		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	55.11	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	48.87	3100							■	■	■	■	2500		■	■	■	■	■	
	48.71	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	45.48	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	41.19	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	41.18	2800							■	■	■	■	2500		■	■	■	■	■	
	35.99	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	35.41	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	33.76	-											2500				■	■	■	
	31.43	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	30.91	4500		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	27.78	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	26.48	4000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	25.54	3900							■	■	■	■	2500		■	■				
	23.49	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	22.54	3600		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	20.19	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	18.91	3100							■	■	■	■	2500		■	■	■	■	■	
	17.63	4500		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	15.93	2800							■	■	■	■	2500		■	■	■	■	■	
	15.10	4000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	14.56	3900							■	■	■	■	2500		■	■				
	13.06	-											2500				■	■	■	
	12.85	3600		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	10.78	3100							■	■	■	■	2500		■	■	■	■	■	
	9.09	2800							■	■	■	■	2500		■	■	■	■	■	
	7.45	-											2500				■	■	■	

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	-	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	-	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K084	2205.52	3000	0.63	716793/325	6000	■	■	■	■									
	1803.58	3000	0.78	46893/26	6000	■	■	■	■									
	1745.64	3000	0.8	2793021/1600	6000	■	■	■	■									
	1524.22	3000	0.92	304843/200	6000	■	■	■	■									
	1427.51	3000	0.98	182721/128	6000	■	■	■	■									
	1424.12	3000	0.98	92568/65	6000	■	■	■	■									
	1246.44	3000	1.1	19943/16	6000	■	■	■	■									
	1127.18	3000	1.2	45087/40	6000	■	■	■	■									
	1104.23	3000	1.3	14355/13	6000	■	■	■	■	■	■	■						
	984.20	3000	1.4	4921/5	6000	■	■	■	■									
	903.77	3000	1.5	763686/845	6000	■	■	■	■	■	■	■						
	873.98	3000	1.6	55935/64	6000	■	■	■	■	■	■	■						
	763.13	3000	1.8	6105/8	6000	■	■	■	■	■	■	■						
	715.32	3000	2	1487871/2080	6000	■	■	■	■	■	■	■						
	695.67	3000	2	180873/260	6000	■	■	■	■	■	■	■						
4 stages	624.59	3000	2.2	162393/260	6000	■	■	■	■	■	■	■						
	550.61	3000	2.5	704781/1280	6000	■	■	■	■	■	■	■						
n_1=1400 min^{-1}	525.61	3000	2.7	341649/650	6000	■	■	■	■	■	■	■						
	480.77	3000	2.9	76923/160	6000	■	■	■	■	■	■	■						
	430.17	3000	3.3	643104/1495	6000	■	■	■	■	■	■	■						
Maximum torque	416.02	3000	3.4	1331253/3200	6000	■	■	■	■	■	■	■						
3000 Nm	363.25	3000	3.9	145299/400	6000	■	■	■	■	■	■	■						
	348.82	3000	4	294756/845	6000			■	■	■	■	■						
	340.47	3000	4.1	78309/230	6000	■	■	■	■	■	■	■						
	297.29	3000	4.7	34188/115	6000	■	■	■	■	■	■	■						
	292.01	3000	4.8	37961/130	5600			■	■	■	■	■						
	276.09	3000	5.1	287133/1040	6000			■	■	■	■	■						
	241.07	3000	5.8	31339/130	6000			■	■	■	■	■						
	236.66	3000	5.9	138446/585	5000			■	■	■	■	■						
	231.12	3000	6.1	147917/640	5600			■	■	■	■	■						
	228.21	3000	6.1	29667/130	4800					■	■	■						
	201.80	3000	6.9	48433/240	5600			■	■	■	■	■						
	187.31	3000	7.5	269731/1440	5000			■	■	■	■	■						
	180.62	3000	7.8	115599/640	4800					■	■	■						
	163.55	3000	8.6	88319/540	5000			■	■	■	■	■						
	157.71	3000	8.9	12617/80	4800					■	■	■						

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K084	2205.52	5000	■	■	■	■	■	■					3000	■						
	1803.58	5000	■	■	■	■	■	■					3000	■						
	1745.64	5000	■	■	■	■	■	■					3000	■						
	1524.22	5000	■	■	■	■	■	■					3000	■						
	1427.51	5000	■	■	■	■	■	■					3000	■						
	1424.12	5000	■	■	■	■	■	■					3000	■						
	1246.44	5000	■	■	■	■	■	■					3000	■						
	1127.18	5000	■	■	■	■	■	■					3000	■						
	1104.23	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	984.20	5000	■	■	■	■	■	■					3000	■						
	903.77	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	873.98	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	763.13	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	715.32	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	695.67	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	624.59	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	550.61	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	525.61	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	480.77	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	430.17	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	416.02	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	363.25	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	348.82	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	340.47	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	297.29	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	292.01	4500		■	■	■	■	■	■	■	■	■	3000	■	■					
	276.09	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	241.07	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	236.66	4000		■	■	■	■	■	■	■	■	■	3000	■	■					
	231.12	4500		■	■	■	■	■	■	■	■	■	3000	■	■					
	228.21	3900							■	■	■	■	3000		■					
	201.80	4500		■	■	■	■	■	■	■	■	■	3000	■	■					
	187.31	4000		■	■	■	■	■	■	■	■	■	3000	■	■					
	180.62	3900							■	■	■	■	3000		■					
	163.55	4000		■	■	■	■	■	■	■	■	■	3000	■	■					
	157.71	3900							■	■	■	■	3000		■					

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	180	200	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	N284/ 286	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K093	169.25	4500	8.3	21156/125	6000	■	■	■	■	■	■	■						
	143.08	4500	9.8	49364/345	6000	■	■	■	■	■	■	■						
	123.86	4500	11	241531/1950	6000			■	■	■	■	■						
	109.70	4500	13	24682/225	5600			■	■	■	■	■	■					
	94.90	4500	15	192167/2025	5000			■	■	■	■	■	■	■				
	91.51	4500	15	192167/2100	4800					■	■	■						
	80.74	4500	17	139277/1725	4400			■	■	■	■	■	■	■				
	68.71	4500	20	66994/975	3900					■	■	■	■	■	■			
	63.96	4500	22	1599/25	6000	■	■	■	■	■	■	■						
	59.28	4500	24	102254/1725	3500					■	■	■	■	■	■			
	54.07	4500	26	3731/69	6000	■	■	■	■	■	■	■						
	49.73	4500	28	19393/390	3100								■	■	■			
	46.81	4500	30	5617/120	6000			■	■	■	■	■						
	41.46	4500	34	3731/90	5600			■	■	■	■	■	■					
	40.43	4500	35	75809/1875	2700								■	■	■			
3 stages	37.13	2785	38	8541/230	6000	■	■	■	■	■	■	■						
	35.86	4500	39	58097/1620	5000			■	■	■	■	■	■	■				
n_1=1400 min^{-1}	34.58	4149	40	58097/1680	4800					■	■	■						
	31.61	4500	44	22919/725	2300								■	■	■			
	31.39	2806	45	33215/1058	6000	■	■	■	■	■	■	■						
Maximum torque 4500 Nm	30.51	4500	46	42107/1380	4400			■	■	■	■	■	■	■				
	27.18	2795	52	10001/368	6000			■	■	■	■	■						
	25.97	4500	54	779/30	3900					■	■	■	■	■	■			
	24.07	2991	58	6643/276	5600			■	■	■	■	■	■					
	22.40	4500	62	15457/690	3500					■	■	■	■	■	■			
	20.82	2991	67	103441/4968	5000			■	■	■	■	■	■	■				
	20.08	2409	70	103441/5152	4800					■	■	■						
	18.79	4500	75	451/24	3100								■	■	■			
	17.72	2991	79	74971/4232	4400			■	■	■	■	■	■	■				
	15.28	4500	92	22919/1500	2700								■	■	■			
	15.08	2991	93	1387/92	3900					■	■	■	■	■	■			
	13.01	2991	108	27521/2116	3500					■	■	■	■	■	■			
	11.95	4500	117	6929/580	2300								■	■	■			
	10.91	2991	128	4015/368	3100								■	■	■			
	8.87	2991	158	40807/4600	2700								■	■	■			
	6.94	2991	202	37011/5336	2300								■	■	■			

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K093	169.25	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	143.08	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	123.86	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	109.70	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	94.90	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	91.51	4100							■	■	■	■	2500		■	■				
	80.74	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	68.71	3300							■	■	■	■	2500		■	■	■	■	■	
	63.96	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	59.28	3000							■	■	■	■	2500		■	■	■	■	■	
	54.07	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	49.73	-											2500				■	■	■	
	46.81	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	41.46	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	40.43	-											2300				■	■	■	
	37.13	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	35.86	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	34.58	4100							■	■	■	■	2500		■	■				
	31.61	-											2000				■	■	■	
	31.39	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	30.51	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	27.18	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	25.97	3300							■	■	■	■	2500		■	■	■	■	■	
	24.07	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	22.40	3000							■	■	■	■	2500		■	■	■	■	■	
	20.82	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	20.08	4100							■	■	■	■	2500		■	■				
	18.79	-											2500				■	■	■	
	17.72	3700		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	15.28	-											2300				■	■	■	
	15.08	3300							■	■	■	■	2500		■	■	■	■	■	
	13.01	3000							■	■	■	■	2500		■	■	■	■	■	
	11.95	-											2000				■	■	■	
	10.91	-											2500				■	■	■	
	8.87	-											2300				■	■	■	
	6.94	-											2000				■	■	■	

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	-	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	-	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K094	1810.95	4500	0.77	1131846/625	6000	■	■	■	■									
	1531.00	4500	0.91	2640974/1725	6000	■	■	■	■									
	1480.92	4500	0.95	37023/25	6000	■	■	■	■									
	1251.99	4500	1.1	86387/69	6000	■	■	■	■									
	1169.35	4500	1.2	1607856/1375	6000	■	■	■	■									
	988.58	4500	1.4	3751664/3795	6000	■	■	■	■									
	906.69	4500	1.5	31734/35	6000	■	■	■	■	■	■	■						
	766.52	4500	1.8	17630/23	6000	■	■	■	■	■	■	■						
	742.09	4500	1.9	1205892/1625	6000	■	■	■	■	■	■	■						
4 stages	627.37	4500	2.2	937916/1495	6000	■	■	■	■	■	■	■						
	571.21	4500	2.5	142803/250	6000	■	■	■	■	■	■	■						
	482.91	4500	2.9	111069/230	6000	■	■	■	■	■	■	■						
n_1=1400 min^{-1}	431.58	4500	3.2	269739/625	6000	■	■	■	■	■	■	■						
	364.86	4500	3.8	209797/575	6000	■	■	■	■	■	■	■						
Maximum torque	353.21	4500	4	1015488/2875	6000	■	■	■	■	■	■	■						
4500 Nm	298.61	4500	4.7	789824/2645	6000	■	■	■	■	■	■	■						
	286.42	4500	4.9	465432/1625	6000			■	■	■	■	■						
	242.14	4500	5.8	1086008/4485	6000			■	■	■	■	■						
	239.77	4500	5.8	29971/125	5600			■	■	■	■	■						
	202.70	4500	6.9	209797/1035	5600			■	■	■	■	■						
	194.32	4500	7.2	218612/1125	5000			■	■	■	■	■						
	187.38	4500	7.5	163959/875	4800					■	■	■						
	164.28	4500	8.5	1530284/9315	5000			■	■	■	■	■						
	158.41	4500	8.8	54653/345	4800					■	■	■						

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K094	1810.95	5000	■	■	■	■	■	■					3000	■						
	1531.00	5000	■	■	■	■	■	■					3000	■						
	1480.92	5000	■	■	■	■	■	■					3000	■						
	1251.99	5000	■	■	■	■	■	■					3000	■						
	1169.35	5000	■	■	■	■	■	■					3000	■						
	988.58	5000	■	■	■	■	■	■					3000	■						
	906.69	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	766.52	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	742.09	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	627.37	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	571.21	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	482.91	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	431.58	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	364.86	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	353.21	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	298.61	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	286.42	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	242.14	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	239.77	4800		■	■	■	■	■	■	■	■	■	3000	■	■					
	202.70	4800		■	■	■	■	■	■	■	■	■	3000	■	■					
	194.32	4200		■	■	■	■	■	■	■	■	■	3000	■	■					
	187.38	4100							■	■	■	■	3000		■					
	164.28	4200		■	■	■	■	■	■	■	■	■	3000	■	■					
	158.41	4100							■	■	■	■	3000		■					

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size											
						63	71	80	90	100	112	132	160	180	200	225	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	I225	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	N284/ 286	N324/ 326	N364	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K103	140.95	8000	9.9	128269/910	6000						■	■						
	124.50	8000	11	13072/105	5600						■	■	■					
	108.07	8000	13	20425/189	5000						■	■	■	■				
	104.21	8000	13	20425/196	4800						■	■						
	93.37	8000	15	3268/35	4400						■	■	■	■				
	79.90	8000	18	72713/910	3900						■	■	■	■	■	■		
	69.01	8000	20	55556/805	3500						■	■	■	■	■	■		
	58.36	8000	24	817/14	3100								■	■	■	■		
	53.27	5963	26	2983/56	6000						■	■						
	47.62	8000	29	41667/875	2700								■	■	■	■		
	47.05	7498	30	988/21	5600						■	■	■					
	40.84	7498	34	30875/756	5000						■	■	■	■				
	39.38	4728	36	30875/784	4800						■	■						
	38.64	8000	36	39216/1015	2300								■	■	■	■		
3 stages	35.29	7498	40	247/7	4400						■	■	■	■				
	30.85	8000	45	30229/980	2100									■	■	■		
n_1=1400 min^{-1}	30.33	3395	46	2669/88	6000						■	■						
	30.20	7498	46	1691/56	3900						■	■	■	■	■	■		
	26.79	4269	52	884/33	5600						■	■	■					
Maximum torque 8000 Nm	26.08	7498	54	4199/161	3500						■	■	■	■	■	■		
	23.25	4269	60	27625/1188	5000						■	■	■	■				
	22.42	2692	62	27625/1232	4800						■	■						
	22.05	7498	63	1235/56	3100								■	■	■	■		
	20.09	4269	70	221/11	4400						■	■	■	■				
	18.00	7498	78	12597/700	2700								■	■	■	■		
	17.19	4269	81	1513/88	3900						■	■	■	■	■	■		
	14.85	4269	94	3757/253	3500						■	■	■	■	■	■		
	14.60	7498	96	2964/203	2300								■	■	■	■		
	12.56	4269	111	1105/88	3100								■	■	■	■		
	11.66	7498	120	9139/784	2100									■	■	■		
	10.25	4269	137	11271/1100	2700								■	■	■	■		
	8.31	4269	168	2652/319	2300								■	■	■	■		
	6.64	4269	211	8177/1232	2100									■	■	■		

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K103	140.95	5000								■	■	■	2500		■	■				
	124.50	5000								■	■	■	2500		■	■	■			
	108.07	4500								■	■	■	2500		■	■	■	■		
	104.21	4400								■	■	■	2500		■	■				
	93.37	4000								■	■	■	2500		■	■	■	■		
	79.90	3500								■	■	■	2500		■	■	■	■	■	
	69.01	3200								■	■	■	1800		■	■	■	■	■	■
	58.36	-											1800				■	■	■	■
	53.27	5000								■	■	■	2500		■	■				
	47.62	-											1800				■	■	■	■
	47.05	5000								■	■	■	2500		■	■	■			
	40.84	4500								■	■	■	2500		■	■	■	■		
	39.38	4400								■	■	■	2500		■	■				
	38.64	-											1800				■	■	■	■
	35.29	4000								■	■	■	2500		■	■	■	■		
	30.85	-											1800					■	■	■
	30.33	5000								■	■	■	2500		■	■				
	30.20	3500								■	■	■	2500		■	■	■	■	■	
	26.79	5000								■	■	■	2500		■	■	■			
	26.08	3200								■	■	■	1800		■	■	■	■	■	■
	23.25	4500								■	■	■	2500		■	■	■	■		
	22.42	4400								■	■	■	2500		■	■				
	22.05	-											1800				■	■	■	■
	20.09	4000								■	■	■	2500		■	■	■	■		
	18.00	-											1800				■	■	■	■
	17.19	3500								■	■	■	2500		■	■	■	■	■	
	14.85	3200								■	■	■	1800		■	■	■	■	■	■
	14.60	-											1800				■	■	■	■
	12.56	-											1800				■	■	■	■
	11.66	-											1800					■	■	■
	10.25	-											1800				■	■	■	■
	8.31	-											1800				■	■	■	■
	6.64	-											1800					■	■	■

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K104	1301.54	8000	1.1	300656/231	6000	■	■	■	■									
	1129.81	8000	1.2	2348875/2079	6000	■	■	■	■									
	1004.85	8000	1.4	738568/735	6000	■	■	■	■	■	■	■						
	976.16	8000	1.4	75164/77	6000	■	■	■	■									
	872.27	8000	1.6	2308025/2646	6000	■	■	■	■	■	■	■						
	842.74	8000	1.7	1150336/1365	6000	■	■	■	■	■	■	■						
	753.64	8000	1.9	184642/245	6000	■	■	■	■	■	■	■						
	731.54	8000	1.9	1797400/2457	6000	■	■	■	■	■	■	■						
	661.38	8000	2.1	13889/21	6000	■	■	■	■	■	■	■						
	632.05	8000	2.2	287584/455	6000	■	■	■	■	■	■	■						
	574.12	8000	2.4	1736125/3024	6000	■	■	■	■	■	■	■						
	510.43	8000	2.7	267976/525	6000	■	■	■	■	■	■	■						
	496.04	8000	2.8	13889/28	6000	■	■	■	■	■	■	■						
	443.08	8000	3.2	167485/378	6000	■	■	■	■	■	■	■						
4 stages	422.20	8000	3.3	339872/805	6000	■	■	■	■	■	■	■						
	382.82	8000	3.7	66994/175	6000	■	■	■	■	■	■	■						
n_1=1400 min^{-1}	366.49	8000	3.8	531050/1449	6000	■	■	■	■	■	■	■						
	359.12	8000	3.9	32680/91	6000			■	■	■	■	■						
Maximum torque 8000 Nm	316.65	8000	4.4	254904/805	6000	■	■	■	■	■	■	■						
	311.74	8000	4.5	510625/1638	6000			■	■	■	■	■						
	311.24	8000	4.5	6536/21	5600			■	■	■	■	■	■					
	270.17	8000	5.2	102125/378	5600			■	■	■	■	■	■					
	269.34	8000	5.2	24510/91	6000			■	■	■	■	■						
	262.82	8000	5.3	248368/945	5000			■	■	■	■	■	■					
	253.44	8000	5.5	62092/245	4800					■	■	■						
	233.43	8000	6	1634/7	5600			■	■	■	■	■	■					
	228.15	8000	6.1	388075/1701	5000			■	■	■	■	■	■					
	220.00	8000	6.4	388075/1764	4800					■	■	■						
	216.51	8000	6.5	104576/483	4400			■	■	■	■	■	■					
	197.12	8000	7.1	62092/315	5000			■	■	■	■	■	■					
	190.08	8000	7.4	46569/245	4800					■	■	■						
	187.95	8000	7.4	817000/4347	4400			■	■	■	■	■	■					
	162.39	8000	8.6	26144/161	4400			■	■	■	■	■	■					

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K104	1301.54	5000	■	■	■	■	■	■					3000	■						
	1129.81	5000	■	■	■	■	■	■					3000	■						
	1004.85	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	976.16	5000	■	■	■	■	■	■					3000	■						
	872.27	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	842.74	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	753.64	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	731.54	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	661.38	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	632.05	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	574.12	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	510.43	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	496.04	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	443.08	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	422.20	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	382.82	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	366.49	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	359.12	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	316.65	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	311.74	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	311.24	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	270.17	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	269.34	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	262.82	4500		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	253.44	4400							■	■	■	■	2500		■	■				
	233.43	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	228.15	4500		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	220.00	4400							■	■	■	■	2500		■	■				
	216.51	4000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	197.12	4500		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	190.08	4400							■	■	■	■	2500		■	■				
	187.95	4000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	162.39	4000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size											
						63	71	80	90	100	112	132	160	180	200	225	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	I225	I250	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	N284/ 286	N324/ 326	N364	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K123	151.11	13000	9.3	12089/80	5600						■	■	■					
	131.76	13000	11	5929/45	5000						■	■	■	■				
	127.05	13000	11	2541/20	4800						■	■						
	113.49	13000	12	26103/230	4400						■	■	■	■				
	97.73	13000	14	2541/26	3900						■	■	■	■	■	■		
	85.37	13000	16	3927/46	3500						■	■	■	■	■	■	■	
	73.74	13000	19	19173/260	3100								■	■	■	■	■	
	60.98	13000	23	7623/125	2700								■	■	■	■	■	
	58.47	8768	24	22451/384	5600						■	■	■					
	50.98	9688	27	11011/216	5000						■	■	■	■				
	50.18	13000	28	14553/290	2300								■	■	■	■	■	
	49.16	5899	28	1573/32	4800						■	■						
	43.91	12727	32	16159/368	4400						■	■	■	■				
	41.25	13000	34	165/4	2100									■	■	■	■	
	37.81	13000	37	605/16	3900						■	■	■	■	■	■		
3 stages	35.02	13000	40	10857/310	1900									■	■	■	■	
	33.34	5000	42	46943/1408	5600						■	■	■					
n_1=1400 min^{-1}	33.03	13000	42	12155/368	3500						■	■	■	■	■	■	■	
	29.89	13000	47	2541/85	1700									■	■	■	■	
	29.07	5525	48	2093/72	5000						■	■	■	■				
Maximum torque 13000 Nm	28.53	13000	49	913/32	3100								■	■	■	■	■	
	28.03	3364	50	897/32	4800						■	■						
	25.04	7258	56	4407/176	4400						■	■	■	■				
	23.60	13000	59	4719/200	2700								■	■	■	■	■	
	21.56	8053	65	345/16	3900						■	■	■	■	■	■		
	19.42	13000	72	9009/464	2300								■	■	■	■	■	
	18.84	8155	74	3315/176	3500						■	■	■	■	■	■	■	
	16.27	8155	86	5727/352	3100								■	■	■	■	■	
	15.96	13000	88	3575/224	2100									■	■	■	■	
	13.55	13000	103	6721/496	1900									■	■	■	■	
	13.46	8155	104	2691/200	2700								■	■	■	■	■	
	11.57	13000	121	1573/136	1700									■	■	■	■	
	11.07	8155	126	56511/5104	2300								■	■	■	■	■	
	9.10	8155	154	22425/2464	2100									■	■	■	■	
	7.73	8155	181	42159/5456	1900									■	■	■	■	
	6.60	8155	212	897/136	1700									■	■	■	■	

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K123	151.11	5000								■	■	■	2500		■	■	■			
	131.76	4800								■	■	■	2500		■	■	■	■		
	127.05	4600								■	■	■	2500		■	■				
	113.49	4200								■	■	■	2500		■	■	■	■		
	97.73	3700								■	■	■	2500		■	■	■	■	■	
	85.37	3400								■	■	■	1800		■	■	■	■	■	■
	73.74	-											1800				■	■	■	■
	60.98	-											1800				■	■	■	■
	58.47	5000								■	■	■	2500		■	■	■			
	50.98	4800								■	■	■	2500		■	■	■	■		
	50.18	-											1800				■	■	■	■
	49.16	4600								■	■	■	2500		■	■				
	43.91	4200								■	■	■	2500		■	■	■	■		
	41.25	-											1800					■	■	■
	37.81	3700								■	■	■	2500		■	■	■	■	■	
	35.02	-											1800					■	■	■
	33.34	5000								■	■	■	2500		■	■	■			
	33.03	3400								■	■	■	1800		■	■	■	■	■	■
	29.89	-											1600						■	■
	29.07	4800								■	■	■	2500		■	■	■	■		
	28.53	-											1800				■	■	■	■
	28.03	4600								■	■	■	2500		■	■				
	25.04	4200								■	■	■	2500		■	■	■	■		
	23.60	-											1800				■	■	■	■
	21.56	3700								■	■	■	2500		■	■	■	■	■	
	19.42	-											1800				■	■	■	■
	18.84	3400								■	■	■	1800		■	■	■	■	■	■
	16.27	-											1800				■	■	■	■
	15.96	-											1800					■	■	■
	13.55	-											1800					■	■	■
	13.46	-											1800				■	■	■	■
	11.57	-											1600						■	■
	11.07	-											1800				■	■	■	■
	9.10	-											1800					■	■	■
	7.73	-											1800					■	■	■
	6.60	-											1600						■	■

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K124	1579.81	13000	0.89	25277/16	6000	■	■	■	■									
	1377.44	13000	1	12397/9	6000	■	■	■	■									
	1219.69	13000	1.1	195151/160	6000	■	■	■	■	■	■	■						
	1186.50	13000	1.2	2373/2	6000	■	■	■	■									
	1063.46	13000	1.3	95711/90	6000	■	■	■	■	■	■	■						
	1022.92	13000	1.4	132979/130	6000	■	■	■	■	■	■	■						
	1021.73	13000	1.4	26565/26	6000	■	■	■	■									
	916.04	13000	1.5	421377/460	6000	■	■	■	■	■	■	■						
	891.88	13000	1.6	521752/585	6000	■	■	■	■	■	■	■						
	802.79	13000	1.7	205513/256	6000	■	■	■	■	■	■	■						
	788.83	13000	1.8	41019/52	6000	■	■	■	■	■	■	■						
	768.25	13000	1.8	1148532/1495	6000	■	■	■	■	■	■	■						
	699.95	13000	2	100793/144	6000	■	■	■	■	■	■	■						
	661.56	13000	2.1	111804/169	6000	■	■	■	■	■	■	■						
	619.56	13000	2.3	495649/800	6000	■	■	■	■	■	■	■						
	602.92	13000	2.3	443751/736	6000	■	■	■	■	■	■	■						
	540.20	13000	2.6	243089/450	6000	■	■	■	■	■	■	■						
	519.19	13000	2.7	215985/416	6000	■	■	■	■	■	■	■						
	512.47	13000	2.7	471471/920	6000	■	■	■	■	■	■	■						
4 stages	465.31	13000	3	1070223/2300	6000	■	■	■	■	■	■	■						
	446.82	13000	3.1	154154/345	6000	■	■	■	■	■	■	■						
	435.90	13000	3.2	181335/416	6000			■	■	■	■	■						
n_1=1400 min^{-1}	400.70	13000	3.5	104181/260	6000	■	■	■	■	■	■	■						
	384.88	13000	3.6	1018017/2645	6000	■	■	■	■	■	■	■						
Maximum torque	380.06	13000	3.7	29645/78	6000			■	■	■	■	■						
13000 Nm	377.78	13000	3.7	12089/32	5600			■	■	■	■	■	■					
	331.43	13000	4.2	7623/23	6000	■	■	■	■	■	■	■						
	329.39	13000	4.3	5929/18	5600			■	■	■	■	■	■					
	327.38	13000	4.3	391545/1196	6000			■	■	■	■	■						
	319.02	13000	4.4	229691/720	5000			■	■	■	■	■	■					
	307.62	13000	4.6	98439/320	4800					■	■	■						
	283.73	13000	4.9	26103/92	5600			■	■	■	■	■	■					
	281.92	13000	5	190575/676	6000			■	■	■	■	■						
	278.15	13000	5	112651/405	5000			■	■	■	■	■	■					
	268.22	13000	5.2	16093/60	4800					■	■	■						
	262.80	13000	5.3	12089/46	4400			■	■	■	■	■	■					
	244.33	13000	5.7	12705/52	5600			■	■	■	■	■	■					
	239.59	13000	5.8	165319/690	5000			■	■	■	■	■	■					
	231.04	13000	6.1	212553/920	4800					■	■	■						
	229.14	13000	6.1	47432/207	4400			■	■	■	■	■	■					
	206.32	13000	6.8	16093/78	5000			■	■	■	■	■	■					
	198.95	13000	7	20691/104	4800					■	■	■						
	197.38	13000	7.1	104412/529	4400			■	■	■	■	■	■					
	169.97	13000	8.2	50820/299	4400			■	■	■	■	■	■					

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Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K124	1579.81	5000	■	■	■	■	■	■					3000	■						
	1377.44	5000	■	■	■	■	■	■					3000	■						
	1219.69	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	1186.50	5000	■	■	■	■	■	■					3000	■						
	1063.46	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	1022.92	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	1021.73	5000	■	■	■	■	■	■					3000	■						
	916.04	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	891.88	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	802.79	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	788.83	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	768.25	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	699.95	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	661.56	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	619.56	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	602.92	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	540.20	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	519.19	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	512.47	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	465.31	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	446.82	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	435.90	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	400.70	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	384.88	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	380.06	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	377.78	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	331.43	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	329.39	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	327.38	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	319.02	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	307.62	4600							■	■	■	■	2500		■	■				
	283.73	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	281.92	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	278.15	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	268.22	4600							■	■	■	■	2500		■	■				
	262.80	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	244.33	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	239.59	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	231.04	4600							■	■	■	■	2500		■	■				
	229.14	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	206.32	4800		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	198.95	4600							■	■	■	■	2500		■	■				
	197.38	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	169.97	4200		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	180	200	225	250	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	I225	I250	I280
						NEMA adapter												
						N56		N143/145		N182	N184	N213/215	N254/256	N284/286	N324/326	N364	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K153	146.69	18000	9.5	6601/45	5000								■	■				
	126.34	18000	11	23247/184	4400								■	■				
	109.28	18000	13	28413/260	3900								■	■	■	■		
	96.39	18000	15	88683/920	3500								■	■	■	■	■	■
	82.79	18000	17	4305/52	3100								■	■	■	■	■	■
	68.88	18000	20	1722/25	2700								■	■	■	■	■	■
	57.15	18000	24	66297/1160	2300								■	■	■	■	■	■
	56.75	10785	25	12259/216	5000								■	■				
	48.88	14174	29	71955/1472	4400								■	■				
	47.66	18000	29	3813/80	2100									■	■	■	■	■
	42.28	17806	33	1353/32	3900								■	■	■	■		
	40.97	18000	34	50799/1240	1900									■	■	■	■	■
3 stages	37.30	18000	38	54899/1472	3500								■	■	■	■	■	■
	35.63	6771	39	962/27	5000								■	■				
	35.45	18000	39	6027/170	1700									■	■	■	■	■
n_1=1400 min^{-1}	32.03	18000	44	1025/32	3100								■	■	■	■	■	■
	30.69	8899	46	64935/2116	4400								■	■				
Maximum torque	26.65	18000	53	533/20	2700								■	■	■	■	■	■
18000 Nm	26.54	11178	53	1221/46	3900								■	■	■	■		
	23.41	13593	60	49543/2116	3500								■	■	■	■	■	■
	22.11	18000	63	41041/1856	2300								■	■	■	■	■	■
	20.11	13390	70	925/46	3100								■	■	■	■	■	■
	18.44	18000	76	16523/896	2100									■	■	■	■	■
	16.73	14116	84	1924/115	2700								■	■	■	■	■	■
	15.85	18000	88	31447/1984	1900									■	■	■	■	■
	13.88	14116	101	37037/2668	2300								■	■	■	■	■	■
	13.72	18000	102	3731/272	1700									■	■	■	■	■
	11.58	13865	121	14911/1288	2100									■	■	■	■	■
	9.95	13306	141	28379/2852	1900									■	■	■	■	■
	8.61	12793	163	3367/391	1700									■	■	■	■	■

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Type	$i_{ges.}$	SERVO adapter											Input unit						
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]					
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K153	146.69	-											2500				■	■		
	126.34	-											2500				■	■		
	109.28	-											2500				■	■	■	
	96.39	-											1800				■	■	■	■
	82.79	-											1800				■	■	■	■
	68.88	-											1800				■	■	■	■
	57.15	-											1800				■	■	■	■
	56.75	-											2500				■	■		
	48.88	-											2500				■	■		
	47.66	-											1800					■	■	■
	42.28	-											2500				■	■	■	
	40.97	-											1800					■	■	■
	37.30	-											1800				■	■	■	■
	35.63	-											2500				■	■		
	35.45	-											1700						■	■
	32.03	-											1800				■	■	■	■
	30.69	-											2500				■	■		
	26.65	-											1800				■	■	■	■
	26.54	-											2500				■	■	■	
	23.41	-											1800				■	■	■	■
	22.11	-											1800				■	■	■	■
	20.11	-											1800				■	■	■	■
	18.44	-											1800					■	■	■
	16.73	-											1800				■	■	■	■
	15.85	-											1800					■	■	■
	13.88	-											1800				■	■	■	■
	13.72	-											1700						■	■
	11.58	-											1800					■	■	■
	9.95	-											1800					■	■	■
	8.61	-											1700						■	■

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	160	180	200	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	N254/ 256	N284/ 286	N324/ 326	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K154	1308.92	18000	1.1	765716/585	6000	■	■	■	■	■	■	■						
	1127.36	18000	1.2	674163/598	6000	■	■	■	■	■	■	■						
	1035.99	18000	1.4	745913/720	6000	■	■	■	■	■	■	■						
	975.12	18000	1.4	823977/845	6000	■	■	■	■	■	■	■						
	904.58	18000	1.5	244237/270	6000			■	■	■	■	■						
	892.29	18000	1.6	2626911/2944	6000	■	■	■	■	■	■	■						
	799.45	18000	1.8	719509/900	6000	■	■	■	■	■	■	■						
	779.11	18000	1.8	286713/368	6000			■	■	■	■	■						
	771.80	18000	1.8	3210669/4160	6000	■	■	■	■	■	■	■						
	688.57	18000	2	2533923/3680	6000	■	■	■	■	■	■	■						
	676.04	18000	2.1	30422/45	6000	■	■	■	■	■	■	■						
	673.90	18000	2.1	350427/520	6000			■	■	■	■	■						
	595.58	18000	2.4	3097017/5200	6000	■	■	■	■	■	■	■						
	582.27	18000	2.4	1232091/2116	6000	■	■	■	■	■	■	■						
	581.11	18000	2.4	679903/1170	6000			■	■	■	■	■						
	507.30	18000	2.8	547883/1080	5600			■	■	■	■	■	■					
4 stages	503.64	18000	2.8	1505889/2990	6000	■	■	■	■	■	■	■						
	500.51	18000	2.8	2394441/4784	6000			■	■	■	■	■						
	436.93	18000	3.2	643167/1472	5600			■	■	■	■	■	■					
n_1=1400 min^{-1}	434.63	18000	3.2	105616/243	5000			■	■	■	■	■	■	■				
	432.92	18000	3.2	2926539/6760	6000			■	■	■	■	■						
	419.11	18000	3.3	3772/9	4800					■	■	■						
Maximum torque 18000 Nm	377.93	18000	3.7	786093/2080	5600			■	■	■	■	■	■					
	374.35	18000	3.7	8610/23	5000			■	■	■	■	■	■	■				
	369.91	18000	3.8	16646/45	4400			■	■	■	■	■	■	■				
	360.98	18000	3.9	16605/46	4800					■	■	■						
	323.79	18000	4.3	12628/39	5000			■	■	■	■	■	■	■				
	318.60	18000	4.4	674163/2116	4400			■	■	■	■	■	■	■				
	312.23	18000	4.5	4059/13	4800					■	■	■						
	310.30	18000	4.5	72611/234	3900					■	■	■	■	■	■			
	275.58	18000	5.1	823977/2990	4400			■	■	■	■	■	■	■				
	267.26	18000	5.2	1278585/4784	3900					■	■	■	■	■	■			
	261.49	18000	5.4	11767/45	3500					■	■	■	■	■	■			
	231.17	18000	6.1	312543/1352	3900					■	■	■	■	■	■			
	225.22	18000	6.2	953127/4232	3500					■	■	■	■	■	■			
	214.39	18000	6.5	125419/585	3100								■	■	■			
	194.80	18000	7.2	1164933/5980	3500					■	■	■	■	■	■			
	184.65	18000	7.6	441693/2392	3100								■	■	■			
	159.72	18000	8.8	539847/3380	3100								■	■	■			

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Type	$i_{ges.}$	SERVO adapter											Input unit						
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]					
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K154	1308.92	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	1127.36	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	1035.99	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	975.12	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	904.58	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	892.29	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	799.45	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	779.11	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	771.80	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	688.57	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	676.04	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	673.90	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	595.58	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	582.27	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	581.11	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	507.30	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	503.64	5000	■	■	■	■	■	■	■	■	■	■	2500	■	■	■				
	500.51	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	436.93	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	434.63	4900		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	432.92	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■				
	419.11	4700							■	■	■	■	2500		■	■				
	377.93	5000		■	■	■	■	■	■	■	■	■	2500	■	■	■	■			
	374.35	4900		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	369.91	4300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	360.98	4700							■	■	■	■	2500		■	■				
	323.79	4900		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	318.60	4300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	312.23	4700							■	■	■	■	2500		■	■				
	310.30	3800							■	■	■	■	2500		■	■	■	■	■	
	275.58	4300		■	■	■	■	■	■	■	■	■	2500	■	■	■	■	■		
	267.26	3800							■	■	■	■	2500		■	■	■	■	■	
	261.49	3500							■	■	■	■	2500		■	■	■	■	■	
	231.17	3800							■	■	■	■	2500		■	■	■	■	■	
	225.22	3500							■	■	■	■	2500		■	■	■	■	■	
	214.39	-											2500				■	■	■	
	194.80	3500							■	■	■	■	2500		■	■	■	■	■	
	184.65	-											2500				■	■	■	
	159.72	-											2500				■	■	■	

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Type	$i_{ges.}$	M_{2nenn}	n_2	i_{exakt}	n_{1max}	IEC motor frame size												
						63	71	80	90	100	112	132	-	-	-	-	-	-
						IEC adapter												
						I63	I71	I80	I90	I100	I112	I132	-	-	-	-	-	-
						NEMA adapter												
						N56		N143/145		N182	N184	N213/ 215	-	-	-	-	-	-
		[Nm]	[min^{-1}]		[min^{-1}]													
K155	14005.40	18000	0.1	40965806/2925	6000	■	■	■	■									
	11453.02	18000	0.12	1340003/117	6000	■	■	■	■									
	9679.02	18000	0.14	26133359/2700	6000	■	■	■	■									
	9043.42	18000	0.15	58194416/6435	6000	■	■	■	■									
	7915.09	18000	0.18	1709659/216	6000	■	■	■	■									
	7012.05	18000	0.2	273470/39	6000	■	■	■	■	■	■	■						
	6249.84	18000	0.22	9281006/1485	6000	■	■	■	■									
	5739.09	18000	0.24	14548604/2535	6000	■	■	■	■	■	■	■						
	4845.97	18000	0.29	174455/36	6000	■	■	■	■	■	■	■						
5 stages	4417.59	18000	0.32	574287/130	6000	■	■	■	■	■	■	■						
	3966.24	18000	0.35	4640503/1170	6000	■	■	■	■	■	■	■						
n_1=1400 min^{-1}	3337.74	18000	0.42	3254293/975	6000	■	■	■	■	■	■	■						
	3052.96	18000	0.46	244237/80	6000	■	■	■	■	■	■	■						
	2731.65	18000	0.51	532672/195	6000	■	■	■	■	■	■	■						
Maximum torque	2306.68	18000	0.61	4152029/1800	6000	■	■	■	■	■	■	■						
18000 Nm	2215.09	18000	0.63	16845752/7605	6000			■	■	■	■	■						
	1887.82	18000	0.74	84952/45	6000	■	■	■	■	■	■	■						
	1854.30	18000	0.76	3254293/1755	5600			■	■	■	■	■						
	1530.83	18000	0.91	2686607/1755	6000			■	■	■	■	■						
	1502.83	18000	0.93	23737196/15795	5000			■	■	■	■	■						
	1449.16	18000	0.97	847757/585	4800					■	■	■						
	1281.49	18000	1.1	4152029/3240	5600			■	■	■	■	■						
	1038.59	18000	1.3	7571347/7290	5000			■	■	■	■	■						
	1001.50	18000	1.4	1081621/1080	4800					■	■	■						

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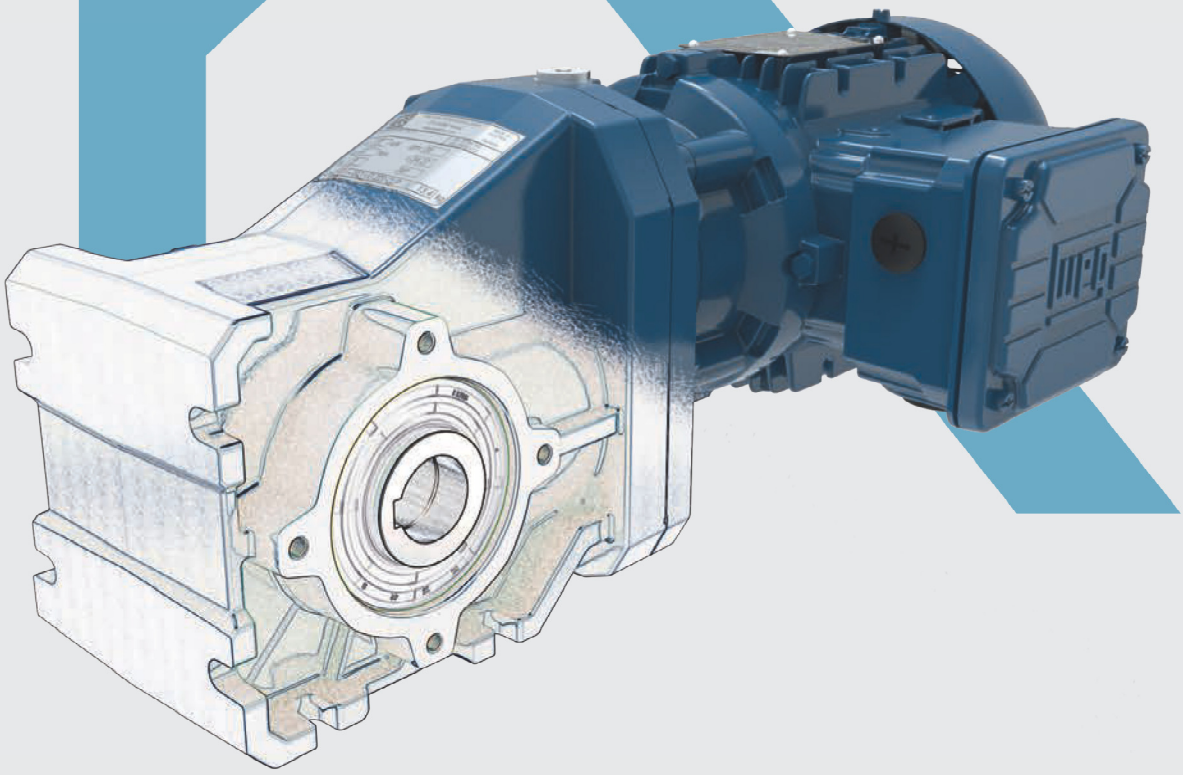
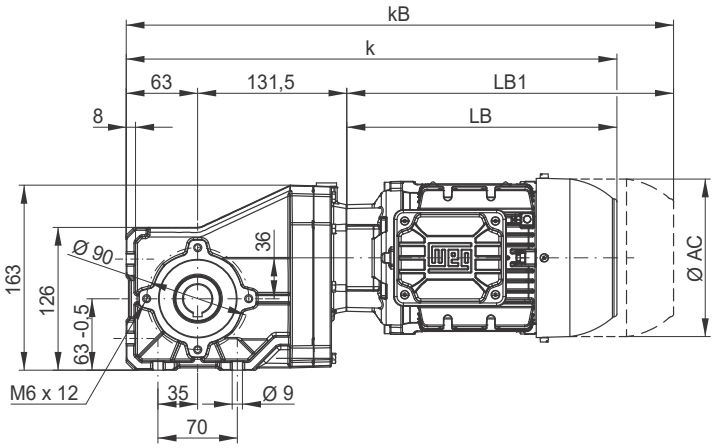
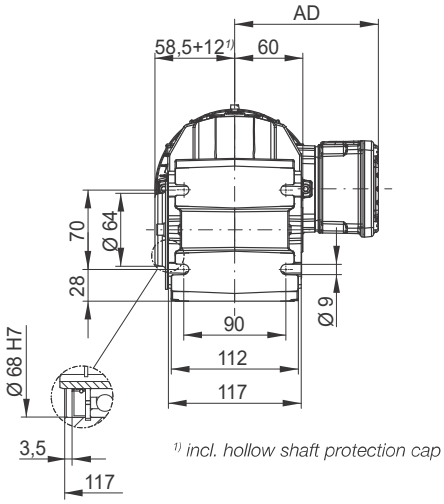
Type	$i_{ges.}$	SERVO adapter											Input unit							
		n_{1max}	Adapter size										n_{1max}	Input shaft [mm]						
		[min^{-1}]	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190	[min^{-1}]	19x40	24x50	28x60	38x80	42x110	48x110	55x110
K155	14005.40	5000	■	■	■	■	■	■					3000	■						
	11453.02	5000	■	■	■	■	■	■					3000	■						
	9679.02	5000	■	■	■	■	■	■					3000	■						
	9043.42	5000	■	■	■	■	■	■					3000	■						
	7915.09	5000	■	■	■	■	■	■					3000	■						
	7012.05	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	6249.84	5000	■	■	■	■	■	■					3000	■						
	5739.09	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	4845.97	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	4417.59	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	3966.24	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	3337.74	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	3052.96	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	2731.65	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	2306.68	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	2215.09	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	1887.82	5000	■	■	■	■	■	■	■	■	■	■	3000	■	■					
	1854.30	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	1530.83	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	1502.83	4900		■	■	■	■	■	■	■	■	■	3000	■	■					
	1449.16	4700							■	■	■	■	3000		■					
	1281.49	5000		■	■	■	■	■	■	■	■	■	3000	■	■					
	1038.59	4900		■	■	■	■	■	■	■	■	■	3000	■	■					
	1001.50	4700							■	■	■	■	3000		■					

Legend see page 397

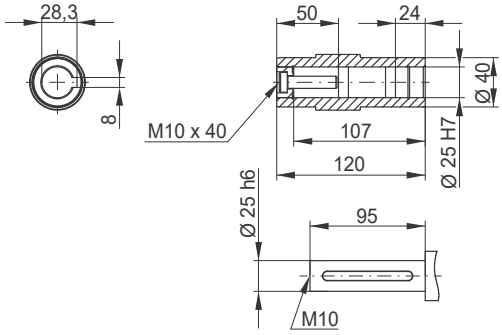


KH022 - Hollow shaft

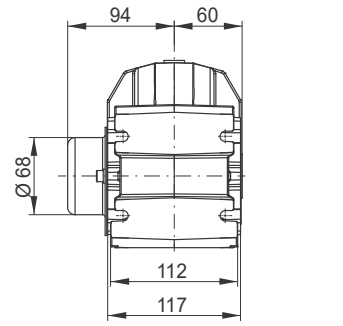


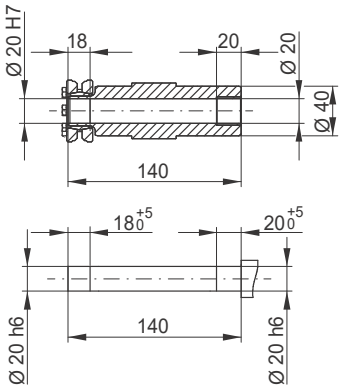


¹⁾ *incl. hollow shaft protection cap*

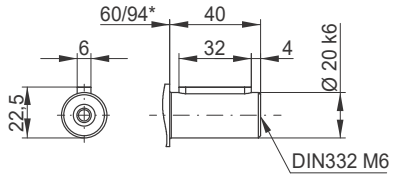


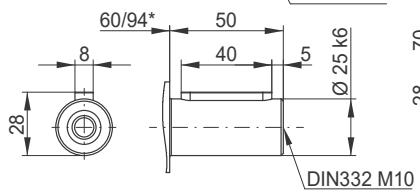
KD022 - Shrink disc

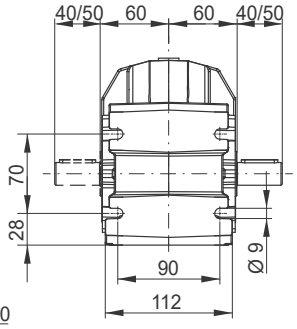




KS022 - Output shaft
KB022 - Output shaft on both sides





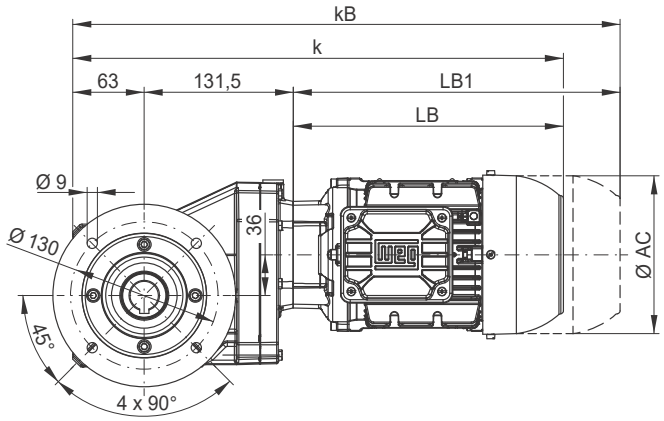


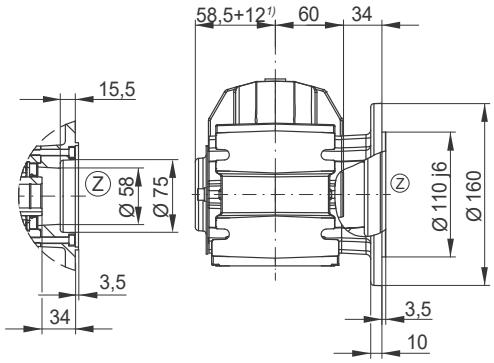
Dimension \ Motor fr.	63	71	80	L80	90S/L
AC	126	141	159	159	178
AD	128	136	145	145	155
k	399	433	441	465	483
kB	443	482	499	523	556
LB	204	238	246	270	288
LB1	248	287	304	328	361

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

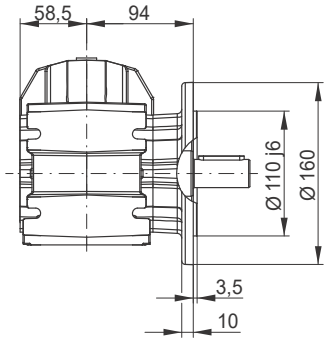
KO022 - B5 flange execution with hollow shaft



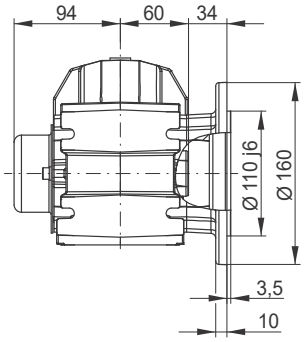


1) incl. hollow shaft protection cap

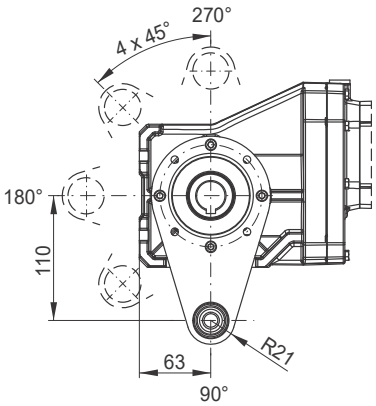
KF022 - B5 flange execution with output shaft

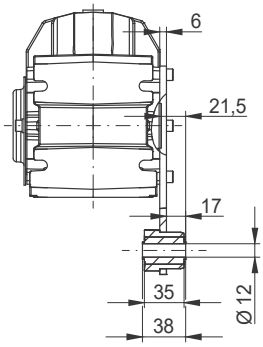


KP022 - B5 flange execution with hollow shaft and shrink disc



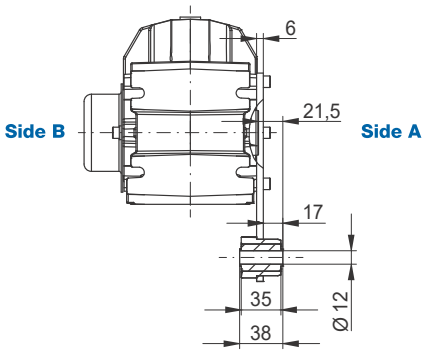
KT022 - Hollow shaft with torque arm **





Torque arm possible positions:
90°, 135°, 180°, 225°, 270°

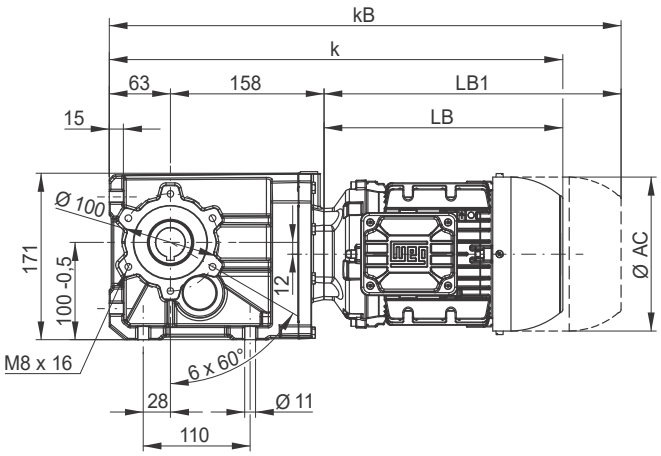
KU022 - Hollow shaft with shrink disc and torque arm **

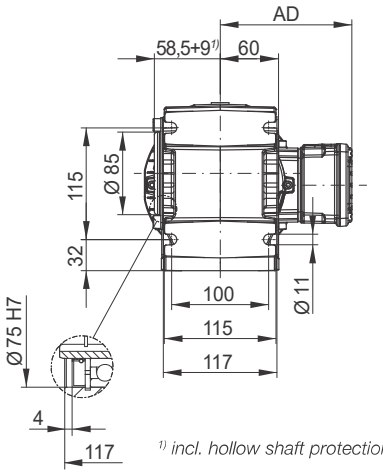


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

KH033 - Hollow shaft

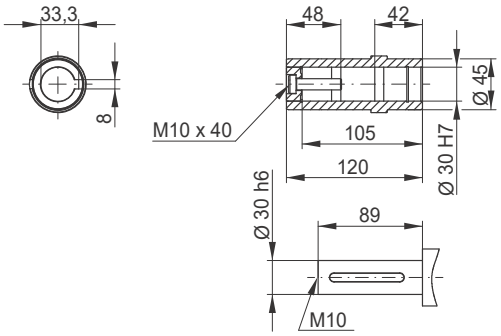


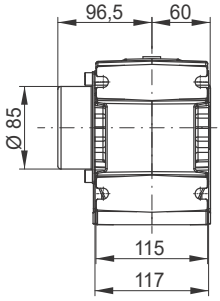


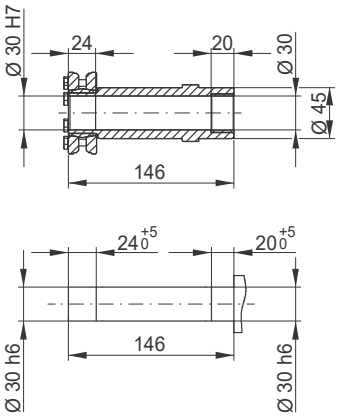
[1)] incl. hollow shaft protection cap

K

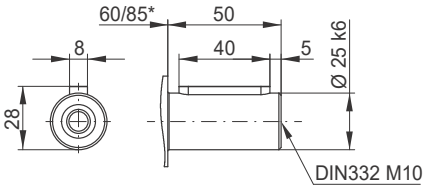
KD033 - Shrink disc

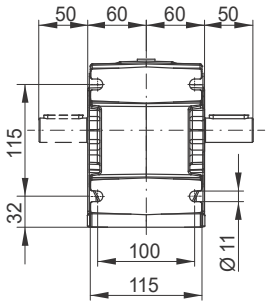






KS033 - Output shaft
KB033 - Output shaft on both sides



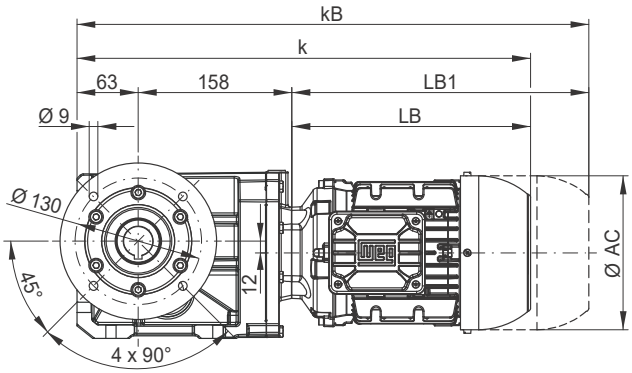


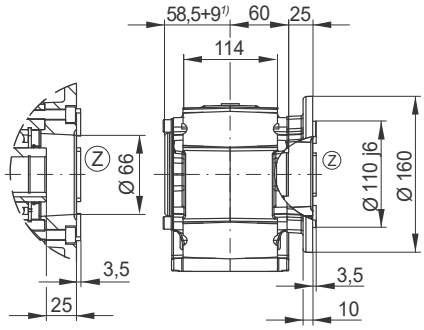
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L
AC	126	141	159	159	178	199	199
AD	128	136	145	145	155	165	165
k	425	459	467	491	509	559	597
kB	469	508	525	549	582	643	681
LB	204	238	246	270	288	338	376
LB1	248	287	304	328	361	422	460

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

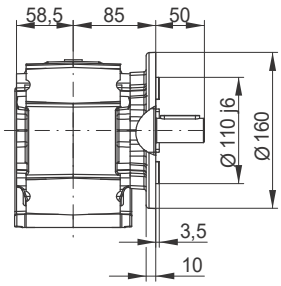
KO033 - B5 flange execution with hollow shaft



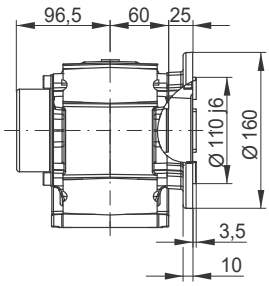


[1)] *incl. hollow shaft protection cap*

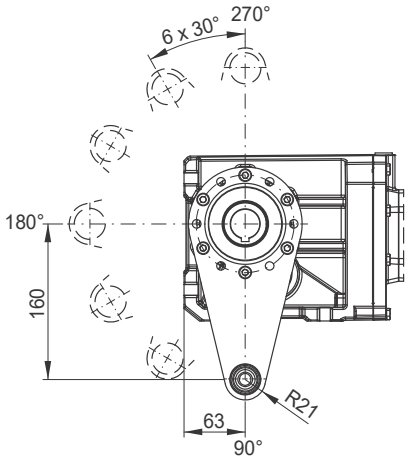
KF033 - B5 flange execution with output shaft

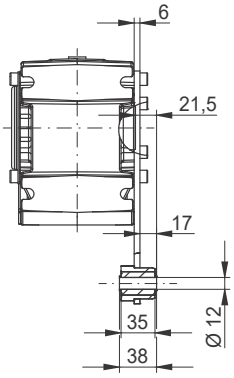


KP033 - B5 flange execution with hollow shaft and shrink disc



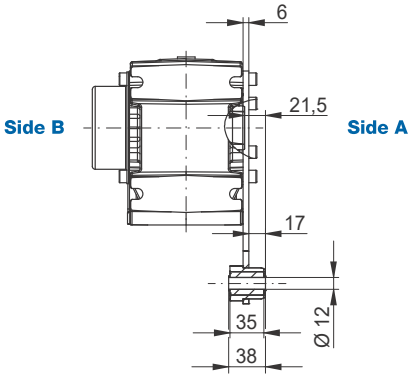
KT033 - Hollow shaft with torque arm **





Torque arm possible positions:
90 °, 120 °, 150 °, 180 °, 210 °, 240 °, 270 °

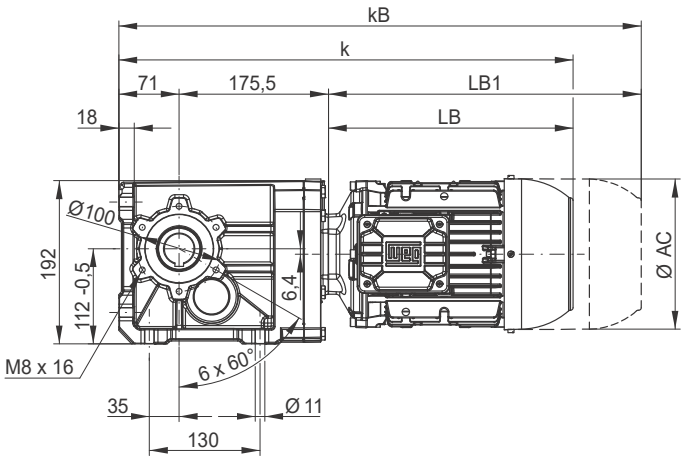
KU033 - Hollow shaft with shrink disc and torque arm **

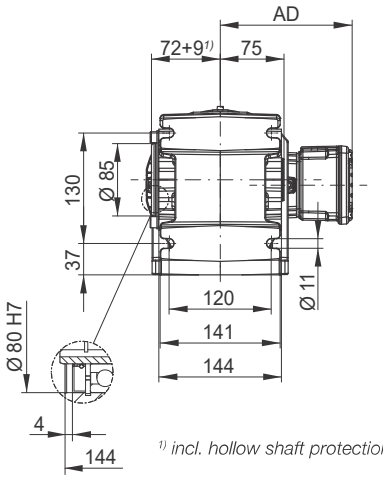


Dimensions in mm.

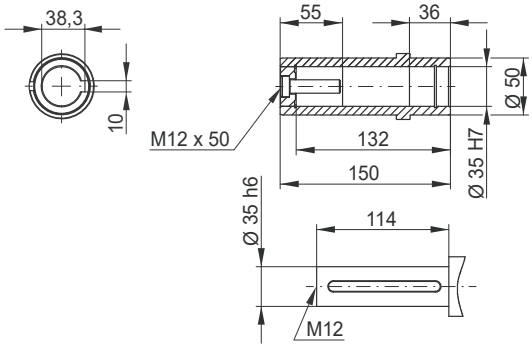
*** Torque arm may be mounted on side A or side B.*

KH043 - Hollow shaft

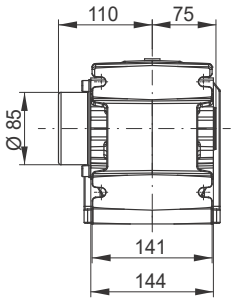


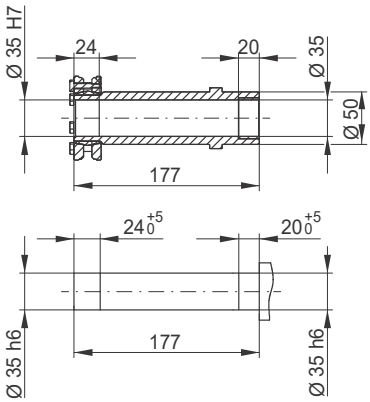


¹⁾ *incl. hollow shaft protection cap*

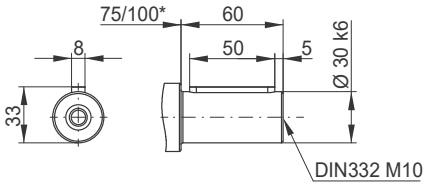


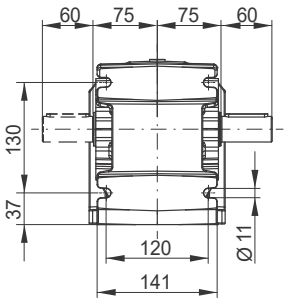
KD043 - Shrink disc





KS043 - Output shaft
KB043 - Output shaft on both sides



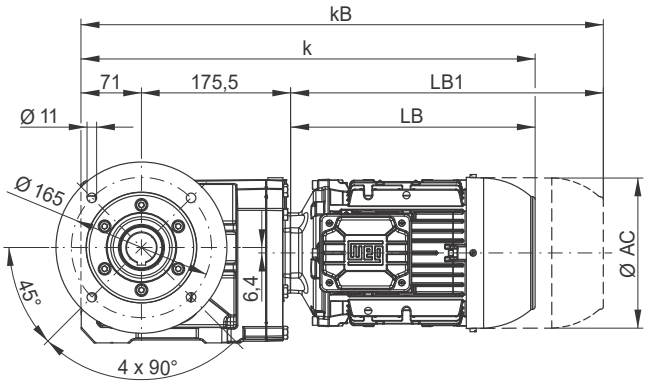


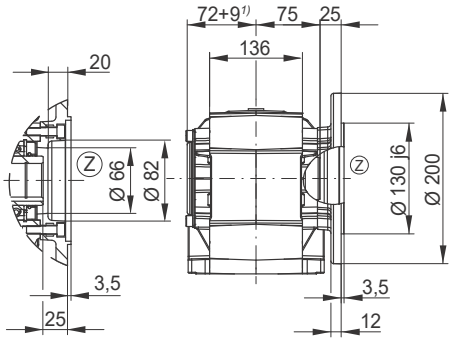
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M
AC	126	141	159	159	178	199	199	221
AD	128	136	145	145	155	165	165	185
k	451	485	493	517	535	585	623	595
kB	495	534	551	575	608	669	707	682
LB	204	238	246	270	288	338	376	348
LB1	248	287	304	328	361	422	460	435

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

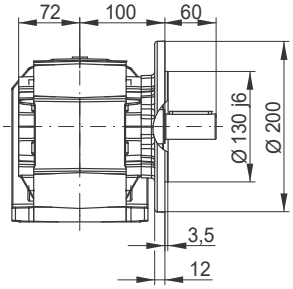
KO043 - B5 flange execution with hollow shaft



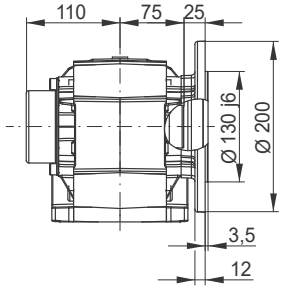


[1)] *incl. hollow shaft protection cap*

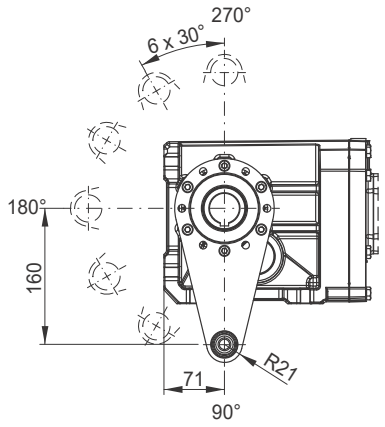
KF043 - B5 flange execution with output shaft

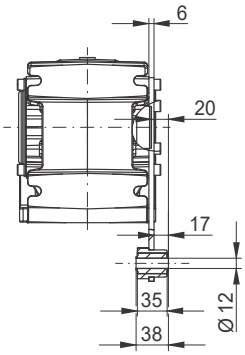


KP043 - B5 flange execution with hollow shaft and shrink disc



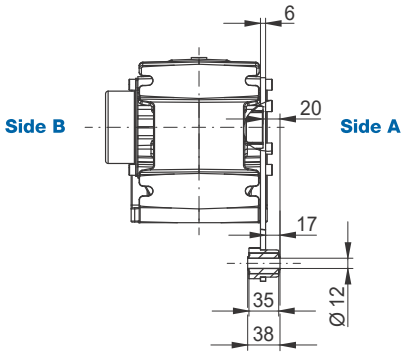
KT043 - Hollow shaft with torque arm **





Torque arm possible positions:
90 °, 120 °, 150 °, 180 °, 210 °, 240 °, 270 °

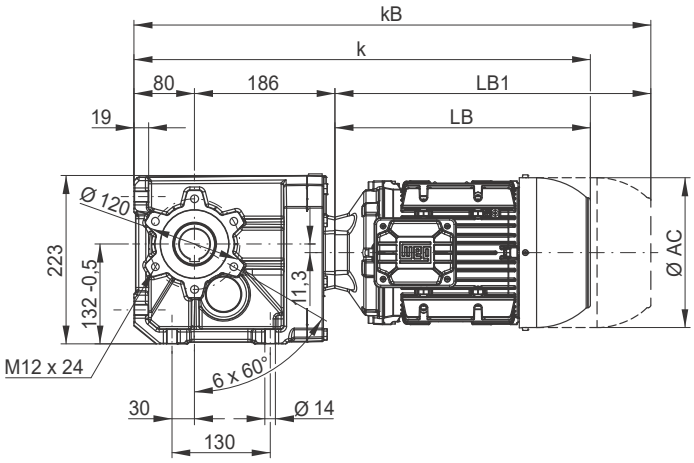
KU043 - Hollow shaft with shrink disc and torque arm **

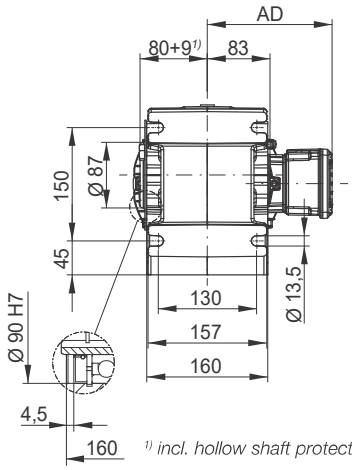


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

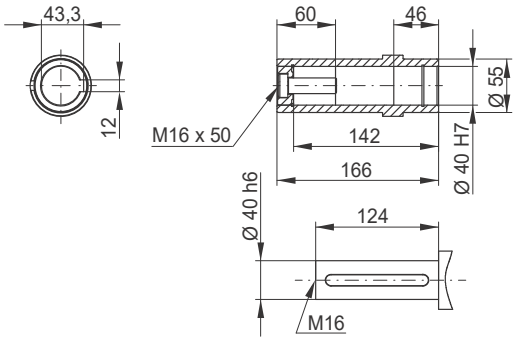
KH053 - Hollow shaft

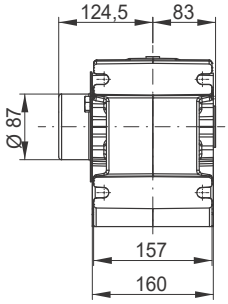


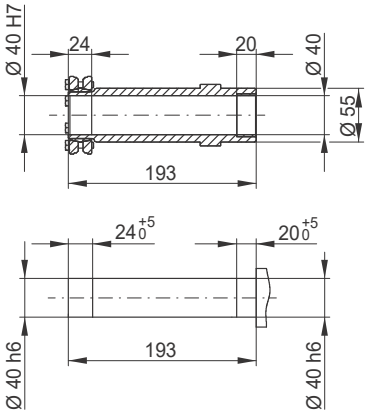


¹⁾ *incl. hollow shaft protection cap*

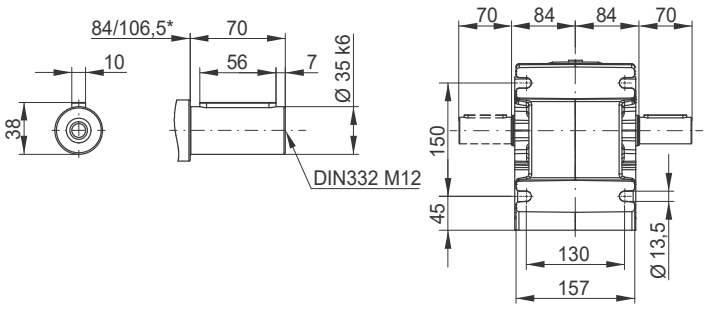
KD053 - Shrink disc







KS053 - Output shaft
KB053 - Output shaft on both sides

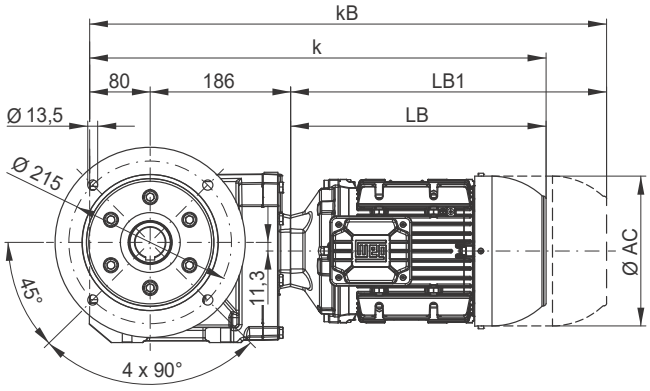


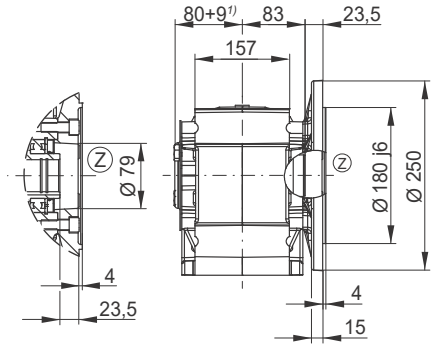
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M
AC	126	141	159	159	178	199	199	221	261	261
AD	128	136	145	145	155	165	165	185	205	205
k	470	504	512	536	554	604	642	614	679	717
kB	514	553	570	594	627	688	726	701	797	835
LB	204	238	246	270	288	338	376	348	413	451
LB1	248	287	304	328	361	422	460	435	531	569

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

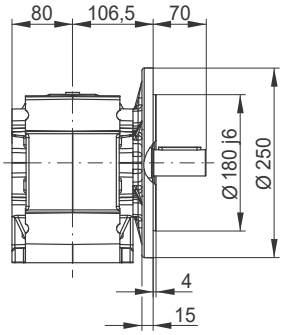
KO053 - B5 flange execution with hollow shaft



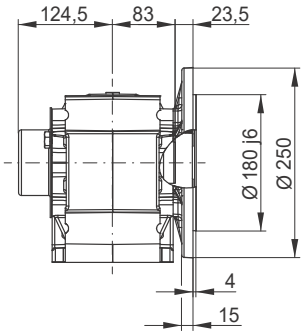


[1)] *incl. hollow shaft protection cap*

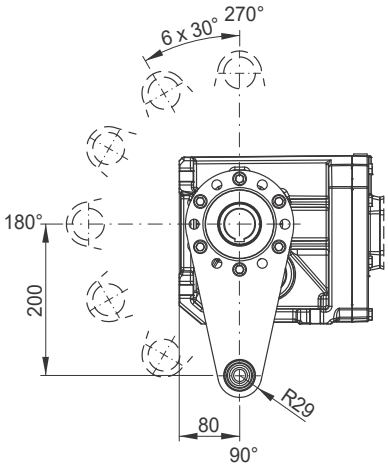
KF053 - B5 flange execution with output shaft

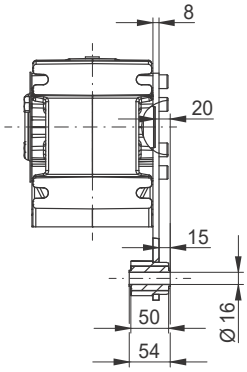


KP053 - B5 flange execution with hollow shaft and shrink disc



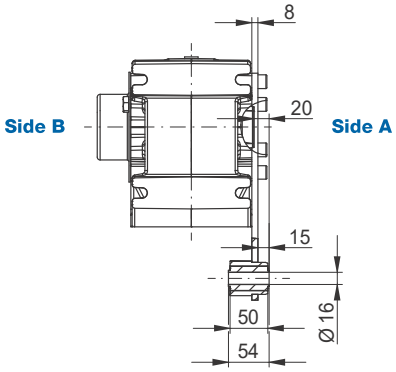
KT053 - Hollow shaft with torque arm **





Torque arm possible positions:
90 °, 120 °, 150 °, 180 °, 210 °, 240 °, 270 °

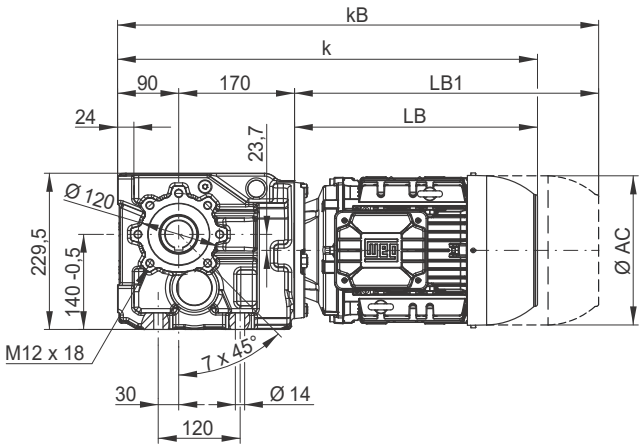
KU053 - Hollow shaft with shrink disc and torque arm **

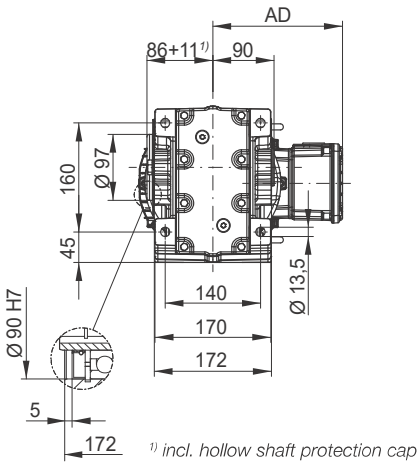


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

KH063 - Hollow shaft

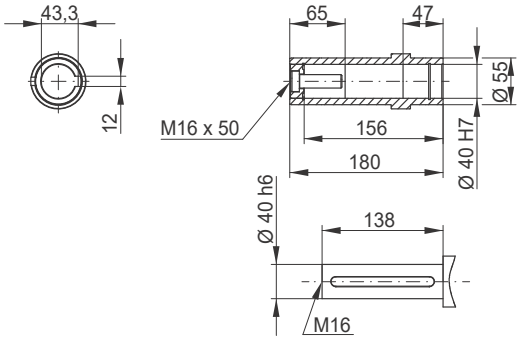


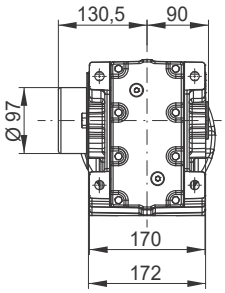


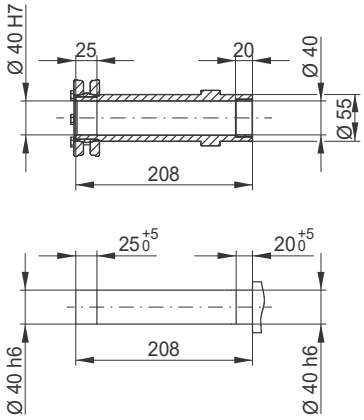
1) incl. hollow shaft protection cap

K

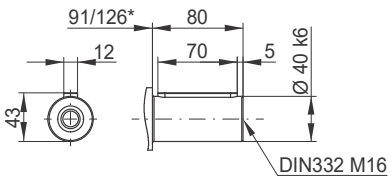
KD063 - Shrink disc

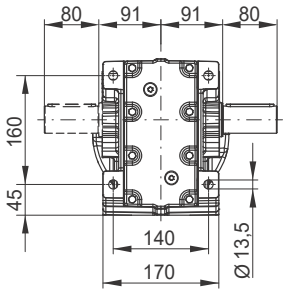






KS063 - Output shaft
KB063 - Output shaft on both sides



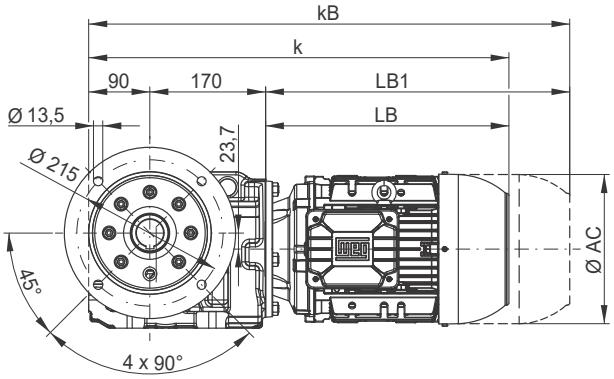


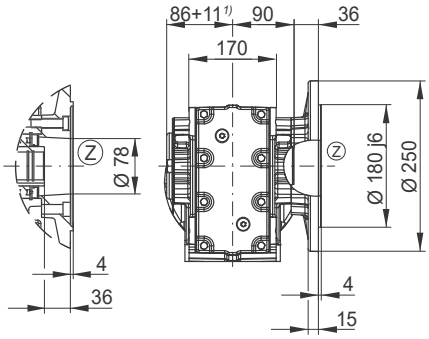
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M
AC	126	141	159	159	178	199	199	221	261	261
AD	128	136	145	145	155	165	165	185	205	205
k	464	498	506	530	548	598	636	608	673	711
kB	508	547	564	588	621	682	720	695	791	829
LB	204	238	246	270	288	338	376	348	413	451
LB1	248	287	304	328	361	422	460	435	531	569

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

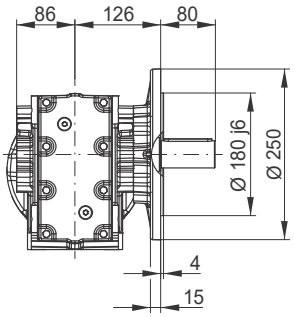
KO063 - B5 flange execution with hollow shaft



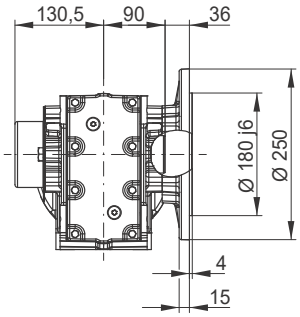


1) incl. hollow shaft protection cap

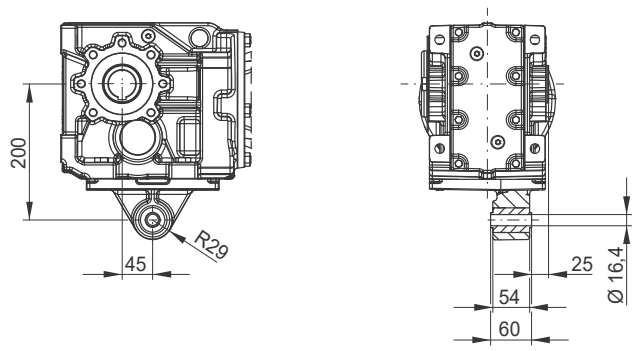
KF063 - B5 flange execution with output shaft



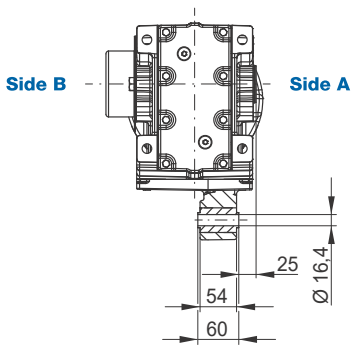
KP063 - B5 flange execution with hollow shaft and shrink disc



KT063 - Hollow shaft with torque arm **



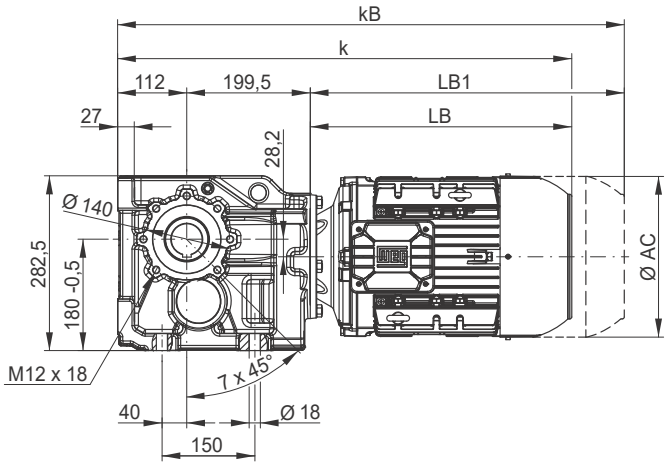
KU063 - Hollow shaft with shrink disc and torque arm **

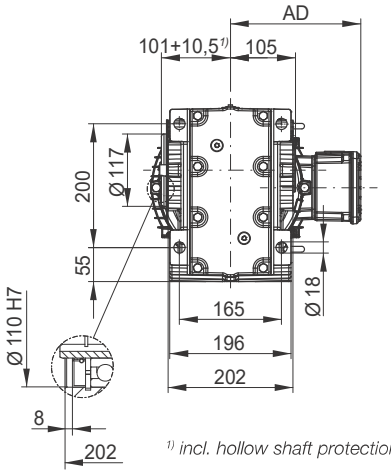


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

KH073 - Hollow shaft

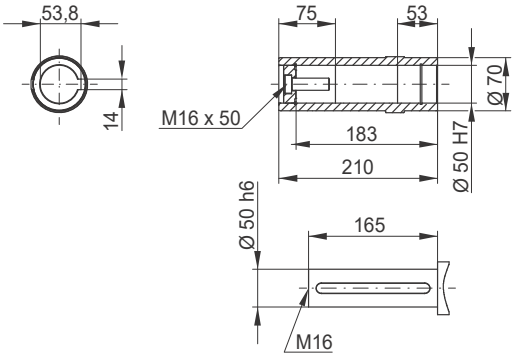


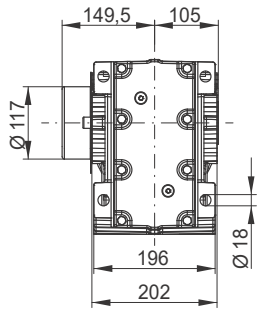


¹⁾ *incl. hollow shaft protection cap*

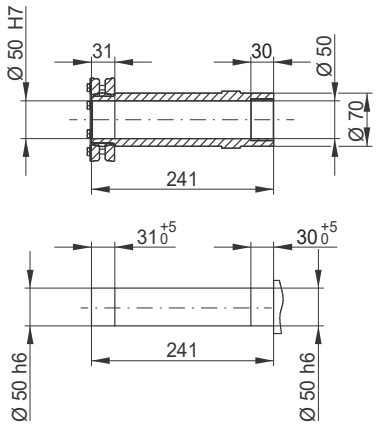
K

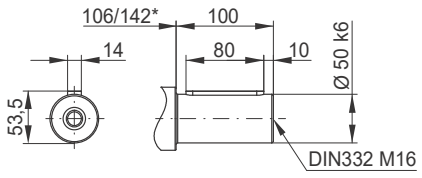
KD073 - Shrink disc

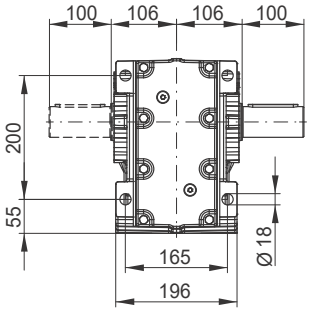




KS073 - Output shaft
KB073 - Output shaft on both sides





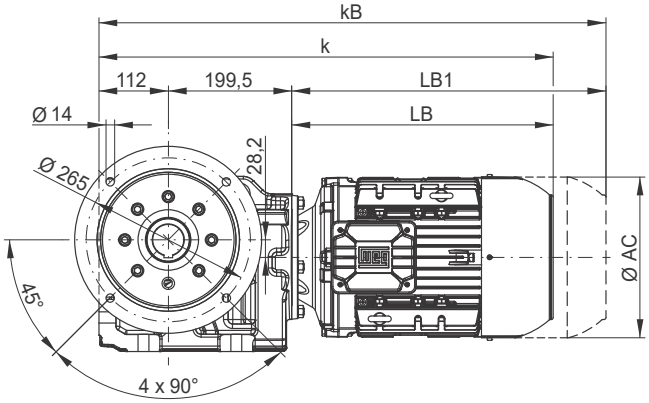


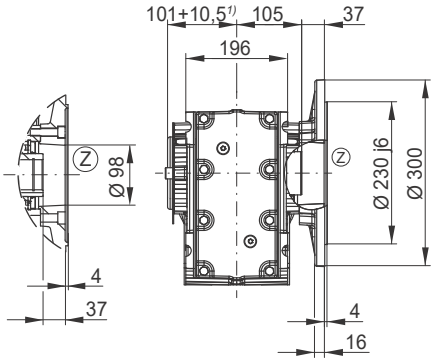
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L
AC	126	141	159	159	178	199	199	221	261	261	329	329
AD	128	136	145	145	155	165	165	185	205	205	266	266
k	516	550	558	582	600	650	688	660	725	763	857	901
kB	560	599	616	640	673	734	772	747	843	881	981	1025
LB	204	238	246	270	288	338	376	348	413	451	545	589
LB1	248	287	304	328	361	422	460	435	531	569	669	713

Motor dimension sheets see page 496. Gear unit size K07 corresponds to motor flange FR-200.
Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

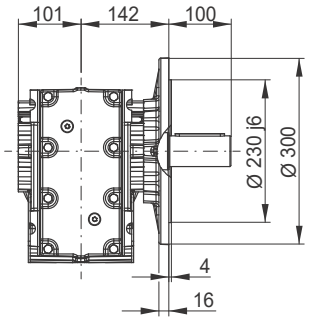
KO073 - B5 flange execution with hollow shaft



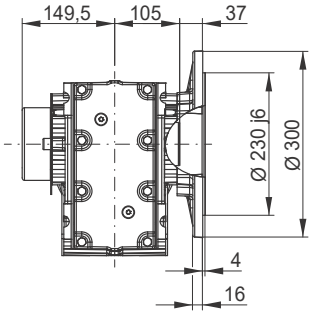


[1)] *incl. hollow shaft protection cap*

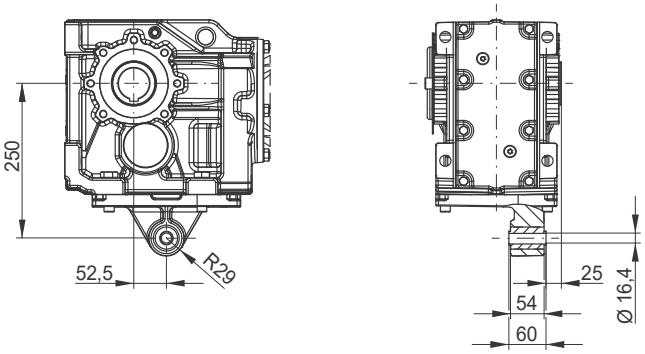
KF073 - B5 flange execution with output shaft



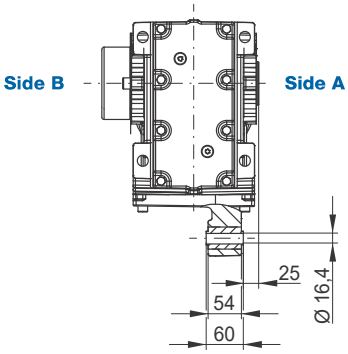
KP073 - B5 flange execution with hollow shaft and shrink disc



KT073 - Hollow shaft with torque arm **



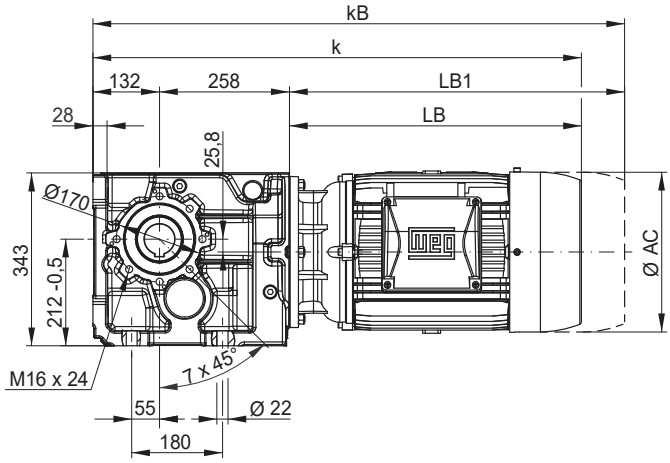
KU073 - Hollow shaft with shrink disc and torque arm **

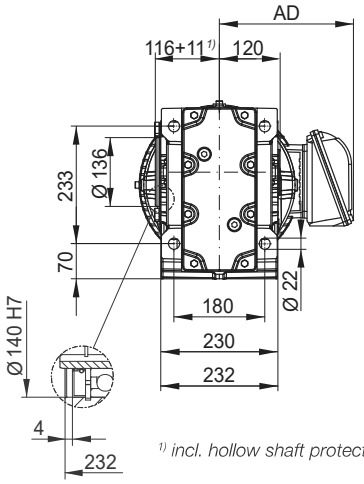


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

KH083 - Hollow shaft

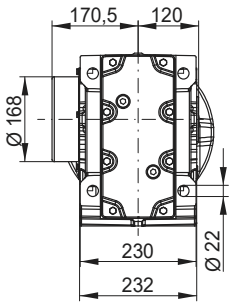


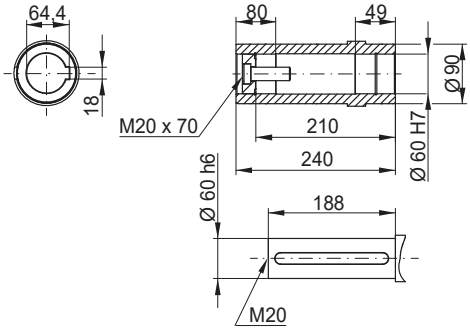


[1)] *incl. hollow shaft protection cap*

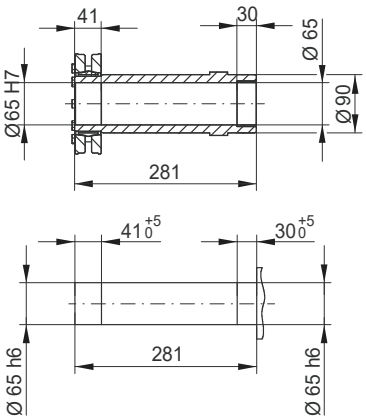
K

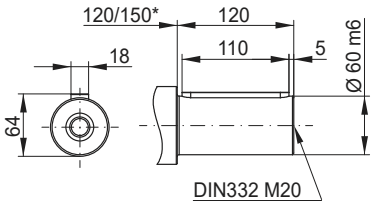
KD083 - Shrink disc

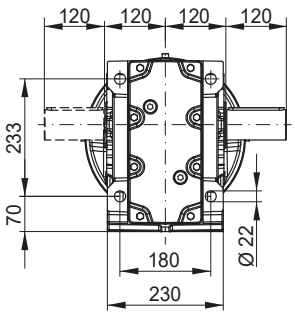




KS083 - Output shaft
KB083 - Output shaft on both sides





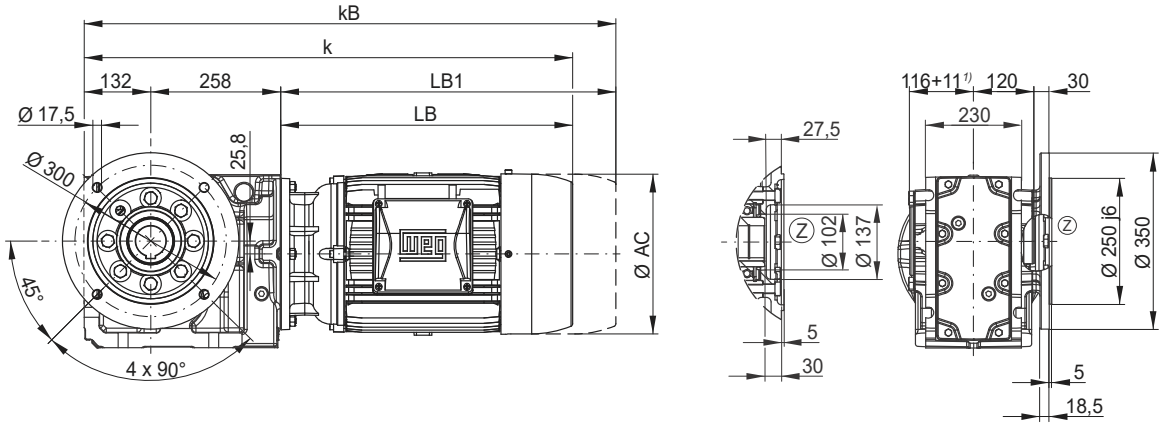


Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L	180M	180L
AC	126	141	159	159	178	199	199	221	261	261	329	329	347	347
AD	128	136	145	145	155	165	165	185	205	205	266	266	281	281
k	594	628	636	660	678	728	766	738	803	841	925	969	993	1031
kB	638	677	694	718	751	812	850	825	921	959	1049	1093	1111	1149
LB	204	238	246	270	288	338	376	348	413	451	535	579	603	641
LB1	248	287	304	328	361	422	460	435	531	569	659	703	721	759

Motor dimension sheets see page 496. Gear unit size K08 corresponds to motor flange FR-300.
Description of motor lengths LB and LB1 see page 500.

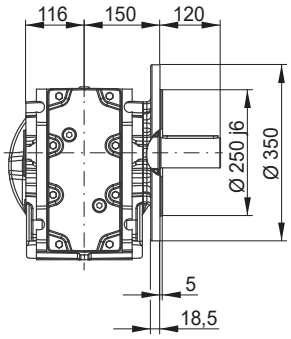
**Design KS(KB)/KF*

KO083 - B5 flange execution with hollow shaft

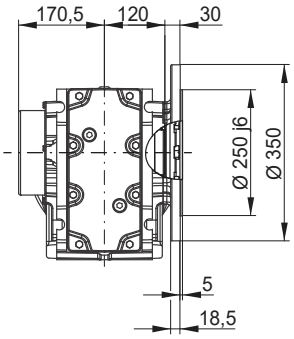


1) *incl. hollow shaft protection cap*

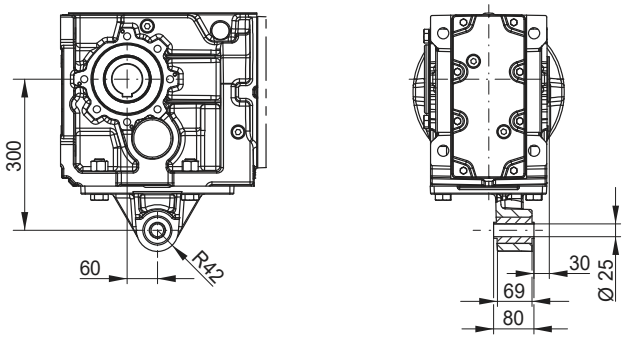
KF083 - B5 flange execution with output shaft



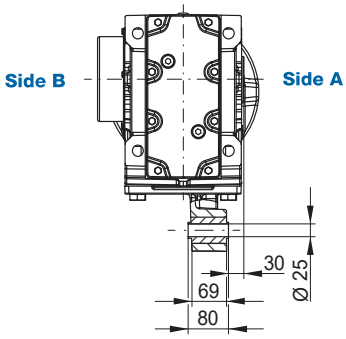
KP083 - B5 flange execution with hollow shaft and shrink disc



KT083 - Hollow shaft with torque arm **



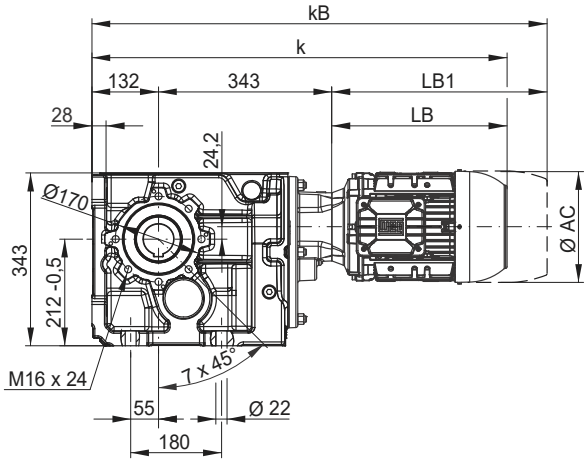
KU083 - Hollow shaft with shrink disc and torque arm **

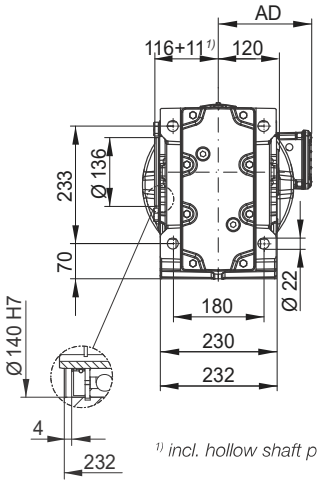


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

KH084 - Hollow shaft

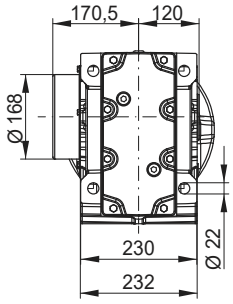


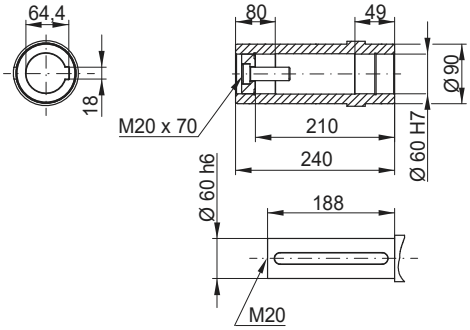


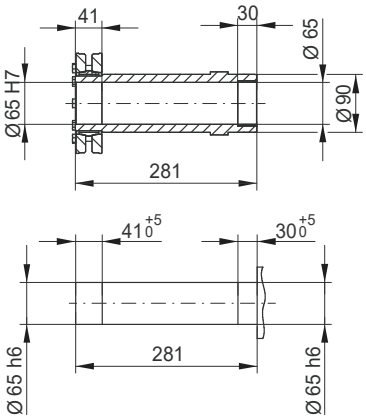
[1)] *incl. hollow shaft protection cap*

K

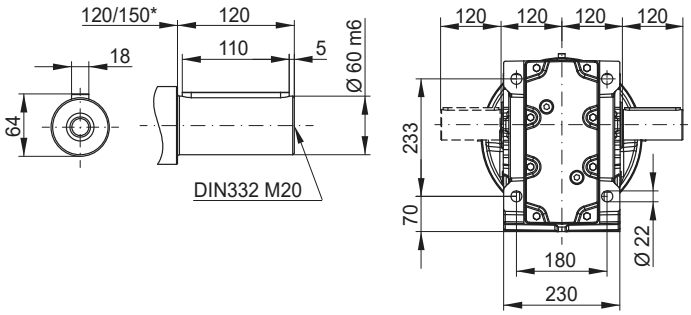
KD084 - Shrink disc







KS084 - Output shaft
KB084 - Output shaft on both sides

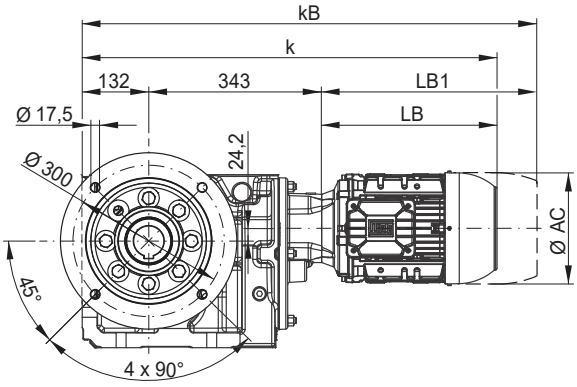


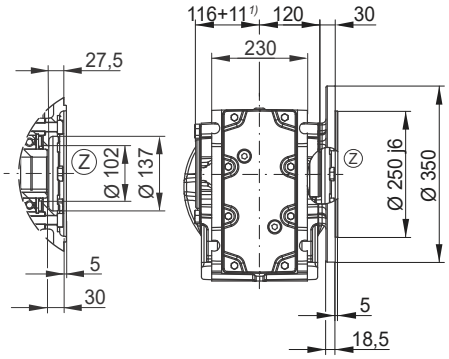
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M
AC	126	141	159	159	178	199	199	221	261	261
AD	128	136	145	145	155	165	165	185	205	205
k	679	713	721	745	763	813	851	823	888	926
kB	723	762	779	803	836	897	935	910	1006	1044
LB	204	238	246	270	288	338	376	348	413	451
LB1	248	287	304	328	361	422	460	435	531	569

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

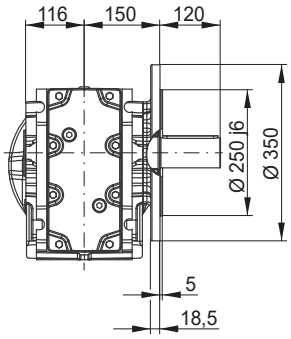
KO084 - B5 flange execution with hollow shaft



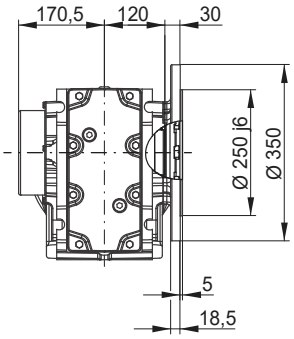


1) *incl. hollow shaft protection cap*

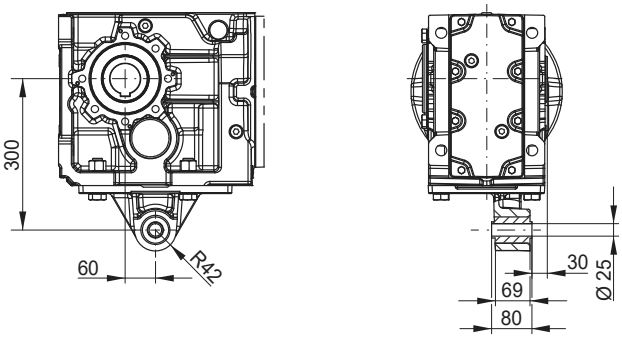
KF084 - B5 flange execution with output shaft



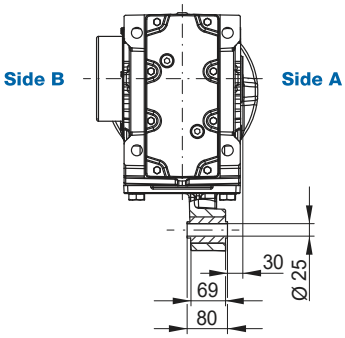
KP084 - B5 flange execution with hollow shaft and shrink disc



KT084 - Hollow shaft with torque arm **



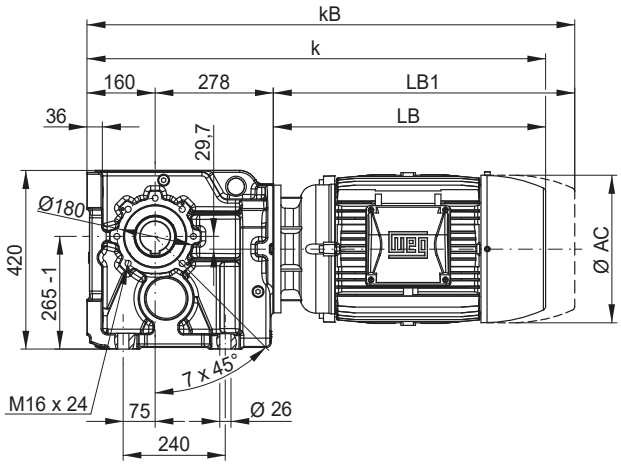
KU084 - Hollow shaft with shrink disc and torque arm **

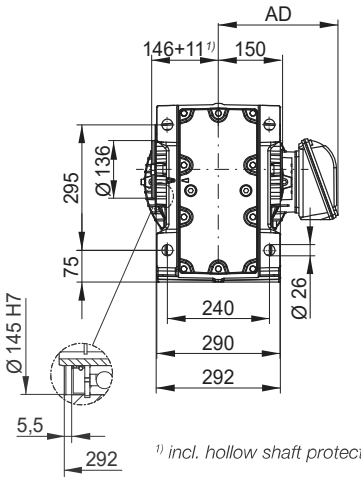


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

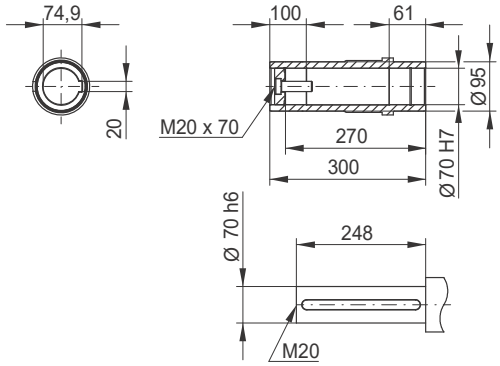
KH093 - Hollow shaft

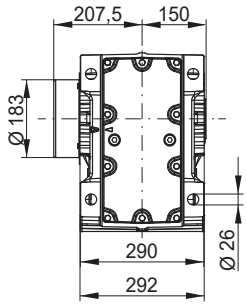




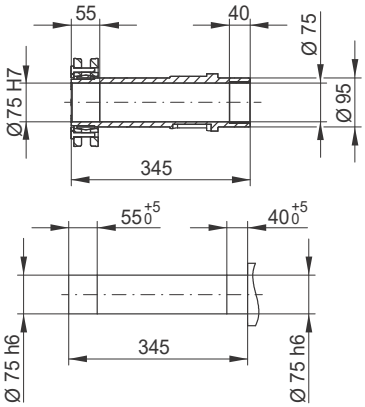
1) *incl. hollow shaft protection cap*

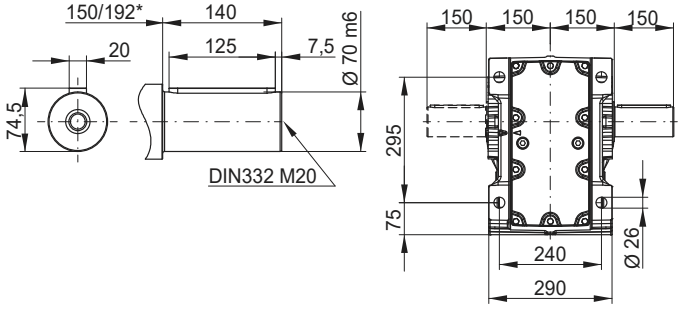
KD093 - Shrink disc





KS093 - Output shaft
KB093 - Output shaft on both sides



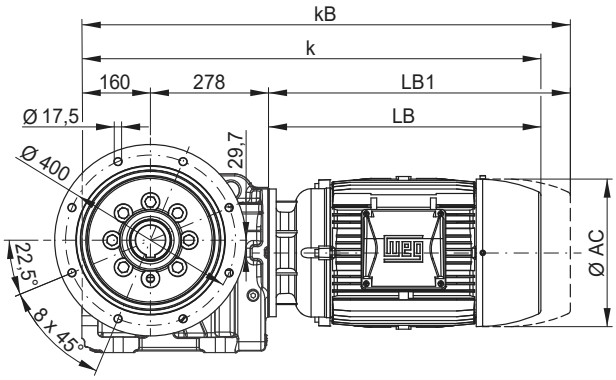


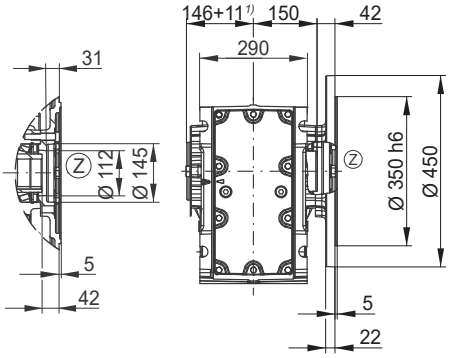
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L	180M	180L	200L
AC	126	141	159	159	178	199	199	221	261	261	329	329	347	347	386
AD	128	136	145	145	155	165	165	185	205	205	266	266	281	281	317
k	642	676	684	708	726	776	814	786	851	889	973	1017	1041	1079	1171
kB	686	725	742	766	799	860	898	873	969	1007	1097	1141	1159	1197	1297
LB	204	238	246	270	288	338	376	348	413	451	535	579	603	641	733
LB1	248	287	304	328	361	422	460	435	531	569	659	703	721	759	859

Motor dimension sheets see page 496. Gear unit size K09 corresponds to motor flange FR-300.
Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

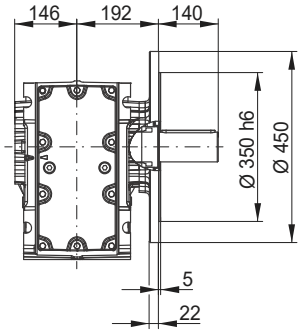
KO093 - B5 flange execution with hollow shaft



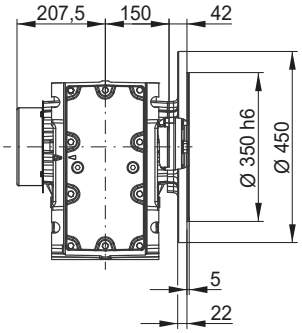


1) *incl. hollow shaft protection cap*

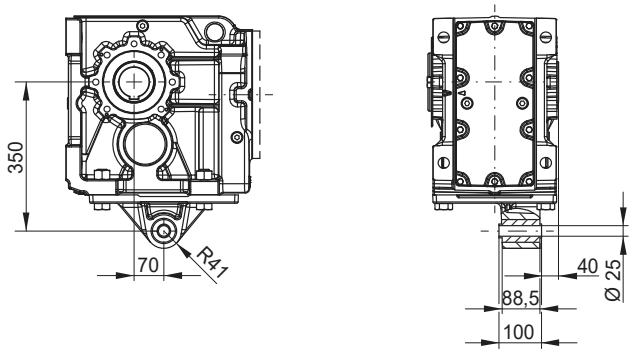
KF093 - B5 flange execution with output shaft



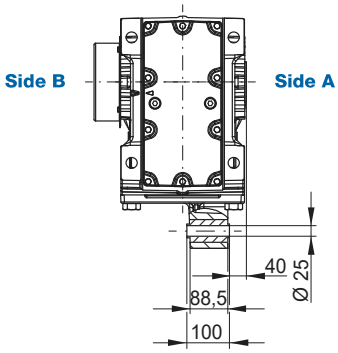
KP093 - B5 flange execution with hollow shaft and shrink disc



KT093 - Hollow shaft with torque arm **



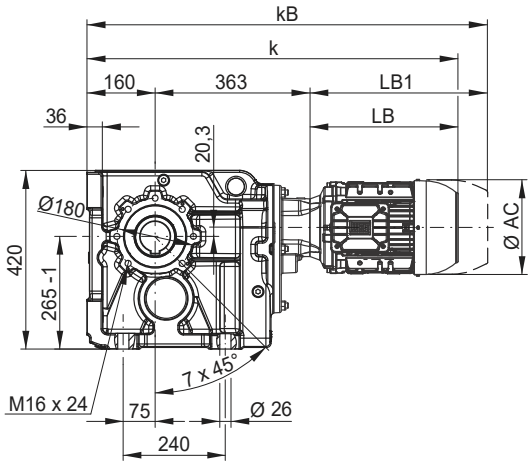
KU093 - Hollow shaft with shrink disc and torque arm **

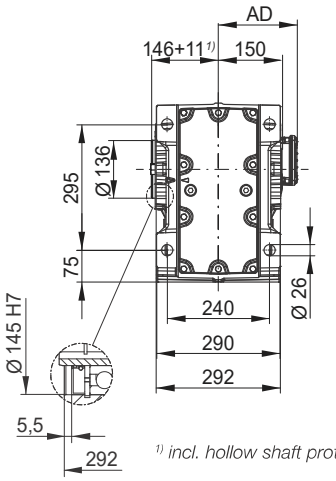


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

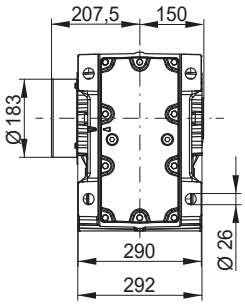
KH094 - Hollow shaft

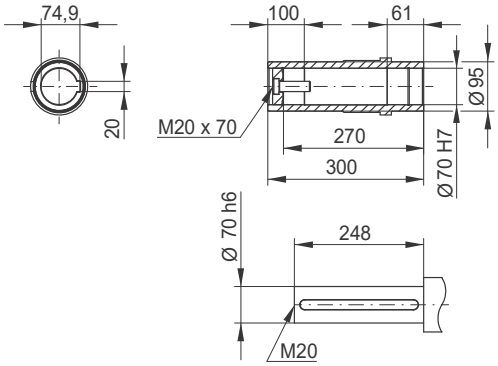


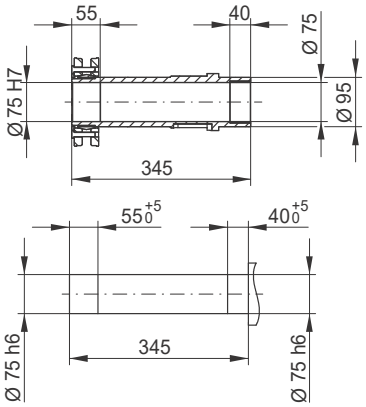


1) incl. hollow shaft protection cap

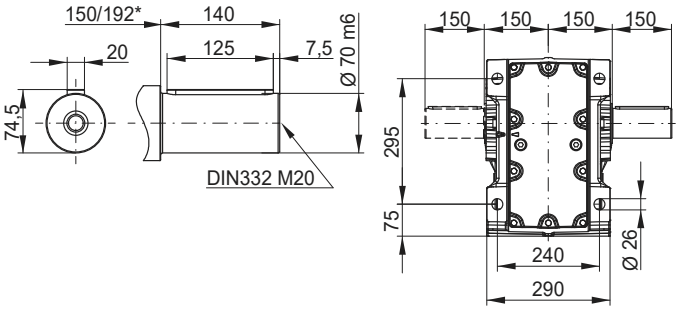
KD094 - Shrink disc







KS094 - Output shaft
KB094 - Output shaft on both sides

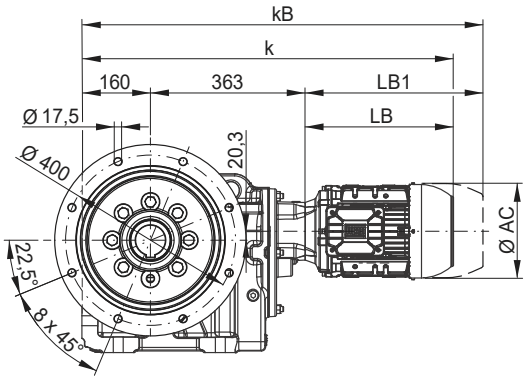


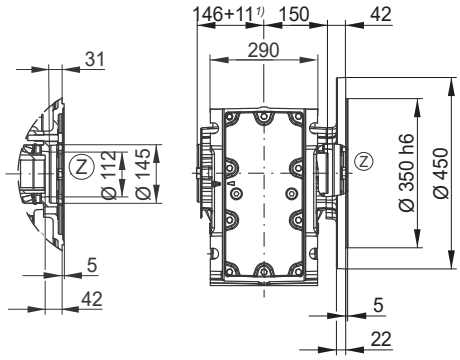
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M
AC	126	141	159	159	178	199	199	221	261	261
AD	128	136	145	145	155	165	165	185	205	205
k	727	761	769	793	811	861	899	871	936	974
kB	771	810	827	851	884	945	983	958	1054	1092
LB	204	238	246	270	288	338	376	348	413	451
LB1	248	287	304	328	361	422	460	435	531	569

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

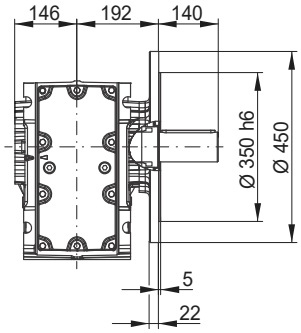
KO094 - B5 flange execution with hollow shaft



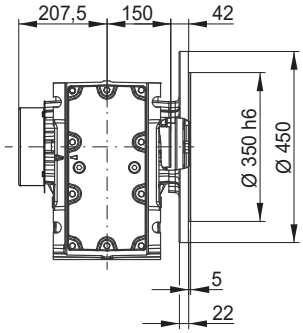


1) *incl. hollow shaft protection cap*

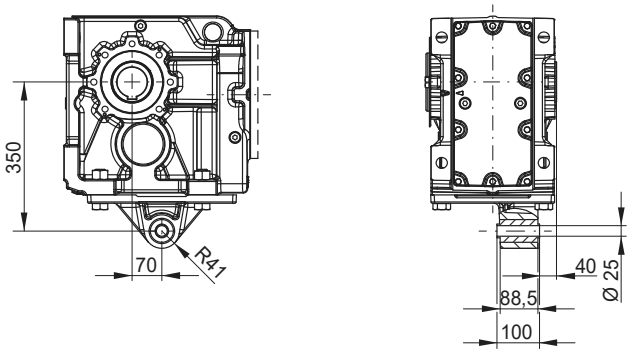
KF094 - B5 flange execution with output shaft



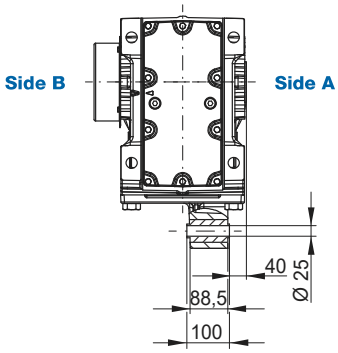
KP094 - B5 flange execution with hollow shaft and shrink disc



KT094 - Hollow shaft with torque arm **



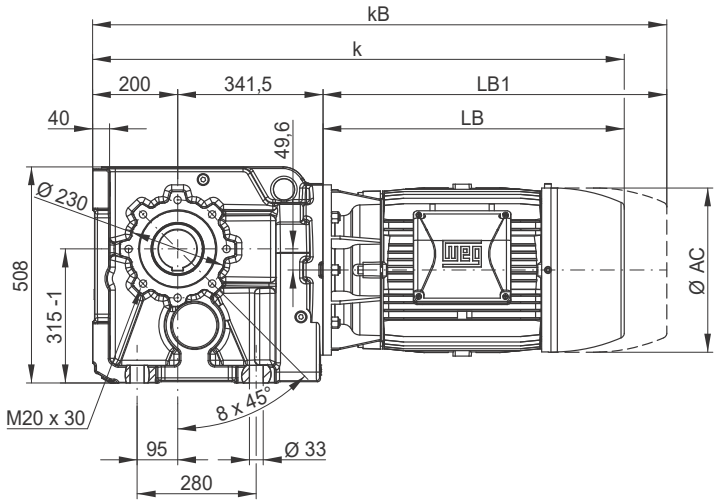
KU094 - Hollow shaft with shrink disc and torque arm **

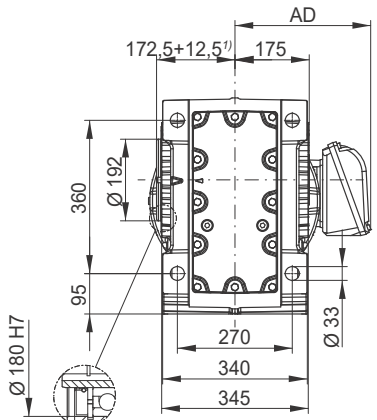


Dimensions in mm.

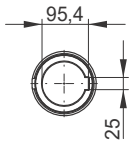
*** Torque arm may be mounted on side A or side B.*

KH103 - Hollow shaft

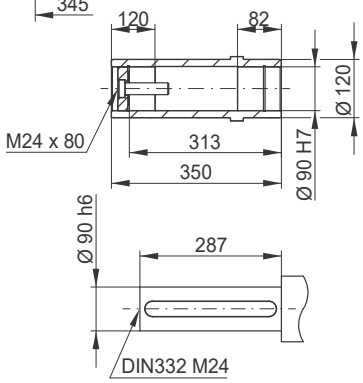


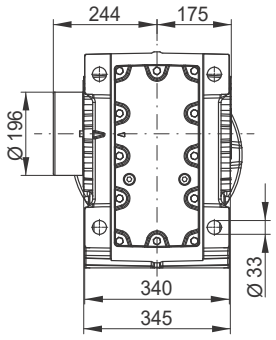


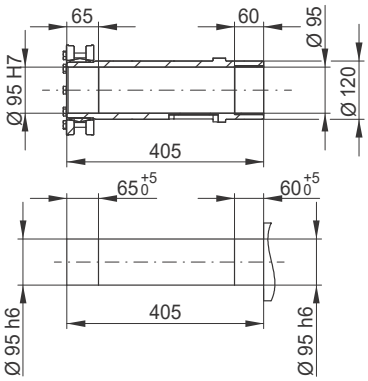
¹⁾ *incl. hollow shaft protection cap*



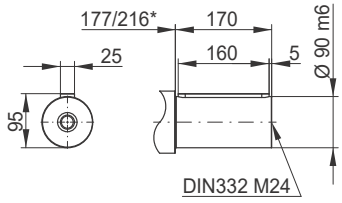
KD103 - Shrink disc

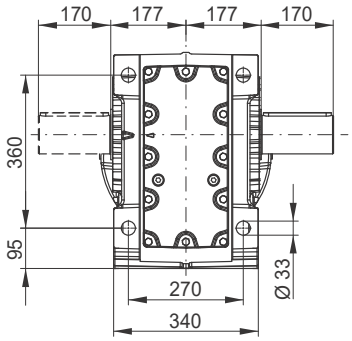






KS103 - Output shaft
KB103 - Output shaft on both sides



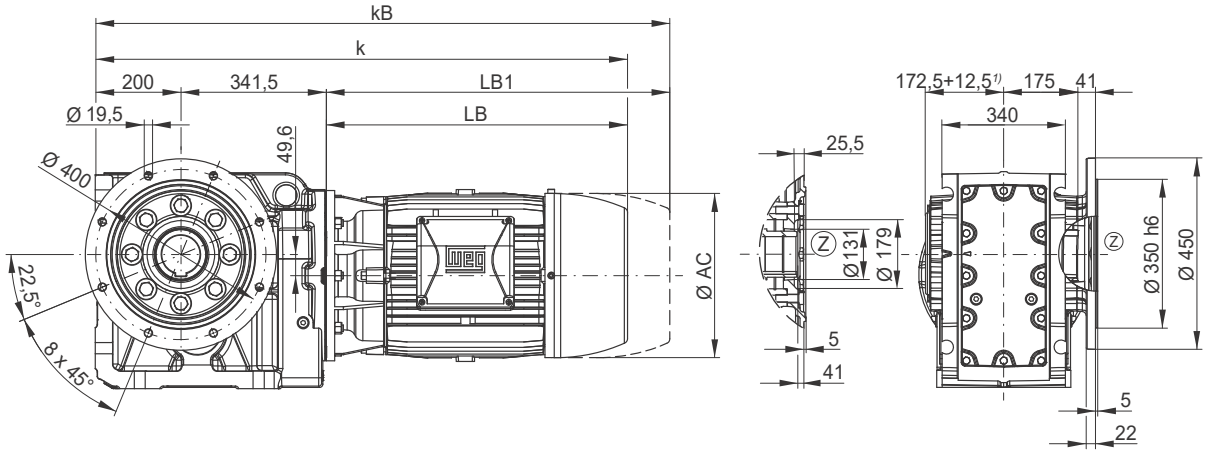


Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L	180M	180L	200L	225S/M
AC	-	-	-	-	-	-	-	221	261	261	329	329	347	347	386	453
AD	-	-	-	-	-	-	-	185	205	205	266	266	281	281	317	385
k	-	-	-	-	-	-	-	890	955	993	1064	1108	1132	1170	1262	1370
kB	-	-	-	-	-	-	-	977	1073	1111	1188	1232	1250	1288	1388	1488
LB	-	-	-	-	-	-	-	348	413	451	522	566	590	628	720	828
LB1	-	-	-	-	-	-	-	435	531	569	646	690	708	746	846	946

Motor dimension sheets see page 496. Gear unit size K103 corresponds to motor flange FR-400.
Description of motor lengths LB and LB1 see page 500.

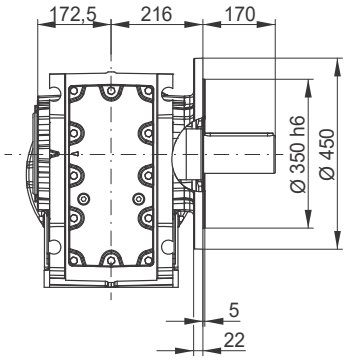
**Design KS(KB)/KF*

KO103 - B5 flange execution with hollow shaft

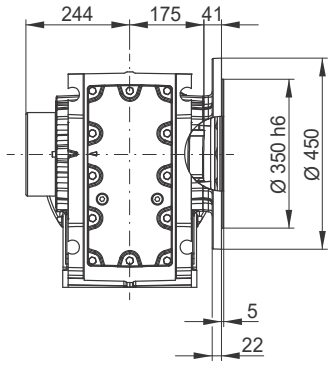


¹⁾ *incl. hollow shaft protection cap*

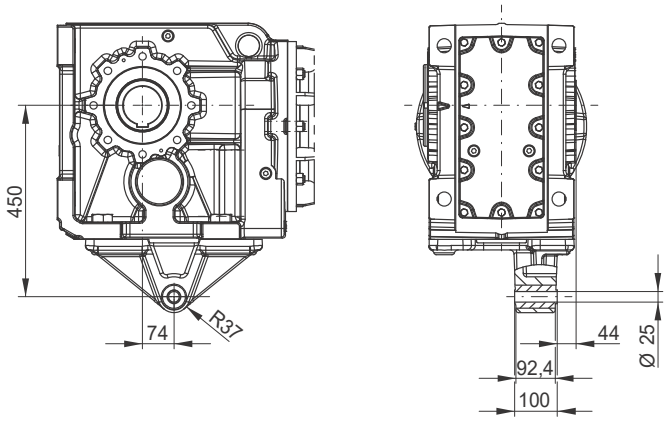
KF103 - B5 flange execution with output shaft



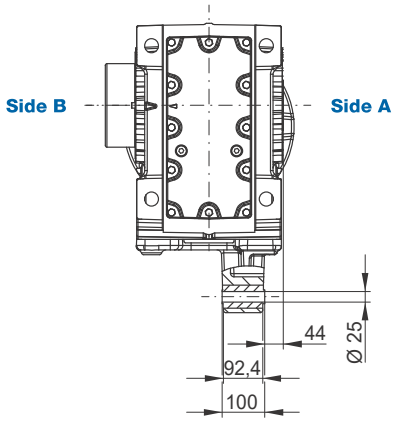
KP103 - B5 flange execution with hollow shaft and shrink disc



KT103 - Hollow shaft with torque arm **



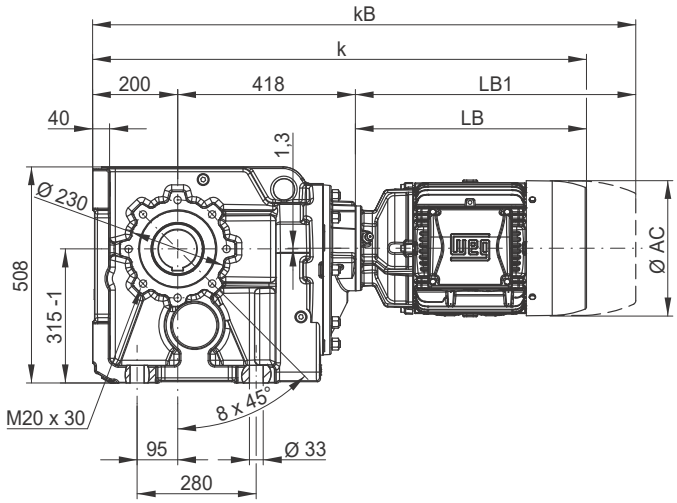
KU103 - Hollow shaft with shrink disc and torque arm **

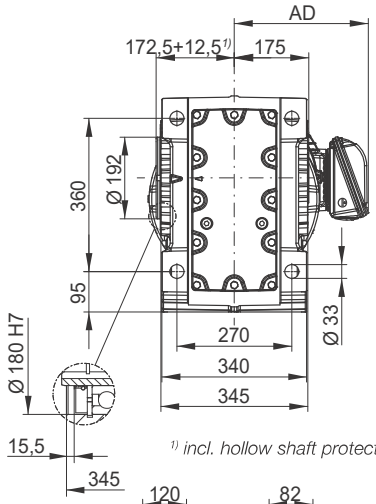


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

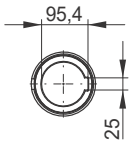
KH104 - Hollow shaft

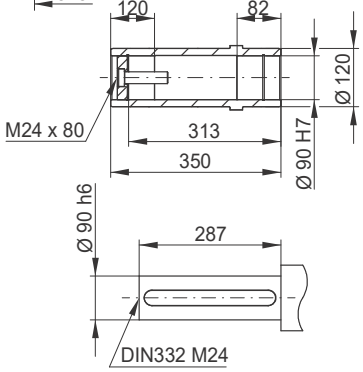


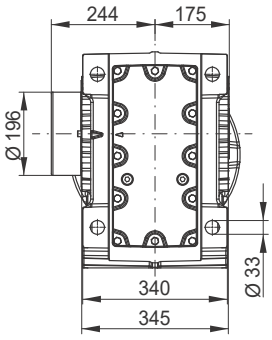


¹⁾ *incl. hollow shaft protection cap*

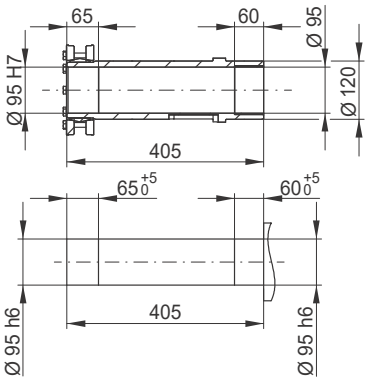
KD104 - Shrink disc

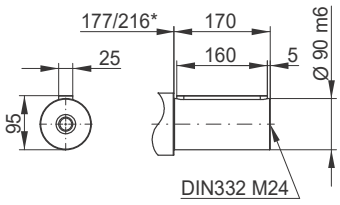


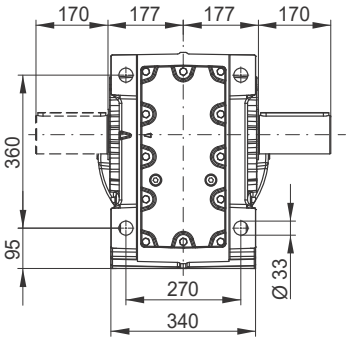




KS104 - Output shaft
KB104 - Output shaft on both sides





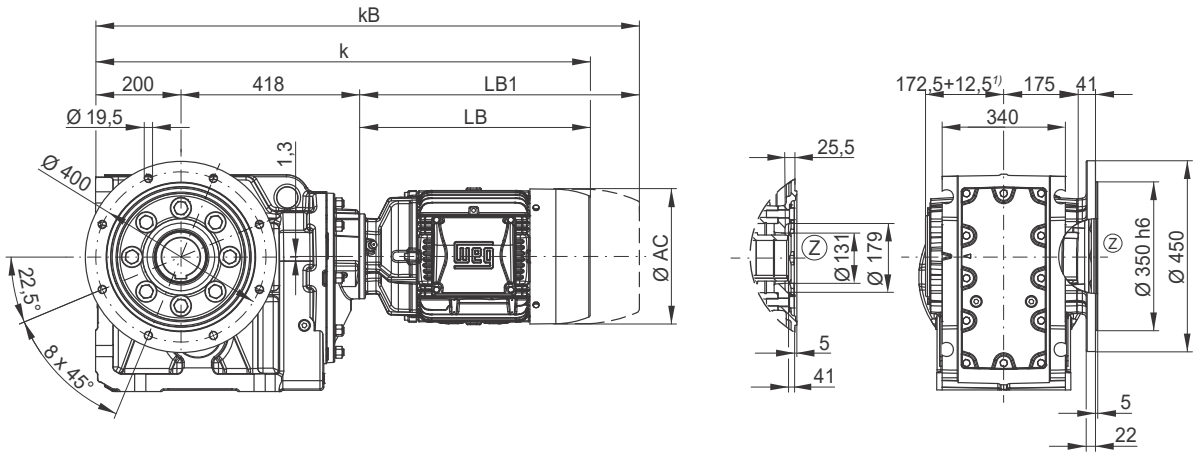


Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L
AC	126	141	159	159	178	199	199	221	261	261	329	329
AD	128	136	145	145	155	165	165	185	205	205	266	266
k	822	856	864	888	906	956	994	966	1031	1069	1163	1207
kB	866	905	922	946	979	1040	1078	1053	1149	1187	1287	1331
LB	204	238	246	270	288	338	376	348	413	451	545	589
LB1	248	287	304	328	361	422	460	435	531	569	669	713

Motor dimension sheets see page 496. Gear unit size K104 corresponds to motor flange FR-200.
Description of motor lengths LB and LB1 see page 500.

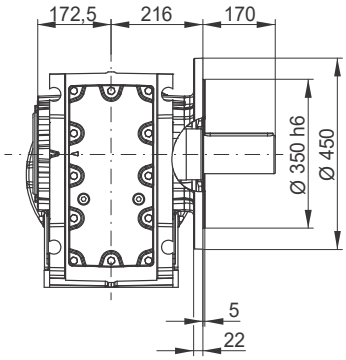
**Design KS(KB)/KF*

KO104 - B5 flange execution with hollow shaft

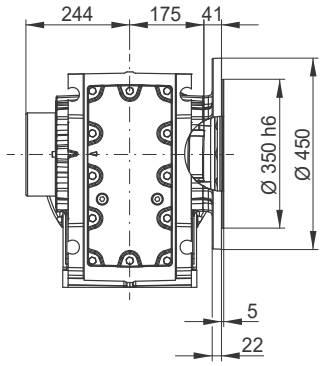


¹⁾ *incl. hollow shaft protection cap*

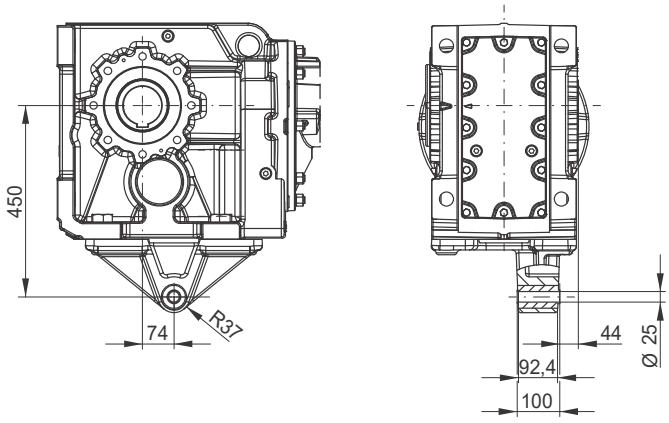
KF104 - B5 flange execution with output shaft



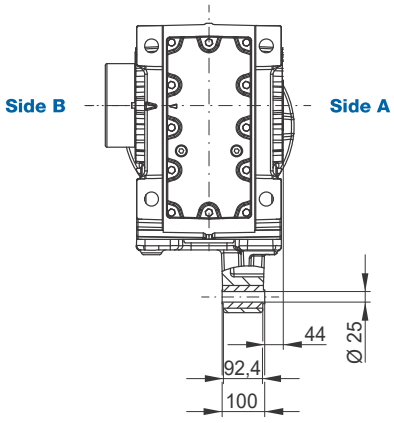
KP104 - B5 flange execution with hollow shaft and shrink disc



KT104 - Hollow shaft with torque arm **



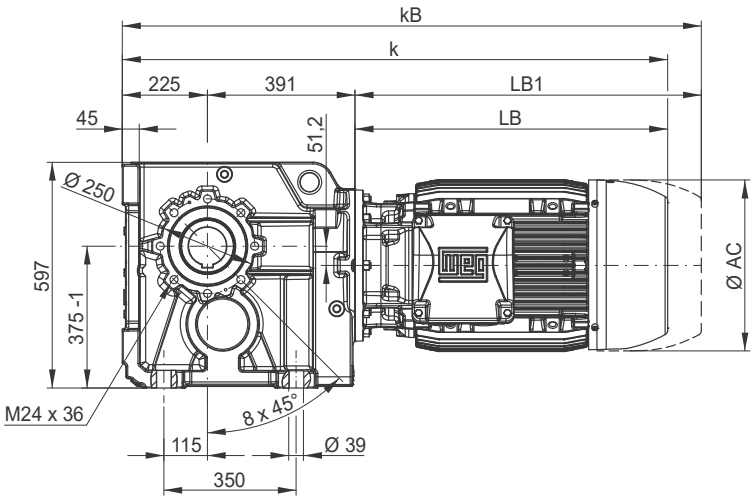
KU104 - Hollow shaft with shrink disc and torque arm **

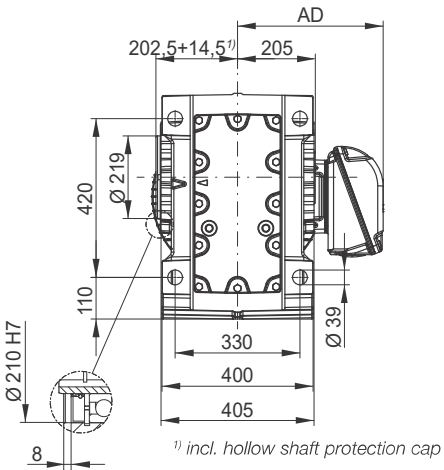


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

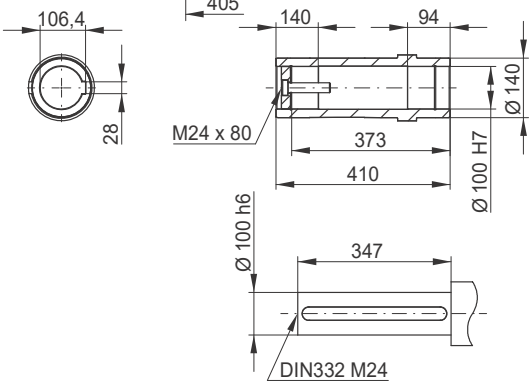
KH123 - Hollow shaft

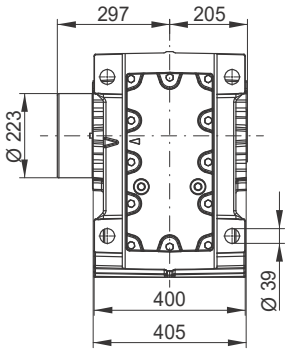


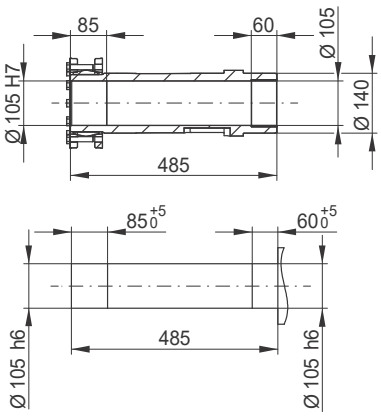


¹⁾ *incl. hollow shaft protection cap*

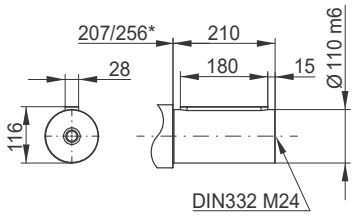
KD123 - Shrink disc

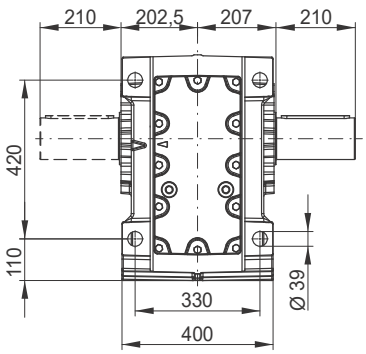






KS123 - Output shaft
KB123 - Output shaft on both sides



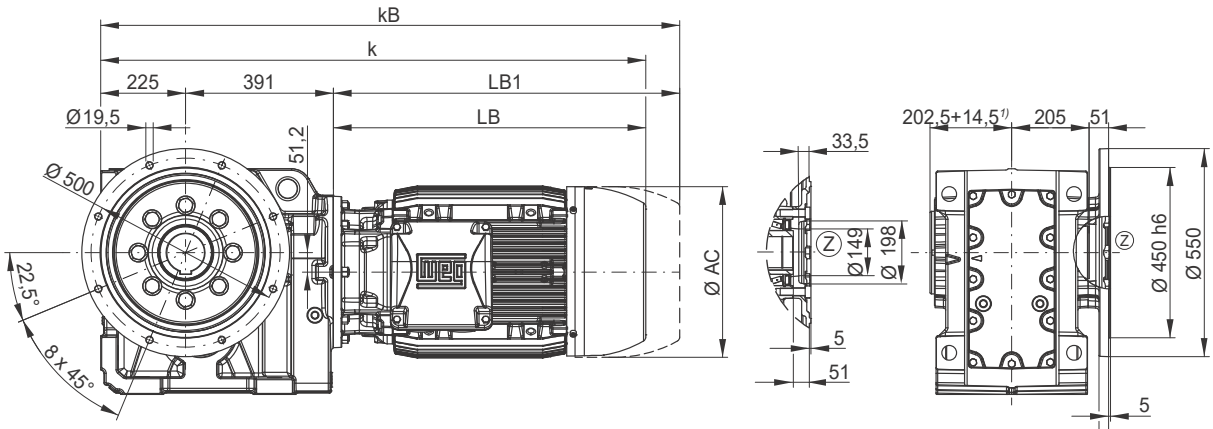


Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L	180M	180L	200L	225S/M
AC	-	-	-	-	-	-	-	221	261	261	329	329	347	347	386	453
AD	-	-	-	-	-	-	-	185	205	205	266	266	281	281	317	385
k	-	-	-	-	-	-	-	964	1029	1067	1138	1182	1206	1244	1336	1444
kB	-	-	-	-	-	-	-	1051	1147	1185	1262	1306	1324	1362	1462	1562
LB	-	-	-	-	-	-	-	348	413	451	522	566	590	628	720	828
LB1	-	-	-	-	-	-	-	435	531	569	646	690	708	746	846	946

Motor dimension sheets see page 496. Gear unit size K123 corresponds to motor flange FR-400.
Description of motor lengths LB and LB1 see page 500.

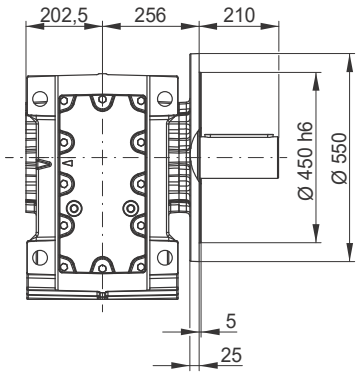
**Design KS(KB)/KF*

KO123 - B5 flange execution with hollow shaft

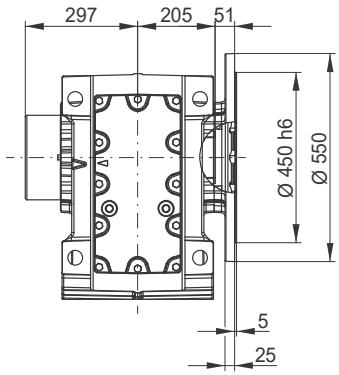


1) *incl. hollow shaft protection cap*

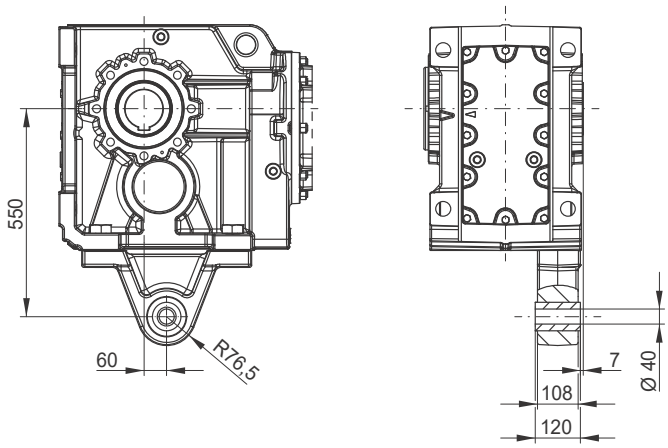
KF123 - B5 flange execution with output shaft



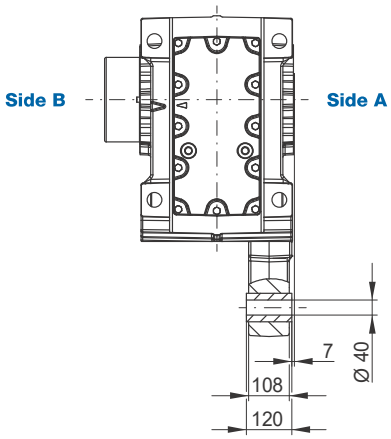
KP123 - B5 flange execution with hollow shaft and shrink disc



KT123 - Hollow shaft with torque arm **



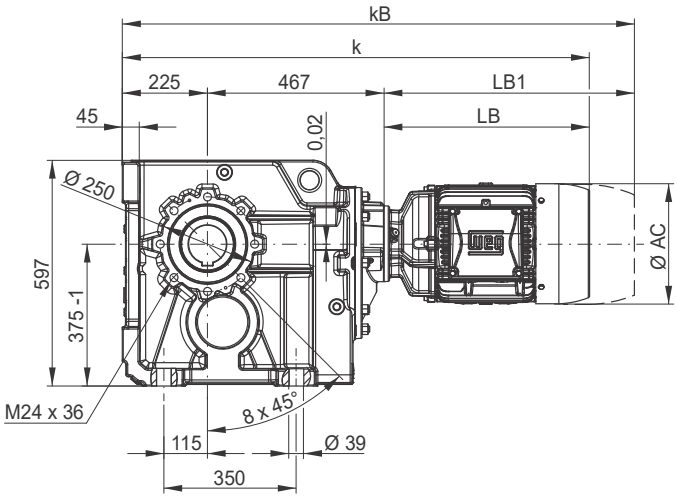
KU123 - Hollow shaft with shrink disc and torque arm **

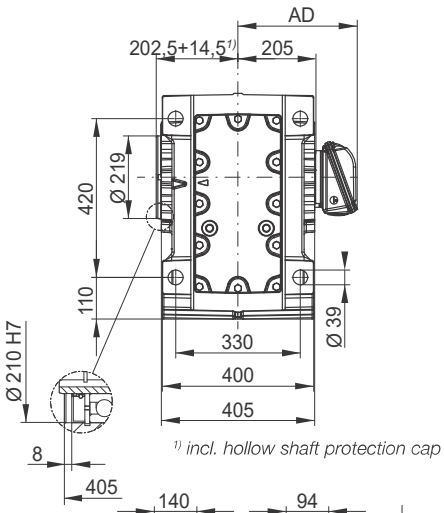


Dimensions in mm.

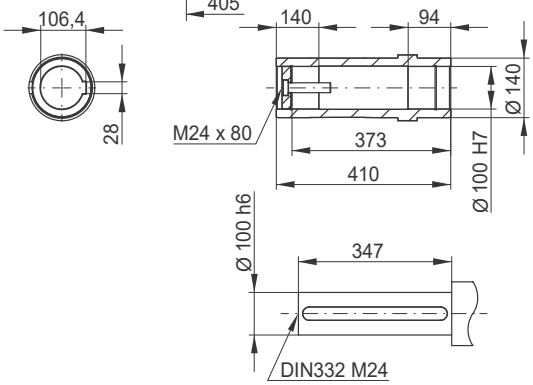
** *Torque arm may be mounted on side A or side B.*

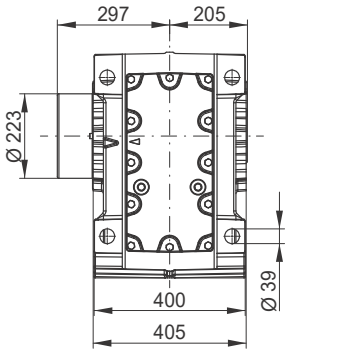
KH124 - Hollow shaft

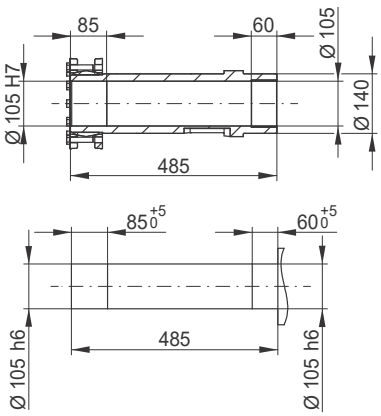




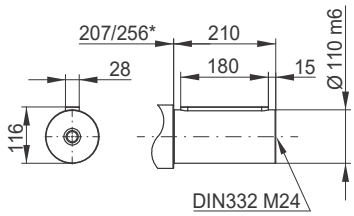
KD124 - Shrink disc

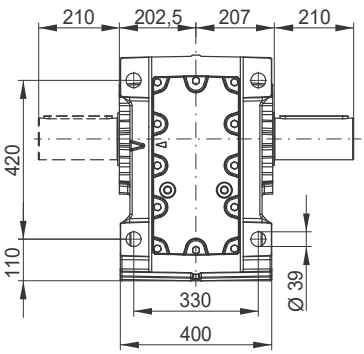






KS124 - Output shaft
KB124 - Output shaft on both sides



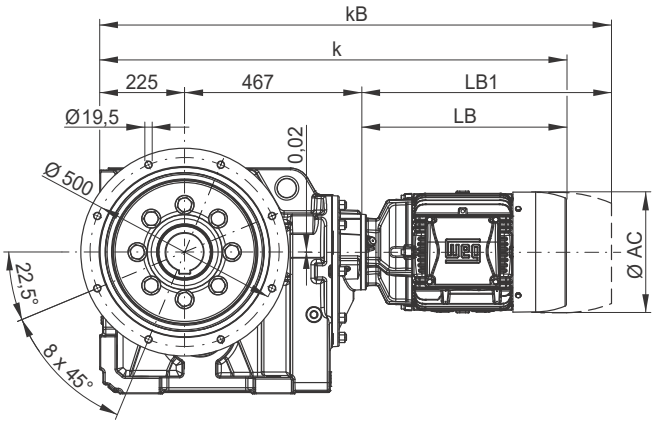


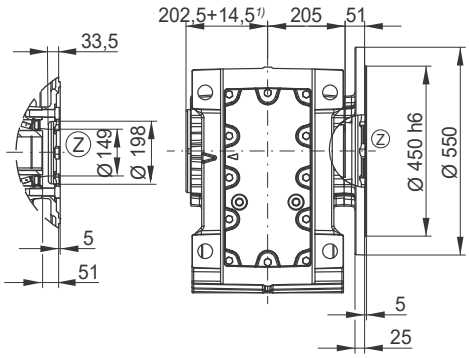
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L
AC	126	141	159	159	178	199	199	221	261	261	329	329
AD	128	136	145	145	155	165	165	185	205	205	266	266
k	896	930	938	962	980	1030	1068	1040	1105	1143	1237	1281
kB	940	979	996	1020	1053	1114	1152	1127	1223	1261	1361	1405
LB	204	238	246	270	288	338	376	348	413	451	545	589
LB1	248	287	304	328	361	422	460	435	531	569	669	713

Motor dimension sheets see page 496. Gear unit size K124 corresponds to motor flange FR-200.
Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

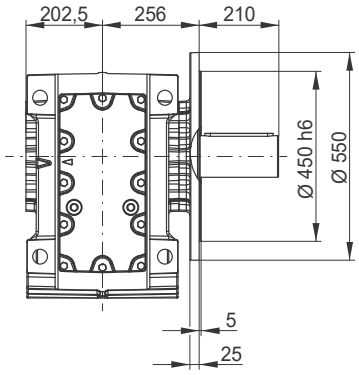
KO124 - B5 flange execution with hollow shaft



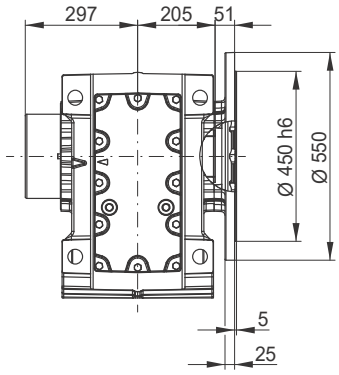


¹⁾ *incl. hollow shaft protection cap*

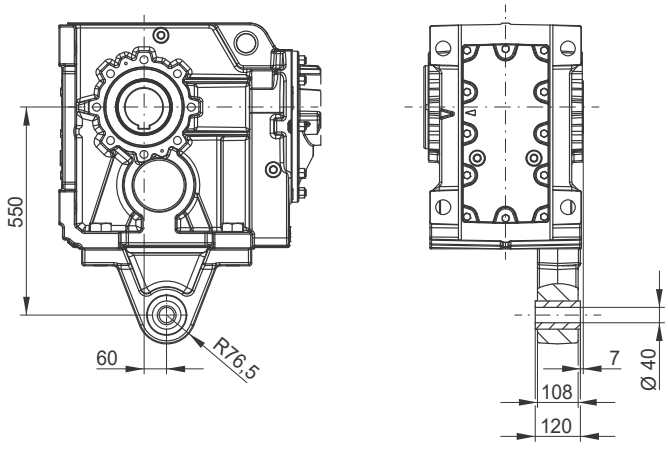
KF124 - B5 flange execution with output shaft



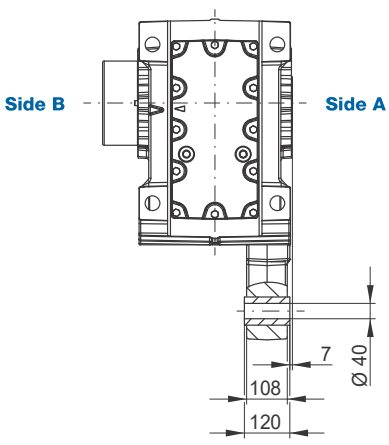
KP124 - B5 flange execution with hollow shaft and shrink disc



KT124 - Hollow shaft with torque arm **



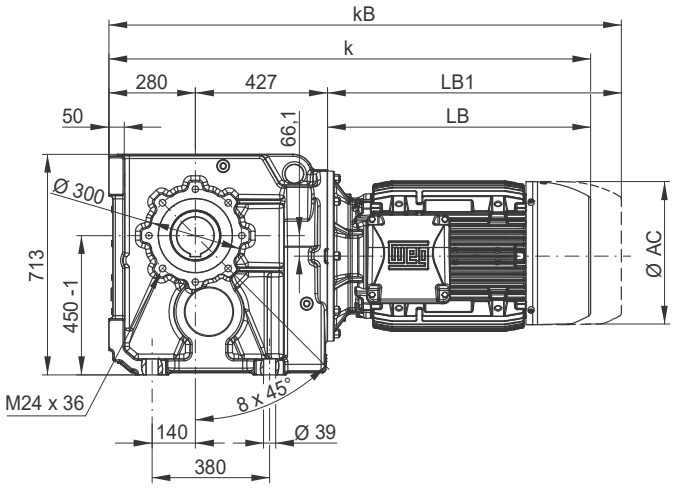
KU124 - Hollow shaft with shrink disc and torque arm **

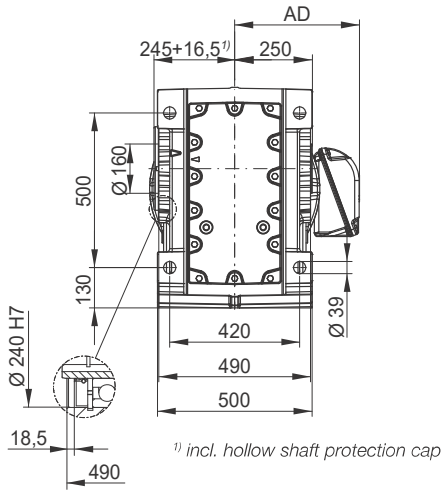


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

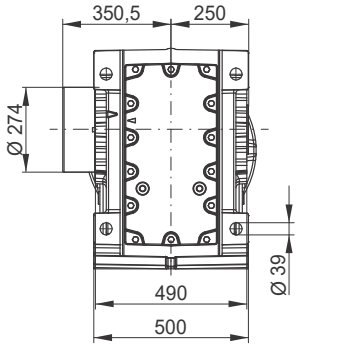
KH153 - Hollow shaft

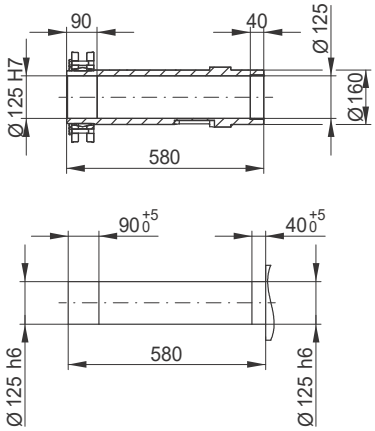


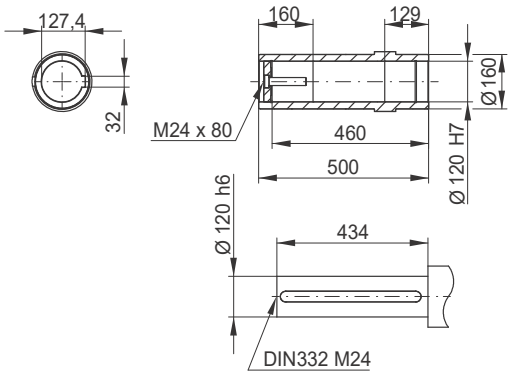


¹⁾ *incl. hollow shaft protection cap*

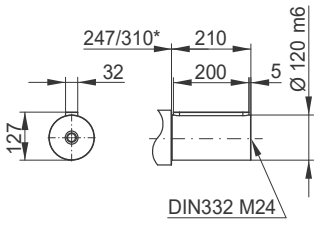
KD153 - Shrink disc

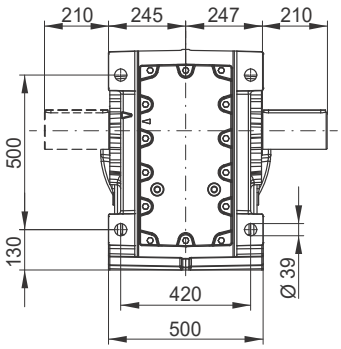






KS153 - Output shaft
KB153 - Output shaft on both sides



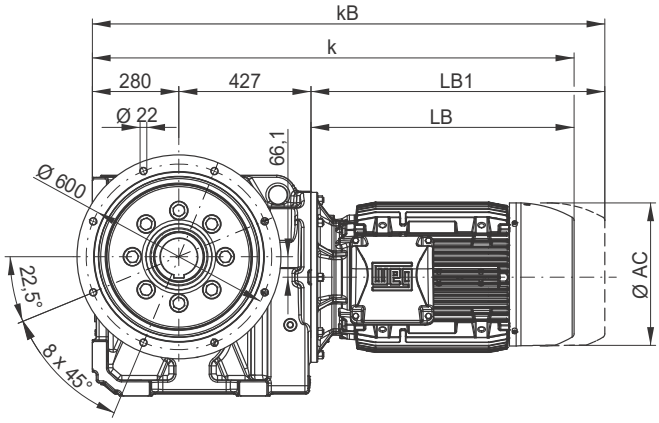


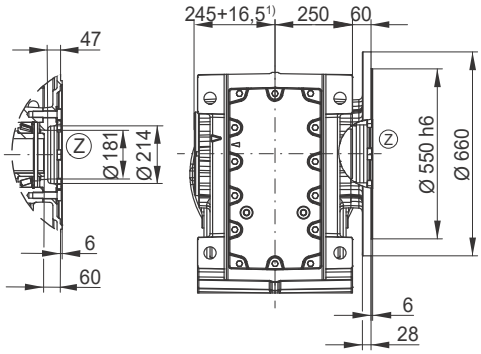
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L	180M	180L	200L	225S/M	250S/M
AC	-	-	-	-	-	-	-	-	-	-	329	329	347	347	386	453	482
AD	-	-	-	-	-	-	-	-	-	-	266	266	281	281	317	385	403
k	-	-	-	-	-	-	-	-	-	-	1213	1257	1281	1319	1411	1519	1558
kB	-	-	-	-	-	-	-	-	-	-	1337	1381	1399	1437	1537	1637	1676
LB	-	-	-	-	-	-	-	-	-	-	506	550	574	612	704	812	851
LB1	-	-	-	-	-	-	-	-	-	-	630	674	692	730	830	930	969

Motor dimension sheets see page 496. Gear unit size K153 corresponds to motor flange FR-550.
Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

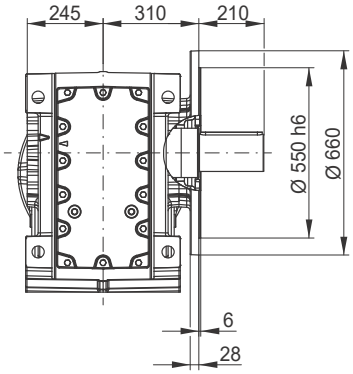
KO153 - B5 flange execution with hollow shaft



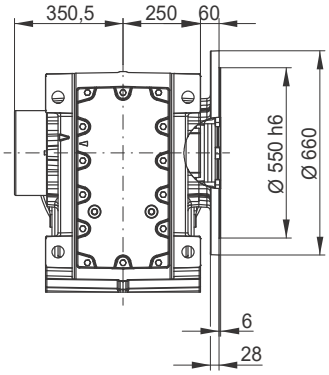


[1)] *incl. hollow shaft protection cap*

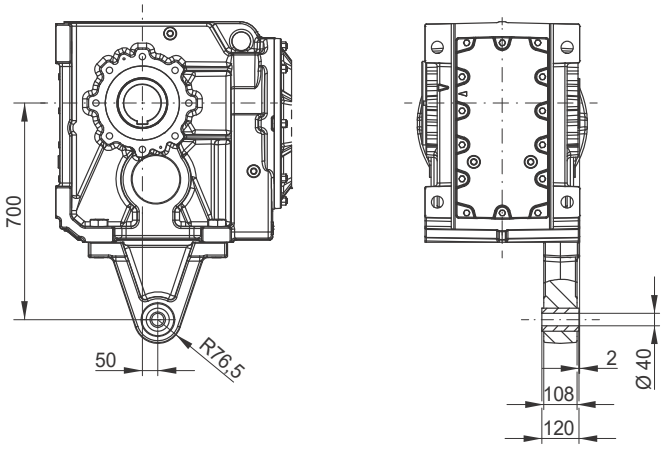
KF153 - B5 flange execution with output shaft



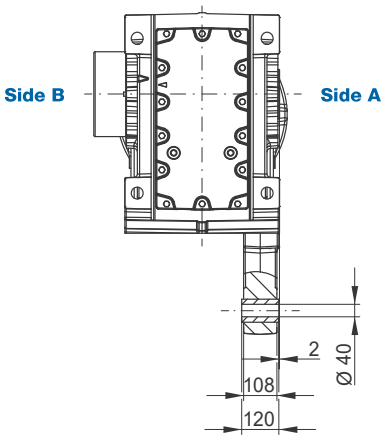
KP153 - B5 flange execution with hollow shaft and shrink disc



KT153 - Hollow shaft with torque arm **



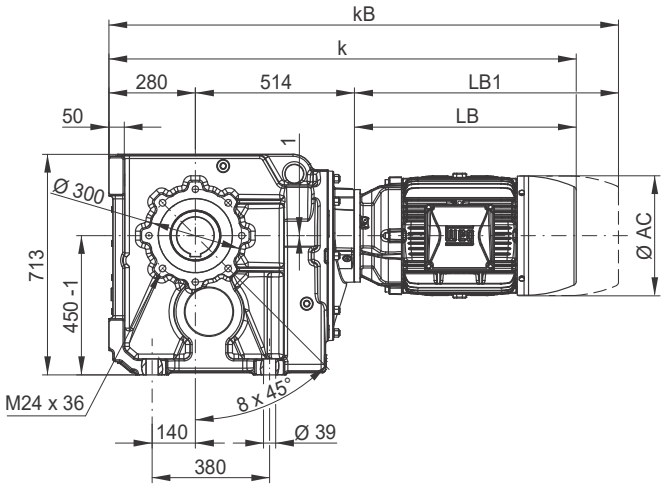
KU153 - Hollow shaft with shrink disc and torque arm **

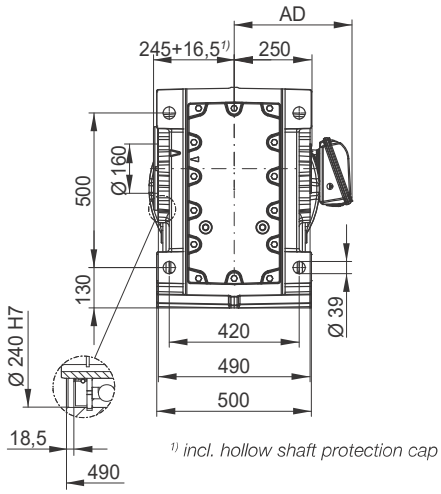


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

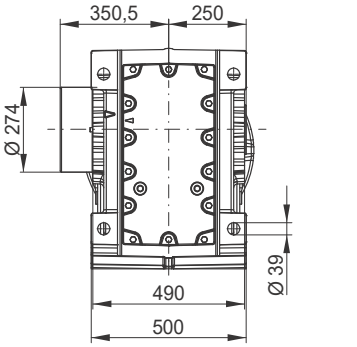
KH154 - Hollow shaft

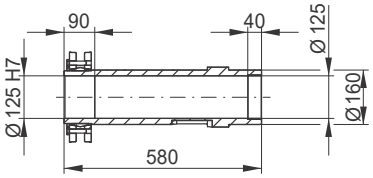


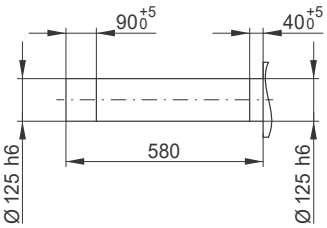


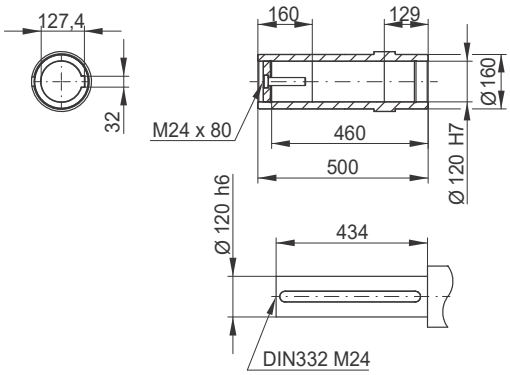
¹⁾ *incl. hollow shaft protection cap*

KD154 - Shrink disc

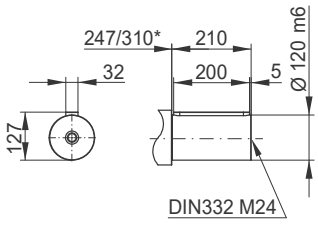


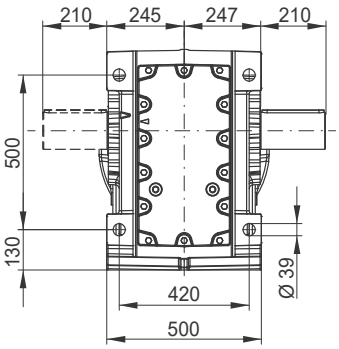






KS154 - Output shaft
KB154 - Output shaft on both sides



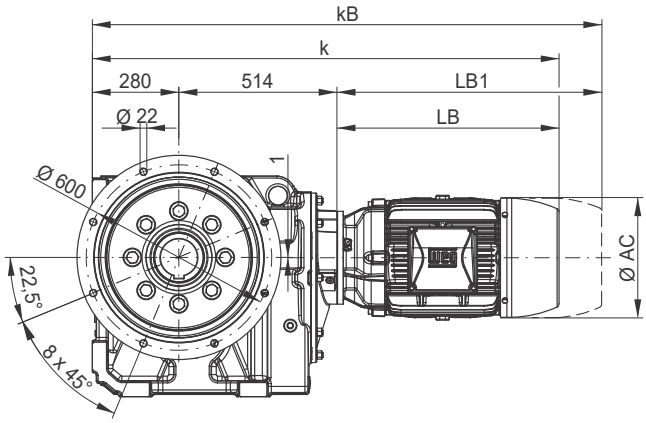


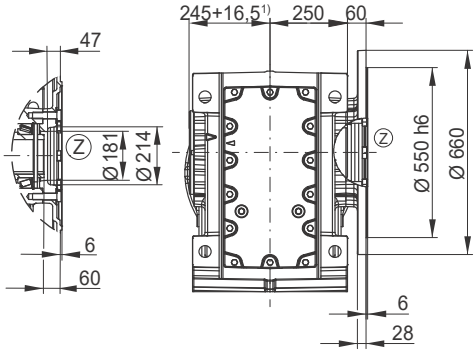
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M	160M	160L	180M	180L	200L
AC	126	141	159	159	178	199	199	221	261	261	329	329	347	347	386
AD	128	136	145	145	155	165	165	185	205	205	266	266	281	281	317
k	998	1032	1040	1064	1082	1132	1170	1142	1207	1245	1329	1373	1397	1435	1527
kB	1042	1081	1098	1122	1155	1216	1254	1229	1325	1363	1453	1497	1515	1553	1653
LB	204	238	246	270	288	338	376	348	413	451	535	579	603	641	733
LB1	248	287	304	328	361	422	460	435	531	569	659	703	721	759	859

Motor dimension sheets see page 496. Gear unit size K154 corresponds to motor flange FR-300.
Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

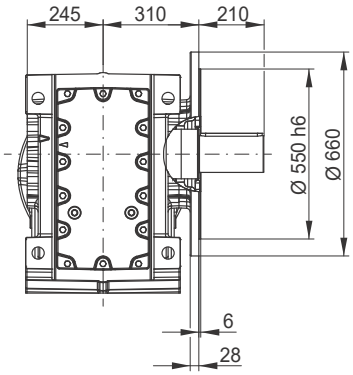
KO154 - B5 flange execution with hollow shaft



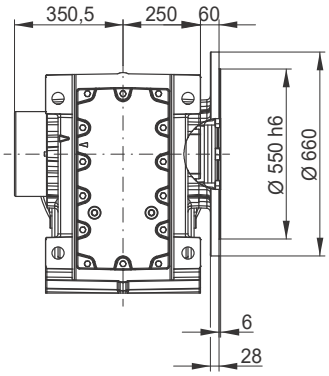


[1)] *incl. hollow shaft protection cap*

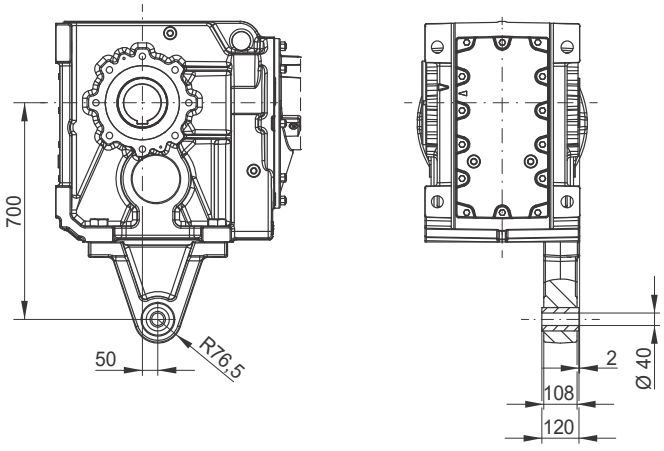
KF154 - B5 flange execution with output shaft



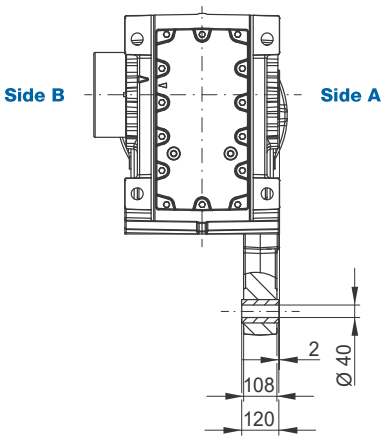
KP154 - B5 flange execution with hollow shaft and shrink disc



KT154 - Hollow shaft with torque arm **



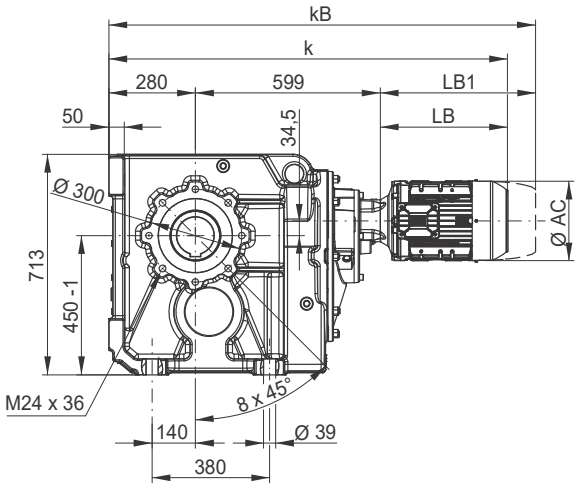
KU154 - Hollow shaft with shrink disc and torque arm **

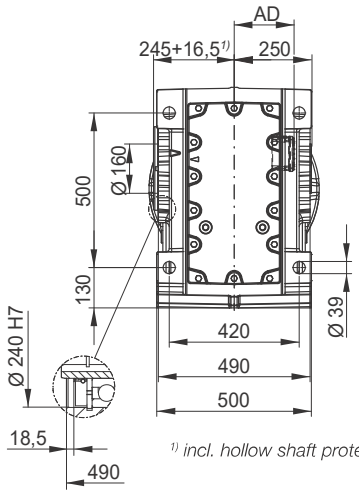


Dimensions in mm.

*** Torque arm may be mounted on side A or side B.*

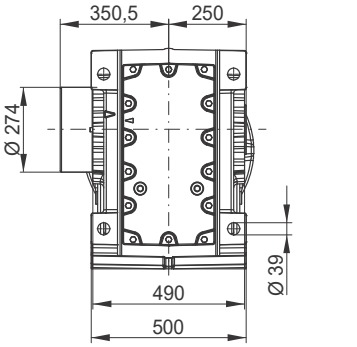
KH155 - Hollow shaft

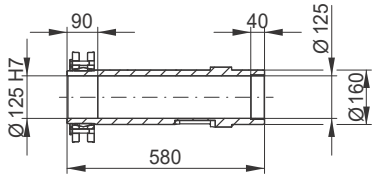


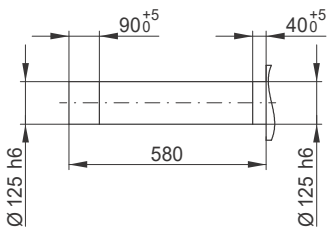


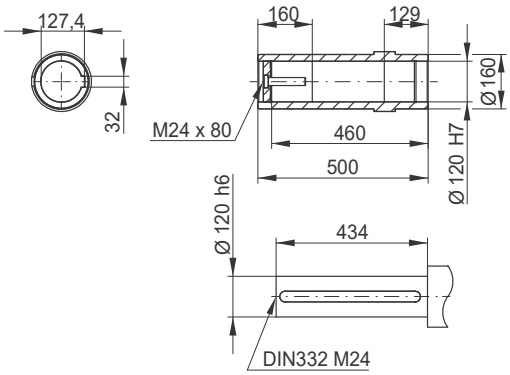
¹⁾ *incl. hollow shaft protection cap*

KD155 - Shrink disc

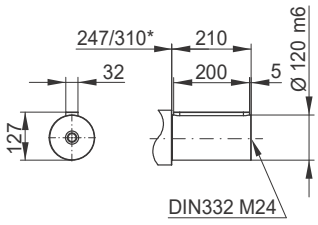


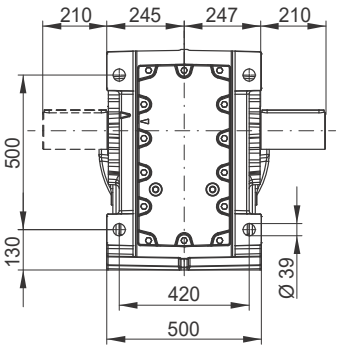






KS155 - Output shaft
KB155 - Output shaft on both sides



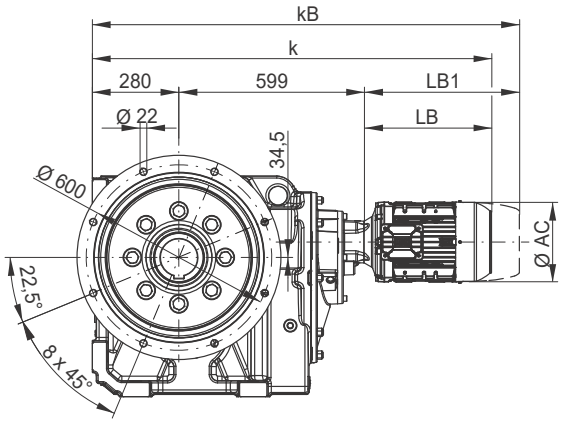


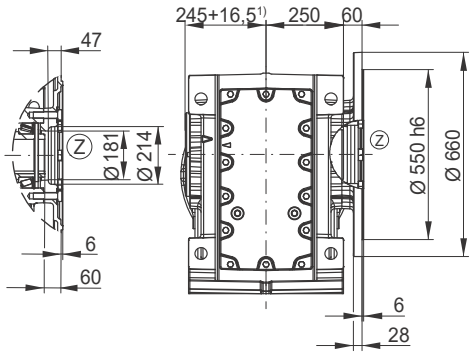
Motor fr. / Dimension	63	71	80	L80	90S/L	100L	L100L	112M	132S,M	L132M
AC	126	141	159	159	178	199	199	221	261	261
AD	128	136	145	145	155	165	165	185	205	205
k	1083	1117	1125	1149	1167	1217	1255	1227	1292	1330
kB	1127	1166	1183	1207	1240	1301	1339	1314	1410	1448
LB	204	238	246	270	288	338	376	348	413	451
LB1	248	287	304	328	361	422	460	435	531	569

Motor dimension sheets see page 496. Description of motor lengths LB and LB1 see page 500.

**Design KS(KB)/KF*

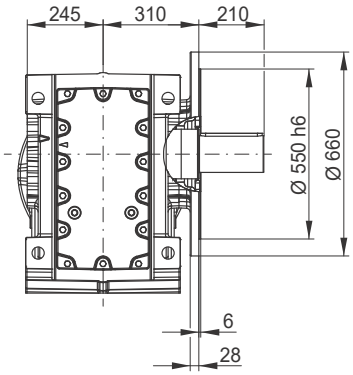
KO155 - B5 flange execution with hollow shaft



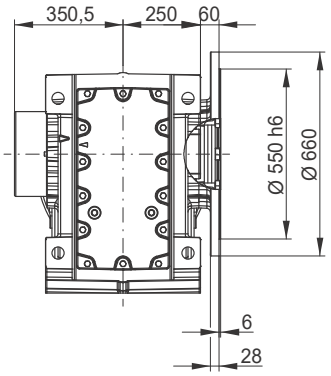


[1)] *incl. hollow shaft protection cap*

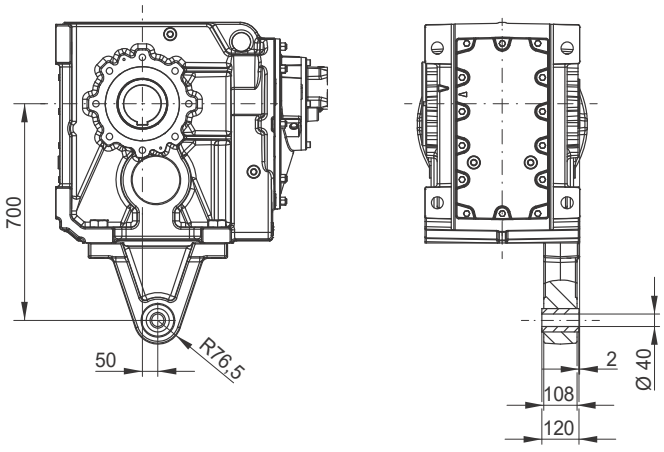
KF155 - B5 flange execution with output shaft



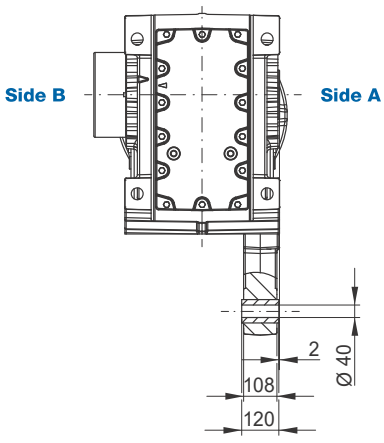
KP155 - B5 flange execution with hollow shaft and shrink disc



KT155 - Hollow shaft with torque arm **

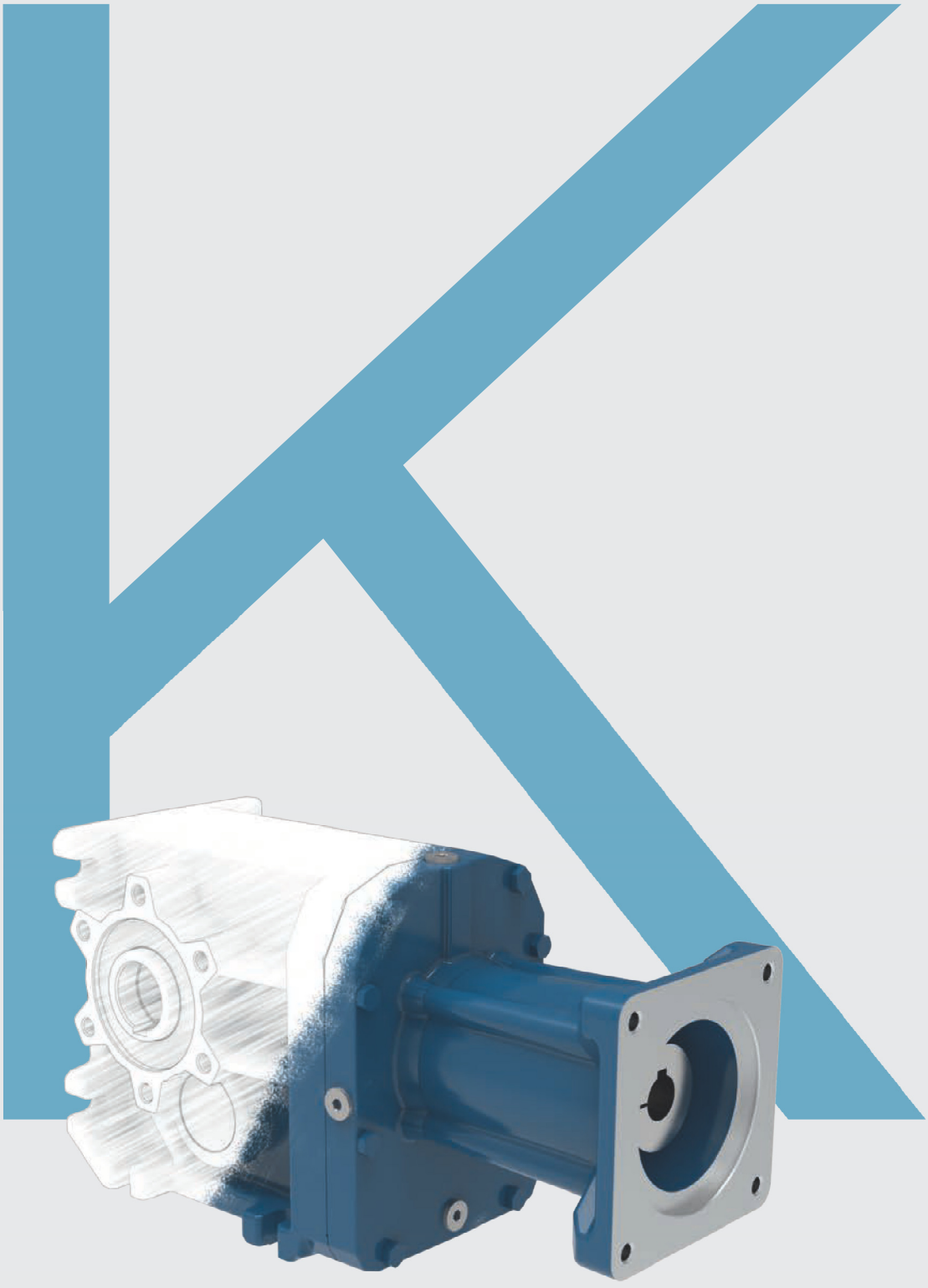


KU155 - Hollow shaft with shrink disc and torque arm **

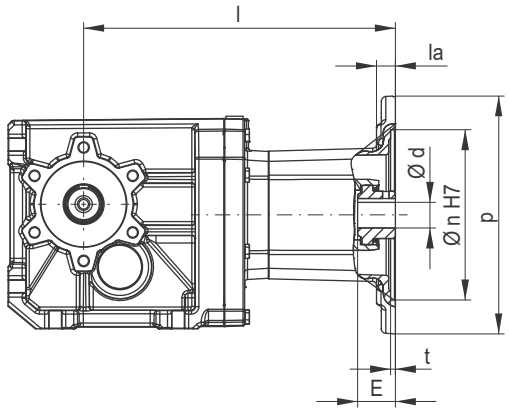


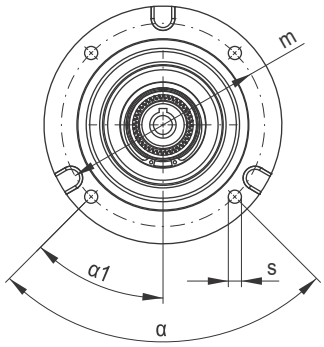
Dimensions in mm.

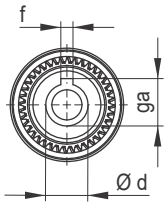
*** Torque arm may be mounted on side A or side B.*



IEC Adapter I63 to I280







K

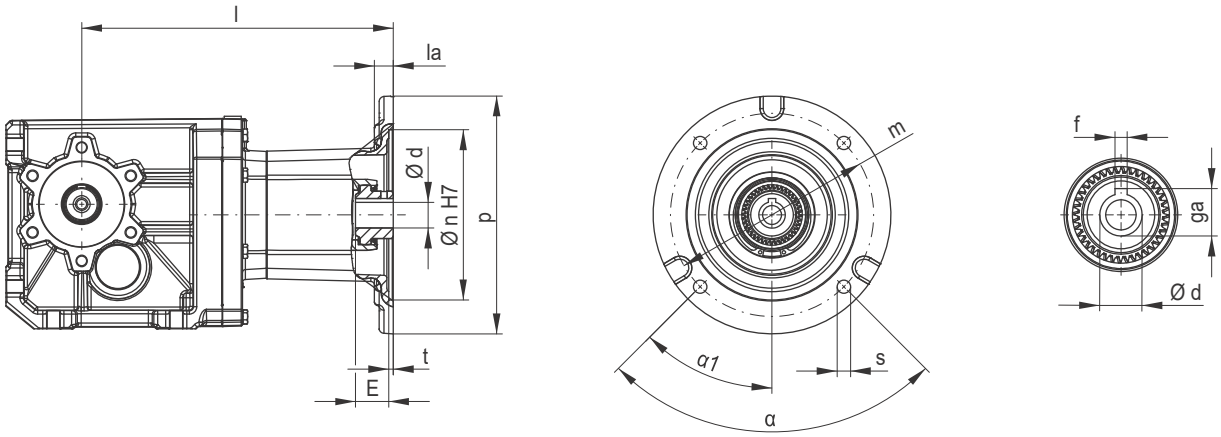
Type	I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	I225	I250	I280
p	154	154	200	200	250	250	300	350	350	400	450	550	550
n	95	110	130	130	180	180	230	250	250	300	350	450	450
la	22.5	10	13	13	15	20	15	35	35	20	20	20	20
m	115	130	165	165	215	215	265	300	300	350	400	500	500
t	4.5	4.5	4.5	4.5	5	5	5	5	5	5.5	5	5	5
s	M8x16	M8x10	11	11	13.5	13.5	13.5	17.5	17.5	17.5	17.5	17.5	17.5
α	90	90	90	90	90	90	90	90	90	90	45	45	45
α_1	35	45	45	45	45	45	45	45	45	45	45	45	45
d	11	14	19	24	28	28	38	42	48	55	60	65	75
f	4	5	6	8	8	8	10	12	14	16	18	18	20
ga	12.8	16.3	21.8	27.3	31.3	31.3	41.3	45.3	51.8	59.3	64.4	69.4	79.9
E [1]	25	32	43	47.5	63	100	85.5	111.5	111.5	114.5	140	146	146

[1] Maximum motor shaft length for motors with key

Gear unit size	I63	I71	I80	I90	I100	I112	I132	I160	I180	I200	I225	I250	I280
	l												
K02	163.5	163.5	191.5	191.5	-	-	-	-	-	-	-	-	-
K03	190	190	218	218	249	-	-	-	-	-	-	-	-
K04	207.5	207.5	235.5	235.5	266.5	319.5	-	-	-	-	-	-	-
K05	218	218	246	246	277	330	341	-	-	-	-	-	-
K06	202.5	202.5	230.5	230.5	261.5	314.5	325.5	-	-	-	-	-	-
K07	232.5	232.5	260.5	260.5	291.5	344.5	355.5	441.5	-	-	-	-	-
K08	281.5	281.5	309.5	309.5	340.5	393.5	404.5	489	489	-	-	-	-
K09	301.5	301.5	329.5	329.5	360.5	413.5	424.5	509	509	537.5	-	-	-
K10	-	-	-	-	-	467.5	478.5	560.5	560.5	589	619	-	-
K12	-	-	-	-	-	516.5	527.5	609.5	609.5	638	668	757	757
K15	-	-	-	-	-	-	-	629.5	629.5	658	688	777	777

Dimensions in mm.

NEMA Adapter N56 to N364

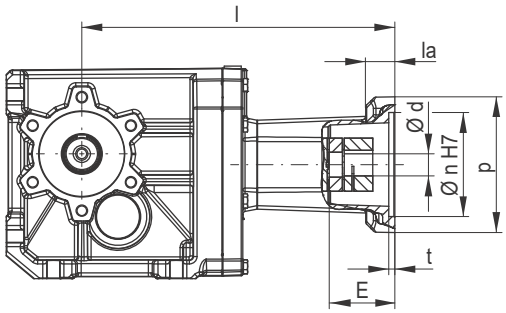


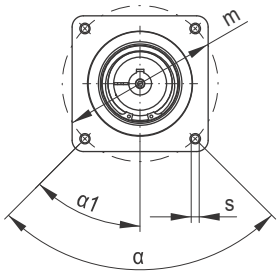
Type	N56	N143/145	N182	N184	N213/215	N254/256	N284/286	N324/326	N364
p	170	170	250	250	300	225	280	350	400
n	114.3	114.3	215.9	215.9	215.9	215.9	266.7	317.5	317.5
la	13	13	10	16.8	10	30	35	15	15
m	149.225	149.225	184.15	184.15	184.15	184.15	228.6	279.4	279.4
t	4.5	4.5	5	3.2	5	5	3	5	5
s	11	11	14	14	14	14	14	16	16
α	90	90	90	90	90	90	90	90	90
α_1	45	45	45	45	45	45	45	45	45
d	15.875	22.225	28.575	28.575	34.925	41.275	47.625	53.975	60.325
f	4.775	4.775	6.350	6.350	7.950	9.525	12.700	12.700	15.875
ga	18.008	24.486	31.521	31.521	38.557	45.618	53.238	59.690	67.335
E	55	55	67.5	96.8	80.5	105.5	111.5	109.5	109.5

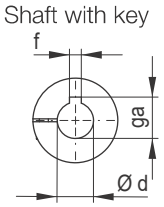
1) Maximum motor shaft length for motors with key

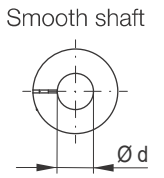
Gear unit size	N56	N143/145	N182	N184	N213/215	N254/256	N284/286	N324/326	N364
	l								
K02	191.5	191.5	-	-	-	-	-	-	-
K03	218	218	249	-	-	-	-	-	-
K04	235.5	235.5	266.5	319.5	-	-	-	-	-
K05	246	246	277	330	341	-	-	-	-
K06	230.5	230.5	261.5	314.5	325.5	-	-	-	-
K07	260.5	260.5	291.5	344.5	355.5	441.5	-	-	-
K08	309.5	309.5	340.5	393.5	404.5	489	492	-	-
K09	329.5	329.5	360.5	413.5	424.5	509	512	559.5	-
K10	-	-	-	467.5	478.5	560.5	563.5	611	626.5
K12	-	-	-	516.5	527.5	609.5	612.5	660	675.5
K15	-	-	-	-	-	629.5	632.5	695.5	695.5

SERVO Adapter S92 to S190









K

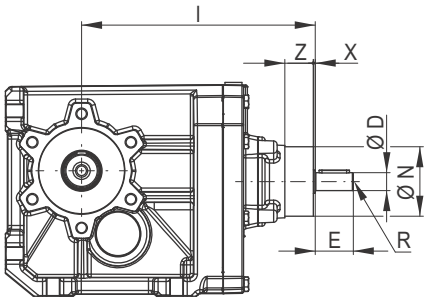
Typ	S92			S105	S114		S115		S130				S141	S142		S180	S189		S190
p	101			144	144		144		144				144	144		197	197		197
n	80			95	95		110		110				110	130		114,3	130		180
la	17,5			31	31		31		31				31	31		35	32		38
m	100			115	130		130		145				165	165		200	215		215
t	6,5			6,5	6,5		6,5		6,5				6,5	6,5		6,5	6,5		6,5
s	M6x12			M8x16	M8x16		M8x16		M8x16				M8x16	M8x16		13,5	15		15
α	90°			90°	90°		90°		90°				90°	90°		90°	90°		90°
$α_1$	45°			45°	45°		45°		45°				45°	45°		45°	45°		45°
d [1]	14	16	19	19	19	24	19	24	19	22	24	28	24	24	32	35	32	38	38
f	5	5	6	6	6	8	6	8	6	6	8	8	8	8	10	10	10	10	10
ga	16,3	18,3	21,8	21,8	21,8	27,3	21,8	27,3	21,8	24,8	27,3	31,3	27,3	27,3	35,3	38,3	35,3	41,3	41,3
E [2]	46	46	34	67	67	54	67	54	76	63	63	63	54	63	63	66	74	60	87
E [3]	46	46	46	67	67	67	67	67	76	76	76	63	67	76	63	87	74	60	87

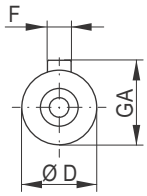
[1] Other shaft diameters on request
[2] Maximum motor shaft length for motors with key
[3] Maximum motor shaft length for motors with smooth shaft

Gear unit size	S92	S105	S114	S115	S130	S141	S142	S180	S189	S190
	l									
K02	229	277	277	277	277	277	277	-	-	-
K03	255.5	303.5	303.5	303.5	303.5	303.5	303.5	-	-	-
K04	273	321	321	321	321	321	321	391.5	385.5	412.5
K05	283.5	331.5	331.5	331.5	331.5	331.5	331.5	402	396	423
K06	268	316	316	316	316	316	316	386.5	380.5	407.5
K07	298	346	346	346	346	346	346	416.5	410.5	437.5
K08	347	395	395	395	395	395	395	465.5	459.5	486.5
K09	367	415	415	415	415	415	415	485.5	479.5	506.5
K10	-	-	-	-	-	-	-	539.5	533.5	560.5
K12	-	-	-	-	-	-	-	588.5	582.5	609.5
K15	-	-	-	-	-	-	-	-	-	-

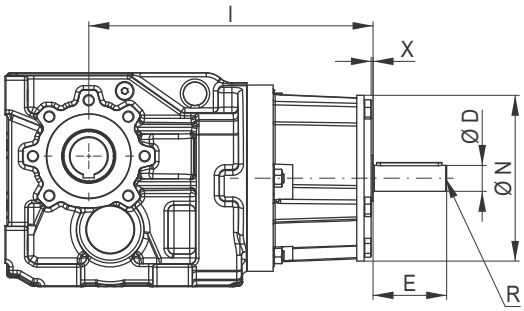
Dimensions in mm.

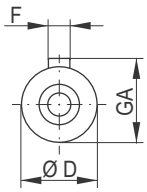
Input Unit U2, U3





Input Unit U5, U6, U7





Type	Input shaft [mm]						
	19x40	24x50	28x60	38x80	42x110	48x110	55x110
	U2	U3	U5			U6	U7
D	19	24	28	38	42	48	55
F	6	8	8	10	12	14	16
GA	21.5	27	31	41	45	51.5	59
E	40	50	60	80	110	110	110
N	73	101	178			235	290
X	2	2.5	1.9			6.5	4
Z	3	35	-			-	-
R	M6	M10	M10	M12	M16	M16	M20

Tolerances		
Dimension name	ISO tolerance DIN EN ISO 286-2	
D	< Ø 55 mm	k6
	≥ Ø 55 mm	m6

Gear unit size	Input shaft [mm]				
	19x40	24x50	28x60 38x80 42x110	48x110	55x110
	U2	U3	U5	U6	U7
	l				
K02	191.5	-	-	-	-
K03	218	-	-	-	-
K04	235.5	267.5	-	-	-
K05	246	278	-	-	-
K06	230.5	262.5	305	-	-
K07	260.5	292.5	335	-	-
K08	309.5	341.5	382.5	404.5	-
K09	329.5	361.5	402.5	424.5	-
K10	-	415.5	454	476	545
K12	-	464.5	503	525	594
K15	-	-	523	545	614