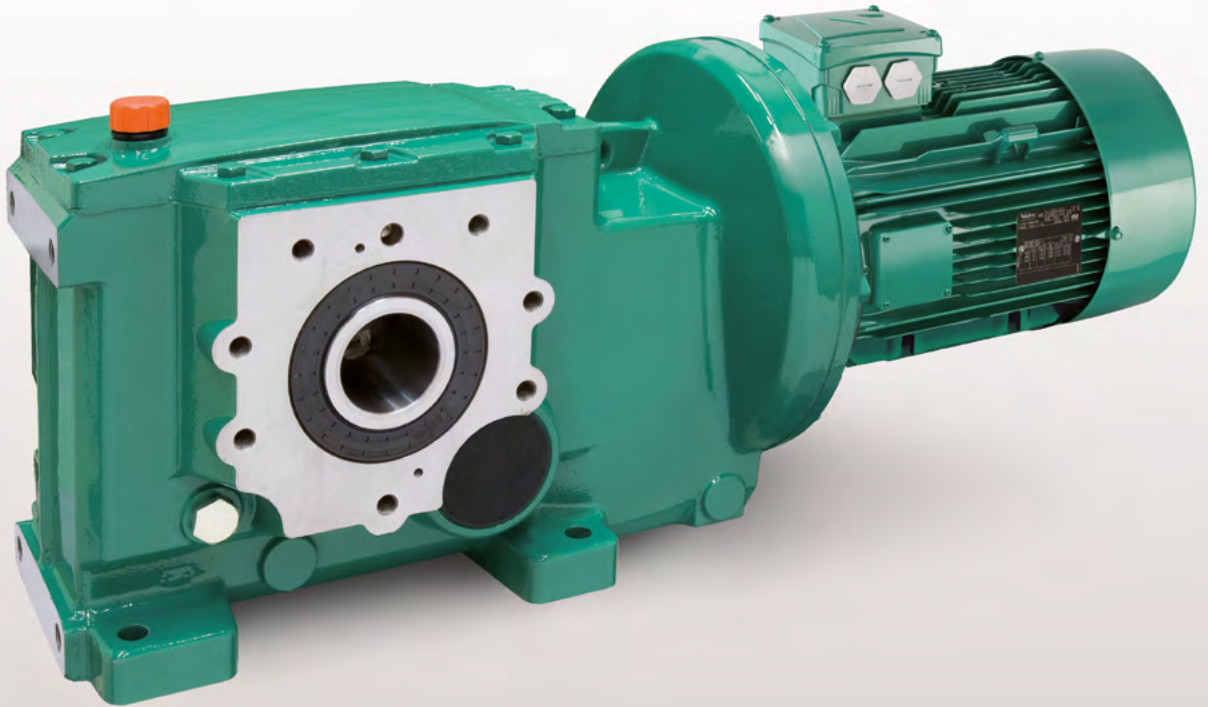




Geared Motors 3000 Range - IMfinity® Orthobloc

Drive systems, Non-IE, IE2 and IE3 efficiency

Variable speed and fixed speed

Sizes 31 to 39

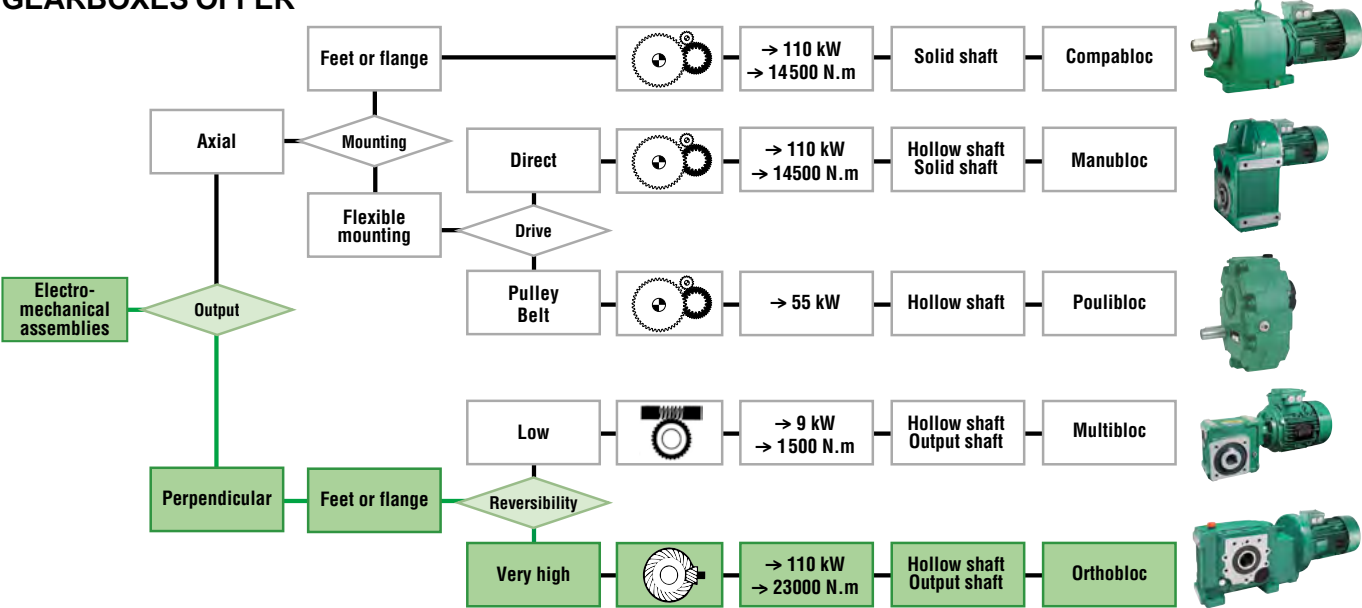
Power rating 0.25 to 110 kW

LEROY-SOMER™

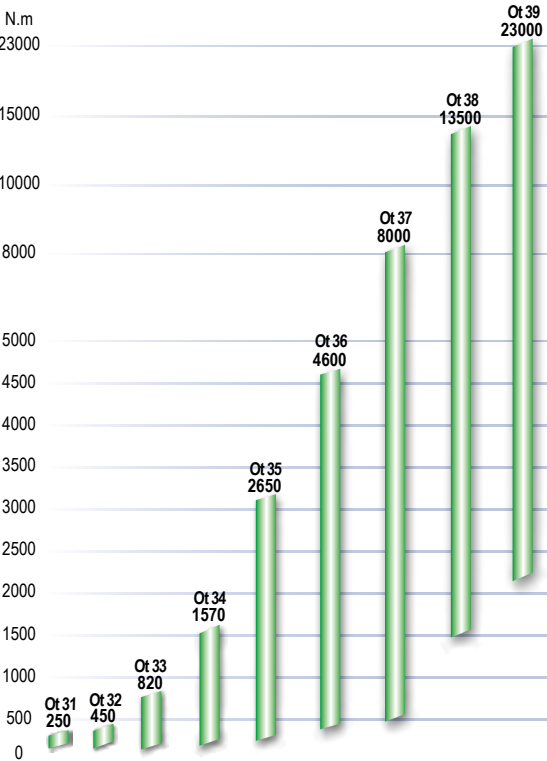
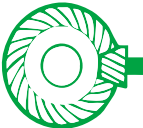
Nidec
— All for dreams

Introduction

GEARBOXES OFFER



ORTHOBLOC RANGE



ASSOCIATED DOCUMENTATIONS

	Environment				
	Current use			Atex regulated	
Brochure	Catalogue	Commissioning			
		Installation	Maintenance	Ex II 3D II 2D	Ex II 3G, 3GD, II 2G, 2GD
3969: Compabloc, Orthobloc, Manubloc 3000 range	3981: Orthobloc 3000 IMfinity) 5181: electromechanical manual	2557: storage and commissioning 3996: Orthobloc 3000 5088: lubrication kit 5217: heat exchanger	4952: Orthobloc 3000 maintenance	3711: gearboxes for potentially explosive dust atmospheres	3804: gearboxes for potentially explosive gas atmospheres

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Glossary

AP	Input shaft	m.....	load weight (kg)
BA.....	Shaft extension	M _{eq}	Equivalent torque
BS, BD, BR, BT	Flange fixing	M	Permissible torque
D	Shaft diameter (mm)	M _S	Output torque
Dim	Dimensions (mm)	MU	Universal Mounting
E	Output shaft length (mm)	N	Rotation speed (drum, rollers, motors, etc. in revs per minute)
FJ.....	Inertia factor	N _E	Input speed
FLSES	IE3 cast iron serial motor	NS.....	Offset feet fixing
F _R E/2	Permissible radial load at E/2	N _S	Gearbox output speed
H	Hollow shaft	N _{uS}	Useful output rotation speed
HA.....	Frame size	O.p.....	Shaft end borehole
h/j.....	hour/day	Ot.....	Orthobloc
i.....	Exact reduction of gearbox	P	Input power (kW)
Iu.....	Reduction available to the application	P _{eq}	Equivalent power
IP, IK	Protection indexes	P _{uE}	Useful input power
J.....	Moment of inertia	R.....	Right-output solid shaft
J _{c/m}	Moment of inertia of the load applied to the drive shaft expressed in kg.m ²	η	Efficiency
J _m	Motor moment of inertia	S B3/B8/B6/B7/V5/V6	Feet fixing followed with the operating position coding
K	Overall duty factor	SD.....	Shrink disc
Kp	Maximum possible duty factor for the geared motor	TB	Terminal box
kW	Kilo Watt	U.G.	General applications
L.....	Left-output solid shaft	U.L.	Hoisting applications
LS	Aluminium serial motor outside efficiency class or not concerned by the IE	U.T.	Displacement Usage
LSSES	IE2, IE3 aluminium motor series	Z (s/h)	Starting frequency of the application (s/h)

General



Orthobloc geared motors with helical bevel gears are used to adapt the speed of the electric motor to that of the driven machine.

Their size is therefore determined by the motor power (P) expressed in kilowatts (kW) and the output rotation speed of the gearbox (N_S) in revolutions per minute (min^{-1}).

The main characteristic of the speed reducers is the rated output torque (Mn_S) expressed in Newton-metres (N.m) :

$$Mn_S = \frac{P \times 9550}{N_S} \times \text{efficiency}$$

A range of nine sizes: 31, 32, 33, 34, 35, 36, 37, 38, 39.

Rated output torque: 10 N.m to 23 000 Nm.

Power rating: from 0.25 to 110 kW.

Reduction ratios: from 3.71 to 5290.

High efficiency: 94 % to 96 %.

Reversible.

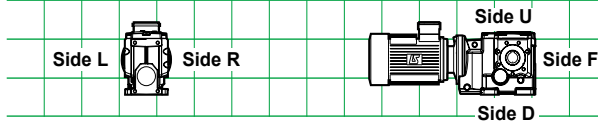
Quiet operation.

Name	Material	Observation
Housing	ENGJL-200 cast iron (31 to 39)	- use of single-component pearlitic ENGJL-200 cast iron (flake graphite: 200 MPa tensile strength) to ensure unit is fully sealed - monobloc with reinforced internal ribbing to absorb vibrations and noise and to increase rigidity - with feet S, SBT or flange BS, BD... BR. They are compact and meet industrial requirements
Gears	Ni Cr Mo steel	- cut by gear hob, they are heat treated and then undergo final machining. The quality and precision of the gear cutting allow maximum torque with minimum noise level
Shaft	Steel	- grinding of the sealing surfaces - hollow with protection cover or cylindrical output with key as per ISO R773, or hollow with shrink disc SD - tolerance of diameters in accordance with NFE 22-051 and ISO R 775 - tapped holes at shaft end in accordance with DIN 332 for mounting connecting equipment
Lip seals	Nitrile	- O-rings between housing and flange - anti-dust lipseals according to DIN 3760 form AS - flat seal under the access cover
Lubrication	Oil	- in accordance with ISO 6743 / 6 - delivered with the quantity of oil corresponding to the operating position, it is fitted with drain, level and breather plugs
Mounting		AP: gearbox with input shaft MI: geared motor with integral motor MU: geared motor with IEC motor, manufactured with universal mounting
Standard motor		- LS 71, 4 poles: three phase multiple voltage 230/400 VY - 400 VΔ - LS and LSES 80 to 315, 4 poles: three phase multiple voltage 230VΔ - 380VY - 400VY - 415VY 50 Hz - 460VY 60 Hz / 380VΔ - 400VΔ - 415VΔ - 690VY 50 Hz - 460VΔ 60 Hz - ventilation cover, fitted on request with a drip cover for operation in vertical position, shaft end facing down - LS, LSES: terminal box made of composite material (80 to 112) aluminium alloy (71 and ≥ 132) equipped with threaded plugs (without cable glands) - IP 55 standard protection
Brake motors		- FFB: failsafe brake induction motor, IP55 (LS 71 to 180, LSES IFT/IE3 80 to 160) - FCPL: failsafe brake induction motor, IP44 (LS 180 to 315)
External finish	Colour RAL 6000 (green) Limited durability class Colour RAL 6000 (green) Average durability class	- Ia system, standard series LS, LSES - Resistance to neutral saline mist: 120 h (according to ISO 9227) - IIa system, standard series FLS - Resistance to neutral saline mist: 240 h (according to ISO 9227)

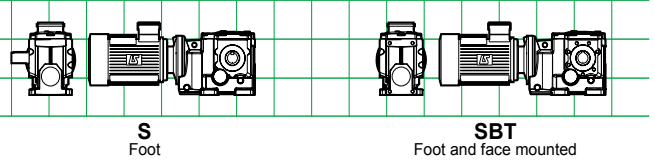
Fixing forms: S, SBT

Standard position: gearbox viewed from side F, motor behind.

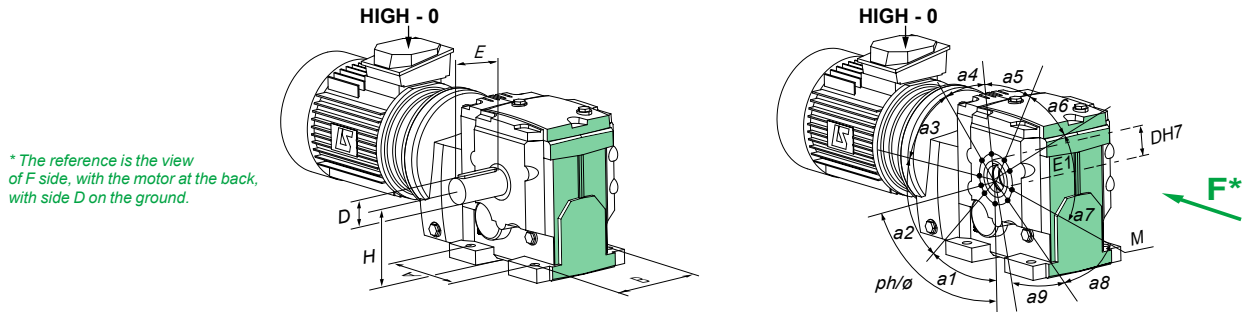
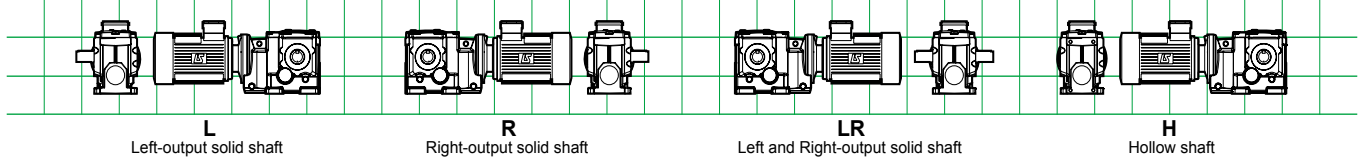
1 - Marking of the sides



2 - Fixing form



3 - Output shaft



- Feet form, left solid shaft L, right solid shaft R, hollow shaft H

Type	SL					SR					SH					kg
	A	B	H	ØD	E	A	B	H	ØD	E	A	B	H	ØDH7	E1	
Ot 3933 S	380	370	450	120m6	210	380	370	450	120m6	210	380	370	450	120	450	648
Ot 3833 S	350	270	375	110m6	210	350	270	375	110m6	210	350	270	375	100	350	378
Ot 3733 S	420	270	250	90m6	170	420	270	250	90m6	170	420	270	250	90	340	306
Ot 3633 S	355	240	225	70m6	140	355	240	225	70m6	140	355	240	225	70	304	198
Ot 3533 S	180-230	180	212	60m6	120	180-230	180	212	60m6	120	180-230	180	212	60	244	83
Ot 3433 S	150-190	165	180	50k6	100	150-190	165	180	50k6	100	150-190	165	180	50	226	60
Ot 3333 S	120-150	140	140	40k6	80	120-150	140	140	40k6	80	120-150	140	140	40	173	38
Ot 3233 S	130-150	120	112	30j6	60	130-150	120	112	30j6	60	130-150	120	112	35	151	21
Ot 3232 S	130-150	120	112	30j6	60	130-150	120	112	30j6	60	130-150	120	112	35	151	22
Ot 3132 S	100	100	80	25j6	50	100	100	80	25j6	50	100	100	80	30	130	14.5

- Left tapped form, left solid shaft L, right solid shaft R, hollow shaft H

Type	Face L															H				 kg
	A	B	H	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	n	ph/ø	øM	øDH7	E1	
Ot 3933 SBT ¹	380	370	450	20°	34°	36°	36°	36°	36°	36°	36°	36°	34°	-	10	0°-180°/325	340	120	450	565
Ot 3833 SBT ¹	350	270	375	30°	30°	30°	30°	30°	30°	30°	30°	30°	30°	30°	11	75°-255°/300	300	100	350	347
Ot 3733 SBT	420	270	250	36°	36°	36°	36°	36°	36°	36°	36°	36°	-	-	9	0°/230	230	90	340	289
Ot 3633 SBT	355	240	225	70°	35°	40°	70°	40°	35°	-	-	-	-	-	6	0°/220	230	70	310	186
Ot 3533 SBT	180-230	180	212	59°	52°	44°	50°	44°	81°	-	-	-	-	-	6	300°/190	190	60	244	80
Ot 3433 SBT	150-190	165	180	65°	46°	44°	50°	44°	81°	-	-	-	-	-	6	300°/152	152	50	226	58
Ot 3333 SBT	120-150	140	140	65°	48°	44°	46°	45°	67°	-	-	-	-	-	6	65°/123	123	40	173	36
Ot 3233 SBT	130-150	120	112	0°	65°	48°	44°	46°	50°	-	-	-	-	-	6	295°/102	100	35	151	20
Ot 3232 SBT	130-150	120	112	0°	65°	48°	44°	46°	50°	-	-	-	-	-	6	295°/102	100	35	151	21.8
Ot 3132 SBT	100	100	80	0°	90°	90°	90°	-	-	-	-	-	-	-	4	340°/95	95	30	130	14

1. Ot 38, Ot 39 SBT, solid shaft: not made

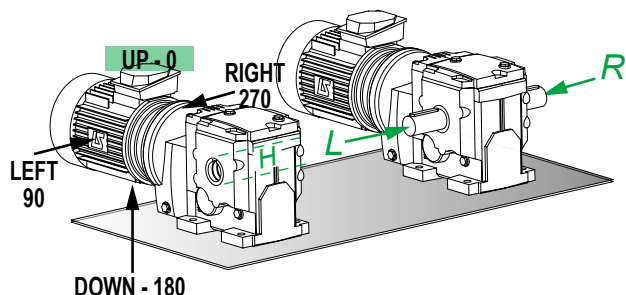
- Right tapped form, left solid shaft L, right solid shaft R, hollow shaft H

Type	Face R															H				
	A	B	H	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	n	ph/ø	øM	øDH7	E1	
Ot 3933 SBT ¹	380	370	450	20°	34°	36°	36°	36°	36°	36°	36°	36°	34°	-	10	0°-180°/325	340	120	450	565
Ot 3833 SBT ¹	350	270	375	30°	30°	30°	30°	30°	30°	30°	30°	30°	30°	30°	11	75°-255°/300	300	100	350	347
Ot 3733 SBT	420	270	250	36°	36°	36°	36°	36°	36°	36°	36°	36°	-	-	9	0°/230	230	90	340	289
Ot 3633 SBT	355	240	225	70°	35°	40°	70°	40°	35°	-	-	-	-	-	6	0°/220	230	70	310	186
Ot 3533 SBT	180-230	180	212	0°	59°	52°	44°	50°	44°	-	-	-	-	-	6	300°/190	190	60	244	80
Ot 3433 SBT	150-190	165	180	10°	55°	46°	44°	50°	44°	-	-	-	-	-	6	300°/152	152	50	226	58
Ot 3333 SBT	120-150	140	140	0°	45°	68°	44°	46°	44°	-	-	-	-	-	6	65°/123	123	40	173	36
Ot 3233 SBT	130-150	120	112	0°	65°	48°	44°	46°	50°	-	-	-	-	-	6	295°/102	100	35	151	20
Ot 3232 SBT	130-150	120	112	0°	65°	48°	44°	46°	50°	-	-	-	-	-	6	295°/102	100	35	151	21.8
Ot 3132 SBT	100	100	80	0°	90°	90°	90°	-	-	-	-	-	-	-	4	340°/95	95	30	130	14

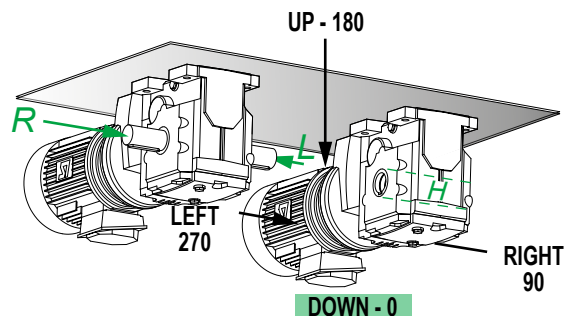
1. Ot 38, Ot 39 SBT, solid shaft: not made

Operating positions: S, SBT

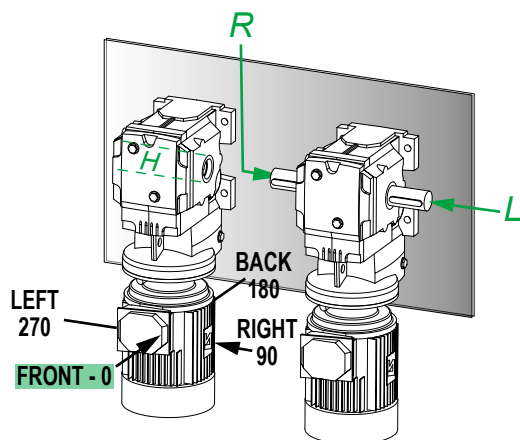
The absolute orientation of the connection (TB: Up, Down, Right, Left, Front, Back) is related to the chosen operating position. The relative orientation (0-90-180-270, in the trigonometric direction), a consequence of the absolute position, is related to the base of the gearbox (real or imaginary) for an observer, facing the gearbox.



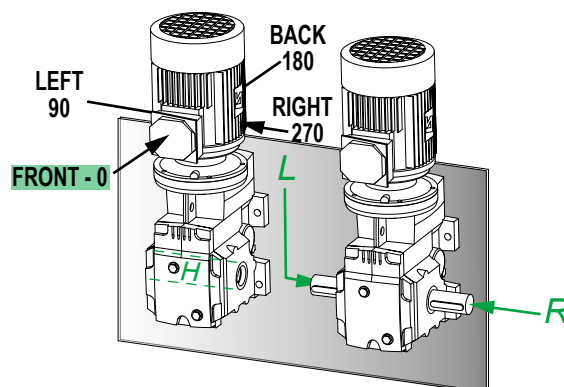
B3



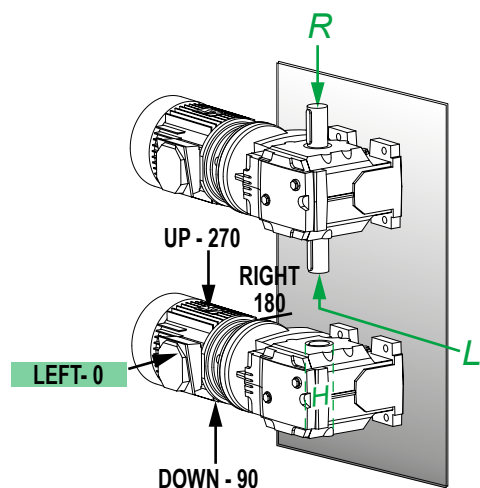
B8



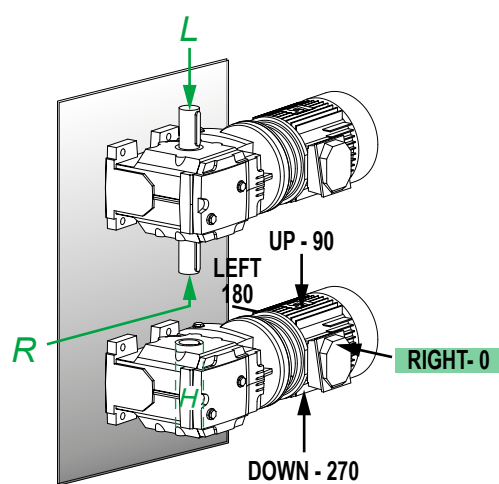
B6



B7¹



V5



V6

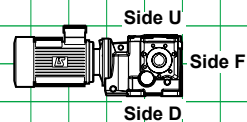
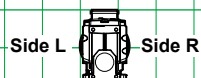
Std terminal box

Output shaft on left L, right R, hollow H.
1 backstop forbidden

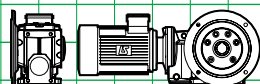
Fixing forms: BSL, BDL

Standard position: gearbox viewed from side F, motor behind.

1 - Marking of the sides

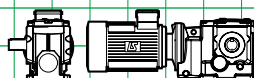


2 - Form fixing

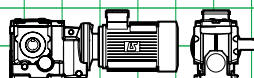


BSL - BDL
Left smooth hole flange

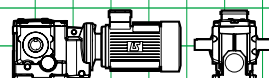
3 - Output shaft



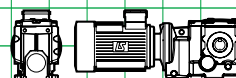
L
Left-output solid shaft



R
Right-output solid shaft

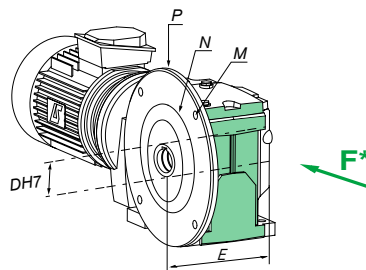
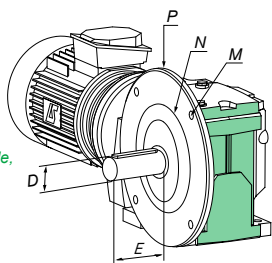


LR
Left and Right-output solid shaft



H
Hollow shaft

* The reference is the view of F side, with the motor at the back, with side D on the ground.



- Solid shaft on left L

Dimensions in mm

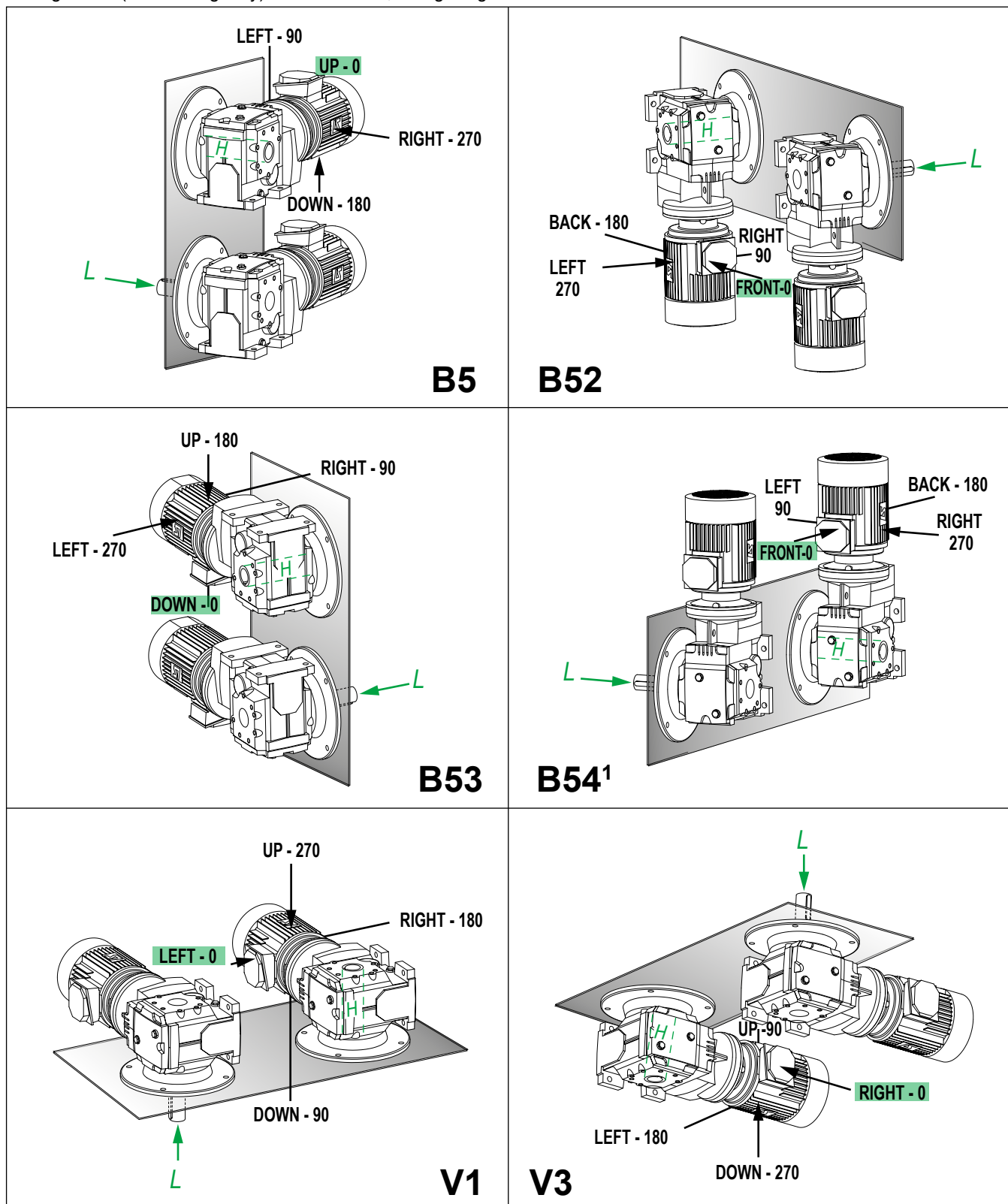
Type	BSL L					 kg	BDL L					 kg
	ØM	ØNj6	ØP	ØD	E		ØM	ØNj6	ØP	ØD	E	
Ot 3933	600	550	660	120m6	210	726	-	-	-	-	-	-
Ot 3833	600	550	660	110m6	210	440	500	450	550	110m6	210	402
Ot 3733	500	450	550	90m6	170	342	400	350	450	90m6	170	336
Ot 3633	500	450	550	70m6	140	232	400	350	450	70m6	140	226
Ot 3533	350	300	400	60m6	120	94	300	250	350	60m6	120	93
Ot 3433	300	250	350	50k6	100	68	265	230	300	50k6	100	67
Ot 3333	265	230	300	40k6	80	42	215	180	250	40k6	80	42
Ot 3233	215	180	250	30j6	60	22	165	130	200	30j6	60	21.7
Ot 3232	215	180	250	30j6	60	23.3	165	130	200	30j6	60	23
Ot 3132	130	110	165	25j6	50	14.8	-	-	-	-	-	-

- Hollow shaft H

Type	BSL H					 kg	BDL H					 kg
	ØM	ØNj6	ØP	ØDH7	E		ØM	ØNj6	ØP	ØDH7	E	
Ot 3933	600	550	660	120	450	648	-	-	-	-	-	-
Ot 3833	600	550	660	100	350	408	500	450	550	100	350	374
Ot 3733	500	450	550	90	340	328	400	350	450	90	340	322
Ot 3633	500	450	550	70	310	222	400	350	450	70	310	216
Ot 3533	350	300	400	60	244	91	300	250	350	60	244	89
Ot 3433	300	250	350	50	226	66	265	230	300	50	226	65
Ot 3333	265	230	300	40	173	40	215	180	250	40	173	40
Ot 3233	215	180	250	35	151	21	165	130	200	35	151	21.7
Ot 3232	215	180	250	35	151	23.3	165	130	200	30	151	23
Ot 3132	130	110	165	30	130	14.8	-	-	-	-	-	-

Operating position

The absolute orientation of the connection (TB: Up, Down, Right, Left, Front, Back) is related to the chosen operating position. The relative orientation (0-90-180-270, in the trigonometric direction), a consequence of the absolute position, is related to the base of the gearbox (real or imaginary) for an observer, facing the gearbox.



Std terminal box

Slow shaft left L, hollow H.
1 backstop forbidden

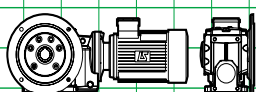
Fixing forms: BSR, BDR, BRR

Standard position: gearbox viewed from side F, motor behind.

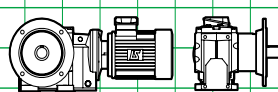
1 - Marking of the sides



2 - Form fixing

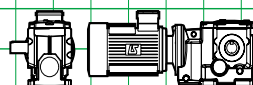


BSR - BDR
Right smooth hole flange

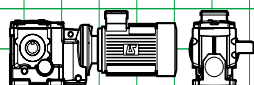


BRR
Reinforced flange on the right

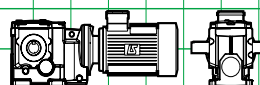
3 - Output shaft



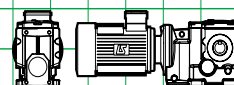
L
Left-output solid shaft



R
Right-output solid shaft

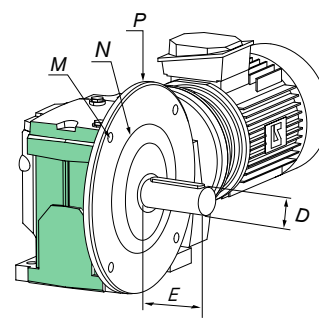
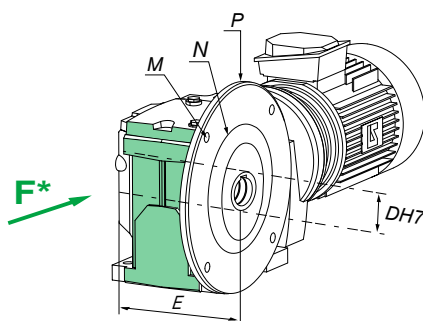


LR
Left and Right-output solid shaft



H
Hollow shaft

* The reference is the view of F side, with the motor at the back, with side D on the ground.



- Solid shaft on right R

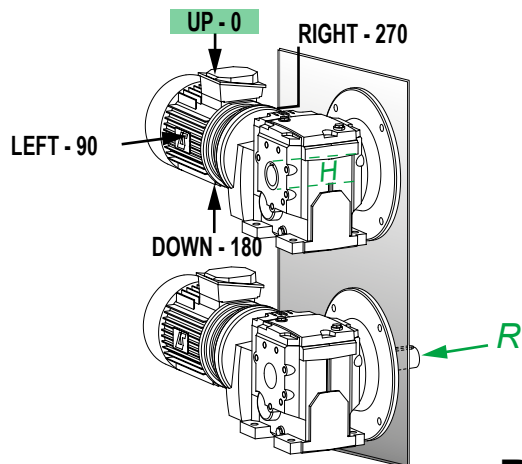
Type	BSR R						BDR R						BRR only					
	ØM	ØNj6	ØP	ØD	E	kg	ØM	ØNj6	ØP	ØD	E	kg	ØM	ØNj6	ØP	ØD	E	kg
Ot 3933	600	550	660	120m6	210	726	-	-	-	-	-	402	-	-	-	-	-	-
Ot 3833	600	550	660	110m6	210	440	500	450	550	110m6	210	336	-	-	-	-	-	-
Ot 3733	500	450	550	90m6	170	342	400	350	450	90m6	170	336	-	-	-	-	-	-
Ot 3633	500	450	550	70m6	140	232	400	350	450	70m6	140	226	-	-	-	-	-	-
Ot 3533	350	300	400	60m6	120	94	300	250	350	60m6	120	93	300	250	350	65m6	130	120
Ot 3433	300	250	350	50k6	100	68	265	230	300	50k6	100	67	265	230	300	55k6	110	72
Ot 3333	265	230	300	40k6	80	42	215	180	250	40k6	80	42	215	180	250	45k6	90	51
Ot 3233	215	180	250	30j6	60	22	165	130	200	30j6	60	21.7	-	-	-	-	-	-
Ot 3232	215	180	250	30j6	60	23.3	165	130	200	30j6	60	23	-	-	-	-	-	-
Ot 3132	130	110	165	25j6	50	14.8	-	-	-	-	-	-	-	-	-	-	-	-

- Hollow shaft H

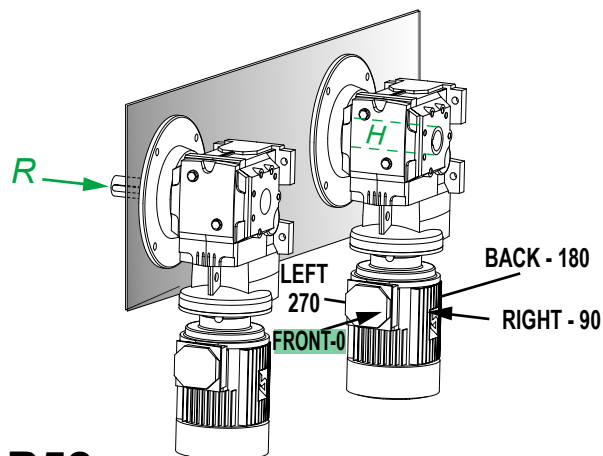
Type	BSR H						BDR H					
	ØM	ØNj6	ØP	ØDH7	E	kg	ØM	ØNj6	ØP	ØDH7	E	kg
Ot 3933	600	550	660	120	450	648	-	-	-	-	-	-
Ot 3833	600	550	660	100	350	408	500	450	550	100	350	374
Ot 3733	500	450	550	90	340	328	400	350	450	90	340	322
Ot 3633	500	450	550	70	310	222	400	350	450	70	310	216
Ot 3533	350	300	400	60	244	91	300	250	350	60	244	89
Ot 3433	300	250	350	50	226	66	265	230	300	50	226	65
Ot 3333	265	230	300	40	173	40	215	180	250	40	173	40
Ot 3233	215	180	250	35	151	21	165	130	200	35	151	21.7
Ot 3232	215	180	250	35	151	23.3	165	130	200	30	151	23
Ot 3132	130	110	165	30	130	14.8	-	-	-	-	-	-

Operating positions: BSR, BDR, BRR

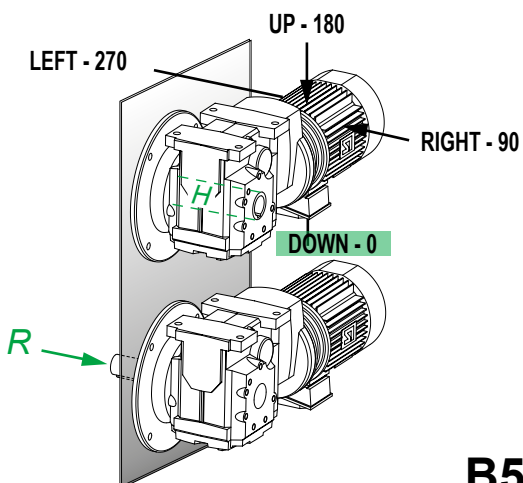
The absolute orientation of the connection (TB: Up, Down, Right, Left, Front, Back) is related to the chosen operating position. The relative orientation (0-90-180-270, in the trigonometric direction), a consequence of the absolute position, is related to the base of the gearbox (real or imaginary) for an observer, facing the gearbox.



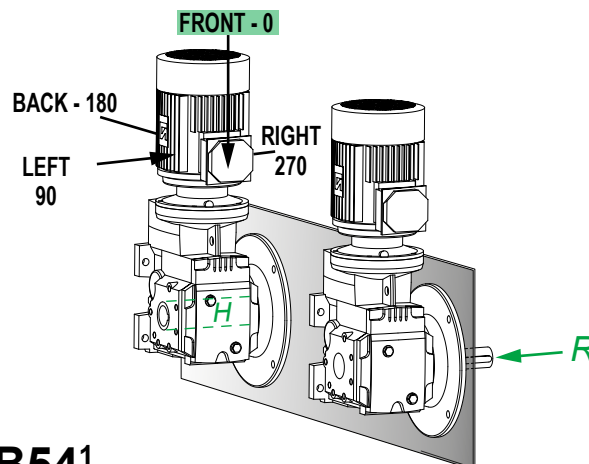
B5



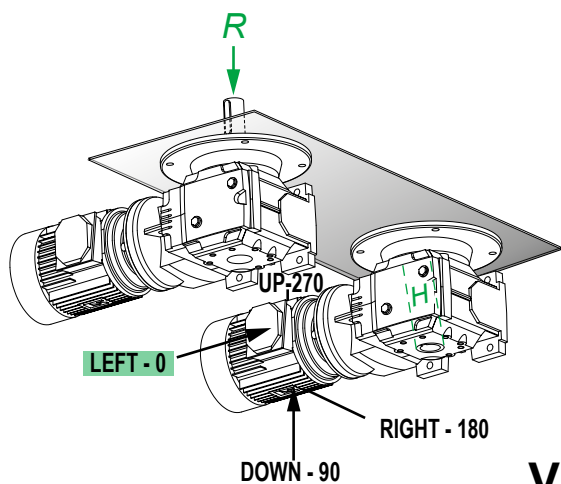
B52



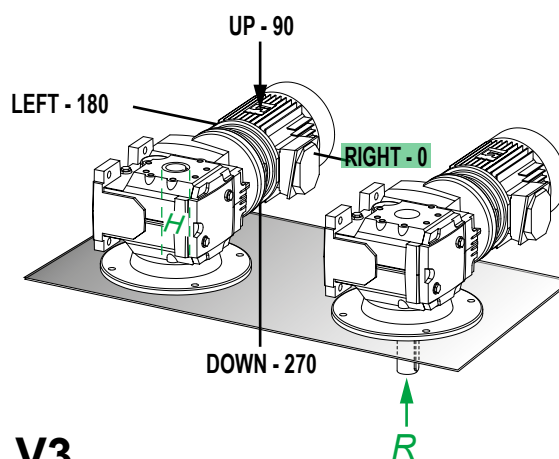
B53



B54¹



V1



V3

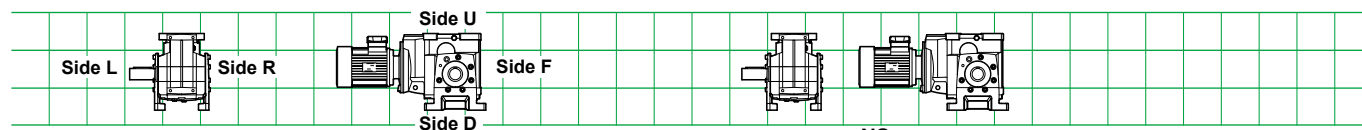
Std terminal box

Output shaft on right **R**, hollow **H**.
¹ backstop forbidden

Fixing forms: NS (offset feet fixing)

Standard position: gearbox viewed from side F, motor behind.

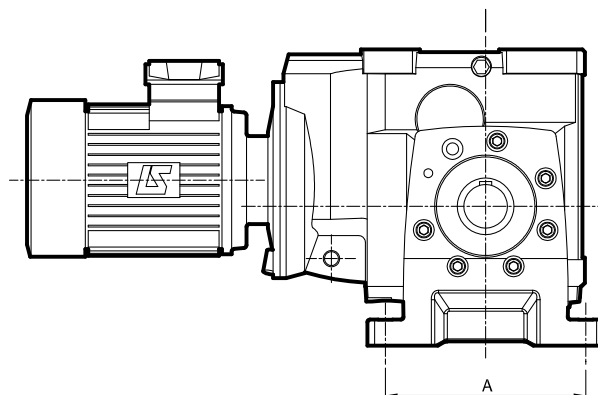
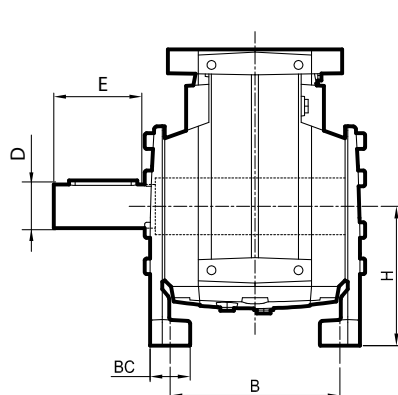
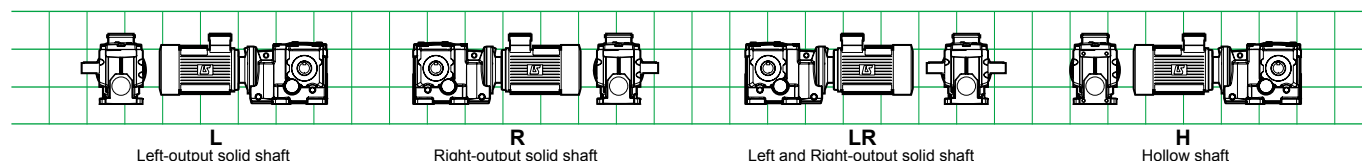
1 - Marking of the sides



2 - Fixing form

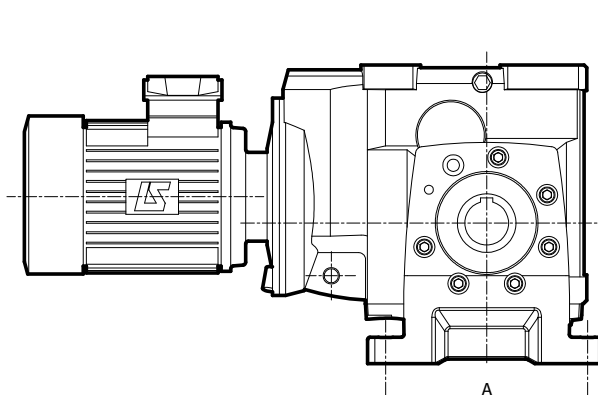
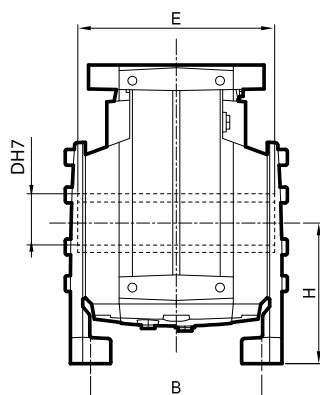
NS
Feet kit added

3 - Output shaft



- Feet kit added form NS, left solid shaft L, right solid shaft R, hollow shaft H

Ot	NSL - NSR					
	A	B	ØD	BC	H	E
Ot 3533	280	230	60	55	200	120
Ot 3433	230	195	50	46	160	100
Ot 3333	170	155	40	39	125	80

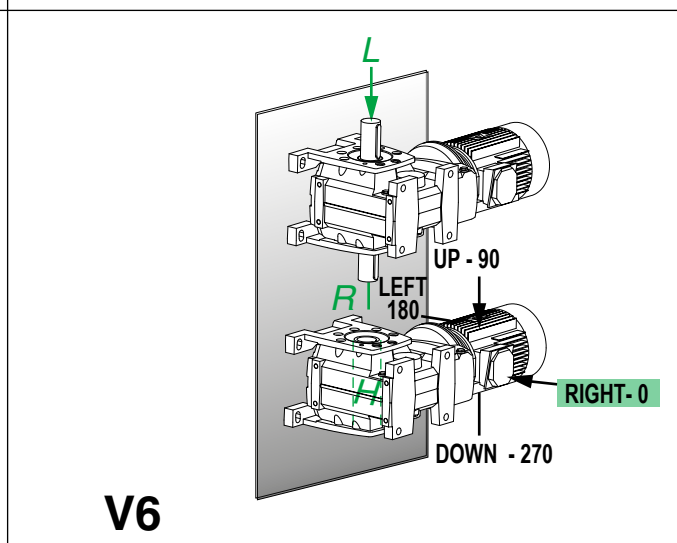
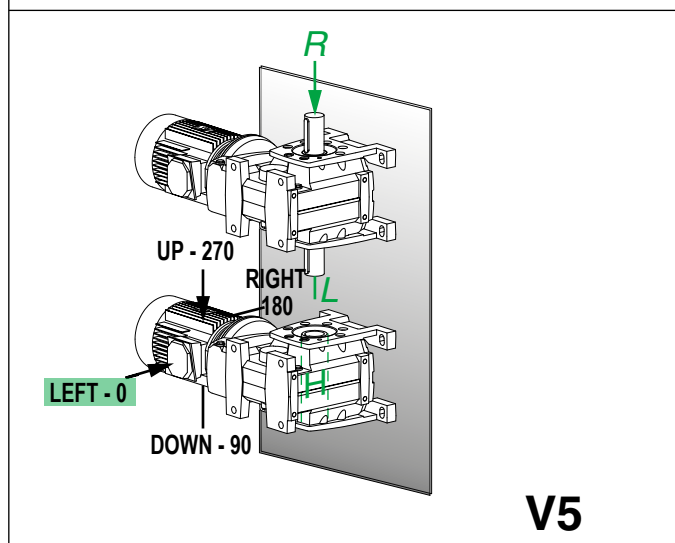
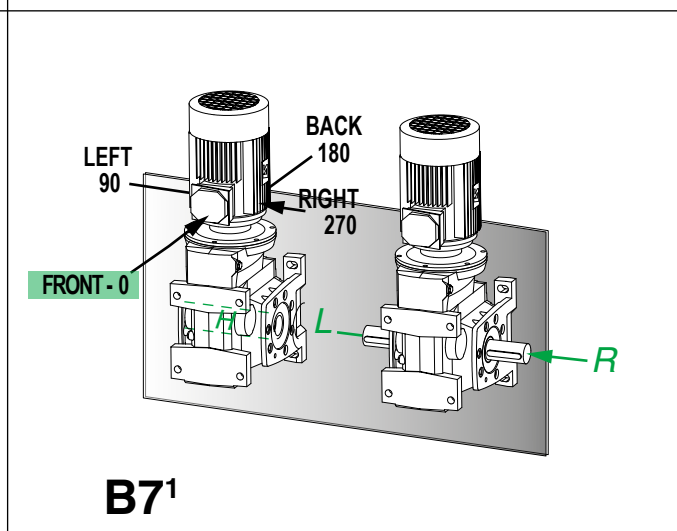
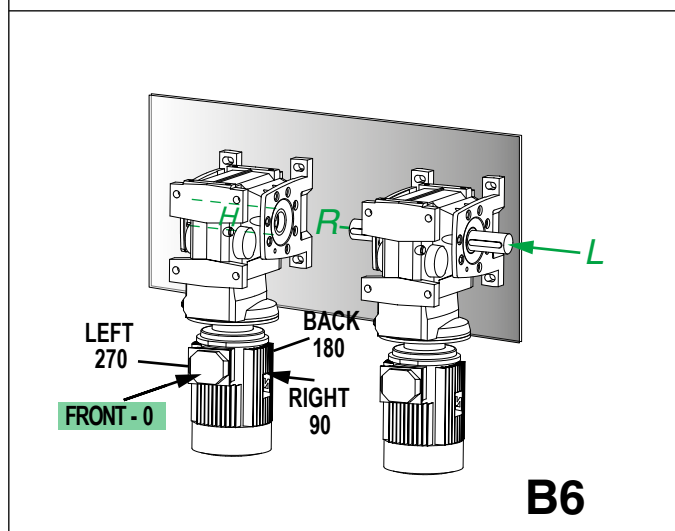
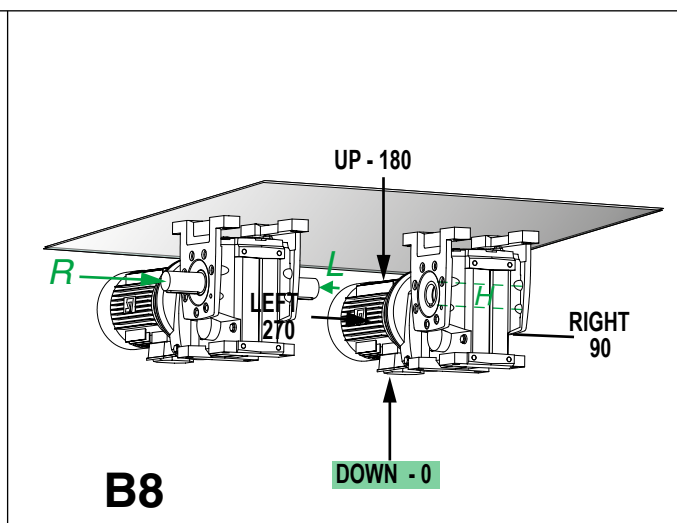
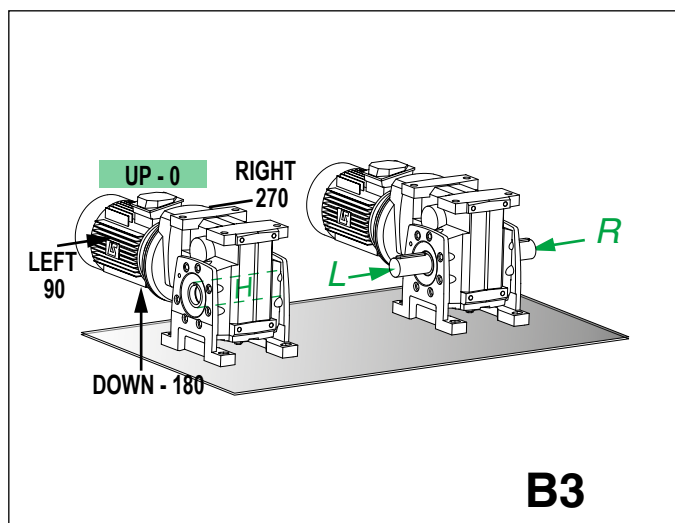


- Feet kit added form NS, hollow shaft H

Ot	NSH					
	A	B	ØD	C	E	H
Ot 3533	280	230	60	7	293	200
Ot 3433	230	195	50	15.5	253	160
Ot 3333	170	155	40	9	213	125

Equipment and options

Extended feet forms NS



Std terminal box

Output shaft on the left **L**, right **R**, hollow **H**
¹ backstop forbidden

Selection methods

SELECTING AN INPUT SHAFT GEARBOX (AP)

The following must be known:

- the duty factor,
- the input and output speeds,
- input power or output torque,
- fixing form and operating position.

1- Choosing the K duty factor

The application and operating conditions determine its value. Refer to page 40 of the electromechanical manual reference 5181.

2- Selecting the gearbox

a- Calculate the reduction i such as

$$i = N_E / N_S$$

where N_E and N_S are the input and output speeds (in min^{-1});

b- Calculate:

- the equivalent torque M_{eq} :

$$M_{eq} = M_S \times K$$

where M_S is the output torque (in N.m),
K the duty factor,

- or the equivalent power P_{eq}

$$P_{eq} = P \times K$$

where P is the input power (in kW);

c- Refer to the selection tables corresponding to the type of gearbox pages 18, 19 and 20 for combined gearboxes; each box in the table indicates:

- gearbox size,
- exact reduction,
- input power for $K = 1$,
- rated output torque for $K = 1$

Select the gearbox, in the tables (pages 18 to 20), which has a torque equal or above the equivalent torque (or a power equal to above the equivalent power) calculated beforehand for the reduction required.

When the input speed is different from those proposed in the grids, select the gearbox size using the grid with the input speed closest to that used for the output speed close to that required.

Then choose the reduction appropriate for this size of device.

3- Operating positions

Feet form: pages 8 or 14

Left flange form: page 10

Right flange form: page 12

4- Radial force check

Refer to the tables in page 43 to 45 of the reference document 5181.

If the radial force available on the output shaft is below that required by the application, select again using a higher duty factor.

For gearboxes driven by the motor by means of a belt pulley system, check in the tables in page 43 of the electromechanical manual reference 5181 the minimum diameter of the pulley to install on the gearbox input shaft.

5- Choosing the options

Refer to the Equipment and options chapter for the choice of any standardized options. The Ot 36 to 39 can be fitted with an anti-return device (backstop AD). In

this case, specify the direction of rotation of the gearbox seen from the output shaft side (p.134).

6- Commissioning, lubrication (p.144)

In case of doubt in the choice or selection of a device, please do not hesitate to contact your Leroy-Somer agent or distributor.

Example of selection

Motorisation of a pump:

- power 7.5 kW at 1450 min^{-1} ,
- output speed 43 min^{-1} ,
- operation: 8 hours per day with moderate overloads.

Feet fixing, horizontal mounting with shaft on the left with semi-elastic coupling.

1- Duty factor $K = 1.4$

2- Selection:

a- reduction ratio:

$$i = 1450 / 43 = 33.7$$

b- equivalent power:

$$(K = 1.4) 7.5 \times 1.4 = 10.5.$$

In the selection grid in page 18, we find for the closest reduction index 35.5 an Ot 3533 for the power immediately above 10.5 which is 10.6.

3- Operating position:

B3 (page 9).

Designation:

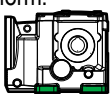
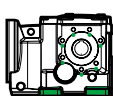
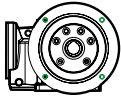
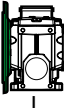
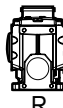
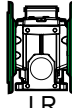
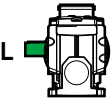
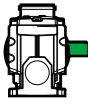
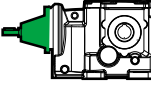
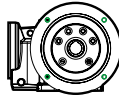
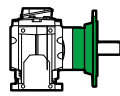
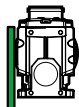
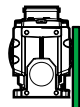
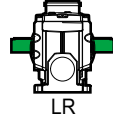
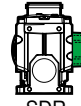
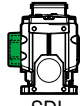
Ot 3533 B3 S 34 AP

																			i exact kW	Ot M _{ns}
N _s min-1	i _{aR}	ORTHOBLOC																		
		3132		32--		33--		34--		35--		3633*		3733*		3833*		3933*		
37.5	40	39.1 0.87	3132 232	39.5 1.64	3233 444	38.3 3.02	3333 793	39.9 5.43	3433 1485	38.6 9.6	3533 2539	39.2 16.0	3633 4300	38.1 27.6	3733 7203	40.6 51.1	3833 14240	39.4 76.2	3933 20604	
42.3	35.5	35.6 0.96	3132 232	34.8 1.86	3233 443	34.6 3.33	3333 791	34.8 5.97	3433 1425	34 10.6	3533 2465	35 17.9	3633 4300	34.4 29.4	3733 6947	36.4 53.7	3833 13405	35.6 81.8	3933 19980	
47.6	31.5	30.7 1.06	3132 221	30.8 2.09	3233 441	30.6 3.75	3333 788	31.5 6.40	3433 1383	30.49 11.7	3533 2452	31.4 20.0	3633 4300	30.4 31.8	3733 6635	32.4 60.4	3833 13430	31.3 89.5	3933 19217	
53.6	28	27.4 1.15	3132 214	27.3 2.35	3233 440	28.7 4.00	3333 787	28.6 6.85	3433 1344	27.1 13.4	3533 2496	28.6 21.9	3633 4300	26.9 34.3	3733 6338	28.7 62.8	3833 12370	29 94.4	3933 18782	

i exact
kW Ot
 M_{nS}

Name

Orthobloc: Ot / AP

Ot	3533	34	S	-	L	B3	AP	OPTIONS
Series: Ot = standard								
9 sizes: 31-; 32-; 33-; 34-; 35-; 36-; 37-; 38-; 39-								
Index: --32 : 2 trains --33 : 3 trains --35 ; --36: combined								
Exact reduction (rounded to the closest 0.005) 6.03 ---> 160 180 ---> 20,000 (combined)								
Fixing form: S  SBT  RK  BS, BD 								
Fixing position:   								
Output shaft:   								
Operating position: S, SBT, R - feet: B3, B6, B7, B8, V5, V6 BS, BD - flange: B5, B52, B53, B54, V1, V3								
Input type:  AP								
SBS, SBD  BRR (Ot 33 --> Ot 35)  RLD  RRD 								
 SDR  SDL  Shrink disc								
AP/AD (Ot 36 to Ot 39) indicate clockwise or counter-clockwise								

Selection

Orthobloc: Ot / AP

Ot AP - 1500 min⁻¹ - kp = 1

Rated capacities

i exact Ot
kW M_{ns}

N _s min ⁻¹	i _{ar}	ORTHOLOC									
		3132	32--	33--	34--	35--	3633*	3733*	3833*	3933*	
9.38	160		156 3233 0.42 454	160 3333 0.74 812	154 3433 1.54 1622	159 3533 2.4 2667	157 3633 4.0 4300	152 3733 8.1 8414	154 3833 14.0 14769	156 3933 23.7 25358	
10.7	140		142 3233 0.47 453	137 3333 0.86 811	139 3433 1.70 1619	134 3533 2.9 2655	135 3633 4.6 4300	135 3733 9.1 8396	137 3833 15.7 14756	139 3933 28.1 26776	
12.0	125		124 3233 0.53 452	125 3333 0.94 810	124 3433 1.90 1617	121 3533 3.2 2648	124 3633 5.1 4300	123 3733 9.9 8381	128 3833 16.8 14734	123 3933 31.2 26344	
13.4	112		113 3233 0.58 452	113 3333 1.04 809	108 3433 2.18 1613	109 3533 3.5 2640	108 3633 5.8 4300	109 3733 11.2 8359	115 3833 18.6 14697	110 3933 34.4 25955	
15	100		97.2 3233 0.68 451	96.4 3333 1.22 807	95.4 3433 2.46 1610	101 3533 3.8 2633	95.1 3633 6.6 4300	98 3733 12.4 8340	102 3833 20.9 14658	98.1 3933 38.0 25576	
16.7	90		86.7 3233 0.76 450	85.7 3333 1.37 805	87.7 3433 2.67 1607	86.5 3533 4.4 2621	85.3 3633 7.3 4300	87.4 3733 13.9 8318	90.8 3833 23.5 14619	87.6 3933 41.9 25200	
18.8	80		77.7 3233 0.84 449	77 3333 1.52 804	77.5 3433 3.02 1604	80.6 3533 4.7 2615	75.9 3633 8.3 4300	80.4 3733 15.1 8302	80.5 3833 26.4 14579	78.3 3933 46.2 24835	
21.1	71		68 3233 0.96 449	67.8 3333 1.72 802	69 3433 3.38 1600	70.6 3533 5.4 2603	69.6 3633 9.0 4300	68.9 3733 17.5 8270	72.2 3833 29.1 14427	69.7 3933 51.1 24439	
23.8	63		64.3 3233 1.02 448	61 3333 1.91 801	61.9 3433 3.76 1596	62.4 3533 6.1 2591	60.1 3633 10.4 4300	63.2 3733 19.0 8250	64.3 3833 31.6 13939	62.1 3933 55.4 23608	
26.8	56		54.1 3233 1.20 447	53.8 3333 2.16 799	57 3433 4.08 1594	55.5 3533 6.8 2579	54.4 3633 11.5 4300	55.9 3733 21.4 8222	57 3833 34.4 13442	55.0 3933 60.4 22772	
30	50	49.4 3132 0.69 233	51 3233 1.27 446	50.3 3333 2.31 797	50.6 3433 4.58 1589	49.8 3533 7.5 2568	47.8 3633 13.1 4300	47.7 3733 23.8 7801	50.1 3833 37.6 12933	48.9 3933 65.6 22001	
33.3	45	44.8 3132 0.77 233	45.2 3233 1.44 445	43.7 3333 2.65 795	44.1 3433 5.06 1531	42.6 3533 8.7 2551	44.1 3633 14.2 4300	42.5 3733 25.7 7488	44.2 3833 41.1 12448	44.6 3933 69.9 21400	
37.5	40	39.1 3132 0.87 232	39.5 3233 1.64 444	38.3 3333 3.02 793	39.9 3433 5.43 1485	38.6 3533 9.6 2539	39.2 3633 16.0 4300	38.1 3733 27.6 7203	40.6 3833 51.1 14240	39.4 3933 76.2 20604	
42.3	35.5	35.6 3132 0.96 232	34.8 3233 1.86 443	34.6 3333 3.33 791	34.8 3433 5.97 1425	34 3533 10.6 2465	35 3633 17.9 4300	34.4 3733 29.4 6947	36.4 3833 53.7 13405	35.6 3933 81.8 19980	
47.6	31.5	30.7 3132 1.06 221	30.8 3233 2.09 441	30.6 3333 3.75 788	31.5 3433 6.40 1383	30.49 3533 11.7 2452	31.4 3633 20.0 4300	30.4 3733 31.8 6635	32.4 3833 60.4 13430	31.3 3933 89.5 19217	
53.6	28	27.4 3132 1.15 214	27.3 3233 2.35 440	28.7 3333 4.00 787	28.6 3433 6.85 1344	27.1 3533 13.4 2496	28.6 3633 21.9 4300	26.9 3733 34.3 6338	28.7 3833 62.8 12370	29 3933 94.4 18782	
60	25	24.6 3132 1.23 206	24.1 3233 2.66 439	24.3 3333 4.70 783	24.8 3433 7.56 1287	24.3 3533 14.9 2480	25 3633 25.1 4300	24 3733 41.0 6756	25.3 3833 72.9 12651	24.8 3933 105.4 17926	
67.0	22.4	21.5 3132 1.36 198	22.9 3233 2.78 436	23.3 3333 4.36 697	21.3 3433 8.15 1191	23.6 3533 14.9 2420	21.4 3633 28.2 4142	22.6 3733 40.8 6332	22.2 3833 77.2 11763	22.6 3933 112 17435	
75.0	20	20.3 3132 1.40 193	20.4 3233 3.01 421	20.3 3333 5.37 748	19.3 3433 8.73 1156	20.8 3533 16.8 2403	19.2 3633 28.2 3713	19.9 3733 41.3 5632	19.6 3833 87.3 11738	19.7 3933 115 15516	
83.3	18	17.1 3132 1.58 183	17.7 3232 3.00 361	18.6 3333 5.42 692	17.5 3433 9.35 1123	18.7 3533 18.6 2388	17.9 3633 27.4 3370	17.6 3733 40.5 4889	17.8 3833 90.6 11058	18.3 3933 121 15165	
93.8	16	16.1 3132 1.63 178	15.6 3232 3.41 361	16.1 3333 6.31 697	15.5 3433 10.5 1119	16.6 3533 20.8 2371	16 3633 28.5 3132	15.5 3733 42.1 4479	15.5 3833 103 10950	15.7 3933 134 14474	
107	14	14.3 3132 1.76 171	14.1 3232 3.77 361	14.8 3333 6.77 687	15.2 3433 10.3 1076	14.9 3533 23.0 2354	14.6 3633 30.2 3023	13.7 3733 42.5 3994	13.9 3833 111 10587	14.3 3933 143 14077	
120	12.5	12.5 3132 1.92 163	12.4 3232 4.29 361	12.3 3333 7.83 661	12.3 3433 12.0 1010	12.3 3533 26.7 2256	12.7 3633 32.9 2865	12.3 3733 48.4 4083	12.4 3833 120 10224	12.9 3933 154 13659	
134	11.2	11 3132 2.09 156	11.6 3232 4.58 361				10.9 3633 36.0 2690	11.5 3733 50.4 3979	11.1 3833 125.6 9564		
150	10	9.72 3132 2.26 149	10.1 3232 5.26 361	9.78 3333 9.18 616	9.51 3433 14.3 935	9.47 3533 32.1 2087	9.81 3633 38.2 2570	10.1 3733 54.5 3775	10 3833 142 9506		
167	9	8.62 3132 2.43 142	8.83 3232 6.02 361				9.1 3633 27.6 1721	8.95 3733 40.6 2491	8.94 3833 90.6 5559		
188	8	7.62 3132 2.65 137	7.97 3232 6.67 361				8.15 3633 28.6 1599	7.9 3733 42.1 2282	7.8 3833 103 5505		
211	7.1	7.23 3132 2.73 134	7.05 3232 7.54 361				7.43 3633 33.7 1718	6.99 3733 42.4 2035	6.98 3833 111 5323		
238	6.3	6.43 3132 2.93 128	6.61 3232 8.04 361				6.5 3633 32.8 1463	6.25 3733 45.4 1946	6.21 3833 121 5140		
268	5.6	5.1 3132 3.35 116	5.6 3232 9.49 361				5.57 3633 36.0 1374	5.86 3733 47.2 1896	5.59 3833 125 4809		
300	5						5 3633 38.3 1312	5.17 3733 50.7 1799	4.9 3833 142 4780		
333	4.5		4.68 3232 11.3 358								
423	3.55		3.71 3232 12.9 324								

N_s output speed

i_{ar}: reduction index

Ot36, Ot37, Ot38 and Ot39*: check the thermal limit of the gearbox

M_{ns}: rated output torque (Nm)

Ot AP - 1500 min⁻¹ - kp = 1

Rated capacity - Combined gearboxes

i exact	Ot
kW	M _{nS}

N _S min ⁻¹	i _{aR}	ORTHOBLOC											
		3235		3335		3435		3535		3635*		3735*	
0.08	20000	19800	3235	20000	3335								
		0.003	456	0.006	819								
0.08	18000	17600	3235	17800	3335	17500	3435	17300	3535	18800	3635	19400	3735
		0.004	456	0.006	819	0.01	1629	0.02	2644	0.03	4300	0.07	10092
0.09	16000	15600	3235	15700	3335	15900	3435	16100	3535	16500	3635	16600	3735
		0.004	456	0.007	814	0.01	1629	0.02	2642	0.04	4300	0.09	10092
0.11	14000	14200	3235	14000	3335	13900	3435	14600	3535	14700	3635	14700	3735
		0.005	456	0.008	814	0.02	1629	0.03	2642	0.04	4300	0.10	10092
0.12	12500	12600	3235	12400	3335	12600	3435	12700	3535	12200	3635	13300	3735
		0.005	456	0.009	814	0.02	1629	0.03	2642	0.05	4300	0.11	10092
0.13	11200	11200	3235	11300	3335	10900	3435	11600	3535	11700	3635	11700	3735
		0.006	456	0.010	814	0.02	1629	0.03	2642	0.05	4300	0.12	10092
0.15	10000	9960	3235	10000	3335	9730	3435	10000	3535	10400	3635	10500	3735
		0.006	456	0.011	814	0.02	1629	0.04	2642	0.06	4300	0.13	10092
0.17	9000	8850	3235	8870	3335	8720	3435	8940	3535	9340	3635	9250	3735
		0.007	456	0.013	814	0.03	1629	0.04	2642	0.06	4300	0.15	10092
0.19	8000	7900	3235	7890	3335	7630	3435	8010	3535	8220	3635	8660	3735
		0.008	456	0.015	814	0.03	1629	0.05	2642	0.07	4300	0.16	10092
0.21	7100	6720	3235	7010	3335	7210	3435	7010	3535	7400	3635	7510	3735
		0.010	456	0.016	814	0.03	1629	0.05	2642	0.08	4300	0.19	10092
0.24	6300	6230	3235	6200	3335	6070	3435	6630	3535	6520	3635	6980	3735
		0.010	456	0.019	819	0.04	1629	0.06	2642	0.09	4300	0.20	10092
0.27	5600	5350	3235	5510	3335	5720	3435	5370	3535	6100	3635	6060	3735
		0.012	456	0.021	819	0.04	1629	0.07	2655	0.10	4300	0.23	10092
0.30	5000	4780	3235	4890	3335	5070	3435	4680	3535	5290	3635	5290	3735
		0.013	456	0.024	819	0.05	1629	0.08	2655	0.11	4300	0.27	10092
0.33	4500	4410	3235	4440	3335	4440	3435	4270	3535	4770	3635	4790	3735
		0.015	456	0.026	819	0.05	1629	0.09	2655	0.13	4300	0.30	10092
0.38	4000	3920	3235	3950	3335	4250	3435	3690	3535	4090	3635	4090	3735
		0.017	456	0.030	819	0.05	1631	0.10	2655	0.15	4300	0.35	10092
0.42	3550	3470	3235	3500	3335	3700	3435	3290	3535	3730	3635	3630	3735
		0.019	456	0.033	819	0.06	1631	0.12	2655	0.16	4300	0.39	10092
0.48	3150	3160	3235	3110	3335	3370	3435	2940	3535	3380	3635	3260	3735
		0.021	456	0.038	819	0.07	1631	0.13	2655	0.18	4300	0.44	10092
0.54	2800	2800	3235	2770	3335	2910	3435	2580	3535	2880	3635	2870	3735
		0.023	456	0.042	819	0.08	1631	0.15	2655	0.21	4300	0.50	10092
0.60	2500	2490	3235	2470	3335	2600	3435	2440	3535	2560	3635	2590	3735
		0.026	456	0.047	819	0.09	1631	0.16	2655	0.24	4300	0.55	10092
0.67	2240	2210	3235	2100	3335	2330	3435	2050	3535	2300	3635	2280	3735
		0.029	456	0.056	819	0.10	1631	0.18	2655	0.26	4300	0.63	10092

N_S output speed

i_{aR}: reduction index

Ot36, Ot37, Ot38 and Ot39*: check the thermal limit of the gearbox

M_{nS}: rated output torque (Nm)

Selection

Orthobloc: Ot / AP

Ot AP - 1500 min⁻¹ - kp = 1

Rated capacity - Combined gearboxes

i exact Ot
kW M_{nS}

N _s min ⁻¹	i _{aR}	ORTHOLOC											
		3235		3335		3435		3535		3635*		3735*	
0.75	2000	1970 0.03	3235 456	1950 0.06	3335 819	2040 0.11	3435 1631	1930 0.20	3535 2655	2030 0.30	3635 4300	2130 0.67	3735 10092
0.83	1800	1760 0.04	3235 456	1670 0.07	3335 819	1930 0.12	3435 1631	1710 0.22	3535 2655	1820 0.33	3635 4300	1850 0.77	3735 10092
0.94	1600	1490 0.04	3235 456	1490 0.08	3335 819	1620 0.14	3435 1631	1500 0.25	3535 2655	1610 0.38	3635 4300	1720 0.83	3735 10092
1.07	1400	1380 0.05	3235 456	1390 0.08	3335 819	1530 0.15	3435 1631	1320 0.29	3535 2655	1500 0.40	3635 4300	1490 0.96	3735 10092
1.20	1250	1190 0.05	3235 456	1170 0.10	3335 819	1350 0.17	3435 1631	1260 0.30	3535 2655	1300 0.47	3635 4300	1350 0.92	3735 8762
1.34	1120	1060 0.06	3235 456	1120 0.10	3335 819	1190 0.20	3435 1631	1060 0.36	3535 2655	1070 0.57	3635 4300	1160 1.1	3735 8762
1.50	1000	991 0.07	3235 456	1010 0.12	3335 819	942 0.24	3435 1614	999 0.38	3535 2655	979 0.62	3635 4300	1050 1.2	3735 8762
1.67	900	835 0.08	3235 456	872 0.13	3335 807	891 0.26	3435 1614	885 0.43	3535 2655	887 0.68	3635 4300	955 1.3	3735 8762
1.88	800	793 0.08	3235 456	775 0.15	3335 807	750 0.31	3435 1614	741 0.50	3535 2581	757 0.80	3635 4300	815 1.5	3735 8762
2.11	710	718 0.09	3235 456	692 0.17	3335 807	707 0.33	3435 1614	661 0.56	3535 2581	673 0.90	3635 4300	724 1.7	3735 8762
2.38	630	617 0.10	3235 448	588 0.20	3335 807	626 0.37	3435 1614	592 0.62	3535 2581	605 1.0	3635 4300	651 1.9	3735 8762
2.68	560	549 0.12	3235 448	545 0.21	3335 807	548 0.42	3435 1614	518 0.71	3535 2581	532 1.1	3635 4300	573 2.2	3735 8762
3.00	500	488 0.13	3235 448	469 0.25	3335 807	482 0.48	3435 1614	490 0.75	3535 2581	479 1.3	3635 4300	516 2.4	3735 8762
3.33	450	435 0.15	3235 448	418 0.28	3335 807	460 0.50	3435 1614	413 0.89	3535 2581	422 1.4	3635 4300	455 2.7	3735 8762
3.75	400	370 0.17	3235 448	391 0.29	3335 807	387 0.60	3435 1614	389 0.95	3535 2581	395 1.5	3635 4300	425 2.9	3735 8762
4.23	355	343 0.19	3235 448	329 0.35	3335 807	365 0.63	3435 1614	345 1.1	3535 2581	343 1.8	3635 4300	369 3.4	3735 8762
4.76	315	295 0.22	3235 448	313 0.37	3335 807	315 0.73	3435 1601	302 1.2	3535 2581	339 2.2	3635 4300	330 3.6	3735 8440
5.36	280	263 0.24	3235 448	283 0.41	3335 807	298 0.77	3435 1601	265 1.4	3535 2581	294 2.5	3635 4300	289 4.1	3735 8440
6.00	250	246 0.26	3235 448	253 0.45	3335 800	251 0.91	3435 1601	235 1.6	3535 2581	258 2.7	3635 4300	261 4.6	3735 8440
6.70	224	207 0.31	3235 448	213 0.54	3335 800	236 0.97	3435 1601	208 1.8	3535 2581	233 3.0	3635 4300	231 5.2	3735 8440
7.50	200	197 0.32	3235 448	201 0.57	3335 800	210 1.1	3435 1601	184 2.0	3535 2581	206 3.1	3635 4300	217 5.5	3735 8440
8.33	180	178 0.36	3235 448	178 0.64	3335 800	183 1.2	3435 1601	174 2.1	3535 2581	193 3.9	3635 4300	184 6.5	3735 8440

N_s output speed

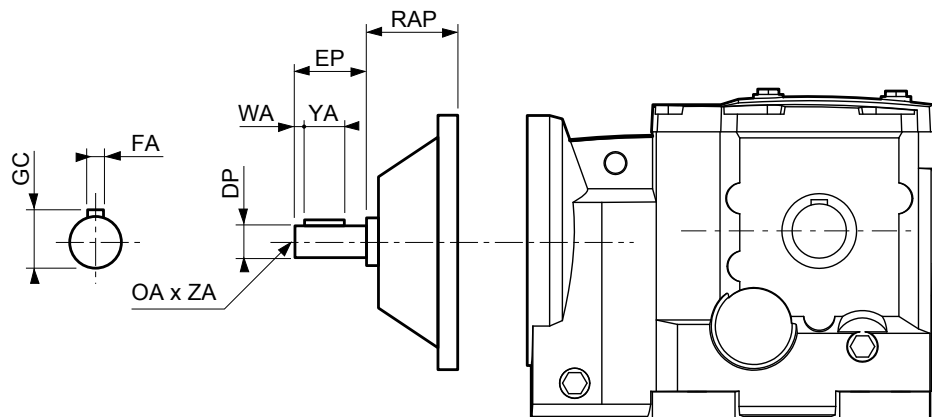
i_{aR}: reduction index

Ot36, Ot37, Ot38 and Ot39*: check the thermal limit of the gearbox

M_{nS}: rated output torque (Nm)

Dimensions of the input shaft AP

Dimensions in millimetres



Brake	AP								 kg
	Ø DP	EP	FA	GC	OAxZA	RAP	WA	YA	
Ot 3933	55k6	110	16	59	M20x42	48.5	10	90	32
Ot 3833	48k6	110	14	51.5	M16x24	51	10	90	27
Ot 3733	48k6	110	14	51.5	M16x24	51	10	90	27
Ot 3633	48k6	110	14	51.5	M16x24	51	10	90	27
Ot 3533	28j6	60	8	31	M10x22	138.5	5	50	5
Ot 3433	28j6	60	8	31	M10x22	69	5	50	5
Ot 3333	24j6	50	8	27	M8x19	73	4.5	40	1.2
Ot 3233	24j6	50	8	27	M8x19	73	4.5	40	1.5
Ot 3232	24j6	50	8	27	M10x22	73	4.5	40	1.2
Ot 3132	24j6	50	8	27	M8x19	27	4.5	40	1.5

SELECTING A GEARED MOTOR

Proceed as follows to select an MI or MU geared motor:

1 - Determine the power or torque necessary

The following must be known:

- P_{UE} : useful input power necessary for the application

- N_S : gearbox output speed in min^{-1} .

The following selection tables are organized:

- per power for output speeds of 0.27 above 300 min^{-1} ; please consult for lower speeds

- per increasing by K_p , per reduction index section

The relation between input power, output speed and output torque is given by the following formula:

$$M_S = P_E \times 9.550 \times \eta / N_S$$

where η represents the mechanical efficiency of the gearbox (pages 7 and 51 of document reference 5181).

2 - Determine the duty factor K required

It is determined by 3 criteria:

a - Operating time (h/d)

b - Starting frequency Z

c - Ratio between the load inertia and the motor inertia: curve I, II, III (page 40 in document reference 5181).

3 - Determine the type of gearbox

- In the tables pages 25 to 87, select the power required for the application.

- Choose the output speed matching the application.

- And then choose the geared motor with a duty factor greater than that required by the application.

4 - Checking

a- Radial force applied by the load on the output shaft (pages 44 and 45 of document reference 5181).

b- Check the geared motor chosen. In the selection tables pages 25 to 87, check that the value for permissible radial load by the gearbox exceeds the radial force applied by the load (page 44 of document reference 5181).

5 - Fixing form

Refer to page 8 for the definition of foot mounted form*, page 10 for the definition of standard flange fitting on the left and page 12 for the flange on the right.

*or page 14 for Ot 33 to 35 with feet kit added.

6 - Operating position

Refer to page 9 or 15 for the definition of the operating positions feet form or kit feet, and pages 11 and 13 for those of the flange form (left or right).

Example

Data of the lifting application:

Operation: 16 h/d

m: 2000 kg loaded, 1000 kg empty

Linear speed: 30 m/min

Drum: Ø 200 mm

Acceleration/deceleration time: 1 s

Maximum braking time: 1 s

Global yield: 0.9

Angle transmission gearbox, foot mounting.

Cycle: build-up 9 s, stop 30 s; idle descent 9 s, stop 30 s

No human risk

Determination of the motor

Resistant torque due to the bearing ($M_{r_{cm}}$):

$$M_{r_{cm}} = 2000 \times 9.81 \times \frac{0.5}{150} \times \frac{1}{0.9} = 72.66 \text{ N.m}$$

Resistant torque due to acceleration ($M_{Y_{cm}}$):

$$M_{Y_{cm}} = \frac{2000 \times 0.5 \times 0.5}{150 \times 0.9} = 3.70 \text{ N.m}$$

Deceleration torque in descent:

$$M_{dec} = M_{Y_{motor}} + (3.70 + 72.66) \times 0.9 \times 0.9$$

$$M_{dec} = M_{Y_{motor}} + 61.86 \text{ N.m}$$

Torque necessary to the motor:

$$M_n > 72.66 \text{ N.m} \quad M_{dec} > 61.86 \text{ N.m} + M_{Y_{motor}} \\ M_{acc} > 76.36 \text{ N.m} + M_{Y_{motor}} \quad M_f > 1.6 \times 72.66 > 116.26 \text{ N.m}$$

Motor choice (cat. ref.5329):

4P LS 160 MP 11 kW FFB5, Mf 140 N.m

$$J_{motor} = 0.0338 \text{ kg.m}^2 \quad M_n = 72.3 \text{ N.m}$$

$$M_d = 209.67 \text{ N.m}$$

Motor inertia acceleration torque ($M_{Y_{motor}}$):

$$M_{Y_{motor}} = 0.0338 \times \frac{150}{1} = 5 \text{ N.m}$$

$$M_n = 72.3 \text{ N.m} \approx 72.66 \text{ N.m}$$

$$M_{acc} = 209.67 \text{ N.m} > 76.36 \text{ N.m} + 5 \text{ N.m}$$

Operating factor calculation:

$$FM = \frac{\text{Temps de fonctionnement}}{\text{Temps total du cycle}} = \frac{1 + 9 + 1}{30 + 1 + 9 + 1} = 26.8 \%$$

Calculation of number of starts/h:

$$Z = \frac{\text{Nombre de démarrages par cycle}}{\text{Temps de cycle}} \times 3600 = \frac{1}{30 + 1 + 9 + 1} \times 3600 = 87.8 \text{ d/h}$$

Starting frequency check:

$$J_{cm} = m \times \left(\frac{V}{\omega} \right)^2 = 2000 \times \left(\frac{0.5}{150} \right)^2 = 0.022 \text{ kg.m}^2$$

$$J_m = 0.03336 \text{ kg.m}^2$$

$$Z_o = Z \times \frac{J_{cm} + J_m}{J_m} = 88 \times \frac{0.022 + 0.057}{0.03336} = 158 \text{ d/h}$$

According to the brake motor catalogue, the Z_o is 300 s/h, for FM = 25 %.

 The load is driving in descent.

Gearbox choice

Gearbox output speed (min^{-1}):

$$N_S = \frac{V_e \times 60}{\pi \times D} = \frac{1 \times 60}{\pi \times 0.2} = 95.49 \text{ tr/min}$$

Determination of the duty factor:

$$J_{cm} = 0.022 \text{ kg.m}^2 \quad J_m = 0.0338 \text{ kg.m}^2$$

$$FJ = \frac{J_{cm}}{J_m} = \frac{0.022}{0.0338} = 0.65$$

According to § 'Definition of the duty factor' (page 40, reference 5181) for 87 s/h, operation 16 h/d and inertia factor 0.39 factor k must be > 1.3 for direct starting.

Selecting the geared motor

a - Fixed speed

- Search the selection tables corresponding to $P_{UE} = 11 \text{ kW}$

- Search the output speed n_S of the geared motor closest to 95.5 min^{-1} (page 70)

- Select the geared motor with a duty factor greater than that required by the application.

- ----> Select the geared motor Ot 3533, i = 14.9 and $K_p = 2.29$ (extract in next page)

- To finish, check that the radial and axial forces values of the geared motor exceed the stress applied by the load.

b - Variable speed

When using variable speed with separate drive, the input speed of the gearbox must not exceed 3 000 min^{-1} .

In the tables at 87 Hz, select the power equivalent to 11 kW - 50 Hz, 95.4 min^{-1} (page 65).

Take the 7.5 kW motor developing 13.1 kW at 87 Hz.

Search for the speed required 95.5 in Ot 3533 with i: 27.1 and $K_p = 1.73$ (extract in next page).

SELECTING A FIXED SPEED GEARED MOTOR

- Search the selection tables corresponding to $P_{uE} = 11 \text{ kW}$ (page 70).
- Search the output speed N_S of the geared motor closest to 95.4 min^{-1} at 50 Hz.
- Select the geared motor with a duty factor above that required by the application.
- ----> Select the geared motor Ot 3533, $i = 14.9$, $K_p = 2.29$

LS, LSES		Ot - Gearbox					LS, LSES	
N_S (min^{-1})	K_p	Ot / MI-MU	i	M (Nm)	$F_R E/2$ (N)	Dim. MI < ---> page	N_S (min^{-1})	K_p
11 kW - 50 Hz		LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE LSES 160 M FFB5 IFT/IE3					19.1 kW - 87 Hz*	
97.6	2.29	3533	14.9	1031	16,255	99-119	170	1.99
100	3.02	3633	14.6	1011	33,499	101-121		
106	4	3733	13.7	951	44,468	103-123		

SELECTING A VARIABLE SPEED GEARED MOTOR CENTRALIZED CONTROL WITH DRIVE



When using variable speed with separate drive, the input speed of the gearbox must not exceed $3,000 \text{ min}^{-1}$.

In the tables at 87 Hz (page 65), select the power equivalent to 11 kW - 50 Hz, 95 min^{-1} .

Take the 7.5 kW motor developing 13.1 kW at 87 Hz.

Search for the speed required close to 95.4 in Ot 3533 with $i = 27.1$ and $K_p = 1.73$

LS, LSES		Ot - Gearbox					LS, LSES	
N_S (min^{-1})	K_p	Ot / MI-MU	i	M (Nm)	$F_R E/2$ (N)	Dim. MI < ---> page	N_S (min^{-1})	K_p
7.5 kW - 50 Hz		LSES 132 M IFT/IE2 - LSES 132 MU IFT/IE3 LS 132 M FFB4 IFT/NIE LSES 132 MU FFB4 IFT/IE3					13.1 kW - 87 Hz*	
50.8	1.01	3433	28.6	1351	9,823	97-117	88	0.85
53.4	1.95	3533	27.1	1283	19,305	99-119	93	1.73
50.7	3.18	3633	28.6	1352	32,587	101-121		

AVAILABILITY

Although quality and energy performance of the products have now become the major criteria in user choices, they remain insufficient if the product's availability does not meet the needs.

An extract of the table below provides a view of the ranges part of the Express Availability.

To know the lead time of your product, refer to the detailed grids accessible on: <http://lrsm.co/dispoen>

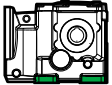
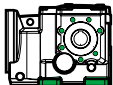
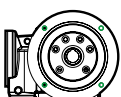
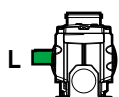
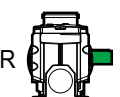
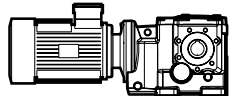
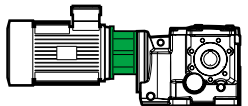
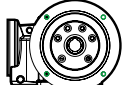
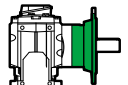
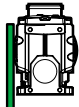
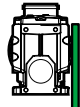
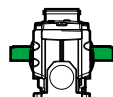
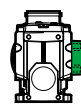
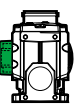
	Motors and geared motors	Range	*Shipping times (with a selection of options)
General applications	IMfinity IE2 - IP55 induction motors	0.75 to 355 kW	D to D+10
	IMfinity IE3 - IP55 induction motors	0.75 to 355 kW	D to D+10
	Dyneo® permanent magnet synchronous motors, including IEC motors	8.2 to 45 kW	D+5
		40 to 320 kW	D+10
	LS non-IE single speed induction motors	0.09 to 3 kW	D to D+2
	Single phase motors	0.06 to 1.5 kW	J
	Brake motors	0.25 to 45 kW	D+1 to D+10
	Helical geared motors	30 to 14,500 Nm	D+5 to D+10
	Motors with built-in drive ID300	0.25 to 7.5 kW	D+5 to D+10

*Shipping times in working days for orders received at the plant on day D before 12:00.

Refer to details page 148, Express Availability.

Name

Orthobloc: Ot / LS, LSES motors

Ot	3533	14.9	S	-	L	B3	MI	OPTIONS
Series: Ot = standard								
9 sizes: 31-; 32-; 33-; 34-; 35-; 36-; 37-; 38-; 39-								
Index: --33; --35; --36								
Exact reduction (rounded to the closest 0.005) 6.03 ---> 160 180 ---> 20000 (combined)								
Fixing form: S  SBT  RK  BS, BD 								
Fixing position:   								
Output shaft:   								
Operating position: S, SBT, R - feet: B3, B6, B7, B8, V5, V6 BS, BD - flange: B5, B52, B53, B54, V1, V3								
Input shaft:   MI MUFF (mot. IEC B5) MUCF (mot. NEMA)								
 SBS, SBD  BRR (Ot 33 --> Ot 35)  								
 LR   Shrink disc								
AD (Ot 36 to Ot 39) MI/AD - MU/AD indicate clockwise or counter-clockwise								

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.25 kW - 50 Hz		LS 71 M LS 71 M FFB¹						
0.27	1.30	3735	5,290	7,781	29,849	129		
0.30	1.43	3735	4,790	7,049	31,462	129		
0.31	2.2	3835	4,560	6,709	50,369	129		
0.35	1.68	3735	4,090	6,013	33,736	129		
0.36	2.57	3835	3,900	5,745	51,287	129		
0.38	0.79	3635	3,730	5,462	21,655	129		
0.39	1.89	3735	3,630	5,345	35,199	129		
0.40	2.82	3835	3,560	5,240	51,767	129		
0.42	0.87	3635	3,380	4,948	23,017	129		
0.44	2.1	3735	3,260	4,804	36,381	129		
0.44	3.11	3835	3,230	4,747	52,232	129		
0.49	1.02	3635	2,880	4,219	24,953	129		
0.52	3.65	3835	2,750	4,049	52,889	129		
0.56	1.15	3635	2,560	3,750	26,198	129		
0.57	3.98	3835	2,520	3,704	53,213	129		
0.69	0.87	3535	2,050	3,047	13,160	129		
0.62	1.28	3635	2,300	3,368	27,213	129		
0.66	5	3835	2,160	3,172	53,711	129		
0.74	0.92	3535	1,930	2,871	13,783	129		
0.72	5	3835	1,970	2,893	53,971	129		
0.83	1.04	3535	1,710	2,545	14,937	129		
0.80	6	3835	1,780	2,621	54,225	129		
0.95	1.19	3535	1,500	2,227	16,055	129		
0.94	7	3835	1,520	2,236	54,583	129		
1.08	1.35	3535	1,320	1,960	16,989	129		
1.06	7	3835	1,350	1,987	54,813	129		
1.05	0.81	3435	1,350	2,013	17,747	129		
1.13	1.42	3535	1,260	1,869	17,304	129		
1.06	4	3735	1,350	1,986	42,500	129		
1.17	8	3835	1,210	1,786	55,000	129		
1.20	0.93	3435	1,190	1,761	18,110	129		
1.34	1.69	3535	1,060	1,574	18,330	129		
1.33	2.73	3635	1,070	1,576	31,991	129		
1.23	5	3735	1,160	1,701	43,116	129		
1.51	1.15	3435	942	1,399	18,631	129		
1.43	1.79	3535	999	1,483	18,645	129		
1.45	2.99	3635	979	1,436	32,364	129		
1.35	6	3735	1,050	1,551	43,439	129		
1.60	1.22	3435	891	1,323	18,739	129		
1.61	2.02	3535	885	1,315	19,229	129		
1.61	3.31	3635	887	1,301	32,725	129		
1.49	6	3735	955	1,405	43,754	129		
1.90	1.45	3435	750	1,114	19,034	129		
1.92	2.34	3535	741	1,101	19,965	129		
1.88	3.88	3635	757	1,109	33,237	129		
1.75	7	3735	815	1,199	44,198	129		

¹ motor not concerned by the IE

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI < — > page	N _S (min ⁻¹)	Kp
0.25 kW - 50 Hz		LS 71 M LS 71 M FFB ¹						
2.06	0.78	3335	692	1,028	7,309	129		
2.02	1.54	3435	707	1,050	19,125	129		
2.16	2.63	3535	661	982	20,375	129		
1.97	8	3735	724	1,066	44,485	129		
2.42	0.92	3335	588	874	8,185	129		
2.28	1.73	3435	626	930	19,297	129		
2.41	2.93	3535	592	880	20,726	129		
2.19	9	3735	651	958	44,717	129		
2.61	1	3335	545	810	8,536	129		
2.60	1.98	3435	548	814	19,464	129		
2.75	3.35	3535	518	770	21,103	129		
3.04	1.16	3335	469	696	9,154	129		
2.95	2.25	3435	482	716	19,606	129		
2.91	3.55	3535	490	728	21,247	129		
3.41	1.3	3335	418	622	9,546	129		
3.10	2.36	3435	460	684	19,654	129		
3.45	4	3535	413	613	21,640	129		
3.85	0.81	3235	370	550	7,003	129		
3.65	1.39	3335	391	580	9,762	129		
3.68	2.8	3435	387	576	19,813	129		
3.66	4	3535	389	578	21,761	129		
4.15	0.88	3235	343	510	7,120	129		
4.33	1.65	3335	329	489	10,228	129		
3.90	2.98	3435	365	542	19,862	129		
4.13	5	3535	345	512	21,985	129		
4.84	1.02	3235	295	438	7,330	129		
4.56	1.74	3335	313	464	10,351	129		
4.52	3.42	3435	315	468	19,971	129		
4.73	6	3535	302	448	22,204	129		
5.41	1.14	3235	263	391	7,467	129		
5.04	1.92	3335	283	420	10,571	129		
4.78	3.62	3435	298	443	20,009	129		
5.37	7	3535	265	394	22,387	129		
5.80	1.23	3235	246	365	7,543	129		
5.62	2.13	3335	253	377	10,786	129		
5.68	4	3435	251	373	20,110	129		
6.88	1.46	3235	207	307	7,712	129		
6.68	2.52	3335	213	317	11,074	129		
6.03	5	3435	236	351	20,142	129		
7.25	1.53	3235	197	292	7,756	129		
7.08	2.68	3335	201	299	11,162	129		
6.80	5	3435	210	311	20,199	129		
8.01	1.69	3235	178	264	7,838	129		
7.99	3.02	3335	178	265	11,324	129		
7.77	6	3435	183	272	20,255	129		
9.11	1.93	3233	156	235	8,461	93-113		
8.92	3.41	3333	160	238	11,448	95-115		
9.28	7	3433	154	229	20,317	97-117		

¹ motor not concerned by the IE

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI < ——— > page	N _S (min ⁻¹)	Kp
0.25 kW - 50 Hz		LS 71 M LS 71 M FFB¹						
10.1	2.13	3233	142	213	8,525	93-113		
10.4	3.97	3333	137	204	11,600	95-115		
10.3	8	3433	139	207	20,349	97-117		
11.5	2.44	3233	124	186	8,602	93-113		
11.4	4	3333	125	186	11,692	95-115		
11.5	9	3433	124	185	20,381	97-117		
12.7	2.67	3233	113	169	8,648	93-113		
12.6	5	3333	113	169	11,772	95-115		
13.2	10	3433	108	161	20,415	97-117		
14.7	3.09	3233	97.2	146	8,713	93-113		
14.8	6	3333	96.4	144	11,886	95-115		
14.9	11	3433	95.4	142	20,443	97-117		
16.4	3.46	3233	86.7	130	8,758	93-113		
16.6	6	3333	85.7	128	11,959	95-115		
16.3	12	3433	87.7	131	20,459	97-117		
18.3	3.85	3233	77.7	117	8,796	93-113		
18.5	7	3333	77	115	12,018	95-115		
18.4	14	3433	77.5	116	20,480	97-117		
21.0	4	3233	68	102	8,837	93-113		
21.0	8	3333	67.8	101	12,080	95-115		
22.2	5	3233	64.3	97	8,852	93-113		
23.4	9	3333	61	91	12,125	95-115		
26.3	6	3233	54.1	81	8,895	93-113		
26.5	10	3333	53.8	80	12,174	95-115		
28.8	3.08	3132	49.4	76	6,087	89-109		
28.0	6	3233	51	77	8,908	93-113		
31.8	3.39	3132	44.8	69	6,112	89-109		
31.5	7	3233	45.2	68	8,933	93-113		
33.7	22	3433	42.3	63	20,557	97-117		
36.5	3.88	3132	39.1	60	6,145	89-109		
36.0	7	3233	39.5	59	8,957	93-113		
34.6	12	3333	41.2	62	12,258	95-115		
37.5	25	3433	38	57	20,565	97-117		
40.1	4	3132	35.6	55	6,163	89-109		
38.7	6	3232	36.8	56	8,466	91-111		
38.4	13	3333	37.1	55	12,285	95-115		
46.4	5	3132	30.7	47	6,192	89-109		
45.2	8	3232	31.5	48	8,487	91-111		
43.6	14	3333	32.7	49	12,315	95-115		
52.0	5	3132	27.4	42	6,211	89-109		
49.6	8	3232	28.7	44	8,499	91-111		
46.6	15	3333	30.6	46	12,328	95-115		
58.0	6	3132	24.6	38	6,225	89-109		
54.7	9	3232	26	40	8,510	91-111		
66.3	6	3132	21.5	33	6,244	89-109		
64.2	11	3232	22.2	34	8,525	91-111		
70.2	6	3132	20.3	31	6,251	89-109		
83.3	7	3132	17.1	26	6,269	89-109		
88.4	7	3132	16.1	25	6,273	89-109		

¹ motor not concerned by the IE

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.37 kW - 50 Hz		LS 71 M¹ LS 71 M FFB1¹						
0.27	0.86	3735	5,290	11,783	20,953	129		
0.30	0.95	3735	4,790	10,674	23,430	129		
0.31	1.45	3835	4,560	10,160	47,037	129		
0.35	1.11	3735	4,090	9,107	26,916	129		
0.36	1.70	3835	3,900	8,701	48,455	129		
0.39	1.25	3735	3,630	8,095	29,156	129		
0.40	1.86	3835	3,560	7,935	49,194	129		
0.43	1.39	3735	3,260	7,275	30,963	129		
0.44	2.05	3835	3,230	7,188	49,911	129		
0.49	1.58	3735	2,870	6,405	32,878	129		
0.52	2.41	3835	2,750	6,132	50,919	129		
0.55	1.75	3735	2,590	5,766	34,277	129		
0.56	2.63	3835	2,520	5,609	51,416	129		
0.62	0.84	3635	2,300	5,108	22,595	129		
0.62	1.99	3735	2,280	5,081	35,777	129		
0.66	3.07	3835	2,160	4,804	52,179	129		
0.70	0.96	3635	2,030	4,494	24,221	129		
0.67	2.12	3735	2,130	4,755	36,489	129		
0.72	3.36	3835	1,970	4,381	52,577	129		
0.78	1.06	3635	1,820	4,047	25,410	129		
0.80	3.71	3835	1,780	3,968	52,965	129		
0.95	0.79	3535	1,500	3,372	12,003	129		
0.88	1.21	3635	1,610	3,564	26,693	129		
0.83	2.63	3735	1,720	3,834	38,494	129		
0.93	4	3835	1,520	3,386	53,511	129		
1.08	0.89	3535	1,320	2,967	13,443	129		
0.94	1.29	3635	1,500	3,334	27,305	129		
1.05	4.89	3835	1,350	3,009	53,863	129		
1.13	0.94	3535	1,260	2,831	13,926	129		
1.05	2.91	3735	1,350	3,008	40,289	129		
1.17	5	3835	1,210	2,705	54,146	129		
1.34	1.11	3535	1,060	2,384	15,502	129		
1.32	1.80	3635	1,070	2,388	29,825	129		
1.23	3.40	3735	1,160	2,576	41,225	129		
1.33	6	3835	1,070	2,381	54,448	129		
1.42	1.18	3535	999	2,246	15,985	129		
1.45	1.98	3635	979	2,176	30,388	129		
1.35	3.73	3735	1,050	2,349	41,716	129		
1.48	7	3835	962	2,144	54,668	129		
1.59	0.81	3435	891	2,004	17,760	129		
1.60	1.33	3535	885	1,991	16,879	129		
1.60	2.18	3635	887	1,972	30,934	129		
1.49	4.12	3735	955	2,128	42,194	129		
1.68	7.8	3835	848	1,889	54,904	129		
1.89	0.96	3435	750	1,687	18,216	129		
1.92	1.55	3535	741	1,668	18,005	129		
1.88	2.56	3635	757	1,681	31,709	129		
1.74	5	3735	815	1,816	42,869	129		
1.79	8	3835	793	1,768	55,017	129		
2.01	1.02	3435	707	1,590	18,356	129		
2.15	1.74	3535	661	1,487	18,632	129		
2.11	2.88	3635	673	1,495	32,208	129		
1.96	5	3735	724	1,614	43,304	129		

¹ motor not concerned by the IE

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.37 kW - 50 Hz		LS 71 M¹ LS 71 M FFB1¹						
2.27	1.15	3435	626	1,409	18,617	129		
2.40	1.94	3535	592	1,333	19,167	129		
2.35	3.20	3635	605	1,343	32,613	129		
2.18	6	3735	651	1,450	43,656	129		
2.59	1.31	3435	548	1,233	18,866	129		
2.74	2.21	3535	518	1,166	19,742	129		
2.67	3.64	3635	532	1,182	33,044	129		
2.48	7	3735	573	1,277	44,030	129		
2.94	1.49	3435	482	1,085	19,075	129		
2.90	2.34	3535	490	1,102	19,961	129		
2.96	4	3635	479	1,064	33,358	129		
2.75	8	3735	516	1,150	44,304	129		
3.39	0.86	3335	418	941	7,805	129		
3.09	1.56	3435	460	1,035	19,147	129		
3.44	2.78	3535	413	928	20,560	129		
3.12	9	3735	455	1,013	44,599	129		
3.64	0.92	3335	391	879	8,158	129		
3.66	1.85	3435	387	872	19,381	129		
3.65	2.95	3535	389	875	20,744	129		
3.34	9	3735	425	948	44,739	129		
4.32	1.09	3335	329	740	8,917	129		
3.89	1.97	3435	365	821	19,454	129		
4.12	3.33	3535	345	775	21,085	129		
4.54	1.15	3335	313	703	9,115	129		
4.51	2.26	3435	315	709	19,617	129		
4.71	3.80	3535	302	678	21,417	129		
4.20	6	3635	339	679	34,387	129		
5.02	1.27	3335	283	636	9,469	129		
4.77	2.39	3435	298	670	19,674	129		
5.35	4	3535	265	597	21,695	129		
5.78	0.81	3235	246	553	6,994	129		
5.60	1.40	3335	253	570	9,813	129		
5.66	2.84	3435	251	565	19,829	129		
6.86	0.96	3235	207	466	7,248	129		
6.65	1.67	3335	213	480	10,272	129		
6.01	3.01	3435	236	532	19,877	129		
7.22	1.01	3235	197	442	7,318	129		
7.06	1.77	3335	201	452	10,411	129		
6.78	3.40	3435	210	471	19,966	129		
7.98	1.12	3235	178	400	7,441	129		
7.97	2.00	3335	178	401	10,666	129		
7.74	3.88	3435	183	413	20,052	129		
9.08	1.27	3233	156	357	8,104	93-113		
8.89	2.24	3333	160	363	10,852	95-115		
9.25	5	3433	154	349	20,145	97-117		
10.0	1.40	3233	142	324	8,201	93-113		
10.4	2.61	3333	137	311	11,104	95-115		
10.2	5	3433	139	315	20,194	97-117		
11.5	1.60	3233	124	282	8,323	93-113		
11.4	2.86	3333	125	284	11,235	95-115		
11.4	6	3433	124	282	20,241	97-117		
12.6	1.76	3233	113	257	8,396	93-113		
12.6	3.15	3333	113	257	11,361	95-115		
13.2	6.59	3433	108	245	20,294	97-117		
14.6	2.03	3233	97.2	222	8,499	93-113		
14.7	3.68	3333	96.4	219	11,539	95-115		
14.9	7	3433	95.4	217	20,335	97-117		

¹ motor not concerned by the IE

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.37 kW - 50 Hz		LS 71 M¹ LS 71 M FFB1¹						
16.4	2.28	3233	86.7	198	8,567	93-113		
16.6	4.14	3333	85.7	195	11,652	95-115		
16.2	8	3433	87.7	199	20,361	97-117		
18.3	2.54	3233	77.7	177	8,625	93-113		
18.4	5	3333	77	175	11,743	95-115		
18.3	9	3433	77.5	176	20,394	97-117		
20.9	2.89	3233	68	155	8,688	93-113		
21.0	5	3333	67.8	154	11,839	95-115		
20.6	10	3433	69	157	20,421	97-117		
22.1	3	3233	64.3	147	8,711	93-113		
23.3	6	3333	61	139	11,910	95-115		
22.9	11	3433	61.9	141	20,444	97-117		
26.2	3.62	3233	54.1	124	8,777	93-113		
26.4	7	3333	53.8	122	11,985	95-115		
24.9	12	3433	57	130	20,460	97-117		
28.7	2.03	3132	49.4	115	5,933	89-109		
27.9	4	3233	51	116	8,797	93-113		
28.2	7	3333	50.3	114	12,020	95-115		
28.1	14	3433	50.6	115	20,482	97-117		
31.7	2.24	3132	44.8	104	5,975	89-109		
31.4	4	3233	45.2	103	8,834	93-113		
32.5	8	3333	43.7	99	12,089	95-115		
33.6	15	3433	42.3	96	20,509	97-117		
36.4	2.56	3132	39.1	91	6,027	89-109		
35.9	5	3233	39.5	90	8,870	93-113		
34.5	8	3333	41.2	94	12,114	95-115		
37.4	16.2	3433	38	86	20,523	97-117		
39.9	2.81	3132	35.6	83	6,059	89-109		
38.6	4	3232	36.8	85	8,388	91-111		
38.3	8	3333	37.1	84	12,156	95-115		
40.6	17	3433	35	79	20,534	97-117		
46.2	3.13	3132	30.7	71	6,105	89-109		
45.1	5	3232	31.5	73	8,421	91-111		
43.5	9	3333	32.7	74	12,201	95-115		
45.8	19	3433	31	71	20,135	97-117		
51.8	3.42	3132	27.4	64	6,130	89-109		
49.4	5	3232	28.7	66	8,438	91-111		
46.4	10	3333	30.6	70	12,222	95-115		
57.8	3.68	3132	24.6	57	6,156	89-109		
54.6	6	3232	26	60	8,450	91-111		
53.5	12	3333	26.5	60	12,263	95-115		
66.1	4	3132	21.5	50	6,181	89-109		
63.9	7	3232	22.2	51	8,478	91-111		
69.9	4	3132	20.3	47	6,192	89-109		
71.9	8	3232	19.7	46	8,493	91-111		
83.0	5	3132	17.1	40	6,218	89-109		
80.0	9	3232	17.7	41	8,506	91-111		
88.1	5	3132	16.1	37	6,229	89-109		
90.9	10	3232	15.6	36	8,519	91-111		
99.4	5	3132	14.3	33	6,244	89-109		
114	6	3132	12.5	29	6,258	89-109		
129	6	3132	11	26	6,269	89-109		

¹ motor not concerned by the IE

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.55 kW - 50 Hz		LS 71 L¹ LS 71 L FFB1¹						
0.31	0.95	3835	4,560	15,524	41,774	129		
0.36	1.11	3835	3,900	13,294	43,998	129		
0.39	0.82	3735	3,630	12,368	19,743	129		
0.39	1.22	3835	3,560	12,123	45,153	129		
0.43	0.91	3735	3,260	11,116	22,535	129		
0.43	1.34	3835	3,230	10,983	46,232	129		
0.49	1.03	3735	2,870	9,785	25,488	129		
0.51	1.58	3835	2,750	9,370	47,840	129		
0.54	1.15	3735	2,590	8,810	27,644	129		
0.56	1.72	3835	2,520	8,570	48,611	129		
0.61	1.30	3735	2,280	7,763	29,888	129		
0.65	2.01	3835	2,160	7,339	49,792	129		
0.66	1.39	3735	2,130	7,265	31,044	129		
0.71	2.20	3835	1,970	6,693	50,408	129		
0.76	1.60	3735	1,850	6,303	33,152	129		
0.79	2.43	3835	1,780	6,063	51,006	129		
0.87	0.79	3635	1,610	5,452	21,736	129		
0.81	1.72	3735	1,720	5,859	34,076	129		
0.92	2.85	3835	1,520	5,173	51,848	129		
0.93	0.84	3635	1,500	5,100	22,663	129		
0.94	1.99	3735	1,490	5,083	35,814	129		
1.04	3.20	3835	1,350	4,598	52,388	129		
1.07	0.97	3635	1,300	4,424	24,409	129		
1.04	1.91	3735	1,350	4,596	36,873	129		
1.15	3.56	3835	1,210	4,133	52,811	129		
1.30	1.18	3635	1,070	3,649	26,466	129		
1.21	2.23	3735	1,160	3,936	38,274	129		
1.31	4	3835	1,070	3,638	53,287	129		
1.43	1.29	3635	979	3,327	27,355	129		
1.33	2.44	3735	1,050	3,589	39,056	129		
1.46	5	3835	962	3,276	53,625	129		
1.58	0.87	3535	885	3,042	13,178	129		
1.58	1.43	3635	887	3,014	28,185	129		
1.47	2.69	3735	955	3,251	39,787	129		
1.65	5	3835	848	2,886	53,977	129		
1.89	1.01	3535	741	2,548	14,925	129		
1.85	1.67	3635	757	2,571	29,337	129		
1.72	3.16	3735	815	2,774	40,818	129		
1.76	5	3835	793	2,701	54,150	129		
2.12	1.14	3535	661	2,272	15,894	129		
2.08	1.88	3635	673	2,285	30,098	129		
1.93	3.55	3735	724	2,466	41,464	129		
2.03	6	3835	688	2,343	54,483	129		
2.36	1.27	3535	592	2,036	16,722	129		
2.31	2.09	3635	605	2,053	30,716	129		
2.15	3.95	3735	651	2,216	42,003	129		
2.32	7	3835	604	2,056	54,750	129		
2.55	0.86	3435	548	1,884	17,933	129		
2.70	1.45	3535	518	1,782	17,610	129		
2.63	2.38	3635	532	1,807	31,373	129		
2.44	4	3735	573	1,951	42,577	129		
2.62	8	3835	534	1,820	54,968	129		
2.90	0.97	3435	482	1,658	18,258	129		
2.86	1.53	3535	490	1,684	17,948	129		
2.92	2.64	3635	479	1,627	31,854	129		
2.71	5	3735	516	1,756	42,996	129		
2.99	9	3835	469	1,597	55,175	129		

¹ motor not concerned by the IE

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.55 kW - 50 Hz		LS 71 L¹ LS 71 L FFB1¹						
3.04	1.02	3435	460	1,581	18,369	129		
3.39	1.82	3535	413	1,418	18,870	129		
3.31	3.00	3635	422	1,433	32,371	129		
3.08	6	3735	455	1,548	43,447	129		
3.61	1.21	3435	387	1,332	18,727	129		
3.60	1.93	3535	389	1,337	19,153	129		
3.54	3.21	3635	395	1,341	32,618	129		
3.29	6	3735	425	1,448	43,661	129		
3.83	1.29	3435	365	1,255	18,835	129		
4.06	2.18	3535	345	1,185	19,678	129		
4.08	3.70	3635	343	1,163	33,093	129		
3.79	7	3735	369	1,257	44,074	129		
4.44	1.48	3435	315	1,083	19,078	129		
4.64	2.49	3535	302	1,037	20,188	129		
4.14	4	3635	339	1,039	33,424	129		
4.24	8	3735	330	1,123	44,361	129		
4.95	0.83	3335	283	972	7,629	129		
4.70	1.56	3435	298	1,024	19,162	129		
5.28	2.83	3535	265	912	20,616	129		
4.77	5	3635	294	914	33,758	129		
4.84	9	3735	289	985	44,658	129		
5.52	0.92	3335	253	871	8,199	129		
5.58	1.86	3435	251	862	19,394	129		
5.43	5	3635	258	823	34,002	129		
6.56	1.09	3335	213	734	8,952	129		
5.92	1.97	3435	236	813	19,466	129		
6.01	6	3635	233	725	34,265	129		
6.96	1.16	3335	201	691	9,179	129		
6.68	2.22	3435	210	720	19,601	129		
7.62	4	3535	184	632	21,577	129		
6.79	6	3635	206	678	34,389	129		
7.85	1.31	3335	178	613	9,593	129		
7.63	2.54	3435	183	630	19,732	129		
8.03	4	3535	174	599	21,687	129		
8.77	1.46	3333	160	557	9,883	95-115		
9.12	3.03	3433	154	535	19,872	97-117		
10.2	1.70	3333	137	477	10,289	95-115		
10.1	3.35	3433	139	484	19,948	97-117		
11.3	1.05	3233	124	432	7,885	93-113		
11.2	1.86	3333	125	435	10,499	95-115		
11.3	3.74	3433	124	433	20,023	97-117		
12.4	1.15	3233	113	393	7,999	93-113		
12.4	2.06	3333	113	394	10,701	95-115		
13.0	4	3433	108	376	20,100	97-117		
14.4	1.33	3233	97.2	340	8,154	93-113		
14.5	2.40	3333	96.4	336	10,983	95-115		
14.7	5	3433	95.4	333	20,168	97-117		
16.2	1.49	3233	86.7	303	8,262	93-113		
16.3	2.70	3333	85.7	299	11,162	95-115		
16.0	5	3433	87.7	306	20,206	97-117		
18.0	1.66	3233	77.7	272	8,353	93-113		
18.2	3.00	3333	77	268	11,306	95-115		
18.1	6	3433	77.5	270	20,258	97-117		
20.6	1.89	3233	68	238	8,452	93-113		
20.7	3.40	3333	67.8	236	11,458	95-115		
20.3	7	3433	69	241	20,300	97-117		

¹ motor not concerned by the IE

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.55 kW - 50 Hz		LS 71 L ¹ LS 71 L FFB ¹						
21.8	2.00	3233	64.3	225	8,490	93-113		
22.9	3.77	3333	61	213	11,568	95-115		
22.6	7	3433	61.9	216	20,336	97-117		
25.9	2.36	3233	54.1	189	8,592	93-113		
26.0	4	3333	53.8	188	11,686	95-115		
24.6	8	3433	57	199	20,361	97-117		
27.5	2.51	3233	51	178	8,623	93-113		
27.8	5	3333	50.3	175	11,741	95-115		
27.7	9	3433	50.6	177	20,392	97-117		
31.0	2.82	3233	45.2	158	8,680	93-113		
32.1	5	3333	43.7	152	11,848	95-115		
31.8	10	3433	44.1	154	20,426	97-117		
35.8	1.68	3132	39.1	139	5,841	89-109		
35.4	3.22	3233	39.5	138	8,735	93-113		
36.5	6	3333	38.3	134	11,933	95-115		
36.9	11	3433	38	132	20,457	97-117		
39.4	1.84	3132	35.6	126	5,888	89-109		
38.1	2.78	3232	36.8	130	8,264	91-111		
37.8	5	3333	37.1	129	11,953	95-115		
40.1	11	3433	35	122	20,472	97-117		
45.6	2.05	3132	30.7	109	5,955	89-109		
44.4	3.24	3232	31.5	111	8,316	91-111		
42.8	6	3333	32.7	114	12,023	95-115		
45.1	12	3433	31	108	20,050	97-117		
51.1	2.25	3132	27.4	97	6,001	89-109		
48.7	3.55	3232	28.7	102	8,343	91-111		
45.8	7	3333	30.6	107	12,056	95-115		
51.8	14	3433	27	94	19,193	97-117		
57.0	2.42	3132	24.6	87	6,042	89-109		
53.8	3.92	3232	26	92	8,369	91-111		
58.1	5	3233	24.1	84	8,887	93-113		
52.8	8	3333	26.5	93	12,119	95-115		
65.2	2.66	3132	21.5	76	6,085	89-109		
63.0	5	3232	22.2	78	8,405	91-111		
61.2	5	3233	22.9	80	8,899	93-113		
60.1	9	3333	23.3	81	12,170	95-115		
68.9	2.74	3132	20.3	72	6,101	89-109		
70.9	5	3232	19.7	70	8,429	91-111		
81.9	3.10	3132	17.1	61	6,141	89-109		
78.9	6	3232	17.7	63	8,448	91-111		
86.9	3.19	3132	16.1	57	6,156	89-109		
89.6	7	3232	15.6	55	8,468	91-111		
98.0	3.46	3132	14.3	51	6,178	89-109		
100	7	3232	14.1	50	8,482	91-111		
112	3.77	3132	12.5	44	6,203	89-109		
113	8	3232	12.4	44	8,498	91-111		
127	4	3132	11	39	6,222	89-109		
121	9	3232	11.6	41	8,506	91-111		
139	10	3232	10.1	36	8,520	91-111		
184	5	3132	7.62	27	6,265	89-109		
194	5	3132	7.23	26	6,269	89-109		

¹ motor not concerned by the IE

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.75 kW - 50 Hz		LSSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3					1.31 kW - 87 Hz*	
0.36	0.81	3835	3,900	18,253	38,943	129		
0.39	0.89	3835	3,560	16,646	40,581	129		
0.43	0.98	3835	3,230	15,080	42,163	129		
0.51	1.15	3835	2,750	12,865	44,375	129		
0.51	2.08	3935	2,770	12,868	80,849	129		
0.54	0.83	3735	2,590	12,098	20,248	129		
0.56	1.25	3835	2,520	11,768	45,460	129		
0.60	2.46	3935	2,330	10,856	84,898	129		
0.61	0.95	3735	2,280	10,659	23,463	129		
0.65	1.46	3835	2,160	10,077	47,118	129		
0.67	2.73	3935	2,100	9,777	87,012	129		
0.66	1.01	3735	2,130	9,975	24,987	129		
0.71	1.60	3835	1,970	9,190	47,981	129		
0.74	3.02	3935	1,900	8,851	88,808	129		
0.76	1.17	3735	1,850	8,654	27,918	129		
0.79	1.77	3835	1,780	8,325	48,817	129		
0.80	3.28	3935	1,750	8,155	90,156	129		
0.81	1.25	3735	1,720	8,044	29,267	129		
0.92	2.07	3835	1,520	7,103	49,993	129		
0.93	3.81	3935	1,510	7,009	92,384	129		
0.94	1.45	3735	1,490	6,979	31,616	129		
1.04	2.33	3835	1,350	6,313	50,747	129		
1.04	1.39	3735	1,350	6,310	33,085	129		
1.15	2.60	3835	1,210	5,674	51,354	129		
1.30	0.86	3635	1,070	5,012	22,848	129		
1.21	1.62	3735	1,160	5,404	35,071	129		
1.31	2.95	3835	1,070	4,995	51,998	129		
1.43	0.94	3635	979	4,570	24,021	129		
1.33	1.78	3735	1,050	4,928	36,111	129		
1.46	3.27	3835	962	4,498	52,467	129		
1.58	1.04	3635	887	4,140	25,162	129		
1.47	1.96	3735	955	4,465	37,122	129		
1.65	3.72	3835	848	3,963	52,970	129		
1.85	1.22	3635	757	3,531	26,780	129		
1.72	2.30	3735	815	3,809	38,550	129		
1.76	3.97	3835	793	3,709	53,209	129		
2.12	0.83	3535	661	3,120	12,900	129	3.78	0.85
2.08	1.37	3635	673	3,139	27,824	129		
1.93	2.59	3735	724	3,386	39,470	129		
2.03	5	3835	688	3,217	53,668	129		
2.36	0.92	3535	592	2,796	14,051	129	4.22	0.95
2.31	1.52	3635	605	2,821	28,671	129		
2.15	2.88	3735	651	3,043	40,213	129		
2.32	5	3835	604	2,823	54,036	129		
2.70	1.06	3535	518	2,446	15,283	129	4.83	1.09
2.63	1.73	3635	532	2,482	29,572	129		
2.44	3.27	3735	573	2,679	41,002	129		
2.62	6	3835	534	2,499	54,338	129		
2.86	1.12	3535	490	2,313	15,752	129	5.11	1.15
2.92	1.92	3635	479	2,235	30,231	129		
2.71	3.63	3735	516	2,412	41,580	129		
2.99	7	3835	469	2,192	54,623	129		
3.39	1.33	3535	413	1,948	17,031	129	6.06	1.37
3.31	2.18	3635	422	1,969	30,941	129		
3.08	4	3735	455	2,125	42,200	129		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
0.75 kW - 50 Hz		LSSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3					1.31 kW - 87 Hz*	
3.61	0.88	3435	387	1,829	18,012	129	6.46	0.91
3.60	1.41	3535	389	1,835	17,423	129	6.43	1.45
3.54	2.33	3635	395	1,842	31,279	129		
3.29	4	3735	425	1,989	42,495	129		
3.83	0.94	3435	365	1,723	18,165	129	6.85	0.97
4.06	1.59	3535	345	1,627	18,148	129	7.26	1.64
4.08	2.69	3635	343	1,598	31,931	129		
3.79	5	3735	369	1,725	43,063	129		
4.44	1.08	3435	315	1,487	18,505	129	7.94	1.11
4.64	1.81	3535	302	1,423	18,853	129	8.30	1.87
4.14	3.01	3635	339	1,428	32,384	129		
4.24	5	3735	330	1,542	43,459	129		
4.70	1.14	3435	298	1,406	18,621	129	8.40	1.17
5.28	2.06	3535	265	1,253	19,444	129	9.43	2.13
4.77	3.42	3635	294	1,257	32,842	129		
4.84	6	3735	289	1,353	43,866	129		
5.58	1.35	3435	251	1,184	18,934	129	10.0	1.39
5.43	3.80	3635	258	1,131	33,178	129		
6.56	0.79	3335	213	1,007	7,428	129	11.7	0.82
5.92	1.43	3435	236	1,116	19,031	129	10.6	1.48
6.01	4	3635	233	997	33,538	129		
6.96	0.84	3335	201	949	7,761	129	12.4	0.87
6.68	1.62	3435	210	989	19,212	129	11.9	1.67
7.62	2.98	3535	184	867	20,770	129	13.6	3.07
6.79	5	3635	206	932	33,710	129		
7.85	0.95	3335	178	841	8,365	129	14.0	0.98
7.63	1.85	3435	183	865	19,390	129	13.6	1.91
8.03	3.14	3535	174	823	20,922	129	14.4	3.24
7.26	5	3635	193	808	33,709	129		
8.77	1.06	3333	160	766	8,778	95-115	15.7	1.09
9.12	2.20	3433	154	736	19,577	97-117	16.3	2.25
8.82	3.52	3533	159	758	21,143	99-119	15.8	3.58
10.2	1.24	3333	137	656	9,367	95-115	18.3	1.27
10.1	2.44	3433	139	665	19,681	97-117	18.0	2.49
10.5	4.16	3533	134	640	21,549	99-119	18.7	4
11.2	1.36	3333	125	598	9,669	95-115	20.1	1.39
11.3	2.72	3433	124	595	19,784	97-117	20.2	2.78
11.6	4.61	3533	121	576	21,766	99-119	20.7	5
12.4	0.84	3233	113	541	7,567	93-113	22.2	0.86
12.4	1.49	3333	113	542	9,959	95-115	22.1	1.53
13.0	3.12	3433	108	517	19,899	97-117	23.2	3.19
12.8	5	3533	109	522	21,953	99-119	22.9	5
14.4	0.97	3233	97.2	467	7,783	93-113	25.7	0.99
14.5	1.75	3333	96.4	462	10,362	95-115	26.0	1.78
14.7	3.52	3433	95.4	457	19,987	97-117	26.2	3.60
13.9	5	3533	101	481	22,092	99-119	24.9	6
16.2	1.08	3233	86.7	417	7,929	93-113	28.9	1.11
16.3	1.96	3333	85.7	411	10,617	95-115	29.2	2.00
16.0	3.83	3433	87.7	421	20,041	97-117	28.5	3.87
16.2	6	3533	86.5	413	22,323	99-119	28.9	6
18.0	1.21	3233	77.7	373	8,058	93-113	32.2	1.23
18.2	2.18	3333	77	369	10,821	95-115	32.5	2.22
18.1	4	3433	77.5	372	20,111	97-117	32.3	4
18.9	7	3533	73.9	353	22,527	99-119	33.8	7
20.6	1.37	3233	68	327	8,192	93-113	36.8	1.40
20.7	2.47	3333	67.8	325	11,036	95-115	36.9	2.52
20.3	5	3433	69	331	20,170	97-117	36.3	5
20.9	8	3533	66.9	320	22,640	99-119	37.4	8

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
0.75 kW - 50 Hz		LSSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3					1.31 kW - 87 Hz*	
21.8	1.45	3233	64.3	309	8,245	93-113	38.9	1.48
22.9	2.74	3333	61	293	11,191	95-115	41.0	2.79
22.6	5	3433	61.9	297	19,943	97-117	40.4	5
22.7	9	3533	61.7	295	22,726	99-119	40.6	9
25.9	1.72	3233	54.1	260	8,388	93-113	46.2	1.75
26.0	3.10	3333	53.8	258	11,356	95-115	46.5	3.16
24.6	6	3433	57	273	19,475	97-117	43.9	5
26.4	10	3533	53	253	22,866	99-119	47.2	10
27.5	1.82	3233	51	245	8,431	93-113	49.1	1.86
27.8	3.31	3333	50.3	241	11,434	95-115	49.7	3.37
27.7	7	3433	50.6	243	18,815	97-117	49.4	6
31.0	2.05	3233	45.2	217	8,513	93-113	55.4	2.09
32.1	3.80	3333	43.7	209	11,584	95-115	57.3	3.86
31.8	7	3433	44.1	211	18,063	97-117	56.7	6
35.8	1.22	3132	39.1	190	5,646	89-109	64.1	1.11
35.4	2.34	3233	39.5	190	8,590	93-113	63.3	2.35
36.5	4	3333	38.3	184	11,703	95-115	65.3	4
36.9	8	3433	38	182	17,277	97-117	65.9	7
39.4	1.34	3132	35.6	173	5,709	89-109	70.3	1.19
38.1	2.02	3232	36.8	179	8,129	91-111	68.0	2.08
37.8	3.97	3333	37.1	178	11,730	95-115	67.5	4
40.1	8	3433	35	168	16,850	97-117	71.6	7
45.6	1.50	3132	30.7	150	5,798	89-109	81.4	1.31
44.4	2.36	3232	31.5	153	8,201	91-111	79.4	2.43
42.8	5	3333	32.7	157	11,828	95-115	76.6	5
45.1	9	3433	31	149	16,255	97-117	80.6	8
51.1	1.64	3132	27.4	133	5,860	89-109	91.3	1.42
48.7	2.59	3232	28.7	140	8,238	91-111	87.1	2.67
45.8	5	3333	30.6	147	11,874	95-115	81.8	5
51.8	10	3433	27	130	15,579	97-117	92.6	9
57.0	1.76	3132	24.6	120	5,914	89-109	102	1.53
53.8	2.85	3232	26	126	8,274	91-111	96.1	2.95
58.1	3.80	3233	24.1	116	7,849	93-113	104	3.39
52.8	6	3333	26.5	127	11,962	95-115	94.3	6
65.2	1.94	3132	21.5	105	5,972	89-109	116	1.68
63.0	3.35	3232	22.2	108	8,325	91-111	113	3.45
61.2	3.98	3233	22.9	110	7,740	93-113	109	3.52
60.1	6	3333	23.3	112	12,033	95-115	107	6
68.9	1.99	3132	20.3	99	5,995	89-109	123	1.73
70.9	3.76	3232	19.7	96	8,358	91-111	127	3.88
81.9	2.26	3132	17.1	83	6,057	89-109	146	1.96
78.9	4	3232	17.7	86	8,384	91-111	141	4
86.9	2.32	3132	16.1	79	6,076	89-109	155	2.01
89.6	5	3232	15.6	76	8,412	91-111	160	5
98.0	2.52	3132	14.3	70	6,108	89-109	175	2.18
100	5	3232	14.1	68	8,433	91-111	178	5
112	2.75	3132	12.5	61	6,141	89-109	200	2.38
113	6	3232	12.4	60	8,454	91-111	202	6
127	2.98	3132	11	54	6,167	89-109	227	2.59
121	6	3232	11.6	56	8,465	91-111	216	7
139	7	3232	10.1	49	8,485	91-111	249	8
159	8	3232	8.83	43	8,501	91-111	283	9
184	3.78	3132	7.62	37	6,229	89-109	328	3.28
194	3.89	3132	7.23	35	6,236	89-109	346	3.38

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.9 kW - 50 Hz		LSSES 80 LG IFT/IE2 - LSSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSSES 80 LG FFB1 IFT/IE3					1.57 kW - 87 Hz*	
0.44	0.83	3835	3,230	17,830	39,376	129		
0.52	0.97	3835	2,750	15,211	42,032	129		
0.52	1.76	3935	2,770	15,226	75,799	129		
0.57	1.06	3835	2,520	13,913	43,332	129		
0.61	2.08	3935	2,330	12,845	80,896	129		
0.63	0.80	3735	2,280	12,603	19,114	129		
0.66	1.24	3835	2,160	11,915	45,316	129		
0.68	2.31	3935	2,100	11,568	83,485	129		
0.67	0.86	3735	2,130	11,794	20,927	129		
0.72	1.36	3835	1,970	10,866	46,347	129		
0.75	2.55	3935	1,900	10,473	85,651	129		
0.77	0.99	3735	1,850	10,232	24,415	129		
0.80	1.50	3835	1,780	9,844	47,346	129		
0.81	2.77	3935	1,750	9,650	87,259	129		
0.83	1.06	3735	1,720	9,511	26,019	129		
0.94	1.75	3835	1,520	8,398	48,748	129		
0.95	3.22	3935	1,510	8,293	89,889	129		
0.95	1.22	3735	1,490	8,251	28,809	129		
1.06	1.97	3835	1,350	7,465	49,646	129		
1.06	1.17	3735	1,350	7,461	30,554	129		
1.17	2.19	3835	1,210	6,709	50,369	129		
1.23	1.37	3735	1,160	6,389	32,912	129		
1.33	2.49	3835	1,070	5,906	51,134	129		
1.45	0.80	3635	979	5,404	21,810	129		
1.35	1.50	3735	1,050	5,827	34,145	129		
1.48	2.77	3835	962	5,318	51,693	129		
1.61	0.88	3635	887	4,895	23,157	129		
1.49	1.66	3735	955	5,279	35,345	129		
1.68	3.14	3835	848	4,686	52,290	129		
1.88	1.03	3635	757	4,176	25,067	129		
1.75	1.95	3735	815	4,503	37,038	129		
1.80	3.36	3835	793	4,385	52,573	129		
2.12	1.16	3635	673	3,712	26,300	129		
1.97	2.19	3735	724	4,003	38,128	129		
2.07	3.87	3835	688	3,804	53,119	129		
2.41	0.78	3535	592	3,306	12,241	129		
2.36	1.29	3635	605	3,335	27,301	129		
2.19	2.44	3735	651	3,598	39,009	129		
2.36	4	3835	604	3,338	53,556	129		
2.75	0.89	3535	518	2,892	13,709	129		
2.68	1.46	3635	532	2,936	28,365	129		
2.49	2.77	3735	573	3,167	39,944	129		
2.67	5	3835	534	2,954	53,914	129		
2.91	0.94	3535	490	2,735	14,267	129	5.09	0.78
2.97	1.63	3635	479	2,643	29,144	129		
2.76	3.07	3735	516	2,852	40,628	129		
3.04	6	3835	469	2,592	54,252	129		
3.45	1.12	3535	413	2,303	15,788	129	6.04	0.93
3.37	1.85	3635	422	2,329	29,982	129		
3.14	3.49	3735	455	2,513	41,362	129		
3.66	1.19	3535	389	2,170	16,254	129	6.41	0.98
3.61	1.97	3635	395	2,179	30,382	129		
3.35	3.73	3735	425	2,351	41,711	129		
3.90	0.79	3435	365	2,037	17,712	129		
4.13	1.34	3535	345	1,923	17,116	129	7.24	1.11
4.16	2.28	3635	343	1,890	31,152	129		
3.86	4	3735	369	2,040	42,384	129		
4.52	0.91	3435	315	1,759	18,113	129		
4.73	1.53	3535	302	1,683	17,953	129	8.27	1.27
4.22	2.55	3635	339	1,689	31,688	129		
4.32	5	3735	330	1,823	42,852	129		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
0.9 kW - 50 Hz		LSSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3					1.57 kW - 87 Hz*	
4.78	0.96	3435	298	1,663	18,251	129	8.37	0.80
5.37	1.74	3535	265	1,481	18,654	129	9.40	1.44
4.85	2.89	3635	294	1,487	32,229	129		
4.92	5	3735	289	1,600	43,334	129		
5.68	1.14	3435	251	1,400	18,630	129	9.94	0.95
5.52	3.21	3635	258	1,338	32,625	129		
6.03	1.21	3435	236	1,319	18,744	129	10.6	1.00
6.12	3.65	3635	233	1,179	33,051	129		
6.80	1.37	3435	210	1,169	18,956	129	11.9	1.13
7.75	2.52	3535	184	1,025	20,226	129	13.6	2.08
6.91	3.90	3635	206	1,103	33,254	129		
7.99	0.80	3335	178	995	7,501	129	14.0	0.81
7.77	1.56	3435	183	1,023	19,164	129	13.6	1.29
8.17	2.65	3535	174	973	20,407	129	14.3	2.19
7.40	5	3635	193	956	33,645	129		
8.92	0.90	3333	160	906	8,003	95-115	15.6	0.89
9.28	1.86	3433	154	871	19,382	97-117	16.2	1.53
8.98	2.97	3533	159	898	20,665	99-119	15.7	2.42
10.4	1.05	3333	137	776	8,723	95-115	18.2	0.86
10.3	2.06	3433	139	787	19,504	97-117	18.0	1.69
10.6	3.51	3533	134	757	21,146	99-119	18.6	2.85
11.4	1.15	3333	125	708	9,091	95-115	20.0	0.94
11.5	2.30	3433	124	704	19,624	97-117	20.1	1.88
11.8	3.89	3533	121	682	21,404	99-119	20.7	3.15
12.6	1.26	3333	113	641	9,444	95-115	22.1	1.03
13.2	2.64	3433	108	612	19,760	97-117	23.1	2.16
13.1	4	3533	109	618	21,625	99-119	22.8	3.47
14.7	0.82	3233	97.2	553	7,532	93-113	25.6	0.81
14.8	1.48	3333	96.4	547	9,933	95-115	25.9	1.21
14.9	2.98	3433	95.4	541	19,863	97-117	26.2	2.43
14.2	5	3533	101	569	21,791	99-119	24.8	3.76
16.4	0.91	3233	86.7	493	7,707	93-113	28.7	0.91
16.6	1.66	3333	85.7	486	10,241	95-115	29.1	1.36
16.3	3.23	3433	87.7	498	19,928	97-117	28.4	2.62
16.5	5	3533	86.5	489	22,064	99-119	28.8	4
18.3	1.02	3233	77.7	442	7,856	93-113	32.1	0.83
18.5	1.84	3333	77	437	10,488	95-115	32.4	1.51
18.4	3.65	3433	77.5	440	20,013	97-117	32.2	2.90
19.3	6	3533	73.9	418	22,305	99-119	33.7	6
21.0	1.16	3233	68	386	8,020	93-113	36.7	0.95
21.0	2.09	3333	67.8	385	10,746	95-115	36.8	1.70
20.7	4	3433	69	392	20,083	97-117	36.1	3.18
21.3	7	3533	66.9	379	22,440	99-119	37.2	7
22.2	1.23	3233	64.3	365	8,081	93-113	38.8	1.00
23.4	2.31	3333	61	346	10,933	95-115	40.9	1.89
23.0	5	3433	61.9	351	19,669	97-117	40.3	3.43
23.1	7	3533	61.7	349	22,541	99-119	40.4	7
26.3	1.45	3233	54.1	308	8,248	93-113	46.1	1.19
26.5	2.62	3333	53.8	305	11,131	95-115	46.4	2.14
25.0	5	3433	57	324	19,225	97-117	43.7	3.64
26.9	8	3533	53	300	22,708	99-119	47.0	8
28.0	1.54	3233	51	290	8,300	93-113	48.9	1.26
28.3	2.80	3333	50.3	286	11,225	95-115	49.6	2.28
28.2	6	3433	50.6	287	18,593	97-117	49.3	3.95

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
0.9 kW - 50 Hz		LSSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3					1.57 kW - 87 Hz*	
31.5	1.73	3233	45.2	257	8,396	93-113	55.2	1.42
32.6	3.21	3333	43.7	248	11,404	95-115	57.1	2.61
32.3	6	3433	44.1	250	17,874	97-117	56.6	4
36.5	1.03	3132	39.1	225	5,520	89-109	63.7	0.92
36.0	1.98	3233	39.5	225	8,490	93-113	63.1	1.59
37.2	3.65	3333	38.3	217	11,547	95-115	65.1	2.91
37.5	6	3433	38	215	17,115	97-117	65.7	4.68
40.1	1.13	3132	35.6	205	5,593	89-109	70.0	0.98
38.7	1.71	3232	36.8	211	8,024	91-111	67.7	1.71
38.4	3.36	3333	37.1	210	11,579	95-115	67.3	2.73
40.8	7	3433	35	198	16,704	97-117	71.4	5
46.4	1.26	3132	30.7	177	5,696	89-109	81.2	0.89
45.2	1.99	3232	31.5	181	8,109	91-111	79.2	1.65
43.6	3.80	3333	32.7	185	11,695	95-115	76.3	3.09
45.9	8	3433	31	176	16,125	97-117	80.4	5
52.0	1.38	3132	27.4	158	5,767	89-109	91.0	0.97
49.6	2.19	3232	28.7	165	8,155	91-111	86.8	1.81
46.6	4	3333	30.6	174	11,750	95-115	81.6	3.29
52.7	8	3433	27	153	15,474	97-117	92	7
58.0	1.48	3132	24.6	141	5,830	89-109	102	1.04
54.7	2.41	3232	26	150	8,200	91-111	95.8	1.99
59.1	3.21	3233	24.1	137	7,687	93-113	103	2.30
53.7	5	3333	26.5	151	11,856	95-115	93.9	5
66.3	1.63	3132	21.5	124	5,898	89-109	116	1.14
64.2	2.83	3232	22.2	128	8,263	91-111	112	2.34
62.3	3.36	3233	22.9	130	7,586	93-113	109	2.39
61.2	5	3333	23.3	132	11,940	95-115	107	4
70.2	1.68	3132	20.3	117	5,924	89-109	123	1.17
72.2	3.18	3232	19.7	113	8,303	91-111	126	2.63
83.3	1.90	3132	17.1	98	5,996	89-109	146	1.33
80.3	3.54	3232	17.7	102	8,334	91-111	141	2.93
88.4	1.95	3132	16.1	93	6,019	89-109	155	1.37
91.2	4	3232	15.6	90	8,368	91-111	160	3.32
100	2.12	3132	14.3	82	6,061	89-109	175	1.48
101	4	3232	14.1	81	8,393	91-111	177	3.69
114	2.31	3132	12.5	72	6,101	89-109	200	1.62
115	5	3232	12.4	71	8,422	91-111	201	4
130	2.51	3132	11	63	6,134	89-109	227	1.75
123	5	3232	11.6	67	8,436	91-111	215	4
142	6	3232	10.1	58	8,459	91-111	248	5
161	7	3232	8.83	51	8,479	91-111	283	6
187	3.18	3132	7.62	44	6,203	89-109	327	2.22
197	3.27	3132	7.23	42	6,211	89-109	345	2.29

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.1 kW - 50 Hz		LS 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3					1.91 kW - 87 Hz*	
0.52	0.79	3835	2,750	18,645	38,541	129		
0.52	1.43	3935	2,770	18,679	67,466	129		
0.61	1.70	3935	2,330	15,758	74,600	129		
0.66	1.01	3835	2,160	14,605	42,640	129		
0.68	1.88	3935	2,100	14,191	78,067	129		
0.72	1.11	3835	1,970	13,319	43,924	129		
0.75	2.08	3935	1,900	12,848	80,891	129		
0.77	0.80	3735	1,850	12,542	19,250	129		
0.80	1.22	3835	1,780	12,066	45,166	129		
0.81	2.26	3935	1,750	11,838	82,945	129		
0.83	0.87	3735	1,720	11,658	21,232	129		
0.94	1.43	3835	1,520	10,294	46,907	129		
0.95	2.63	3935	1,510	10,174	86,237	129		
0.95	1.00	3735	1,490	10,114	24,677	129		
1.06	1.61	3835	1,350	9,150	48,020	129		
1.01	2.82	3935	1,400	9,480	87,588	129		
1.17	1.79	3835	1,210	8,224	48,915	129		
1.16	3.22	3935	1,230	8,302	89,872	129		
1.23	1.12	3735	1,160	7,832	29,736	129		
1.33	2.03	3835	1,070	7,240	49,862	129		
1.31	3.64	3935	1,090	7,337	91,744	129		
1.35	1.23	3735	1,050	7,142	31,256	129		
1.48	2.26	3835	962	6,518	50,552	129		
1.47	4	3935	968	6,534	93,314	129		
1.49	1.35	3735	955	6,470	32,734	129		
1.68	2.56	3835	848	5,743	51,289	129		
1.64	5	3935	867	5,854	94,657	129		
1.88	0.84	3635	757	5,119	22,564	129		
1.75	1.59	3735	815	5,520	34,817	129		
1.80	2.74	3835	793	5,375	51,639	129		
1.92	5	3935	742	5,010	96,346	129		
2.12	0.94	3635	673	4,550	24,073	129		
1.97	1.79	3735	724	4,907	36,158	129		
2.07	3.16	3835	688	4,663	52,311	129		
2.00	6	3935	713	4,818	96,735	129		
2.36	1.05	3635	605	4,089	25,297	129		
2.19	1.99	3735	651	4,410	37,241	129		
2.36	3.60	3835	604	4,091	52,850	129		
2.28	6	3935	625	4,219	97,960	129		
2.68	1.19	3635	532	3,599	26,599	129		
2.49	2.26	3735	573	3,882	38,390	129		
2.67	4	3835	534	3,621	53,290	129		
2.58	7	3935	552	3,729	98,978	129		
2.97	1.33	3635	479	3,241	27,553	129		
2.76	2.51	3735	516	3,495	39,231	129		
3.04	5	3835	469	3,177	53,706	129		
2.90	8	3935	492	3,320	99,673	129		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.1 kW - 50 Hz		LSES 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3					1.91 kW - 87 Hz*	
3.45	0.91	3535	413	2,823	13,955	129	6.04	0.93
3.37	1.51	3635	422	2,855	28,579	129		
3.14	2.84	3735	455	3,080	40,133	129		
3.23	9	3935	441	2,975	100,007	129		
3.66	0.97	3535	389	2,660	14,531	129	6.41	0.98
3.61	1.61	3635	395	2,672	29,068	129		
3.35	3.04	3735	425	2,882	40,562	129		
3.63	10	3935	392	2,648	100,326	129		
4.13	1.09	3535	345	2,357	15,596	129	7.24	1.11
4.16	1.86	3635	343	2,317	30,012	129		
3.86	3.50	3735	369	2,501	41,388	129		
4.25	12	3935	336	2,266	100,696	129		
4.73	1.25	3535	302	2,063	16,629	129	8.27	1.27
4.22	2.08	3635	339	2,071	30,668	129		
4.32	3.78	3735	330	2,235	41,963	129		
4.79	7	3835	297	2,015	54,788	129		
4.78	0.79	3435	298	2,038	17,711	129	8.37	0.80
5.37	1.42	3535	265	1,815	17,493	129	9.40	1.44
4.85	2.36	3635	294	1,823	31,331	129		
4.92	4	3735	289	1,961	42,555	129		
5.68	0.93	3435	251	1,716	18,175	129	9.94	0.95
6.08	1.61	3535	235	1,604	18,226	129	10.6	1.63
5.52	2.62	3635	258	1,641	31,816	129		
6.03	0.99	3435	236	1,617	18,317	129	10.6	1.00
6.85	1.81	3535	208	1,423	18,856	129	12.0	1.84
6.21	2.97	3635	233	1,446	32,338	129		
6.46	10	3835	221	1,495	55,269	129		
6.80	1.12	3435	210	1,433	18,582	129	11.9	1.13
7.75	2.05	3535	184	1,257	19,428	129	13.6	2.08
6.91	3.18	3635	206	1,353	32,586	129		
7.34	11	3835	194	1,315	55,435	129		
7.77	1.28	3435	183	1,254	18,836	129	13.6	1.29
8.17	2.16	3535	174	1,193	19,651	129	14.3	2.19
7.40	3.67	3635	193	1,173	33,066	129		
7.77	7	3735	184	1,243	44,102	129		
8.34	13	3835	171	1,158	55,580	129		
9.28	1.52	3433	154	1,069	19,099	97-117	16.2	1.53
8.98	2.42	3533	159	1,102	19,963	99-119	15.7	2.42
9.09	3.95	3633 ¹	157	1,088	33,292	101-121		
9.40	8	3733 ¹	152	1,049	44,521	103-123		
10.4	0.85	3333	137	952	7,745	95-115	18.2	0.86
10.3	1.68	3433	139	966	19,246	97-117	18.0	1.69
10.6	2.86	3533	134	930	20,555	99-119	18.6	2.85
10.6	5	3633 ¹	135	934	33,705	101-121		
10.6	9	3733 ¹	135	934	44,769	103-123		
11.4	0.93	3333	125	868	8,216	95-115	20.0	0.94
11.5	1.87	3433	124	864	19,392	97-117	20.1	1.88
11.8	3.17	3533	121	837	20,873	99-119	20.7	3.15
11.5	5	3633 ¹	124	859	33,906	101-121		
11.6	10	3733 ¹	123	852	44,945	103-123		
12.6	1.03	3333	113	787	8,666	95-115	22.1	1.03
13.2	2.15	3433	108	750	19,500	97-117	23.1	2.16
13.1	3.49	3533	109	758	21,144	99-119	22.8	3.47
13.2	6	3633 ¹	108	748	34,202	101-121		
13.1	11	3733 ¹	109	753	45,158	103-123		

¹Ot 3633 and Ot 3733: integrated mounting MI obligatory for frame size 90

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.1 kW - 50 Hz		LS 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3					1.91 kW - 87 Hz*	
14.8	1.20	3333	96.4	671	9,287	95-115	25.9	1.21
14.9	2.43	3433	95.4	664	19,683	97-117	26.2	2.43
14.2	3.78	3533	101	698	21,348	99-119	24.8	3.76
15.0	7	3633 ¹	95.1	660	34,438	101-121		
16.6	1.35	3333	85.7	596	9,677	95-115	29.1	1.36
16.3	2.64	3433	87.7	610	19,762	97-117	28.4	2.62
16.5	4	3533	86.5	600	21,600	99-119	28.8	4
16.7	7	3633 ¹	85.3	592	34,619	101-121		
18.3	0.83	3233	77.7	541	7,567	93-113	32.1	0.83
18.5	1.50	3333	77	536	9,988	95-115	32.4	1.51
18.4	2.98	3433	77.5	539	19,866	97-117	32.2	2.90
17.7	5	3533	80.6	559	21,824	99-119	31.0	5
18.8	8	3633 ¹	75.9	527	34,793	101-121		
18.4	13	3733 ¹	77.3	535	45,626	103-123		
21.0	0.95	3233	68	474	7,763	93-113	36.7	0.95
21.0	1.70	3333	67.8	472	10,313	95-115	36.8	1.70
20.7	3.33	3433	69	480	19,845	97-117	36.1	3.18
20.2	5	3533	70.6	490	22,061	99-119	35.4	5
20.8	9	3633 ¹	68.6	477	34,929	101-121		
20.7	14	3733 ¹	68.8	476	45,752	103-123		
22.2	1.00	3233	64.3	448	7,839	93-113	38.8	1.00
23.4	1.89	3333	61	425	10,548	95-115	40.9	1.89
23.0	3.71	3433	61.9	431	19,297	97-117	40.3	3.43
22.9	6	3533	62.4	433	22,255	99-119	40.0	6
22.6	9	3633 ¹	63.1	438	35,032	101-121		
22.7	16	3733 ¹	62.8	434	45,842	103-123		
26.3	1.19	3233	54.1	377	8,046	93-113	46.1	1.19
26.5	2.14	3333	53.8	374	10,796	95-115	46.4	2.14
25.0	4	3433	57	397	18,878	97-117	43.7	3.64
25.7	7	3533	55.5	386	22,416	99-119	44.9	7
25.9	11	3633 ¹	55	382	35,183	101-121		
25.7	17	3733 ¹	55.5	384	45,950	103-123		
28.0	1.26	3233	51	355	8,100	93-113	48.9	1.26
28.3	2.28	3333	50.3	350	10,913	95-115	49.6	2.28
28.2	5	3433	50.6	352	18,285	97-117	49.3	3.95
28.6	7	3533	49.8	345	22,553	99-119	50.1	7
29.4	12	3633 ¹	48.5	337	35,303	101-121		
31.5	1.41	3233	45.2	315	8,227	93-113	55.2	1.42
32.6	2.62	3333	43.7	304	11,137	95-115	57.1	2.61
32.3	5	3433	44.1	307	17,605	97-117	56.6	4
33.5	9	3533	42.6	296	22,722	99-119	58.6	9
32.8	13	3633 ¹	43.5	302	35,396	101-121		
36.0	1.61	3233	39.5	276	8,287	93-113	63.1	1.59
37.2	2.98	3333	38.3	267	11,315	95-115	65.1	2.91
37.5	5	3433	38	264	16,880	97-117	65.7	5
37.3	9	3533	38.2	265	22,825	99-119	65.2	9
36.8	15	3633 ¹	38.7	269	35,485	101-121		
41.0	1.83	3233	34.8	243	8,093	93-113	71.7	1.77
38.4	2.74	3333	37.1	258	11,355	95-115	67.3	2.73
40.8	6	3433	35	243	16,489	97-117	71.4	5
41.9	10	3533	34	236	22,924	99-119	73.3	10
46.4	1.03	3132	30.7	217	5,549	89-109	81.2	0.89
45.2	1.63	3232	31.5	222	8,002	91-111	79.2	1.65
46.3	2.06	3233	30.8	214	7,888	93-113	81.1	1.94
43.6	3.10	3333	32.7	227	11,499	95-115	76.3	3.09
45.9	6	3433	31	216	15,936	97-117	80.4	5
46.7	12	3533	30.5	212	23,007	99-119	81.8	11

¹Ot 3633 and Ot 3733: integrated mounting MI obligatory for frame size 90

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.1 kW - 50 Hz		LS 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3					1.91 kW - 87 Hz*	
52.0	1.12	3132	27.4	193	5,635	89-109	91.0	0.97
49.6	1.78	3232	28.7	202	8,050	91-111	86.8	1.81
52.3	2.32	3233	27.3	190	7,689	93-113	91.5	2.11
46.6	3.30	3333	30.6	213	11,568	95-115	81.6	3.29
49.9	7	3433	28.6	199	15,554	97-117	87.3	6
58.0	1.21	3132	24.6	173	5,709	89-109	102	1.04
54.7	1.97	3232	26	183	8,109	91-111	95.8	1.99
59.1	2.62	3233	24.1	168	7,479	93-113	103	2.30
58.7	5	3333	24.3	169	11,771	95-115	103	4
57.6	8	3433	24.8	172	14,913	97-117	101	7
54.6	13	3533	26.1	181	23,111	99-119	95.6	13
66.3	1.33	3132	21.5	152	5,791	89-109	116	1.14
64.2	2.31	3232	22.2	156	8,186	91-111	112	2.34
62.3	2.74	3233	22.9	159	7,392	93-113	109	2.39
61.2	4	3333	23.3	162	11,803	95-115	107	4
70.2	1.37	3132	20.3	143	5,822	89-109	123	1.17
72.2	2.59	3232	19.7	139	8,234	91-111	126	2.63
70.0	2.99	3233	20.4	142	7,188	93-113	123	2.59
70.2	5	3333	20.3	141	11,797	95-115	123	5
71.1	9	3433	20.1	140	14,002	97-117	124	8
83.3	1.55	3132	17.1	121	5,909	89-109	146	1.33
80.3	2.89	3232	17.7	125	8,274	91-111	141	2.93
81.4	9	3433	17.5	122	13,440	97-117	142	8
88.4	1.59	3132	16.1	114	5,936	89-109	155	1.37
88.3	3.55	3233	16.1	112	6,782	93-113	160	3.32
91.2	3.28	3232	15.6	110	8,314	91-111	155	3.05
88.5	6	3333	16.1	112	11,018	95-115	155	5
100	1.73	3132	14.3	101	5,987	89-109	175	1.48
101	3.64	3232	14.1	99	8,345	91-111	177	3.69
96.5	7	3333	14.8	103	10,743	95-115	169	6
93.9	10	3433	15.2	106	12,866	97-117	164	9
114	1.88	3132	12.5	88	6,037	89-109	200	1.62
115	4	3232	12.4	87	8,379	91-111	201	4
116	8	3333	12.3	86	10,174	95-115	202	7
116	12	3433	12.3	86	12,057	97-117	203	10
130	2.04	3132	11	78	6,079	89-109	227	1.75
123	4	3232	11.6	82	8,393	91-111	215	4.48
147	2.21	3132	9.72	69	6,112	89-109	257	1.90
142	5	3232	10.1	71	8,425	91-111	248	5
146	9	3333	9.78	68	9,483	95-115	255	8
150	14	3433	9.51	66	11,127	97-117	262	12
165	2.38	3132	8.62	61	6,141	89-109	289	2.04
161	6	3232	8.83	62	8,449	91-111	283	6
187	2.59	3132	7.62	54	6,167	89-109	327	2.22
197	2.67	3132	7.23	51	6,178	89-109	345	2.29
221	2.86	3132	6.43	45	6,200	89-109	388	2.46
255	9	3232	5.6	39	8,510	91-111	446	9
279	3.28	3132	5.1	36	6,233	89-109	489	2.81

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.5 kW - 50 Hz		LS 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3					2.61 kW - 87 Hz*	
0.52	1.05	3935	2,770	25,493	45,775	129		
0.61	1.24	3935	2,330	21,506	59,467	129		
0.68	1.38	3935	2,100	19,368	65,628	129		
0.73	0.81	3835	1,970	18,161	39,037	129		
0.75	1.52	3935	1,900	17,535	70,379	129		
0.80	0.90	3835	1,780	16,453	40,778	129		
0.82	1.65	3935	1,750	16,156	73,683	129		
0.94	1.05	3835	1,520	14,036	43,210	129		
0.95	1.93	3935	1,510	13,885	78,721	129		
1.06	1.18	3835	1,350	12,477	44,760	129		
1.02	2.07	3935	1,400	12,939	80,703	129		
1.18	1.31	3835	1,210	11,214	46,006	129		
1.16	2.36	3935	1,230	11,330	83,959	129		
1.24	0.82	3735	1,160	10,679	23,419	129		
1.34	1.49	3835	1,070	9,872	47,318	129		
1.32	2.67	3935	1,090	10,014	86,549	129		
1.36	0.90	3735	1,050	9,739	25,513	129		
1.49	1.66	3835	962	8,888	48,274	129		
1.48	3.00	3935	968	8,917	88,680	129		
1.50	0.99	3735	955	8,823	27,545	129		
1.69	1.88	3835	848	7,831	49,293	129		
1.65	3.35	3935	867	7,989	90,478	129		
1.76	1.16	3735	815	7,527	30,409	129		
1.80	2.01	3835	793	7,329	49,776	129		
1.93	3.91	3935	742	6,837	92,720	129		
1.97	1.31	3735	724	6,691	32,250	129		
2.08	2.32	3835	688	6,358	50,704	129		
2.00	4	3935	713	6,575	93,233	129		
2.20	1.46	3735	651	6,013	33,736	129		
2.37	2.64	3835	604	5,578	51,446	129		
2.29	5	3935	625	5,758	94,848	129		
2.69	0.88	3635	532	4,909	23,121	129		
2.50	1.66	3735	573	5,294	35,312	129		
2.68	2.97	3835	534	4,938	52,052	129		
2.59	5	3935	552	5,089	96,187	129		
2.98	0.97	3635	479	4,420	24,419	129		
2.77	1.84	3735	516	4,766	36,464	129		
3.05	3.38	3835	469	4,332	52,623	129		
2.91	6	3935	492	4,531	97,318	129		
3.39	1.10	3635	422	3,894	25,815	129		
3.15	2.09	3735	455	4,200	37,700	129		
3.25	7	3935	441	4,060	98,288	129		
3.62	1.18	3635	395	3,644	26,480	129		
3.36	2.23	3735	425	3,930	38,286	129		
3.65	7	3935	392	3,614	99,217	129		
4.15	0.80	3535	345	3,215	12,565	129	7.24	0.81
4.17	1.36	3635	343	3,161	27,765	129		
3.87	2.57	3735	369	3,410	39,418	129		
4.26	9	3935	336	3,093	99,893	129		

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.5 kW - 50 Hz		LSES 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3					2.61 kW - 87 Hz*	
4.74	0.92	3535	302	2,813	13,991	129	8.27	0.92
4.22	1.52	3635	339	2,826	28,658	129		
4.34	2.77	3735	330	3,048	40,203	129		
4.81	5	3835	297	2,747	54,107	129		
5.39	1.04	3535	265	2,475	15,182	129	9.40	1.05
4.87	1.73	3635	294	2,487	29,560	129		
4.94	3.16	3735	289	2,674	41,013	129		
6.10	1.18	3535	235	2,188	16,192	129	10.6	1.19
5.55	1.92	3635	258	2,239	30,221	129		
6.88	1.33	3535	208	1,940	17,058	129	12.0	1.34
6.14	2.18	3635	233	1,972	30,932	129		
6.48	7	3835	221	2,039	54,766	129		
6.82	0.82	3435	210	1,955	17,830	129	11.9	0.82
7.78	1.51	3535	184	1,714	17,845	129	13.6	1.52
6.94	2.33	3635	206	1,846	31,270	129		
7.37	8	3835	194	1,793	54,993	129		
7.80	0.94	3435	183	1,710	18,183	129	13.6	0.94
8.20	1.59	3535	174	1,626	18,150	129	14.3	1.60
7.42	2.69	3635	193	1,601	31,924	129		
7.79	5	3735	184	1,695	43,128	129		
8.37	9	3835	171	1,579	55,191	129		
9.31	1.11	3433	154	1,459	18,545	97-117	16.2	1.11
9.01	1.77	3533	159	1,505	18,500	99-119	15.7	1.76
9.12	2.89	3633 ¹	157	1,487	32,229	101-121		
9.43	6	3733 ¹	152	1,434	43,691	103-123		
10.3	1.23	3433	139	1,318	18,746	97-117	18.0	1.23
10.7	2.09	3533	134	1,270	19,384	99-119	18.6	2.07
10.6	3.37	3633 ¹	135	1,276	32,791	101-121		
10.6	7	3733 ¹	135	1,276	44,031	103-123		
11.5	1.37	3433	124	1,179	18,941	97-117	20.1	1.37
11.9	2.32	3533	121	1,144	19,820	99-119	20.7	2.29
11.6	3.67	3633 ¹	124	1,173	33,066	101-121		
11.6	7	3733 ¹	123	1,164	44,273	103-123		
13.3	1.58	3433	108	1,024	19,162	97-117	23.1	1.57
13.1	2.55	3533	109	1,035	20,192	99-119	22.8	2.52
13.3	4	3633 ¹	108	1,022	33,470	101-121		
13.2	8	3733 ¹	109	1,029	44,500	103-123		
14.8	0.88	3333	96.4	916	7,949	95-115	25.9	0.88
15.0	1.78	3433	95.4	906	19,331	97-117	26.2	1.77
14.2	2.76	3533	101	954	20,472	99-119	24.8	2.73
15.0	5	3633 ¹	95.1	901	33,793	101-121		
16.7	0.99	3333	85.7	814	8,500	95-115	29.1	0.99
16.3	1.93	3433	87.7	833	19,437	97-117	28.44	1.90
16.5	3.20	3533	86.5	820	20,932	99-119	28.8	3.16
16.8	5	3633 ¹	85.3	809	34,040	101-121		
18.6	1.10	3333	77	732	8,963	95-115	32.4	1.09
18.5	2.18	3433	77.5	736	19,458	97-117	32.2	2.11
17.8	3.43	3533	80.6	764	21,124	99-119	31.0	3.38
18.8	6	3633 ¹	75.9	720	34,277	101-121		
18.5	10	3733 ¹	77.3	732	45,204	103-123		

¹Ot 3633 and Ot 3733: integrated mounting MI obligatory for frame size 90

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.5 kW - 50 Hz		LSES 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3					2.61 kW - 87 Hz*	
21.1	1.25	3333	67.8	644	9,429	95-115	36.8	1.24
20.7	2.44	3433	69	656	18,976	97-117	36.1	2.32
20.3	3.90	3533	70.6	669	21,449	99-119	35.4	3.84
20.8	6	3633 ¹	68.6	651	34,463	101-121		
20.8	10	3733 ¹	68.8	651	45,377	103-123		
23.4	1.38	3333	61	580	9,763	95-115	40.9	1.37
23.1	2.72	3433	61.9	588	18,516	97-117	40.3	2.50
22.9	4	3533	62.4	591	21,715	99-119	40.0	4
22.7	7	3633 ¹	63.1	598	34,603	101-121		
22.8	12	3733 ¹	62.8	594	45,500	103-123		
26.4	0.87	3233	54.1	515	7,643	93-113	46.1	0.86
26.6	1.56	3333	53.8	511	10,116	95-115	46.4	1.55
25.1	2.95	3433	57	542	18,165	97-117	43.7	2.65
25.8	5	3533	55.5	527	21,936	99-119	44.9	5
26.0	8	3633 ¹	55	521	34,809	101-121		
25.8	13	3733 ¹	55.5	525	45,648	103-123		
28.0	0.92	3233	51	485	7,715	93-113	48.9	0.92
28.4	1.67	3333	50.3	478	10,282	95-115	49.6	1.66
28.2	3.31	3433	50.6	481	17,650	97-117	49.3	2.88
28.7	5	3533	49.8	472	22,123	99-119	50.1	5
29.5	9	3633 ¹	48.5	460	34,974	101-121		
31.6	1.04	3233	45.2	430	7,663	93-113	55.2	1.03
32.8	1.92	3333	43.7	415	10,598	95-115	57.1	1.90
32.4	3.68	3433	44.1	419	17,053	97-117	56.6	3.17
33.6	6	3533	42.6	404	22,354	99-119	58.6	6
32.9	10	3633 ¹	43.5	413	35,100	101-121		
36.2	1.18	3233	39.5	376	7,570	93-113	63.1	1.16
37.3	2.18	3333	38.3	364	10,847	95-115	65.1	2.12
37.7	3.88	3433	38	361	16,408	97-117	65.7	3.41
37.4	7	3533	38.2	362	22,495	99-119	65.2	7
36.9	11	3633 ¹	38.7	367	35,221	101-121		
41.1	1.34	3233	34.8	331	7,461	93-113	71.7	1.28
38.6	2.00	3333	37.1	352	10,904	95-115	67.3	1.99
40.9	4	3433	35	332	16,050	97-117	71.4	3.61
42.0	8	3533	34	323	22,630	99-119	73.3	7
45.4	1.19	3232	31.5	303	7,769	91-111	79.2	1.2
46.5	1.51	3233	30.8	293	7,334	93-113	81.1	1
43.8	2.27	3333	32.7	310	11,106	95-115	76.3	2.25
46.1	5	3433	31	295	15,545	97-117	80.4	4
46.9	9	3533	30.5	289	22,744	99-119	81.8	8.3
52.2	0.82	3132	27.4	264	5,383	89-109		
49.8	1.31	3232	28.7	276	7,845	91-111	86.8	1.31
52.4	1.70	3233	27.3	259	7,197	93-113	91.5	1.54
46.8	2.42	3333	30.6	291	11,201	95-115	81.6	2.40
50.1	5.04	3433	28.6	271	15,193	97-117	87.3	4
58.2	0.89	3132	24.6	236	5,479	89-109		
54.9	1.44	3232	26	250	7,916	91-111	95.8	1.45
59.3	1.92	3233	24.1	229	7,044	93-113	103	1.67
58.9	3.40	3333	24.3	231	11,484	95-115	103	2.97
57.8	6	3433	24.8	235	14,600	97-117	101	5
54.8	10	3533	26.1	247	22,886	99-119	95.6	10
66.6	0.97	3132	21.5	207	5,550	89-109	116	0.83
64.4	1.69	3232	22.2	213	8,021	91-111	112	1.70
62.6	2.01	3233	22.9	217	6,978	93-113	109	1.74
61.4	3.16	3333	23.3	221	11,529	95-115	107	3.07

¹Ot 3633 and Ot 3733: integrated mounting MI obligatory for frame size 90

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.5 kW - 50 Hz		LSES 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3					2.61 kW - 87 Hz*	
70.4	1.00	3132	20.3	195	5,627	89-109	123	0.85
72.4	1.90	3232	19.7	189.7	8,087	91-111	126	1.91
70.3	2.19	3233	20.4	194	6,823	93-113	123	1.88
70.5	3.91	3333	20.3	192.8	11,500	95-115	123	3.36
71.3	6	3433	20.1	190.5	13,753	97-117	124	6
83.6	1.13	3132	17.1	164.6	5,742	89-109	146	0.97
80.6	2.12	3232	17.7	170.5	8,144	91-111	141	2.13
81.7	7	3433	17.5	166.3	13,220	97-117	142	6
88.7	1.17	3132	16.1	155.1	5,778	89-109	155	0.99
91.6	2.40	3232	15.6	150.1	8,200	91-111	160	2.42
88.7	2.60	3233	16.1	153.4	6,494	93-113	155	2.22
88.9	5	3333	16.1	152.9	10,789	95-115	155	3.96
92.2	8	3433	15.5	147.4	12,755	97-117	161	7
100	1.27	3132	14.3	137.5	5,845	89-109	175	1.08
102	2.67	3232	14.1	135.1	8,243	91-111	177	2.69
96.9	5	3333	14.8	140.2	10,530	95-115	169	4
94.2	8	3433	15.2	144.2	12,675	97-117	164	6
114	1.38	3132	12.5	120.3	5,900	89-109	200	1.18
115	3.03	3232	12.4	119.1	8,288	91-111	201	3.05
116	6	3333	12.3	117.2	10,001	95-115	202	5
116	9	3433	12.3	116.8	11,900	97-117	203	8
130	1.50	3132	11	105.9	5,967	89-109	227	1.28
123	3.24	3232	11.6	111.4	8,308	91-111	215	3.26
147	1.62	3132	9.72	93.6	6,016	89-109	257	1.38
142	3.73	3232	10.1	96.7	8,351	91-111	248	3.76
146	7	3333	9.78	92.9	9,343	95-115	255	6
150	11	3433	9.51	90.4	11,005	97-117	262	9
166	1.75	3132	8.62	83.0	6,058	89-109	289	1.49
162	4.25	3232	8.83	84.8	8,385	91-111	283	4
188	1.9	3132	7.62	73.3	6,097	89-109	327	1.62
198	1.96	3132	7.23	69.6	6,108	89-109	345	1.67
222	2.10	3132	6.43	61.9	6,138	89-109	388	1.79
256	7	3232	5.6	53.8	8,460	91-111	446	6
280	2.4	3132	5.1	49.1	6,185	89-109	489	2.05
306	8	3232	4.68	44.9	8,052	91-111	533	7
386	9	3232	3.71	35.6	7,546	91-111	673	8

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.8 kW - 50 Hz		LSSES 90 LU IFT/IE2 - LSES 100 L IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 100 L FFB2 IFT/IE3					3.13 kW - 87 Hz*	
0.52	0.88	3935	2,770	30,546	23,160	137		
0.61	1.04	3935	2,330	25,769	44,705	129		
0.68	1.15	3935	2,100	23,206	54,013	129		
0.75	1.27	3935	1,900	21,010	60,962	129		
0.82	1.38	3935	1,750	19,358	65,654	129		
0.94	0.88	3835	1,520	16,811	40,414	129		
0.95	1.61	3935	1,510	16,637	72,554	129		
1.06	0.99	3835	1,350	14,943	42,301	129		
1.02	1.72	3935	1,400	15,503	75,178	129		
1.18	1.10	3835	1,210	13,431	43,813	129		
1.17	1.97	3935	1,230	13,576	79,376	129		
1.34	1.25	3835	1,070	11,823	45,406	129		
1.32	2.23	3935	1,090	11,999	82,621	129		
1.49	1.38	3835	962	10,645	46,563	129		
1.48	2.5	3935	968	10,685	85,235	129		
1.50	0.83	3735	955	10,567	23,670	129		
1.69	1.57	3835	848	9,380	47,797	129		
1.66	2.79	3935	867	9,573	87,408	129		
1.76	0.97	3735	815	9,015	27,119	129		
1.81	1.68	3835	793	8,778	48,380	129		
1.93	3.26	3935	742	8,192	90,084	129		
1.98	1.09	3735	724	8,013	29,336	129		
2.09	1.93	3835	688	7,615	49,501	129		
2.01	3.39	3935	713	7,878	90,693	129		
2.20	1.22	3735	651	7,202	31,124	129		
2.38	2.20	3835	604	6,681	50,396	129		
2.30	3.88	3935	625	6,899	92,599	129		
2.50	1.38	3735	573	6,340	33,019	129		
2.69	2.48	3835	534	5,914	51,127	129		
2.60	4	3935	552	6,097	94,174	129		
2.99	0.81	3635	479	5,294	22,100	129		
2.78	1.53	3735	516	5,708	34,405	129		
3.06	2.82	3835	469	5,189	51,815	129		
2.92	5	3935	492	5,430	95,502	129		
3.40	0.92	3635	422	4,665	23,769	129		
3.16	1.74	3735	455	5,030	35,889	129		
3.26	6	3935	441	4,865	96,640	129		
3.63	0.99	3635	395	4,365	24,565	129		
3.37	1.86	3735	425	4,707	36,593	129		
3.66	6	3935	392	4,331	97,729	129		
4.18	1.14	3635	343	3,787	26,101	129		
3.89	2.15	3735	369	4,084	37,952	129		
4.28	7	3935	336	3,706	99,024	129		
4.24	1.27	3635	339	3,385	27,169	129		
4.35	2.31	3735	330	3,650	38,895	129		
4.83	4	3835	297	3,290	53,600	129		
5.41	0.87	3535	265	2,964	13,453	129	9.53	0.88
4.89	1.44	3635	294	2,979	28,249	129		
4.96	2.64	3735	289	3,202	39,867	129		
6.12	0.99	3535	235	2,620	14,671	129	10.8	1.00
5.57	1.60	3635	258	2,682	29,040	129		
6.90	1.11	3535	208	2,323	15,716	129	12.2	1.13
6.16	1.82	3635	233	2,363	29,891	129		
6.50	6	3835	221	2,442	54,391	129		
7.81	1.26	3535	184	2,053	16,663	129	13.8	1.27
6.96	1.94	3635	206	2,211	30,295	129		
7.39	7	3835	194	2,148	54,665	129		
7.83	0.78	3435	183	2,048	17,696	129	13.8	0.79
8.23	1.33	3535	174	1,948	17,031	129	14.5	1.34
7.45	2.24	3635	193	1,918	31,078	129		
7.82	4	3735	184	2,031	42,404	129		
8.40	8	3835	171	1,891	54,902	129		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
1.8 kW - 50 Hz		LS 90 L FFB2 IFT/NIE - LSES 100 L FFB2 IFT/IE3					3.13 kW - 87 Hz*	
9.35	0.93	3433	154	1,748	18,129	97-117	16.5	0.93
9.04	1.48	3533	159	1,804	17,531	99-119	15.9	1.48
9.15	2.41	3633 ¹	157	1,782	31,441	101-121		
9.47	5	3733 ¹	152	1,720	43,076	103-123		
10.4	1.03	3433	139	1,579	18,372	97-117	18.2	1.03
10.7	1.75	3533	134	1,522	18,511	99-119	18.9	1.74
10.7	2.81	3633 ¹	135	1,529	32,114	101-121		
10.6	5	3733 ¹	135	1,530	43,484	103-123		
11.6	1.15	3433	124	1,413	18,611	97-117	20.4	1.15
11.9	1.93	3533	121	1,371	19,036	99-119	21.0	1.93
11.6	3.06	3633 ¹	124	1,406	32,444	101-121		
11.7	6	3733 ¹	123	1,396	43,774	103-123		
13.3	1.32	3433	108	1,227	18,874	97-117	23.5	1.32
13.1	2.13	3533	109	1,241	19,484	99-119	23.2	2.12
13.3	3.51	3633 ¹	108	1,225	32,927	101-121		
13.2	7	3733 ¹	109	1,234	44,123	103-123		
15.0	1.48	3433	95.4	1,086	19,074	97-117	26.5	1.49
14.3	2.31	3533	101	1,143	19,820	99-119	25.2	2.29
15.1	3.98	3633 ¹	95.1	1,080	33,314	101-121		
16.8	0.83	3333	85.7	975	7,612	95-115	29.5	0.83
16.4	1.61	3433	87.7	998	19,079	97-117	28.9	1.60
16.6	2.67	3533	86.5	983	20,373	99-119	29.3	2.65
16.8	4	3633 ¹	85.3	970	33,610	101-121		
18.6	0.92	3333	77	877	8,169	95-115	32.9	0.92
18.5	1.82	3433	77.5	882	18,670	97-117	32.7	1.77
17.8	2.86	3533	80.6	916	20,604	99-119	31.4	2.84
18.9	5	3633 ¹	75.9	863	33,895	101-121		
18.6	8	3733 ¹	77.3	877	44,891	103-123		
21.2	1.04	3333	67.8	772	8,746	95-115	37.3	1.04
20.8	2.04	3433	69	786	18,270	97-117	36.7	1.94
20.3	3.25	3533	70.6	802	20,994	99-119	35.9	3.22
20.9	5	3633 ¹	68.6	780	34,117	101-121		
20.9	9	3733 ¹	68.8	781	45,099	103-123		
23.5	1.15	3333	61	695	9,160	95-115	41.5	1.16
23.2	2.27	3433	61.9	705	17,878	97-117	40.9	2.09
23.0	3.66	3533	62.4	709	21,313	99-119	40.6	3.63
22.7	6	3633 ¹	63.1	717	34,285	101-121		
22.9	10	3733 ¹	62.8	712	45,246	103-123		
26.7	1.31	3333	53.8	612	9,595	95-115	47.0	1.31
25.2	2.46	3433	57	649	17,568	97-117	44.4	2.22
25.8	4.09	3533	55.5	631	21,579	99-119	45.6	4
26.1	6	3633 ¹	55	625	34,532	101-121		
25.9	11	3733 ¹	55.5	629	45,423	103-123		
28.5	1.39	3333	50.3	573	9,799	95-115	50.3	1.39
28.3	2.76	3433	50.6	576	17,116	97-117	50.0	2.41
28.8	5	3533	49.8	565	21,803	99-119	50.9	5
29.6	7	3633 ¹	48.5	551	34,730	101-121		
31.8	0.87	3233	45.2	515	7,044	93-113	56.0	0.87
32.9	1.60	3333	43.7	497	10,187	95-115	57.9	1.60
32.5	3.07	3433	44.1	502	16,577	97-117	57.4	2.65
33.7	5	3533	42.6	484	22,081	99-119	59.4	5
33.0	8	3633 ¹	43.5	495	34,881	101-121		
36.3	0.99	3233	39.5	451	7,030	93-113	64.0	0.97
37.5	1.82	3333	38.3	436	10,492	95-115	66.0	1.78
37.8	3.23	3433	38	432	15,989	97-117	66.6	2.85
37.5	6	3533	38.2	434	22,250	99-119	66.2	6
37.0	9	3633 ¹	38.7	440	35,026	101-121		
41.2	1.12	3233	34.8	396	6,980	93-113	72.7	1.08
38.7	1.67	3333	37.1	422	10,561	95-115	68.2	1.67
41.1	3.48	3433	35	398	15,663	97-117	72.4	3.02
42.2	6	3533	34	387	22,412	99-119	74.3	6

¹Ot 3633 and Ot 3733: integrated mounting MI obligatory for frame size 90

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
1.8 kW - 50 Hz		LSES 90 LU IFT/IE2 - LSES 100 L IFT/IE3 LS 90 L FFB2 IFT/IE1 - LSES 100 L FFB2 IFT/IE3					3.13 kW - 87 Hz*	
45.5	0.99	3232	31.5	363	7,594	91-111	80.3	1.01
46.7	1.26	3233	30.8	350	6,903	93-113	82.3	1.18
43.9	1.89	3333	32.7	372	10,808	95-115	77.4	1.89
46.2	3.81	3433	31	353	15,196	97-117	81.5	3.28
47.1	7	3533	30.5	347	22,549	99-119	83.0	7
49.9	1.09	3232	28.7	331	7,690	91-111	88.1	1.11
52.6	1.42	3233	27.3	311	6,818	93-113	92.8	1.29
46.9	2.02	3333	30.6	348	10,924	95-115	82.7	2.01
50.3	4	3433	28.6	325	14,866	97-117	88.6	3.60
55.1	1.20	3232	26	300	7,782	91-111	97.2	1.22
59.6	1.60	3233	24.1	275	6,700	93-113	105	1.40
59.1	2.84	3333	24.3	277	11,268	95-115	104	2.48
58.0	5	3433	24.8	282	14,310	97-117	102	3.98
55.0	8	3533	26.1	297	22,719	99-119	96.9	8
66.8	0.81	3132	21.5	248	5,439	89-109		
64.6	1.41	3232	22.2	256	7,908	91-111	114	1.43
62.8	1.68	3233	22.9	260	6,650	93-113	111	1.45
61.7	2.63	3333	23.3	265	11,323	95-115	109	2.58
70.7	0.84	3132	20.3	234	5,487	89-109		
72.7	1.59	3232	19.7	227	7,987	91-111	128	1.61
70.5	1.83	3233	20.4	232	6,525	93-113	124	1.58
70.7	3.26	3333	20.3	231	11,240	95-115	125	2.82
71.6	5	3433	20.1	228	13,507	97-117	126	5
83.9	0.94	3132	17.1	197	5,621	89-109	148	0.81
80.9	1.77	3232	17.7	204	8,053	91-111	143	1.79
82.0	6	3433	17.5	199	12,997	97-117	145	5
89.0	0.97	3132	16.1	186	5,663	89-109	157	0.83
91.9	2.01	3232	15.6	180	8,121	91-111	162	2.03
89.0	2.17	3233	16.1	184	6,255	93-113	157	1.86
89.2	3.87	3333	16.1	183	10,572	95-115	157	3.31
92.5	6	3433	15.5	177	12,559	97-117	163	6
100	1.06	3132	14.3	165	5,741	89-109	177	0.90
102	2.23	3232	14.1	162	8,169	91-111	180	2.26
97.2	4	3333	14.8	168	10,327	95-115	171	3.61
94.6	6	3433	15.2	173	12,480	97-117	167	5
115	1.15	3132	12.5	144	5,819	89-109	202	0.99
116	2.53	3232	12.4	143	8,223	91-111	204	2.56
116	5	3333	12.3	140	9,828	95-115	205	4
117	7	3433	12.3	140	11,734	97-117	206	6
130	1.25	3132	11	127	5,886	89-109	230	1.07
124	2.70	3232	11.6	133	8,249	91-111	218	2.74
148	1.35	3132	9.72	112	5,943	89-109	260	1.16
143	3.12	3232	10.1	116	8,300	91-111	251	3.16
147	6	3333	9.78	111	9,196	95-115	259	5
151	9	3433	9.51	108	10,868	97-117	266	8
166	1.46	3132	8.62	99	5,993	89-109	293	1.25
163	3.55	3232	8.83	102	8,340	91-111	287	3.60
188	1.58	3132	7.62	88	6,039	89-109	332	1.36
199	1.63	3132	7.23	83	6,057	89-109	350	1.40
223	1.75	3132	6.43	74	6,093	89-109	393	1.50
256	6	3232	5.6	64	8,393	91-111	452	5
281	2.00	3132	5.1	59	6,149	89-109	496	1.72
307	7	3232	4.68	54	7,990	91-111	541	6
387	8	3232	3.71	43	7,497	91-111	682	7

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
2.2 kW - 50 Hz		LSSES 100 L IFT/IE2 - LSES 100 LR IFT/IE3 LS 100 L FFB2 IFT/NIE - LSES 100 LR FFB2 IFT/IE3					3.83 kW - 87 Hz*	
0.61	0.85	3935	2,330	31,553	17,809	129		
0.68	0.94	3935	2,100	28,416	33,506	129		
0.75	1.04	3935	1,900	25,726	44,871	129		
0.82	1.13	3935	1,750	23,703	52,315	129		
0.95	1.31	3935	1,510	20,372	62,827	129		
1.06	0.81	3835	1,350	18,290	38,905	129		
1.02	1.41	3935	1,400	18,983	66,662	129		
1.18	0.90	3835	1,210	16,439	40,791	129		
1.17	1.61	3935	1,230	16,623	72,587	129		
1.34	1.02	3835	1,070	14,471	42,774	129		
1.32	1.82	3935	1,090	14,692	76,981	129		
1.49	1.13	3835	962	13,030	44,212	129		
1.48	2.04	3935	968	13,083	80,405	129		
1.69	1.28	3835	848	11,481	45,743	129		
1.66	2.28	3935	867	11,721	83,178	129		
1.76	0.79	3735	815	11,034	22,627	129		
1.81	1.37	3835	793	10,744	46,466	129		
1.93	2.67	3935	742	10,031	86,515	129		
1.98	0.89	3735	724	9,808	25,359	129		
2.09	1.58	3835	688	9,321	47,854	129		
2.01	2.77	3935	713	9,647	87,264	129		
2.20	0.99	3735	651	8,815	27,561	129		
2.38	1.80	3835	604	8,178	48,960	129		
2.30	3.17	3935	625	8,447	89,590	129		
2.50	1.13	3735	573	7,760	29,894	129		
2.69	2.02	3835	534	7,239	49,863	129		
2.60	3.58	3935	552	7,466	91,493	129		
2.78	1.25	3735	516	6,987	31,598	129		
3.06	2.31	3835	469	6,351	50,711	129		
2.92	4	3935	492	6,648	93,089	129		
3.16	1.42	3735	455	6,156	33,422	129		
3.39	2.55	3835	424	5,736	51,296	129		
3.26	4	3935	441	5,956	94,453	129		
3.63	0.80	3635	395	5,344	21,970	129		
3.37	1.52	3735	425	5,761	34,288	129		
3.83	2.89	3835	375	5,075	51,922	129		
3.66	4.96	3935	392	5,303	95,756	129		
4.18	0.93	3635	343	4,635	23,847	129		
3.89	1.75	3735	369	4,998	35,957	129		
4.08	3.08	3835	351	4,758	52,221	129		
4.28	6	3935	336	4,538	97,304	129		
4.24	1.04	3635	339	4,144	25,152	129		
4.35	1.89	3735	330	4,468	37,115	129		
4.83	3.64	3835	297	4,027	52,910	129		
4.89	1.18	3635	294	3,647	26,471	129		
4.96	2.15	3735	289	3,920	38,309	129		
5.16	3.92	3835	278	3,767	53,154	129		
6.12	0.80	3535	235	3,207	12,592	129	10.6	0.81
5.57	1.31	3635	258	3,284	27,439	129		
5.49	2.38	3735	261	3,540	39,133	129		
5.50	4	3835	261	3,531	53,375	129		
6.90	0.91	3535	208	2,844	13,881	129	12.0	0.91
6.16	1.49	3635	233	2,893	28,479	129		
6.20	2.69	3735	231	3,133	40,019	129		
6.50	5	3835	221	2,989	53,882	129		
7.81	1.03	3535	184	2,513	15,050	129	13.6	1.03
6.96	1.59	3635	206	2,707	28,974	129		
6.62	2.87	3735	217	2,937	40,443	129		
7.39	6	3835	194	2,629	54,217	129		
8.23	1.08	3535	174	2,384	15,503	129	14.3	1.09
7.45	1.83	3635	193	2,348	29,930	129		
7.82	3.40	3735	184	2,486	41,421	129		
8.40	6	3835	171	2,314	54,510	129		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
2.2 kW - 50 Hz		LSSES 100 L IFT/IE2 - LSES 100 LR IFT/IE3 LS 100 L FFB2 IFT/NIE - LSES 100 LR FFB2 IFT/IE3					3.83 kW - 87 Hz*	
9.04	1.21	3533	159	2,210	16,114	99-119	15.7	1.20
9.15	1.97	3633	157	2,183	30,372	101-121		
9.47	4	3733	152	2,107	42,240	103-123		
10.7	1.43	3533	134	1,864	17,322	99-119	18.6	1.41
10.7	2.30	3633	135	1,873	31,196	101-121		
10.6	4	3733	135	1,875	42,740	103-123		
11.6	0.94	3433	124	1,730	18,155	97-117	20.1	0.93
11.9	1.58	3533	121	1,679	17,967	99-119	20.7	1.56
11.6	2.50	3633	124	1,722	31,600	101-121		
11.7	5	3733	123	1,710	43,096	103-123		
13.3	1.07	3433	108	1,503	18,419	97-117	23.1	1.07
13.1	1.74	3533	109	1,520	18,519	99-119	22.8	1.72
13.3	2.87	3633	108	1,500	32,192	101-121		
13.2	5.53	3733	109	1,512	43,524	103-123		
15.0	1.21	3433	95.4	1,330	18,230	97-117	26.2	1.21
14.3	1.88	3533	101	1,400	18,932	99-119	24.8	1.86
15.1	3.25	3633	95.1	1,323	32,665	101-121		
14.6	6	3733	98.0	1,362	43,847	103-123		
16.4	1.32	3433	87.7	1,222	18,068	97-117	28.4	1.30
16.6	2.18	3533	86.5	1,204	19,613	99-119	28.8	2.15
16.8	3.62	3633	85.3	1,188	33,028	101-121		
16.4	7	3733	87.4	1,215	44,164	103-123		
18.5	1.49	3433	77.5	1,080	17,788	97-117	32.2	1.44
17.8	2.34	3533	80.6	1,122	19,895	99-119	31.0	2.3
18.9	4	3633	75.9	1,057	33,376	101-121		
17.9	7	3733	80.4	1,117	44,375	103-123		
21.2	0.85	3333	67.8	945	7,785	95-115	36.8	0.85
20.8	1.66	3433	69	962	17,490	97-117	36.1	1.58
20.3	2.65	3533	70.6	982	20,375	99-119	35.4	2.61
20.6	4	3633	69.6	969	33,613	101-121		
20.9	7	3733	68.8	956	44,720	103-123		
23.5	0.94	3333	61	851	8,313	95-115	40.9	0.94
23.2	1.85	3433	61.9	863	17,184	97-117	40.3	1.70
23.0	2.99	3533	62.4	868	20,767	99-119	40.0	2.94
23.9	5	3633	60.1	837	33,964	101-121		
22.9	8	3733	62.8	872	44,901	103-123		
26.7	1.07	3333	53.8	750	8,866	95-115	46.4	1.06
25.2	2.01	3433	57	795	16,935	97-117	43.7	1.80
25.8	3.34	3533	55.5	773	21,093	99-119	44.9	3.28
26.4	6	3633	54.4	757	34,179	101-121		
25.9	9	3733	55.5	771	45,119	103-123		
28.5	1.14	3333	50.3	702	9,124	95-115	49.6	1.13
28.3	2.25	3433	50.6	706	16,560	97-117	49.3	1.96
28.8	4	3533	49.8	693	21,368	99-119	50.1	3.65
29.6	6	3633	48.5	675	34,398	101-121		
28.7	9	3733	50	695	45,283	103-123		
32.9	1.31	3333	43.7	609	9,614	95-115	57.1	1.30
32.5	2.51	3433	44.1	615	16,100	97-117	56.6	2.16
33.7	4	3533	42.6	593	21,710	99-119	58.6	4
33.0	7	3633	43.5	606	34,583	101-121		
32.2	10	3733	44.6	620	45,445	103-123		
36.3	0.81	3233	39.5	552	6,350	93-113	63.1	0.79
37.5	1.49	3333	38.3	534	9,999	95-115	65.1	1.44
36.0	2.70	3433	39.9	556	15,759	97-117	62.5	2.32
37.5	5	3533	38.2	532	21,917	99-119	65.2	5
37.0	7	3633	38.7	539	34,761	101-121		
35.0	11	3733	41	570	45,552	103-123		
41.2	0.91	3233	34.8	485	6,388	93-113	71.7	0.88
41.5	1.64	3333	34.6	482	10,261	95-115	72.1	1.57
41.3	2.99	3433	34.8	485	15,279	97-117	71.7	2.55
42.2	5	3533	34	474	22,115	99-119	73.3	5
40.4	8	3633	35.5	494	34,882	101-121		

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
2.2 kW - 50 Hz		LSSES 100 L IFT/IE2 - LSSES 100 LR IFT/IE3 LS 100 L FFB2 IFT/NIE - LSSES 100 LR FFB2 IFT/IE3					3.83 kW - 87 Hz*	
46.7	1.03	3233	30.8	429	6,387	93-113	81.1	0.96
46.9	1.85	3333	30.6	427	10,539	95-115	81.5	1.72
46.2	3.11	3433	31	433	14,876	97-117	80.4	2.67
47.1	6	3533	30.5	425	22,283	99-119	81.8	6
46.8	9	3633	30.7	427	35,061	101-121		
52.6	1.16	3233	27.3	380	6,355	93-113	91.5	1.05
50.0	1.97	3333	28.7	400	10,650	95-115	86.9	1.80
50.3	3.43	3433	28.6	398	14,578	97-117	87.3	2.93
51.7	10	3633	27.7	386	35,171	101-121		
55.1	0.98	3232	26	367	7,582	91-111	95.8	0.99
59.6	1.31	3233	24.1	336	6,300	93-113	103	1.14
59.1	2.32	3333	24.3	339	10,970	95-115	103	2.02
58.0	3.79	3433	24.8	345	14,069	97-117	101	3.24
55.0	6.71	3533	26.1	363	22,492	99-119	95.6	7
64.6	1.15	3232	22.2	313	7,740	91-111	112	1.16
62.8	1.37	3233	22.9	319	6,269	93-113	109	1.18
61.7	2.15	3333	23.3	324	11,039	95-115	107	2.09
67.3	4	3433	21.3	297	13,537	97-117	117	3.48
72.7	1.30	3232	19.7	278	7,837	91-111	123	1.28
70.5	1.49	3233	20.4	284	6,192	93-113	126	1.30
68.3	2.37	3333	21	293	11,098	95-115	119	2.27
70.7	2.67	3333	20.3	283	11,005	95-115	123	2.29
71.6	4	3433	20.1	280	13,319	97-117	124	3.75
80.9	1.44	3232	17.7	250	7,916	91-111	141	1.45
77.1	2.67	3333	18.6	259	10,773	95-115	134	2.50
82.0	5	3433	17.5	244	12,840	97-117	142	3.99
79.4	9	3633	18.1	252	35,531	101-121		
89.0	0.79	3132	16.1	227	5,511	89-109		
91.9	1.64	3232	15.6	220	8,002	91-111	160	1.65
89.0	1.77	3233	16.1	225	5,989	93-113	155	1.51
89.2	3.16	3333	16.1	224	10,393	95-115	155	2.70
92.5	5	3433	15.5	216	12,423	97-117	161	4
91.8	9	3633	15.6	218	35,622	101-121		
100	0.86	3132	14.3	202	5,600	89-109		
102	1.82	3232	14.1	198	8,064	91-111	177	1.83
97.2	3.34	3333	14.8	206	10,168	95-115	169	2.94
94.6	5	3433	15.2	212	12,348	97-117	164	4
102	10	3633	14.1	197	35,678	101-121		
115	0.94	3132	12.5	176	5,698	89-109	200	0.80
116	2.07	3232	12.4	175	8,129	91-111	201	2.08
116	3.87	3333	12.3	172	9,694	95-115	202	3.33
117	6	3433	12.3	171	11,637	97-117	203	5
130	1.02	3132	11	155	5,777	89-109	227	0.87
124	2.21	3232	11.6	163	8,163	91-111	215	2.22
148	1.10	3132	9.72	137	5,846	89-109	257	0.94
143	2.54	3232	10.1	142	8,223	91-111	248	2.56
147	5	3333	9.78	136	9,103	95-115	255	3.92
151	7	3433	9.51	133	10,800	97-117	262	6
166	1.19	3132	8.62	122	5,906	89-109	289	1.02
163	2.90	3232	8.83	124	8,271	91-111	283	2.92
188	1.29	3132	7.62	107	5,961	89-109	327	1
180	3.21	3232	7.97	112	8,305	91-111	313	3
199	1.33	3132	7.23	102	5,983	89-109	345	1
203	3.63	3232	7.05	99	8,342	91-111	354	3.63
223	1.43	3132	6.43	91	6,027	89-109	388	1.22
217	3.87	3232	6.61	93	8,359	91-111	377	3.79
256	5	3232	5.6	79	8,305	91-111	446	4
281	1.64	3132	5.1	72	6,101	89-109	489	1
307	5	3232	4.68	66	7,920	91-111	533	5
387	6	3232	3.71	52	7,444	91-111	673	5

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
3 kW - 50 Hz		LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3					5.22 kW - 87 Hz*	
0.82	0.83	3935	1,750	32,394	13,107	129		
0.95	0.96	3935	1,510	27,841	36,088	129		
1.02	1.03	3935	1,400	25,943	44,019	129		
1.17	1.18	3935	1,230	22,718	55,635	129		
1.32	1.33	3935	1,090	20,079	63,659	129		
1.49	0.83	3835	962	17,799	39,408	129		
1.48	1.50	3935	968	17,880	69,518	129		
1.69	0.94	3835	848	15,683	41,556	129		
1.66	1.67	3935	867	16,019	74,000	129		
1.81	1.00	3835	793	14,676	42,569	129		
1.93	1.95	3935	742	13,709	79,094	129		
2.09	1.16	3835	688	12,733	44,507	129		
2.01	2.03	3935	713	13,184	80,196	129		
2.38	1.32	3835	604	11,171	46,047	129		
2.30	2.32	3935	625	11,544	83,532	129		
2.50	0.83	3735	573	10,601	23,594	129		
2.69	1.48	3835	534	9,888	47,302	129		
2.60	2.62	3935	552	10,203	86,179	129		
2.78	0.92	3735	516	9,544	25,945	129		
3.06	1.69	3835	469	8,675	48,479	129		
2.92	2.94	3935	492	9,086	88,353	129		
3.16	1.04	3735	455	8,410	28,459	129		
3.39	1.87	3835	424	7,836	49,289	129		
3.26	3.28	3935	441	8,140	90,185	129		
3.37	1.11	3735	425	7,870	29,651	129		
3.83	2.11	3835	375	6,933	50,155	129		
3.66	3.63	3935	392	7,247	91,920	129		
3.89	1.28	3735	369	6,828	31,948	129		
4.08	2.25	3835	351	6,500	50,569	129		
4.28	4	3935	336	6,202	93,967	129		
4.35	1.38	3735	330	6,103	33,540	129		
4.83	2.66	3835	297	5,501	51,519	129		
4.89	0.86	3635	294	4,983	22,924	129		
4.96	1.58	3735	289	5,354	35,179	129		
5.16	2.87	3835	278	5,145	51,856	129		
5.57	0.96	3635	258	4,487	24,242	129		
5.49	1.75	3735	261	4,836	36,311	129		
5.50	3.06	3835	261	4,824	52,160	129		
6.16	1.09	3635	233	3,953	25,659	129		
6.20	1.97	3735	231	4,279	37,526	129		
6.50	3.62	3835	221	4,083	52,858	129		
6.96	1.16	3635	206	3,699	26,334	129		
6.62	2.10	3735	217	4,012	38,109	129		
7.39	4	3835	194	3,591	53,319	129		
8.23	0.79	3535	174	3,256	12,416	129	14.3	0.79
7.45	1.34	3635	193	3,209	27,638	129		
7.82	2.49	3735	184	3,395	39,449	129		
8.40	5	3835	171	3,162	53,720	129		
9.04	0.88	3533	159	3,021	13,252	99-119	15.7	0.87
9.15	1.44	3633	157	2,984	28,237	101-121		
9.47	2.92	3733	152	2,881	40,563	103-123		
10.7	1.04	3533	134	2,549	14,923	99-119	18.6	1.03
10.7	1.68	3633	135	2,561	29,362	101-121		
10.6	3.28	3733	135	2,564	41,250	103-123		
11.9	1.16	3533	121	2,295	15,814	99-119	20.7	1.14
11.6	1.83	3633	124	2,354	29,913	101-121		
11.7	3.59	3733	123	2,339	41,737	103-123		

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
3 kW - 50 Hz		LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3					5.22 kW - 87 Hz*	
13.3	0.79	3433	108	2,053	15,709	97-117	23.1	0.78
13.1	1.27	3533	109	2,078	16,575	99-119	22.8	1.25
13.3	2.10	3633	108	2,051	30,721	101-121		
13.2	4	3733	109	2,068	42,324	103-123		
15.0	0.89	3433	95.4	1,817	15,834	97-117	26.2	0.88
14.3	1.38	3533	101	1,915	17,146	99-119	24.8	1.36
15.1	2.38	3633	95.1	1,809	31,368	101-121		
14.6	4	3733	98	1,863	42,766	103-123		
16.4	0.96	3433	87.7	1,670	15,866	97-117	28.4	0.95
16.6	1.60	3533	86.5	1,646	18,083	99-119	28.8	1.57
16.8	2.65	3633	85.3	1,624	31,863	101-121		
16.4	5	3733	87.4	1,661	43,202	103-123		
18.5	1.09	3433	77.5	1,476	15,840	97-117	32.2	1.05
18.9	2.98	3633	75.9	1,445	32,339	101-121		
17.8	1.71	3533	80.6	1,533	18,472	99-119	31.0	1.68
17.9	5	3733	80.4	1,528	43,490	103-123		
20.8	1.22	3433	69	1,315	15,759	97-117	36.1	1.15
20.3	1.94	3533	70.6	1,343	19,132	99-119	35.4	1.90
20.6	3.25	3633	69.6	1,324	32,663	101-121		
20.9	5	3733	68.8	1,308	43,963	103-123		
23.2	1.35	3433	61.9	1,180	15,626	97-117	40.3	1.24
23.0	2.19	3533	62.4	1,187	19,671	99-119	40.0	2.14
23.9	3.76	3633	60.1	1,145	33,142	101-121		
22.9	6	3733	62.8	1,193	44,211	103-123		
26.7	0.78	3333	53.8	1,025	7,329	95-115		
25.2	1.47	3433	57	1,086	15,505	97-117	43.7	1.32
25.8	2.45	3533	55.5	1,057	20,119	99-119	44.9	2.39
26.4	4	3633	54.4	1,035	33,436	101-121		
25.9	6	3733	55.5	1,055	44,509	103-123		
28.5	0.83	3333	50.3	959	7,706	95-115	49.6	0.82
28.3	1.65	3433	50.6	965	15,288	97-117	49.3	1.43
28.8	2.72	3533	49.8	947	20,497	99-119	50.1	2.66
29.6	4	3633	48.5	923	33,736	101-121		
28.7	7	3733	50	950	44,734	103-123		
32.9	0.96	3333	43.7	832	8,418	95-115	57.1	0.94
32.5	1.83	3433	44.1	840	14,993	97-117	56.6	1.57
33.7	3.15	3533	42.6	810	20,965	99-119	58.6	3.08
33.0	5	3633	43.5	828	33,988	101-121		
32.2	7	3733	44.6	847	44,955	103-123		
37.5	1.09	3333	38.3	730	8,973	95-115	65.1	1.05
36.0	1.98	3433	39.9	760	14,758	97-117	62.5	1.69
37.5	3.41	3533	38.2	727	21,249	99-119	65.2	3.33
37.0	5	3633	38.7	737	34,232	101-121		
35.0	8	3733	41	779	45,101	103-123		
41.5	1.20	3333	34.6	659	9,349	95-115	72.1	1.14
41.3	2.19	3433	34.8	662	14,405	97-117	71.7	1.86
42.2	3.81	3533	34	648	21,521	99-119	73.3	3.72
40.4	6	3633	35.5	675	34,397	101-121		
46.9	1.35	3333	30.6	583	9,746	95-115	81.5	1.25
46.2	2.27	3433	31	591	14,095	97-117	80.4	1.95
47.1	4	3533	30.5	580	21,752	99-119	81.8	4
46.8	7	3633	30.7	584	34,642	101-121		
52.6	0.85	3233	27.3	520	7,180	93-113		
50.0	1.44	3333	28.7	547	9,934	95-115	86.9	1.31
50.3	2.51	3433	28.6	544	13,860	97-117	87.3	2.13
51.7	7	3633	27.7	528	34,792	101-121		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
3 kW - 50 Hz		LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3					5.22 kW - 87 Hz*	
59.6	0.96	3233	24.1	459	5,430	93-113	103	0.83
59.1	1.69	3333	24.3	463	10,359	95-115	103	1.47
58.0	2.77	3433	24.8	472	13,449	97-117	101	2.36
55.0	5	3533	26.1	497	22,037	99-119	95.6	5
64.6	0.84	3232	22.2	428	7,397	91-111	112	0.85
62.8	1.00	3233	22.9	436	5,440	93-113	109	0.86
61.7	1.57	3333	23.3	443	10,456	95-115	107	1.52
67.3	2.98	3433	21.3	406	13,000	97-117	117	2.54
72.7	0.95	3232	19.7	380	7,542	91-111	126	0.95
70.5	1.09	3233	20.4	388	5,455	93-113	123	0.94
70.7	1.95	3333	20.3	387	10,419	95-115	123	1.67
71.6	3.21	3433	20.1	382	12,816	97-117	124	2.73
80.9	1.06	3232	17.7	342	7,655	91-111	141	1.06
77.1	1.96	3333	18.6	354	10,244	95-115	134	1.82
82.0	3.42	3433	17.5	334	12,400	97-117	142	2.91
79.4	6	3633	18.1	344	35,283	101-121		
91.9	1.20	3232	15.6	301	7,771	91-111	160	1.20
89.0	1.30	3233	16.1	307	5,407	93-113	155	1.10
89.2	2.31	3333	16.1	307	9,930	95-115	155	1.97
92.5	3.85	3433	15.5	296	12,033	97-117	161	3.27
91.8	7	3633	15.6	298	35,408	101-121		
102	1.33	3232	14.1	271	7,857	91-111	177	1.34
97.2	2.45	3333	14.8	281	9,744	95-115	169	2.14
94.6	3.78	3433	15.2	289	11,968	97-117	164	3.22
102	7	3633	14.1	269	35,485	101-121		
116	1.51	3232	12.4	239	7,948	91-111	201	1.52
116	2.83	3333	12.3	235	9,343	95-115	202	2.43
117	4	3433	12.3	234	11,325	97-117	203	3.7
124	1.62	3232	11.6	223	7,990	91-111	215	1.62
148	0.81	3132	9.72	187	5,657	89-109		
143	1.86	3232	10.1	194	8,075	91-111	248	1.87
147	3.36	3333	9.78	186	8,819	95-115	255	2.86
151	5	3433	9.51	181	10,561	97-117	262	4
166	0.87	3132	8.62	166	5,736	89-109		
163	2.12	3232	8.83	170	8,141	91-111	283	2.13
188	0.95	3132	7.62	147	5,809	89-109	327	0.81
180	2.35	3232	7.97	154	8,189	91-111	313	2.36
199	0.98	3132	7.23	139	5,838	89-109	345	0.83
203	2.66	3232	7.05	136	8,240	91-111	354	2.65
223	1.05	3132	6.43	124	5,897	89-109	388	0.89
217	2.83	3232	6.61	127	8,263	91-111	377	2.77
256	3.35	3232	5.6	108	8,136	91-111	446	3.13
281	1.20	3132	5.1	98	5,997	89-109	489	1.02
307	3.98	3232	4.68	90	7,780	91-111	533	3.43
387	5	3232	3.71	71	7,333	91-111	673	3.92

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
4 kW - 50 Hz		LSES 112 MU IFT/IE2 - LSES 112 MU IFT/IE3 LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3					6.96 kW - 87 Hz*	
1.16	0.88	3935	1,230	30,443	23,688	129		
1.32	0.99	3935	1,090	26,907	40,102	129		
1.48	1.12	3935	968	23,960	51,420	129		
1.65	1.25	3935	867	21,466	59,590	129		
1.93	1.46	3935	742	18,371	68,267	129		
2.08	0.86	3835	688	17,057	40,164	129		
2.00	1.51	3935	713	17,666	70,052	129		
2.37	0.98	3835	604	14,965	42,279	129		
2.29	1.73	3935	625	15,470	75,253	129		
2.68	1.11	3835	534	13,246	43,997	129		
2.59	1.96	3935	552	13,673	79,171	129		
3.05	1.26	3835	469	11,622	45,604	129		
2.91	2.2	3935	492	12,176	82,264	129		
3.38	1.39	3835	424	10,497	46,708	129		
3.25	2.45	3935	441	10,908	84,795	129		
3.36	0.83	3735	425	10,543	23,723	129		
3.82	1.58	3835	375	9,288	47,886	129		
3.65	2.71	3935	392	9,711	87,139	129		
3.87	0.96	3735	369	9,147	26,827	129		
4.07	1.68	3835	351	8,707	48,449	129		
4.26	3.17	3935	336	8,311	89,854	129		
4.34	1.03	3735	330	8,176	28,977	129		
4.81	1.99	3835	297	7,369	49,737	129		
4.70	3.50	3935	304	7,528	91,373	129		
4.94	1.18	3735	289	7,173	31,189	129		
5.14	2.14	3835	278	6,893	50,194	129		
5.33	3.97	3935	268	6,639	93,108	129		
5.47	1.30	3735	261	6,479	32,715	129		
5.48	2.29	3835	261	6,462	50,605	129		
5.95	4	3935	240	5,951	94,464	129		
6.14	0.81	3635	233	5,297	22,094	129		
6.18	1.47	3735	231	5,732	34,352	129		
6.48	2.70	3835	221	5,469	51,549	129		
6.68	5	3935	214	5,297	95,768	129		
6.94	0.87	3635	206	4,956	22,996	129		
6.60	1.57	3735	217	5,374	35,136	129		
7.37	3.06	3835	194	4,810	52,173	129		
7.48	6	3935	191	4,737	96,900	129		
7.42	1.00	3635	193	4,300	24,739	129		
7.79	1.86	3735	184	4,548	36,940	129		
8.37	3.47	3835	171	4,235	52,714	129		
9.12	1.08	3633	157	3,999	25,535	101-121		
9.43	2.18	3733	152	3,863	38,432	103-123		
9.31	3.78	3833	154	3,911	53,019	105-125		
10.6	1.25	3633	135	3,433	27,042	101-121		
10.6	2.44	3733	135	3,438	39,356	103-123		
10.4	4	3833	137	3,500	53,404	105-125		
11.9	0.86	3533	121	3,077	13,053	99-119	20.7	0.85
11.6	1.36	3633	124	3,156	27,779	101-121		
11.6	2.68	3733	123	3,136	40,011	103-123		
11.1	5	3833	128	3,270	53,619	105-125		
13.1	0.95	3533	109	2,785	14,086	99-119	22.9	0.93
13.3	1.56	3633	108	2,750	28,860	101-121		
13.2	3.02	3733	109	2,773	40,799	103-123		
12.4	5	3833	115	2,928	53,938	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
4 kW - 50 Hz		LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3					6.96 kW - 87 Hz*	
14.2	1.03	3533	101	2,566	14,859	99-119	24.9	1.01
15.0	1.77	3633	95.1	2,425	29,726	101-121		
14.6	3.34	3733	98	2,498	41,394	103-123		
14.0	6	3833	102	2,594	54,250	105-125		
16.5	1.19	3533	86.5	2,206	16,127	99-119	28.9	1.17
16.8	1.98	3633	85.3	2,176	30,389	101-121		
16.4	3.74	3733	87.4	2,227	41,979	103-123		
15.7	6	3833	90.8	2,314	54,510	105-125		
18.5	0.81	3433	77.5	1,977	17,799	97-117		
17.8	1.27	3533	80.6	2,055	16,653	99-119	31.1	1.25
18.8	2.22	3633	75.9	1,937	31,026	101-121		
17.8	4	3733	80.4	2,048	42,366	103-123		
17.8	7	3833	80.5	2,051	54,754	105-125		
20.7	0.91	3433	69	1,762	13,533	97-117	36.3	0.86
20.3	1.45	3533	70.6	1,800	17,545	99-119	35.5	1.42
20.6	2.42	3633	69.6	1,775	31,459	101-121		
20.7	5	3733	68.9	1,757	42,995	103-123		
19.8	8	3833	72.2	1,838	54,952	105-125		
23.1	1.01	3433	61.9	1,581	13,630	97-117	40.4	0.92
22.9	1.63	3533	62.4	1,591	18,272	99-119	40.1	1.59
23.8	2.80	3633	60.1	1,534	32,101	101-121		
22.6	5	3733	63.2	1,611	43,309	103-123		
22.2	9	3833	64.3	1,639	55,136	105-125		
25.1	1.10	3433	57	1,455	13,660	97-117	43.9	0.98
25.8	1.82	3533	55.5	1,416	18,876	99-119	45.1	1.78
26.3	3.10	3633	54.4	1,387	32,495	101-121		
25.6	6	3733	55.9	1,425	43,711	103-123		
25.1	9	3833	57	1,452	55,308	105-125		
28.2	1.23	3433	50.6	1,292	13,650	97-117	49.4	1.06
28.7	2.03	3533	49.8	1,269	19,386	99-119	50.3	1.98
29.9	3.52	3633	47.8	1,220	32,940	101-121		
30.0	6	3733	47.7	1,217	44,160	103-123		
28.5	10	3833	50.1	1,277	55,470	105-125		
32.4	1.37	3433	44.1	1,126	13,567	97-117	56.7	1.17
33.6	2.35	3533	42.6	1,086	20,017	99-119	58.8	2.29
32.4	3.82	3633	44.1	1,125	33,195	101-121		
33.7	7	3733	42.5	1,082	44,449	103-123		
32.4	11	3833	44.2	1,125	55,611	105-125		
37.3	0.81	3333	38.3	978	7,596	95-115	65.3	0.78
35.8	1.48	3433	39.9	1,018	13,464	97-117	62.7	1.26
37.1	2.59	3533	38.6	984	20,369	99-119	64.9	2.48
36.5	4	3633	39.2	1,000	33,529	101-121		
34.9	6	3733	41	1,045	44,530	103-123		
35.3	14	3833	40.6	1,033	55,695	105-125		
41.3	0.90	3333	34.6	883	8,131	95-115	72.3	0.85
41.1	1.63	3433	34.8	888	13,278	97-117	72.0	1.38
42.1	2.92	3533	34	868	20,768	99-119		
40.9	5	3633	35	893	33,816	101-121		
40.7	6	3733	35.2	896	44,850	103-123		
39.3	15	3833	36.4	926	55,794	105-125		
46.7	1.01	3333	30.6	782	8,692	95-115	81.7	0.93
45.4	1.75	3433	31.5	804	13,113	97-117	79.5	1.48
46.9	3.24	3533	30.49	778	21,076	99-119	82.1	2.98
45.6	5	3633	31.4	800	34,064	101-121		
44.3	7	3733	32.2	822	45,010	103-123		
44.1	17	3833	32.4	826	55,886	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
4 kW - 50 Hz		LSES 112 MU IFT/IE2 - LSES 112 MU IFT/IE3 LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3					6.96 kW - 87 Hz*	
49.8	1.08	3333	28.7	733	8,957	95-115	87.2	0.97
50.1	1.87	3433	28.6	729	12,935	97-117	87.6	1.59
52.7	3.62	3533	27.1	692	21,369	99-119	92.2	3.23
50.0	6	3633	28.6	730	34,252	101-121		
50.1	7	3733	28.5	727	45,214	103-123		
49.8	17	3833	28.7	732	55,972	105-125		
58.9	1.26	3333	24.3	620	9,554	95-115	103	1.10
57.8	2.07	3433	24.8	632	12,642	97-117	101	1.75
58.9	4	3533	24.3	619	21,420	99-119	103	3.5
57.2	7	3633	25	637	34,498	101-121		
58.7	8	3733	24.4	621	45,442	103-123		
56.6	20	3833	25.3	643	56,054	105-125		
61.4	1.17	3333	23.3	594	9,688	95-115	107	1.13
67.1	2.23	3433	21.3	544	12,306	97-117	117	1.88
60.5	4	3533	23.6	603	21,275	99-119	106	3.84
63.6	6	3633	22.5	574	34,669	101-121		
66.0	9	3733	21.7	552	45,590	103-123		
64.3	21	3833	22.2	567	56,124	105-125		
70.5	1.46	3333	20.3	518	9,669	95-115	123	1.24
74.1	2.39	3433	19.3	493	12,066	97-117	130	2.02
68.6	5	3533	20.8	532	20,574	99-119	120	4
71.5	7	3633	20	510	34,839	101-121		
72.9	24	3833	19.6	500	56,186	105-125		
80.6	0.79	3232	17.7	458	7,300	91-111	141	0.79
76.9	1.46	3333	18.6	475	9,550	95-115	135	1.35
81.7	2.56	3433	17.5	447	11,829	97-117	143	2.16
76.5	5	3533	18.7	477	19,970	99-119	134	5
79.8	6	3733	17.9	457	45,795	103-123		
80.1	8	3633	17.9	455	34,986	101-121		
80.4	25	3833	17.8	453	56,228	105-125		
91.6	0.90	3232	15.6	403	7,472	91-111	160	0.9
88.9	1.73	3333	16.1	411	9,332	95-115	155	1.46
92.2	2.87	3433	15.5	396	11,525	97-117	161	2.43
86.0	6	3533	16.6	424	19,342	99-119	150	5
87.0	7	3733	16.4	419	45,876	103-123		
89.4	8	3633	16	408	35,112	101-121		
92.1	28	3833	15.5	396	56,281	105-125		
102	0.99	3232	14.1	363	7,593	91-111	178	0.99
96.9	1.83	3333	14.8	377	9,191	95-115	170	1.59
94.2	2.82	3433	15.2	387	11,470	97-117	165	2.39
96.1	6	3533	14.9	379	18,740	99-119	168	5
98.4	7	3733	14.5	370	45,980	103-123		
98.0	8	3633	14.6	372	35,208	101-121		
103	30	3833	13.9	354	56,320	105-125		
115	1.13	3232	12.4	320	7,715	91-111	202	1.13
116	2.11	3333	12.3	315	8,880	95-115	203	1.81
116	3.27	3433	12.3	314	10,920	97-117	204	2.77
116	7	3533	12.3	313	17,740	99-119	204	6
115	8	3733	12.4	316	46,096	103-123		
112	9	3633	12.7	325	35,334	101-121		
116	33	3833	12.4	315	56,355	105-125		
123	1.21	3232	11.6	299	7,774	91-111	216	1.21
125	6	3633	11.5	292	35,422	101-121		
130	9	3733	11	281	46,171	103-123		
129	34	3833	11.1	283	56,384	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
4 kW - 50 Hz		LSES 112 MU IFT/IE2 - LSES 112 MU IFT/IE3 LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3					6.96 kW - 87 Hz*	
142	1.39	3232	10.1	260	7,885	91-111	249	1.39
146	2.51	3333	9.78	250	8,451	95-115	256	2.12
150	3.92	3433	9.51	243	10,246	97-117	263	3.32
151	9	3533	9.47	242	16,440	99-119	264	7
140	7	3633	10.2	260	35,509	101-121		
145	24	3833	9.86	251	56,414	105-125		
162	1.58	3232	8.83	228	7,976	91-111	283	1.58
157	8	3633	9.1	232	35,583	101-121		
160	25	3833	8.94	228	56,435	105-125		
179	1.75	3232	7.97	206	8,038	91-111	314	1.75
175	8	3633	8.15	208	35,648	101-121		
183	28	3833	7.8	199	56,462	105-125		
203	1.98	3232	7.05	182	8,107	91-111	355	1.97
192	9	3633	7.43	190	35,697	101-121		
205	30	3833	6.98	178	56,481	105-125		
216	2.11	3232	6.61	171	8,138	91-111	378	2.06
220	9	3633	6.5	166	35,761	101-121		
256	2.50	3232	5.6	144	7,909	91-111	447	2.32
306	2.97	3232	4.68	121	7,602	91-111	535	2.55
386	3.44	3232	3.71	96	7,195	91-111	675	2.91

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
5.5 kW - 50 Hz							9.57 kW - 87 Hz*	
		LSES 132 SU IFT/IE2 - LSES 132 SM IFT/IE3 LS 132 S FFB3 IFT/NIE - LSES 132 SM FFB4 IFT/IE3						
1.50	0.82	3935	968	32,529	12,334	129		
1.67	0.92	3935	867	29,143	30,113	129		
1.95	1.07	3935	742	24,941	47,867	129		
2.03	1.11	3935	713	23,985	51,332	129		
2.32	1.27	3935	625	21,003	60,984	129		
2.71	0.81	3835	534	17,979	39,223	129		
2.63	1.44	3935	552	18,563	67,768	129		
3.09	0.93	3835	469	15,774	41,464	129		
2.95	1.62	3935	492	16,530	72,807	129		
3.42	1.03	3835	424	14,248	42,998	129		
3.29	1.81	3935	441	14,810	76,723	129		
3.87	1.16	3835	375	12,606	44,632	129		
3.70	2.00	3935	392	13,185	80,194	129		
4.13	1.24	3835	351	11,818	45,410	129		
4.32	2.33	3935	336	11,283	84,052	129		
4.88	1.46	3835	297	10,003	47,191	129		
4.77	2.58	3935	304	10,220	86,146	129		
5.01	0.87	3735	289	9,736	25,519	129		
5.21	1.58	3835	278	9,356	47,820	129		
5.41	2.92	3935	268	9,013	88,494	129		
5.55	0.96	3735	261	8,794	27,610	129		
5.56	1.68	3835	261	8,771	48,387	129		
6.03	3.26	3935	240	8,079	90,303	129		
6.27	1.08	3735	231	7,781	29,849	129		
6.57	1.99	3835	221	7,423	49,686	129		
6.78	3.66	3935	214	7,192	92,028	129		
6.69	1.16	3735	217	7,294	30,921	129		
7.47	2.26	3835	194	6,529	50,542	129		
7.58	4	3935	191	6,431	93,517	129		
7.90	1.37	3735	184	6,173	33,385	129		
8.49	2.55	3835	171	5,749	51,284	129		
9.25	0.79	3633	157	5,431	21,700	101-121		
9.57	1.60	3733	152	5,247	35,414	103-123		
9.44	2.78	3833	154	5,312	51,698	105-125		
10.8	0.92	3633	135	4,662	23,778	101-121		
10.8	1.80	3733	135	4,670	36,675	103-123		
10.6	3.10	3833	137	4,755	52,224	105-125		
11.7	1.00	3633	124	4,285	24,776	101-121		
11.8	1.97	3733	123	4,259	37,569	103-123		
11.3	3.32	3833	128	4,442	52,519	105-125		
13.5	1.15	3633	108	3,734	26,242	101-121		
13.3	2.22	3733	109	3,766	38,644	103-123		
12.6	3.70	3833	115	3,978	52,956	105-125		
15.3	1.31	3633	95.1	3,293	27,415	101-121		
14.8	2.46	3733	98	3,392	39,455	103-123		
14.2	4	3833	102	3,523	53,382	105-125		
16.8	0.88	3533	86.5	2,995	13,290	99-119	29.1	0.85
17.0	1.46	3633	85.3	2,955	28,313	101-121		
16.6	2.75	3733	87.4	3,025	40,252	103-123		
16.0	5	3833	90.8	3,143	53,738	105-125		
18.0	0.94	3533	80.6	2,791	14,017	99-119	31.3	0.91
19.1	1.63	3633	75.9	2,631	29,177	101-121		
18.0	2.99	3733	80.4	2,782	40,779	103-123		
18.0	5	3833	80.5	2,786	54,071	105-125		
20.6	1.07	3533	70.6	2,444	15,248	99-119	35.7	1.04
20.8	1.78	3633	69.6	2,410	29,765	101-121		
21.0	3.47	3733	68.9	2,386	41,635	103-123		
20.1	6	3833	72.2	2,497	54,340	105-125		
23.3	1.20	3533	62.4	2,160	16,249	99-119	40.4	1.17
24.1	2.06	3633	60.1	2,083	30,636	101-121		
22.9	3.77	3733	63.2	2,189	42,063	103-123		
22.5	6	3833	64.3	2,226	54,592	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
5.5 kW - 50 Hz		LSES 132 SU IFT/IE2 - LSES 132 SM IFT/IE3 LS 132 S FFB3 IFT/NIE - LSES 132 SM FFB4 IFT/IE3					9.57 kW - 87 Hz*	
25.4	0.81	3433	57	1,976	15,264	97-117		
26.1	1.34	3533	55.5	1,923	17,081	99-119	45.3	1.30
26.7	2.28	3633	54.4	1,883	31,170	101-121		
25.9	4.25	3733	55.9	1,936	42,609	103-123		
25.4	6.88	3833	57	1,973	54,827	105-125		
28.6	0.91	3433	50.6	1,755	15,376	97-117		
29.2	1.49	3533	49.8	1,723	17,782	99-119	50.6	1.45
30.3	2.59	3633	47.8	1,657	31,773	101-121		
30.4	5	3733	47.7	1,653	43,220	103-123		
28.9	8	3833	50.1	1,735	55,047	105-125		
32.9	1.01	3433	44.1	1,528	11,525	97-117	57.1	0.86
34.1	1.73	3533	42.6	1,475	18,649	99-119	59.1	1.68
32.9	2.82	3633	44.1	1,527	32,120	101-121		
34.2	5	3733	42.5	1,470	43,614	103-123		
32.8	8	3833	44.2	1,528	55,239	105-125		
36.3	1.08	3433	39.9	1,383	11,614	97-117	63.1	0.92
37.6	1.90	3533	38.6	1,336	19,132	99-119	65.3	1.82
37.0	3.17	3633	39.2	1,358	32,573	101-121		
35.4	4	3733	41	1,419	43,724	103-123		
35.8	10	3833	40.6	1,400	55,353	105-125		
41.7	1.20	3433	34.8	1,205	11,664	97-117	72.4	1.01
42.6	2.15	3533	34	1,178	19,680	99-119	74.0	2.01
41.4	4	3633	35	1,212	32,962	101-121		
41.2	5	3733	35.2	1,217	44,159	103-123		
40.0	11	3833	36.4	1,254	55,488	105-125		
46.1	1.28	3433	31.5	1,091	11,646	97-117	80.0	1.08
47.6	2.38	3533	30.49	1,056	20,102	99-119	82.6	2.18
46.2	3.96	3633	31.4	1,086	33,299	101-121		
45.0	5	3733	32.2	1,116	44,376	103-123		
44.9	12	3833	32.4	1,118	55,614	105-125		
50.5	0.79	3333	28.7	995	7,500	95-115		
50.8	1.37	3433	28.6	990	11,600	97-117	88.2	1.16
53.4	2.66	3533	27.1	940	20,504	99-119	92.8	2.36
50.7	4	3633	28.6	991	33,554	101-121		
50.8	5	3733	28.5	987	44,654	103-123		
50.6	13	3833	28.7	991	55,731	105-125		
59.7	0.93	3333	24.3	842	8,338	95-115	104	0.80
58.6	1.52	3433	24.8	858	11,485	97-117	102	1.28
59.8	2.96	3533	24.3	841	20,528	99-119	104	2.56
58.0	5	3633	25	866	33,888	101-121		
59.5	6	3733	24.4	843	44,964	103-123		
57.6	15	3833	25.3	872	55,841	105-125		
62.3	0.86	3333	23.3	807	8,533	95-115	108	0.83
68.0	1.63	3433	21.3	739	11,303	97-117	118	1.38
61.3	2.96	3533	23.6	819	20,405	99-119	107	2.81
64.5	5	3633	22.5	779	34,119	101-121		
66.9	6	3733	21.7	750	45,165	103-123		
65.4	16	3833	22.2	768	55,937	105-125		
71.5	1.07	3333	20.3	703	8,588	95-115	124	0.91
75.2	1.75	3433	19.3	669	11,162	97-117	131	1.48
69.6	3.33	3533	20.8	722	19,803	99-119	121	3.11
72.5	5	3633	20	693	34,351	101-121		
74.1	18	3833	19.6	677	56,021	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
5.5 kW - 50 Hz		LSES 132 SU IFT/IE2 - LSES 132 SM IFT/IE3 LS 132 S FFB3 IFT/NIE - LSES 132 SM FFB4 IFT/IE3					9.57 kW - 87 Hz*	
78.0	1.07	3333	18.6	645	8,559	95-115	135	0.99
82.8	1.87	3433	17.5	607	11,004	97-117	144	2
77.6	3.70	3533	18.7	647	19,277	99-119	135	3.38
80.9	5	3733	17.9	620	45,443	103-123		
81.2	6	3633	17.9	618	34,550	101-121		
81.5	18	3833	17.8	616	56,079	105-125		
90.1	1.27	3333	16.1	558	8,470	95-115	156	1.07
93.5	2.11	3433	15.5	538	10,789	97-117	162	1.78
87.2	4	3533	16.6	576	18,719	99-119	151	3.67
88.2	5	3733	16.4	569	45,554	103-123		
90.7	6	3633	16	554	34,722	101-121		
93.4	21	3833	15.5	537	56,151	105-125		
98.2	1.34	3333	14.8	512	8,403	95-115	171	1.16
95.6	2.07	3433	15.2	526	10,749	97-117	166	2
97.5	5	3533	14.9	515	18,183	99-119	169	3.96
100	5	3733	14.5	503	45,695	103-123		
99.4	6	3633	14.6	505	34,852	101-121		
104	22	3833	13.9	480	56,203	105-125		
117	0.83	3232	12.4	434	7,371	91-111	203	0.83
118	1.55	3333	12.3	427	8,216	95-115	204	1.32
118	2.40	3433	12.3	426	10,338	97-117	205	2.03
118	5	3533	12.3	425	17,275	99-119	205	4.53
117	6	3733	12.4	430	45,853	103-123		
114	7	3633	12.7	442	35,023	101-121		
117	24	3833	12.4	428	56,252	105-125		
125	0.89	3232	11.6	406	7,457	91-111	217	0.88
127	5	3633	11.5	397	35,142	101-121		
131	6	3733	11	382	45,955	103-123		
130	25	3833	11.1	385	56,291	105-125		
144	1.02	3232	10.1	352	7,618	91-111	250	1.02
148	1.84	3333	9.78	339	7,923	95-115	257	1.55
152	2.87	3433	9.51	330	9,793	97-117	265	2.43
142	5	3633	10.2	353	35,260	101-121	266	5.44
153	6	3533	9.47	328	16,075	99-119		
149	29	3833	9.75	337	56,335	105-125		
164	1.17	3232	8.83	309	7,740	91-111	285	1.16
159	6	3633	9.1	315	35,361	101-121		
162	18	3833	8.94	309	56,360	105-125		
182	1.29	3232	7.97	279	7,825	91-111	316	1
178	6	3633	8.15	282	35,449	101-121		
186	21	3833	7.8	270	56,396	105-125		
206	1.46	3232	7.05	247	7,802	91-111	357	1.44
195	7	3633	7.43	258	35,515	101-121		
208	22	3833	6.98	241	56,423	105-125		
219	1.56	3232	6.61	232	7,724	91-111	381	1.51
223	7	3633	6.5	225	35,602	101-121		
233	24	3833	6.21	215	55,960	105-125		
259	2	3232	5.6	196	7,520	91-111	450	1.7
259	25	3833	5.59	193	54,245	105-125		
296	29	3833	4.9	169	52,175	105-125		
310	2.19	3232	4.68	164	7,277	91-111	539	1.87
391	2.52	3232	3.71	130	6,949	91-111	679	2.13

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
7.5 kW - 50 Hz		LS 132 M IFT/IE2 - LSES 132 MU IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 132 MU FFB4 IFT/IE3					13.1 kW - 87 Hz*	
1.95	0.79	3935	742	34,040	3,243	129		
2.03	0.82	3935	713	32,735	11,135	129		
2.32	0.93	3935	625	28,666	32,357	129		
2.63	1.06	3935	552	25,336	46,378	129		
2.95	1.19	3935	492	22,561	56,147	129		
3.29	1.32	3935	441	20,213	63,279	129		
3.70	1.46	3935	392	17,995	69,227	129		
4.32	1.71	3935	336	15,400	75,410	129		
4.77	1.89	3935	304	13,949	78,585	129		
5.41	2.14	3935	268	12,301	82,009	129		
6.03	2.39	3935	240	11,027	84,560	129		
6.78	2.68	3935	214	9,815	86,936	129		
7.58	3	3935	191	8,777	88,952	129		
9.57	1.18	3733	152	7,163	31,209	103-123		
9.44	2.04	3833	154	7,254	49,848	105-125		
10.8	1.32	3733	135	6,375	32,942	103-123		
10.6	2.27	3833	137	6,493	50,576	105-125		
11.8	1.44	3733	123	5,815	34,171	103-123		
11.3	2.43	3833	128	6,066	50,983	105-125		
13.5	0.84	3633	108	5,097	22,624	101-121		
13.3	1.63	3733	109	5,141	35,646	103-123		
12.6	2.71	3833	115	5,431	51,585	105-125		
15.3	0.96	3633	95.1	4,494	24,221	101-121		
14.8	1.80	3733	98	4,632	36,758	103-123		
14.2	3.05	3833	102	4,811	52,172	105-125		
17.0	1.07	3633	85.3	4,034	25,444	101-121		
16.6	2.02	3733	87.4	4,130	37,852	103-123		
16.0	3.41	3833	90.8	4,291	52,661	105-125		
19.1	1.20	3633	75.9	3,591	26,621	101-121		
18.0	2.19	3733	80.4	3,798	38,574	103-123		
18.0	3.84	3833	80.5	3,804	53,119	105-125		
20.6	0.78	3533	70.6	3,336	12,000	99-119		
20.8	1.31	3633	69.6	3,290	27,422	101-121		
21.0	2.54	3733	68.9	3,258	39,747	103-123		
20.1	4	3833	72.2	3,409	53,489	105-125		
23.3	0.88	3533	62.4	2,949	13,432	99-119		
24.1	1.51	3633	60.1	2,844	28,609	101-121		
22.9	2.76	3733	63.2	2,988	40,332	103-123		
22.5	5	3833	64.3	3,040	53,834	105-125		
26.1	0.98	3533	55.5	2,626	14,583	99-119		
26.7	1.67	3633	54.4	2,571	29,337	101-121		
25.9	3.11	3733	55.9	2,643	41,080	103-123		
25.4	5	3833	57	2,694	54,157	105-125		
29.2	1.09	3533	49.8	2,352	15,552	99-119		
30.3	1.90	3633	47.8	2,262	30,159	101-121		
30.4	3.48	3733	47.7	2,256	41,916	103-123		
28.9	6	3833	50.1	2,369	54,459	105-125		
34.1	1.27	3533	42.6	2,013	16,750	99-119		
32.9	2.06	3633	44.1	2,085	30,632	101-121		
34.2	3.78	3733	42.5	2,007	42,400	103-123		
32.8	6	3833	44.2	2,086	54,722	105-125		
36.3	0.79	3433	39.9	1,887	12,904	97-117		
37.6	1.39	3533	38.6	1,823	17,416	99-119		
37.0	2.32	3633	39.2	1,853	31,250	101-121		
35.4	3.09	3733	41	1,937	42,606	103-123		
35.8	7	3833	40.6	1,913	54,879	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
7.5 kW - 50 Hz							13.1 kW - 87 Hz*	
LS 132 M IFT/IE2 - LSES 132 MU IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 132 MU FFB4 IFT/IE3								
41.7	0.88	3433	34.8	1,645	13,094	97-117		
42.6	1.57	3533	34	1,608	18,171	99-119		
41.4	2.60	3633	35	1,655	31,780	101-121		
41.2	3.42	3733	35.2	1,662	43,200	103-123		
39.9	8	3833	36.4	1,715	55,063	105-125		
46.1	0.94	3433	31.5	1,489	9,687	97-117		
47.6	1.75	3533	30.49	1,442	18,753	99-119		
46.2	2.90	3633	31.4	1,483	32,239	101-121		
45.0	3.62	3733	32.2	1,524	43,497	103-123		
44.8	9	3833	32.4	1,529	55,235	105-125		
50.8	1.01	3433	28.6	1,351	9,823	97-117	88	0.85
53.4	1.95	3533	27.1	1,283	19,305	99-119	93	1.73
50.7	3.18	3633	28.6	1,352	32,587	101-121		
50.8	3.93	3733	28.5	1,348	43,877	103-123		
50.6	9	3833	28.7	1,355	55,396	105-125		
58.6	1.11	3433	24.8	1,171	9,940	97-117	102	0.94
59.8	2.17	3533	24.3	1,147	19,380	99-119	104	1.87
58.0	3.64	3633	25	1,182	33,044	101-121		
59.5	4	3733	24.4	1,151	44,302	103-123		
57.5	11	3833	25.3	1,192	55,547	105-125		
68.0	1.20	3433	21.3	1,008	9,978	97-117	118	1.01
64.5	3.38	3633	22.5	1,064	33,359	101-121		
66.9	5	3733	21.7	1,024	44,576	103-123		
65.3	11	3833	22.2	1,049	55,679	105-125		
75.2	1.28	3433	19.3	913	9,959	97-117	130	1.08
69.6	2.44	3533	20.8	986	18,819	99-119	121	2.27
72.5	3.65	3633	20	945	33,675	101-121		
74.0	13	3833	19.6	926	55,793	105-125		
82.8	1.37	3433	17.5	828	9,918	97-117	144	1.16
77.6	2.71	3533	18.7	884	18,397	99-119	135	2.47
80.9	3.42	3733	17.9	847	44,956	103-123		
81.2	4	3633	17.9	844	33,946	101-121		
81.5	13	3833	17.8	841	55,872	105-125		
93.5	1.54	3433	15.5	734	9,830	97-117	162	1.30
87.2	3.02	3533	16.6	787	17,936	99-119	151	2.68
88.2	3.62	3733	16.4	777	45,107	103-123		
90.7	4	3633	16	756	34,181	101-121		
93.4	15	3833	15.5	734	55,970	105-125		
95.6	1.52	3433	15.2	718	9,809	97-117	166	1.28
97.5	3.35	3533	14.9	703	17,480	99-119	169	2.90
100	3.93	3733	14.5	687	45,300	103-123		
99.4	4	3633	14.6	690	34,358	101-121		
104	16	3833	13.9	656	56,042	105-125		
118	1.76	3433	12.3	582	9,573	97-117	205	1.48
118	3.91	3533	12.3	580	16,696	99-119	205	3.32
117	4	3733	12.4	586	45,516	103-123		
114	5	3633	12.7	603	34,591	101-121		
117	18	3833	12.4	584	56,108	105-125		
127	3.39	3633	11.5	542	34,754	101-121		
131	5	3733	11	522	45,655	103-123		
130	18	3833	11.1	525	56,162	105-125		
152	2.10	3433	9.51	450	9,203	97-117	264	1.77
142	3.65	3633	10.2	482	34,915	101-121		
153	5	3533	9.47	448	15,633	99-119	265	3.98
149	21	3833	9.75	460	56,222	105-125		
159	4	3633	9.1	430	35,053	101-121		
162	13	3833	8.94	422	56,256	105-125		
178	4	3633	8.15	385	35,173	101-121		
186	15	3833	7.8	369	56,306	105-125		
195	5	3633	7.43	352	35,263	101-121		
208	16	3833	6.98	330	56,342	105-125		
223	5	3633	6.5	307	35,382	101-121		
233	18	3833	6.21	294	55,790	105-125		
259	18	3833	5.59	264	54,090	105-125		
296	21	3833	4.9	231	52,039	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
9 kW - 50 Hz		LSES 132 M IFT/IE2 - LSES 160 MR IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 160 MR FFB4 IFT/IE3					15.7 kW - 87 Hz*	
2.62	0.88	3935	552	30,521	23,288	129		
2.94	0.98	3935	492	27,178	38,959	129		
3.28	1.10	3935	441	24,349	50,033	129		
3.68	1.21	3935	392	21,678	58,942	129		
4.31	1.42	3935	336	18,552	67,798	129		
4.75	1.57	3935	304	16,804	72,157	129		
5.39	1.78	3935	268	14,819	76,703	129		
6.01	1.98	3935	240	13,284	79,987	129		
6.75	2.23	3935	214	11,824	82,972	129		
7.55	2.49	3935	191	10,573	85,455	129		
9.41	1.69	3833 ¹	154	8,740	48,417	105-125		
9.28	2.88	3933 ¹	156	8,872	88,767	107-127		
10.7	1.09	3733 ¹	135	7,681	30,069	103-123		
10.5	1.89	3833 ¹	137	7,823	49,301	105-125		
10.4	3.39	3933 ¹	139	7,912	90,627	107-127		
11.7	1.20	3733 ¹	123	7,006	31,500	103-123		
11.3	2.02	3833 ¹	128	7,309	49,796	105-125		
11.8	3.78	3933 ¹	123	6,995	92,412	107-127		
13.3	1.35	3733 ¹	109	6,194	33,340	103-123		
12.6	2.25	3833 ¹	115	6,544	50,527	105-125		
13.2	4	3933	110	6,254	93,865	107-127		
15.2	0.79	3633 ¹	95.1	5,415	21,781	101-121		
14.8	1.50	3733 ¹	98	5,580	34,685	103-123		
14.2	2.53	3833 ¹	102	5,797	51,238	105-125		
14.7	5	3933	98.1	5,590	95,182	107-127		
16.9	0.88	3633 ¹	85.3	4,860	23,252	101-121		
16.5	1.67	3733 ¹	87.4	4,976	36,007	103-123		
15.9	2.83	3833	90.8	5,171	51,832	105-125		
16.5	5	3933	87.6	4,989	96,389	107-127		
19.0	0.99	3633 ¹	75.9	4,326	24,668	101-121		
18.0	1.82	3733 ¹	80.4	4,576	36,880	103-123		
17.9	3.18	3833	80.5	4,584	52,386	105-125		
18.5	6	3933	78.3	4,459	97,466	107-127		
20.8	1.08	3633 ¹	69.6	3,963	25,632	101-121		
21.0	2.11	3733 ¹	68.9	3,925	38,296	103-123		
20.0	3.52	3833	72.2	4,108	52,834	105-125		
20.7	6	3933	69.7	3,972	98,470	107-127		
24.0	1.26	3633 ¹	60.1	3,426	27,059	101-121		
22.9	2.29	3733	63.2	3,600	39,004	103-123		
22.5	3.83	3833	64.3	3,663	53,252	105-125		
23.3	7	3933	62.1	3,535	99,384	107-127		
26.0	0.82	3533 ¹	55.5	3,163	12,748	99-119	45.5	0.80
26.6	1.39	3633	54.4	3,097	27,935	101-121		
25.8	2.59	3733	55.9	3,184	39,907	103-123		
25.3	4	3833	57	3,246	53,642	105-125		
26.3	7	3933	55	3,130	99,857	107-127		
29.0	0.91	3533 ¹	49.8	2,834	13,916	99-119	50.8	0.89
30.2	1.58	3633	47.8	2,725	28,925	101-121		
30.3	2.89	3733	47.7	2,719	40,916	103-123		
28.8	5	3833	50.1	2,855	54,007	105-125		
29.5	8	3933	48.9	2,786	100,191	107-127		

¹Ot 3533 to Ot 3933: integrated mounting MI obligatory for frame size 132

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
9 kW - 50 Hz		LSSES 132 M IFT/IE2 - LSES 160 MR IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 160 MR FFB4 IFT/IE3					15.7 kW - 87 Hz*	
33.9	1.05	3533 ¹	42.6	2,425	15,357	99-119	59.3	1.03
32.8	1.71	3633	44.1	2,512	29,494	101-121		
34.0	3.14	3733	42.5	2,418	41,567	103-123		
32.7	5	3833	44.2	2,514	54,325	105-125		
32.4	9	3933	44.6	2,538	100,432	107-127		
37.5	1.16	3533 ¹	38.6	2,197	16,159	99-119	65.5	1.11
36.9	1.93	3633	39.2	2,233	30,238	101-121		
38.0	3.37	3733	38.1	2,168	42,107	103-123		
35.6	6	3833	40.6	2,309	54,514	105-125		
36.9	9	3933	39.2	2,233	100,727	107-127		
42.5	1.31	3533 ¹	34	1,937	17,067	99-119	74.2	1.23
41.3	2.16	3633	35	1,994	30,876	101-121		
42.0	3.59	3733	34.4	1,961	42,556	103-123		
39.8	7	3833	36.4	2,069	54,737	105-125		
41.6	9	3933	34.7	1,977	100,976	107-127		
47.4	1.45	3533 ¹	30.49	1,737	17,766	99-119	82.8	1.33
46.1	2.41	3633	31.4	1,786	31,429	101-121		
47.6	3.89	3733	30.4	1,730	43,054	103-123		
44.6	7	3833	32.4	1,845	54,945	105-125		
46.8	10	3933	30.9	1,760	101,187	107-127		
53.3	1.62	3533 ¹	27.1	1,546	18,429	99-119	93.1	1.45
50.5	2.64	3633	28.6	1,629	31,848	101-121		
53.7	4	3733	26.9	1,531	43,482	103-123		
50.3	8	3833	28.7	1,635	55,139	105-125		
51.3	11	3933	28.1	1,603	101,338	107-127		
59.6	1.80	3533 ¹	24.3	1,382	18,510	99-119	104	1.56
57.8	3.02	3633	25	1,423	32,398	101-121		
60.1	5	3733	24	1,369	43,832	103-123		
57.7	9	3833	25.3	1,425	55,321	105-125		
58.0	12	3933	24.9	1,418	101,518	107-127		
61.1	1.80	3533 ¹	23.6	1,347	18,440	99-119	107	1.72
67.5	3.41	3633	21.4	1,220	32,940	101-121		
66.7	3.90	3733	21.7	1,233	44,124	103-123		
65.5	9	3833	22.2	1,255	55,480	105-125		
64.3	13	3933	22.5	1,280	101,652	107-127		
69.3	2.03	3533 ¹	20.8	1,188	18,067	99-119	121	1.90
75.2	3.44	3633	19.2	1,095	33,274	101-121		
74.4	4	3733	19.4	1,106	44,398	103-123		
73.7	11	3833	19.6	1,117	55,618	105-125		
73.2	14	3933	19.7	1,125	101,802	107-127		
77.3	2.25	3533 ¹	18.7	1,065	17,720	99-119	135	2.07
81.0	3.36	3633	17.9	1,017	33,484	101-121		
82.3	5	3733	17.6	1,000	44,626	103-123		
81.2	11	3833	17.8	1,013	55,713	105-125		
86.9	2.51	3533 ¹	16.6	948	17,330	99-119	152	2.24
90.3	3.48	3633	16	911	33,767	101-121		
93.3	5	3733	15.5	882	44,880	103-123		
93.0	13	3833	15.5	884	55,832	105-125		
97.1	2.79	3533 ¹	14.9	847	16,940	99-119	170	2.43
99.0	3.69	3633	14.6	831	33,981	101-121		
105	5	3733	13.7	781	45,097	103-123		
104	14	3833	13.9	790	55,918	105-125		

¹Ot 3533: integrated mounting MI obligatory for frame size 132

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
9 kW - 50 Hz		LSES 132 M IFT/IE2 - LSES 160 MR IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 160 MR FFB4 IFT/IE3					15.7 kW - 87 Hz*	
118	3.25	3533 ¹	12.3	699	16,247	99-119	206	2.77
113	4	3633	12.7	726	34,261	101-121		
118	6	3733	12.3	698	45,276	103-123		
117	15	3833	12.4	704	55,998	105-125		
131	3.90	3733	11.0	629	45,425	103-123		
132	4	3633	10.9	622	34,539	101-121		
130	15	3833	11.1	633	56,063	105-125		
142	3.04	3633	10.2	580	34,651	101-121		
153	3.92	3533 ¹	9.47	540	15,280	99-119	267	3.33
146	4	3733	9.9	564	45,565	103-123		
147	11	3833	9.86	561	56,129	105-125		
148	17	3833	9.75	555	56,135	105-125		
159	3.37	3633	9.10	518	34,818	101-121		
161	5	3733	8.95	510	45,681	103-123		
162	11	3833	8.94	509	56,177	105-125		
177	3.49	3633	8.15	464	34,962	101-121		
183	5	3733	7.9	450	45,810	103-123		
185	13	3833	7.8	444	56,236	105-125		
194	4	3633	7.43	424	35,071	101-121		
207	5	3733	6.99	398	45,921	103-123		
207	14	3833	6.98	397	56,280	105-125		
222	4	3633	6.5	370	35,214	101-121		
231	6	3733	6.25	356	46,011	103-123		
233	15	3833	6.21	354	55,717	105-125		
260	4	3633	5.57	317	35,355	101-121		
289	5	3633	5	285	35,442	101-121		

¹Ot 3533: integrated mounting MI obligatory for frame size 132

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
11 kW - 50 Hz		LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE - LSES 160 M FFB5 IFT/IE3					19.1 kW - 87 Hz*	
2.95	0.81	3935	492	33,069	9,170	129		
3.30	0.90	3935	441	29,628	27,774	129		
3.70	1.00	3935	392	26,377	42,284	129		
4.33	1.17	3935	336	22,573	56,107	129		
4.78	1.29	3935	304	20,446	62,611	129		
5.42	1.46	3935	268	18,031	69,136	129		
6.04	1.63	3935	240	16,163	73,666	129		
6.79	1.83	3935	214	14,387	77,644	129		
7.59	2.05	3935	191	12,865	80,856	129		
9.46	1.39	3833	154	10,637	46,571	105-125		
9.32	2.36	3933	156	10,797	85,015	107-127		
10.8	0.90	3733	135	9,347	26,383	103-123		
10.6	1.55	3833	137	9,521	47,660	105-125		
10.5	2.78	3933	139	9,628	87,300	107-127		
11.8	0.98	3733	123	8,526	28,202	103-123		
11.3	1.66	3833	128	8,894	48,268	105-125		
11.8	3.10	3933	123	8,512	89,466	107-127		
13.4	1.11	3733	109	7,538	30,385	103-123		
12.6	1.85	3833	115	7,964	49,166	105-125		
13.2	3.43	3933	110	7,610	91,214	107-127		
14.8	1.23	3733	98	6,791	32,030	103-123		
14.3	2.08	3833	102	7,055	50,039	105-125		
14.8	2.36	3933	98.4	6,820	92,753	107-127		
14.8	3.78	3933	98.1	6,802	92,788	107-127		
16.6	1.37	3733	87.4	6,055	33,645	103-123		
16.0	2.33	3833	90.8	6,293	50,767	105-125		
16.5	2.94	3933	87.8	6,082	94,204	107-127		
16.6	4	3933	87.6	6,071	94,227	107-127		
19.1	0.82	3633	75.9	5,264	22,180	101-121		
18.1	1.49	3733	80.4	5,568	34,711	103-123		
18.0	2.62	3833	80.5	5,578	51,446	105-125		
18.7	3.86	3933	77.6	5,377	95,607	107-127		
18.6	5	3933	78.3	5,426	95,509	107-127		
20.9	0.89	3633	69.6	4,823	23,350	101-121		
21.1	1.73	3733	68.9	4,777	36,441	103-123		
20.1	2.89	3833	72.2	4,999	51,994	105-125		
20.9	5	3933	69.4	4,807	96,756	107-127		
20.8	5	3933	69.7	4,834	96,703	107-127		
24.1	1.03	3633	60.1	4,169	25,085	101-121		
23.0	1.88	3733	63.2	4,381	37,304	103-123		
22.6	3.15	3833	64.3	4,457	52,505	105-125		
23.4	6	3933	62.1	4,301	97,790	107-127		
26.7	1.14	3633	54.4	3,769	26,149	101-121		
26.0	2.12	3733	55.9	3,875	38,407	103-123		
25.5	3.44	3833	57	3,950	52,982	105-125		
26.4	6	3933	55	3,809	98,810	107-127		
30.4	1.30	3633	47.8	3,316	27,352	101-121		
30.4	2.37	3733	47.7	3,308	39,638	103-123		
29.0	3.77	3833	50.1	3,474	53,428	105-125		
29.7	7	3933	48.9	3,391	99,604	107-127		
34.1	0.87	3533	42.6	2,951	13,500	99-119	59.4	0.84
32.9	1.41	3633	44.1	3,057	28,043	101-121		
34.2	2.57	3733	42.5	2,943	40,431	103-123		
32.9	4	3833	44.2	3,059	53,816	105-125		
32.6	7	3933	44.6	3,088	99,898	107-127		

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
11 kW - 50 Hz		LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE - LSES 160 M FFB5 IFT/IE3					19.1 kW - 87 Hz*	
37.7	0.95	3533	38.6	2,673	14,484	99-119	65.6	0.91
37.0	1.58	3633	39.2	2,717	28,947	101-121		
38.1	2.76	3733	38.1	2,639	41,089	103-123		
35.8	5	3833	40.6	2,810	54,048	105-125		
37.0	7	3933	39.2	2,717	100,259	107-127		
42.7	1.07	3533	34	2,357	15,596	99-119	74.3	1.01
41.5	1.77	3633	35	2,426	29,723	101-121		
42.2	2.95	3733	34.4	2,386	41,636	103-123		
39.9	5	3833	36.4	2,518	54,320	105-125		
41.8	8	3933	34.7	2,406	100,560	107-127		
47.6	1.19	3533	30.49	2,113	16,452	99-119	82.9	1.1
46.3	1.98	3633	31.4	2,174	30,396	101-121		
47.8	3.19	3733	30.4	2,105	42,243	103-123		
44.8	6	3833	32.4	2,245	54,574	105-125		
47.0	8	3933	30.9	2,142	100,816	107-127		
53.5	1.33	3533	27.1	1,881	17,200	99-119	93.2	1.19
50.8	2.17	3633	28.6	1,983	30,905	101-121		
54.0	3.44	3733	26.9	1,863	42,765	103-123		
50.6	6	3833	28.7	1,990	54,811	105-125		
51.6	9	3933	28.1	1,951	101,001	107-127		
59.8	1.48	3533	24.3	1,682	17,394	99-119	104	1.29
58.1	2.48	3633	25	1,732	31,573	101-121		
60.4	4	3733	24	1,666	43,192	103-123		
57.5	7	3833	25.3	1,750	55,033	105-125		
58.3	10	3933	24.9	1,725	101,221	107-127		
61.4	1.48	3533	23.6	1,639	17,350	99-119	107	1.42
67.8	2.80	3633	21.4	1,485	32,233	101-121		
67.0	3.20	3733	21.7	1,501	43,547	103-123		
65.3	8	3833	22.2	1,541	55,226	105-125		
64.6	10	3933	22.5	1,558	101,382	107-127		
69.7	1.67	3533	20.8	1,445	17,107	99-119	121	1.57
75.5	2.82	3633	19.2	1,333	32,639	101-121		
74.8	3.43	3733	19.4	1,346	43,882	103-123		
74.0	9	3833	19.6	1,359	55,394	105-125		
73.5	11	3933	19.7	1,368	101,566	107-127		
77.7	1.85	3533	18.7	1,295	16,858	99-119	135	1.7
81.3	2.76	3633	17.9	1,237	32,895	101-121		
82.7	4	3733	17.6	1,217	44,159	103-123		
81.6	9	3833	17.8	1,233	55,511	105-125		
79.4	12	3933	18.3	1,268	101,663	107-127		
87.3	2.06	3533	16.6	1,153	16,563	99-119	152	1.84
90.8	2.86	3633	16	1,109	33,238	101-121		
93.7	4	3733	15.5	1,074	44,468	103-123		
93.5	10	3833	15.5	1,076	55,655	105-125		
92.7	13	3933	15.7	1,086	101,840	107-127		
97.6	2.29	3533	14.9	1,031	16,255	99-119	170	1.99
100	3.02	3633	14.6	1,011	33,499	101-121		
106	4	3733	13.7	951	44,733	103-123		
105	11	3833	13.9	962	55,761	105-125		
102	14	3933	14.3	990	99,880	107-127		
118	2.67	3533	12.3	851	15,676	99-119	206	2.28
114	3.28	3633	12.7	883	33,840	101-121		
118	5	3733	12.3	850	44,950	103-123		
117	12	3833	12.4	857	55,857	105-125		
112	15	3933	12.9	895	97,060	107-127		

87Hz* 400VY triangle-coupled drive-supplied motor

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
11 kW - 50 Hz		LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE - LSES 160 M FFB5 IFT/IE3					19.1 kW - 87 Hz*	
132	3.20	3733	11	765	45,132	103-123		
133	3.59	3633	10.9	757	34,178	101-121		
131	13	3833	11.1	771	55,937	105-125		
143	2.49	3633	10.2	706	34,314	101-121		
153	3.22	3533	9.47	657	14,840	99-119	267	2.74
147	3.43	3733	9.9	686	45,302	103-123		
147	9	3833	9.86	683	56,017	105-125		
149	14	3833	9.8	675	56,024	105-125		
160	2.76	3633	9.1	631	34,517	101-121		
162	4	3733	8.95	620	45,443	103-123		
162	9	3833	8.94	619	56,076	105-125		
178	2.86	3633	8.15	565	34,692	101-121		
184	4	3733	7.9	547	45,600	103-123		
186	10	3833	7.8	541	56,148	105-125		
195	3	3633	7.43	515	34,825	101-121		
208	4	3733	6.99	484	45,735	103-123		
208	11	3833	6.98	483	56,201	105-125		
224	3.29	3633	6.5	450	34,999	101-121		
232	5	3733	6.25	433	45,846	103-123		
234	12	3833	6.21	430	55,468	105-125		
261	3.60	3633	5.57	386	35,171	101-121		
260	13	3833	5.59	387	53,798	105-125		
291	3.83	3633	5	346	35,277	101-121		
297	14	3833	4.9	339	51,780	105-125		

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
15 kW - 50 Hz		LS 160 LR FFB5 IFT/NIE - LSES 160 LUR FFB5 IFT/IE3					26.1 kW - 87 Hz*	
4.33	0.86	3935	336	30,753	22,085	129		
4.78	0.95	3935	304	27,855	36,023	129		
5.42	1.07	3935	268	24,565	49,252	129		
6.05	1.20	3935	240	22,020	57,874	129		
6.80	1.34	3935	214	19,601	64,992	129		
7.60	1.50	3935	191	17,526	70,399	129		
9.47	1.02	3833	154	14,494	42,751	105-125		
9.33	1.73	3933	156	14,710	76,941	107-127		
10.6	1.14	3833	137	12,974	44,268	105-125		
10.5	2.04	3933	139	13,119	80,331	107-127		
11.3	1.22	3833	128	12,120	45,000	105-125		
11.8	2.28	3933	123	11,597	83,427	107-127		
13.4	0.81	3733	109	10,270	24,330	103-123		
12.7	1.36	3833	115	10,852	46,360	105-125		
13.2	2.52	3933	110	10,369	85,855	107-127		
14.8	0.90	3733	98	9,253	26,592	103-123		
14.3	1.53	3833	102	9,613	47,570	105-125		
14.8	2.77	3933	98.1	9,268	88,000	107-127		
16.6	1.01	3733	87.4	8,250	28,812	103-123		
16.0	1.71	3833	90.8	8,575	48,577	105-125		
16.6	3.06	3933	87.6	8,271	89,931	107-127		
18.1	1.10	3733	80.4	7,587	30,276	103-123		
18.1	1.92	3833	80.5	7,602	49,514	105-125		
18.6	3.38	3933	78.3	7,393	91,635	107-127		
21.1	1.27	3733	68.9	6,509	32,649	103-123		
20.2	2.12	3833	72.2	6,812	50,271	105-125		
20.9	3.73	3933	69.7	6,586	93,000	107-127		
23.0	1.38	3733	63.2	5,969	33,833	103-123		
22.6	2.31	3833	64.3	6,074	50,975	105-125		
23.4	4	3933	62.1	5,861	94,643	107-127		
26.7	0.84	3633	54.4	5,135	22,523	101-121		
26.0	1.56	3733	55.9	5,279	35,343	103-123		
25.5	2.52	3833	57	5,383	51,631	105-125		
26.5	4	3933	55	5,189	95,984	107-127		
30.4	0.95	3633	47.8	4,518	24,158	101-121		
30.5	1.74	3733	47.7	4,508	37,028	103-123		
29.0	2.76	3833	50.1	4,734	52,244	105-125		
29.7	5	3933	48.9	4,620	97,137	107-127		
33.0	1.03	3633	44.1	4,165	25,097	101-121		
34.2	1.89	3733	42.5	4,009	38,114	103-123		
32.9	3.02	3833	44.2	4,168	52,777	105-125		
32.6	5	3933	44.6	4,208	97,983	107-127		
37.1	1.16	3633	39.2	3,702	26,327	101-121		
38.2	2.03	3733	38.1	3,595	39,014	103-123		
35.8	3.74	3833	40.6	3,830	53,095	105-125		
37.1	5	3933	39.2	3,702	99,033	107-127		
42.8	0.79	3533	34	3,212	12,574	99-119		
41.6	1.30	3633	35	3,305	27,381	101-121		
42.2	2.16	3733	34.4	3,251	39,762	103-123		
40.0	3.95	3833	36.4	3,432	53,468	105-125		
41.9	6	3933	34.7	3,278	99,713	107-127		
47.7	0.87	3533	30.49	2,879	13,756	99-119	83.2	0.80
46.4	1.45	3633	31.4	2,961	28,296	101-121		
47.9	2.34	3733	30.4	2,868	40,592	103-123		
44.9	4	3833	32.4	3,060	53,815	105-125		
47.0	6	3933	30.9	2,918	100,063	107-127		
53.6	0.98	3533	27.1	2,563	14,873	99-119	93.4	0.87
50.8	1.59	3633	28.6	2,701	28,989	101-121		
54.1	2.52	3733	26.9	2,539	41,305	103-123		
50.6	5	3833	28.7	2,712	54,140	105-125		
51.7	7	3933	28.1	2,658	100,315	107-127		

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
15 kW - 50 Hz		LSES 160 L IFT/IE2 - LSES 160 LUR IFT/IE3 LS 160 LR FFB5 IFT/NIE - LSES 160 LUR FFB5 IFT/IE3					26.1 kW - 87 Hz*	
59.9	1.08	3533	24.3	2,292	15,097	99-119	104	0.94
58.2	1.82	3633	25	2,360	29,899	101-121		
60.5	3.01	3733	24	2,270	41,888	103-123		
57.6	5	3833	25.3	2,385	54,444	105-125		
58.4	7	3933	24.9	2,351	100,613	107-127		
61.5	1.09	3533	23.6	2,233	15,113	99-119	107	1.04
67.9	2.06	3633	21.4	2,023	30,600	101-121		
67.1	2.35	3733	21.7	2,045	42,373	103-123		
65.4	6	3833	22.2	2,100	54,709	105-125		
64.7	8	3933	22.5	2,122	100,835	107-127		
69.7	1.22	3533	20.8	1,969	15,133	99-119	122	1.15
75.6	2.07	3633	19.2	1,816	31,350	101-121		
74.9	2.51	3733	19.4	1,834	42,829	103-123		
74.1	6	3833	19.6	1,852	54,938	105-125		
73.6	8	3933	19.7	1,865	101,085	107-127		
77.8	1.36	3533	18.7	1,765	15,090	99-119	136	1.25
81.5	2.02	3633	17.9	1,686	31,697	101-121		
82.8	2.98	3733	17.6	1,658	43,208	103-123		
81.7	7	3833	17.8	1,680	55,098	105-125		
79.5	9	3933	18.3	1,728	101,218	107-127		
87.4	1.51	3533	16.6	1,571	14,985	99-119	152	1.35
90.9	2.10	3633	16	1,511	32,165	101-121		
93.8	3.10	3733	15.5	1,463	43,629	103-123		
93.6	8	3833	15.5	1,466	55,295	105-125		
92.8	10	3933	15.7	1,479	101,459	107-127		
97.8	1.68	3533	14.9	1,405	14,840	99-119	170	1.46
100	2.22	3633	14.6	1,378	32,519	101-121		
106	3.12	3733	13.7	1,295	43,991	103-123		
105	8.17	3833	13.9	1,311	55,439	105-125		
102	10.55	3933	14.3	1,349	99,090	107-127		
118	1.96	3533	12.3	1,159	14,510	99-119	207	1.67
114	2.41	3633	12.7	1,204	32,984	101-121		
119	3.57	3733	12.3	1,158	44,287	103-123		
118	9	3833	12.4	1,167	55,571	105-125		
113	11	3933	12.9	1,220	96,337	107-127		
132	2.35	3733	11	1,042	44,536	103-123		
133	2.64	3633	10.9	1,032	33,444	101-121		
131	9	3833	11.1	1,050	55,679	105-125		
143	1.83	3633	10.2	962	33,630	101-121		
153	2.36	3533	9.47	895	13,937	99-119	268	2.00
147	2.51	3733	9.9	935	44,767	103-123		
149	10	3833	9.75	920	55,799	105-125		
160	2.03	3633	9.1	859	33,906	101-121		
162	2.98	3733	8.95	845	44,960	103-123		
163	7	3833	8.94	844	55,869	105-125		
178	2.10	3633	8.15	770	34,145	101-121		
184	3.10	3733	7.9	746	45,174	103-123		
186	8	3833	7.8	737	55,968	105-125		
196	2.47	3633	7.43	702	34,325	101-121		
208	3.12	3733	6.99	660	45,358	103-123		
208	8	3833	6.98	659	56,040	105-125		
224	2.41	3633	6.5	613	34,563	101-121		
233	3.34	3733	6.25	590	45,508	103-123		
234	9	3833	6.21	587	55,100	105-125		
261	2.64	3633	5.57	526	34,797	101-121		
260	9.22	3833	5.59	528	53,467	105-125		
291	2.81	3633	5	472	34,941	101-121		
297	10	3833	4.9	462	51,490	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
18.5 kW - 50 Hz		LSES 180 MT IFT/IE2 - LSES 180 M IFT/IE3 LS 180 MT FFB5 IFT/NIE					32.2 kW - 87 Hz*	
5.43	0.87	3935	268	30,262	24,611	129		
6.06	0.97	3935	240	27,127	39,173	129		
6.81	1.09	3935	214	24,146	50,759	129		
7.61	1.22	3935	191	21,591	59,207	129		
9.48	0.83	3833	154	17,858	39,348	105-125		
9.35	1.41	3933	156	18,123	68,902	107-127		
10.6	0.92	3833	137	15,984	41,252	105-125		
10.5	1.66	3933	139	16,162	73,668	107-127		
11.3	0.99	3833	128	14,933	42,311	105-125		
11.9	1.85	3933	123	14,288	77,859	107-127		
12.7	1.10	3833	115	13,371	43,873	105-125		
13.3	2.04	3933	110	12,774	80,500	107-127		
14.3	1.24	3833	102	11,844	45,385	105-125		
14.8	2.25	3933	98.1	11,418	83,785	107-127		
16.7	0.82	3733	87.4	10,164	24,566	103-123		
16.0	1.38	3833	90.8	10,565	46,642	105-125		
16.6	2.48	3933	87.6	10,190	86,205	107-127		
18.1	0.89	3733	80.4	9,347	26,382	103-123		
18.1	1.56	3833	80.5	9,366	47,811	105-125		
18.6	2.74	3933	78.3	9,109	88,309	107-127		
21.1	1.03	3733	68.9	8,019	29,000	103-123		
20.2	1.72	3833	72.2	8,393	48,753	105-125		
20.9	3.03	3933	69.7	8,114	90,237	107-127		
23.0	1.12	3733	63.2	7,354	30,789	103-123		
22.6	1.87	3833	64.3	7,483	49,628	105-125		
23.5	3.29	3933	62.1	7,220	91,972	107-127		
26.0	1.27	3733	55.9	6,504	32,659	103-123		
25.5	2.05	3833	57	6,632	50,443	105-125		
26.5	3.59	3933	55	6,393	93,590	107-127		
30.5	1.41	3733	47.7	5,554	34,744	103-123		
29.0	2.24	3833	50.1	5,833	51,204	105-125		
29.8	3.91	3933	48.9	5,692	94,979	107-127		
33.0	0.84	3633	44.1	5,131	22,534	101-121		
34.3	1.53	3733	42.5	4,940	36,086	103-123		
33.0	2.45	3833	44.2	5,136	51,865	105-125		
32.7	4	3933	44.6	5,184	95,995	107-127		
37.1	0.94	3633	39.2	4,561	24,046	101-121		
38.2	1.64	3733	38.1	4,429	37,199	103-123		
35.9	3.03	3833	40.6	4,718	52,259	105-125		
37.1	4	3933	39.2	4,561	97,257	107-127		
41.6	1.06	3633	35	4,072	25,343	101-121		
42.3	1.75	3733	34.4	4,005	38,123	103-123		
40.1	3.20	3833	36.4	4,228	52,721	105-125		
41.9	5	3933	34.7	4,039	98,332	107-127		
46.4	1.18	3633	31.4	3,648	26,469	101-121		
47.9	1.90	3733	30.4	3,534	39,148	103-123		
44.9	3.60	3833	32.4	3,770	53,151	105-125		
47.1	5	3933	30.9	3,596	99,256	107-127		
53.7	0.79	3533	27.1	3,157	12,769	99-119		
50.9	1.29	3633	28.6	3,328	27,321	101-121		
54.1	2.05	3733	26.9	3,128	40,028	103-123		
50.7	3.74	3833	28.7	3,341	53,553	105-125		
51.7	5	3933	28.1	3,275	99,717	107-127		

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
18.5 kW - 50 Hz		LSES 180 MT IFT/IE2 - LSES 180 M IFT/IE3 LS 180 MT FFB5 IFT/NIE					32.2 kW - 87 Hz*	
60.0	0.88	3533	24.3	2,823	13,954	99-119		
58.3	1.48	3633	25	2,907	28,440	101-121		
60.6	2.44	3733	24	2,796	40,748	103-123		
57.6	4	3833	25.3	2,938	53,929	105-125		
58.5	6	3933	24.9	2,896	100,085	107-127		
61.6	0.88	3533	23.6	2,751	13,166	99-119	107	0.84
68.0	1.67	3633	21.4	2,492	29,546	101-121		
67.2	1.90	3733	21.7	2,520	41,347	103-123		
65.5	5	3833	22.2	2,587	54,256	105-125		
64.8	6	3933	22.5	2,614	100,358	107-127		
69.8	0.99	3533	20.8	2,426	13,417	99-119	122	0.93
75.7	1.68	3633	19.2	2,237	30,226	101-121		
75.0	2.04	3733	19.4	2,259	41,910	103-123		
74.2	5	3833	19.6	2,282	54,540	105-125		
73.7	7	3933	19.7	2,297	100,665	107-127	136	1.01
77.9	1.10	3533	18.7	2,174	13,549	99-119		
81.6	1.64	3633	17.9	2,077	30,653	101-121		
82.9	2.42	3733	17.6	2,043	42,378	103-123		
81.8	5	3833	17.8	2,070	54,737	105-125		
79.6	7	3933	18.3	2,129	100,829	107-127		
87.5	1.23	3533	16.6	1,935	13,616	99-119	152	1.10
91.0	1.70	3633	16	1,861	31,230	101-121		
94.0	2.51	3733	15.5	1,803	42,897	103-123		
93.7	6	3833	15.5	1,807	54,981	105-125		
92.9	8	3933	15.7	1,823	100,910	107-127		
97.9	1.36	3533	14.9	1,731	13,618	99-119	170	1.18
100	1.80	3633	14.6	1,697	31,666	101-121		
106	2.53	3733	13.7	1,596	43,343	103-123		
105	7	3833	13.9	1,615	55,158	105-125		
102	9	3933	14.3	1,662	98,390	107-127		
119	1.59	3533	12.3	1,428	13,500	99-119	207	1.35
114	1.95	3633	12.7	1,483	32,239	101-121		
119	2.89	3733	12.3	1,426	43,709	103-123		
118	7	3833	12.4	1,438	55,321	105-125		
113	9	3933	12.9	1,503	95,700	107-127		
132	1.90	3733	11	1,284	44,015	103-123		
133	2.14	3633	10.9	1,271	32,804	101-121		
131	7	3833	11.1	1,294	55,455	105-125		
143	1.48	3633	10.2	1,185	33,033	101-121		
154	1.91	3533	9.47	1,102	13,157	99-119	268	1.62
147	2.04	3733	9.9	1,151	44,301	103-123		
149	8	3833	9.75	1,134	55,602	105-125		
160	1.64	3633	9.1	1,058	33,373	101-121		
163	2.42	3733	8.95	1,041	44,538	103-123		
163	5	3833	8.94	1,040	55,689	105-125		
179	1.70	3633	8.15	948	33,667	101-121		
184	2.51	3733	7.9	919	44,802	103-123		
187	6	3833	7.8	908	55,810	105-125		
196	2.01	3633	7.43	865	33,890	101-121		
208	2.53	3733	6.99	813	45,029	103-123		
209	7	3833	6.98	811	55,899	105-125		
224	1.96	3633	6.5	756	34,182	101-121		
233	2.71	3733	6.25	727	45,214	103-123		
234	7	3833	6.21	723	54,780	105-125		
261	2.14	3633	5.57	648	34,471	101-121		
261	7	3833	5.59	650	53,177	105-125		
291	2.28	3633	5	582	34,648	101-121		
297	8	3833	4.9	570	51,230	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
22 kW - 50 Hz		LSES 180 LR IFT/IE2 - LSES 180 LUR IFT/IE3 LS 180 LR FCPL 54H1D					38.3 kW - 87 Hz*	
6.06	0.82	3935	240	32,265	13,845	129		
6.81	0.92	3935	214	28,719	32,108	129		
7.61	1.03	3935	191	25,680	45,051	129		
9.35	1.18	3933	156	21,556	59,315	107-127		
10.5	1.39	3933	139	19,224	66,018	107-127		
11.3	0.83	3833	128	17,762	39,446	105-125		
11.9	1.55	3933	123	16,994	71,700	107-127		
12.7	0.92	3833	115	15,904	41,333	105-125		
13.3	1.72	3933	110	15,194	75,872	107-127		
14.3	1.04	3833	102	14,088	43,158	105-125		
14.8	1.18	3933	98.4	13,617	79,288	107-127		
14.8	1.89	3933	98.1	13,581	79,365	107-127		
16.0	1.16	3833	90.8	12,566	44,672	105-125		
16.6	2.09	3933	87.6	12,120	82,375	107-127		
18.1	1.31	3833	80.5	11,140	46,078	105-125		
18.6	2.30	3933	78.3	10,834	84,941	107-127		
21.1	0.87	3733	68.9	9,538	25,959	103-123		
20.2	1.45	3833	72.2	9,983	47,210	105-125		
20.9	2.54	3933	69.7	9,651	87,257	107-127		
23.0	0.94	3733	63.2	8,748	27,711	103-123		
22.6	1.57	3833	64.3	8,901	48,261	105-125		
23.5	2.77	3933	62.1	8,588	89,318	107-127		
26.0	1.06	3733	55.9	7,737	29,946	103-123		
25.5	1.72	3833	57	7,888	49,239	105-125		
26.5	3.02	3933	55	7,604	91,000	107-127		
30.5	1.19	3733	47.7	6,606	32,436	103-123		
29.0	1.88	3833	50.1	6,938	50,151	105-125		
29.8	3.28	3933	48.9	6,770	92,851	107-127		
34.3	1.29	3733	42.5	5,876	34,038	103-123		
33.0	2.06	3833	44.2	6,109	50,942	105-125		
32.7	3.51	3933	44.6	6,166	94,039	107-127		
37.1	0.79	3633	39.2	5,424	21,756	101-121		
38.2	1.38	3733	38.1	5,269	35,367	103-123		
35.9	2.55	3833	40.6	5,612	51,414	105-125		
37.1	3.55	3933	39.2	5,388	95,511	107-127		
41.6	0.89	3633	35	4,843	23,296	101-121		
42.3	1.47	3733	34.4	4,764	36,469	103-123		
40.1	2.69	3833	36.4	5,029	51,966	105-125		
41.9	4	3933	34.7	4,804	96,763	107-127		
46.4	0.99	3633	31.4	4,339	24,633	101-121		
47.9	1.60	3733	30.4	4,203	37,692	103-123		
44.9	3.03	3833	32.4	4,484	52,480	105-125		
47.1	4	3933	30.9	4,277	97,841	107-127		
50.9	1.09	3633	28.6	3,958	25,645	101-121		
54.1	1.72	3733	26.9	3,721	38,741	103-123		
50.7	3.15	3833	28.7	3,974	52,960	105-125		
51.7	4	3933	28.1	3,895	98,631	107-127		
58.3	1.24	3633	25	3,458	26,975	101-121		
60.6	2.05	3733	24	3,326	39,600	103-123		
57.6	3.66	3833	25.3	3,495	53,409	105-125		
58.5	5	3933	24.9	3,445	99,552	107-127		

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	K _p	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	K _p
22 kW - 50 Hz		LSES 180 LR IFT/IE2 - LSES 180 LUR IFT/IE3 LS 180 LR FCPL 54H1D					38.3 kW - 87 Hz*	
68.0	1.40	3633	21.4	2,964	28,288	101-121		
67.2	1.60	3733	21.7	2,997	40,313	103-123		
65.5	3.86	3833	22.2	3,077	53,799	105-125		
64.8	5	3933	22.5	3,110	99,877	107-127		
69.8	0.83	3533	20.8	2,885	11,708	99-119	122	0.78
75.7	1.41	3633	19.2	2,661	29,096	101-121		
75.0	1.72	3733	19.4	2,687	40,984	103-123		
74.2	4	3833	19.6	2,714	54,138	105-125		
73.7	6	3933	19.7	2,732	100,243	107-127		
77.9	0.93	3533	18.7	2,586	12,016	99-119	136	0.85
81.6	1.38	3633	17.9	2,470	29,604	101-121		
82.9	2.03	3733	17.6	2,430	41,541	103-123		
81.8	5	3833	17.8	2,462	54,373	105-125		
79.6	6	3933	18.3	2,532	100,438	107-127		
87.5	1.03	3533	16.6	2,302	12,250	99-119	153	0.92
91.0	1.43	3633	16	2,213	30,289	101-121		
94.0	2.11	3733	15.5	2,144	42,159	103-123		
93.7	5	3833	15.5	2,149	54,663	105-125		
92.9	7	3933	15.7	2,168	100,190	107-127		
97.9	1.15	3533	14.9	2,058	12,396	99-119	171	1.00
100	1.51	3633	14.6	2,019	30,808	101-121		
106	2.13	3733	13.7	1,898	42,691	103-123		
105	6	3833	13.9	1,921	54,875	105-125		
102	7	3933	14.3	1,976	97,730	107-127		
119	1.34	3533	12.3	1,699	12,490	99-119	207	1.14
114	1.64	3633	12.7	1,764	31,489	101-121		
119	2.43	3733	12.3	1,696	43,126	103-123		
118	6	3833	12.4	1,711	55,069	105-125		
113	8	3933	12.9	1,788	95,106	107-127		
132	1.60	3733	11	1,527	43,491	103-123		
133	1.80	3633	10.9	1,512	32,161	101-121		
131	6	3833	11.1	1,539	55,228	105-125		
143	1.25	3633	10.2	1,410	32,434	101-121		
154	1.61	3533	9.47	1,311	12,377	99-119	268	1.37
147	1.72	3733	9.9	1,369	43,831	103-123		
148	4	3833	9.86	1,364	55,390	105-125		
149	7	3833	9.75	1,348	55,404	105-125		
160	1.38	3633	9.1	1,259	32,837	101-121		
163	2.03	3733	8.95	1,238	44,114	103-123		
163	5	3833	8.94	1,237	55,507	105-125		
179	1.43	3633	8.15	1,128	33,187	101-121		
184	2.11	3733	7.9	1,093	44,427	103-123		
187	5	3833	7.8	1,080	55,652	105-125		
196	1.69	3633	7.43	1,029	33,452	101-121		
208	2.13	3733	6.99	967	44,697	103-123		
209	6	3833	6.98	965	55,758	105-125		
224	1.65	3633	6.5	899	33,799	101-121		
233	2.28	3733	6.25	864	44,918	103-123		
234	6	3833	6.21	860	54,480	105-125		
261	1.80	3633	5.57	771	34,142	101-121		
261	6	3833	5.59	773	52,908	105-125		
291	1.92	3633	5	692	34,353	101-121		
297	7	3833	4.9	677	50,997	105-125		

87Hz* 400VY triangle-coupled drive-supplied motor

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
30 kW - 50 Hz		LSES 200 LR IFT/IE2 - LSES 200 LU IFT/IE3 LS 200 LT FCPL 54H1D + CDF7					52.2 kW - 87 Hz	
13.3	1.26	3933	110	20,668	61,969	107-127		
14.9	1.39	3933	98.1	18,474	68,001	107-127		
16.1	0.86	3833	90.8	17,095	40,126	105-125		
16.7	1.53	3933	87.6	16,487	72,908	107-127		
18.1	0.96	3833	80.5	15,155	42,088	105-125		
18.7	1.69	3933	78.3	14,737	76,882	107-127		
20.2	1.06	3833	72.2	13,580	43,665	105-125		
20.9	1.87	3933	69.7	13,128	80,313	107-127		
22.7	1.16	3833	64.3	12,109	45,124	105-125		
23.5	2.03	3933	62.1	11,682	83,257	107-127		
26.1	0.78	3733	55.9	10,524	23,765	103-123		
25.6	1.26	3833	57	10,731	46,479	105-125		
26.6	2.22	3933	55	10,344	85,904	107-127		
30.6	0.87	3733	47.7	8,986	27,184	103-123		
29.1	1.38	3833	50.1	9,438	47,741	105-125		
29.8	2.41	3933	48.9	9,209	88,115	107-127		
34.4	0.95	3733	42.5	7,992	29,381	103-123		
33.1	1.51	3833	44.2	8,310	48,833	105-125		
32.8	2.58	3933	44.6	8,387	89,707	107-127		
38.3	1.01	3733	38.1	7,167	31,202	103-123		
36.0	1.87	3833	40.6	7,635	49,483	105-125		
37.2	2.61	3933	39.2	7,380	91,662	107-127		
42.4	1.08	3733	34.4	6,480	32,712	103-123		
40.2	1.98	3833	36.4	6,841	50,243	105-125		
42.1	2.84	3933	34.7	6,534	93,313	107-127		
48.1	1.17	3733	30.4	5,718	34,384	103-123		
45.0	2.22	3833	32.4	6,100	50,950	105-125		
47.2	3.08	3933	30.9	5,817	94,729	107-127		
51.0	0.80	3633	28.6	5,384	21,862	101-121		
54.3	1.26	3733	26.9	5,061	35,820	103-123		
50.8	2.31	3833	28.7	5,406	51,609	105-125		
51.9	3.29	3933	28.1	5,298	95,765	107-127		
58.4	0.91	3633	25	4,704	23,666	101-121		
60.7	1.51	3733	24	4,524	36,993	103-123		
57.8	2.69	3833	25.3	4,754	52,225	105-125		
58.6	4	3933	24.9	4,686	97,002	107-127		
68.2	1.03	3633	21.4	4,032	25,448	101-121		
64.7	1.51	3733	22.6	4,246	37,599	103-123		
65.6	2.84	3833	22.2	4,186	52,760	105-125		
65.0	4	3933	22.5	4,230	97,937	107-127		
75.9	1.04	3633	19.2	3,620	26,545	101-121		
73.4	1.52	3733	19.9	3,745	38,689	103-123		
74.4	3.21	3833	19.6	3,692	53,224	105-125		
73.9	4	3933	19.7	3,717	99,003	107-127		
81.8	1.01	3633	17.9	3,360	27,235	101-121		
83.1	1.49	3733	17.6	3,305	39,644	103-123		
82.0	3.33	3833	17.8	3,349	53,545	105-125		
91.3	1.05	3633	16	3,011	28,165	101-121		
94.2	1.55	3733	15.5	2,916	40,487	103-123		
94.0	3.78	3833	15.5	2,923	53,943	105-125		

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
30 kW - 50 Hz		LSES 200 LR IFT/IE2 - LSES 200 LU IFT/IE3 LS 200 LT FCPL 54H1D + CDF7					52.2 kW - 87 Hz	
100	1.11	3633	14.6	2,746	28,869	101-121		
106	1.56	3733	13.7	2,582	41,213	103-123		
105	4	3833	13.9	2,613	54,232	105-125		
115	1.21	3633	12.7	2,399	29,794	101-121		
119	1.79	3733	12.3	2,308	41,806	103-123		
118	4	3833	12.4	2,327	54,498	105-125		
134	1.32	3633	10.9	2,057	30,707	101-121		
127	1.86	3733	11.5	2,166	42,113	103-123		
131	2.84	3833	11.2	2,103	54,705	105-125		
143	0.92	3633	10.2	1,918	31,078	101-121		
144	2.00	3733	10.1	1,910	42,665	103-123		
148	3.21	3833	9.86	1,855	54,936	105-125		
161	1.01	3633	9.1	1,712	31,626	101-121		
163	1.49	3733	8.95	1,684	43,152	103-123		
163	3.34	3833	8.94	1,683	55,095	105-125		
179	1.05	3633	8.15	1,534	32,102	101-121		
185	1.55	3733	7.9	1,486	43,579	103-123		
187	3.78	3833	7.8	1,469	55,293	105-125		
196	1.24	3633	7.43	1,399	32,461	101-121		
209	1.56	3733	6.99	1,316	43,947	103-123		
209	4	3833	6.98	1,313	55,435	105-125		
225	1.21	3633	6.5	1,223	32,934	101-121		
234	1.67	3733	6.25	1,176	44,248	103-123		
235	4	3833	6.21	1,169	53,758	105-125		
262	1.32	3633	5.57	1,048	33,400	101-121		
249	1.73	3733	5.86	1,104	44,404	103-123		
292	1.41	3633	5	941	33,687	101-121		
282	1.87	3733	5.17	973	44,684	103-123		

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
37 kW - 50 Hz		LSES 225 ST IFT/IE2 - LSES 225 SR IFT/IE3 LS 225 ST FCPL 54H1D + CDF7					64.4 kW - 87 Hz	
16.8	1.25	3933	87.6	20,226	63,242	107-127		
18.8	1.38	3933	78.3	18,079	69,013	107-127		
20.3	0.87	3833	72.2	16,660	40,567	105-125		
21.1	1.52	3933	69.7	16,105	73,500	107-127		
22.8	0.94	3833	64.3	14,855	42,389	105-125		
23.7	1.66	3933	62.1	14,331	77,765	107-127		
25.8	1.03	3833	57	13,164	44,078	105-125		
26.7	1.81	3933	55	12,690	81,216	107-127		
29.3	1.13	3833	50.1	11,578	45,647	105-125		
30.0	1.96	3933	48.9	11,297	84,024	107-127		
33.3	1.23	3833	44.2	10,195	46,900	105-125		
33.0	2.10	3933	44.6	10,289	86,012	107-127		
38.6	0.83	3733	38.1	8,792	27,613	103-123		
37.7	1.34	3833	38.9	8,992	48,173	105-125		
37.4	2.12	3933	39.2	9,053	88,416	107-127		
42.6	0.88	3733	34.4	7,950	29,475	103-123		
40.4	1.61	3833	36.4	8,393	48,752	105-125		
42.3	2.31	3933	34.7	8,016	90,425	107-127		
48.3	0.95	3733	30.4	7,014	31,537	103-123		
45.3	1.81	3833	32.4	7,484	49,628	105-125		
47.5	2.51	3933	30.9	7,137	92,135	107-127		
54.6	1.03	3733	26.9	6,209	33,306	103-123		
51.1	1.88	3833	28.7	6,632	50,443	105-125		
52.2	2.68	3933	28.1	6,500	93,381	107-127		
61.1	1.23	3733	24	5,550	34,751	103-123		
59.8	1.85	3833	24.5	5,667	51,361	105-125		
58.1	2.19	3833	25.3	5,833	51,204	105-125		
59.0	2.92	3933	24.9	5,749	94,865	107-127		
68.5	0.84	3633	21.4	4,947	23,021	101-121		
65.1	1.23	3733	22.6	5,209	35,498	103-123		
66.0	2.31	3833	22.2	5,136	51,865	105-125		
65.3	3.13	3933	22.5	5,189	95,984	107-127		
76.3	0.84	3633	19.2	4,440	24,365	101-121		
73.8	1.24	3733	19.9	4,594	36,840	103-123		
74.8	2.61	3833	19.6	4,530	52,437	105-125		
74.4	3.43	3933	19.7	4,559	97,261	107-127		
82.2	0.82	3633	17.9	4,122	25,209	101-121		
83.6	1.22	3733	17.6	4,055	38,014	103-123		
82.5	2.71	3833	17.8	4,109	52,833	105-125		
80.2	3.62	3933	18.3	4,225	97,947	107-127		
91.8	0.85	3633	16	3,694	26,348	101-121		
94.7	1.26	3733	15.5	3,578	39,052	103-123		
94.5	3.08	3833	15.5	3,586	53,323	105-125		
93.7	4	3933	15.7	3,618	96,890	107-127		
101	0.90	3633	14.6	3,369	27,211	101-121		
107	1.27	3733	13.7	3,167	39,944	103-123		
106	3.33	3833	13.9	3,206	53,679	105-125		
103	4	3933	14.3	3,298	94,710	107-127		

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI ↔ page	N _S (min ⁻¹)	Kp
37 kW - 50 Hz		LSES 225 ST IFT/IE2 - LSES 225 SR IFT/IE3 LS 225 ST FCPL 54H1D + CDF7					64.4 kW - 87 Hz	
115	0.98	3633	12.7	2,943	28,344	101-121		
120	1.45	3733	12.3	2,831	40,673	103-123		
119	3.61	3833	12.4	2,855	54,007	105-125		
114	5	3933	12.9	2,983	92,356	107-127		
134	1.07	3633	10.9	2,523	29,463	101-121		
128	1.51	3733	11.5	2,657	41,050	103-123		
132	3.75	3833	11.1	2,568	54,274	105-125		
150	1.14	3633	9.81	2,265	30,152	101-121		
145	1.62	3733	10.1	2,343	41,728	103-123		
151	4	3833	9.75	2,250	54,569	105-125		
161	0.83	3633	9.1	2,101	30,590	101-121		
164	1.21	3733	8.95	2,066	42,327	103-123		
164	2.71	3833	8.94	2,064	54,742	105-125		
180	0.86	3633	8.15	1,882	31,173	101-121		
186	1.26	3733	7.9	1,823	42,852	103-123		
188	3.08	3833	7.8	1,802	54,985	105-125		
197	1.01	3633	7.43	1,717	31,614	101-121		
210	1.27	3733	6.99	1,614	43,304	103-123		
210	3.33	3833	6.98	1,611	54,687	105-125		
226	0.98	3633	6.5	1,500	32,193	101-121		
235	1.36	3733	6.25	1,443	43,673	103-123		
236	3.61	3833	6.21	1,434	53,085	105-125		
264	1.08	3633	5.57	1,286	32,765	101-121		
250	1.41	3733	5.86	1,354	43,865	103-123		
263	3.76	3833	5.59	1,290	51,640	105-125		
294	1.15	3633	5	1,154	33,117	101-121		
284	1.52	3733	5.17	1,194	44,209	103-123		
300	4	3833	4.9	1,131	49,874	105-125		

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI-MU* ↔ page	N _S (min ⁻¹)	Kp
45 kW - 50 Hz		LSES 225 MR IFT/IE2 - LSES 225 MG IFT/IE3 LS 225 MR FCPL 54H1D + CDF7					78.3 kW - 87 Hz	
16.8	1.03	3933	87.6	24,602	49,116	107-127-130		
18.8	1.13	3933	78.3	21,991	57,967	107-127-130		
21.1	1.25	3933	69.7	19,589	65,024	107-127-130		
23.7	1.36	3933	62.1	17,432	70,633	107-127-130		
25.8	0.85	3833	57	16,013	41,223	105-125-130		
26.7	1.49	3933	55	15,435	75,331	107-127-130		
29.3	0.93	3833	50.1	14,084	43,000	105-125-130		
30.0	1.61	3933	48.9	13,742	79,026	107-127-130		
33.3	1.01	3833	44.2	12,401	44,836	105-125-130		
33.0	1.72	3933	44.6	12,515	81,573	107-127-130		
37.7	1.10	3833	38.9	10,937	46,277	105-125-130		
37.4	1.75	3933	39.2	11,012	84,590	107-127-130		
40.4	1.32	3833	36.4	10,209	46,989	105-125-130		
42.3	1.90	3933	34.7	9,751	87,062	107-127-130		
48.3	0.78	3733	30.4	8,532	28,189	103-123-130		
45.3	1.49	3833	32.4	9,103	48,065	105-125-130		
47.5	2.06	3933	30.9	8,681	89,138	107-127-130		
54.6	0.85	3733	26.9	7,553	30,352	103-123-130		
51.1	1.55	3833	28.7	8,067	49,067	105-125-130		
52.2	2.20	3933	28.1	7,906	90,639	107-127-130		
61.1	1.01	3733	24	6,751	32,117	103-123-130		
58.1	1.80	3833	25.3	7,095	50,000	105-125-130		
59.0	2.40	3933	24.9	6,993	92,416	107-127-130		
65.1	1.01	3733	22.6	6,335	33,030	103-123-130		
66.0	1.90	3833	22.2	6,247	50,810	105-125-130		
65.3	2.58	3933	22.5	6,312	93,750	107-127-130		
73.8	1.02	3733	19.9	5,588	34,668	103-123-130		
74.8	2.15	3833	19.6	5,510	51,510	105-125-130		
74.4	2.82	3933	19.7	5,546	95,270	107-127-130		
83.6	1.00	3733	17.6	4,933	36,101	103-123-130		
82.5	2.23	3833	17.8	4,998	51,995	105-125-130		
80.2	2.97	3933	18.3	5,139	96,086	107-127-130		
94.7	1.04	3733	15.5	4,352	37,368	103-123-130		
94.5	2.53	3833	15.5	4,362	52,595	105-125-130		
93.7	3.31	3933	15.7	4,400	95,250	107-127-130		
107	1.04	3733	13.7	3,852	38,455	103-123-130		
106	2.74	3833	13.9	3,899	53,030	105-125-130		
103	3.54	3933	14.3	4,012	93,210	107-127-130		
115	0.81	3633	12.7	3,580	26,650	101-121-130		
120	1.20	3733	12.3	3,443	39,344	103-123-130		
119	2.97	3833	12.4	3,473	53,430	105-125-130		
114	3.79	3933	12.9	3,629	91,000	107-127-130		
134	0.88	3633	10.9	3,069	28,010	101-121-130		
128	1.24	3733	11.5	3,232	39,804	103-123-130		
132	3.09	3833	11.1	3,124	53,756	105-125-130		
150	0.94	3633	9.81	2,755	28,846	101-121-130		
145	1.33	3733	10.1	2,850	40,631	103-123-130		
151	3.50	3833	9.75	2,737	54,116	105-125-130		

*1st pages for Ot output shaft L - Ot hollow shaft H. 3rd page for motor + MU

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI-MU* ↔ page	N _S (min ⁻¹)	Kp
45 kW - 50 Hz		LSES 225 MR IFT/IE2 - LSES 225 MG IFT/IE3 LS 225 MR FCPL 54H1D + CDF7					78.3 kW - 87 Hz	
164	1.00	3733	8.95	2,514	41,360	103-123-130		
164	2.23	3833	8.94	2,511	54,327	105-125-130		
186	1.04	3733	7.9	2,218	42,000	103-123-130		
188	2.53	3833	7.8	2,192	54,623	105-125-130		
197	0.83	3633	7.43	2,088	30,623	101-121-130		
210	1.04	3733	6.99	1,963	42,550	103-123-130		
210	2.74	3833	6.98	1,959	53,925	105-125-130		
226	0.81	3633	6.5	1,824	31,327	101-121-130		
235	1.12	3733	6.25	1,755	43,000	103-123-130		
236	2.97	3833	6.21	1,745	52,404	105-125-130		
264	0.89	3633	5.57	1,564	32,022	101-121-130		
250	1.16	3733	5.86	1,647	43,233	103-123-130		
263	3.09	3833	5.59	1,569	51,030	105-125-130		
294	0.94	3633	5	1,404	32,450	101-121-130		
284	1.25	3733	5.17	1,452	43,652	103-123-130		
300	3.50	3833	4.9	1,375	49,340	105-125-130		

*1st pages for Ot output shaft L - Ot hollow shaft H. 3rd page for motor + MU

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI-MU* ↔ page	N _S (min ⁻¹)	Kp
55 kW - 50 Hz		LSES 250 ME IFT/IE2 - LSES 250 ME IFT/IE3 MU / LS 250 ME FCPL 60H2D					95.7 kW - 87 Hz	
16.9	0.85	3933	87.6	29,868	25,000	107-127-130		
18.9	0.93	3933	78.3	26,698	40,968	107-127-130		
21.2	1.03	3933	69.7	23,782	52,041	107-127-130		
23.8	1.12	3933	62.1	21,163	60,505	107-127-130		
26.9	1.22	3933	55	18,739	67,307	107-127-130		
30.2	1.33	3933	48.9	16,683	72,444	107-127-130		
33.5	0.83	3833	44.2	15,055	42,188	105-125-130		
33.2	1.42	3933	44.6	15,194	75,872	107-127-130		
38.0	0.91	3833	38.9	13,279	43,964	105-125-130		
37.7	1.43	3933	39.2	13,369	79,809	107-127-130		
40.7	1.09	3833	36.4	12,395	44,841	105-125-130		
42.6	1.56	3933	34.7	11,838	82,944	107-127-130		
45.6	1.22	3833	32.4	11,052	46,164	105-125-130		
47.8	1.69	3933	30.9	10,539	85,522	107-127-130		
51.5	1.27	3833	28.7	9,794	47,394	105-125-130		
52.5	1.81	3933	28.1	9,598	87,358	107-127-130		
61.5	0.83	3733	24	8,196	28,932	103-123-130		
58.5	1.48	3833	25.3	8,614	48,539	105-125-130		
59.4	1.97	3933	24.9	8,490	89,508	107-127-130		
65.5	0.83	3733	22.6	7,692	30,045	103-123-130		
66.4	1.56	3833	22.2	7,585	49,531	105-125-130		
65.8	2.12	3933	22.5	7,663	91,110	107-127-130		
74.3	0.83	3733	19.9	6,784	32,044	103-123-130		
75.3	1.76	3833	19.6	6,690	50,388	105-125-130		
74.9	2.32	3933	19.7	6,733	92,924	107-127-130		
84.2	0.82	3733	17.6	5,988	33,791	103-123-130		
83.1	1.83	3833	17.8	6,068	50,981	105-125-130		
80.8	2.44	3933	18.3	6,239	93,895	107-127-130		
95.4	0.85	3733	15.5	5,284	35,334	103-123-130		
95.2	2.08	3833	15.5	5,296	51,713	105-125-130		
94.3	2.72	3933	15.7	5,342	93,066	107-127-130		
108	0.86	3733	13.7	4,677	36,659	103-123-130		
106	2.25	3833	13.9	4,734	52,244	105-125-130		
103	2.91	3933	14.3	4,871	91,200	107-127-130		
121	0.98	3733	12.3	4,181	37,741	103-123-130		
120	2.44	3833	12.4	4,216	52,732	105-125-130		
114	3.12	3933	12.9	4,406	89,170	107-127-130		
128	1.02	3733	11.5	3,923	38,301	103-123-130		
133	2.54	3833	11.1	3,792	53,130	105-125-130		
146	1.10	3733	10.1	3,460	39,307	103-123-130		
152	2.88	3833	9.75	3,323	53,569	105-125-130		
165	0.82	3733	8.95	3,052	40,194	103-123-130		
165	1.83	3833	8.94	3,049	53,826	105-125-130		
187	0.85	3733	7.9	2,692	40,973	103-123-130		
189	2.08	3833	7.8	2,661	54,187	105-125-130		
211	0.86	3733	6.99	2,383	41,642	103-123-130		
212	2.25	3833	6.98	2,379	52,887	105-125-130		
237	0.92	3733	6.25	2,130	42,189	103-123-130		
238	2.44	3833	6.21	2,118	51,473	105-125-130		
252	0.95	3733	5.86	1,999	42,472	103-123-130		
264	2.54	3833	5.59	1,905	50,184	105-125-130		
286	1.03	3733	5.17	1,763	42,981	103-123-130		
302	2.88	3833	4.9	1,670	48,588	105-125-130		

*1st pages for Ot output shaft L - Ot hollow shaft H. 3rd page for motor + MU

Selection tables

Orthobloc: Ot / LS, LSES motors / 4 poles

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI-MU* ↔ page	N _S (min ⁻¹)	Kp
75 kW - 50 Hz		LSES 280 SD - LSES 280 SD IFT/IE3 MU / LS 280 SC FCPL 60H2D					130 kW - 87 Hz	
23.8	0.82	3933	62.1	28,862	7,300	107-127-130		
26.9	0.90	3933	55	25,557	45,530	107-127-130		
30.2	0.97	3933	48.9	22,752	55,522	107-127-130		
33.2	1.04	3933	44.6	20,722	61,813	107-127-130		
37.7	1.05	3933	39.2	18,233	68,622	107-127-130		
40.7	0.80	3833	36.4	16,904	40,319	105-125-130		
42.6	1.14	3933	34.7	16,144	73,710	107-127-130		
45.6	0.90	3833	32.4	15,073	42,171	105-125-130		
47.8	1.24	3933	30.9	14,373	77,675	107-127-130		
51.5	0.93	3833	28.7	13,357	43,886	105-125-130		
52.5	1.33	3933	28.1	13,090	80,390	107-127-130		
58.5	1.08	3833	25.3	11,748	45,480	105-125-130		
59.4	1.44	3933	24.9	11,578	83,465	107-127-130		
66.4	1.14	3833	22.2	10,344	46,857	105-125-130		
65.8	1.55	3933	22.5	10,451	85,694	107-127-130		
75.3	1.29	3833	19.6	9,123	48,046	105-125-130		
74.9	1.70	3933	19.7	9,182	88,166	107-127-130		
83.1	1.34	3833	17.8	8,275	48,866	105-125-130		
80.8	1.79	3933	18.3	8,509	89,472	107-127-130		
95.2	1.52	3833	15.5	7,223	49,878	105-125-130		
94.3	2.00	3933	15.7	7,286	88,989	107-127-130		
106	1.65	3833	13.9	6,457	50,610	105-125-130		
103	2.13	3933	14.3	6,643	87,488	107-127-130		
120	1.79	3833	12.4	5,750	51,283	105-125-130		
114	2.29	3933	12.9	6,008	85,810	107-127-130		
133	1.86	3833	11.1	5,172	51,831	105-125-130		
146	0.80	3733	10.1	4,719	36,567	103-123-130		
152	2.11	3833	9.75	4,532	52,435	105-125-130		
165	1.34	3833	8.94	4,158	52,787	105-125-130		
189	1.52	3833	7.8	3,629	52,138	105-125-130		
212	1.65	3833	6.98	3,244	50,990	105-125-130		
238	1.79	3833	6.21	2,889	49,785	105-125-130		
264	1.86	3833	5.59	2,599	48,665	105-125-130		
302	2.11	3833	4.9	2,277	47,259	105-125-130		

*1st pages for Ot output shaft L - Ot hollow shaft H. 3rd page for motor + MU

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MI-MU	i	M (Nm)	F _R E/2 (N)	Dim. MI-MU* ↔ page	N _S (min ⁻¹)	Kp
90 kW - 50 Hz		LSES 280 MD IFT/IE2 - LSES 280 MD IFT/IE3 MU / LS 280 MD FCPL 60H2D + CDF7					157 kW - 87 Hz	
30.2	0.81	3933	48.9	27,304	9,131	107-127-130		
33.2	0.87	3933	44.6	24,867	32,330	107-127-130		
37.9	0.88	3933	39.2	21,791	58,313	107-127-130		
42.8	0.96	3933	34.7	19,296	65,610	107-127-130		
48.0	1.04	3933	30.9	17,179	71,083	107-127-130		
52.7	1.11	3933	28.1	15,645	74,711	107-127-130		
59.6	1.21	3933	24.9	13,838	78,702	107-127-130		
67.2	0.83	3833	22.2	12,271	44,964	105-125-130		
66.0	1.30	3933	22.5	12,491	81,519	107-127-130		
76.7	0.91	3833	19.6	10,753	46,457	105-125-130		
75.2	1.42	3933	19.7	10,975	84,575	107-127-130		
83.8	1.12	3833	17.8	9,891	46,810	105-125-130		
81.1	1.50	3933	18.3	10,170	86,165	107-127-130		
95.5	1.27	3833	15.5	8,633	46,646	105-125-130		
94.7	1.67	3933	15.7	8,708	85,930	107-127-130		
107	1.38	3833	13.9	7,717	46,249	105-125-130		
104	1.78	3933	14.3	7,939	84,700	107-127-130		
120	1.49	3833	12.4	6,873	45,771	105-125-130		
115	1.91	3933	12.9	7,181	83,289	107-127-130		
133	1.55	3833	11.1	6,182	45,277	105-125-130		
152	1.76	3833	9.75	5,417	44,471	105-125-130		
166	1.12	3833	8.94	4,970	43,880	105-125-130		
190	1.27	3833	7.8	4,338	42,948	105-125-130		
213	1.38	3833	6.98	3,877	42,086	105-125-130		
239	1.49	3833	6.21	3,453	41,200	105-125-130		
266	1.55	3833	5.59	3,106	40,341	105-125-130		
303	1.76	3833	4.9	2,722	39,290	105-125-130		

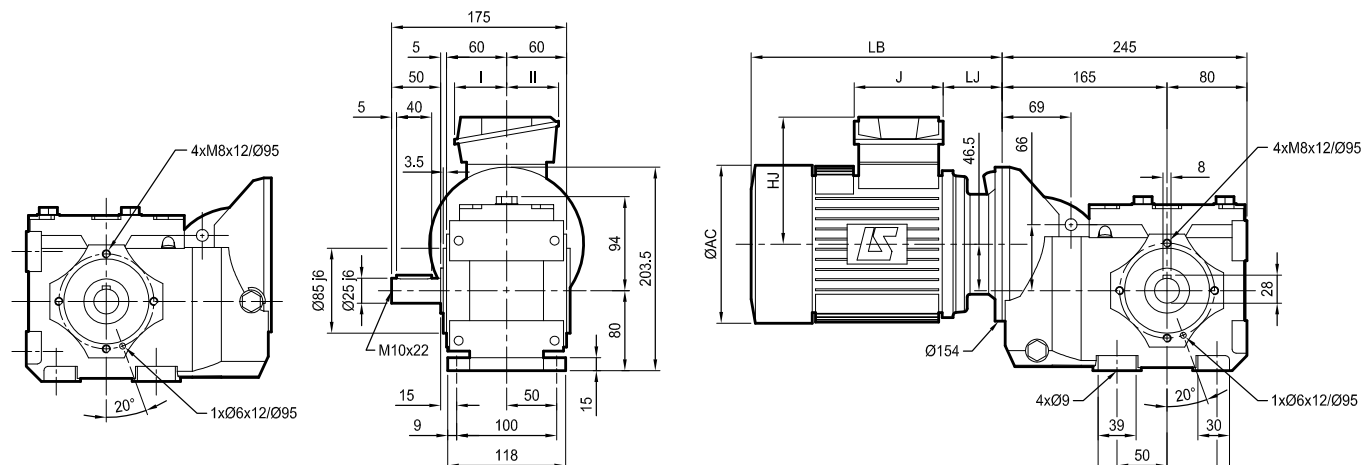
*1st pages for Ot output shaft L - Ot hollow shaft H. 3rd page for motor + MU

LS, LSES 1500 min ⁻¹ - 50 Hz		Ot - Gearbox					LS, LSES 2600 min ⁻¹ - 87 Hz	
N _S (min ⁻¹)	Kp	Ot / MU	i	M (Nm)	F _R E/2 (N)	Dim. MU* ↔ page	N _S (min ⁻¹)	Kp
110 kW - 50 Hz		LSES 315 SP IFT/IE2 - LSES 315 SP IFT/IE3 LS 315 SN FCPL 60H2D + CDF7					191 kW - 87 Hz	
42.9	0.78	3933	34.7	23,522	42,245	107-127-130		
48.1	0.85	3933	30.9	20,941	47,141	107-127-130		
52.9	0.91	3933	28.1	19,072	58,914	107-127-130		
59.8	0.99	3933	24.9	16,869	64,609	107-127-130		
66.2	1.06	3933	22.5	15,227	68,527	107-127-130		
75.4	1.16	3933	19.7	13,378	79,791	107-127-130		
81.3	1.23	3933	18.3	12,397	81,814	107-127-130		
95.0	1.37	3933	15.7	10,615	85,372	107-127-130		
104	1.46	3933	14.3	9,678	87,203	107-127-130		
115	1.56	3933	12.9	8,754	88,996	107-127-130		

*1st pages for Ot output shaft L - Ot hollow shaft H. 3rd page for motor + MU

Dimensions in millimetres

- Tapped form SBT LR, output shaft on the left L*



Ot: 14 kg
+ mot

* shaft on the right option R

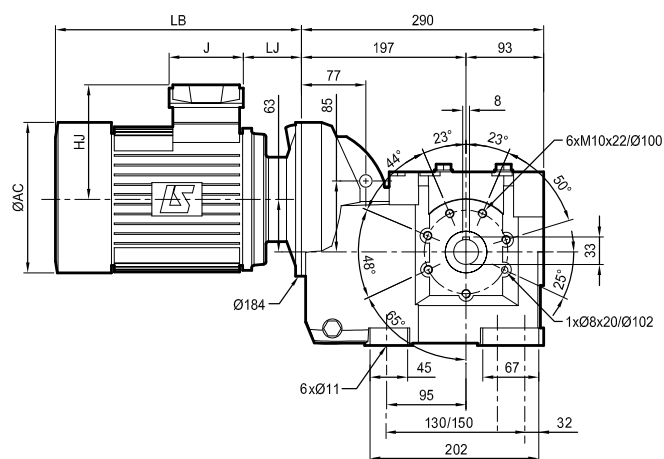
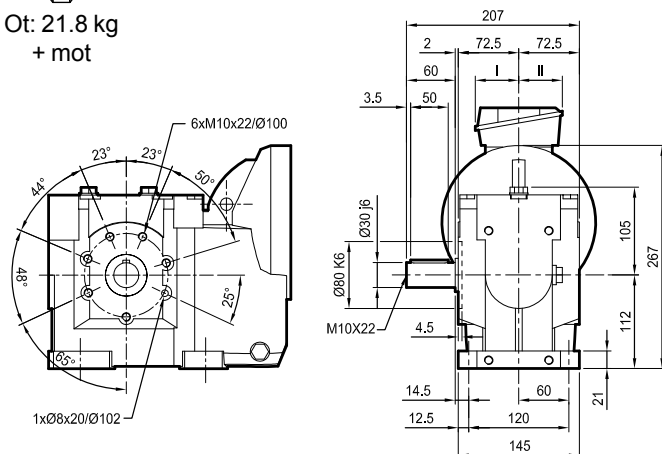
89

Dimensions in millimetres

- Tapped form SBT LR, output shaft on the left L*



Ot: 21.8 kg
+ mot

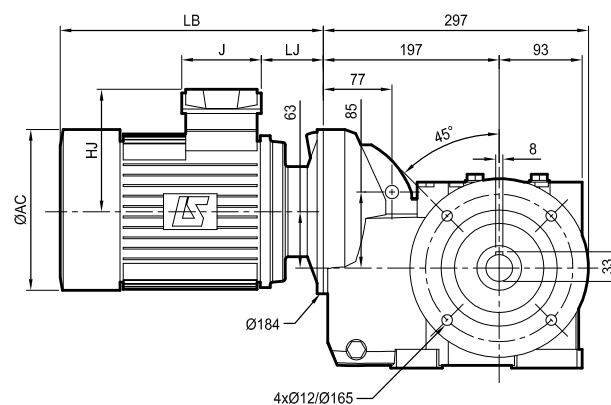
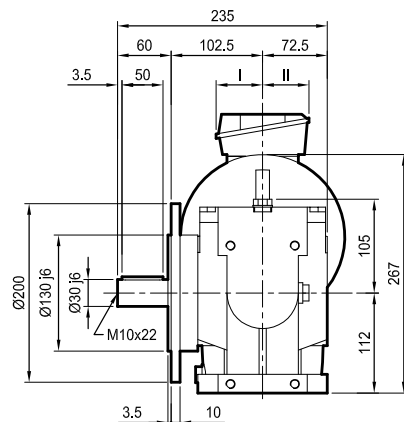


* shaft on the right option R

- Flange form BD L*, output shaft on left L*



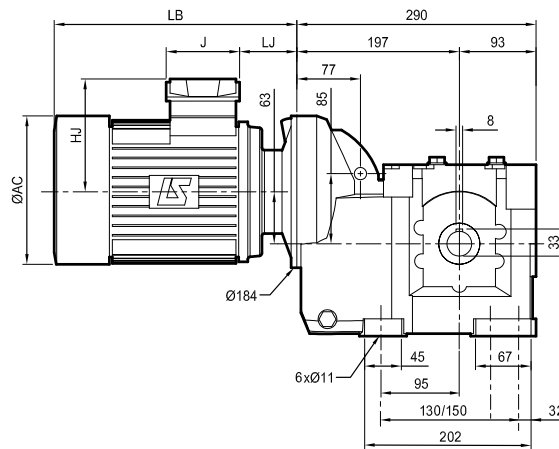
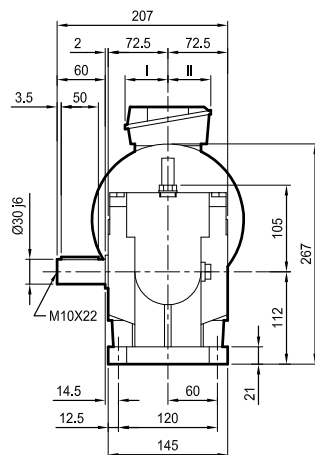
Ot: 23 kg
+ mot



* option on right BDR R: identical flange and shaft

- Foot mounted form S, output shaft on left L *

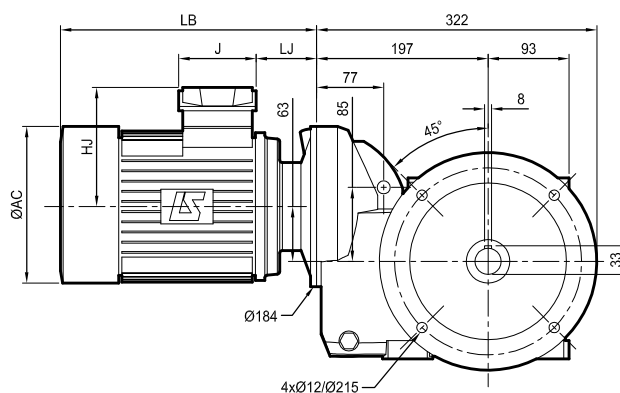
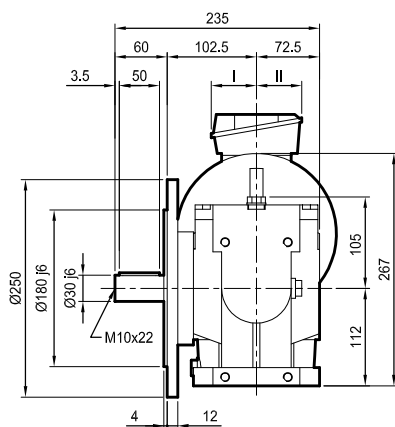
Ot: 22 kg
+ mot



* shaft on the right option R

- Flange form BS L*, output shaft on left L *

Ot: 23.3 kg
+ mot



* option on right BSR R: identical flange and shaft

Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 71 M	140	109	87	199.5	37	43.5	43.5	7.3
LS 71 L	140	109	87	207.5	37	43.5	43.5	8.3
LSES 80 LG	190	135	87	288	67.5	43.5	43.5	14.1
LSES 90 SL	190	135	87	290	71	43.5	43.5	16.2
LSES 90 L	190	135	87	290	71	43.5	43.5	16.2
LSES 90 LU	190	135	87	321.5	71	43.5	43.5	20.4
LSES 100 L	200	140	87	335.5	72	43.5	43.5	22.6
LSES 100 LR	200	140	87	354.5	72	43.5	43.5	25.8
LSES 100 LG	235	149	87	350.5	71	43.5	43.5	31
LSES 112 MU	235	149	87	368.5	71	43	43	37
LSES 132 SU	227	172	126	403	52	63	63	42.1
LSES 132 SM	272	190	126	437	69	63	63	52

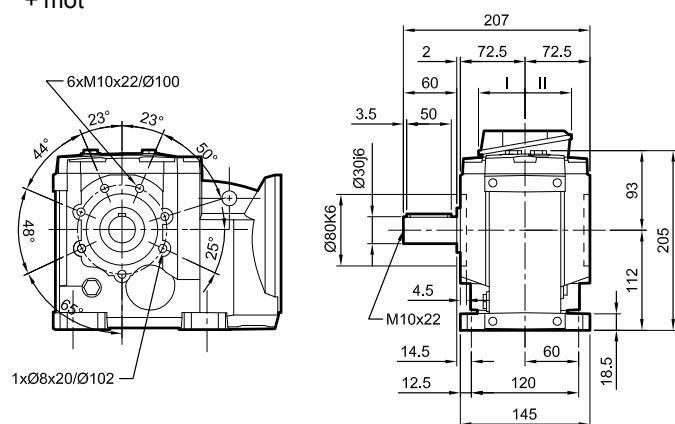
Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	296	21.5	55	55	10.3
LS 71 L	FFB 1	140	130	160	296	21.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	347	49.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	430	55.5	55	55	17.1
LS 90 SL	FFB 2	190	151	160	435	59	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	435	59	55	55	22.4
LS 90 L	FFB 2	190	151	160	435	59	55	55	21
LSES 90 LU	FFB 2	190	151	160	435	59	55	55	26.6
LS 100 L	FFB 2	200	156	160	483	60	55	55	29.1
LSES 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	483	60	55	55	32
LSES 100 LG	FFB 3	235	165	160	459	59	55	55	37.6
LS 112 MG	FFB 3	235	165	160	486	61.5	55	55	37.6
LSES 112 MU	FFB 3	235	165	160	484	59	55	55	40.9
LS 132 S	FFB 3	227	168	160	509	60.5	55	55	44.6
LSES 132 SM	FFB 4	272	186	160	648	77.5	55	55	66.5

1. except motor, brake motor in italics: not concerned by the IE

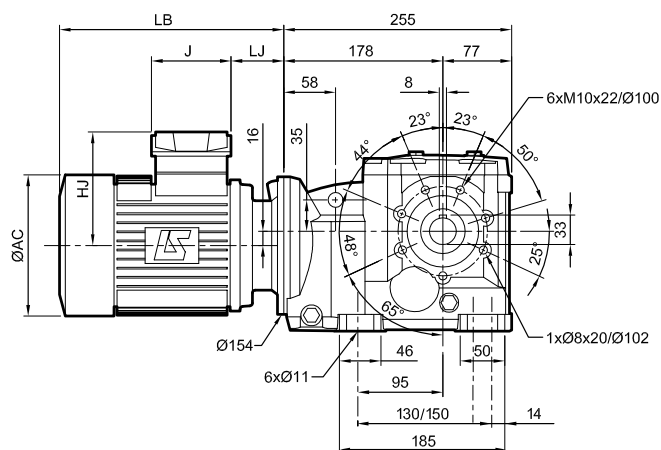
Dimensions in millimetres

- Tapped form SBT LR, output shaft on the left L*

Ot: 21 kg
+ mot

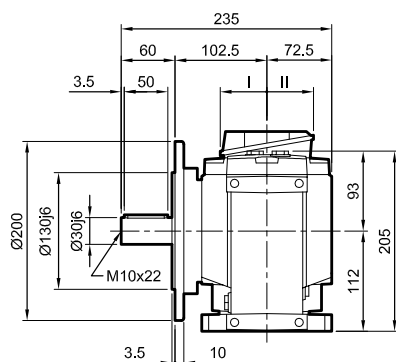


* shaft on the right option R

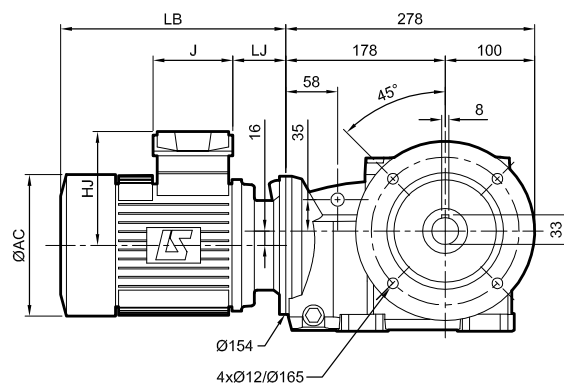


- Flange form BD L*, output shaft on left L*

Ot: 21.7 kg
+ mot



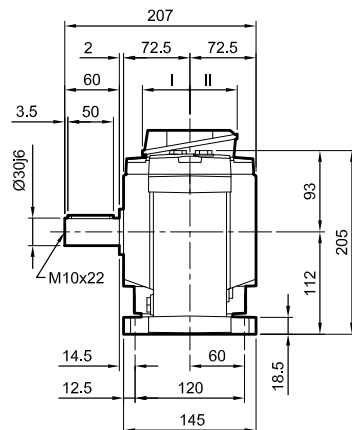
* option on right BDR R: identical flange and shaft



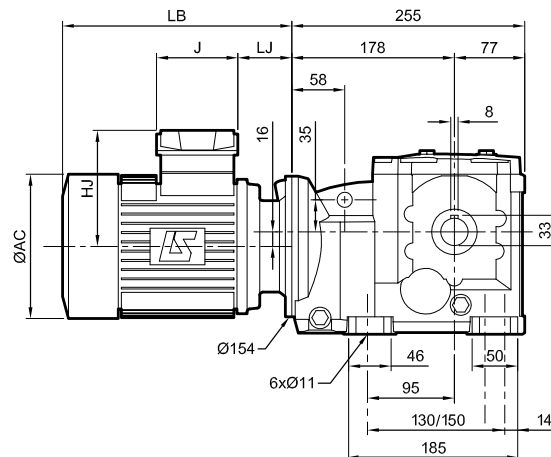
Dimensions in millimetres

- Foot mounted form S, output shaft on left L*

Ot: 20.5 kg
+ mot

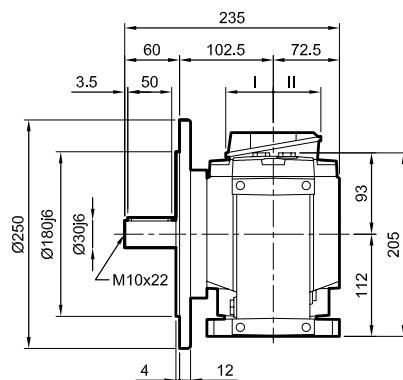


* shaft on the right option R

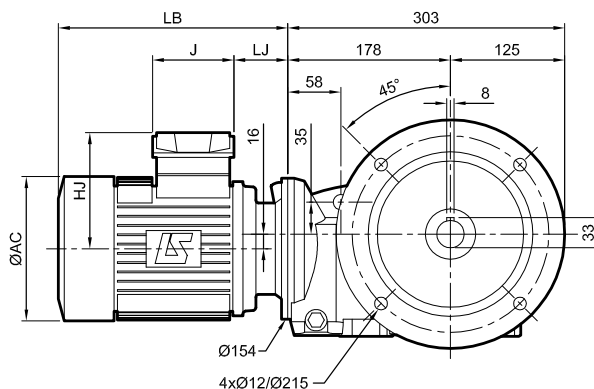


- Flange form BS L*, output shaft on left L*

Ot: 22 kg
+ mot



* option on right BSR R: identical flange and shaft



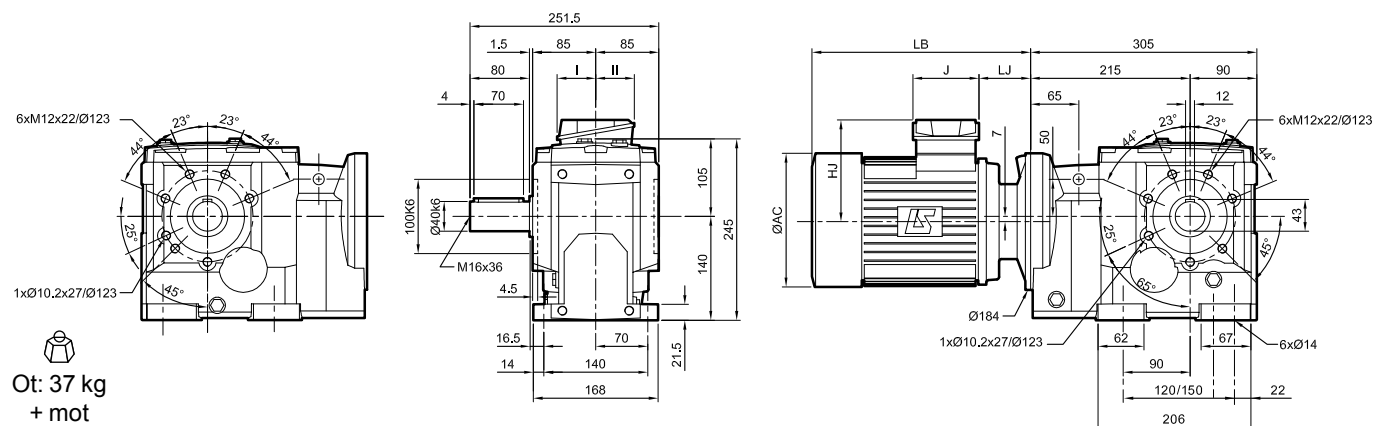
Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 71 M	140	109	87	199.5	37	43.5	43.5	7.3
LS 71 L	140	109	87	207.5	37	43.5	43.5	8.3
LSES 80 LG	190	135	87	288	67.5	43.5	43.5	14.1
LSES 90 SL	190	135	87	290	71	43.5	43.5	16.2
LSES 90 L	190	135	87	290	71	43.5	43.5	16.2
LSES 90 LU	190	135	87	321.5	71	43.5	43.5	20.4
LSES 100 L	200	140	87	335.5	72	43.5	43.5	23
LSES 100 LR	200	140	87	354.5	72	43.5	43.5	25.8
LSES 100 LG	235	149	87	350.5	71	43.5	43.5	31

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	300	25.5	55	55	11.3
LS 71 L	FFB 1	140	130	160	306	25.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	347	49.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	430	55.5	55	55	18
LS 90 SL	FFB 2	190	151	160	435	59	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	435	59	55	55	22.4
LS 90 L	FFB 2	190	151	160	435	59	55	55	21
LSES 90 LU	FFB 2	190	151	160	435	59	55	55	26.6
LS 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	483	60	55	55	32
LSES 100 LG	FFB 3	235	165	160	459	59	55	55	37.6

1. except motor, brake motor in italics: not concerned by the IE

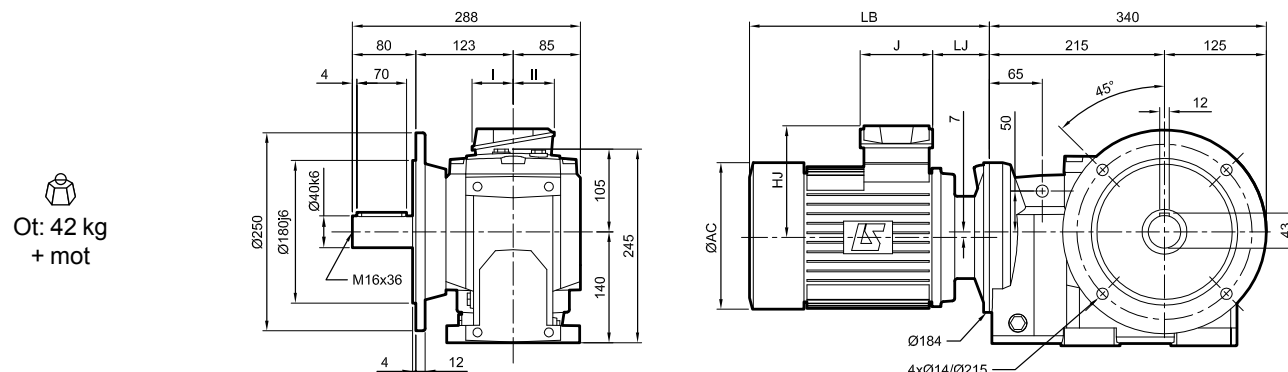
Dimensions in millimetres

- Tapped form SBT LR, output shaft on the left L*



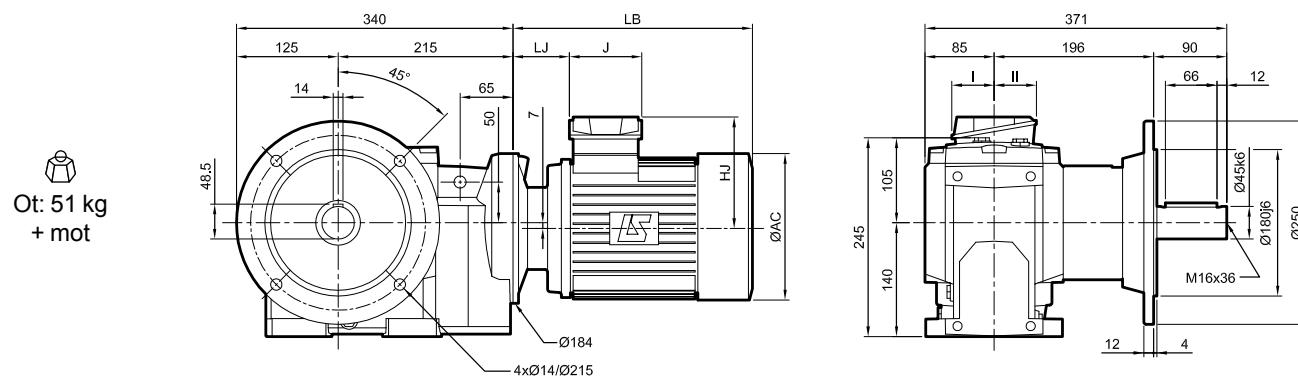
* shaft on the right option R

- Flange form BD L*, output shaft on left L*



* option on right BDR R: identical flange and shaft

- Reinforced flange form BR R, output shaft on the right R* only

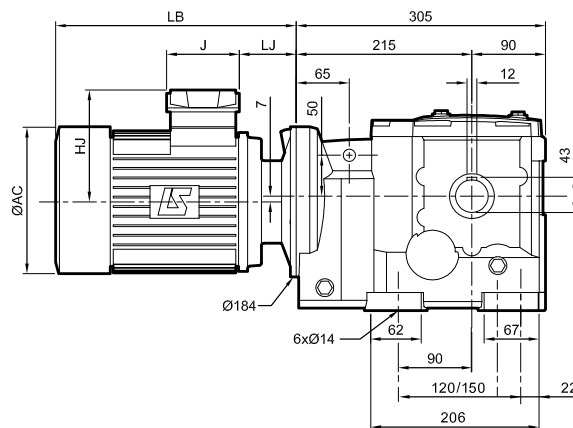
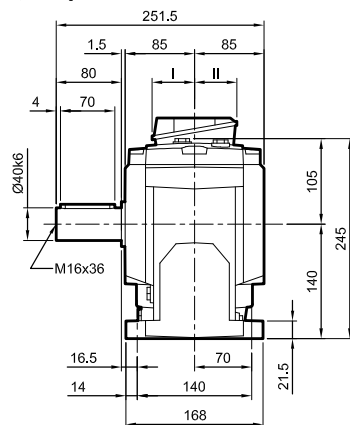


* left option: not possible

Dimensions in millimetres

- Foot mounted form S, output shaft on left L *

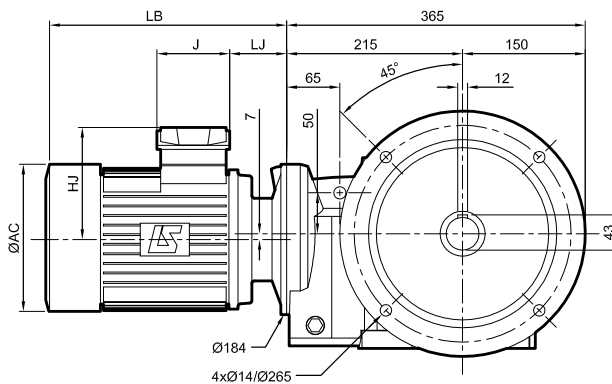
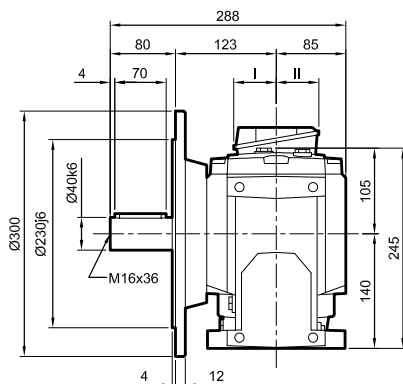

Ot: 38 kg
+ mot



* shaft on the right option R

- Flange form BS L*, output shaft on left L *


Ot: 42 kg
+ mot



* option on right BSR R: identical flange and shaft

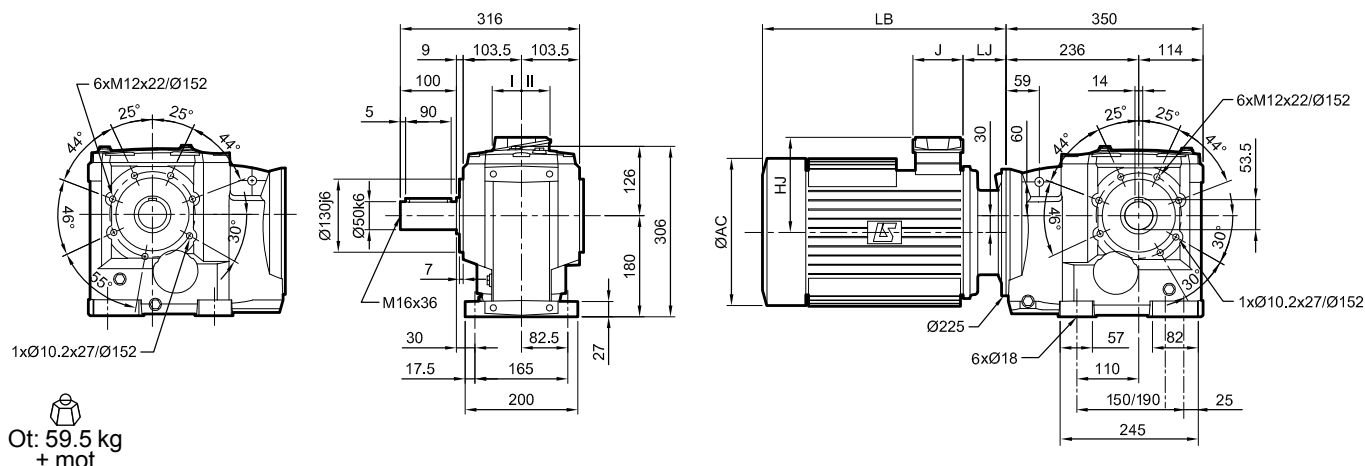
Motor type	IMfinity® three-phase 4-pole motors ¹							
	AC	HJ	J	LB	LJ	I	II	
LS 71 M	140	109	87	199.5	37	43.5	43.5	7.3
LS 71 L	140	109	87	207.5	37	43.5	43.5	8.3
LSES 80 LG	190	135	87	288	67.5	43.5	43.5	14.1
LSES 90 SL	190	135	87	290	71	43.5	43.5	16.2
LSES 90 L	190	135	87	290	71	43.5	43.5	16.2
LSES 90 LU	190	135	87	321.5	71	43.5	43.5	20.4
LSES 100 L	200	140	87	335.5	72	43.5	43.5	22.6
LSES 100 LR	200	140	87	354.5	72	43.5	43.5	25.8
LSES 100 LG	235	149	87	350.5	71	43.5	43.5	31
LSES 112 MU	235	149	87	368.5	71	43	43	37
LSES 132 SU	227	172	126	403	52	63	63	42.1
LSES 132 SM	272	190	126	437	69	63	63	52

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	296	21.5	55	55	10.3
LS 71 L	FFB 1	140	130	160	296	21.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	347	49.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	430	55.5	55	55	17.1
LS 90 SL	FFB 2	190	151	160	435	59	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	435	59	55	55	22.4
LS 90 L	FFB 2	190	151	160	435	59	55	55	21
LSES 90 LU	FFB 2	190	151	160	435	59	55	55	26.6
LS 100 L	FFB 2	200	156	160	483	60	55	55	29.1
LSES 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	483	60	55	55	32
LSES 100 LG	FFB 3	235	165	160	459	59	55	55	37.6
LS 112 MG	FFB 3	235	165	160	486	61.5	55	55	37.6
LSES 112 MU	FFB 3	235	165	160	484	59	55	55	40.9
LS 132 S	FFB 3	227	168	160	509	60.5	55	55	44.6
LSES 132 SM	FFB 4	272	186	160	648	77.5	55	55	66.5

1. except motor, brake motor in italics: not concerned by the IE

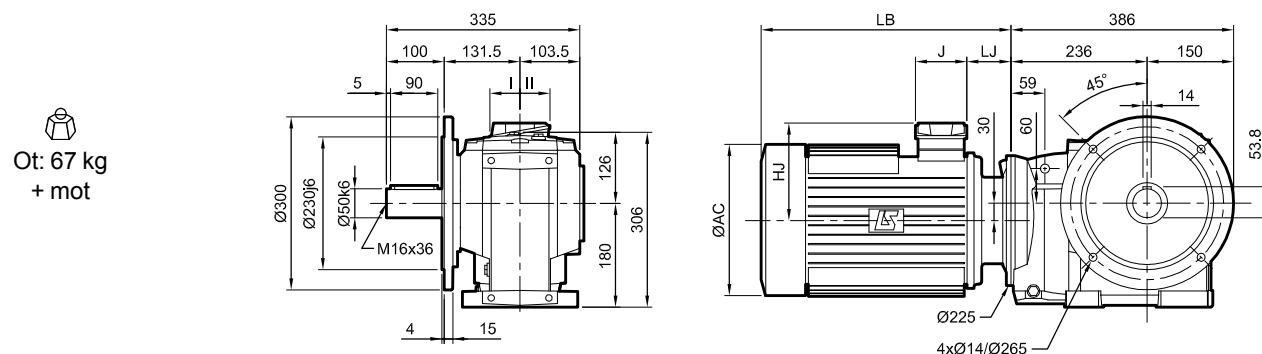
Dimensions in millimetres

- Tapped form SBT LR, output shaft on the left L*



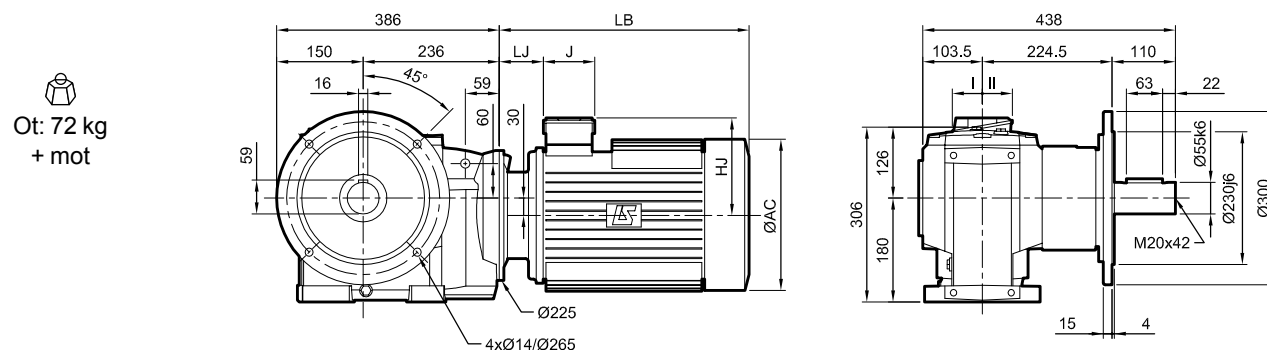
* shaft on the right option R

- Flange form BD L*, output shaft on left L*



* option on right BDR R: identical flange and shaft

- Reinforced flange form BR R, output shaft on the right R* only

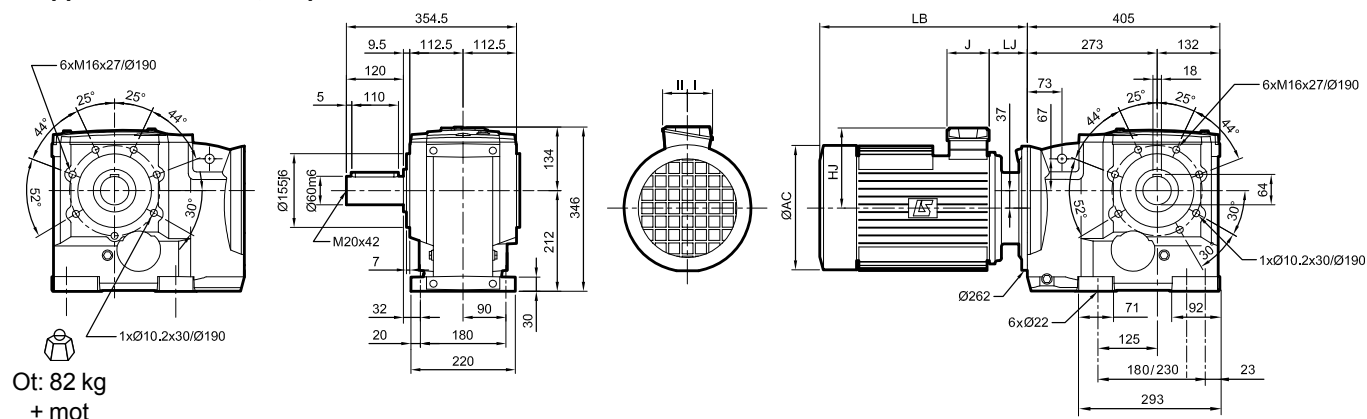


* left option: not possible

97

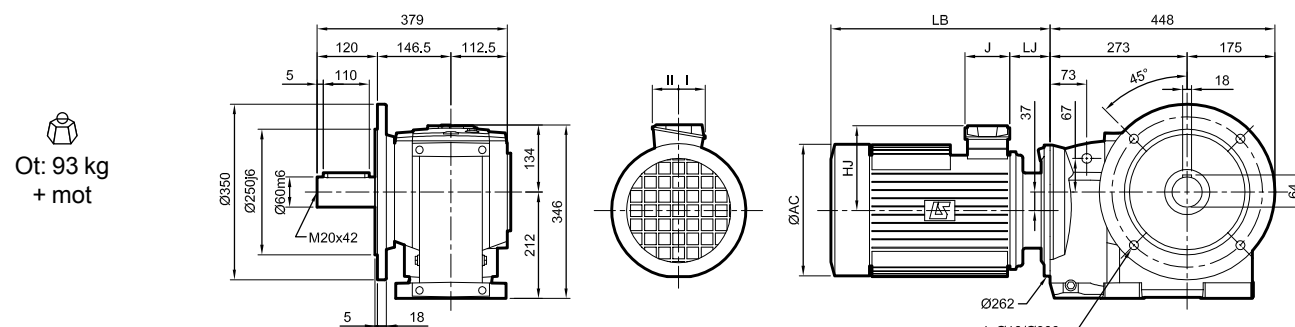
Dimensions in millimetres

- Tapped form SBT LR, output shaft on the left L*



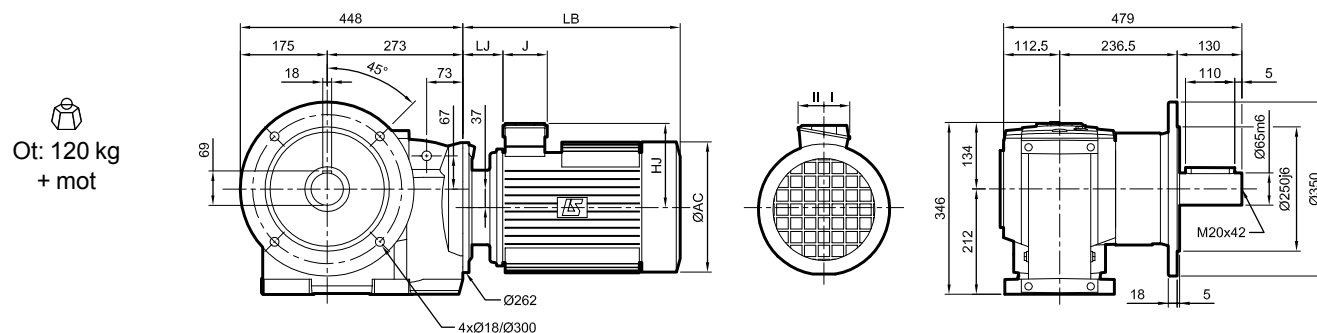
* shaft on the right option R

- Flange form BD L*, output shaft on left L*



* option on right BDR R: identical flange and shaft

- Reinforced flange form BR R, output shaft on the right R* only

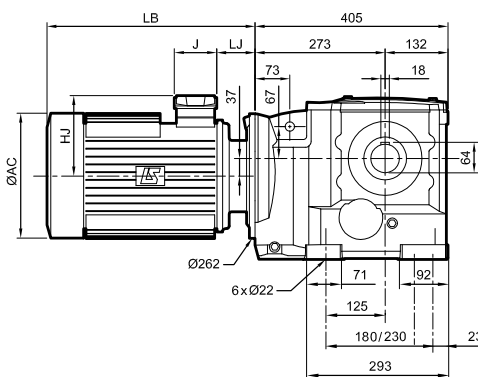
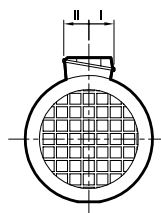
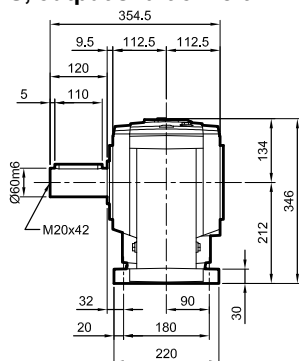


* left option: not possible

Dimensions in millimetres

- Foot mounted form S, output shaft on left L*

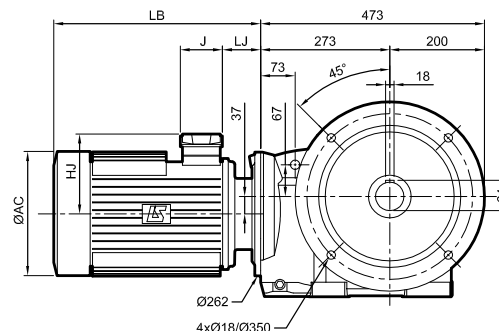
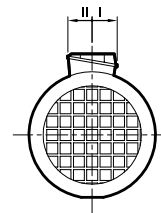
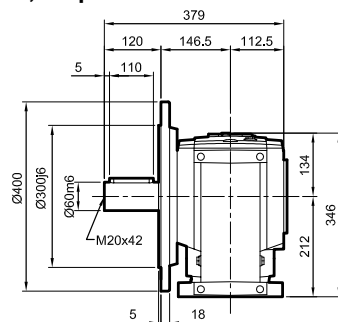
Ot: 83 kg
+ mot



* shaft on the right option R

- Flange form BS L*, output shaft on left L*

Ot: 94 kg
+ mot



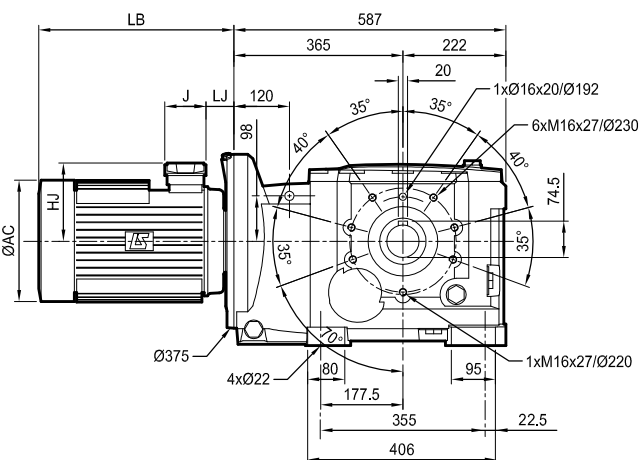
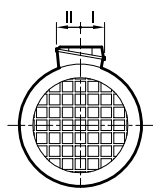
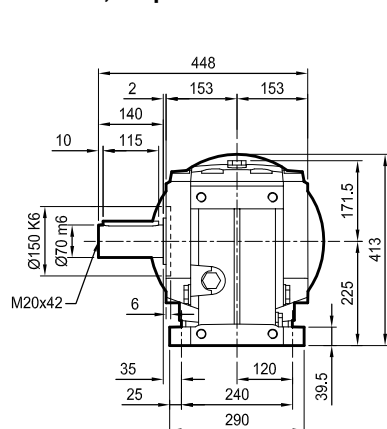
* option on right BSR: identical flange and shaft

Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 80 LG	190	135	87	288.5	68	43	43	15
LS 90 SL	190	135	87	286	67	43	43	16.2
LS 90 L	190	135	87	286	67	43	43	16.2
LS 90 LU	190	135	87	317.5	67	43	43	20.4
LS 100 L	200	140	87	331.5	68	43	43	23
LS 100 LR	200	140	87	350.5	68	43	43	25.8
LS 100 LG	235	149	87	346.5	67	43	43	31
LS 112 MU	235	149	87	364.5	67	43	43	37
LS 132 SU	227	172	126	403	52	63	63	42.1
LS 132 SM	272	190	126	437	69	63	63	52
LS 132 M	272	190	126	437	69	63	63	59.1
LS 132 MU	272	190	126	464	69	63	63	62.6
LS 160 MR	272	190	126	506	69.5	63	63	78
LS 160 L	312	235	135	508	55.8	88	64	90
LS 160 M	312	235	135	508	55.8	88	64	93
LS 160 LUR	312	235	135	523	55.8	88	64	100
LS 180 MT	312	248	186	508	67.8	112	98	100
LS 180 M	350	256	186	565	76.5	112	98	130
LS 180 LR	312	248	186	533	67	112	98	108
LS 180 LUR	350	256	186	627	76.5	112	98	155

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 80 L	FFB 1	170	141	160	348	50	55	55	13.9
LS 80 LG	FFB 1	190	151	160	431	56	55	55	18
LS 90 SL	FFB 2	190	151	160	431	55	55	55	18.2
LS 90 SL	FFB 2	190	151	160	431	55	55	55	22.4
LS 90 L	FFB 2	190	151	160	431	55	55	55	21
LS 90 LU	FFB 2	190	151	160	431	55	55	55	26.6
LS 100 L	FFB 2	200	156	160	479	56	55	55	29.1
LS 100 L	FFB 2	200	156	160	479	55	55	55	29.6
LS 100 LR	FFB 2	200	156	160	479	55	55	55	32
LS 100 LG	FFB 3	235	165	160	455	55	55	55	37.6
LS 112 MG	FFB 3	235	165	160	482	28.5	55	55	37.6
LS 112 MU	FFB 3	235	165	160	480	55	55	55	40.9
LS 132 S	FFB 3	227	168	160	509	60.5	55	55	44.6
LS 132 SM	FFB 4	272	186	160	648	77.5	55	55	66.5
LS 132 M	FFB 4	272	186	160	648	77.5	55	55	67.4
LS 132 MU	FFB 4	272	186	160	648	77.5	55	55	77.1
LS 160 MR	FFB 4	272	186	160	683	79.5	55	55	92.3
LS 160 MP	FFB 5	272	186	160	682	78.5	55	55	82.9
LS 160 LR	FFB 5	272	186	160	682	78.5	55	55	96.1
LS 160 M	FFB 5	312	221	160	695	68	55	55	110
LS 160 LUR	FFB 5	312	221	160	690	68	55	55	117
LS 180 MT	FFB 5	312	221	160	695	68	55	55	117
LS 180 LR	FCPL54-H1D	312	235	134	696	57	92	63	152

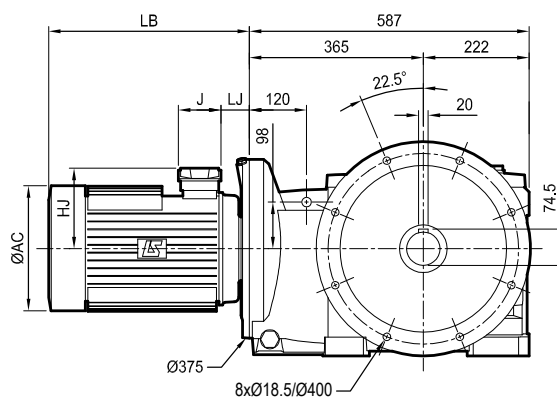
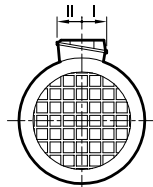
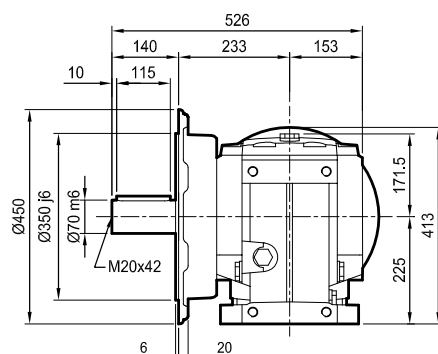
1. except motor, brake motor in italics: not concerned by the IE

- Tapped form SBT LR, output shaft on the left L*



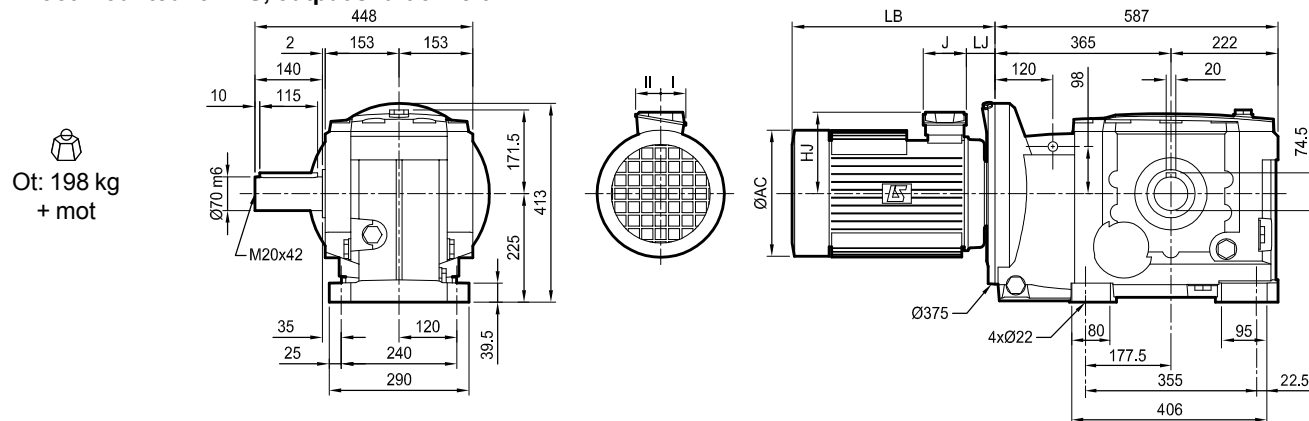
* option on right SBT, LR R: identical flange and shaft

- Flange form BD L*, output shaft on left L*



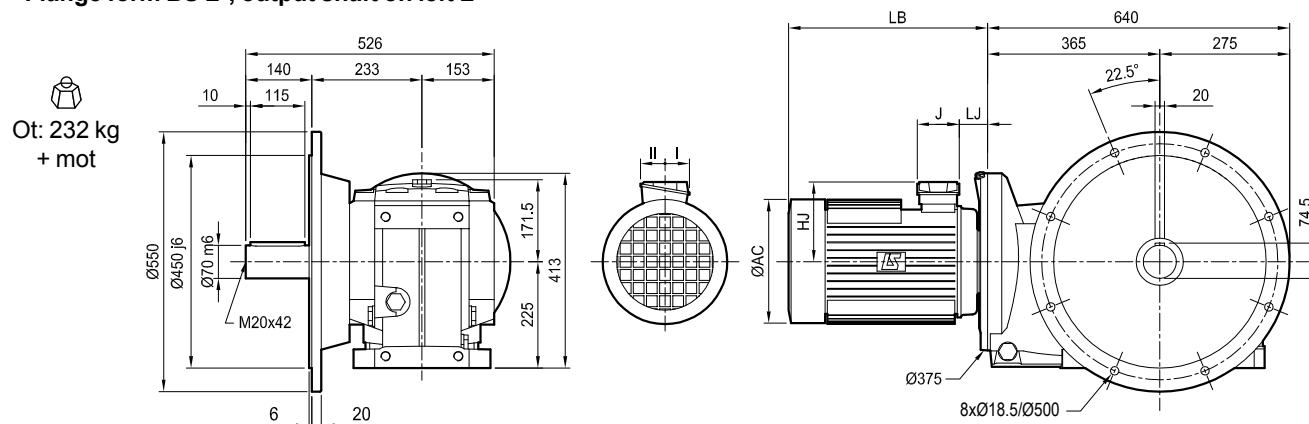
* option on right BDR R: identical flange and shaft

- Foot mounted form S, output shaft on left L*



* shaft on the right option R

- Flange form BS L*, output shaft on left L*



* option on right BSR R: identical flange and shaft

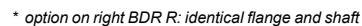
Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS90 SL	190	135	87	272	53	43	43	16.2
LS90 L	190	135	87	272	53	43	43	16.2
LS90 LU	190	135	87	303.5	53	43	43	20.4
LS100 L	200	140	87	317.5	54	43	43	22.6
LS100 LR	200	140	87	336.5	54	43	43	25.8
LS100 LG	235	149	87	332.5	53	43	43	31
LS112 MU	235	149	87	350.5	53	43	43	37
LS132 SU	227	172	126	385	28.5	63	63	42.1
LS132 SM	272	190	126	419	51	63	63	52
LS132 M	272	190	126	419	51	63	63	59.1
LS132 MU	272	190	126	446	51	63	63	62.6
LS160 MR	272	190	126	489	52.5	63	63	77.8
LS160 L	312	235	135	490	37.8	88	64	90
LS160 M	312	235	135	490	37.8	88	64	93
LS160 LUR	312	235	135	505	37.8	88	64	100
LS180 MT	312	248	186	490	49.8	112	98	100
LS180 LR	312	248	186	515	49.8	112	98	108
LS180 M	350	256	186	547	58.8	112	98	130
LS180 LUR	350	256	186	609	58.8	112	98	155
LS200 LR	350	256	186	609	58.8	112	98	166
LS200 LU	390	276	186	674	82	112	98	225
LS225 ST	390	310	231	625.5	59.5	119	142	205
LS225 SR	390	310	231	674.5	59.5	119	142	236
LS225 MR	390	310	292	825	83.5	119	142	230

1. except brake motor in italics: not concerned by the IE

2. with CDF device

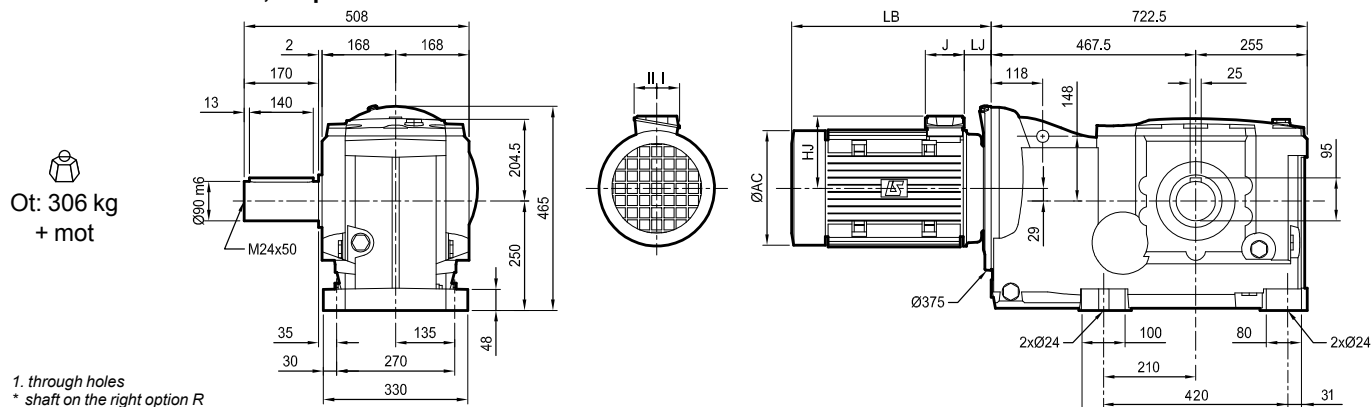
Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS90 SL	FFB 2	190	151	160	417	41	55	55	18.2
LS90 SL	FFB 2	190	151	160	417	41	55	55	22.4
LS90 L	FFB 2	190	151	160	417	41	55	55	21
LS90 LU	FFB 2	190	151	160	417	41	55	55	26.6
LS100 L	FFB 2	200	156	160	465	41	55	55	29.1
LS100 L	FFB 2	200	156	160	465	41	55	55	29.6
LS100 LR	FFB 2	200	156	160	465	41	55	55	32
LS100 LG	FFB 3	235	165	160	441	41	55	55	37.6
LS112 MG	FFB 3	235	165	160	468	43.5	55	55	37.6
LS112 MU	FFB 3	235	165	160	466	41	55	55	40.9
LS132 S	FFB 3	227	168	160	491	42.5	55	55	44.6
LS132 SM	FFB 4	272	186	160	630	59.5	55	55	66.5
LS132 M	FFB 4	272	186	160	630	59.5	55	55	67.4
LS132 MU	FFB 4	272	186	160	665	61.5	55	55	77.1
LS160 MR	FFB 4	272	186	160	664	60.5	55	55	92.3
LS160 MP	FFB 5	272	186	160	664	60.5	55	55	82.9
LS160 LR	FFB 5	272	186	160	664	60.5	55	55	96
LS160 M	FFB 5	312	235	160	667	55.8	55	55	110
LS160 LUR	FFB 5	312	235	160	672	50	55	55	117
LS180 MT	FFB 5	312	235	160	677	50	55	55	117
LS180 LR	FCPL54-H1D ²	312	235	134	678	39	92	63	152
LS200 LT	FCPL54-H1D ²	350	263	134	774	86	92	63	200
LS225 ST	FCPL54-H1D ²	390	283	134	836	109.5	92	63	242
LS225 MR	FCPL54-H1D ²	390	283	134	878	109.5	92	63	274

- Tapped form SBT LR, output shaft on the left L*

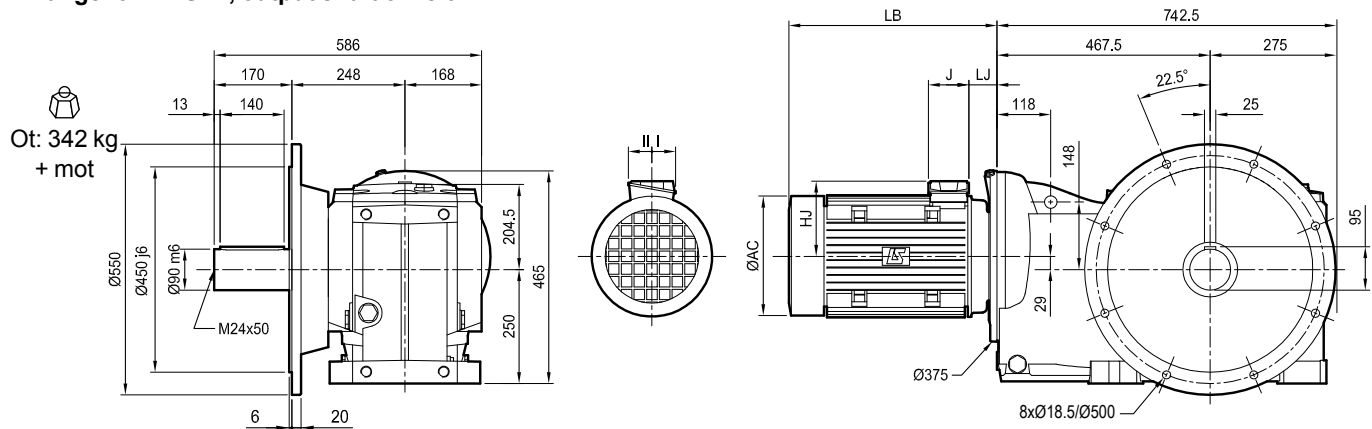


Dimensions in millimetres

- Foot mounted form S, output shaft on left L*



- Flange form BS L*, output shaft on left L*



* option on right BSR R: identical flange and shaft

Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 90 SL	190	135	87	272	53	43	43	16.2
LS 90 L	190	135	87	272	53	43	43	16.2
LS 90 LU	190	135	87	303.5	53	43	43	20.4
LS 100 L	200	140	87	317.5	54	43	43	22.6
LS 100 LR	200	140	87	336.5	54	43	43	25.8
LS 100 LG	235	149	87	332.5	53	43	43	31
LS 112 MU	235	149	87	350.5	53	43	43	37
LS 132 SU	227	172	126	385	28.5	63	63	42.1
LS 132 SM	272	190	126	419	51	63	63	52
LS 132 M	272	190	126	419	51	63	63	59.1
LS 132 MU	272	190	126	446	51	63	63	62.6
LS 160 MR	272	190	126	489	52.5	63	63	77.8
LS 160 L	312	235	135	490	37.8	88	64	90
LS 160 M	312	235	135	490	37.8	88	64	93
LS 160 LUR	312	235	135	505	37.8	88	64	100
LS 180 MT	312	248	186	490	49.8	112	98	100
LS 180 LR	312	248	186	515	49.8	112	98	108
LS 180 M	350	256	186	547	58.8	112	98	130
LS 180 LUR	350	256	186	609	58.8	112	98	155
LS 200 LR	350	256	186	609	58.8	112	98	166
LS 200 LU	390	276	186	674	82	112	98	225
LS 225 ST	390	310	231	626	59.5	119	142	205
LS 225 SR	390	310	231	674	72.5	119	142	236
LS 225 MR	390	310	292	825	83.5	119	142	230
LS 225 MG	479	405	292	825	83.5	151	181	318
LS 250 ME	479	405	292	825	83.5	151	181	350

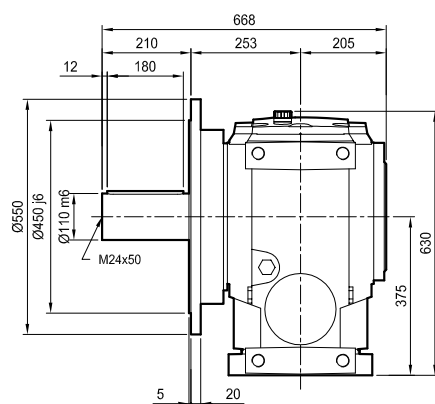
1. except brake motor in italics: not concerned by the IE

2. with CDF device

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 90 SL	FFB 2	190	151	160	417	41	55	55	18.2
LS 90 SL	FFB 2	190	151	160	417	41	55	55	22.4
LS 90 L	FFB 2	190	151	160	417	41	55	55	21
LS 90 LU	FFB 2	190	151	160	417	41	55	55	26.6
LS 100 L	FFB 2	200	156	160	465	41	55	55	29.1
LS 100 L	FFB 2	200	156	160	465	41	55	55	29.6
LS 100 LR	FFB 2	200	156	160	465	41	55	55	32
LS 100 LG	FFB 3	235	165	160	441	41	55	55	37.6
LS 112 MG	FFB 3	235	165	160	468	43.5	55	55	37.6
LS 112 MU	FFB 3	235	165	160	466	41	55	55	40.9
LS 132 S	FFB 3	227	168	160	491	42.5	55	55	44.6
LS 132 SM	FFB 4	272	186	160	630	59.5	55	55	66.5
LS 132 M	FFB 4	272	186	160	630	59.5	55	55	67.4
LS 132 MU	FFB 4	272	186	160	665	61.5	55	55	77.1
LS 160 MR	FFB 4	272	186	160	664	60.5	55	55	92.3
LS 160 MP	FFB 5	272	186	160	664	60.5	55	55	82.9
LS 160 LR	FFB 5	272	186	160	664	60.5	55	55	96
LS 160 M	FFB 5	312	235	160	667	55.8	55	55	110
LS 160 LUR	FFB 5	312	235	160	672	50	55	55	117
LS 180 MT	FFB 5	312	235	160	677	50	55	55	117
LS 180 LR	FCPL54-H1D	312	235	134	678	39	92	63	152
LS 200 LT	FCPL54-H1D ²	350	263	134	774	86	92	63	200
LS 225 ST	FCPL54-H1D ²	390	283	134	836	109.5	92	63	242
LS 225 MR	FCPL54-H1D ²	390	283	134	878	109.5	92	63	274

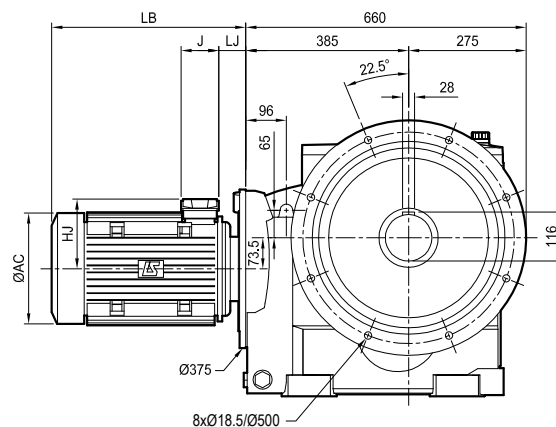
Dimensions in millimetres

- Flange form BD L*, output shaft on left L*



Ot: 402 kg
+ mot

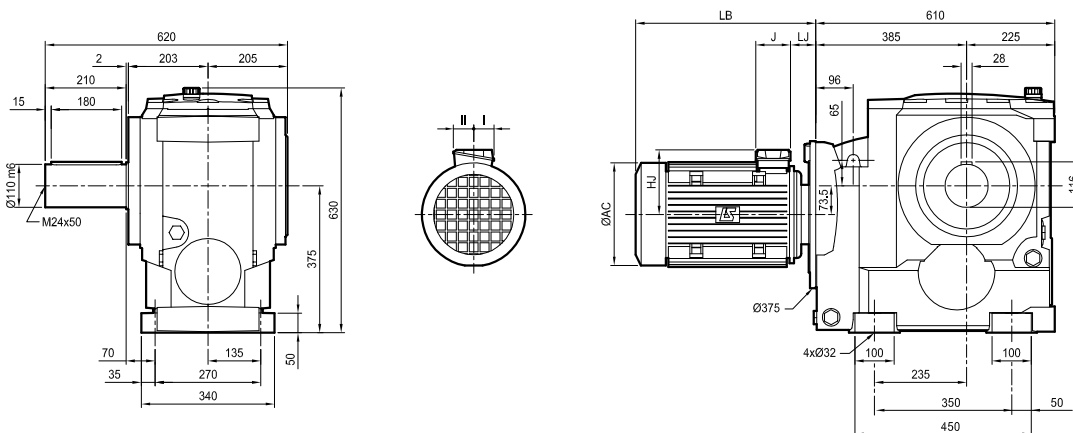
* option on right BDR R: identical flange and shaft



- Foot mounted form S, output shaft on left L*

Ot: 378 kg
+ mot

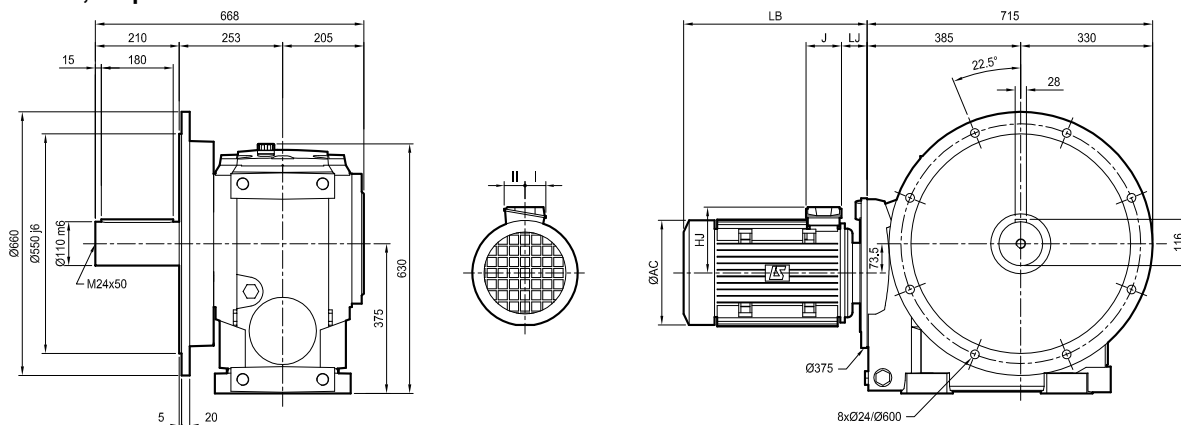
* shaft on the right option R



- Flange form BS L*, output shaft on left L*

Ot: 440 kg
+ mot

* option on right BSR R: identical flange and shaft



Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 112 MU	235	149	87	349.5	53.5	43	43	34.4
LSES 132 SU	227	172	126	385	34	63	63	42.1
LSES 132 SM	272	190	126	419	51	63	63	52
LSES 132 M	272	190	126	406	38	63	63	59.1
LSES 132 MR	272	190	126	433	38	63	63	62.6
LSES 160 MU	272	190	126	476	40	63	63	77.8
LSES 160 L	312	235	135	477	26	92	63	90
LSES 160 M	312	235	135	477	27	92	63	93
LSES 160 LUR	312	235	135	492	26	92	63	100
LSES 180 MT	312	248	186	477	36	112	98	100
LSES 180 LR	312	248	186	502	36	112	98	108
LSES 180 M	350	256	186	534	46	112	98	130
LSES 180 LUR	350	256	186	596	46	112	98	155
LSES 200 LR	350	256	186	596	46	112	98	166
LSES 200 LU	390	276	186	661.5	69.5	112	98	225
LSES 225 ST	390	310	231	612.5	46.5	119	142	205
LSES 225 SR	390	365	231	661.5	60.5	151	181	236
LSES 225 MR	390	310	292	812	70.5	119	142	230
LSES 225 MG	479	405	292	812	70.5	151	181	318
LSES 250 ME	479	405	292	812	70.5	151	181	350
LSES 280 SD	479	405	292	872	70.5	151	181	428
LSES 280 MD	479	405	292	872	70.5	151	181	470

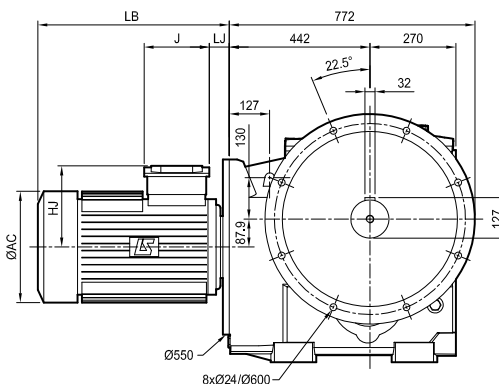
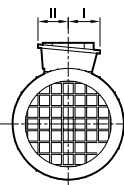
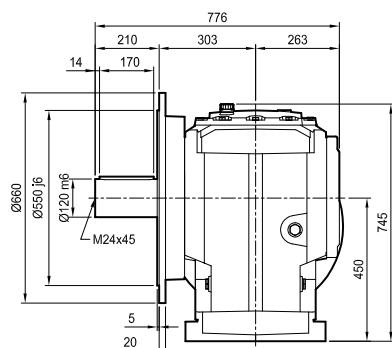
1. except brake motor in italics: not concerned by the IE

2. with CDF device

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
<i>LS 112 MG</i>	<i>FFB 3</i>	235	165	160	468	43.5	55	55	37.6
LSES 112 MU	FFB 3	235	165	160	465.5	41	55	55	40.9
<i>LS 132 S</i>	<i>FFB 3</i>	227	168	160	491	42.5	55	55	44.6
LSES 132 SM	FFB 4	272	186	160	630	59.5	55	55	66.5
<i>LS 132 M</i>	<i>FFB 4</i>	265	186	160	617	46.5	55	55	67.4
LSES 132 MU	FFB 4	265	186	160	617	46.5	55	55	77.1
LSES 160 MR	FFB 4	264	186	160	651	47.5	55	55	92.3
<i>LS 160 MP</i>	<i>FFB 5</i>	264	186	160	651	47.5	55	55	82.9
<i>LS 160 LR</i>	<i>FFB 5</i>	265	186	160	651	47.5	55	55	96.1
LSES 160 M	FFB 5	312	201	160	665	36	55	55	110
LSES 160 LUR	FFB 5	312	201	160	665	36	55	55	117
<i>LS 180 MT</i>	<i>FFB 5</i>	312	235	160	665	36	55	55	152
<i>LS 180 LR</i>	<i>FCPL54-H1D</i>	312	235	134	665	26	92	63	152
<i>LS 200 LT</i>	<i>FCPL54-H1D²</i>	350	263	134	761	73	92	63	200
<i>LS 225 ST</i>	<i>FCPL54-H1D²</i>	390	283	134	823	96.5	92	63	242
<i>LS 225 MR</i>	<i>FCPL54-H1D²</i>	390	283	134	878	109.5	92	63	274

Dimensions in millimetres

- Flange form BS L*, output shaft on left L*

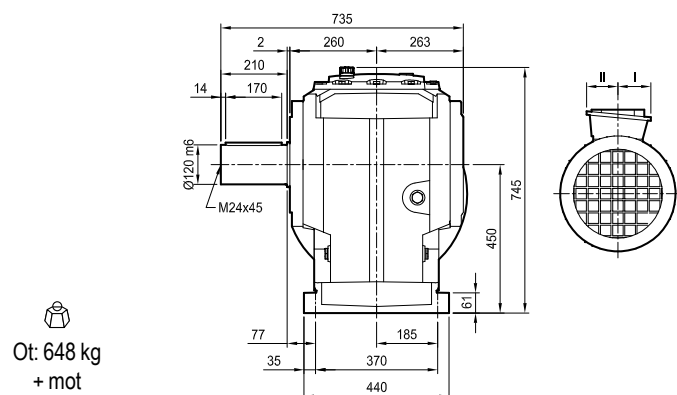


Ot: 726 kg
+ mot

* option on right BSR R: identical flange and shaft

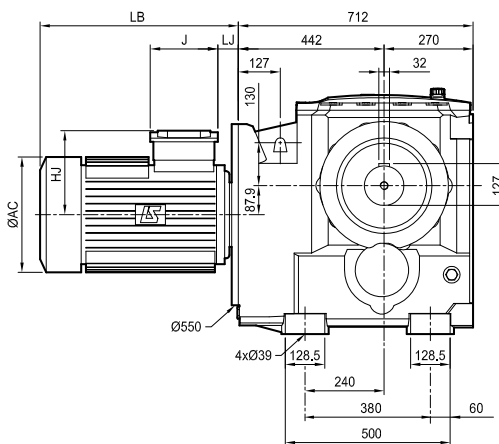
Dimensions in millimetres

- Foot mounted form S, output shaft on left L *



Ot: 648 kg
+ mot

* shaft on the right option R



Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS132 M	272	190	126	406	38	63	63	59.1
LS132 MU	272	190	126	433	38	63	63	62.6
LS160 MR	272	190	126	476	40	63	63	77.8
LS160 L	312	235	135	477	26	92	63	90
LS160 M	312	235	135	477	27	92	63	93
LS160 LUR	312	235	135	492	26	92	63	100
LS180 MT	312	248	186	477	36	112	98	100
LS180 LR	312	248	186	502	36	112	98	108
LS180 M	350	256	186	534	46	112	98	130
LS180 LUR	350	256	186	596	46	112	98	155
LS200 LR	350	256	186	596	46	112	98	166
LS200 LU	390	276	186	661.5	69.5	112	98	225
LS225 ST	390	310	231	612.5	46.5	119	142	205
LS225 SR	390	365	231	661.5	60.5	151	181	236
LS225 MR	390	310	292	812	70.5	119	142	230
LS225 MG	479	405	292	812	70.5	151	181	318
LS250 ME	479	405	292	812	70.5	151	181	350
LS280 SD	479	405	292	872	70.5	151	181	428
LS280 MD	479	405	292	872	70.5	151	181	470

1. except brake motor in italics: not concerned by the IE

2. with CDF device

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS132 M	FFB 4	265	186	160	617	46.5	55	55	67.4
LS132 MU	FFB 4	265	186	160	617	46.5	55	55	77.1
LS160 MR	FFB 4	264	186	160	651	47.5	55	55	92.3
LS160 MP	FFB 5	264	186	160	651	47.5	55	55	82.9
LS160 LR	FFB 5	265	186	160	651	47.5	55	55	96.1
LS160 M	FFB 5	312	201	160	665	36	55	55	110
LS160 LUR	FFB 5	312	201	160	665	36	55	55	117
LS180 MT	FFB 5	312	235	160	665	36	55	55	152
LS180 LR	FCPL54-H1D ²	312	235	134	665	26	92	63	152
LS200 LT	FCPL54-H1D ²	350	263	134	761	73	92	63	200
LS225 ST	FCPL54-H1D ²	390	283	134	823	96.5	92	63	242

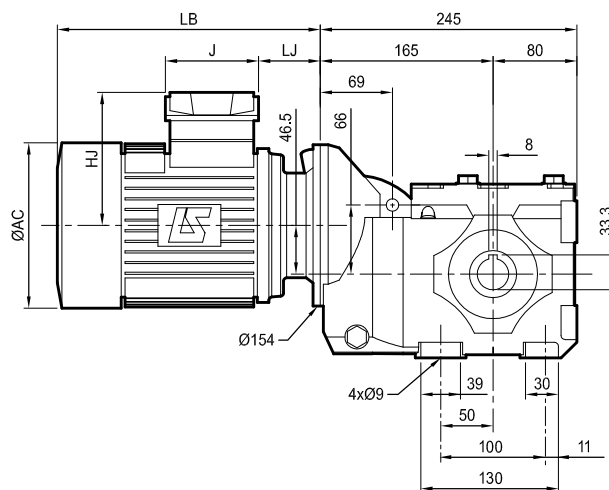
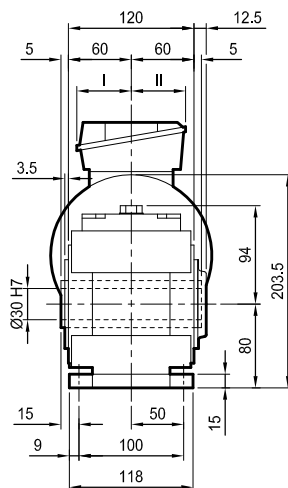
- Tapped form SBT LR, cylindrical hollow shaft H



Dimensions in millimetres

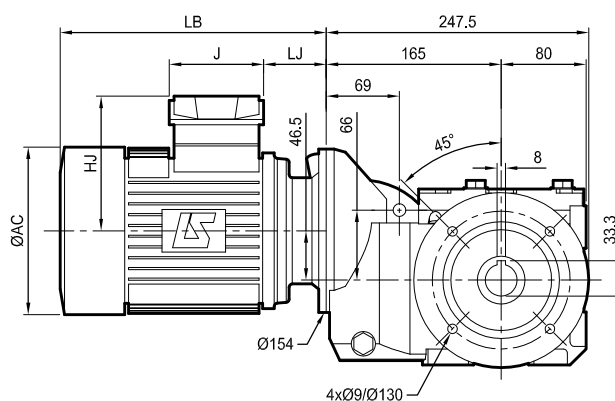
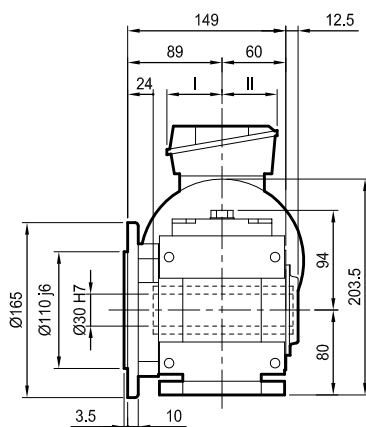
- Foot mounted form S, cylindrical hollow shaft H


Ot: 14.5 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H


Ot: 14.8 kg
+ mot



* option on right BSR H: identical flange and shaft

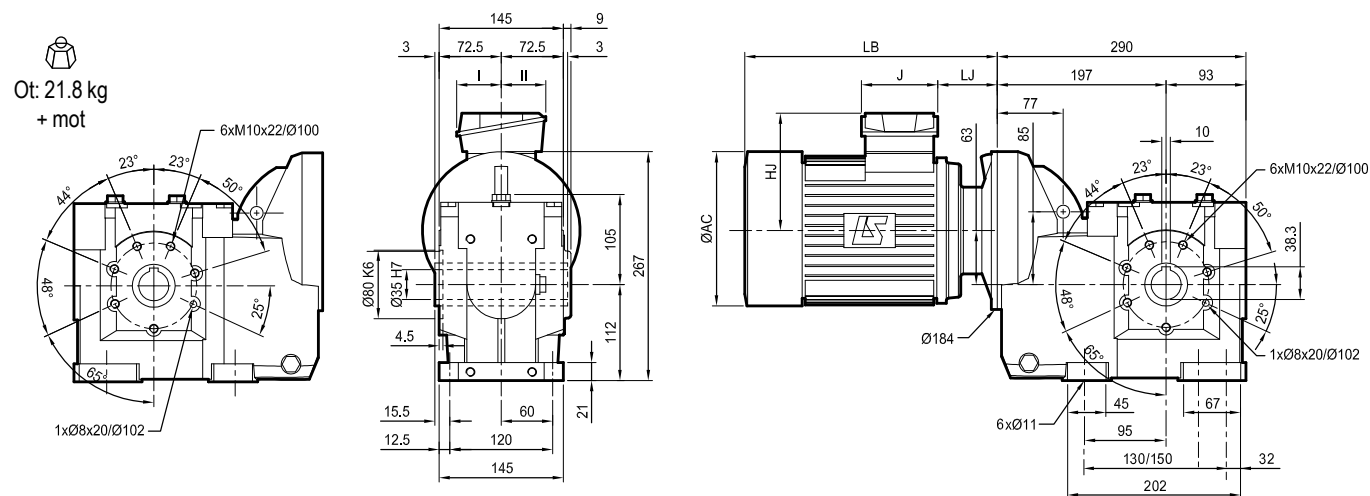
Motor type	IMfinity® three-phase 4-pole motors ¹							 kg
	AC	HJ	J	LB	LJ	I	II	
LS 71 M	140	109	87	199.5	37	43.5	43.5	7.3
LS 71 L	140	109	87	207.5	37	43.5	43.5	8.3
LSES 80 LG	190	135	87	288	67.5	43.5	43.5	14.1
LSES 90 SL	190	135	87	290	71	43.5	43.5	16.2
LSES 90 L	190	135	87	290	71	43.5	43.5	16.2
LSES 90 LU	190	135	87	321.5	71	43.5	43.5	20.4
LSES 100 L	200	140	87	335.5	72	43.5	43.5	23
LSES 100 LR	200	140	87	354.5	72	43.5	43.5	25.8
LSES 100 LG	235	149	87	350.5	71	43.5	43.5	31

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							 kg
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	300	25.5	55	55	11.3
LS 71 L	FFB 1	140	130	160	306	25.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	347	49.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	430	55.5	55	55	18
LS 90 SL	FFB 2	190	151	160	435	59	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	435	59	55	55	22.4
LS 90 L	FFB 2	190	151	160	435	59	55	55	21
LSES 90 LU	FFB 2	190	151	160	435	59	55	55	26.6
LS 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	483	60	55	55	32
LSES 100 LG	FFB 3	235	165	160	459	59	55	55	37.6

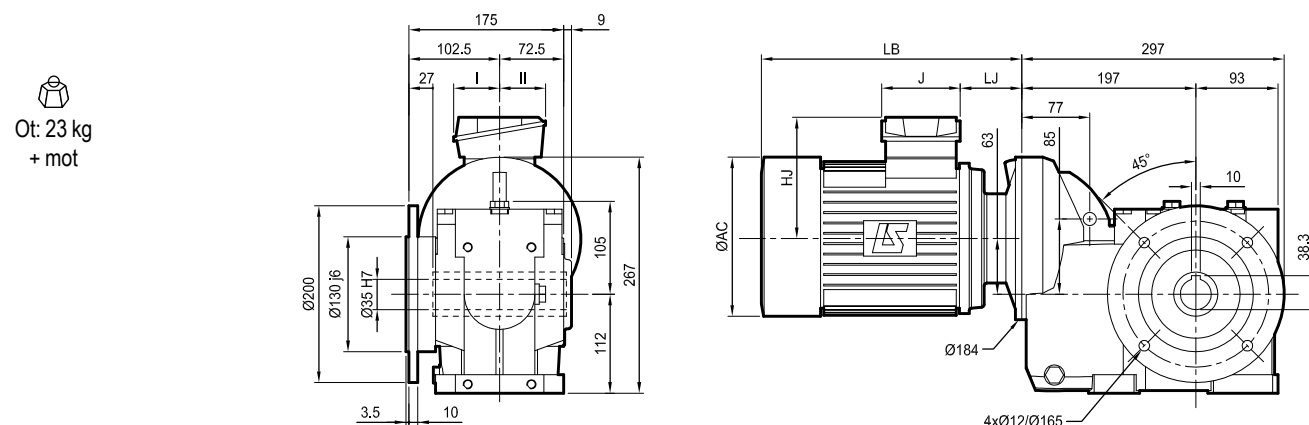
1. except brake motor in italics: not concerned by the IE

Dimensions in millimetres

- Tapped form SBT LR, cylindrical hollow shaft H

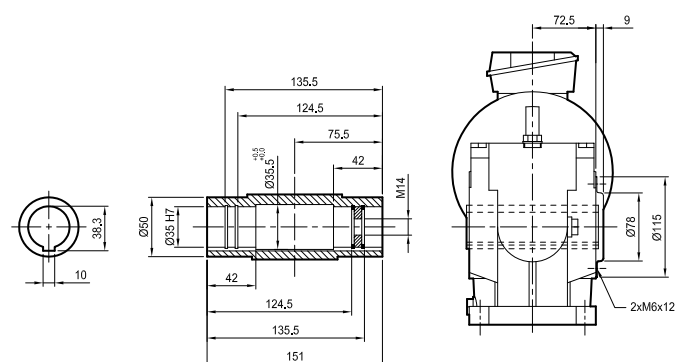


- Flange form BD L, cylindrical hollow shaft H

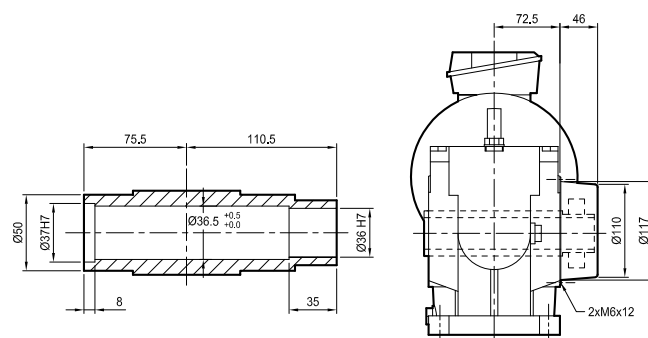


* option on right BDR H: identical flange and shaft

- Hollow shaft details H



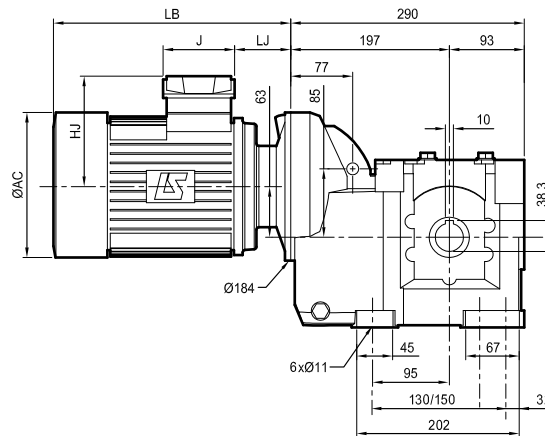
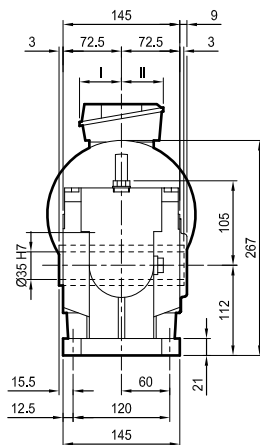
- Option: shrink disc on the right SDR*



* left SDL

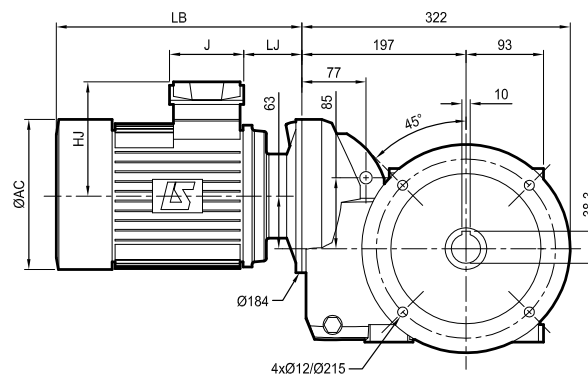
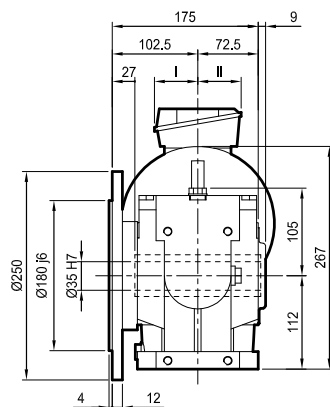
- Foot mounted form S, cylindrical hollow shaft H

Ot: 22 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H

Ot: 23.3 kg
+ mot



* option on right BSR H: identical flange and shaft

Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 71 M	140	109	87	199.5	37	43.5	43.5	7.3
LS 71 L	140	109	87	207.5	37	43.5	43.5	8.3
LSES 80 LG	190	135	87	288	67.5	43.5	43.5	14.1
LSES 90 SL	190	135	87	290	71	43.5	43.5	16.2
LSES 90 L	190	135	87	290	71	43.5	43.5	16.2
LSES 90 LU	190	135	87	321.5	71	43.5	43.5	20.4
LSES 100 L	200	140	87	335.5	72	43.5	43.5	22.6
LSES 100 LR	200	140	87	354.5	72	43.5	43.5	25.8
LSES 100 LG	235	149	87	350.5	71	43.5	43.5	31
LSES 112 MU	235	149	87	368.5	71	43	43	37
LSES 132 SU	227	172	126	403	52	63	63	42.1
LSES 132 SM	272	190	126	437	69	63	63	52

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	296	21.5	55	55	10.3
LS 71 L	FFB 1	140	130	160	296	21.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	347	49.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	430	55.5	55	55	17.1
LS 90 SL	FFB 2	190	151	160	435	59	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	435	59	55	55	22.4
LS 90 L	FFB 2	190	151	160	435	59	55	55	21
LSES 90 LU	FFB 2	190	151	160	435	59	55	55	26.6
LS 100 L	FFB 2	200	156	160	483	60	55	55	29.1
LSES 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	483	60	55	55	32
LSES 100 LG	FFB 3	235	165	160	459	59	55	55	37.6
LS 112 MG	FFB 3	235	165	160	486	61.5	55	55	37.6
LSES 112 MU	FFB 3	235	165	160	484	59	55	55	40.9
LS 132 S	FFB 3	227	168	160	509	60.5	55	55	44.6
LSES 132 SM	FFB 4	272	186	160	648	77.5	55	55	66.5

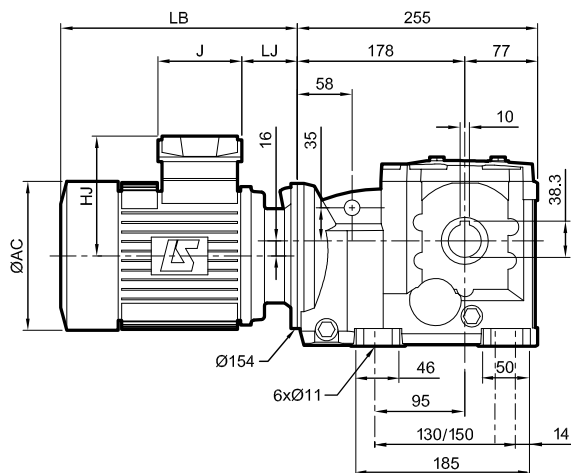
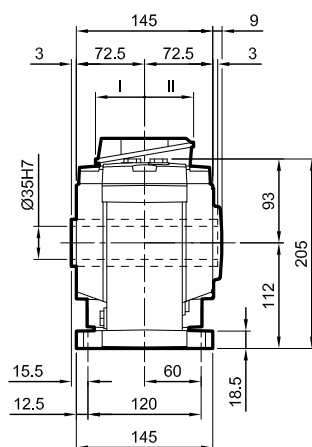
1. except brake motor in italics: not concerned by the IE

Orthobloc 3000 Geared Motors - 3981 en - 2019.03 / h

Dimensions in millimetres

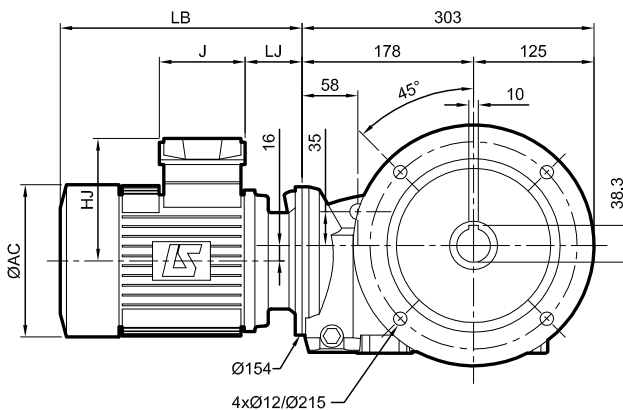
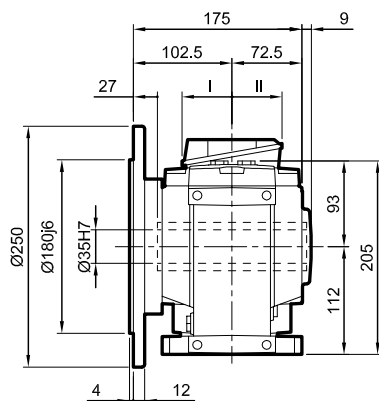
- Foot mounted form S, cylindrical hollow shaft H

Ot: 21 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H

Ot: 22 kg
+ mot



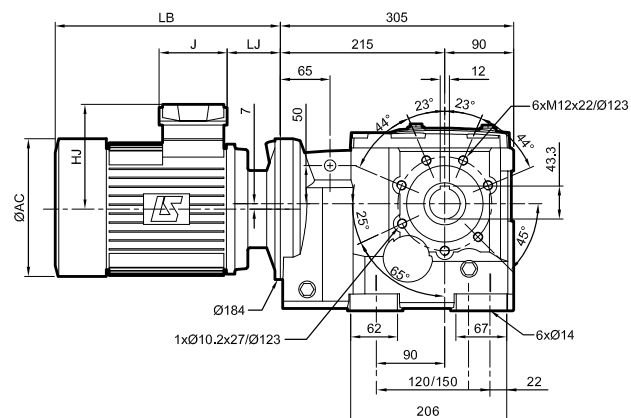
* option on right BSR H: identical flange and shaft

Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 71 M	140	109	87	199.5	37	43.5	43.5	7.3
LS 71 L	140	109	87	207.5	37	43.5	43.5	8.3
LSES 80 LG	190	135	87	288	67.5	43.5	43.5	14.1
LSES 90 SL	190	135	87	290	71	43.5	43.5	16.2
LSES 90 L	190	135	87	290	71	43.5	43.5	16.2
LSES 90 LU	190	135	87	321.5	71	43.5	43.5	20.4
LSES 100 L	200	140	87	335.5	72	43.5	43.5	23
LSES 100 LR	200	140	87	354.5	72	43.5	43.5	25.8
LSES 100 LG	235	149	87	350.5	71	43.5	43.5	31

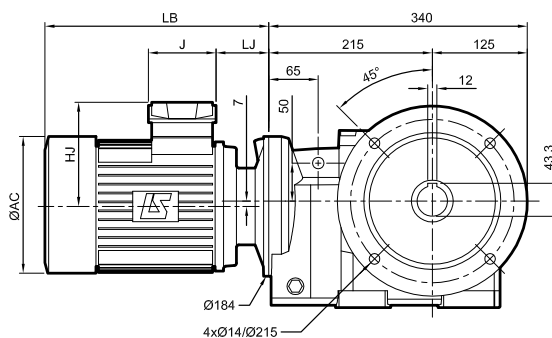
Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	300	25.5	55	55	11.3
LS 71 L	FFB 1	140	130	160	306	25.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	347	49.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	430	55.5	55	55	18
LS 90 SL	FFB 2	190	151	160	435	59	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	435	59	55	55	22.4
LS 90 L	FFB 2	190	151	160	435	59	55	55	21
LSES 90 LU	FFB 2	190	151	160	435	59	55	55	26.6
LS 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 L	FFB 2	200	156	160	483	60	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	483	60	55	55	32
LSES 100 LG	FFB 3	235	165	160	459	59	55	55	37.6

1. except brake motor in italics: not concerned by the IE

- Tapped form SBT LR, cylindrical hollow shaft H

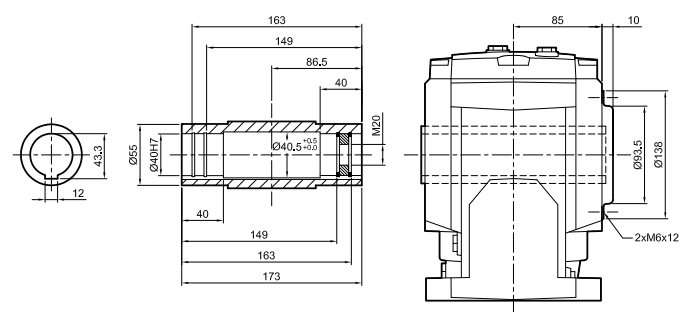


- Flange form BD L*, cylindrical hollow shaft H

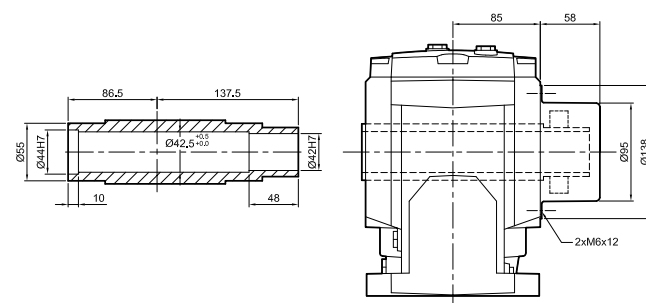


* option on right BDR H: identical flange and shaft

- Hollow shaft details H



- Option: shrink disc on the right SDR*



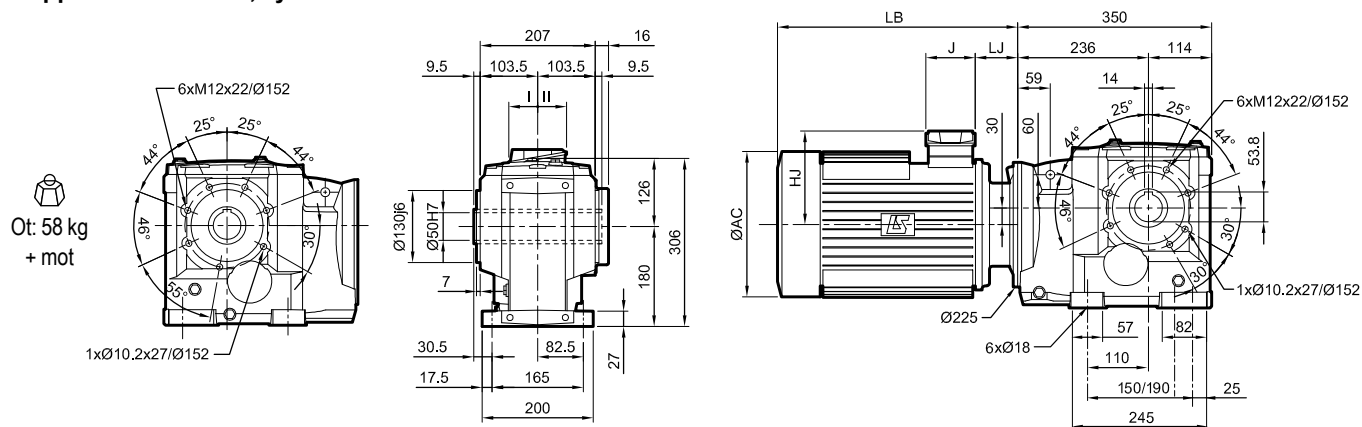
* *left SDL*

Keying on driven shaft: according to NF E22-175

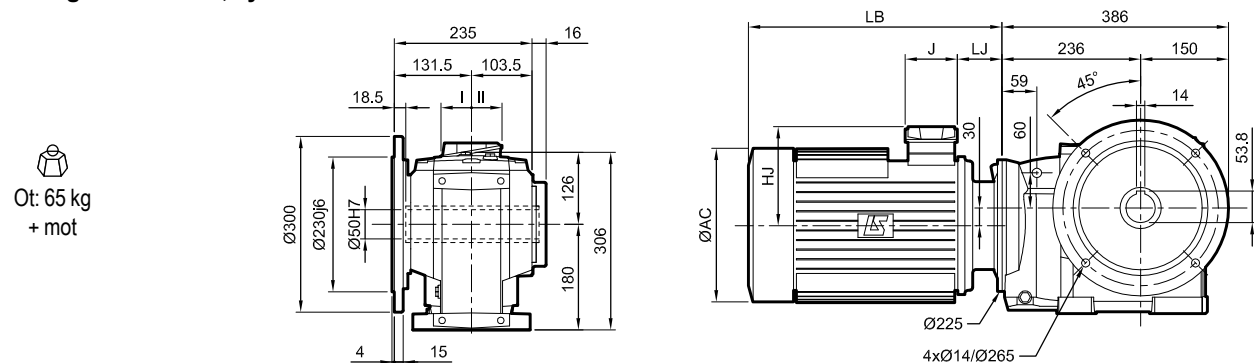
115

Dimensions in millimetres

- Tapped form SBT LR, cylindrical hollow shaft H

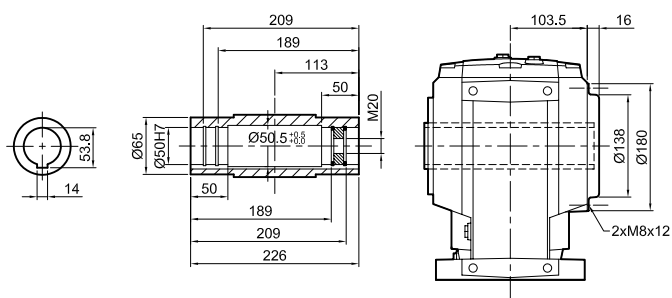


- Flange form BD L*, cylindrical hollow shaft H

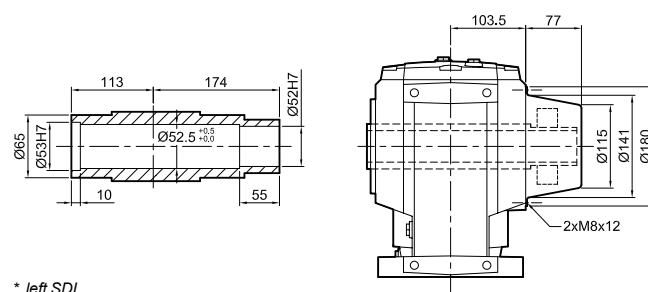


* option on right BDR H: identical flange and shaft

- Hollow shaft details H



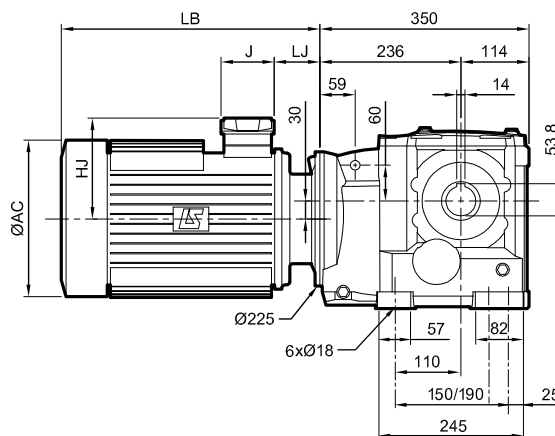
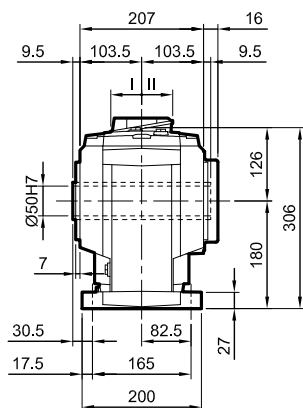
- Option: shrink disc on the right SDR*



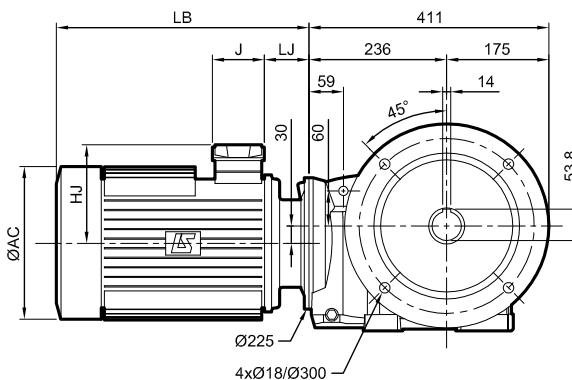
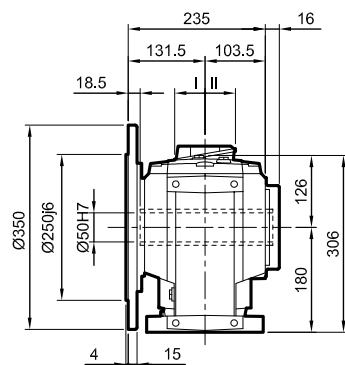
* left SDL

Keying on driven shaft: according to NF E22-175

- Foot mounted form S, cylindrical hollow shaft H



- Flange form BS L*, cylindrical hollow shaft H

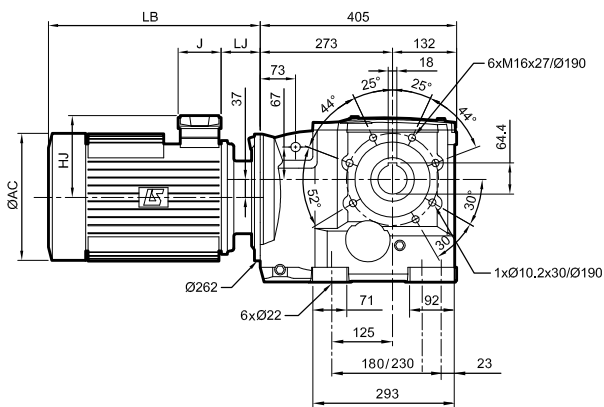


* option on right BSR H: identical flange and shaft

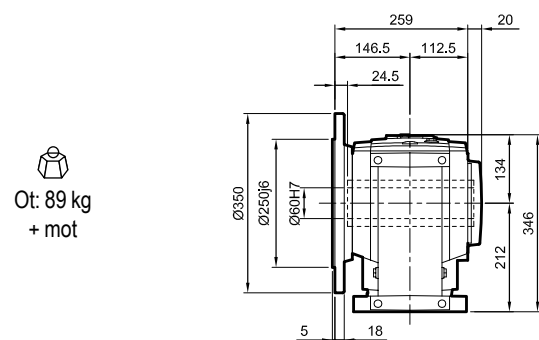
Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake [†]							 kg
		AC	HJ	J	LB	LJ	I	II	
LS 71 M	FFB 1	140	130	160	296	21.5	55	55	10.3
LS 71 L	FFB 1	140	130	160	296	21.5	55	55	11.3
LS 80 L	FFB 1	170	141	160	343	45.5	55	55	13.9
LSES 80 LG	FFB 1	190	151	160	426	51.5	55	55	18
LS 90 SL	FFB 2	190	151	160	431	55	55	55	18.2
LSES 90 SL	FFB 2	190	151	160	431	55	55	55	22.4
LS 90 L	FFB 2	190	151	160	431	55	55	55	21
LSES 90 LU	FFB 2	190	151	160	431	55	55	55	26.6
LS 100 L	FFB 2	200	156	160	479	56	55	55	29.1
LSES 100 L	FFB 2	200	156	160	479	56	55	55	29.6
LSES 100 LR	FFB 2	200	156	160	479	56	55	55	32
LSES 100 LG	FFB 3	235	165	160	455	55	55	55	37.6
LS 112 MG	FFB 3	235	165	160	448	28.5	55	55	37.6
LSES 112 MU	FFB 3	235	165	160	480	55	55	55	40.9
LS 132 S	FFB 3	227	168	160	505	56.5	55	55	44.6
LSES 132 SM	FFB 4	272	186	160	644	73.5	55	55	66.5
LS 132 M	FFB 4	272	186	160	644	73.5	55	55	67.4
LSES 132 MU	FFB 4	272	186	160	644	73.5	55	55	77.1

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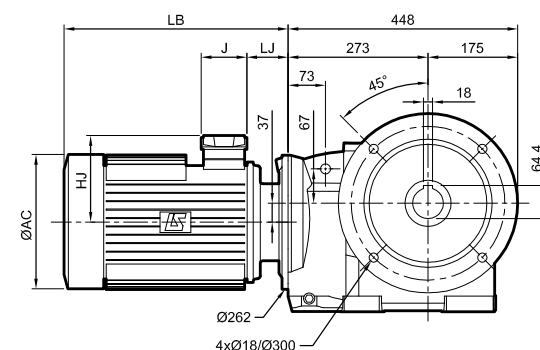
- Tapped form SBT LR, cylindrical hollow shaft H



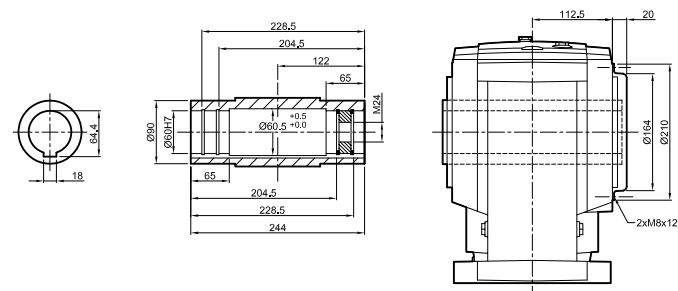
- Flange form BD L*, cylindrical hollow shaft H



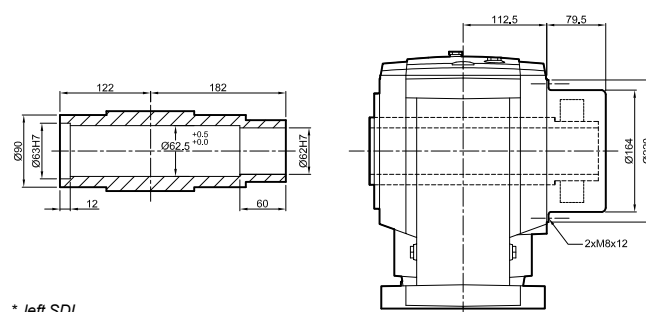
* option on right BDR H: identical flange and shaft



- Hollow shaft details H



- Option: shrink disc on the right SDR*



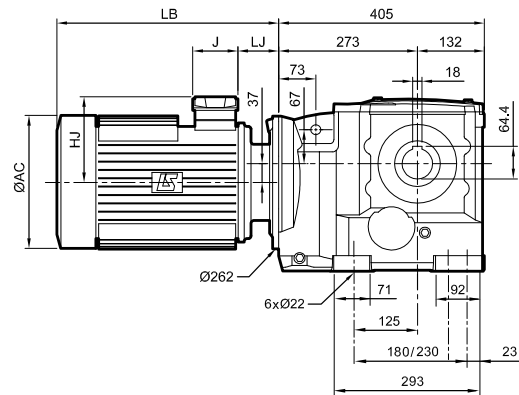
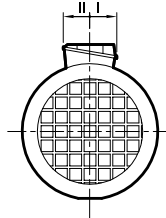
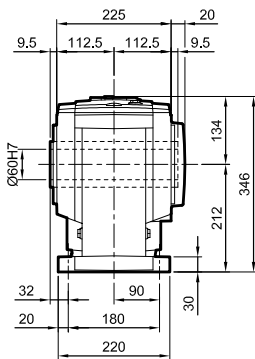
* *left SDL*

Keying on driven shaft: according to NF E22-175

Dimensions in millimetres

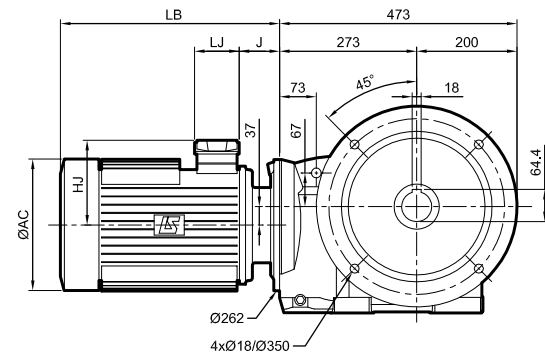
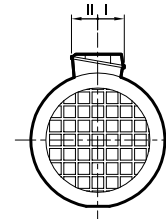
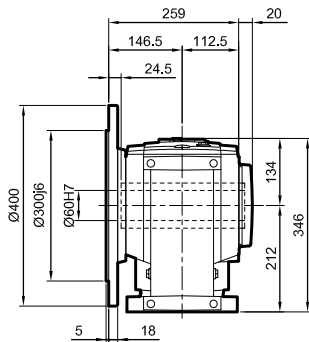
- Foot mounted form S, cylindrical hollow shaft H

Ot: 82 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H

Ot: 91 kg
+ mot



* option on right BSR H: identical flange and shaft

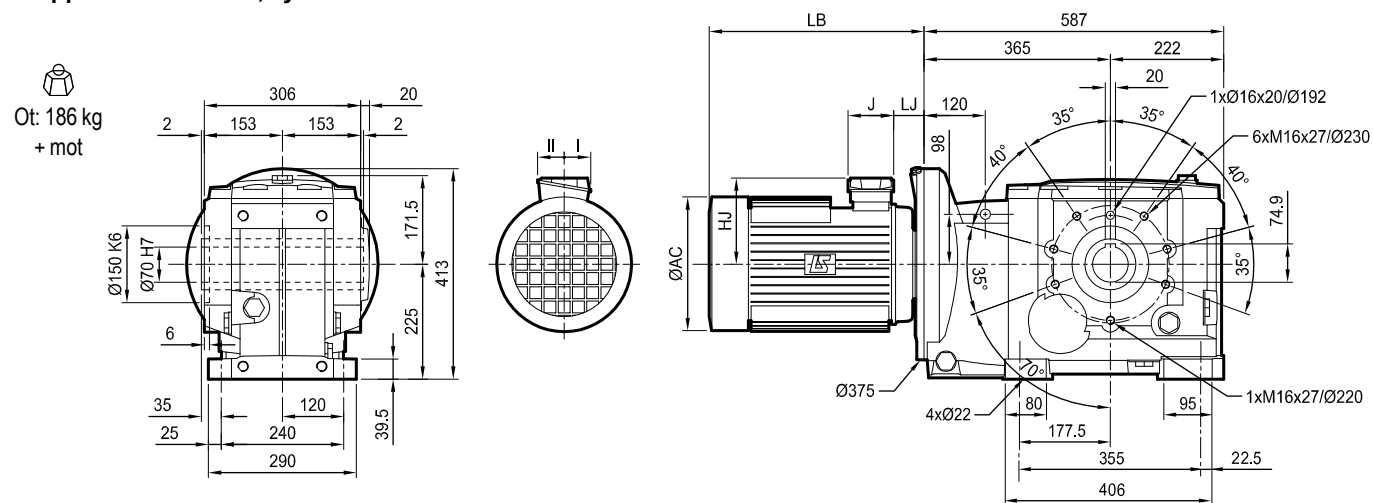
Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 80 LG	190	135	87	288.5	68	43	43	15
LS 90 SL	190	135	87	286	67	43	43	16.2
LS 90 L	190	135	87	286	67	43	43	16.2
LS 90 LU	190	135	87	317.5	67	43	43	20.4
LS 100 L	200	140	87	331.5	68	43	43	23
LS 100 LR	200	140	87	350.5	68	43	43	25.8
LS 100 LG	235	149	87	346.5	67	43	43	31
LS 112 MU	235	149	87	364.5	67	43	43	37
LS 132 SU	227	172	126	403	52	63	63	42.1
LS 132 SM	272	190	126	437	69	63	63	52
LS 132 M	272	190	126	437	69	63	63	59.1
LS 132 MU	272	190	126	464	69	63	63	62.6
LS 160 MR	272	190	126	506	69.5	63	63	78
LS 160 L	312	235	135	508	55.8	88	64	90
LS 160 M	312	235	135	508	55.8	88	64	93
LS 160 LUR	312	235	135	523	55.8	88	64	100
LS 180 MT	312	248	186	508	67.8	112	98	100
LS 180 M	350	256	186	565	76.5	112	98	130
LS 180 LR	312	248	186	533	67	112	98	108
LS 180 LUR	350	256	186	627	76.5	112	98	155

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 80 L	FFB 1	170	141	160	348	50	55	55	13.9
LS 80 LG	FFB 1	190	151	160	431	56	55	55	18
LS 90 SL	FFB 2	190	151	160	431	55	55	55	18.2
LS 90 SL	FFB 2	190	151	160	431	55	55	55	22.4
LS 90 L	FFB 2	190	151	160	431	55	55	55	21
LS 90 LU	FFB 2	190	151	160	431	55	55	55	26.6
LS 100 L	FFB 2	200	156	160	479	56	55	55	29.1
LS 100 L	FFB 2	200	156	160	479	55	55	55	29.6
LS 100 LR	FFB 2	200	156	160	479	55	55	55	32
LS 100 LG	FFB 3	235	165	160	455	55	55	55	37.6
LS 112 MG	FFB 3	235	165	160	482	28.5	55	55	37.6
LS 112 MU	FFB 3	235	165	160	480	55	55	55	40.9
LS 132 S	FFB 3	227	168	160	509	60.5	55	55	44.6
LS 132 SM	FFB 4	272	186	160	648	77.5	55	55	66.5
LS 132 M	FFB 4	272	186	160	648	77.5	55	55	67.4
LS 132 MU	FFB 4	272	186	160	648	77.5	55	55	77.1
LS 160 MR	FFB 4	272	186	160	683	79.5	55	55	92.3
LS 160 MP	FFB 5	272	186	160	682	78.5	55	55	82.9
LS 160 LR	FFB 5	272	186	160	682	78.5	55	55	96.1
LS 160 M	FFB 5	312	221	160	695	68	55	55	110
LS 160 LUR	FFB 5	312	221	160	690	68	55	55	117
LS 180 MT	FFB 5	312	221	160	695	68	55	55	117
LS 180 LR	FCPL54-H1D	312	235	134	696	57	92	63	152

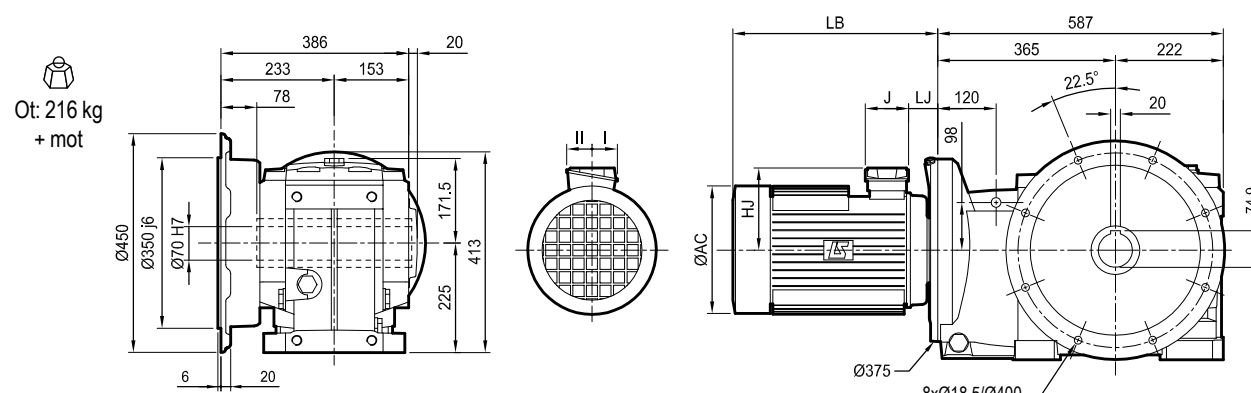
1. except brake motor in italics: not concerned by the IE

Dimensions in millimetres

- Tapped form SBT LR, cylindrical hollow shaft H

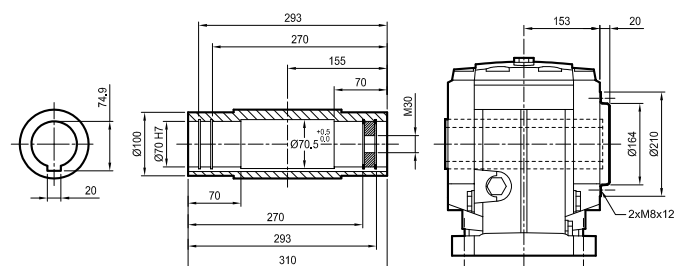


- Flange form BD L*, cylindrical hollow shaft H

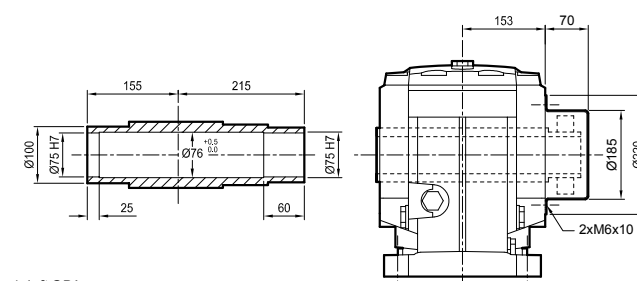


* option on right BDR H: identical flange and shaft

- Hollow shaft details H



- Option: shrink disc on the right SDR*



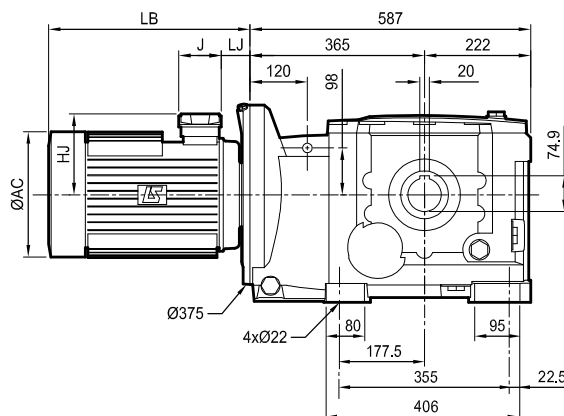
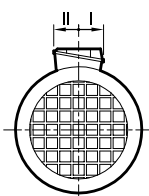
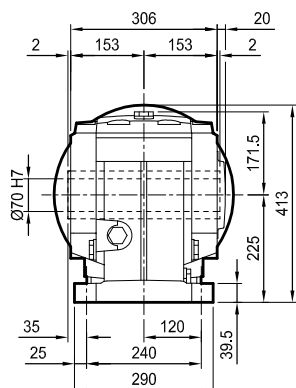
* left SDL

Keying on driven shaft: according to NF E22-175

- Foot mounted form S, cylindrical hollow shaft H

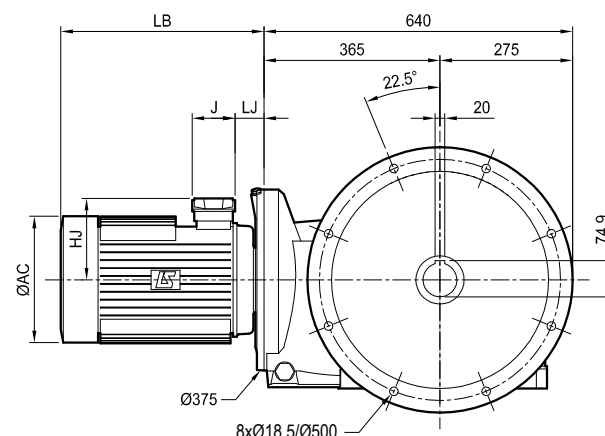
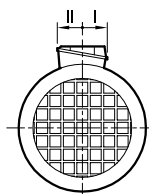
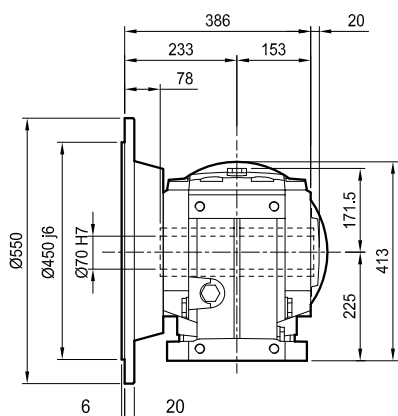
Dimensions in millimetres

Ot: 188 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H

Ot: 222 kg
+ mot



* option on right BSR H: identical flange and shaft

Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS 90 SL	190	135	87	272	53	43	43	16.2
LS 90 L	190	135	87	272	53	43	43	16.2
LS 90 LU	190	135	87	303.5	53	43	43	20.4
LS 100 L	200	140	87	317.5	54	43	43	22.6
LS 100 LR	200	140	87	336.5	54	43	43	25.8
LS 100 LG	235	149	87	332.5	53	43	43	31
LS 112 MU	235	149	87	350.5	53	43	43	37
LS 132 SU	227	172	126	385	28.5	63	63	42.1
LS 132 SM	272	190	126	419	51	63	63	52
LS 132 M	272	190	126	419	51	63	63	59.1
LS 132 MU	272	190	126	446	51	63	63	62.6
LS 160 MR	272	190	126	489	52.5	63	63	77.8
LS 160 L	312	235	135	490	37.8	88	64	90
LS 160 M	312	235	135	490	37.8	88	64	93
LS 160 LUR	312	235	135	505	37.8	88	64	100
LS 180 MT	312	248	186	490	49.8	112	98	100
LS 180 LR	312	248	186	515	49.8	112	98	108
LS 180 M	350	256	186	547	58.8	112	98	130
LS 180 LUR	350	256	186	609	58.8	112	98	155
LS 200 LR	350	256	186	609	58.8	112	98	166
LS 200 LU	390	276	186	674	82	112	98	225
LS 225 ST	390	310	231	625.5	59.5	119	142	205
LS 225 SR	390	310	231	674.5	59.5	119	142	236
LS 225 MR	390	310	292	825	83.5	119	142	230

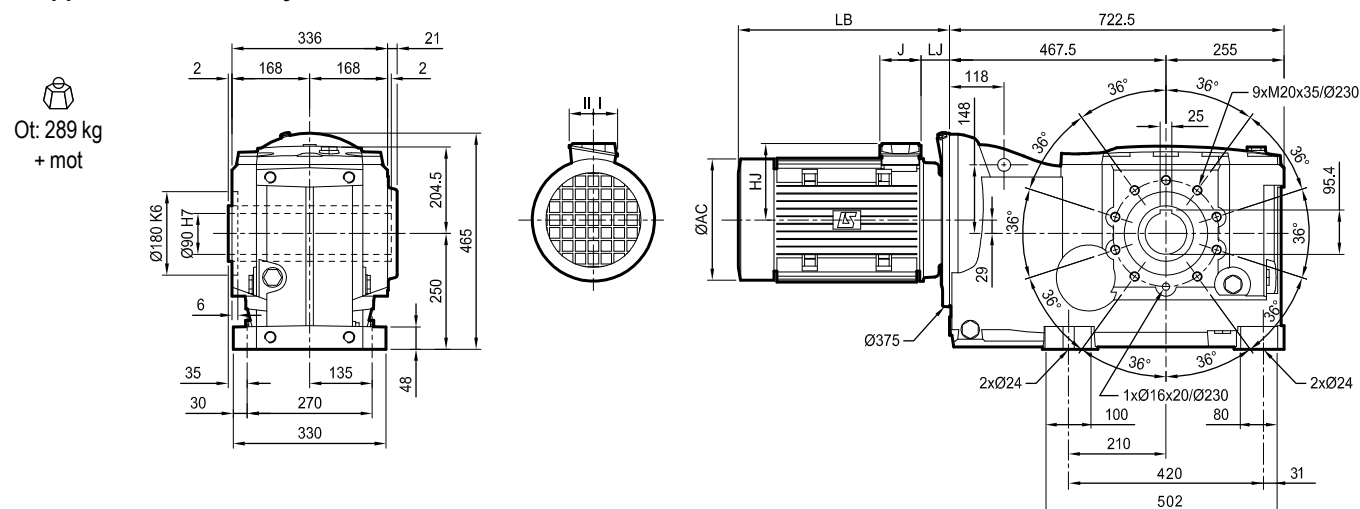
1. except brake motor in italics: not concerned by the IE

2. with CDF device

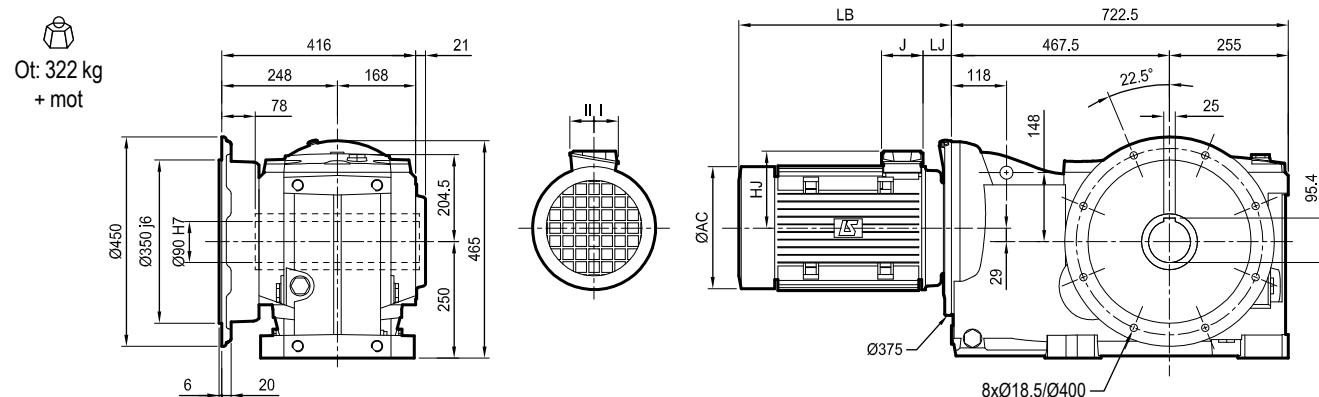
Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
<i>LS 90 SL</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	18.2
<i>LS 90 SL</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	22.4
<i>LS 90 L</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	21
<i>LS 90 LU</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	26.6
<i>LS 100 L</i>	<i>FFB 2</i>	200	156	160	465	41	55	55	29.1
<i>LS 100 L</i>	<i>FFB 2</i>	200	156	160	465	41	55	55	29.6
<i>LS 100 LR</i>	<i>FFB 2</i>	200	156	160	465	41	55	55	32
<i>LS 100 LG</i>	<i>FFB 3</i>	235	165	160	441	41	55	55	37.6
<i>LS 112 MG</i>	<i>FFB 3</i>	235	165	160	468	43.5	55	55	37.6
<i>LS 112 MU</i>	<i>FFB 3</i>	235	165	160	466	41	55	55	40.9
<i>LS 132 S</i>	<i>FFB 3</i>	227	168	160	491	42.5	55	55	44.6
<i>LS 132 SM</i>	<i>FFB 4</i>	272	186	160	630	59.5	55	55	66.5
<i>LS 132 M</i>	<i>FFB 4</i>	272	186	160	630	59.5	55	55	67.4
<i>LS 132 MU</i>	<i>FFB 4</i>	272	186	160	665	61.5	55	55	77.1
<i>LS 160 MR</i>	<i>FFB 4</i>	272	186	160	664	60.5	55	55	92.3
<i>LS 160 MP</i>	<i>FFB 5</i>	272	186	160	664	60.5	55	55	82.9
<i>LS 160 LR</i>	<i>FFB 5</i>	272	186	160	664	60.5	55	55	96
<i>LS 160 M</i>	<i>FFB 5</i>	312	235	160	667	55.8	55	55	110
<i>LS 160 LUR</i>	<i>FFB 5</i>	312	235	160	672	50	55	55	117
<i>LS 180 MT</i>	<i>FFB 5</i>	312	235	160	677	50	55	55	117
<i>LS 180 LR</i>	<i>FCPL54-H1D²</i>	312	235	134	678	39	92	63	152
<i>LS 200 LT</i>	<i>FCPL54-H1D²</i>	350	263	134	774	86	92	63	200
<i>LS 225 ST</i>	<i>FCPL54-H1D²</i>	390	283	134	836	109.5	92	63	242
<i>LS 225 MR</i>	<i>FCPL54-H1D²</i>	390	283	134	878	109.5	92	63	274

Dimensions in millimetres

- Tapped form SBT LR, cylindrical hollow shaft H

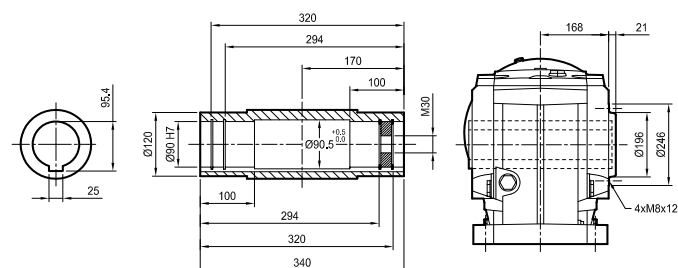


- Flange form BD L*, cylindrical hollow shaft H

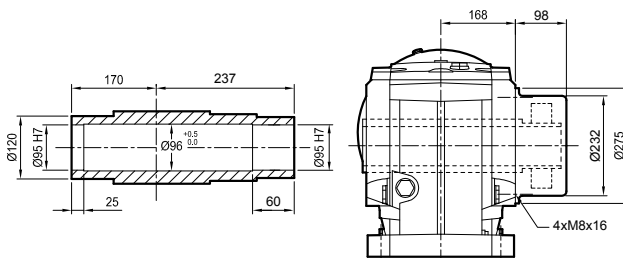


* option on right BDR H: identical flange and shaft

- Hollow shaft details H



- Option: shrink disc on the right SDR*



Keying on driven shaft: according to NF E22-175

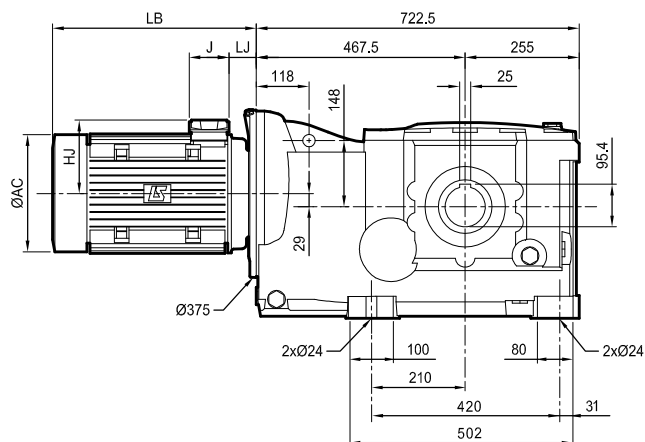
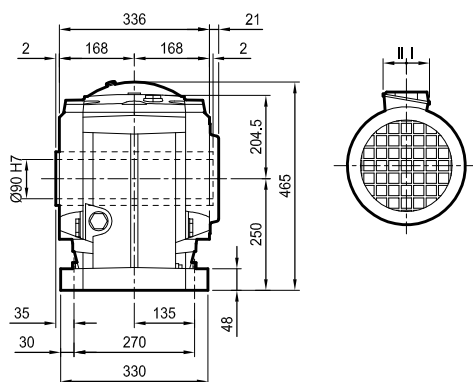
* left SDL

- Foot mounted form S, cylindrical hollow shaft H

Dimensions in millimetres



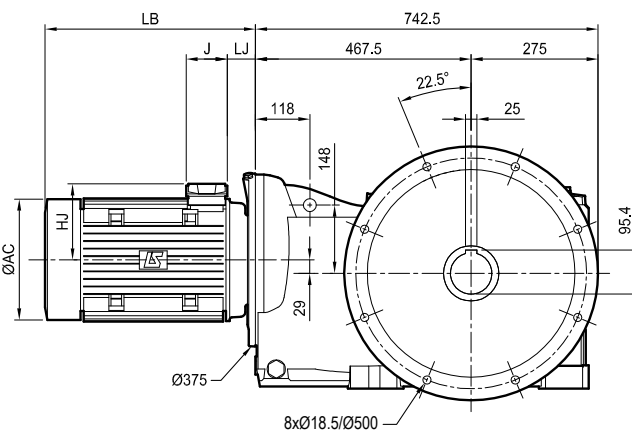
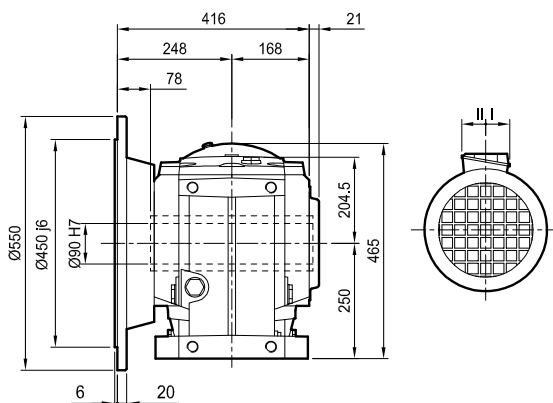
Ot: 292 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H



Ot: 328 kg
+ mot



* option on right BSRH: identical flange and shaft

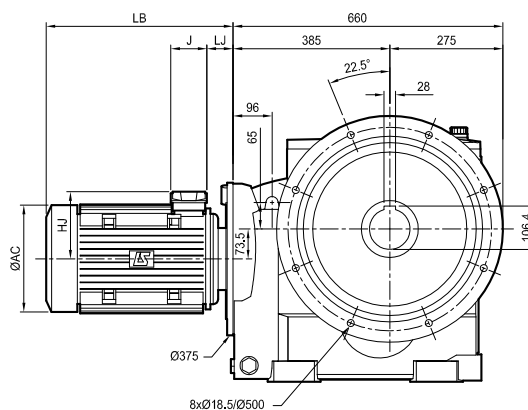
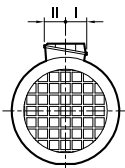
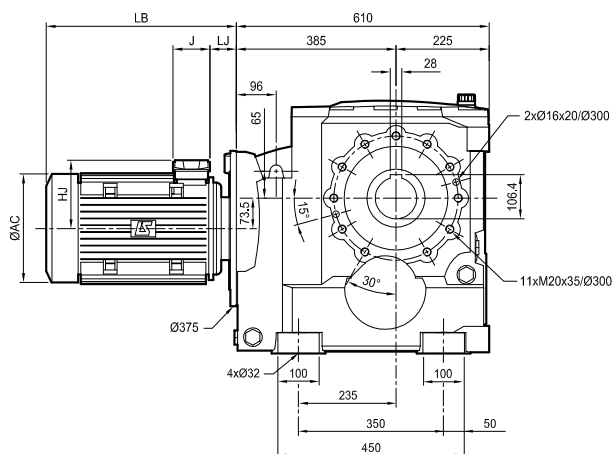
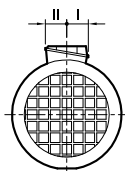
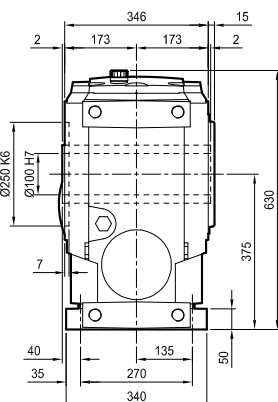
Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LSSES 90 SL	190	135	87	272	53	43	43	16.2
LSSES 90 L	190	135	87	272	53	43	43	16.2
LSSES 90 LU	190	135	87	303.5	53	43	43	20.4
LSSES 100 L	200	140	87	317.5	54	43	43	22.6
LSSES 100 LR	200	140	87	336.5	54	43	43	25.8
LSSES 100 LG	235	149	87	332.5	53	43	43	31
LSSES 112 MU	235	149	87	350.5	53	43	43	37
LSSES 132 SU	227	172	126	385	28.5	63	63	42.1
LSSES 132 SM	272	190	126	419	51	63	63	52
LSSES 132 M	272	190	126	419	51	63	63	59.1
LSSES 132 MU	272	190	126	446	51	63	63	62.6
LSSES 160 MR	272	190	126	489	52.5	63	63	77.8
LSSES 160 L	312	235	135	490	37.8	88	64	90
LSSES 160 M	312	235	135	490	37.8	88	64	93
LSSES 160 LUR	312	235	135	505	37.8	88	64	100
LSSES 180 MT	312	248	186	490	49.8	112	98	100
LSSES 180 LR	312	248	186	515	49.8	112	98	108
LSSES 180 M	350	256	186	547	58.8	112	98	130
LSSES 180 LUR	350	256	186	609	58.8	112	98	155
LSSES 200 LR	350	256	186	609	58.8	112	98	166
LSSES 200 LU	390	276	186	674	82	112	98	225
LSSES 225 ST	390	310	231	626	59.5	119	142	205
LSSES 225 SR	390	310	231	674	72.5	119	142	236
LSSES 225 MR	390	310	292	825	83.5	119	142	230
LSSES 225 MG	479	405	292	825	83.5	151	181	318
LSSES 250 ME	479	405	292	825	83.5	151	181	350

1. except brake motor in italics: not concerned by the IE

2. with CDF device

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
<i>LS 90 SL</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	18.2
<i>LSSES 90 SL</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	22.4
<i>LS 90 L</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	21
<i>LSSES 90 LU</i>	<i>FFB 2</i>	190	151	160	417	41	55	55	26.6
<i>LS 100 L</i>	<i>FFB 2</i>	200	156	160	465	41	55	55	29.1
<i>LSSES 100 L</i>	<i>FFB 2</i>	200	156	160	465	41	55	55	29.6
<i>LSSES 100 LR</i>	<i>FFB 2</i>	200	156	160	465	41	55	55	32
<i>LSSES 100 LG</i>	<i>FFB 3</i>	235	165	160	441	41	55	55	37.6
<i>LS 112 MG</i>	<i>FFB 3</i>	235	165	160	468	43.5	55	55	37.6
<i>LSSES 112 MU</i>	<i>FFB 3</i>	235	165	160	466	41	55	55	40.9
<i>LS 132 S</i>	<i>FFB 3</i>	227	168	160	491	42.5	55	55	44.6
<i>LSSES 132 SM</i>	<i>FFB 4</i>	272	186	160	630	59.5	55	55	66.5
<i>LS 132 M</i>	<i>FFB 4</i>	272	186	160	630	59.5	55	55	67.4
<i>LSSES 132 MU</i>	<i>FFB 4</i>	272	186	160	665	61.5	55	55	77.1
<i>LSSES 160 MR</i>	<i>FFB 4</i>	272	186	160	664	60.5	55	55	92.3
<i>LS 160 MP</i>	<i>FFB 5</i>	272	186	160	664	60.5	55	55	82.9
<i>LS 160 LR</i>	<i>FFB 5</i>	272	186	160	664	60.5	55	55	96
<i>LSSES 160 M</i>	<i>FFB 5</i>	312	235	160	667	55.8	55	55	110
<i>LSSES 160 LUR</i>	<i>FFB 5</i>	312	235	160	672	50	55	55	117
<i>LS 180 MT</i>	<i>FFB 5</i>	312	235	160	677	50	55	55	117
<i>LS 180 LR</i>	<i>FCPL54-H1D</i>	312	235	134	678	39	92	63	152
<i>LS 200 LT</i>	<i>FCPL54-H1D²</i>	350	263	134	774	86	92	63	200
<i>LS 225 ST</i>	<i>FCPL54-H1D²</i>	390	283	134	836	109.5	92	63	242
<i>LS 225 MR</i>	<i>FCPL54-H1D²</i>	390	283	134	878	109.5	92	63	274

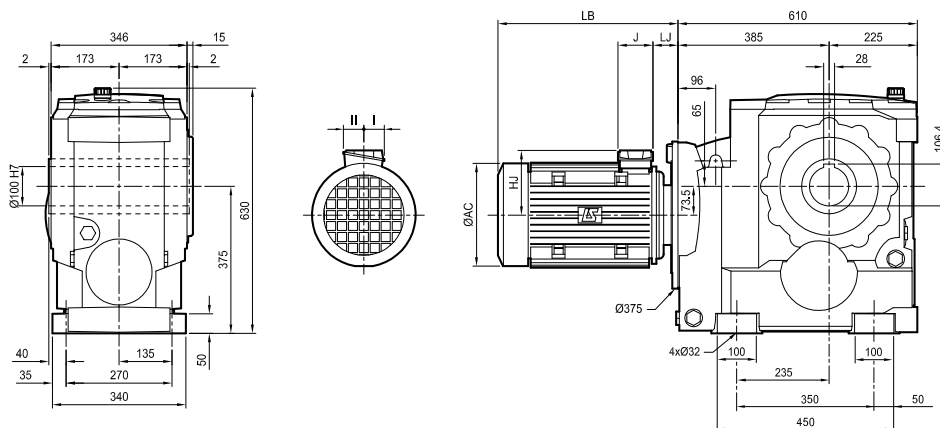
- Tapped form SBT LR, cylindrical hollow shaft H

[illegible][illegible]

Orthobloc 3000 Geared Motors - 3981 en - 2019.03 / h

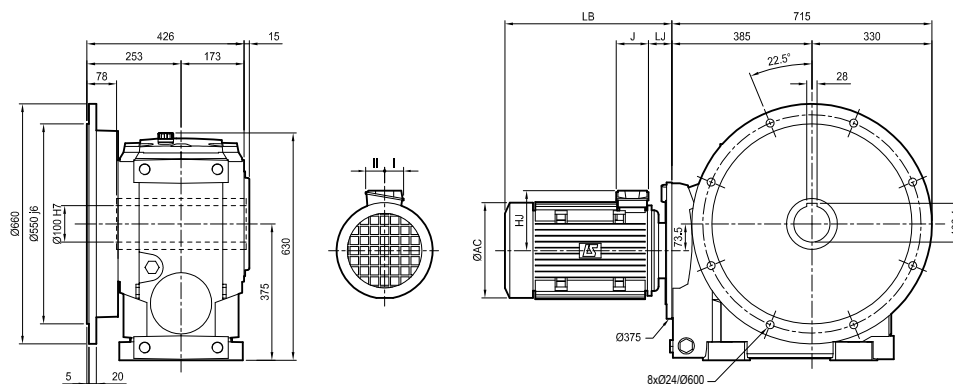
- Foot mounted form S, cylindrical hollow shaft H

Ot: 350 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H

Ot: 408 kg
+ mot



* option on right BSR H: identical flange and shaft

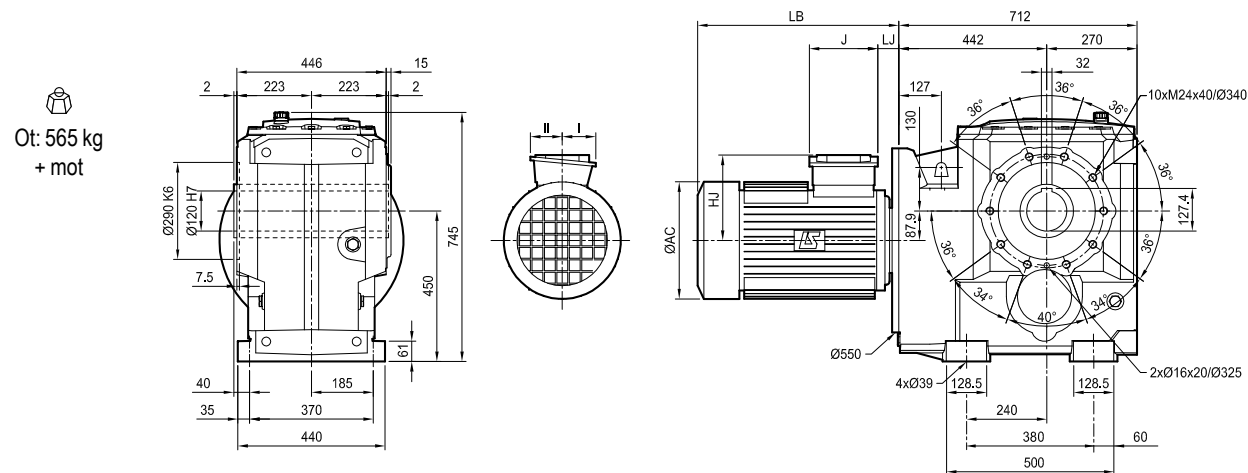
Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS112 MU	235	149	87	349.5	53.5	43	43	34.4
LS132 SU	227	172	126	385	34	63	63	42.1
LS132 SM	272	190	126	419	51	63	63	52
LS132 M	272	190	126	406	38	63	63	59.1
LS132 MU	272	190	126	433	38	63	63	62.6
LS160 MR	272	190	126	476	40	63	63	77.8
LS160 L	312	235	135	477	26	92	63	90
LS160 M	312	235	135	477	27	92	63	93
LS160 LUR	312	235	135	492	26	92	63	100
LS180 MT	312	248	186	477	36	112	98	100
LS180 LR	312	248	186	502	36	112	98	108
LS180 M	350	256	186	534	46	112	98	130
LS180 LUR	350	256	186	596	46	112	98	155
LS200 LR	350	256	186	596	46	112	98	166
LS200 LU	390	276	186	661.5	69.5	112	98	225
LS225 ST	390	310	231	612.5	46.5	119	142	205
LS225 SR	390	365	231	661.5	60.5	151	181	236
LS225 MR	390	310	292	812	70.5	119	142	230
LS225 MG	479	405	292	812	70.5	151	181	318
LS250 ME	479	405	292	812	70.5	151	181	350
LS280 SD	479	405	292	872	70.5	151	181	428
LS280 MD	479	405	292	872	70.5	151	181	470

1. except brake motor in italics: not concerned by the IE

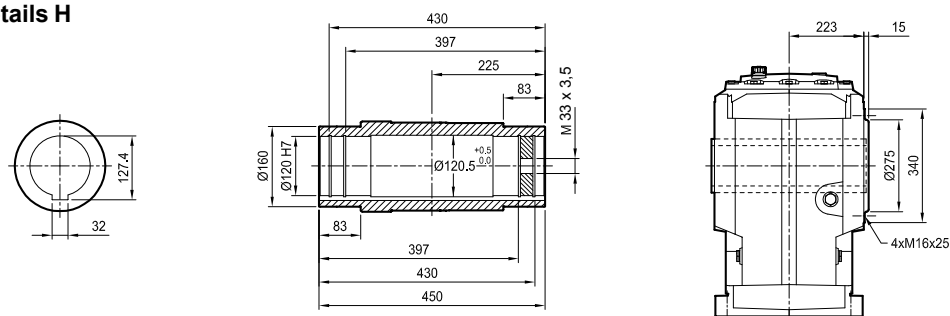
2. with CDF device

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS112 MG	FFB 3	235	165	160	468	43.5	55	55	37.6
LS132 MU	FFB 3	235	165	160	465.5	41	55	55	40.9
LS132 S	FFB 3	227	168	160	491	42.5	55	55	44.6
LS132 SM	FFB 4	272	186	160	630	59.5	55	55	66.5
LS132 M	FFB 4	265	186	160	617	46.5	55	55	67.4
LS132 MU	FFB 4	265	186	160	617	46.5	55	55	77.1
LS160 MR	FFB 4	264	186	160	651	47.5	55	55	92.3
LS160 MP	FFB 5	264	186	160	651	47.5	55	55	82.9
LS160 LR	FFB 5	265	186	160	651	47.5	55	55	96.1
LS160 M	FFB 5	312	201	160	665	36	55	55	110
LS160 LUR	FFB 5	312	201	160	665	36	55	55	117
LS180 MT	FFB 5	312	235	160	665	36	55	55	152
LS180 LR	FCPL54-H1D	312	235	134	665	26	92	63	152
LS200 LT	FCPL54-H1D ²	350	263	134	761	73	92	63	200
LS225 ST	FCPL54-H1D ²	390	283	134	823	96.5	92	63	242
LS225 MR	FCPL54-H1D ²	390	283	134	878	109.5	92	63	274

- Tapped form SBT LR, cylindrical hollow shaft H

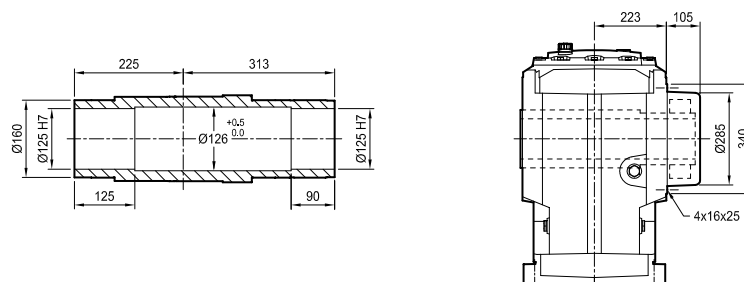


- Hollow shaft details H



Keying on driven shaft: according to NF E22-175

- Option: shrink disc on the right SDR*

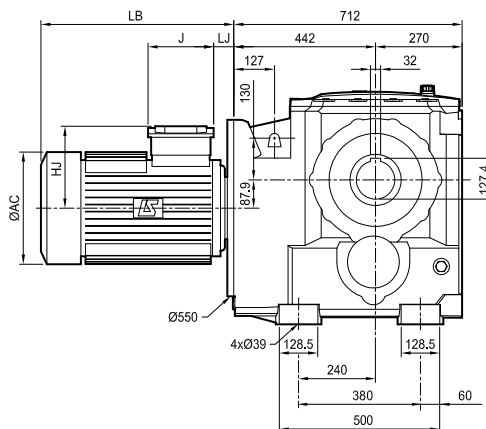
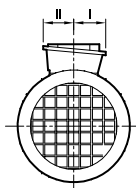
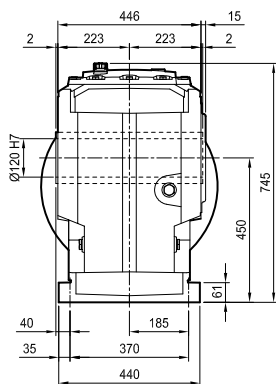


* left SDL

Dimensions in millimetres

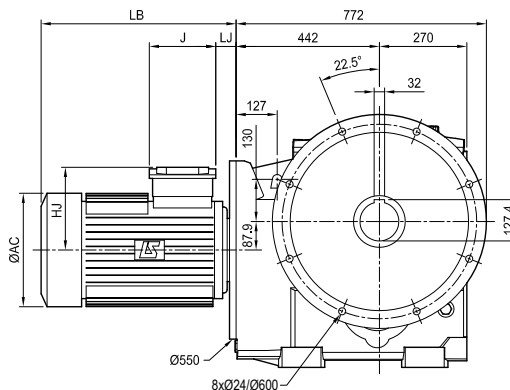
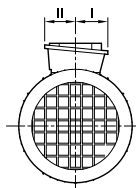
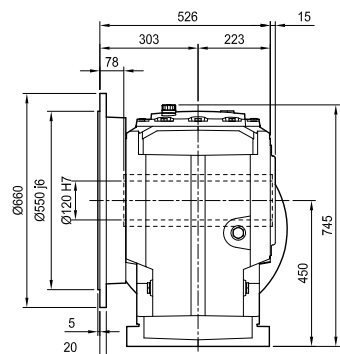
- Foot mounted form S, cylindrical hollow shaft H

Ot: 570 kg
+ mot



- Flange form BS L*, cylindrical hollow shaft H

Ot: 648 kg
+ mot



* option on right BSR H: identical flange and shaft

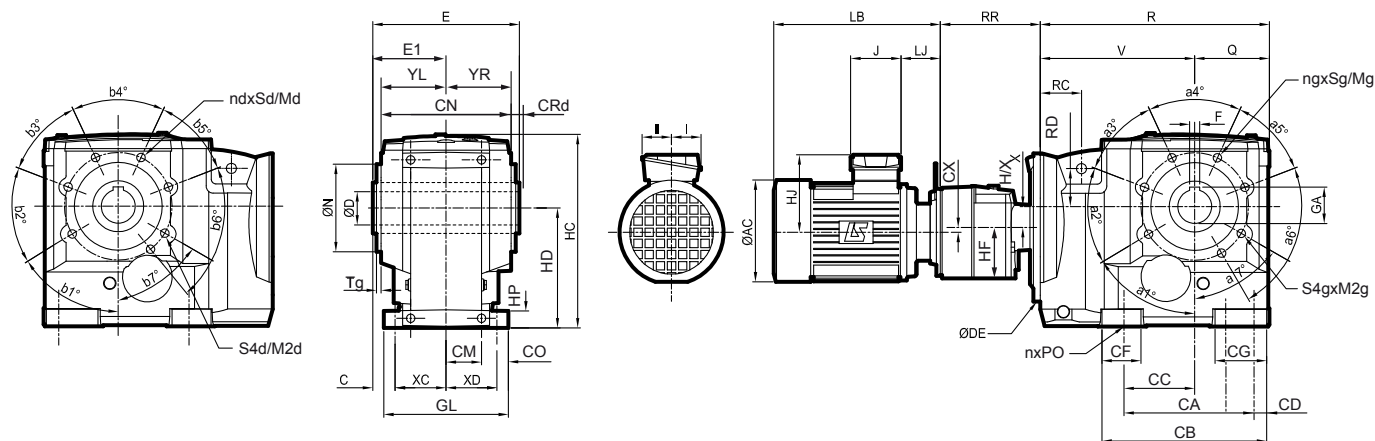
Motor type	IMfinity® three-phase 4-pole motors ¹							kg
	AC	HJ	J	LB	LJ	I	II	
LS ES 132 M	272	190	126	406	38	63	63	59.1
LS ES 132 MU	272	190	126	433	38	63	63	62.6
LS ES 160 MR	272	190	126	476	40	63	63	77.8
LS ES 160 L	312	235	135	477	26	92	63	90
LS ES 160 M	312	235	135	477	27	92	63	93
LS ES 160 LUR	312	235	135	492	26	92	63	100
LS ES 180 MT	312	248	186	477	36	112	98	100
LS ES 180 LR	312	248	186	502	36	112	98	108
LS ES 180 M	350	256	186	534	46	112	98	130
LS ES 180 LUR	350	256	186	596	46	112	98	155
LS ES 200 LR	350	256	186	596	46	112	98	166
LS ES 200 LU	390	276	186	661.5	69.5	112	98	225
LS ES 225 ST	390	310	231	612.5	46.5	119	142	205
LS ES 225 SR	390	365	231	661.5	60.5	151	181	236
LS ES 225 MR	390	310	292	812	70.5	119	142	230
LS ES 225 MG	479	405	292	812	70.5	151	181	318
LS ES 250 ME	479	405	292	812	70.5	151	181	350
LS ES 280 SD	479	405	292	872	70.5	151	181	428
LS ES 280 MD	479	405	292	872	70.5	151	181	470

1. except brake motor in italics: not concerned by the IE

2. with CDF device

Motor type	Brake type	IMfinity® three-phase 4-pole motors and brake ¹							kg
		AC	HJ	J	LB	LJ	I	II	
LS 132 M	FFB 4	265	186	160	617	46.5	55	55	67.4
LS ES 132 MU	FFB 4	265	186	160	617	46.5	55	55	77.1
LS ES 160 MR	FFB 4	264	186	160	651	47.5	55	55	92.3
LS 160 MP	FFB 5	264	186	160	651	47.5	55	55	82.9
LS 160 LR	FFB 5	265	186	160	651	47.5	55	55	96.1
LS ES 160 M	FFB 5	312	201	160	665	36	55	55	110
LS ES 160 LUR	FFB 5	312	201	160	665	36	55	55	117
LS 180 MT	FFB 5	312	235	160	665	36	55	55	152
LS 180 LR	FCPL54-H1D	312	235	134	665	26	92	63	152
LS 200 LT	FCPL54-H1D²	350	263	134	761	73	92	63	200
LS 225 ST	FCPL54-H1D²	390	283	134	823	96.5	92	63	242

- Tapped form SBT LR, cylindrical hollow shaft H



		Orthobloc SBTLR H																			Side L				
Ot	i	a1°	a2°	a3°	a4°	a5°	a6°	a7°	a8°	a9°	a10°	a11°	b1°	b2°	b3°	b4°	b5°	b6°	b7°...	details	ngxSg	ØMg	S4g	ØM2g	kg
Ot 3935	194->17,900	20	34	36	36	36	36	36	36	36	34	-	1	1	1	1	1	1	1	p126	10M24x40	340	2x16x20	325	620
Ot 3835	171->18,505	30	30	30	30	30	30	30	30	30	30	30	1	1	1	1	1	1	1	p124	11M20x35	300	2x16x20	300	366
Ot 3735	187->19,441	36	36	36	36	36	36	36	36	36	-	-	1	1	1	1	1	1	1	p122	9M20x35	230	16x20	230	308
Ot 3635	174->18,805	70	35	40	35	35	40	35	70	-	-	-	1	1	1	1	1	1	1	p120	6M16x27	230	16x20	220	205
Ot 3535	174->17,300	59	52	44	50	44	51	-	-	-	-	-	1	1	1	1	1	1	-	p118	6M16x27	190	10.2x30	190	93
Ot 3435	183->17,500	65	46	44	50	44	51	30	-	-	-	-	10	55	46	44	50	44	51	p116	6M12x22	152	10.2x27	152	71
Ot 3335	178->20,000	65	48	44	46	44	67	-	-	-	-	-	45	20	48	44	46	44	-	p114	6M12x22	123	10.2x27	123	49
Ot 3235	178->617	65	48	44	46	50	42	-	-	-	-	-	65	48	44	46	50	42	-	p112	6M10x22	100	8x20	102	27
Ot 3235	718->19,800	65	48	44	46	50	42	-	-	-	-	-	65	48	44	46	50	42	-	p112	6M10x22	100	8x20	102	26

1. Left and right SBTLR: identical flange and shaft

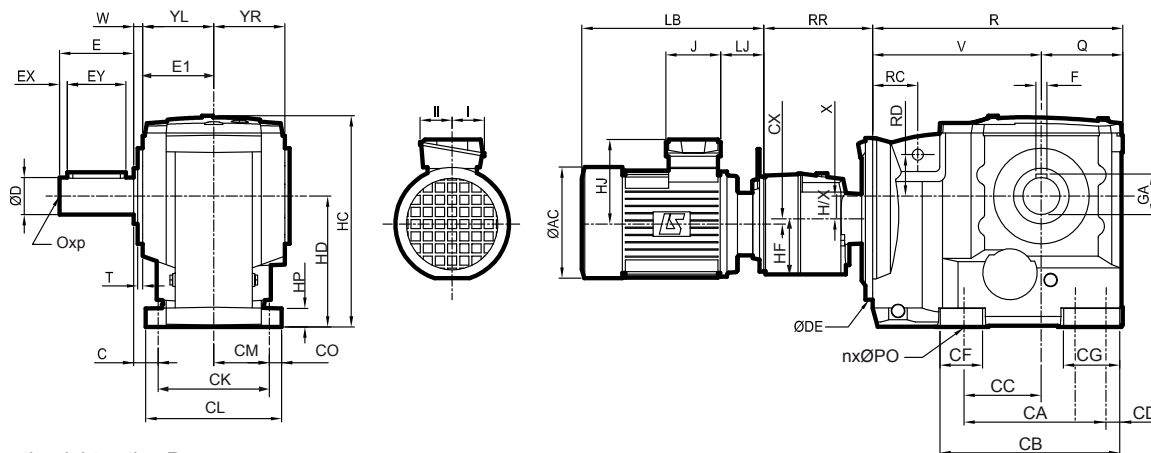
		Side R					Shaft H			
Ot	i	ndxSd	ØMd	S4d	ØM2d	CA to YG details	ØD	E	F	GA
Ot 3935	194->17,900	10M24x40	340	2x16x20	325	o/ page 126	120H7	430	32	127.4
Ot 3835	171->18,505	11M20x35	300	2x16x20	300	o/ page 124	100H7	350	28	106.4
Ot 3735	187->19,441	9M20x35	230	16x20	230	o/ page 122	90H7	340	25	95
Ot 3635	174->18,505	6M16x27	230	16x20	220	o/ page 120	70H7	310	20	75
Ot 3535	174->17,300	6M16x27	190	10.2x30	190	o/ page 118	60H7	244	18	64
Ot 3435	183->17,500	6M12x22	152	10.2x27	152	o/ page 116	50H7	226	14	54
Ot 3335	178->20,000	6M12x22	123	10.2x27	123	o/ page 114	40H7	173	12	43
Ot 3235	178->617	6M10x22	100	8x20	102	o/ page 110	35H7	151	10	38
Ot 3235	718->19,800	6M10x22	100	8x20	102	o/ page 112	35H7	151	10	38

		IMfinity® three-phase 4-pole							kg	IMfinity® three-phase 4-pole and brake FFB							kg
Ot	LS(ES)	AC	HJ	J	LB	LJ	I	II		AC	HJ	J	LB	LJ	I	II	
Ot 3935																	
Ot 3835																	
Ot 3735																	
Ot 3635																	
Ot 3535																	
Ot 3435																	
Ot 3335	71	140	109	87	208	37	43.5	46.5	8.3	140	130	160	296	23.5	55	55	11.3
Ot 3235	80	190	135	87	288	67.5	43.5	43.5	14.1	190	151	160	430	49.5	55	55	17.1

Dimensions Combined Ot

Dimensions in millimetres

- Foot mounted form S, slow shaft on left L¹



1. Shaft on the right option R

		Orthobloc S																											
Ot	i	C	CA	CB	CC	CD	CF	CG	CK	CL	CM	CO	CX	DE ¹	E1	HC	HD	HF	HP	HX	nxPO	R	RC	RD	RR	V	YL ¹	YR ¹	kg
Ot 3935	194->17,900	77	380	500	240	65	129	129	370	440	185	35	26	550	262	745	450	154	61	87.9	4x39	712	127	130	229	442	260	263	703
Ot 3835	171->18,505	70	350	450	235	50	100	100	270	340	135	35	10	375	205	630	375	105	50	73.5	4x32	610	96	65	178	385	203	205	396.7
Ot 3735	187->19,441	35	420	502	210	31	100	80	270	330	135	30	10	375	170	465	250	105	48	29	4x24	723	118	148	178	468	168	168	324.7
Ot 3635	174->18,505	35	355	406	178	23	80	95	240	290	120	25	10	375	155	413	225	105	39.5	0	4x22	587	120	98	178	365	153	153	216.7
Ot 3535	174->17,300	32	180/230	293	125	23	71	92	180	220	90	20	8.5	262	122	346	212	81.5	30	37	6x22	405	73	67	174	273	112.5	112.5	96.4
Ot 3435	183->17,500	30	150/190	245	110	25	57	82	165	200	82.5	17.5	8.5	225	112.5	306	180	81.5	27	30	6x18	350	59	60	174	236	104	104	73.4
Ot 3335	178->253	16.5	120/150	206	90	22	62	67	140	168	70	14	8.5	184	86.5	245	140	81.5	21.5	7	6x14	305	65	50	174	215	85	85	51.4
Ot 3335	283->6,200	16.5	120/150	206	90	22	62	67	140	168	70	14	-7	184	86.5	245	140	70	21.5	7	6x14	305	65	50	107	215	85	85	42.7
Ot 3335	7,010-20,000	16.5	120/150	206	90	22	62	67	140	168	70	14	-7	184	86.5	245	140	70	21.5	7	6x14	305	65	50	127	215	85	85	43
Ot 3235	178->617	14.5	130/150	185	95	14	46	50	120	145	60	12.5	-7	154	74.5	205	112	70	18.5	16	6x11	255	58	35	113	178	72.5	72.5	26.7
Ot 3235	718->19,800	14.5	130/150	185	95	14	46	50	120	145	60	12.5	-7	154	74.5	205	112	70	18.5	16	6x11	255	77	35	133	178	72.5	72.5	25.5

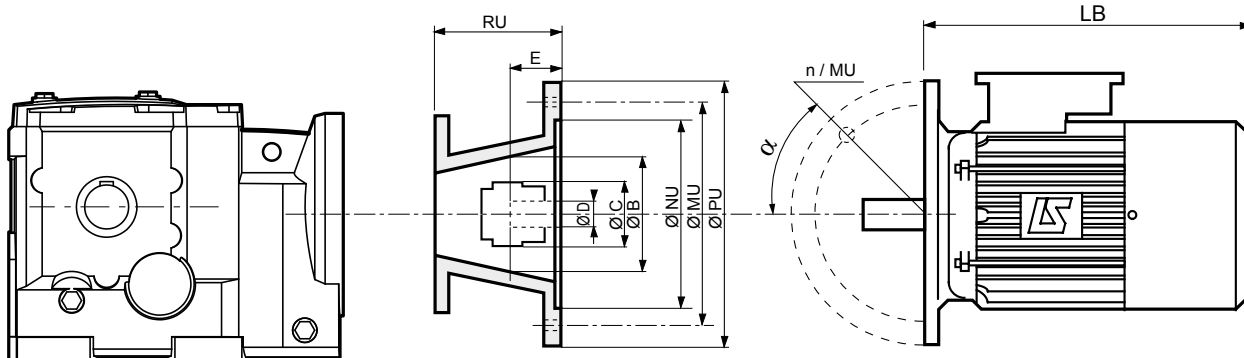
1. DE/2 can be > YL; YR

		Shaft L ¹							
Ot	i	D	E	EX	EY	F	GA	O	p
Ot 3935	194->17,900	120m6	210	14	170	32	127	M24	45
Ot 3835	171->18,505	110m6	210	15	180	28	116	M24	50
Ot 3735	187->19,441	90m6	170	13	140	25	95	M24	50
Ot 3635	174->18,505	70m6	140	10	115	20	74.5	M20	42
Ot 3535	174->17,300	60m6	120	5	110	18	64	M20	42
Ot 3435	183->17,500	50k6	100	5	90	14	53.5	M16	36
Ot 3335	178->20,000	40k6	80	4	70	12	43	M16	36
Ot 3235	4780->19,800	30j6	60	3.5	50	8	33	M10	22

1. Shaft on the right option R

		IMfinity® three-phase 4-pole							kg	IMfinity® three-phase 4-pole and brake FFB							kg
Ot	LS(ES)	AC	HJ	J	LB	LJ	I	II		AC	HJ	J	LB	LJ	I	II	
Ot 3935																	
Ot 3835																	
Ot 3735																	
Ot 3635																	
Ot 3535																	
Ot 3435																	
Ot 3335	71	140	109	87	208	37	43.5	46.5	8.3	140	130	160	296	23.5	55	55	11.3
Ot 3235	80	190	135	87	288	67.5	43.5	43.5	14.1	190	151	160	430	49.5	55	55	17.1

Dimensions in millimetres



Type	LS, LSES IM 3001 (IM B5) IEC										U-mounts									
	ØD	E	LB	LB FFB/FCPL	ØMU	ØNU	ØPU	n	α°		ØC RU	ØC RU	ØC RU	ØC RU	ØC RU	ØC RU	ØC RU	ØC RU	ØC RU	ØC RU
LS 71 M	14j6	30	186	286	FF130	110	160	4	45		65 122	65 122	65 122	65 122	65 122	-	-	-	-	-
LS 71 L	14j6	30	186	296	FF130	110	160	4	45		65 122	65 122	65 122	65 122	65 122	-	-	-	-	-
LS 80 L	19j6	40	-	312	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LSES 80 LG	19j6	40	265	409	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LS 90 SL	24j6	50	-	409	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LSES 90 SL	24j6	50	265	409	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LS 90 L	24j6	50	-	409	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LSES 90 L	24j6	50	265	409	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LSES 90 LU	24j6	50	296	409	FF165	130	200	4	45		65 130	65 130	65 130	65 126	65 130	-	-	-	-	-
LS 100 L	28j6	60	-	437	FF215	180	250	4	45		65 144	65 144	65 140	65 140	65 144	65 148	65 148	65 148	65 136	
LSES 100 L	28j6	60	290	437	FF215	180	250	4	45		65 144	65 144	65 140	65 140	65 144	65 148	65 148	65 148	65 136	
LSES 100 LR	28j6	60	309	437	FF215	180	250	4	45		65 144	65 144	65 140	65 140	65 144	65 148	65 148	65 148	65 136	
LS 100 LG	28j6	60	315	423	FF215	180	250	4	45		65 144	65 144	65 140	65 140	65 144	65 148	65 148	65 148	65 136	
LS 112 MG	28j6	60	-	448	FF215	180	250	4	45		65 144	65 144	65 144	65 144	65 144	65 148	65 148	65 148	65 136	
LSES 112 MU	28j6	60	332	448	FF215	180	250	4	45		65 144	65 144	65 144	65 140	65 144	65 148	65 148	65 148	65 136	
LS 132 S	38k6	80	-	490	FF265	230	300	4	45		-	-	-	-	65 162	62 169	65 167	65 167	65 156	
LSES 132 SM	38k6	80	385	621	FF265	230	300	4	45		-	-	-	-	65 162	62 169	65 167	65 167	65 156	
LS 132 M	38k6	80	385	596	FF265	230	300	4	45		-	-	-	-	65 162	62 169	65 167	65 167	65 156	
LSES 132 M	38k6	80	385	596	FF265	230	300	4	45		-	-	-	-	65 162	62 169	65 167	65 167	65 156	
LSES 132 MU	38k6	80	412	596	FF265	230	300	4	45		-	-	-	-	65 162	62 169	65 167	65 167	65 156	
LSES 160 MR	42k6	110	495	671	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LS 160 MP	42k6	110	-	671	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LS 160 LR	42k6	110	-	671	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 160 L	42k6	110	495	682	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 160 M	42k6	110	495	682	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 160 LUR	42k6	110	510	677	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LS 180 MT	48k6	110	-	668	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 180 MT	48k6	110	495	-	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LS 180 LR	48k6	110	-	683	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 180 LR	48k6	110	520	-	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 180 M	48k6	110	552	-	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 180 LUR	48k6	110	614	-	FF300	250	350	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 200 LR	55m6	110	620	-	FF350	300	400	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LS 200 LT	55m6	110	-	785	FF350	300	400	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LSES 200 LU	55m6	110	669	-	FF350	300	400	4	45		-	-	-	-	-	95 194	95 199	95 199	95 187	
LS 225 ST	60m6	140	-	838	FF400	350	450	8	22.5		-	-	-	-	-	-	120 311	120 311	120 233	
LSES 225 ST	60m6	140	627	-	FF400	350	450	8	22.5		-	-	-	-	-	-	120 311	120 311	120 233	
LSES 225 SR	60m6	140	676	-	FF400	350	450	8	22.5		-	-	-	-	-	-	120 311	120 311	120 233	
LS 225 MR	60m6	140	-	880	FF400	350	450	8	22.5		-	-	-	-	-	-	120 311	120 311	120 233	
LSES 225 MR	60m6	140	676	-	FF400	350	450	8	22.5		-	-	-	-	-	-	120 311	120 311	120 233	
LSES 225 MG	60m6	140	810	-	FF400	350	450	8	22.5		-	-	-	-	-	-	120 311	120 311	120 233	
LS 250 ME ¹	65m6	140	-	1116	FF500	450	550	8	22.5		-	-	-	-	-	-	-	160 303	160 316	
LSES 250 ME ¹	65m6	140	810	-	FF500	450	550	8	22.5		-	-	-	-	-	-	-	160 303	160 316	
LSES 280 SD ¹	75m6	140	870	-	FF500	450	550	8	22.5		-	-	-	-	-	-	-	160 303	160 316	
LS 280 SC ¹	75m6	140	-	1116	FF500	450	550	8	22.5		-	-	-	-	-	-	-	160 303	160 316	
LS 280 MD ¹	75m6	140	-	1116	FF500	450	550	8	22.5		-	-	-	-	-	-	-	160 303	160 316	
LSES 280 MD ¹	75m6	140	870	-	FF500	450	550	8	22.5		-	-	-	-	-	-	-	160 303	160 316	
LSES 315 SP ¹	80m6	170	947	-	FF600	550	660	8	22.5		-	-	-	-	-	-	-	-	200 366	
LS 315 SP ¹	80m6	170	-	1116	FF600	550	660	8	22.5		-	-	-	-	-	-	-	-	200 366	

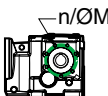
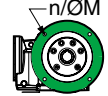
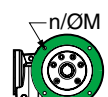
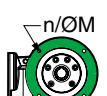
1. Motors with feet and flange (B35), horizontal mounting: motor support is recommended.

	Ot								
	Ot 31	Ot 32	Ot 33	Ot 34	Ot 35	Ot 36	Ot 37	Ot 38	Ot 39
MU max (kg)	4	4	8	14	20	75	75	75	117
LS max (kg) ¹	65	65	70	120	150	350	350	350	350

1. maximum permissible motor weight in B5

Dimensions Synthesis

Dimensions in millimetres

			ORTHOLOC								
Mountings			Ot 31	Ot 32	Ot 33	Ot 34	Ot 35	Ot 36	Ot 37	Ot 38	Ot 39
	Shaft	L, R, LR	25j6 x 50	30j6 x 60	40k6 x 80	50k6 x 100	60m6 x 120	70m6 x 140	90m6 x 170	110m6 x 210	120m6 x 210
											
		H	30H7 x 130	35H7 x 151	40H7 x 173	50H7 x 226	60H7 x 244	70H7 x 310	90H7 x 340	100H7 x 350	120H7 x 450
											
	Shaft	L, R	4 x M8 x 12 M = 95	6 x M10 x 22 M = 100	6 x M12 x 22 M = 123	6 x M12 x 22 M = 152	6 x M16 x 27 M = 190	6 x M16 x 27 M = 230	9 x M20 x 35 M = 230	-	-
			25j6 x 50	30j6 x 60	40k6 x 80	50k6 x 100	60m6 x 120	70m6 x 140	90m6 x 170		
		H	4 x M8 x 12 M = 95	6 x M10 x 22 M = 100	6 x M12 x 22 M = 123	6 x M12 x 22 M = 152	6 x M16 x 27 M = 190	6 x M16 x 27 M = 230	9 x M20 x 35 M = 230	11 x M20 x 35 M = 300	10 x M24 x 40 M = 340
			30H7 x 130	35H7 x 151	40H7 x 173	50H7 x 226	60H7 x 244	70H7 x 310	90H7 x 340	100H7 x 350	120H7 x 450
	Shaft L¹		4 x 9 M = 130	4 x 12 M = 215	4 x 14 M = 265	4 x 18 M = 300	4 x 18 M = 350	8 x 18.5 M = 500	8 x 18.5 M = 500	8 x 24 M = 600	8 x 24 M = 600
			25j6 x 50	30j6 x 60	40k6 x 80	50k6 x 100	60m6 x 120	70m6 x 140	90m6 x 170	110m6 x 210	120m6 x 210
	Shaft H		4 x 9 M = 130	4 x 12 M = 215	4 x 14 M = 265	4 x 18 M = 300	4 x 18 M = 350	8 x 18.5 M = 500	8 x 18.5 M = 500	8 x 24 M = 600	8 x 24 M = 600
			30H7 x 130	35H7 x 151	40H7 x 173	50H7 x 226	60H7 x 244	70H7 x 310	90H7 x 340	100H7 x 350	120H7 x 450
	Shaft	L¹	-	4 x 12 M = 165	4 x 14 M = 215	4 x 14 M = 265	4 x 18 M = 300	8 x 18.5 M = 400	8 x 18.5 M = 400	8 x 18.5 M = 500	-
			-	30j6 x 60	40k6 x 80	50k6 x 100	60m6 x 120	70m6 x 140	90m6 x 170	110m6 x 210	-
		H	-	4 x 12 M = 165	4 x 14 M = 215	4 x 14 M = 265	4 x 18 M = 300	8 x 18.5 M = 400	8 x 18.5 M = 400	8 x 18.5 M = 500	-
			-	35H7 x 151	40H7 x 173	50H7 x 226	60H7 x 244	70H7 x 310	90H7 x 340	100H7 x 350	-
	Shaft R		-	-	4 x 14 M = 215	4 x 14 M = 265	4 x 18 M = 300	-	-	-	-
			-	-	45K6 x 90	55k6 x 110	65m6 x 130	-	-	-	-
	71	FF130 - 14x30	FF130 - 14x30	FF130 - 14x30	FF130 - 14x30	FF130 - 14x30	-	-	-	-	
	80	FF165 - 19x40	FF165 - 19x40	FF165 - 19x40	FF165 - 19x40	FF165 - 19x40	-	-	-	-	
	90	FF165 - 24x50	FF165 - 24x50	FF165 - 24x50	FF165 - 24x50	FF165 - 24x50	-	-	-	-	
	100-112	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	
	132	-	-	-	FF265 - 38x80	FF265 - 38x80	FF265 - 38x80	FF265 - 38x80	FF265 - 38x80	FF265 - 38x80	
	160	-	-	-	-	FF300 - 42x110	FF300 - 42x110	FF300 - 42x110	FF300 - 42x110	FF300 - 42x110	
	180	-	-	-	-	FF300 - 48x110	FF300 - 48x110	FF300 - 48x110	FF300 - 48x110	FF300 - 48x110	
	200	-	-	-	-	FF350 - 55x110	FF350 - 55x110	FF350 - 55x110	FF350 - 55x110	FF350 - 55x110	
	225	-	-	-	-	-	FF400 - 60x140	FF400 - 60x140	FF400 - 60x140	FF400 - 60x140	
	250	-	-	-	-	-	-	FF500 - 65x140	FF500 - 65x140	FF500 - 65x140	
	280	-	-	-	-	-	-	-	FF500 - 75x140	FF500 - 75x140	
	315	-	-	-	-	-	-	-	-	FF600 - 80x170	

Equipment and options

Shrink disc SD

ADVANTAGE OF THE SHRINK DISC

Specially designed for assembling hollow shafts, it attaches the transmission device securely to the shaft.

The torque (M), radial (F_R) and axial forces (F_a) are transmitted fully without play.

There is no need to use a key, and the absence of the keyway avoids incipient cracks.

Alternating movements are possible within the limits of the torque (M) indicated in the technical catalogue selection tables.

The absence of initial play is retained throughout the lifetime.

The tightening torque is maintained for operating temperatures from -50°C to $+250^{\circ}\text{C}$.

Roughness tolerance

The maximum permissible surface roughness is: $R_z \text{ max} = 15 \mu\text{m}$.

The maximum permissible tolerance on the shrink disc working reach diameter = $h8$.

Secure positioning

While the screws are tightened, the hub does not move axially in relation to the shaft.

Characteristics of the shrink disc

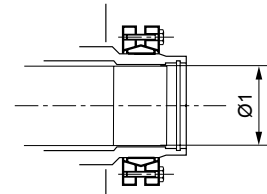
The very high transmissible torque (M of the shrink disc according to table below).

No axial movement between shaft/hub (shrink disc F_a).

Takes little time to assemble.

Quick to dismantle.

The assembly and disassembly instructions are described in the appropriate manual.

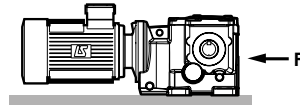


Type	Shrink disc torque M Nm	Shaft $\varnothing 1$	Fastening torque of shrink disc screws N.m	$\varnothing$ shrink disc screws	Dimensions see pages
Ot 3933	31,000	125	100	12 x M12	126
Ot 3833	20,000	105	100	10 x M12	124
Ot 3733	15,000	95	59	12 x M10	122
Ot 3633	7,250	75	30	10 x M8	120
Ot 3533	6,000	62	30	7 x M8	118
Ot 3433	2,400	52	12	M6	116
Ot 3333	1,380	42	12	M6	114
Ot 3232 - 33	860	36	12	M6	110-112
Ot 3132	570	30	12	M6	108

DETERMINATION

The following elements must be specified, after the operating position:

- the fixing form and its position: they are defined page 24. With the gearbox seen from the front **F** motor at the back, operation **B3** or **B5**.



- the side for fixing the shrink disc **SD** on hollow shaft:

SD R: shrink disc mounted on the right,

SD L: shrink disc mounted on the left.

The two tables below indicate the possible mountings, shrink disc and cover positions according to the fixing forms available.

In the case of flange gearbox, the shrink disc and cover remain opposite the flange.

Shrink disc and shrink disc cover on the right SD R, client shaft on the left: ● = feasibility

Type	Feet form		Flange form		
	NS SD R	S SD R	SBT LR SD R	BS L SD R	BD L SD R
Ot 39	NR	●	●	●	NR
Ot 36 - 37 - 38	NR	●	●	●	●
Ot 33 - 34 - 35	-	●	●	●	●
Ot 32	NR	●	●	●	●
Ot 31	NR	●	●	●	-

NR: not performed

Shrink disc and shrink disc cover on the left SD L, client shaft on the right: ● = feasibility

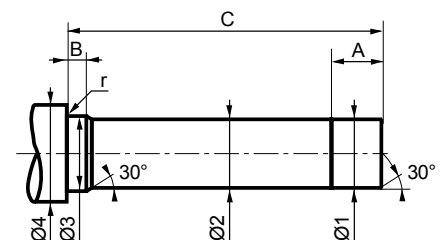
Type	Feet form		Flange form		
	NS SD L	S SD L	SBT LR SD L	BS R SD L	BD R SD L
Ot 39	NR	●	●	●	NR
Ot 36 - 37 - 38	NR	●	●	●	●
Ot 33 - 34 - 35	-	●	●	●	●
Ot 32	NR	●	●	●	●
Ot 31	NR	●	●	●	-

NR: not performed

CLIENT SHAFT FOR SHRINK DISC

Type	A min ¹	B max ¹	C max ¹	r max ¹	$\varnothing 1$	$\varnothing 2$	$\varnothing 3h6$	$\varnothing 4^1$
Ot 3933	90	24.5	538	1	125g6	124	125	160
Ot 3833	90	24.5	448	1	105g6	104	105	140
Ot 3733	60	24.5	407	0.8	95g6	94	95	120
Ot 3633	60	24.5	370	0.8	75g6	74	75	100
Ot 3533	50	11.5	304	0.8	62g6	61	63	90
Ot 3433	45	9.5	287	0.5	52g6	51	53	65
Ot 3333	37	9.5	224	0.5	42h6	41	44	55
Ot 3232 - 33	25	7.5	186	0.8	36h6	35	37	50
Ot 3132	25	34.5	167	-	30h6	29	30	45

1. These values are given for information only.



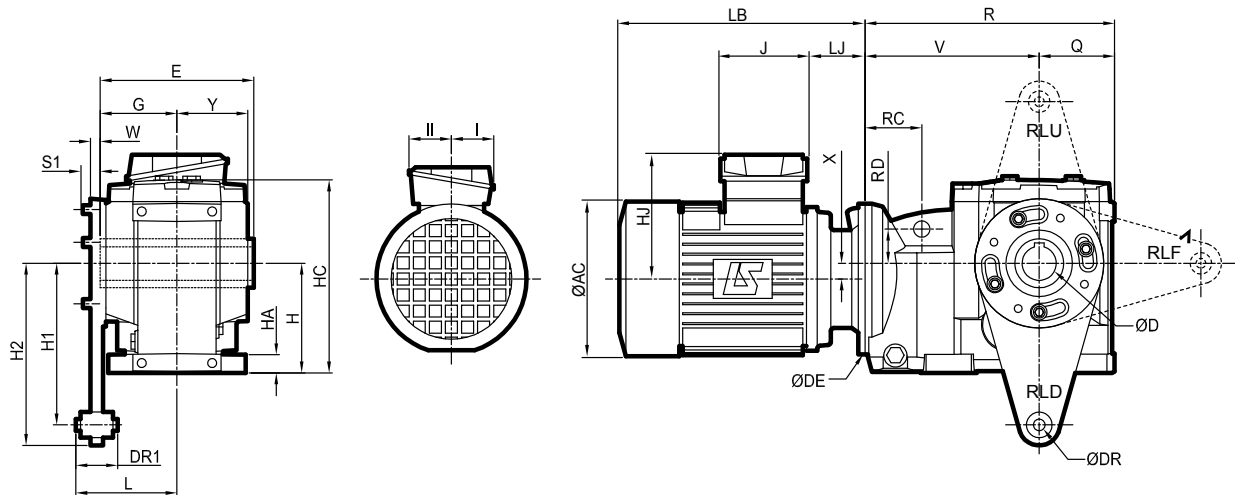
Equipment and options

Torque arm R

In the case of pendular mounting, Leroy-Somer proposes a torque arm **R**. It is fastened on the lateral face, either left **RL*** or right **RR**.

The torque arm can be turned downwards **R LD**, forward **RLF** or upwards **RLU** (except Ot 39). However, it is supplied separately, **RK** kit.

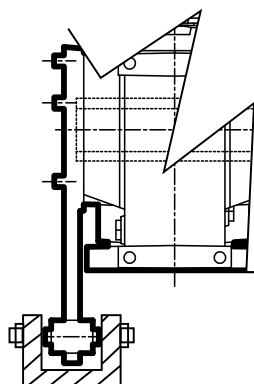
Dimensions in millimetres



	Torque arm R																				
Type	Ø D	Ø DE	Ø DR	DR1	E	G	H	H1	H2	HA	HC	L	Q	R	RC	RD	V	W	X	Y	S1
Ot 3933	120H7	550	32	116	446	223	450	700	772	61	745	305	270	712	127	130	442	32	87.9	223	16
Ot 3833	100H7	375	32	116	346	173	375	550	610	50	630	253	225	610	96	65	385	28	73.5	173	13
Ot 3733	90H7	375	24	96	340	170	250	450	496	48	465	236	255	722.5	118	148	467.5	24	-29	168	12.5
Ot 3633	70H7	375	24	96	310	155	225	350	391.5	39.5	413	215	222	587	120	98	365	18	0	153	10
Ot 3533	60H7	262	16	54	244	122	212	310	340	30	346	139.5	132	405	73	67	273	15.5	37	112.5	-
Ot 3433	50H7	225	16	54	226	113	180	250	280	27	306	128.5	114	350	59	60	236	13.5	30	103.5	-
Ot 3333	40H7	184	16	54	173	86.5	140	200	230	21.5	245	110	90	305	65	50	215	21.5	7	85	-
Ot 3233	35H7	154	10	33	151	75.5	112	130	151	18.5	205	90	77	255	58	35	178	13	16	72.5	-
Ot 3232	35H7	184	10	33	151	75.5	112	130	151	21	267	91.5	93	290	77	85	197	13	63	72.5	-
Ot 3132	30H7	154	10	33	130	65	80	130	151	15	203.5	77.5	80	245	69	66	165	11	46.5	60	-

1. RLF (on the left) or RRF (on the right) except Ot39

Pendular mounting by torque point.
We recommend mounting with flexible joint supplied, as per diagram.



Equipment and options

DRIVEN SHAFT

Dimensions in millimetres

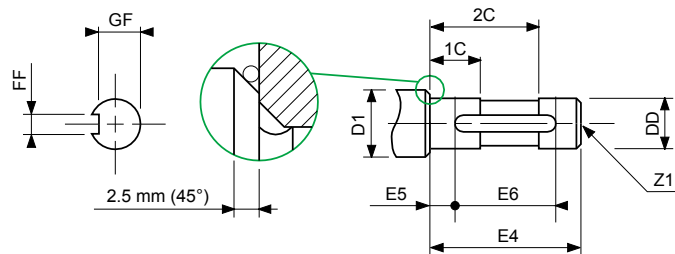
Whether with S feet, BS or BD smooth hole flange, we provide below for information the values for producing a driven shaft (steel recommended: C45E) for Ot 31 to Ot 39.

Check that the cylindrical shaft has been machined in accordance with the standard NF-E22-175, with a side fit: g6 (the hub is: H7).

Check that the key is standard and the shaft of a minimum length, tapped at the end (for screws class 8.8 according to ISO 898/1) following opposite data:

ØDD Ot	Recommended drilling	Tightening moment N.m
25, 30	M10	48
35, 50	M16	200
60, 70	M20	390
90, 110, 120	M24	675

Maximum clamping moment (N.m) is given with a μ coefficient of friction from 0.12 to 0.18.



Driven shaft										
Type	1C	2C	DDg6	D1	E4	E5	E6	FF	GF	Z1
Ot 3933	120	330	120	150	390	20	350	32	109	24
Ot 3833	110	280	100	130	295	20	265	28	90	24
Ot 3733	100	275	90	120	290	20	250	25	81	24
Ot 3633	75	250	70	100	265	20	225	20	62,5	20
Ot 3533	65	179	60	65	200	15	175	18	53	20
Ot 3433	50	176	50	65	185	15	160	14	44,5	16
Ot 3333	45	133	40	55	145	15	120	12	35	16
Ot 3233	42	109	35	50	120	15	95	10	30	16
Ot 3232	42	109	35	50	120	15	95	10	30	16
Ot 3132	32	100	30	45	105	15	85	8	26	10

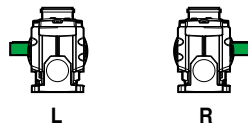
BACKSTOP AD

Gearboxes Ot 36 to 39 can be made in version gearbox with **input shaft AP with backstop option**: device allowing rotation in a single direction.

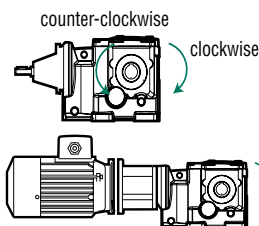
Sizes 36 to 39 are also available in version **geared motor with universal mounting U with backstop option**.

In the order, please specify:

1 - the slow shaft side used: left L (Std, by default) **or right R**.
(view facing the gearbox: face F, motor at the back)

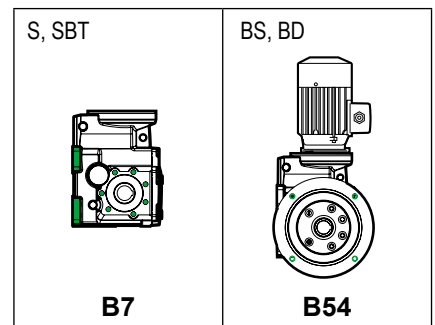


2 - direction of rotation of the output shaft: clockwise or counter-clockwise.



Operating positions

AD forbidden



Example of designation

Ot 3733 i 38.1 S - LB3 MU 4P - LSES 200 LR
- 30kW - IFT/IE2 - Clockwise AD (left side)

Equipment and options

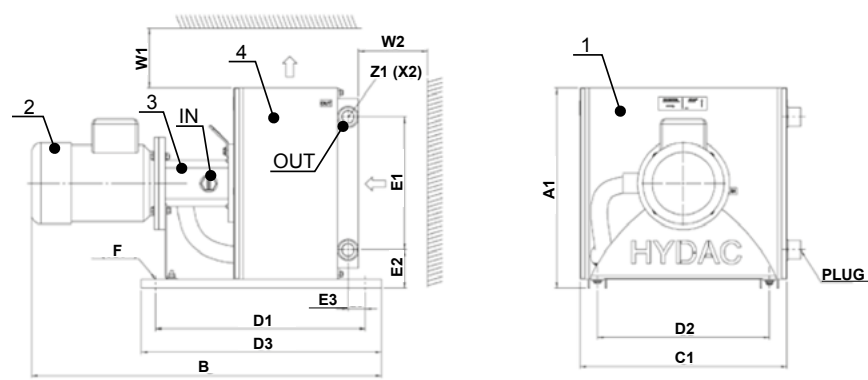
HEAT EXCHANGER

Dimensions in millimetres

The geared motor may require an external cooling system to maintain its performance. We recommend the heat exchanger appended, approved by our technical services. It is composed of: a metallic housing (1), motor (2), pump (3), fan (4) with the following characteristics:

- Motor: 1.1 kW, 4p, IP 55
- Maximum dissipation: 10 kW
- Flow rate: 40l/min for 40 cSt - 4 bar
- Max oil temperature: 90°C

The cooling air flow must be free of obstacles. For the ideal air intake and discharge distance, refer to dimensions W1 and W2 (mm) in the table below.



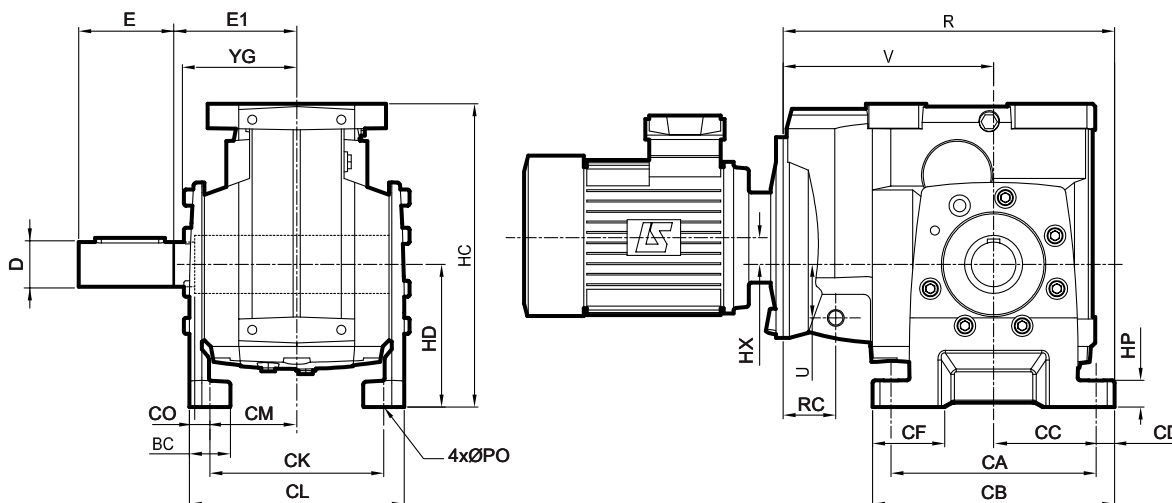
Dimensions (mm)														
A1	B	C1	D1	D2	D3	E1	E2	E3	F	W1 min	W2 min	Z1 IN	Z2 OUT	 kg
433	766	449	455	373	521	288	83	37.5	9	1.000	300	G1"	G3/4"	40

Equipment and options

Dimensions in millimetres

FEET KIT ADDED

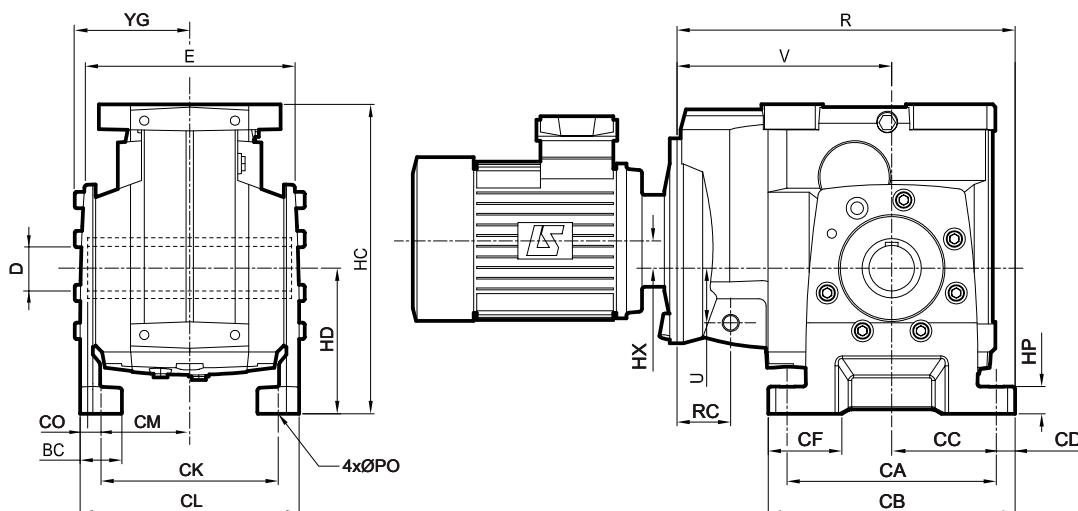
- NS form, output shaft on the left*



* option on right NS R

Ot	Feet kit added NS, output shaft L																			kg
	BC	CA	CB	CC	CD	CF	CK	CL	CM	CO	Ø D	E	E1	HC	HD	HP	HX	PO	R	
Ot 3533	60	280	332	140	25	103	230	280	115	25	60	120	146.5	412	200	40	37	24	438	98
Ot 3433	46	230	271	115	20	81	195	241	97.5	23	50	100	131.5	340	160	30	30	18	371.5	70
Ot 3333	39	170	211	85	20	61	155	200	77.5	22.5	40	80	123	265	125	20	7	14	321	43

- NS form, cylindrical hollow shaft H



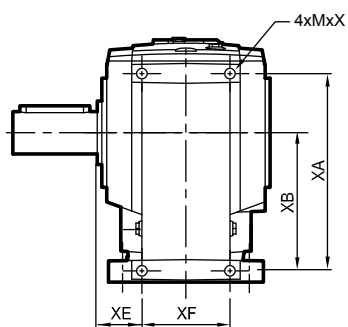
Ot	Feet kit added NS, Hollow shaft H																			kg
	BC	CA	CB	CC	CD	CF	CK	CL	CM	CO	Ø D	E	HC	HD	HP	HX	PO	R	RC	
Ot 3533	60	280	332	140	25	103	230	280	115	25	60	244	412	200	40	37	24	438	73	97
Ot 3433	46	230	271	115	20	81	195	241	97.5	23	50	226	340	160	30	30	18	371.5	59	68
Ot 3333	39	170	211	85	20	61	155	200	77.5	22.5	40	173	265	125	20	7	14	321	65	42

Dimensions

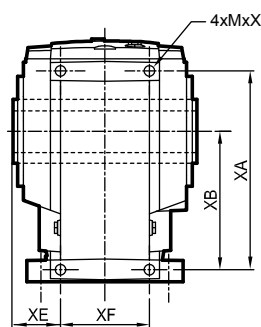
Versions SBT, BS, BD, BR (shaft L, R, LR, H, SD, ...)

Dimensions in millimetres

- Details side F¹



Ot with output shaft L



Ot with hollow shaft H

Type	Details side F, Ot output shaft L* hollow H				
	M x X	XA	XB	XE	XF
Ot 3933	M30 x 45	565	390	127	270
Ot 3833	M30 x 45	490	340	75	200
Ot 3733	M24 x 40	345	224	85	170
Ot 3633	M20 x 35	295	200	78	154
Ot 3533	M16 x 27	280	196	59.5	125
Ot 3433	M12 x 22	238	164	62.5	100
Ot 3333	M12 x 22	184	127	41.5	90
Ot 3233	M10 x 22	155	102	38.5	72
Ot 3232	M10 x 22	155	102	38.5	72
Ot 3132	9	100	50	15	100

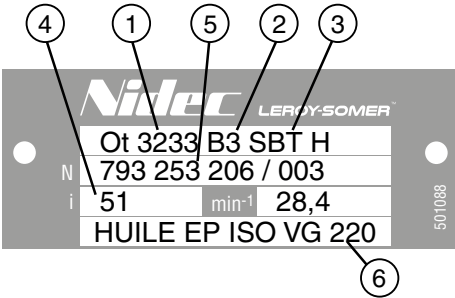
1. Gearbox mounting forbidden by these holes (X) except in Ot 31 if applicable.

* shaft on right option R

Identification
Gearboxes

NAMEPLATES

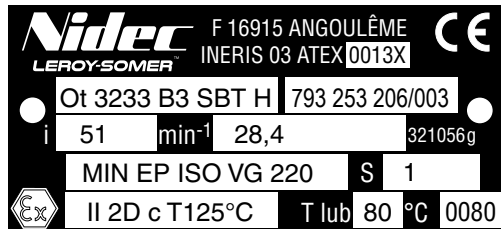
The nameplate identifies the motors, indicate the main performance and show compatibility of the motor concerned with the main standards and concerning them.



Information to be reminded in each spare parts order:

① Ot: Orthobloc gearbox 3233: gearbox type	② B3: operating position	③ SBT: fixing form H: slow shaft form	④ i: exact reduction	⑤ No.: serial number N/ 001: order number in the series	⑥ MIN EP ISO VG: lubrication according to ISO 220: viscosity grade at 40°C in cSt Option: lubrication synthetic oil PAO ISO VG150	min⁻¹: number of revolutions per minute
--	---	---	---	---	---	--

SPECIFIC MARKING



INERIS No. 03 ATEX 0013X: Geared motor



Legal marking indicating that the equipment conforms to the requirements of European Directives

Special marking (ATEX)

0080	: Identification of INERIS (Notified Body)
	: Specific marking
II 2D	: Group II, category 2, Conductive dusts or:
II 3D	: Group II, category 3, Non-conductive dusts
c	: Mode of protection of the gear mesh by design
T max	: Maximum surface temperature: e.g. 125°C
T lub: lubricant	: Temperature recorded during plant tests (ambient temperature 20 °C)
Certificate no.	: No. of the CE type certificate issued by INERIS (group II 2D)
If applicable	: additional marking planned in the CE certificate

Nameplates identify the equipment, indicate the main performance and show its compatibility with the main standards and regulations related to them.

DEFINITION OF NAMEPLATE SYMBOLS



Legal sign that the equipment conforms to the requirements of European Directives.

Mains supply plate:

MOT 3 ~ : Three-phase A.C. motor
LSes : Series
200 : Frame size
LU : Housing symbol
T : Impregnation index

IP55 IK08 : Protection index

I cl. F : Insulation class F

40°C : Contractual ambient temperature for operation

S1 : Duty - Operating factor

kg : Weight

V : Supply voltage

Hz : Supply frequency

min⁻¹ : Number of revolutions per minute

kW : Rated power

cos φ : Power factor

A : Rated current

Δ : Delta connection

Y : Star connection

Bearings

DE : Drive end bearing

NDE : Non-drive end bearing

g : Amount of grease at each regreasing (g)

h : Greasing interval (hours)

POLYREX EM103 : Type of grease

Δ : Vibration level

(H) : Balancing mode

Motor no.

789456 : Motor batch number

F : Month of production

14 : Year of production

001 : Serial number

IE3 : Efficiency class

93.6% : Efficiency at 4/4 load

Information to be reminded whenever ordering spare parts

Drive supply plate:

Inverter settings: Values necessary to set the frequency inverter

Motor performance: Torque available on the motor shaft in % rated torque at the plate frequencies

Min. Fsw (kHz): Minimum cut-off frequency acceptable for the motor

Nmax (min⁻¹): Maximum mechanical speed acceptable for the motor

Identification

FFB Brake motors

NAMEPLATES

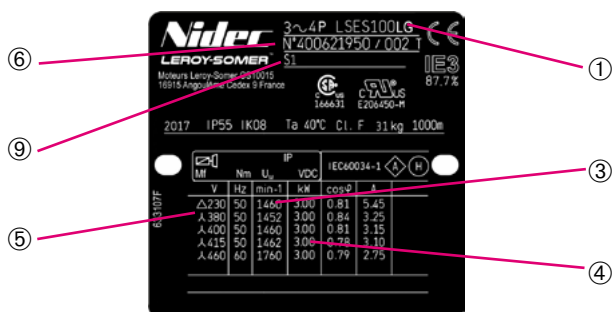
Check equipment conformity: construction shape, indications on nameplates.

Information ① to ⑫ to be reminded whenever ordering spare parts.

Other logos may be included optionally: approval is required prior to ordering.

Example: LSES 100 LG FFB3 IFT/IE3

MOTOR NAMEPLATE



Definition of the symbols

T : Impregnation class

IE2: Efficiency class

IP-- IK--: protection ratings*

CI.F : Insulation class

(Ta) 40°C: contractual ambient temperature for operation

cos P or φ : power factor

A : Rated current

Δ : delta connection

Λ : star connection

Δ A : vibration level

Δ H : balancing mode

BRAKE MOTOR NAMEPLATE



Bearings

DE: Drive end bearing

NDE: Non drive end bearing

*IK: Resistance to impacts

The motor withstands low mechanical impacts (IK 08 as per EN 50102). **The user shall provide additional protection in case of risk of high mechanical impact.**

Marking

Definition of symbols used on nameplates

Information required on nameplates:

①	Serial motor, frame size
②	Brake type FFB ☒ ☐
③	Speed of rotation (min ⁻¹)
④	Rated output power (kW)
⑤	Motor voltage (V)
⑥	Motor and brake manufacturing No.
⑦	Mf: Braking torque (N.m)
⑧	U: Brake coil voltage (VDC)
⑨	Duty - Operating factor
⑩	I: Coil current (mA)
⑪	Specific marking (ATEX) Ex
⑫	rpm: Maximum usage speed

Information to be reminded whenever ordering spare parts

	Motor nameplate	FFB brake nameplate
CE	Legal mark of compliance of equipments with the requirements of European Directives	Frame size 71 to 180
CULUS	Legal mark of compliance of equipments with the USA and Canada markets	Frame size 71* to 180
CSUS	Legal mark of brake's compliance with the USA and Canada requirements	Frame size 80 to 180
71*	Legal mark of compliance of equipments with the USA and Canada requirements	*or optional Frame size 71

Identification

FCPL Brake motors

NAMEPLATES

Nameplates identify the equipment, indicate the main performance and show its compatibility with the main standards and regulations related to them.

DEFINITION OF NAMEPLATES SYMBOLS

CE Legal sign that the equipment conforms to the requirements of European Directives.

EAC Eurasian conformity

Mains supply plate:
induction motor, short-circuit rotor

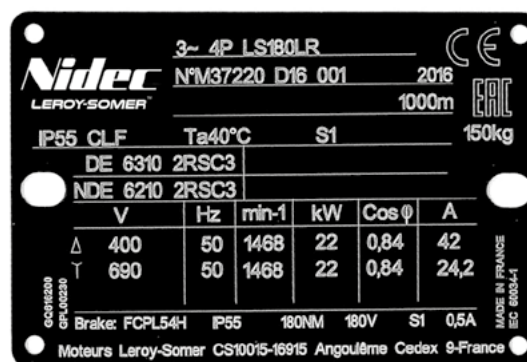
LS : series
180 : frame size
LR : housing description

Motor no.

2016 : year of production
M3722D16 : motor batch number
001 : Serial number
IP55 : motor protection indices
22 kW : rated output power
3~ 4P : three-phase A.C. motor
Hz : supply frequency
cos φ : power factor
cl.F : insulation class F
Ta : 40°C, contractual ambient temperature
min⁻¹ : number of revolutions per minute
S1 : duty
V : supply voltage
A : rated current

Brake 

FCPL 54H : type of brake
IP55 : brake protection index
180 Nm : braking torque
180 V : brake supply voltage
0.5 A : brake coil current



Marking

Definition of symbols used on nameplates

	Motor nameplate	FCPL brake nameplate
CE Legal mark of compliance of equipments with the requirements of European Directives	Frame size 180 to 315	Frame size 180 to 315
cULus Legal mark of compliance of equipments with the USA and Canada markets	Frame size 180 to 315	-
RU Mark of compliance, of final product components, with the requirements of the USA and Canada markets		optional Frame size 180 to 315 (E68554)

IK: Shock resistance

The motor can withstand a weak mechanical shock (IK 08 according to EN 50102).

The user shall provide additional protection if there is a risk of significant mechanical shock.

**Information to be reminded
whenever ordering spare parts**

Installation

ACCEPTANCE TESTING

Check the condition of the equipment. In case of damage, either to the equipment or its packaging, record reservations with the carrier (if applicable, repairing may be excluded from the warranty).

Check that the equipment conforms to the order (construction shape, indications on nameplates)

See the leaflet reference 2557.

HANDLING

- It is mandatory to use lifting devices, fitted on equipment.

STORAGE

Store the equipment in a clean and dry location, protected from shocks, vibrations, temperature differences (between -30°C and +50°C) and in an atmosphere with a hygrometry below 80%.

Long-term storage (>1 year)

- Unless the equipment is lubricated for life, fill the gearbox completely with oil (upon commissioning, drain and top up as described in the manual of the gearbox concerned). Coat the external gasket(s) with grease.
- Enclose the unit in a sealed plastic bag (e.g. thermal glue) with a desiccant product inside.
- For manual release brake geared motors, release the brake to prevent sticking.

COMMISSIONING

The installation must be performed by skilled personnel.

- Mount the gearboxes onto rigid and flat supports free of vibration. Use screws of appropriate length and class (class 8.8 min) and tighten them at 70 % their elastic limit.
- Remove the protections from the shaft(s) and flange(s): plastic end pieces, oil or varnish (use a solvent if required, while avoiding contact with the gaskets).
- For gearboxes lubricated with oil, check the oil level or top up.
- Fit the breather plug at the upper point of the gearbox when the equipment has one.
- Lubrication: see appropriate manuals. (page 2)

Allow sufficient room around the geared motor for plugs (or expansion tank) accessibility:

200 mm: G1/4" plug std Ot 31 to 35

500 mm: G3/4" plug with dipstick for Ot 36 to 39.

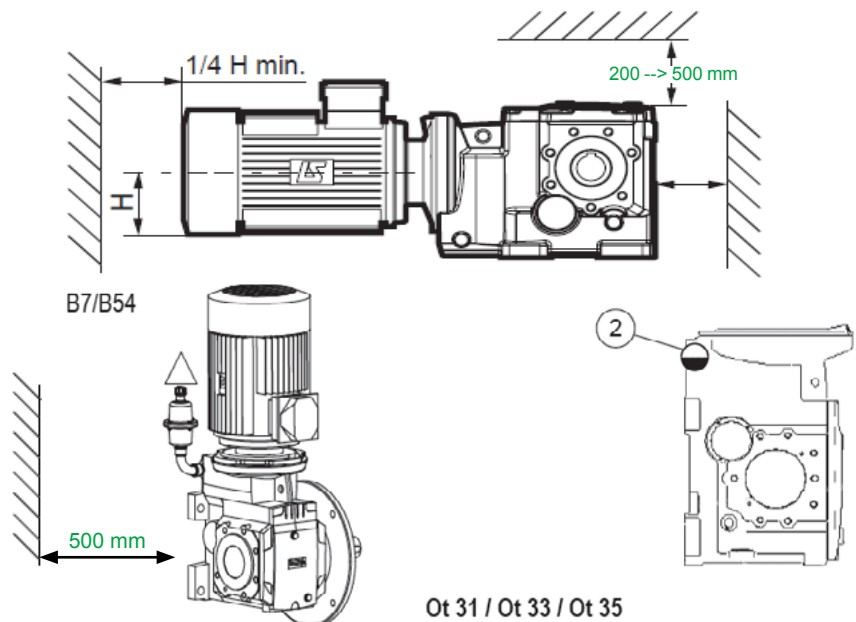
LUBRICATION

For operation in ambient temperature between -10°C and +40°C, Orthobloc series 3000 is supplied, as standard, with mineral Extreme Pressure oil type EP ISO VG 220*. Each gearbox is filled according to the operating position specified in the order. Refer to the gearbox nameplate (page 147) and installation manual reference 3996 for the quantity required for the operating position of your unit.

**option: synthetic oil PAO ISO VG 150*

Lubrication kit

Certain operating positions or a high input speed require a lubrication kit to preserve the initial performance of Ot gearboxes (manual reference 5088). In this case, allow sufficient room around the geared motor for plugs (or expansion tank) accessibility, machine stopped. (Installation manual reference 5088).



Example: Ot 31, 33, 35 in operating position B7 (foot mounted gearbox) or B54 (flange mounted gearbox).

Plugs:
● Level △ Breather



In the case of a selection where the output shaft does not make a complete turn, please consult us to define the most appropriate oil quantity or operating position.



A maintenance fault may cause material or bodily damage. Check regularly that the recommendations concerning mechanical and electrical installation are still complied with.

Installation

PACKAGING WEIGHT AND DIMENSIONS

Road transport (code 30) or air transport (code 40)

Cardboard boxes ¹		
Ref.	Tare	Dimensions (L x W x H) ²
	kg	mm
P0 000	0.25	245 x 190 x 150
P0 100	0.35	256 x 222 x 165
P0 200	0.40	330 x 288 x 172
R1	0.25	330 x 145 x 200
R2	0.50	420 x 200 x 240
R3	0.65	520 x 220 x 280
R4	1.05	550 x 320 x 360
R5	0.85	580 x 260 x 280
R6	1.30	780 x 300 x 430
R7	0.75	420 x 300 x 260
R8	0.90	500 x 330 x 290
R5 Marine	0.85	580 x 260 x 280

Open pallet box or open-slat crate		
Tare	Outer dimensions (L x W x H) ²	Inner dimensions (L x W x H) ²
kg	mm	mm
10	720 x 420 x 550	650 x 350 x 400
26	830 x 520 x 660	760 x 450 x 500
30	990 x 570 x 620	920 x 500 x 550
47	920 x 870 x 700	850 x 800 x 550
48	990 x 870 x 880	920 x 800 x 720
45	1,270 x 870 x 700	1,200 x 800 x 550
47	1,270 x 870 x 880	1,200 x 800 x 720
61	1,270 x 1,070 x 730	1,200 x 1,000 x 550
62	1,270 x 1,070 x 900	1,200 x 1,000 x 720
64	1,270 x 1,070 x 1,050	1,200 x 1,000 x 870

Packaging for sea transport (code 10)

Plywood crates		
Tare	Outer dimensions (L x W x H) ²	Inner dimensions (L x W x H) ²
kg	mm	mm
20	740 x 480 x 730	680 x 420 x 600
26	840 x 520 x 710	760 x 440 x 530
30	980 x 560 x 720	920 x 500 x 550
58	1,120 x 750 x 850	1,040 x 680 x 670
60	1,100 x 950 x 680	1,020 x 870 x 500
80	1,100 x 950 x 1,180	1,020 x 870 x 1,000

¹ maximum permissible weight: 50 kg

² these approximate values are given for individual packages. Packages grouped in open slat crates for quantity of machines supplied > 5, in the majority of cases.

Configurator



The Leroy-Somer configurator allows selecting the most appropriate motors and provides the corresponding technical specifications and plans.

Online registration:

<http://configureur.ls.leroy-somer.com/en/inscrire.php>

- Product selection help
- Printing technical specifications
- Printing of 2D and 3D CAM files
- Equivalent to 300 catalogues in 15 languages.

Nidec Configurator LEROY-SOMER

Motors & Gears configurator V8.201

Environment	Current	[?]	[OK]
Ambiance	Non corrosive	[?]	[OK]
Finish	-	[?]	[OK]
Zone	Non specific	[?]	[OK]
Method of cooling	Fan cooled motor		
Protection type	-	[?]	[OK]
Gearbox serie	O1	[?]	[OK]
Application	General applications		
Number of speed	Single-speed		
Brake	With	[?]	[OK]
Gearbox bearing and output shaft calculation	-	[?]	[OK]
Number of network phases	3		

Availability Informations

Express Availability: Yes

Nidec Configurator LEROY-SOMER

Gear mechanical interface V 8.201

Motor type	4P LS 160MP 11kW 380D/400D/415D/690Y-460D 50-Hz	[?]	[OK]
Gearbox type	Ot3533 - i = 14.0 - Integrated mounting		
Fixing form	Feet and standard face arrangement	[?]	[OK]
Fixing form	SBT - FT190	[?]	[OK]
Position of the fixation	Both side flanges	[?]	[OK]
Low speed shaft	Left solid shaft	[?]	[OK]
Dimension of low speed shaft	60m6x120		
Shaft material type	Steel shaft		
Operation position	B3 (S)	[?]	[OK]

Availability Informations

Express Availability: Yes

Availability time: D+10

Maximum quantity: 2

Nidec Configurator LEROY-SOMER

Motors & Gears configurator V8.201

Geared motor Orthobloc with brake

Ot3533 14.9 SBT LR L B3 MI 4P LS 160MP 11kW IFT/NIE B14 380D/400D/415D/690Y-460D 50-60Hz FFB 140.0N.m -

€

Q

Service for drive systems

Audit & Advice

- Facility audit
- Energy optimisation
- Modernisation
- Facility management



Installation & commissioning

- Installation
- Commissioning
- Extended warranty
- Training



Maintenance

- Emergency services
- Services upon request
- Contracts

MAINTENANCE

The service life of your facilities ensures continuity of your production flow and extends the lifetime of the equipment, ensuring a good return on investment.

For emergency situations, we have defined the appropriate services to offer you the solution ensuring your installations will restart promptly.

Experts close to your facilities available 24/7 monitoring proper operation of your equipment, able to define the level of intervention required according to the context, and able to intervene urgently: that is our vision of maintenance.

Unique services and support

- Proximity network with 200 service partners
- Express transport option in 24h

MONITORING CONTRACTS

Maintaining drive systems in operational condition at all times is vital for proper operation of your equipment, whether these are line production units or utilities.

Parameter monitoring programmes ensure drifts and anomalies likely to cause malfunctions are detected early.

MAINTENANCE CONTRACTS

Observing inspection intervals and changing first wear devices and parts are often complex and tedious operations because of the multiplicity of equipment present in an industrial site.

To facilitate these operations, our solutions allow managing the maintenance of drives.

DEADLINE COMMITMENT

Express Availability



- Ready to ship in 1 to 10 working days
- Motors, servomotors, geared motors, drives, options and accessories
- Limited quantity
- Access to the list of products eligible to *Express Availability*, and the appropriate conditions, directly on our Web site

Express Availability

Being able both to respond to urgent requests and adhere to promised customer lead times calls for a powerful logistics system.

The availability of geared motors is ensured by the network of approved partners and Leroy-Somer central services all working together.

The colour code in the "Express Availability" selection grids ensures product lead times are indicated per family, and according to the quantities ordered.

Consult Leroy-Somer.

The illustration of the delivery time below for the equipment selected page 22, i.e. D+5; D being the day the order is received by the factory before 12:00 am.

FFB - IFT/NIE geared brake motors (Not in any efficiency class) Helical gears COMPABLOC, MANUBLOC, ORTHOBLOC Standard environment - Fixed speed

Integral mounting	MI
Universal mounting	MU
Input shaft mounting	AP

AVAILABILITY TIMES EX WORKS (FRANCE), IN WORKING DAYS

Orders received, within the maximum quantity limit, by the factory on day D before 12:00 pm Central European Time, will have the following Availability.

For products with options, availability will be that of the longest lead-time item, i.e. the product or its options.

If the order is received after 12:00 pm, 1 working day will be added to the stated lead time.

The maximum quantity is per line of order. Above this maximum quantity, please consult your Sales Office.

D	D+1	D+2	D+5	D+10	Please consult
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FFB - IMfinity® NIE brake associated motors 4p IP55 Class F

(motors in italics excepted NC: Not Covered by IE Standards)

Cb, Mub, Ot + 4p LS FFB brake motor - IFT/NIE - 230 V Δ / 380 V Y / 400 V Y / 415 V Y - 460 V Y or 400 V Δ															
FFB brake: 180VDC Built-in brake power supply - Factory set braking torque															
Motor type	Brake type	Brake moment	Mounting	Rated power	400 V	Cb 30-	Cb 31- Mub 31-	Cb 32- Ot 32-, 33- Mub 32-	Cb 33- Ot 34- Mub 33-	Cb 34- Ot 35- Mub 34-	Cb 35- Mub 35-	Cb 36-* Ot 36-* Mub 36-*	Cb 37-* Ot 37-, 38-* Mub 37-*	Cb 38-* Mub 38-*	Ot 39-
		Mf ¹ N.m		P _n kW											
LS 71 M	FFB1	4.5	MI or MU	0.25	Y	5	5	5	5						
LS 71 M	FFB1	4.5	MI or MU	0.37	Y	5	5	5	5						
LS 71 L	FFB1	6	MI or MU	0.55	Y	5	5	5	5						
LS 80 L	FFB1	12	MI or MU	0.75	Y	5	5	5	5	5	5				
LS 80 L	FFB1	12	MI or MU	0.9	Y	5	5	5	5	5	5				
LS 90 SL	FFB2	19	MI or MU	1.1	Y		5	5	5	5	5	2	2		
LS 90 L	FFB2	19	MI or MU	1.5	Y		5	5	5	5	5	2	2		
LS 90 L	FFB2	26	MI or MU	1.8	Y		5	5	5	5	5	2	2		
LS 100 L	FFB2	26	MI or MU	2.2	Y		5	5	5	5	5	2	2		
LS 100 L	FFB3	52	MI or MU	3	Y		5	5	5	5	5	2	2		
LS 112 MG	FFB3	52	MI or MU	4	Y			5	5	5	5	2	2		
LS 132 S	FFB3	67	MI or MU	5.5	Y			5	5	5	5	2	2		
LS 132 M	FFB4	110	MI or MU	7.5	Δ				5	5	5	2	2	2	
LS 132 M	FFB4	110	MI or MU	9	Δ					5	5	2	2	2	
LS 160 MP	FFB5	140	MI or MU	11	Δ					2	2	2	2	2	
LS 160 LR	FFB5	180	MI or MU	15	Δ					2	2	2	2	2	

(¹) values given for information only; in the event of normative restriction, please consult us

ORTHOBLOC - MECHANICAL OPTIONS CORRESPONDING TO THE MOUNTING FORM AND L (left) R (right) SOLID SHAFT

Type	Ot MI forms				Ot mounting				Equipment		
	S L, SR	S LR	SBTLR L, R	SBTLR LR	Flange mounted	Backstop ¹	Universal	Input shaft	Lubrication PAO ISO VG150	Heat exchanger	
Ot 3132									2		
Ot 3232-3233									2		
Ot 3333									2		
Ot 3433									2		
Ot 3533									2		
Ot 3633						1			2		
Ot 3733						1			2		
Ot 3833						1			2		
Ot 3933									2		

1. Ot 36 to 39: AD (backstop) not allowed for B7, B54 operating positions.

SAVING YOUR TIME

The delivery charter for products in Express Availability are accessible strictly through our web pages:

<http://lrm.co/dispofr> (chapter 6: Gearboxes-Geared motors)

You can also scan the QR code below for direct access:





**Express
Availability**

Express Availability commitment

**Drives, motors, geared motors
and servomotors you need,
when you need them**



LEROY-SOMER™

Notes

Notes

LEROY-SOMERTM

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Nidec
All for dreams

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