



## Geared Motors 3000 Range - IMfinity® Manubloc

Drive systems, Non-IE, IE2 and IE3 efficiencies

Variable speed and fixed speed

Sizes 31 to 38

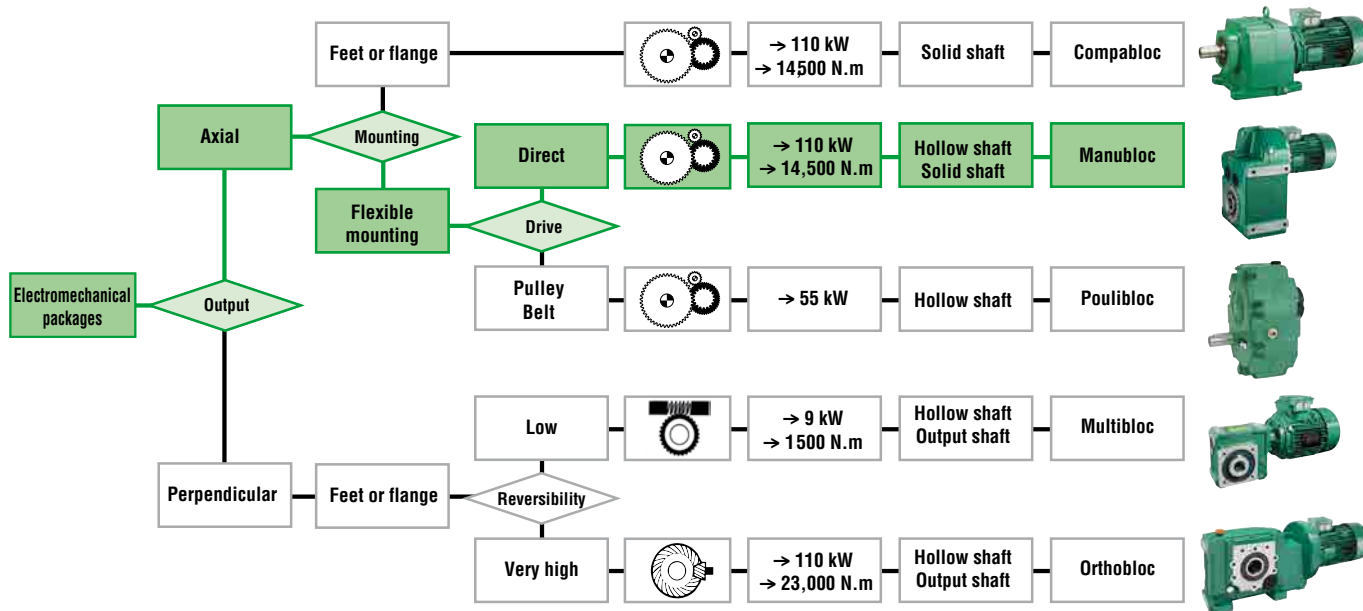
Power rating 0.25 to 110 kW

**LEROY-SOMER**™

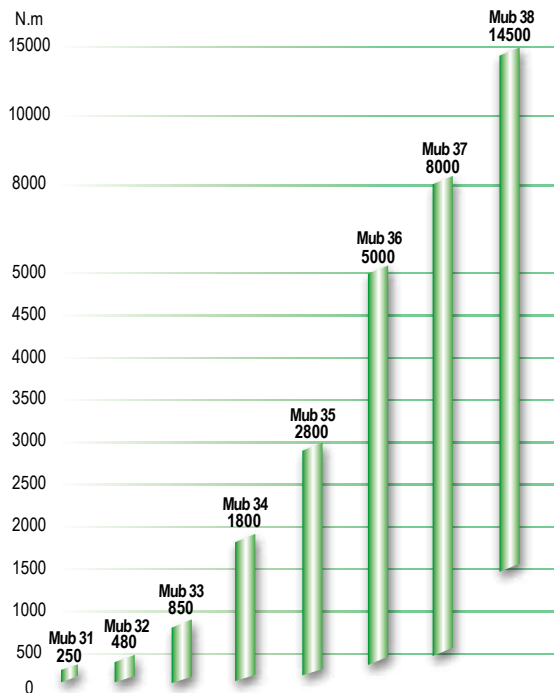
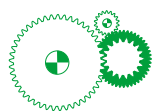
**Nidec**  
All for dreams

## Introduction

### GEARBOXES OFFER



### MANUBLOC RANGE

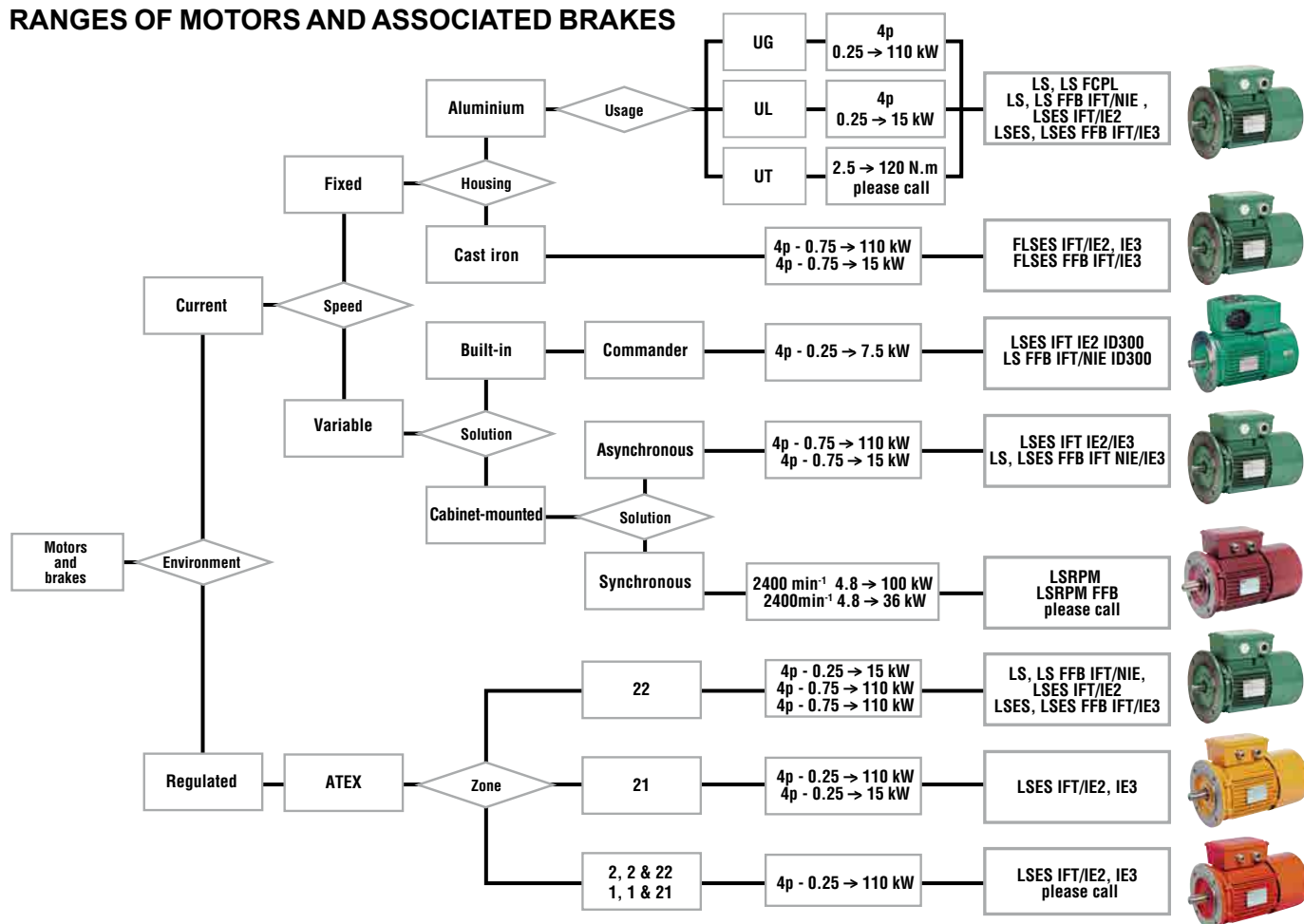


### ASSOCIATED DOCUMENTATIONS

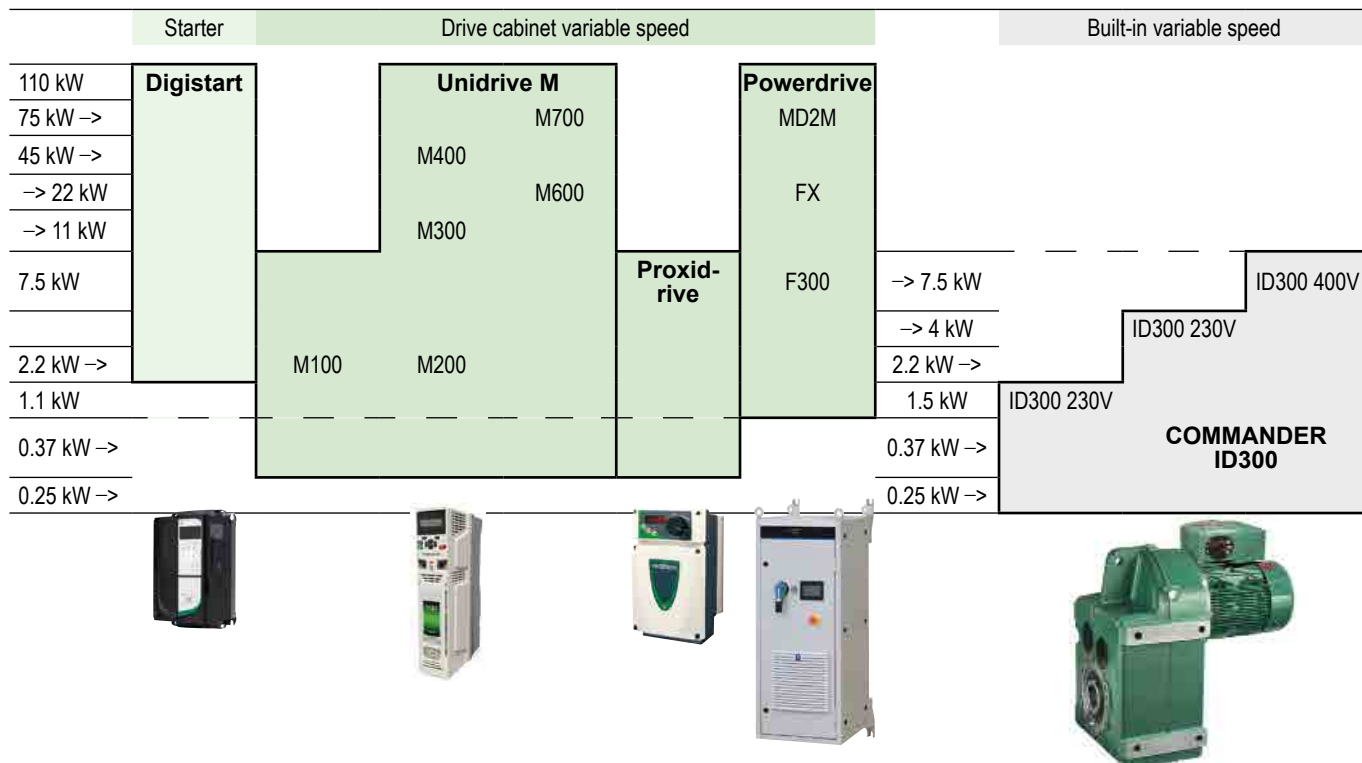
Brochure	Catalogue	Environment			
		Current use		Atex regulated	
		Commissioning			
		Installation	Maintenance	Ex II3D II2D	Ex II 3G, 3GD, II 2G, 2GD
<b>3969:</b> Compabloc, Orthobloc, Manubloc 3000 range	<b>5200:</b> Manubloc 3000 IMfinity® <b>5181:</b> Electromechanical Manual	<b>2557:</b> Storage and commissioning <b>4031:</b> Manubloc 3000 <b>5088:</b> Lubrication kit <b>5217:</b> Thermal exchanger	<b>5066:</b> Manubloc 3000 Maintenance	<b>3711:</b> Gearboxes for potentially explosive dust atmospheres	<b>3804:</b> Gearboxes for potentially explosive atmospheres

## Introduction

### RANGES OF MOTORS AND ASSOCIATED BRAKES



### RANGES OF ASSOCIATED DRIVES



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## Glossary

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AP .....	Input shaft	LS .....	Aluminium serial motor outside efficiency class or not concerned by the IE
BA .....	Shaft extension	LSES .....	IE2, IE3 aluminium motor series
BS, BD, BT .....	Flange fixing	M .....	Permissible torque
D .....	Shaft diameter (mm)	m .....	load weight (kg)
Dim .....	Dimensions (mm)	$M_{eq}$ .....	Equivalent torque
E .....	Output shaft length (mm)	$M_S$ .....	Output torque
FJ .....	Inertia factor	MU .....	Universal Mounting
FLSES .....	IE3 cast iron serial motor	Mub .....	Manubloc
FM .....	Flexible joint	N .....	Rotation speed (drum, rollers, motors, etc. in revs per minute)
$F_R E/2$ .....	Permissible radial load at E/2	$N_E$ .....	Input speed
H .....	Hollow shaft	$N_S$ .....	Gearbox output speed
HA .....	Frame size	NU (L or R) .....	Fixing form on lateral face (L left , R right)
h/j .....	hour/day	$N_{US}$ .....	Useful output rotation speed
i .....	Exact reduction of gearbox	O.p .....	Shaft end borehole
lu .....	Reduction available to the application	P .....	Input power (kW)
IP, IK .....	Protection indexes	$P_{eq}$ .....	Equivalent power
J .....	Moment of inertia	$P_{uE}$ .....	Working input power
$J_{C/M}$ .....	Moment of inertia of the load applied to the drive shaft expressed in $kg.m^2$	R .....	Flexible gearbox
$J_M$ .....	Motor moment of inertia	R, NU	
K .....	Overall duty factor	B3/B8/B6/B7/V5/V6 .....	Fixing form followed with the operating position coding
Kp .....	Maximum possible duty factor for the geared motor	$\eta$ .....	Efficiency
kW .....	Kilo Watt	S .....	Output solid shaft
		SDB .....	Shrink disc
		TB .....	Terminal box
		U.G. ....	General applications
		U.L. ....	Hoisting applications
		U.T. ....	Displacement Usage
		Z (d/h) .....	Starting frequency of the application (s/h)

## General



Manubloc geared motors with parallel 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 ( $\text{min}^{-1}$ ).

The main characteristic of the speed reducers is the rated output torque ( $M_{nS}$ ) expressed in Newton-metres (N.m) :

$$M_{nS} = \frac{P \times 9550}{n_S} \times \text{efficiency}$$

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

Rated output torque: 10 N.m to 14 500 Nm.

Power rating: from 0.25 to 110 kW.

Reduction ratios: from 2,88 to 4600.

High efficiency: 95 % to 98 %.

Reversible.

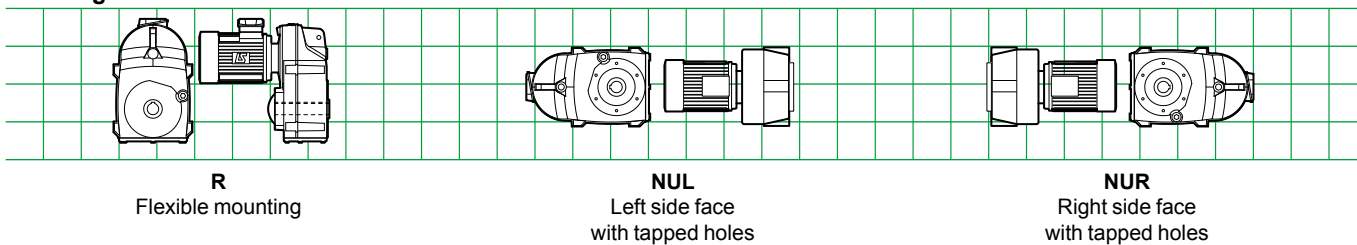
Quiet operation.

Name	Material	Observation
<b>Housing</b>	Cast iron	<ul style="list-style-type: none"> <li>- use of single-component pearlitic ENGJL-200 cast iron (flake graphite: 200 MPa tensile strength) to ensure unit is fully sealed</li> <li>- monobloc with reinforced internal ribbing to absorb vibrations and noise and to increase rigidity</li> <li>- flexible mounting <b>R</b>, housing with tapped side <b>NU</b> or with flange <b>BT</b>, <b>BS</b> or <b>BD</b>. They are compact and meet industrial requirements</li> </ul>
<b>Gears</b>	Ni Cr Mo steel	<ul style="list-style-type: none"> <li>- 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</li> </ul>
<b>Shaft</b>	Steel	<ul style="list-style-type: none"> <li>- grinding of the sealing surfaces</li> <li>- key in accordance with ISO R773 or hollow with <b>SD</b> shrink disc, output with key for sizes 36 to 38</li> <li>- tolerance of diameters in accordance with NFE 22-051 and ISO R 775</li> </ul>
<b>Lip seals</b>	Nitrile	<ul style="list-style-type: none"> <li>- O-ring motor side</li> <li>- anti-dust lipseals according to DIN 3760 form AS</li> </ul>
<b>Lubrication</b>	Oil	<ul style="list-style-type: none"> <li>- in accordance with ISO 6743 / 6</li> <li>- delivered with the quantity of oil corresponding to the operating position, it is fitted with drain, level and breather plugs</li> </ul>
<b>Mounting</b>		<p>AP: gearbox with input shaft                      MI: geared motor with integral motor                      MU: geared motor with IEC motor, manufactured with universal mounting</p>
<b>Standard motor</b>		<ul style="list-style-type: none"> <li>- LS 71, 4 poles: three phase multiple voltage 230/400 VY - 400 VΔ</li> <li>- 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</li> <li>- ventilation cover, fitted on request with a drip cover for operation in vertical position, shaft end facing down</li> <li>- LS, LSES: terminal box made of composite material (80 to 112) aluminium alloy 71 and (≥ 132) equipped with threaded plugs (without cable glands)</li> <li>- IP 55 standard protection</li> </ul>
<b>Brake motors</b>		<ul style="list-style-type: none"> <li>- FFB: failsafe brake induction motor, IP55 (LS 71 to 160, LSES 80 to 160)</li> <li>- FPCL: failsafe brake induction motor, IP44 (LS 180 to 315)</li> </ul>
<b>External finish</b>	Colour RAL 6000 (green) Limited durability class Colour RAL 6000 (green) Average durability class	<ul style="list-style-type: none"> <li>- Ia system, standard series LS, LSES</li> <li>- Resistance to neutral saline mist: 120 h (according to ISO 9227)</li> <li>- IIa system, standard series FLSES</li> <li>- Resistance to neutral saline mist: 240 h (according to ISO 9227)</li> </ul>

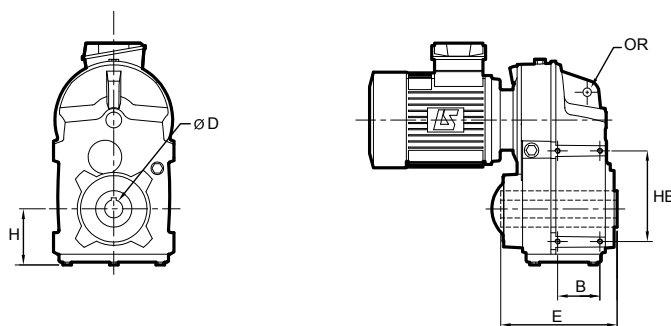
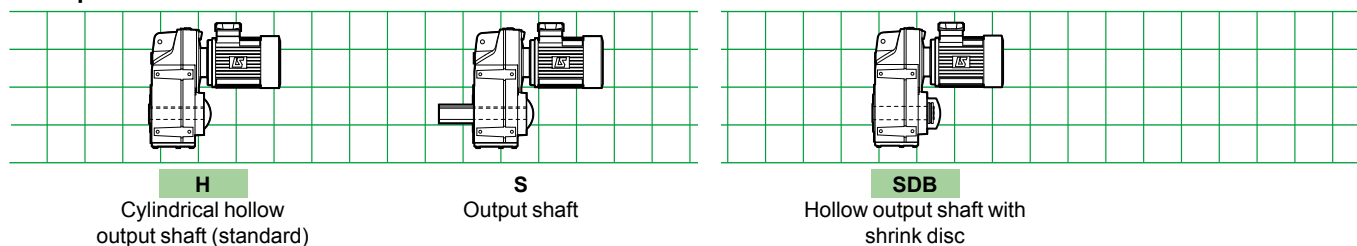
## Fixing forms: R, NU

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

### 1 - Fixing form



### 2 - Output shaft



### - R form

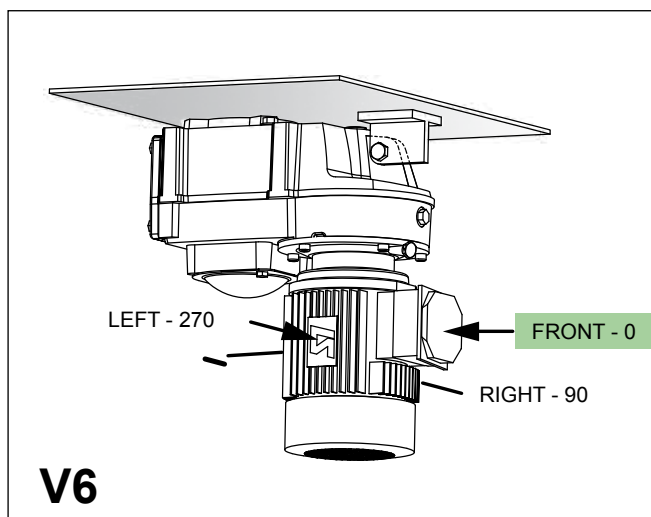
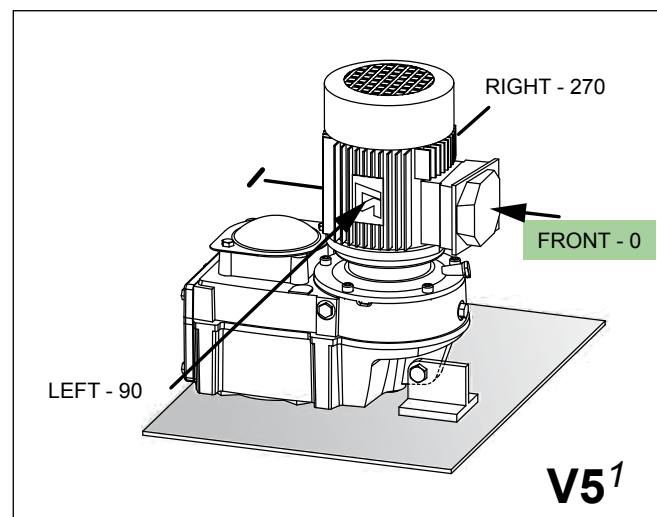
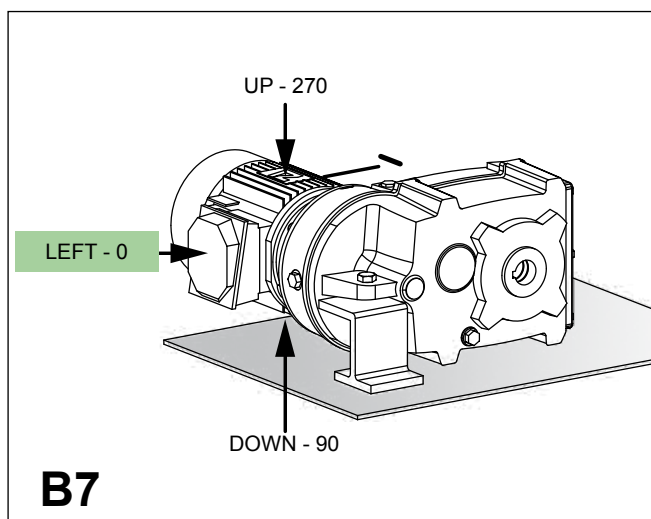
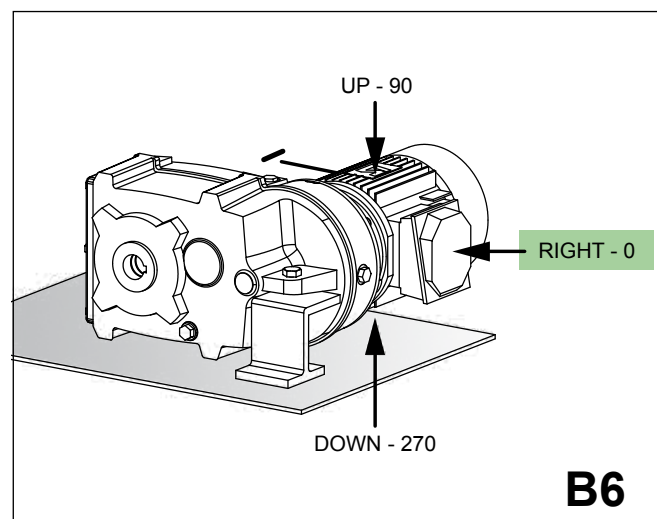
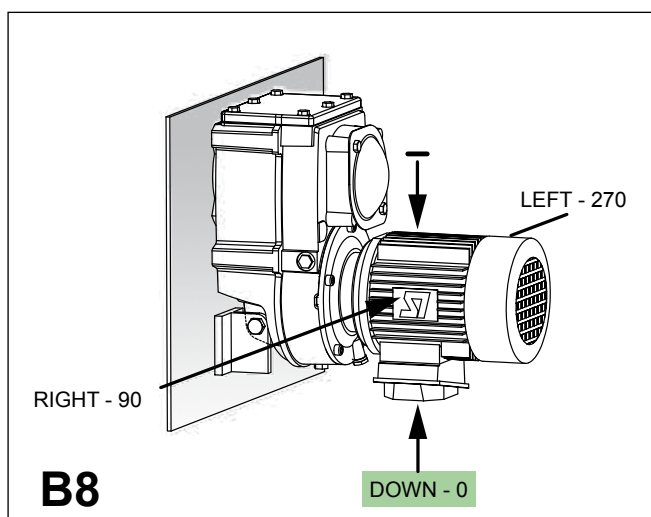
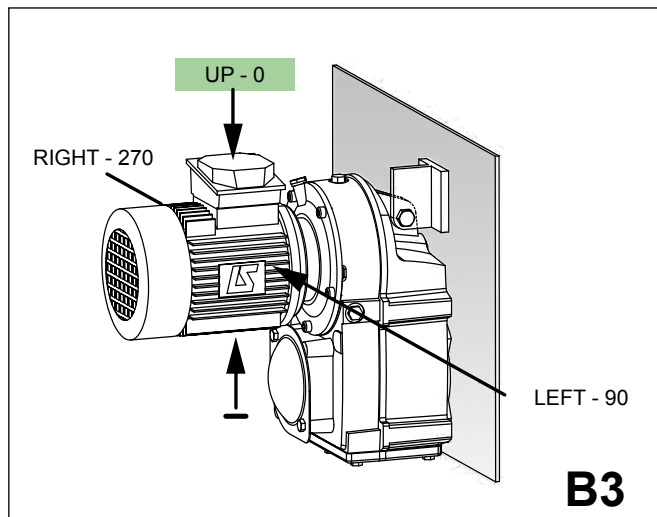
Type	H hollow shaft			kg	S solid shaft			kg
	ØD	H	OR		ØD	E	OR	
<b>Mub 38--</b>	100H7	263	33	335	110m6	210	33	352
<b>Mub 37--</b>	90H7	214	33	283	90m6	170	33	297
<b>Mub 36--</b>	70H7	194	33	197	70m6	140	33	207
<b>Mub 35--</b>	60H7	171	24	116	-	-	-	-
<b>Mub 34--</b>	50H7	126	22	70	-	-	-	-
<b>Mub 33--</b>	40H7	127	14	43	-	-	-	-
<b>Mub 32--</b>	30H7	94.5	14	26	-	-	-	-
<b>Mub 3132</b>	30H7	95	14	15.5	-	-	-	-

### - NU form - L (left), R (right), LR (left and right)

Type	H hollow shaft				kg	S solid shaft		kg
	ØD	H	B	HB		ØD	E	
<b>Mub 38--</b>	100H7	263	270	450	332	110m6	210	348
<b>Mub 37--</b>	90H7	214	220	425	280	90m6	170	294
<b>Mub 36--</b>	70H7	194	165	315	195	70m6	140	205
<b>Mub 35--</b>	60H7	171	165	300	115	-	-	-
<b>Mub 34--</b>	50H7	126	100	240	69	-	-	-
<b>Mub 33--</b>	40H7	127	110	200	43	-	-	-
<b>Mub 32--</b>	30H7	94.5	70	150	26	-	-	-

## Operating positions: R, NU

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.



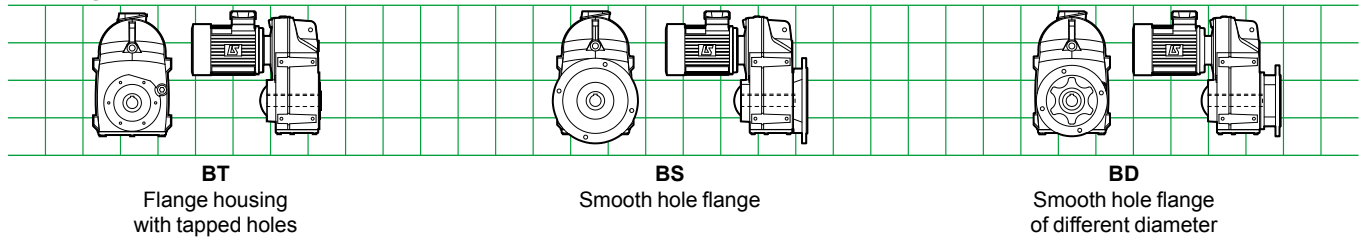
Std terminal box

1. Backstop forbidden

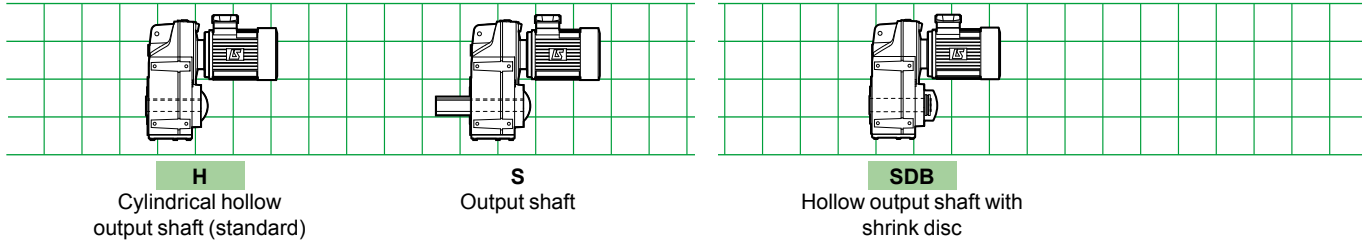
## Fixing forms: BT, BS, BD

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

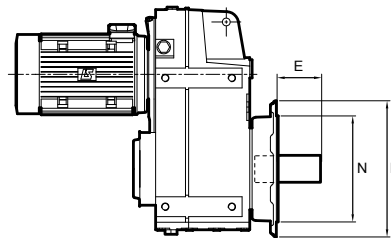
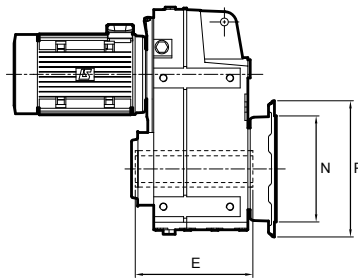
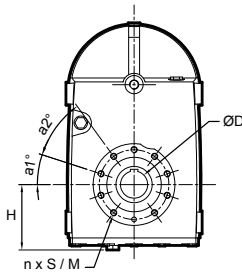
### 1 - Fixing form



### 2 - Output shaft



Dimensions in millimetres



#### - BT form

Type	H hollow shaft														ØM	kg	
	ØD	H	a1°	a2°	a3°	a4°	a5°	a6°	a7°	a8°	a9°	a10°	a11°	nxS			
Mub 38--	100H7	263	30	30	30	60	30	30	30	30	30	30	30	30	11xM20x40	300	332
Mub 37--	90H7	214	18	36	36	36	36	36	36	72	36	-	-	9xM20x35	230	280	
Mub 36--	70H7	194	15	40	70	40	35	70	70	-	-	-	-	6xM16x27	230	195	
Mub 35--	60H7	171	60	-	-	-	-	-	-	-	-	-	-	6xM12x20	215	115	
Mub 34--	50H7	126	60	-	-	-	-	-	-	-	-	-	-	6xM12x22	180	69	
Mub 33--	40H7	127	60	-	-	-	-	-	-	-	-	-	-	6xM10x18	165	43	
Mub 32--	30H7	94.5	45	-	-	-	-	-	-	-	-	-	-	4xM8x12	130	26	
Mub 3132	30H7	95	45	-	-	-	-	-	-	-	-	-	-	4xM8x12	115	15.5	

Type	S solid shaft													ØM	kg	
	ØD	E	a1°	a2°	a3°	a4°	a5°	a6°	a7°	a8°	a9°	a10°	a11°			nxS
Mub 38--	110m6	210	30	30	30	30	30	30	30	30	30	30	30	11xM20x40	300	348
Mub 37--	90m6	170	18	36	36	36	36	36	36	72	-	-	-	9xM20x35	230	294
Mub 36--	70m6	140	15	40	70	40	35	70	70	-	-	-	-	6xM16x27	230	205

#### - BS flange form

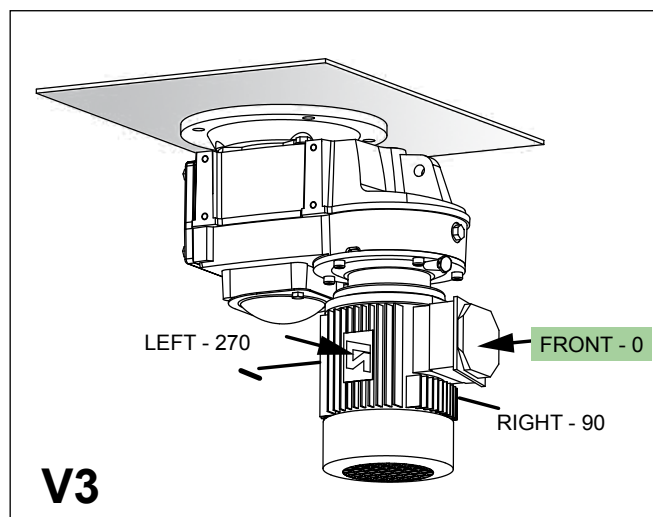
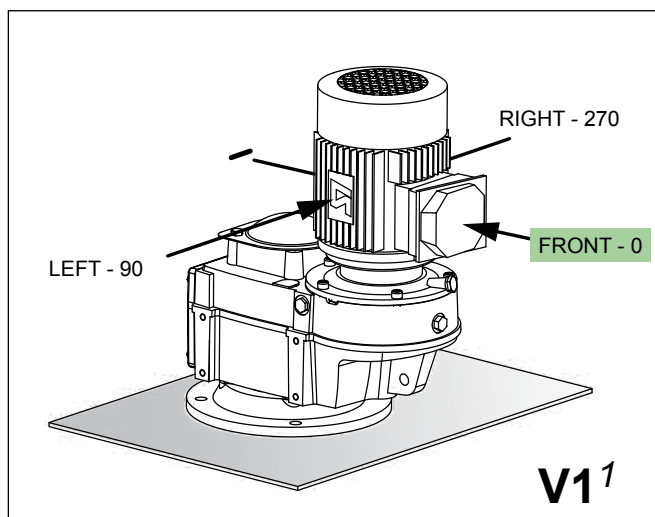
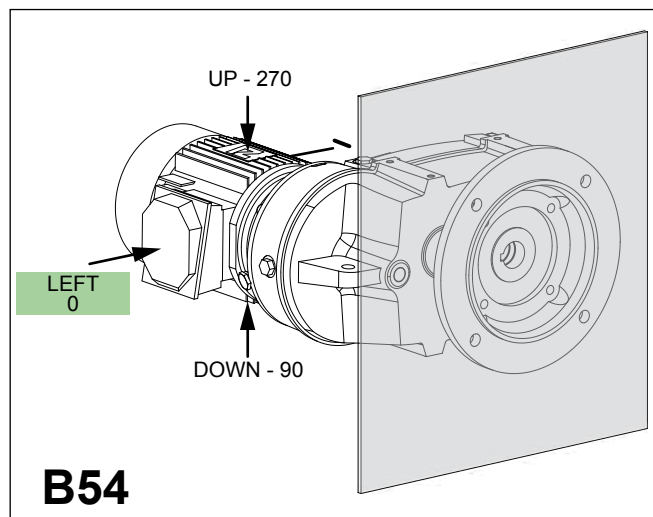
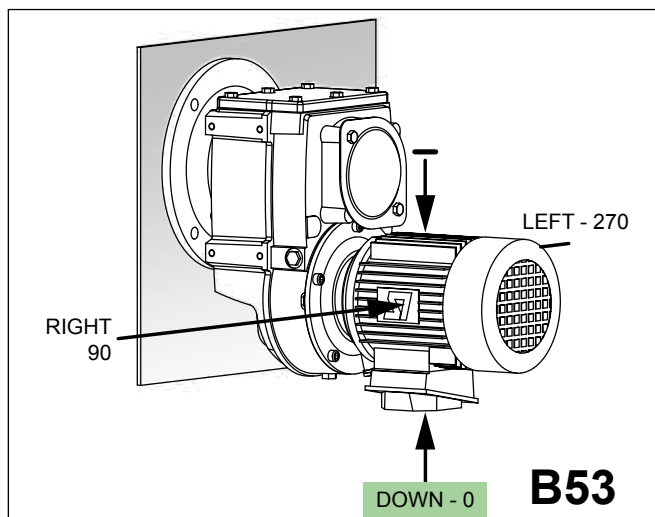
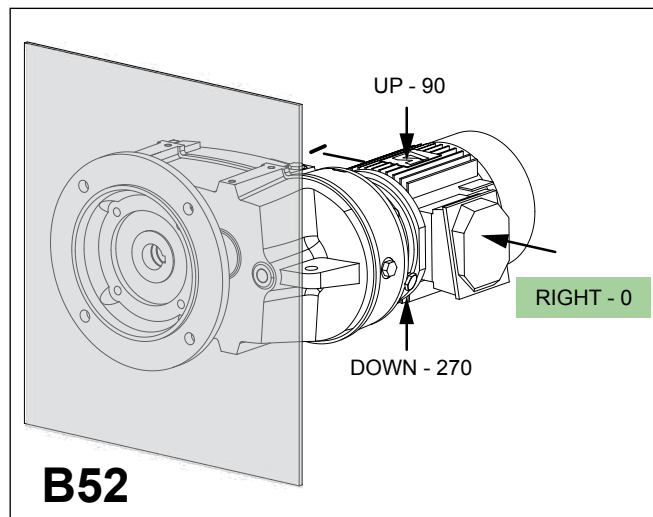
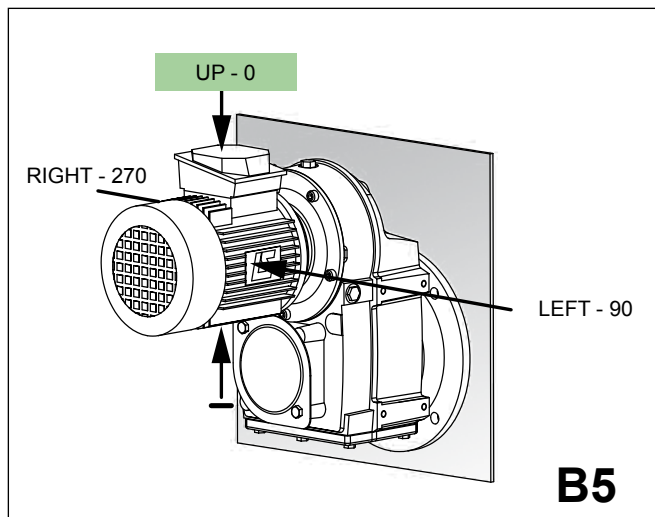
Type	H hollow shaft								kg	S solid shaft				kg
	ØD	E	nxS	ØM	a1°	a2°	ØNj6	ØP		ØD	E	a1°	a2°	
Mub 38--	100H7	428	8x17.5	600	22.5	45	550	660	390	110m6	210	22.5	45	410
Mub 37--	90H7	376	8x18	500	22.5	45	450	550	316	90m6	170	22.5	45	330
Mub 36--	70H7	326	8x18	500	22.5	45	450	550	229	70m6	140	22.5	45	239
Mub 35--	60H7	292	4x18	300	45	90	250	350	130	-	-	-	-	-
Mub 34--	50H7	260	4x14	265	45	90	230	300	79	-	-	-	-	-
Mub 33--	40H7	191.5	4x14	265	45	90	230	300	51	-	-	-	-	-
Mub 32--	30H7	190.5	4x14	215	45	90	180	250	31	-	-	-	-	-

#### - BD flange form

Type	H hollow shaft								kg	S solid shaft				kg
	ØD	E	nxS	ØM	a1°	a2°	ØNj6	ØP		ØD	E	a1°	a2°	
Mub 38--	100H7	428	8x17.5	500	22.5	45	450	550	367	110m6	210	22.5	45	384
Mub 37--	90H7	376	8x18	400	22.5	45	350	450	310	90m6	170	22.5	45	324
Mub 36--	70H7	326	8x18	400	22.5	45	350	450	223	70m6	140	22.5	45	233
Mub 35--	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mub 34--	50H7	260	4x14	215	45	90	180j6	250	78	-	-	-	-	-
Mub 33--	40H7	191.5	4x14	215	45	90	180j6	250	50	-	-	-	-	-
Mub 32--	30H7	190.5	4x12	165	45	90	130j6	200	30	-	-	-	-	-

## Operating positions: BT, BS, BD

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

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<sub>E</sub>* and *N<sub>S</sub>* and the input and output speeds (in min<sup>-1</sup>);

b- Calculate:

- the equivalent torque *M<sub>eq</sub>*:

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

where *M<sub>S</sub>* is the output moment (in N.m), *K* the duty factor,

- or the equivalent power *P<sub>eq</sub>*

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

where *P* is the input power (in kW);

c- Refer to the selection tables corresponding to the type of gearbox pages 14 and 15: gearbox only and pages 16 and 17: combined gearboxes. Each box in the table specifies:

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

Select the gearbox, in the tables (pages 14 to 17), 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**

Pendular fixing form R or NU: pages 8, 9  
Flange form: pages 10, 11

**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 (**H**) is below that required by the application, select again using a higher duty factor. The values used (pages 22 to 83) are given for client shaft inserted in hollow shaft H, at the most demanding input speed. Call Leroy-Somer for optimised values.

For the output shaft version **S** on Mub 36 to 38, our gearboxes can withstand higher loads. Call Leroy-Somer for optimised values.

For gearboxes driven by the motor by means of a belt pulley system, check in the tables in page 43 of the document reference 5181 the minimum diameter of the pulley to install on the gearbox input shaft. These values are those for client shaft inserted in the hollow shaft **H**.

**5- Choosing the options**

Refer to the Equipment and options chapter for the choice of any standardized options. The Mub 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.111).

**6- Commissioning, lubrication (p.118)**

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 powder screw:

- power 2.2 kW at 1500 min<sup>-1</sup>,
- output speed 15 min<sup>-1</sup>,
- operation: 9 hours per day with dampened jogging. Flange fastening, horizontal mounting with semi-elastic coupling on primary shaft and hollow shaft at output.

1- Duty factor *K* = 1

2- Selection:

a- reduction ratio:

$$i = 1500 / 15 = 100$$

b- equivalent power:

identical to the input power (*K* = 1).

The following is found in the selection grid in page 14 for the closes reduction index: 106 a Mub 3433 for the 2.2 kW power.

3- Operating position:

B5 (page 11).

4- Fixing form:

standard flange (page 10).

**Designation:**

**Mub 3433 106 BT H B5 AP**

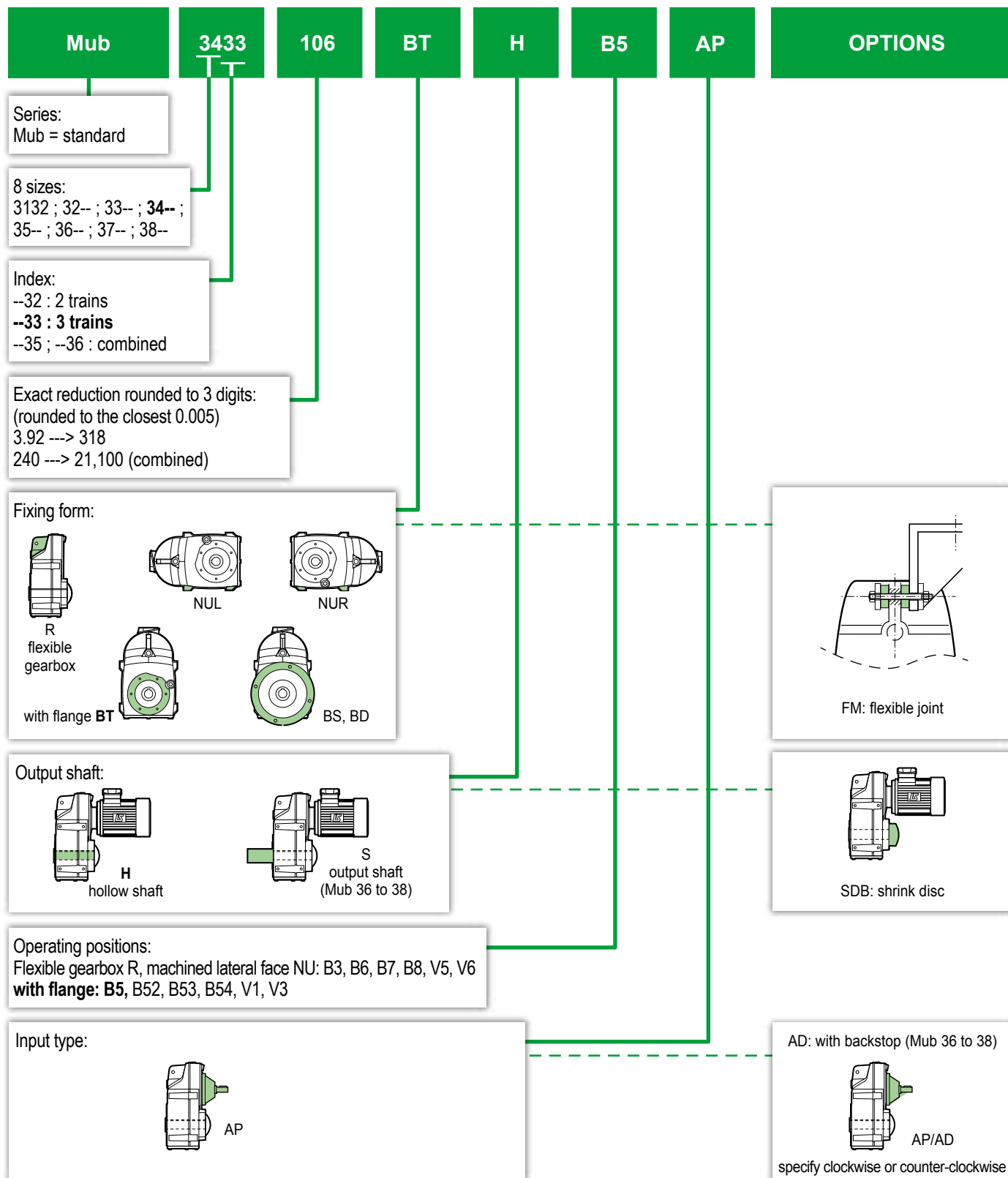
i exact	Mub
kW	M <sub>nS</sub>

N <sub>S</sub> min <sup>-1</sup>	i <sub>aR</sub>	MANUBLOC													
		3132	32--		33--		34--		35--		36--*		37--*		38--*
12.0	125	127	<b>3233</b>	122	<b>3333</b>	119	<b>3433</b>	117	<b>3533</b>	122	<b>3633</b>	129	<b>3733</b>	130	<b>3833</b>
		<b>0.49</b>	430	<b>0.92</b>	771	<b>2.1</b>	1745	<b>3.2</b>	2601	<b>5.8</b>	4886	<b>9.5</b>	8389	<b>17.0</b>	15124
13.4	112	113	<b>3233</b>	107	<b>3333</b>	106	<b>3433</b>	104	<b>3533</b>	112	<b>3633</b>	111	<b>3733</b>	115	<b>3833</b>
		<b>0.55</b>	429	<b>1.0</b>	770	<b>2.4</b>	1742	<b>3.6</b>	2596	<b>6.3</b>	4878	<b>11.0</b>	8363	<b>19.1</b>	15082
15.0	100	99.3	<b>3233</b>	100	<b>3333</b>	94.8	<b>3433</b>	95.3	<b>3533</b>	96.6	<b>3633</b>	102	<b>3733</b>	103	<b>3833</b>
		<b>0.63</b>	428	<b>1.1</b>	769	<b>2.7</b>	1738	<b>4.0</b>	2592	<b>7.3</b>	4864	<b>11.9</b>	8347	<b>21.3</b>	15043
16.7	90	93.8	<b>3233</b>	87	<b>3333</b>	87.3	<b>3433</b>	82.4	<b>3533</b>	87.3	<b>3633</b>	89.9	<b>3733</b>	92	<b>3833</b>
		<b>0.66</b>	427	<b>1.3</b>	767	<b>2.9</b>	1736	<b>4.6</b>	2584	<b>8.1</b>	4853	<b>13.5</b>	8324	<b>23.8</b>	15003



## Name

**Manubloc: Mub / AP**



## Selection Manubloc: Mub / AP

Mub AP - 1500 min<sup>-1</sup> - kp = 1

i exact	Mub
kW	M <sub>nS</sub>

Rated capacities

N <sub>S</sub> min <sup>-1</sup>	i <sub>aR</sub>	MANUBLOC															
		3132		32--		33--		34--		35--		36--*		37--*		38--*	
4.76	315			318	<b>3333</b>												
				<b>0.36</b>	781												
5.36	280			272	<b>3333</b>												
				<b>0.42</b>	780												
6.00	250			248	<b>3333</b>	235	<b>3433</b>				252	<b>3633</b>	244	<b>3733</b>			
				<b>0.46</b>	779	<b>1.1</b>	1762				<b>2.9</b>	4943	<b>5.1</b>	8480			
6.70	224		228	<b>3233</b>	225	<b>3333</b>	212	<b>3433</b>	215	<b>3533</b>	216	<b>3633</b>	217	<b>3733</b>	220	<b>3833</b>	
			<b>0.28</b>	436	<b>0.50</b>	778	<b>1.2</b>	1760	<b>1.8</b>	2626	<b>3.3</b>	4933	<b>5.7</b>	8465	<b>10.0</b>	15164	
7.50	200		207	<b>3233</b>	192	<b>3333</b>	190	<b>3433</b>	184	<b>3533</b>	199	<b>3633</b>	198	<b>3733</b>	196	<b>3833</b>	
			<b>0.31</b>	435	<b>0.59</b>	776	<b>1.3</b>	1758	<b>2.1</b>	2621	<b>3.6</b>	4927	<b>6.2</b>	8453	<b>11.3</b>	15164	
8.33	180		180	<b>3233</b>	171	<b>3333</b>	165	<b>3433</b>	169	<b>3533</b>	173	<b>3633</b>	175	<b>3733</b>	184	<b>3833</b>	
			<b>0.35</b>	434	<b>0.66</b>	775	<b>1.5</b>	1754	<b>2.3</b>	2617	<b>4.1</b>	4916	<b>7.0</b>	8436	<b>12.0</b>	15164	
9.38	160		164	<b>3233</b>	153	<b>3333</b>	146	<b>3433</b>	148	<b>3533</b>	153	<b>3633</b>	158	<b>3733</b>	164	<b>3833</b>	
			<b>0.38</b>	433	<b>0.74</b>	774	<b>1.7</b>	1751	<b>2.6</b>	2612	<b>4.7</b>	4906	<b>7.8</b>	8420	<b>13.5</b>	15164	
10.7	140		142	<b>3233</b>	135	<b>3333</b>	134	<b>3433</b>	130	<b>3533</b>	137	<b>3633</b>	141	<b>3733</b>	146	<b>3833</b>	
			<b>0.44</b>	432	<b>0.83</b>	772	<b>1.9</b>	1749	<b>2.9</b>	2606	<b>5.2</b>	4897	<b>8.7</b>	8402	<b>15.1</b>	15164	
12.0	125		127	<b>3233</b>	122	<b>3333</b>	119	<b>3433</b>	117	<b>3533</b>	122	<b>3633</b>	129	<b>3733</b>	130	<b>3833</b>	
			<b>0.49</b>	430	<b>0.92</b>	771	<b>2.1</b>	1745	<b>3.2</b>	2601	<b>5.8</b>	4886	<b>9.5</b>	8389	<b>17.0</b>	15124	
13.4	112		113	<b>3233</b>	107	<b>3333</b>	106	<b>3433</b>	104	<b>3533</b>	112	<b>3633</b>	111	<b>3733</b>	115	<b>3833</b>	
			<b>0.55</b>	429	<b>1.0</b>	770	<b>2.4</b>	1742	<b>3.6</b>	2596	<b>6.3</b>	4878	<b>11.0</b>	8363	<b>19.1</b>	15082	
15.0	100		99.3	<b>3233</b>	100	<b>3333</b>	94.8	<b>3433</b>	95.3	<b>3533</b>	96.6	<b>3633</b>	102	<b>3733</b>	103	<b>3833</b>	
			<b>0.63</b>	428	<b>1.1</b>	769	<b>2.7</b>	1738	<b>4.0</b>	2592	<b>7.3</b>	4864	<b>11.9</b>	8347	<b>21.3</b>	15043	
16.7	90		93.8	<b>3233</b>	87	<b>3333</b>	87.3	<b>3433</b>	82.4	<b>3533</b>	87.3	<b>3633</b>	89.9	<b>3733</b>	92	<b>3833</b>	
			<b>0.66</b>	427	<b>1.3</b>	767	<b>2.9</b>	1736	<b>4.6</b>	2584	<b>8.1</b>	4853	<b>13.5</b>	8324	<b>23.8</b>	15003	
18.8	80		79	<b>3233</b>	76.3	<b>3333</b>	77.5	<b>3433</b>	74.5	<b>3533</b>	76.9	<b>3633</b>	76.8	<b>3733</b>	81.5	<b>3833</b>	
			<b>0.74</b>	403	<b>1.5</b>	765	<b>3.3</b>	1732	<b>5.0</b>	2578	<b>9.2</b>	4839	<b>15.7</b>	8292	<b>26.8</b>	14960	
21.1	71	70.6	<b>3132</b>	74.5	<b>3233</b>	68.9	<b>3333</b>	67.5	<b>3433</b>	65.5	<b>3533</b>	70.8	<b>3633</b>	68.3	<b>3733</b>	71.7	<b>3833</b>
		<b>0.50</b>	240	<b>0.77</b>	394	<b>1.6</b>	763	<b>3.7</b>	1727	<b>5.7</b>	2571	<b>9.9</b>	4830	<b>17.6</b>	8268	<b>30.3</b>	14912
23.8	63	63.9	<b>3132</b>	66	<b>3233</b>	61	<b>3333</b>	61.1	<b>3433</b>	60.4	<b>3533</b>	63	<b>3633</b>	61.2	<b>3733</b>	63.1	<b>3833</b>
		<b>0.55</b>	239	<b>0.83</b>	376	<b>1.8</b>	761	<b>4.1</b>	1723	<b>6.2</b>	2566	<b>11.1</b>	4816	<b>19.6</b>	8243	<b>34.3</b>	14865
26.8	56	55.8	<b>3132</b>	57.8	<b>3233</b>	54.3	<b>3332</b>	53.2	<b>3433</b>	53.7	<b>3533</b>	56.2	<b>3633</b>	55.4	<b>3733</b>	55.7	<b>3833</b>
		<b>0.63</b>	239	<b>0.90</b>	357	<b>2.1</b>	759	<b>4.5</b>	1658	<b>6.9</b>	2558	<b>12.5</b>	4802	<b>21.6</b>	8220	<b>38.8</b>	14818
30.0	50	50.8	<b>3132</b>	50.8	<b>3233</b>	49.1	<b>3332</b>	49.3	<b>3432</b>	47.9	<b>3533</b>	50.4	<b>3633</b>	48	<b>3732</b>	50.5	<b>3833</b>
		<b>0.69</b>	238	<b>0.97</b>	339	<b>2.3</b>	757	<b>5.1</b>	1714	<b>7.8</b>	2551	<b>13.8</b>	4787	<b>25.0</b>	8159	<b>42.7</b>	14782
33.3	45	43.9	<b>3132</b>	44.9	<b>3233</b>	43.9	<b>3332</b>	41.6	<b>3432</b>	43	<b>3533</b>	46	<b>3633</b>	43	<b>3732</b>	44.1	<b>3833</b>
		<b>0.80</b>	238	<b>1.1</b>	324	<b>2.5</b>	755	<b>6.0</b>	1706	<b>8.6</b>	2543	<b>15.1</b>	4774	<b>27.9</b>	8131	<b>48.7</b>	14731
37.5	40	39.1	<b>3132</b>	39.8	<b>3233</b>	38.1	<b>3332</b>	37.4	<b>3432</b>	39.2	<b>3533</b>	40.1	<b>3633</b>	40.2	<b>3732</b>	39.4	<b>3833</b>
		<b>0.89</b>	237	<b>1.1</b>	309	<b>2.9</b>	752	<b>6.5</b>	1659	<b>9.4</b>	2536	<b>17.3</b>	4755	<b>29.7</b>	8113	<b>54.3</b>	14689
42.3	35.5	35.1	<b>3132</b>	38.9	<b>3232</b>	33.7	<b>3332</b>	33.9	<b>3432</b>	34.2	<b>3533</b>	34.5	<b>3632</b>	36	<b>3732</b>	35.1	<b>3833</b>
		<b>0.99</b>	236	<b>1.7</b>	457	<b>3.3</b>	749	<b>7.0</b>	1603	<b>10.6</b>	2497	<b>19.1</b>	4483	<b>33.1</b>	8082	<b>60.8</b>	14645
47.6	31.5	30.7	<b>3132</b>	33.3	<b>3232</b>	31	<b>3332</b>	31.2	<b>3432</b>	32.4	<b>3532</b>	31.1	<b>3632</b>	31.8	<b>3732</b>	31.6	<b>3833</b>
		<b>1.1</b>	235	<b>2.0</b>	457	<b>3.6</b>	747	<b>7.4</b>	1558	<b>10.1</b>	2229	<b>22.3</b>	4715	<b>37.3</b>	8047	<b>67.4</b>	14605

N<sub>S</sub> output speed

i<sub>aR</sub>: reduction index

Mub 36 to Mub 38\*: check the gearbox thermal limit

M<sub>nS</sub>: rated output torque (N.m)

## Selection Manubloc: Mub / AP

Mub AP - 1500 min<sup>-1</sup> - kp = 1

Rated capacities

i exact kW	Mub M <sub>nS</sub>
---------------	------------------------

n <sub>S</sub> min-1	i <sub>aR</sub>	MANUBLOC															
		3132		32--		33--		34--		35--		36--*		37--*		38--*	
53.6	28	29 1.2	3132 235	30.4 2.2	3232 457	27.4 4.0	3332 744	26.8 8.1	3432 1478	27.8 11.4	3532 2159	27.7 23.7	3632 4460	28.4 37.8	3732 7294	27.7 76.6	3833 14554
60.0	25	24.4 1.4	3132 234	27.5 2.4	3232 457	24.4 4.5	3332 742	25 8.5	3432 1444	25.6 12.9	3532 2247	25.5 27.0	3632 4681	25.2 46.8	3732 7999	24.5 82.8	3832 13776
67.0	22.4	23 1.5	3132 234	23.5 2.9	3232 457	21.9 5.0	3332 739	21.9 9.3	3432 1376	22.3 14.8	3532 2247	21.9 29.3	3632 4361	22.6 51.9	3732 7963	21.9 95.1	3832 14136
75.0	20	20.4 1.7	3132 233	20.9 3.2	3232 457	20.2 5.4	3332 737	19.4 10.0	3432 1319	19.7 16.7	3532 2233	20 31.8	3632 4313	20.1 56.8	3732 7747	19.5 97.7	3832 12940
83.3	18	17.8 1.9	3132 232	18.7 3.5	3232 444	17.9 6.0	3332 733	17.2 10.8	3432 1263	17.6 18.8	3532 2247	17.7 34.9	3632 4200	17.8 61.1	3732 7384	17.4 112	3832 13244
93.8	16	15.7 2.2	3132 231	16.5 3.8	3232 427	15.6 6.9	3332 729	15.4 11.6	3432 1213	15.7 20.2	3532 2158	15.1 34.9	3632 3574	15.7 65.6	3732 6990	15.4 117	3832 12244
107	14	13.9 2.4	3132 230	14.9 4.1	3232 414	14.1 7.6	3332 726	13.2 12.8	3432 1148	14.4 23.0	3532 2247	13.5 39.8	3632 3648	13.8 70.6	3732 6614	13.7 131	3832 12218
120	12.5	12.3 2.7	3132 229	13.1 4.5	3232 398	12.3 8.6	3332 722	12 13.5	3432 1101	12.4 22.4	3532 1890	12.1 47.7	3632 3917	12.2 75.5	3732 6254	12.5 135	3832 11459
134	11.2	10.9 3.1	3132 227	12.3 4.7	3232 390	11.1 9.5	3332 718	10.6 14.6	3432 1049	11.2 26.1	3532 1985	10.9 50.6	3632 3745	11 79.8	3732 5957	11 152	3832 11331
150	10	10.3 2.5	3132 174	10.6 5.2	3232 373	10.1 10.4	3332 715	9.46 15.6	3432 1003	9.89 28.4	3532 1909	9.63 54.1	3632 3534	9.64 85.6	3732 5601	9.96 162	3832 10925
167	9	9.19 2.7	3132 166	9.32 5.7	3232 359	8.76 11.9	3332 710	8.42 16.7	3432 954	9.12 30.0	3532 1855	8.53 57.6	3632 3333	8.62 90.5	3732 5297	8.75 176	3832 10444
188	8			8.42 6.1	3232 347			7.53 17.8	3432 908	8.11 33.1	3532 1820	7.62 54.4	3632 2814	7.68 95.7	3732 4989	8.11 178	3832 9802
211	7.1	7.28 3.1	3132 151	7.45 6.6	3232 332	7.09 14.6	3332 702			7.24 35.3	3532 1736	7.15 56.3	3632 2731	7.04 86.8	3732 4148	6.95 202	3832 9539
238	6.3			6.99 6.7	3232 319			6.22 19.9	3432 841	6.48 47.3	3532 2083	6.22 52.8	3632 2229	6.21 95.3	3732 4016	6.33 215	3832 9219
268	5.6			5.91 7.3	3232 293	5.49 17.1	3332 637			5.91 49.8	3532 1998	5.62 60.0	3632 2289	5.63 99.6	3732 3807	5.73 228	3832 8879
300	5			4.94 7.9	3232 264			4.8 23.3	3432 760	5.17 53.0	3532 1859	4.96 64.7	3632 2180	4.91 107	3732 3562	5.01 220	3832 7496
333	4.5									4.43 56.4	3532 1696	4.39 69.3	3632 2067	4.39 112	3732 3351	4.4 239	3832 7151
375	4			3.92 8.7	3232 232					3.98 44.7	3532 1207	3.92 54.4	3632 1449	3.91 118	3732 3138	4.08 239	3832 6627
423	3.55											3.68 56.3	3632 1406			3.49 269	3832 6378
476	3.15											3.25 65.6	3632 1447			3.18 269	3832 5799
536	2.8															2.88 293	3832 5135

N<sub>S</sub> output speed

i<sub>aR</sub>: reduction index

Mub 36 to Mub 38\*: check the gearbox thermal limit

M<sub>nS</sub>: rated output torque (N.m)

## Selection

### Manubloc: Mub / AP

**Mub AP - 1500 min<sup>-1</sup> - kp = 1**

Rated capacity - Combined gearboxes

i exact	Mub
kW	M <sub>nS</sub>

n <sub>s</sub> min-1	i <sub>aR</sub>	MANUBLOC													
		32--		33--		34--		35--		36--*		37--*		38--*	
0.08	20000		20500	<b>3336</b>	21100	<b>3436</b>			19500	<b>3636</b>	20300	<b>3736</b>	21000	<b>3836</b>	
			<b>0.006</b>	802	<b>0.01</b>	1772			<b>0.04</b>	4950	<b>0.06</b>	8522	<b>0.10</b>	15164	
0.08	18000		18200	<b>3336</b>	19200	<b>3436</b>			17800	<b>3636</b>	17300	<b>3736</b>	17800	<b>3836</b>	
			<b>0.006</b>	802	<b>0.01</b>	1772			<b>0.04</b>	4950	<b>0.07</b>	8522	<b>0.12</b>	15164	
0.09	16000	15200	<b>3236</b>	16100	<b>3336</b>	16700	<b>3436</b>		16100	<b>3636</b>	15400	<b>3736</b>	16600	<b>3836</b>	
		<b>0.004</b>	394	<b>0.007</b>	802	<b>0.01</b>	1772		<b>0.04</b>	4950	<b>0.08</b>	8522	<b>0.13</b>	15164	
0.11	14000	13500	<b>3236</b>	14700	<b>3336</b>	15200	<b>3436</b>		13700	<b>3636</b>	13800	<b>3736</b>	14000	<b>3836</b>	
		<b>0.004</b>	394	<b>0.008</b>	802	<b>0.02</b>	1772		<b>0.05</b>	4950	<b>0.09</b>	8522	<b>0.15</b>	15164	
0.12	12500	12000	<b>3236</b>	13000	<b>3336</b>	13100	<b>3436</b>	12100	<b>3536</b>	12200	<b>3636</b>	12200	<b>3736</b>	12600	<b>3836</b>
		<b>0.005</b>	394	<b>0.009</b>	802	<b>0.02</b>	1772	<b>0.04</b>	3031	<b>0.06</b>	4950	<b>0.10</b>	8522	<b>0.17</b>	15164
0.13	11200	10900	<b>3236</b>	11500	<b>3336</b>	11700	<b>3436</b>	11000	<b>3536</b>	11000	<b>3636</b>	10900	<b>3736</b>	11400	<b>3836</b>
		<b>0.005</b>	394	<b>0.01</b>	802	<b>0.02</b>	1772	<b>0.04</b>	3031	<b>0.06</b>	4950	<b>0.11</b>	8522	<b>0.19</b>	15164
0.15	10000	9670	<b>3236</b>	10300	<b>3336</b>	10500	<b>3436</b>	9550	<b>3536</b>	9670	<b>3636</b>	9640	<b>3736</b>	10500	<b>3836</b>
		<b>0.006</b>	394	<b>0.01</b>	802	<b>0.02</b>	1772	<b>0.04</b>	3031	<b>0.07</b>	4950	<b>0.12</b>	8522	<b>0.20</b>	15164
0.17	9000	8580	<b>3236</b>	8960	<b>3335</b>	9190	<b>3436</b>	8700	<b>3536</b>	8700	<b>3636</b>	9020	<b>3736</b>	9060	<b>3836</b>
		<b>0.006</b>	394	<b>0.01</b>	808	<b>0.03</b>	1772	<b>0.05</b>	3031	<b>0.08</b>	4950	<b>0.13</b>	8522	<b>0.23</b>	15164
0.19	8000	7630	<b>3236</b>	7970	<b>3335</b>	8690	<b>3436</b>	7520	<b>3536</b>	7670	<b>3636</b>	7830	<b>3736</b>	8040	<b>3836</b>
		<b>0.007</b>	394	<b>0.01</b>	808	<b>0.03</b>	1772	<b>0.06</b>	3031	<b>0.09</b>	4950	<b>0.15</b>	8522	<b>0.26</b>	15027
0.21	7100	6780	<b>3236</b>	7060	<b>3335</b>	7180	<b>3435</b>	6700	<b>3536</b>	7180	<b>3636</b>	7000	<b>3736</b>	6780	<b>3836</b>
		<b>0.008</b>	394	<b>0.02</b>	808	<b>0.04</b>	1778	<b>0.06</b>	3031	<b>0.10</b>	4950	<b>0.17</b>	8470	<b>0.31</b>	15027
0.24	6300	6200	<b>3235</b>	6420	<b>3335</b>	6500	<b>3435</b>	6010	<b>3536</b>	6230	<b>3636</b>	6170	<b>3736</b>	6110	<b>3836</b>
		<b>0.01</b>	457	<b>0.02</b>	808	<b>0.04</b>	1778	<b>0.07</b>	3031	<b>0.11</b>	4950	<b>0.19</b>	8470	<b>0.34</b>	15027
0.27	5600	5510	<b>3235</b>	5700	<b>3335</b>	5670	<b>3435</b>	5250	<b>3536</b>	5790	<b>3636</b>	5770	<b>3736</b>	5530	<b>3836</b>
		<b>0.01</b>	457	<b>0.02</b>	808	<b>0.04</b>	1778	<b>0.08</b>	3031	<b>0.12</b>	4868	<b>0.21</b>	8470	<b>0.38</b>	15027
0.30	5000	4880	<b>3235</b>	5060	<b>3335</b>	5170	<b>3435</b>	4970	<b>3536</b>	4940	<b>3636</b>	5010	<b>3736</b>	5090	<b>3836</b>
		<b>0.01</b>	457	<b>0.02</b>	808	<b>0.05</b>	1778	<b>0.09</b>	3031	<b>0.14</b>	4868	<b>0.24</b>	8470	<b>0.41</b>	15027
0.33	4500	4440	<b>3235</b>	4500	<b>3335</b>	4460	<b>3435</b>	4180	<b>3536</b>	4390	<b>3636</b>	4600	<b>3735</b>	4380	<b>3836</b>
		<b>0.01</b>	457	<b>0.03</b>	808	<b>0.06</b>	1778	<b>0.10</b>	3031	<b>0.15</b>	4868	<b>0.25</b>	8224	<b>0.48</b>	15027
0.38	4000	3940	<b>3235</b>	4000	<b>3335</b>	3980	<b>3435</b>	3940	<b>3536</b>	3940	<b>3636</b>	3940	<b>3735</b>	3980	<b>3835</b>
		<b>0.02</b>	457	<b>0.03</b>	808	<b>0.06</b>	1778	<b>0.11</b>	3031	<b>0.17</b>	4868	<b>0.29</b>	8224	<b>0.52</b>	14770
0.42	3550	3500	<b>3235</b>	3570	<b>3335</b>	3570	<b>3435</b>	3490	<b>3536</b>	3610	<b>3635</b>	3590	<b>3735</b>	3360	<b>3835</b>
		<b>0.02</b>	457	<b>0.03</b>	808	<b>0.07</b>	1778	<b>0.12</b>	3031	<b>0.17</b>	4454	<b>0.32</b>	8224	<b>0.62</b>	14770
0.48	3150	3110	<b>3235</b>	3030	<b>3335</b>	3120	<b>3435</b>	3060	<b>3536</b>	3090	<b>3635</b>	3250	<b>3735</b>	3030	<b>3835</b>
		<b>0.02</b>	457	<b>0.04</b>	808	<b>0.08</b>	1778	<b>0.14</b>	3031	<b>0.20</b>	4454	<b>0.36</b>	8224	<b>0.69</b>	14770
0.54	2800	2760	<b>3235</b>	2810	<b>3335</b>	2950	<b>3435</b>	2920	<b>3535</b>	2820	<b>3635</b>	2770	<b>3735</b>	2740	<b>3835</b>
		<b>0.02</b>	457	<b>0.04</b>	808	<b>0.09</b>	1778	<b>0.13</b>	2640	<b>0.22</b>	4454	<b>0.42</b>	8224	<b>0.76</b>	14770
0.60	2500	2470	<b>3235</b>	2420	<b>3335</b>	2480	<b>3435</b>	2640	<b>3535</b>	2560	<b>3635</b>	2470	<b>3735</b>	2530	<b>3835</b>
		<b>0.03</b>	457	<b>0.05</b>	808	<b>0.10</b>	1778	<b>0.16</b>	3026	<b>0.25</b>	4454	<b>0.47</b>	8224	<b>0.82</b>	14770
0.67	2240	2300	<b>3235</b>	2160	<b>3335</b>	2340	<b>3435</b>	2390	<b>3535</b>	2180	<b>3635</b>	2220	<b>3735</b>	2170	<b>3835</b>
		<b>0.03</b>	457	<b>0.05</b>	808	<b>0.11</b>	1778	<b>0.18</b>	3026	<b>0.29</b>	4454	<b>0.52</b>	8224	<b>0.96</b>	14770

N<sub>s</sub> output speed

i<sub>aR</sub>: reduction index

Mub 36 to Mub 38\*: check the gearbox thermal limit

M<sub>nS</sub>: rated output torque (N.m)

## Selection

### Manubloc: Mub / AP

**Mub AP - 1500 min<sup>-1</sup> - kp = 1**

Rated capacity - Combined gearboxes

i exact	Mub
kW	M <sub>nS</sub>

n <sub>S</sub> min-1	i <sub>aR</sub>	MANUBLOC													
		32--		33--		34--		35--		36--*		37--*		38--*	
0.75	2000	2130	<b>3235</b>	1990	<b>3334</b>	2070	<b>3435</b>	2090	<b>3535</b>	1940	<b>3635</b>	1950	<b>3735</b>	2020	<b>3835</b>
		<b>0.03</b>	457	<b>0.06</b>	808	<b>0.12</b>	1778	<b>0.21</b>	3026	<b>0.32</b>	4454	<b>0.60</b>	8224	<b>1.03</b>	14770
0.83	1800	1830	<b>3235</b>	1770	<b>3334</b>	1820	<b>3435</b>	1900	<b>3535</b>	1740	<b>3635</b>	1760	<b>3735</b>	1770	<b>3835</b>
		<b>0.04</b>	457	<b>0.07</b>	808	<b>0.14</b>	1778	<b>0.23</b>	3026	<b>0.36</b>	4454	<b>0.66</b>	8224	<b>1.18</b>	14770
0.94	1600	1640	<b>3235</b>	1570	<b>3334</b>	1670	<b>3434</b>	1640	<b>3535</b>	1530	<b>3635</b>	1550	<b>3735</b>	1570	<b>3835</b>
		<b>0.04</b>	457	<b>0.07</b>	808	<b>0.15</b>	1741	<b>0.26</b>	3026	<b>0.41</b>	4454	<b>0.75</b>	8224	<b>1.33</b>	14770
1.00	1500	1510	<b>3234</b>												
		<b>0.04</b>	457												
1.07	1400	1340	<b>3234</b>	1430	<b>3334</b>	1510	<b>3434</b>	1460	<b>3535</b>	1380	<b>3635</b>	1450	<b>3735</b>	1390	<b>3835</b>
		<b>0.05</b>	457	<b>0.08</b>	808	<b>0.17</b>	1741	<b>0.30</b>	3026	<b>0.46</b>	4454	<b>0.80</b>	8224	<b>1.50</b>	14770
1.20	1250	1190	<b>3234</b>	1270	<b>3334</b>	1320	<b>3434</b>	1310	<b>3535</b>	1220	<b>3635</b>	1260	<b>3735</b>	1250	<b>3835</b>
		<b>0.06</b>	457	<b>0.09</b>	808	<b>0.19</b>	1741	<b>0.33</b>	3026	<b>0.52</b>	4454	<b>0.92</b>	8224	<b>1.67</b>	14770
1.34	1120	1080	<b>3234</b>	1120	<b>3334</b>	1200	<b>3434</b>	1150	<b>3535</b>	1140	<b>3635</b>	1130	<b>3734</b>	1070	<b>3835</b>
		<b>0.06</b>	457	<b>0.10</b>	808	<b>0.21</b>	1741	<b>0.38</b>	3026	<b>0.55</b>	4454	<b>1.04</b>	8224	<b>1.95</b>	14770
1.50	1000	960	<b>3234</b>	1000	<b>3334</b>	1040	<b>3434</b>	1080	<b>3535</b>	988	<b>3635</b>	970	<b>3734</b>	983	<b>3834</b>
		<b>0.07</b>	457	<b>0.12</b>	808	<b>0.24</b>	1741	<b>0.40</b>	3026	<b>0.64</b>	4454	<b>1.21</b>	8224	<b>2.14</b>	14770
1.67	900	852	<b>3234</b>	889	<b>3334</b>	923	<b>3434</b>	913	<b>3535</b>	890	<b>3634</b>	885	<b>3734</b>	829	<b>3834</b>
		<b>0.08</b>	457	<b>0.13</b>	808	<b>0.27</b>	1741	<b>0.47</b>	3026	<b>0.71</b>	4454	<b>1.33</b>	8224	<b>2.54</b>	14770
1.88	800	758	<b>3234</b>	793	<b>3334</b>	827	<b>3434</b>	861	<b>3535</b>	762	<b>3634</b>	801	<b>3734</b>	747	<b>3834</b>
		<b>0.09</b>	457	<b>0.15</b>	808	<b>0.30</b>	1741	<b>0.50</b>	3026	<b>0.83</b>	4454	<b>1.47</b>	8224	<b>2.82</b>	14770
2.11	710	674	<b>3234</b>	674	<b>3334</b>	724	<b>3434</b>	763	<b>3535</b>	695	<b>3634</b>	684	<b>3734</b>	676	<b>3834</b>
		<b>0.10</b>	457	<b>0.17</b>	808	<b>0.35</b>	1741	<b>0.57</b>	3026	<b>0.91</b>	4454	<b>1.72</b>	8224	<b>3.12</b>	14770
2.38	630	601	<b>3234</b>	625	<b>3334</b>	685	<b>3434</b>	667	<b>3535</b>	630	<b>3634</b>	608	<b>3734</b>	623	<b>3834</b>
		<b>0.11</b>	457	<b>0.19</b>	808	<b>0.37</b>	1741	<b>0.65</b>	3026	<b>1.01</b>	4454	<b>1.93</b>	8224	<b>3.38</b>	14770
2.68	560	511	<b>3234</b>	537	<b>3334</b>	576	<b>3434</b>	587	<b>3535</b>	537	<b>3634</b>	546	<b>3734</b>	535	<b>3834</b>
		<b>0.13</b>	457	<b>0.22</b>	808	<b>0.44</b>	1741	<b>0.74</b>	3026	<b>1.18</b>	4454	<b>2.15</b>	8224	<b>3.94</b>	14770
3.00	500	474	<b>3234</b>	480	<b>3334</b>	543	<b>3434</b>	500	<b>3535</b>	477	<b>3634</b>	481	<b>3734</b>	499	<b>3834</b>
		<b>0.14</b>	457	<b>0.24</b>	808	<b>0.46</b>	1741	<b>0.86</b>	3020	<b>1.33</b>	4454	<b>2.44</b>	8224	<b>4.22</b>	14770
3.33	450	407	<b>3234</b>	448	<b>3334</b>	481	<b>3434</b>	421	<b>3535</b>	429	<b>3634</b>	433	<b>3734</b>	437	<b>3834</b>
		<b>0.16</b>	457	<b>0.26</b>	808	<b>0.52</b>	1741	<b>1.02</b>	3020	<b>1.48</b>	4454	<b>2.71</b>	8224	<b>4.82</b>	14770
3.75	400	364	<b>3234</b>	377	<b>3334</b>	421	<b>3434</b>	397	<b>3535</b>	378	<b>3634</b>	381	<b>3734</b>	386	<b>3834</b>
		<b>0.18</b>	457	<b>0.31</b>	808	<b>0.60</b>	1741	<b>1.09</b>	3020	<b>1.68</b>	4454	<b>3.08</b>	8224	<b>5.46</b>	14770
4.23	355	339	<b>3234</b>	358	<b>3334</b>	371	<b>3434</b>	352	<b>3535</b>	340	<b>3634</b>	357	<b>3734</b>	344	<b>3834</b>
		<b>0.19</b>	457	<b>0.33</b>	808	<b>0.68</b>	1741	<b>1.22</b>	3020	<b>1.87</b>	4454	<b>3.29</b>	8224	<b>6.13</b>	14770
4.76	315	286	<b>3234</b>			298	<b>3434</b>	306	<b>3534</b>	300	<b>3634</b>	310	<b>3734</b>	308	<b>3834</b>
		<b>0.23</b>	457			<b>0.84</b>	1741	<b>1.18</b>	2501	<b>2.12</b>	4454	<b>3.79</b>	8224	<b>6.84</b>	14770
5.36	280	272	<b>3234</b>			281	<b>3434</b>	274	<b>3534</b>	280	<b>3634</b>	272	<b>3734</b>	264	<b>3834</b>
		<b>0.24</b>	457			<b>0.89</b>	1741	<b>1.32</b>	2501	<b>2.27</b>	4454	<b>4.32</b>	8224	<b>7.99</b>	14770
6.00	250	246	<b>3234</b>					240	<b>3534</b>						
		<b>0.27</b>	457					<b>1.50</b>	2501						

N<sub>S</sub>: output speed

i<sub>aR</sub>: reduction index

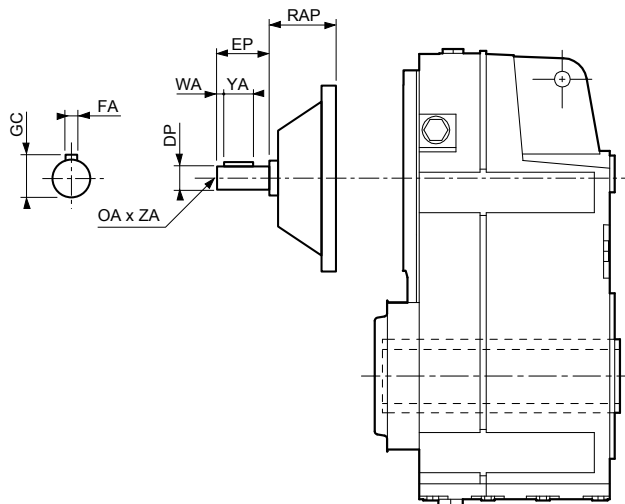
Mub 36 to Mub 38\*: check the gearbox thermal limit

M<sub>nS</sub>: rated output torque (N.m)

## Dimensions Manubloc: Mub / AP

### Dimensions of the input shaft AP

Dimensions in millimetres



Brake	AP								kg
	Ø DP	EP	FA	GC	OAxZA	RAP	WA	YA	
<b>Mub 38--</b>	55k6	110	16	59	M20x42	48.5	10	90	32
<b>Mub 37--</b>	48k6	110	14	51.5	M16x36	51	10	90	27
<b>Mub36--</b>	48k6	110	14	51.5	M16x36	51	10	90	27
<b>Mub 35--</b>	38j6	80	10	41	M12x28	129.5	8	63	14
<b>Mub 34--</b>	28j6	60	8	31	M10x22	138.5	5	50	5
<b>Mub 33--</b>	28j6	60	8	31	M10x22	69	5	50	5
<b>Mub 32--</b>	24j6	50	8	27	M8x19	73	4.5	40	1.2
<b>Mub 3132</b>	24j6	50	8	27	M8x19	73	4.5	40	1.5

## Selection

### Manubloc: Mub / LS, LSES motors / 4 poles

#### 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  $\text{min}^{-1}$ .
- The following selection tables are organized:
- per power for output speeds of 0.31 above  $517 \text{ min}^{-1}$ ; 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  $\eta$  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 in pages 22 to 83, select the power required for the application.
- Choose the output speed matching the application.
- And then choose the geared motor with a duty factor above 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 in pages 22 to 83, 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). The values used are given for client shaft inserted in hollow shaft **H**, at the most demanding input speed. For the output shaft version **S** on Mub 36 to 38, our gearboxes can withstand higher loads. Call Leroy-Somer for optimised values.

##### 5 - Fixing form

Refer to page 8 for the definition of flexible or lateral mounted form and page 10 for the definition of standard flange fitting.

##### 6 - Operating position

Refer to page 9 or 15 for the definition of the operating positions form **R** or **NU** fixing form, and pages 11 and 13 for those of the flange form **BT**, **BS** or **BD**.

##### 7- Choosing the options

Refer to the "Equipment and options" chapter for the choice of any standardized options.

The Mub 36 to 38 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.111).

##### 8 - Commissioning, lubrication

Check the «Electrical characteristics» defined in document reference 5181. 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

• *Application data:*

*Roller conveyor drive:*

$P_{uE}$ : 3 kW

$N_{uS}$ : 40  $\text{min}^{-1}$

*Daily operating time: 21 hours per day with violent jogging*

*Fastening by tapped flange, horizontal mounting, hollow shaft; safety brake motor.*

• *Determination of the duty factor:*

- *The application class is II (read page 42 in reference document 5181).*

- *At the AGMAII class, the corresponding duty factor  $K_p$  is =1.4 (read page 40 in reference document 5181).*

##### Selecting the geared motor

###### a - Fixed speed

- Search the selection tables corresponding to  $P_{uE} = 3 \text{ kW}$
- Search the output speed  $n_S$  of the geared motor closest to  $40 \text{ min}^{-1}$  (page 50)
- Select the geared motor with a duty factor above that required by the application.
- ----> Select the geared motor Mub 3432,  $i = 33.9$  and  $K_p = 2.48$  (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  $3\,000 \text{ min}^{-1}$ . In the tables at 87 Hz, select the power equivalent to 3 kW - 50 Hz,  $40 \text{ min}^{-1}$  (page 44). Take the 1.8 kW motor developing 3.13 kW at 87 Hz. Search for the speed required 43.8 in Mub 3332 with  $i: 49.1$  and  $K_p = 1.4$  (extract in next page).



## Selection

### Manubloc: Mub / LS, LSES motors

#### SELECTING A FIXED SPEED GEARED MOTOR

- Search the selection tables corresponding to  $P_{uE} = 3 \text{ kW}$  (page 50).
- Search the output speed  $N_s$  of the geared motor closest to  $40 \text{ min}^{-1}$  at 50 Hz.
- Select the geared motor with a duty factor above that required by the application.
- ---> Select the geared motor Mub 3432,  $i = 33.9$ ,  $K_p = 2.48$
- To finish, check that the radial and axial forces values ( $F_R E/2$ ) of the geared motor exceed the stress applied by the load.

LS, LSES 1500 $\text{min}^{-1}$ - 50 Hz		Mub - Gearbox					LS, LSES 2600 $\text{min}^{-1}$ - 87 Hz	
$N_s$ ( $\text{min}^{-1}$ )	$K_p$	Mub / MI-MU	$i$	M (Nm)	$F_R E/2$ (N)	Dim. MI <---> page	$N_s$ ( $\text{min}^{-1}$ )	$K_p$
<b>3 kW - 50 Hz</b>		LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3					<b>19.1 kW - 87 Hz*</b>	
36.8	6	3632	39	750	27,457	95-101		
42.5	1.15	3332	33.7	650	4,968	89	75.1	1.15
42.3	2.48	3432	33.9	652	10,863	91	74.8	2.15
41.6	7	3632	34.5	663	27,549	95-101		
46.3	1.25	3332	31	598	4,987	89	81.7	1.25

#### SELECTING A VARIABLE SPEED GEARED MOTOR



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 44), select the power equivalent to 3 kW - 50 Hz,  $40 \text{ min}^{-1}$ .

Take the 1.8 kW motor developing 3.13 kW at 87 Hz.

Search for the speed required close to 40 in Mub 3332 with  $i: 49.1$  and  $K_p = 1.4$

LS, LSES 1500 $\text{min}^{-1}$ - 50 Hz		Mub - Gearbox					LS, LSES 2600 $\text{min}^{-1}$ - 87 Hz	
$N_s$ ( $\text{min}^{-1}$ )	$K_p$	Ot / MI-MU	$i$	M (Nm)	$F_R E/2$ (N)	Dim. MI <---> page	$N_s$ ( $\text{min}^{-1}$ )	$K_p$
<b>1.8 kW - 50 Hz</b>		LSES 90 LU IFT/IE2 - LSES 100 L IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 100 L FFB2 IFT/IE3					<b>3.13 kW - 87 Hz*</b>	
26.4	1.22	3332	54.3	626	6,453	89	46.6	1.27
29.3	1.35	3332	49.1	566	6,417	89	51.6	1.40
29.1	3.03	3432	49.3	567	11,437	91	51.3	2.78
29.9	8	3632	48.1	552	27,667	95-101		
32.7	1.51	3332	43.9	506	6,369	89	57.6	1.56

#### 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 abstract 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/disprof>

	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 VMA	0.25 to 7.5 kW	D+2 to D+5	

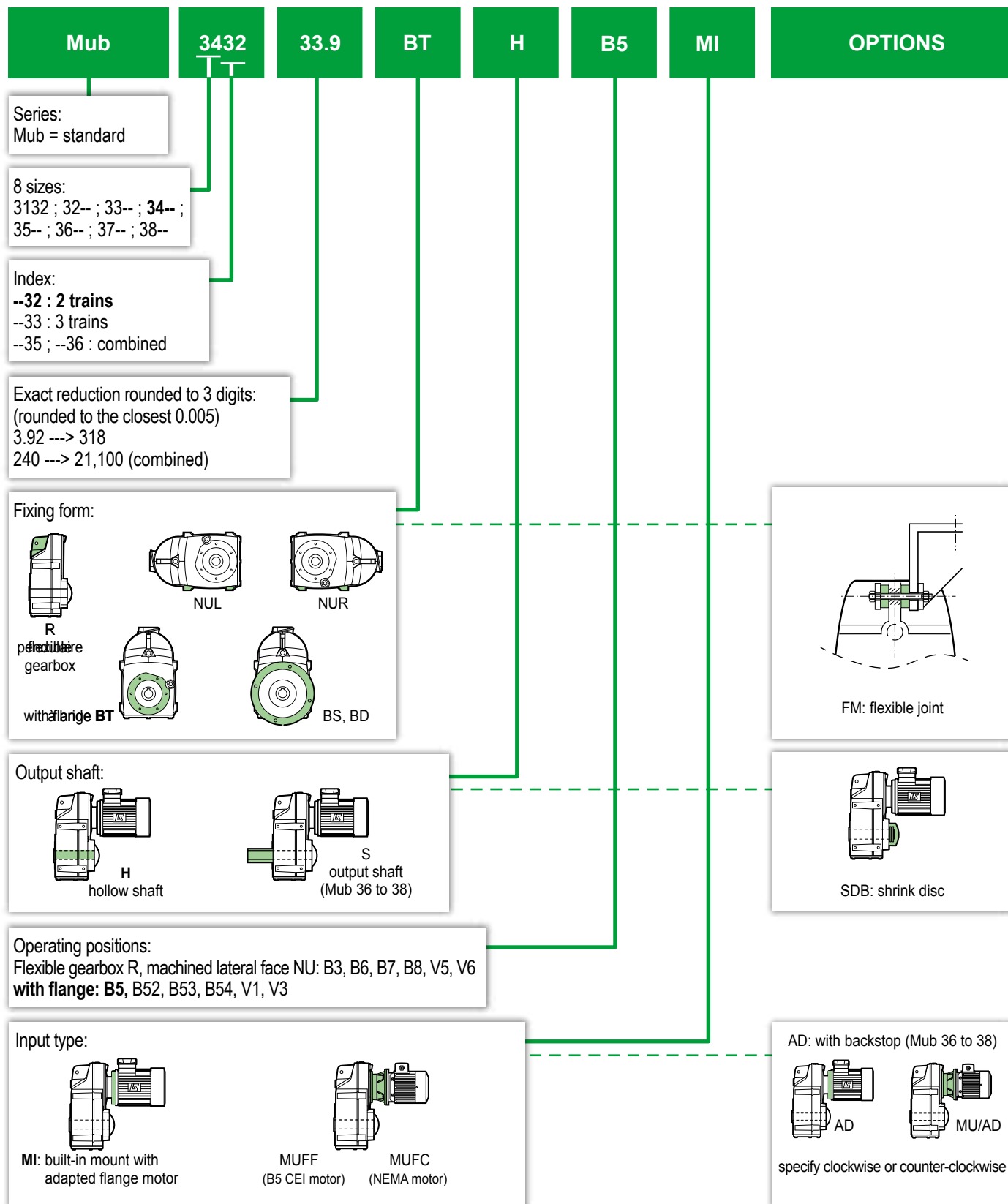
\*Shipping times in working days for orders received at the plant on day D before 12:00.

Refer to details page 122.



## Name

### Manubloc: Mub / LS, LSES motors



## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.25 kW - 50 Hz</b>		<b>LS 71 M<sup>1</sup></b> <b>LS 71 M FFB<sup>1</sup></b>						
0.31	1.22	3735	4600	6,753	44,434	108		
0.36	1.42	3735	3940	5,783	45,339	108		
0.36	2.56	3835	3980	5,763	52,483	108		
0.39	0.84	3635	3610	5,305	22,621	108		
0.40	1.56	3735	3590	5,274	45,815	108		
0.42	3.04	3835	3360	4,862	53,180	108		
0.46	0.98	3635	3090	4,543	23,430	108		
0.44	1.72	3735	3250	4,777	46,278	108		
0.47	3.37	3835	3030	4,378	53,554	108		
0.51	1.08	3635	2820	4,143	23,854	108		
0.51	2.02	3735	2770	4,076	46,933	108		
0.52	3.73	3835	2740	3,964	53,874	108		
0.56	1.19	3635	2560	3,753	24,268	108		
0.58	2.27	3735	2470	3,623	47,355	108		
0.56	4	3835	2530	3,652	54,115	108		
0.60	0.84	3535	2390	3,602	15,812	108		
0.65	1.39	3635	2180	3,202	24,853	108		
0.64	2.53	3735	2220	3,256	47,698	108		
0.66	5	3835	2170	3,139	54,512	108		
0.68	0.96	3535	2090	3,142	16,346	108		
0.74	1.56	3635	1940	2,846	25,231	108		
0.73	2.87	3735	1950	2,865	48,063	108		
0.70	5	3835	2020	2,925	54,677	108		
0.75	1.06	3535	1900	2,861	16,671	108		
0.82	1.74	3635	1740	2,558	25,537	108		
0.81	3.19	3735	1760	2,579	48,330	108		
0.80	6	3835	1770	2,561	54,958	108		
0.87	1.22	3535	1640	2,471	17,123	108		
0.93	1.98	3635	1530	2,250	25,864	108		
0.92	3.62	3735	1550	2,273	48,616	108		
0.91	7	3835	1570	2,264	55,188	108		
0.97	1.37	3535	1460	2,204	17,432	108		
1.03	2.20	3635	1380	2,026	26,102	108		
0.98	3.87	3735	1450	2,127	48,752	108		
1.02	7	3835	1390	2,016	55,380	108		
1.08	0.87	3434	1320	2,004	9,627	108		
1.09	1.53	3535	1310	1,975	17,698	108		
1.17	2.49	3635	1220	1,785	26,357	108		
1.13	4	3735	1260	1,844	49,016	108		
1.14	8	3835	1250	1,806	55,542	108		
1.19	0.95	3434	1200	1,825	9,852	108		
1.24	1.75	3535	1150	1,728	17,984	108		
1.25	2.67	3635	1140	1,671	26,479	108		
1.26	5	3734	1130	1,679	49,169	108		
1.33	10	3835	1070	1,546	55,743	108		
1.38	1.10	3434	1040	1,576	10,166	108		
1.31	1.85	3535	1080	1,634	18,093	108		
1.44	3.07	3635	988	1,449	26,715	108		
1.47	6	3734	970	1,438	49,395	108		
1.45	10	3834	983	1,437	55,827	108		
1.54	1.24	3434	923	1,406	10,380	108		
1.56	2.20	3535	913	1,376	18,392	108		
1.60	3.38	3634	890	1,319	26,852	108		
1.61	6	3734	885	1,311	49,514	108		

<sup>1</sup> motor not concerned by the IE

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>0.25 kW - 50 Hz</b>		<b>LS 71 M<sup>1</sup> LS 71 M FFB<sup>1</sup></b>						
1.72	1.38	3434	827	1,260	10,565	108		
1.66	2.33	3535	861	1,296	18,484	108		
1.87	3.94	3634	762	1,130	27,053	108		
1.78	7	3734	801	1,187	49,629	108		
1.97	1.58	3434	724	1,102	10,763	108		
1.87	2.63	3535	763	1,149	18,654	108		
2.05	4	3634	695	1,030	27,160	108		
2.08	8	3734	684	1,012	49,792	108		
2.08	1.67	3434	685	1,042	10,839	108		
2.14	3.01	3535	667	1,005	18,821	108		
2.26	5	3634	630	933	27,263	108		
2.34	9	3734	608	900	49,897	108		
2.47	1.98	3434	576	877	11,046	108		
2.43	3.42	3535	587	885	18,960	108		
2.65	6	3634	537	795	27,409	108		
2.62	2.11	3434	543	827	11,110	108		
2.85	4	3535	500	754	19,112	108		
2.98	6	3634	477	707	27,502	108		
2.96	2.38	3434	481	733	11,228	108		
3.38	5	3535	421	635	19,250	108		
3.38	2.72	3434	421	641	11,343	108		
3.59	5	3535	397	598	19,293	108		
3.84	3.09	3434	371	564	11,440	108		
4.05	6	3535	352	530	19,371	108		
4.78	3.84	3434	298	453	11,580	108		
4.65	5	3534	306	466	19,445	108		
5.23	1.90	3333	272	413	7,035	89		
5.08	4	3434	281	427	11,613	108		
5.19	6	3534	274	418	19,501	108		
5.73	2.08	3333	248	377	7,089	89		
5.73	5	3434	249	379	11,674	108		
5.93	7	3534	240	366	19,562	108		
6.33	2.29	3333	225	342	7,142	89		
7.42	2.68	3333	192	291	7,216	89		
7.50	6	3433	190	284	11,794	91		
7.90	1.59	3233	180	274	3,225	87		
8.35	3.01	3333	171	259	7,264	89		
8.63	7	3433	165	246	11,841	91		
8.67	1.74	3233	164	249	3,267	87		
9.29	3.35	3333	153	233	7,303	89		
9.76	8	3433	146	218	11,876	91		
10.0	2.01	3233	142	215	3,326	87		
10.6	3.79	3333	135	205	7,344	89		
10.6	9	3433	134	200	11,898	91		
11.3	2.24	3233	127	192	3,366	87		
11.7	4	3333	122	184	7,374	89		
12.0	10	3433	119	177	11,928	91		
12.6	2.5	3233	113	172	3,401	87		
13.3	5	3333	107	163	7,407	89		
13.5	11	3433	106	158	11,952	91		
14.4	2.85	3233	99.3	151	3,438	87		
14.2	5	3333	100	152	7,422	89		
15.0	12	3433	94.8	142	11,973	91		

<sup>1</sup> motor not concerned by the IE

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.25 kW - 50 Hz</b>		<b>LS 71 M<sup>1</sup> LS 71 M FFB<sup>1</sup></b>						
15.2	3.00	3233	93.8	142	3,452	87		
16.4	6	3333	87	132	7,452	89		
16.3	13	3433	87.3	130	11,987	91		
18.0	3.40	3233	79	120	3,491	87		
18.7	7	3333	76.3	116	7,476	89		
18.4	15	3433	77.5	116	12,005	91		
20.2	2.22	3132	70.6	108	4180	85		
19.1	3.54	3233	74.5	113	3,503	87		
20.7	7	3333	68.9	105	7,492	89		
21.1	17	3433	67.5	101	12,024	91		
22.3	2.44	3132	63.9	98	4195	85		
21.6	3.84	3233	66	100	3,526	87		
23.4	8	3333	61	93	7,510	89		
23.3	19	3433	61.1	91	12,036	91		
25.6	2.8	3132	55.8	85	4,215	85		
24.7	4	3233	57.8	88	3,547	87		
24.9	9	3333	57.2	87	7,519	89		
26.2	9	3332	54.3	83	7,524	89		
28.1	3.06	3132	50.8	78	4,228	85		
28.0	5	3233	50.8	77	3,566	87		
29.0	10	3332	49.1	75	7,536	89		
29.4	10	3333	48.4	73	7,539	89		
28.9	23	3432	49.3	74	12,057	91		
32.5	3.54	3132	43.9	67	4,247	85		
31.7	5	3233	44.9	68	3,581	87		
32.5	11	3332	43.9	67	7,548	89		
36.4	3.96	3132	39.1	60	4,260	85		
35.8	5	3233	39.8	60	3,594	87		
37.4	13	3332	38.1	58	7,561	89		
35.3	12	3333	40.4	61	7,556	89		
40.7	4	3132	35.1	54	4,271	85		
40.5	6	3233	35.2	53	3,607	87		
36.7	8	3232	38.9	60	3,596	87		
42.2	15	3332	33.7	52	7,571	89		
46.5	5	3132	30.7	47	4,283	85		
42.7	6	3233	33.4	51	3,611	87		
42.8	9	3232	33.3	51	3,611	87		
45.9	16	3332	31	48	7,577	89		
49.1	5	3132	29	44	4,288	85		
47.9	6	3233	29.7	45	3,621	87		
46.9	10	3232	30.4	47	3,619	87		
58.4	6	3132	24.4	37	4,301	85		
51.8	11	3232	27.5	42	3,626	87		
61.9	7	3132	23	35	4,304	85		
60.7	13	3232	23.5	36	3,637	87		
69.9	7	3132	20.4	31	4,312	85		
79.9	8	3132	17.8	27	4,318	85		
90.7	10	3132	15.7	24	4,324	85		

<sup>1</sup> motor not concerned by the IE

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>0.37 kW - 50 Hz</b>		<b>LS 71 M<sup>1</sup></b> <b>LS 71 M FFB<sup>1</sup></b>						
0.31	0.80	3735	4600	10,228	41,190	108		
0.36	0.94	3735	3940	8,759	42,561	108		
0.36	1.68	3835	3980	8,775	50,155	108		
0.40	1.03	3735	3590	7,988	43,281	108		
0.42	2.00	3835	3360	7,403	51,216	108		
0.44	1.14	3735	3250	7,236	43,983	108		
0.47	2.22	3835	3030	6,667	51,785	108		
0.51	1.33	3735	2770	6,174	44,975	108		
0.52	2.45	3835	2740	6,036	52,273	108		
0.56	0.78	3635	2560	5,685	22,217	108		
0.58	1.50	3735	2470	5,488	45,615	108		
0.56	2.66	3835	2530	5,561	52,640	108		
0.65	0.92	3635	2180	4,850	23,104	108		
0.64	1.67	3735	2220	4,932	46,133	108		
0.65	3.09	3835	2170	4,780	53,244	108		
0.73	1.03	3635	1940	4,311	23,676	108		
0.73	1.89	3735	1950	4,340	46,686	108		
0.70	3.32	3835	2020	4,454	53,495	108		
0.82	1.15	3635	1740	3,875	24,139	108		
0.81	2.10	3735	1760	3,908	47,090	108		
0.80	3.79	3835	1770	3,900	53,923	108		
0.87	0.81	3535	1640	3,725	15,670	108		
0.93	1.31	3635	1530	3,409	24,633	108		
0.92	2.39	3735	1550	3,443	47,523	108		
0.91	4	3835	1570	3,447	54,274	108		
0.97	0.91	3535	1460	3,322	16,137	108		
1.03	1.45	3635	1380	3,070	24,994	108		
0.98	2.55	3735	1450	3,222	47,729	108		
1.02	5	3835	1390	3,070	54,565	108		
1.08	1.02	3535	1310	2,976	16,537	108		
1.17	1.65	3635	1220	2,705	25,381	108		
1.13	2.94	3735	1260	2,794	48,129	108		
1.14	5	3835	1250	2,750	54,812	108		
1.24	1.16	3535	1150	2,604	16,968	108		
1.25	1.76	3635	1140	2,531	25,565	108		
1.25	3.23	3734	1130	2,545	48,362	108		
1.33	6	3835	1070	2,353	55,119	108		
1.31	1.23	3535	1080	2,462	17,133	108		
1.44	2.03	3635	988	2,195	25,922	108		
1.46	3.77	3734	970	2,179	48,703	108		
1.44	7	3834	983	2,189	55,246	108		
1.54	0.82	3434	923	2,119	9,482	108		
1.55	1.46	3535	913	2,074	17,583	108		
1.60	2.23	3634	890	1,999	26,130	108		
1.61	4	3734	885	1,987	48,883	108		
1.71	8	3834	829	1,846	55,511	108		
1.72	0.92	3434	827	1,898	9,760	108		
1.65	1.55	3535	861	1,954	17,722	108		
1.86	2.60	3634	762	1,712	26,435	108		
1.77	5	3734	801	1,800	49,057	108		
1.90	9	3834	747	1,663	55,653	108		
1.96	1.05	3434	724	1,661	10,059	108		
1.86	1.75	3535	763	1,732	17,979	108		
2.04	2.85	3634	695	1,561	26,596	108		
2.08	5	3734	684	1,535	49,304	108		
2.10	10	3834	676	1,505	55,774	108		

<sup>1</sup> motor not concerned by the IE

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.37 kW - 50 Hz</b>		<b>LS 71 M<sup>1</sup></b> <b>LS 71 M FFB1<sup>1</sup></b>						
2.07	1.11	3434	685	1,571	10,173	108		
2.13	2.00	3535	667	1,515	18,230	108		
2.26	3.15	3634	630	1,414	26,752	108		
2.34	6	3734	608	1,364	49,464	108		
2.28	11	3834	623	1,387	55,866	108		
2.46	1.32	3434	576	1,323	10,485	108		
2.42	2.27	3535	587	1,333	18,441	108		
2.64	3.69	3634	537	1,206	26,973	108		
2.60	7	3734	546	1,226	49,593	108		
2.61	1.40	3434	543	1,246	10,581	108		
2.84	2.66	3535	500	1,136	18,669	108		
2.97	4	3634	477	1,072	27,115	108		
2.95	8	3734	481	1,079	49,730	108		
2.95	1.58	3434	481	1,105	10,760	108		
3.37	3.16	3535	421	956	18,877	108		
3.31	5	3634	429	963	27,231	108		
3.28	8	3734	433	971	49,831	108		
3.37	1.80	3434	421	967	10,934	108		
3.58	3.35	3535	397	901	18,941	108		
3.76	5	3634	378	847	27,353	108		
3.83	2.05	3434	371	851	11,080	108		
4.04	3.78	3535	352	799	19,060	108		
4.18	6	3634	340	763	27,443	108		
4.77	2.55	3434	298	683	11,290	108		
4.64	3.56	3534	306	703	19,171	108		
5.21	1.25	3333	272	626	6,721	89		
5.06	2.70	3434	281	644	11,340	108		
5.17	3.97	3534	274	630	19,256	108		
5.71	1.37	3333	248	571	6,802	89		
5.71	3.05	3434	249	571	11,432	108		
5.91	5	3534	240	551	19,347	108		
6.31	1.51	3333	225	517	6,882	89		
7.39	1.77	3333	192	441	6,994	89		
7.47	4	3433	190	432	11,607	91		
7.87	1.05	3233	180	415	2,981	87		
8.32	1.99	3333	171	392	7,067	89		
8.60	5	3433	165	375	11,678	91		
8.64	1.15	3233	164	378	3,045	87		
9.26	2.21	3333	153	353	7,126	89		
9.72	5	3433	146	332	11,733	91		
10.0	1.32	3233	142	326	3,134	87		
10.5	2.51	3333	135	310	7,188	89		
10.6	6	3433	134	305	11,766	91		
11.2	1.48	3233	127	291	3,195	87		
11.7	2.78	3333	122	279	7,234	89		
12.0	6	3433	119	270	11,811	91		
12.5	1.65	3233	113	261	3,248	87		
13.3	3.15	3333	107	246	7,283	89		
13.4	7	3433	106	240	11,848	91		
14.3	1.88	3233	99.3	228	3,304	87		
14.2	3.36	3333	100	230	7,306	89		
15.0	8	3433	94.8	216	11,879	91		
15.1	1.98	3233	93.8	216	3,326	87		
16.3	3.84	3333	87	200	7,351	89		
16.3	9	3433	87.3	198	11,901	91		
18.0	2.25	3233	79	182	3,385	87		
18.6	4	3333	76.3	175	7,388	89		
18.3	10	3433	77.5	176	11,929	91		

<sup>1</sup> motor not concerned by the IE

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.37 kW - 50 Hz</b>		<b>LS 71 M<sup>1</sup></b> <b>LS 71 M FFB1<sup>1</sup></b>						
20.1	1.47	3132	70.6	164	4102	85		
19.1	2.34	3233	74.5	171	3,403	87		
20.6	5	3333	68.9	158	7,413	89		
21.0	11	3433	67.5	154	11,958	91		
22.2	1.61	3132	63.9	148	4117	85		
21.5	2.54	3233	66	152	3,436	87		
23.3	5	3333	61	140	7,440	89		
23.2	12	3433	61.1	139	11,976	91		
25.5	1.85	3132	55.8	129	4,137	85		
24.6	2.76	3233	57.8	133	3,469	87		
24.8	6	3333	57.2	131	7,453	89		
26.2	6	3332	54.3	126	7,461	89		
26.7	14	3433	53.2	121	11,998	91		
28.0	2.02	3132	50.8	118	4,157	85		
27.9	2.98	3233	50.8	117	3,497	87		
28.9	7	3332	49.1	114	7,479	89		
29.3	7	3333	48.4	111	7,483	89		
29.5	15	3433	48.2	110	12,013	91		
28.8	15	3432	49.3	113	12,008	91		
32.4	2.33	3132	43.9	102	4,186	85		
31.6	3.21	3233	44.9	103	3,520	87		
32.3	7	3332	43.9	102	7,496	89		
32.5	16	3433	43.7	99	12,026	91		
34.2	18	3432	41.6	95	12,031	91		
36.3	2.61	3132	39.1	91	4,205	85		
35.7	3.46	3233	39.8	92	3,541	87		
35.1	8	3333	40.4	93	7,510	89		
37.2	9	3332	38.1	89	7,516	89		
37.9	19	3432	37.4	86	12,043	91		
40.5	2.91	3132	35.1	81	4,222	85		
40.4	3.73	3233	35.2	81	3,559	87		
36.5	5	3232	38.9	90	3,543	87		
42.1	10	3332	33.7	78	7,531	89		
41.9	21	3432	33.9	78	12,053	91		
46.3	3.31	3132	30.7	71	4,240	85		
42.5	3.85	3233	33.4	77	3,566	87		
42.7	6	3232	33.3	77	3,565	87		
45.8	10	3332	31	72	7,541	89		
45.5	22	3432	31.2	72	12,061	91		
49.0	3.50	3132	29	67	4,247	85		
47.8	4	3233	29.7	68	3,581	87		
46.8	6	3232	30.4	70	3,577	87		
51.8	12	3332	27.4	64	7,553	89		
58.2	4	3132	24.4	57	4,266	85		
51.6	7	3232	27.5	64	3,589	87		
58.2	13	3332	24.4	57	7,563	89		
61.7	4	3132	23	53	4,272	85		
60.5	8	3232	23.5	54	3,605	87		
64.8	15	3332	21.9	51	7,572	89		
69.6	5	3132	20.4	47	4,283	85		
68.1	9	3232	20.9	48	3,615	87		
70.4	16	3332	20.2	47	7,578	89		
79.6	6	3132	17.8	41	4,293	85		
75.8	10	3232	18.7	44	3,624	87		
90.4	6	3132	15.7	36	4,302	85		
86.1	11	3232	16.5	38	3,633	87		
102	7	3132	13.9	32	4,310	85		
95.6	12	3232	14.9	34	3,639	87		
115	8	3132	12.3	29	4,316	85		
131	9	3132	10.9	25	4,322	85		
138	7	3132	10.3	24	4,325	85		

<sup>1</sup> motor not concerned by the IE

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.55 kW - 50 Hz</b>		<b>LS 71 L<sup>1</sup> LS 71 L FFB<sup>1</sup></b>						
0.35	1.10	3835	3980	13,407	46,576	108		
0.42	1.31	3835	3360	11,310	48,196	108		
0.46	1.45	3835	3030	10,186	49,065	108		
0.51	0.87	3735	2770	9,399	41,964	108		
0.51	1.60	3835	2740	9,222	49,810	108		
0.57	0.98	3735	2470	8,355	42,939	108		
0.56	1.74	3835	2530	8,496	50,371	108		
0.63	1.10	3735	2220	7,509	43,728	108		
0.65	2.02	3835	2170	7,302	51,294	108		
0.72	1.24	3735	1950	6,609	44,568	108		
0.80	1.38	3735	1760	5,950	45,183	108		
0.92	0.86	3635	1530	5,192	22,741	108		
0.91	1.57	3735	1550	5,243	45,843	108		
1.02	0.95	3635	1380	4,674	23,290	108		
0.97	1.68	3735	1450	4,906	46,157	108		
1.16	1.08	3635	1220	4,119	23,880	108		
1.12	1.93	3735	1260	4,255	46,765	108		
1.23	1.16	3635	1140	3,854	24,161	108		
1.24	2.12	3734	1130	3,876	47,119	108		
1.30	0.81	3535	1080	3,737	15,657	108		
1.42	1.33	3635	988	3,343	24,703	108		
1.45	2.48	3734	970	3,319	47,639	108		
1.43	4	3834	983	3,344	54,353	108		
1.54	0.96	3535	913	3,147	16,340	108		
1.58	1.46	3634	890	3,045	25,020	108		
1.59	2.72	3734	885	3,026	47,912	108		
1.69	5	3834	829	2,821	54,758	108		
1.63	1.02	3535	861	2,965	16,551	108		
1.84	1.71	3634	762	2,607	25,485	108		
1.75	3.00	3734	801	2,741	48,178	108		
1.88	6	3834	747	2,540	54,974	108		
1.84	1.15	3535	763	2,628	16,941	108		
2.02	1.87	3634	695	2,377	25,729	108		
2.06	3.52	3734	684	2,338	48,555	108		
2.08	6	3834	676	2,300	55,160	108		
2.11	1.32	3535	667	2,300	17,322	108		
2.23	2.07	3634	630	2,154	25,966	108		
2.31	3.96	3734	608	2,078	48,797	108		
2.25	7	3834	623	2,119	55,300	108		
2.44	0.87	3434	576	2,007	9,623	108		
2.39	1.50	3535	587	2,024	17,641	108		
2.62	2.42	3634	537	1,837	26,303	108		
2.57	4	3734	546	1,867	48,994	108		
2.62	8	3834	535	1,821	55,530	108		
2.59	0.92	3434	543	1,891	9,769	108		
2.81	1.75	3535	500	1,724	17,989	108		
2.94	2.73	3634	477	1,633	26,519	108		
2.92	5	3734	481	1,643	49,203	108		
2.92	1.04	3434	481	1,676	10,040	108		
3.33	2.08	3535	421	1,452	18,304	108		
3.27	3.04	3634	429	1,467	26,695	108		
3.25	5.56	3734	433	1,480	49,356	108		
3.34	1.19	3434	421	1,467	10,304	108		
3.54	2.21	3535	397	1,368	18,401	108		
3.72	3.45	3634	378	1,291	26,882	108		
3.68	6	3734	381	1,303	49,520	108		

<sup>1</sup> motor not concerned by the IE



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.55 kW - 50 Hz</b>		<b>LS 71 L<sup>1</sup> LS 71 L FFB<sup>1</sup></b>						
3.79	1.35	3434	371	1,291	10,525	108		
3.99	2.49	3535	352	1,212	18,581	108		
4.13	3.83	3634	340	1,162	27,019	108		
3.94	7	3734	357	1,219	49,599	108		
4.72	1.68	3434	298	1,037	10,845	108		
4.59	2.34	3534	306	1,067	18,750	108		
4.69	4	3634	300	1,024	27,166	108		
4.54	8	3734	310	1,058	49,750	108		
5.16	0.82	3333	272	953	6,237	89		
5.01	1.78	3434	281	977	10,920	108		
5.12	2.62	3534	274	956	18,878	108		
5.01	5	3634	280	958	27,236	108		
5.17	9	3734	272	927	49,871	108		
5.65	0.90	3333	248	869	6,361	89		
5.65	2.01	3434	249	866	11,060	108		
5.98	2.16	3433	235	817	11,123	91		
5.85	2.99	3534	240	836	19,017	108		
6.24	1.00	3333	225	787	6,482	89		
6.62	2.39	3433	212	738	11,222	91		
7.32	1.17	3333	192	672	6,653	89		
7.39	2.67	3433	190	660	11,319	91		
8.23	1.31	3333	171	597	6,764	89		
8.51	3.06	3433	165	573	11,429	91		
9.16	1.45	3333	153	537	6,853	89		
9.62	3.46	3433	146	507	11,512	91		
9.90	0.87	3233	142	497	2,839	87		
10.4	1.65	3333	135	472	6,948	89		
10.5	3.75	3433	134	466	11,564	91		
11.1	0.97	3233	127	443	2,932	87		
11.6	1.83	3333	122	425	7,018	89		
11.9	4	3433	119	412	11,632	91		
12.4	1.08	3233	113	397	3,012	87		
13.1	2.07	3333	107	375	7,093	89		
13.3	5	3433	106	367	11,689	91		
14.2	1.23	3233	99.3	347	3,098	87		
14.0	2.21	3333	100	351	7,128	89		
14.8	5	3433	94.8	329	11,736	91		
15.0	1.30	3233	93.8	328	3,130	87		
16.2	2.52	3333	87	304	7,197	89		
16.1	6	3433	87.3	303	11,769	91		
17.8	1.48	3233	79	276	3,220	87		
18.4	2.87	3333	76.3	267	7,252	89		
18.1	6	3433	77.5	269	11,812	91		
18.9	1.54	3233	74.5	260	3,248	87		
20.8	7	3433	67.5	235	11,856	91		
21.3	1.68	3233	66	231	3,299	87		
25.2	1.21	3132	55.8	197	4,016	85		
24.3	1.82	3233	57.8	202	3,349	87		
25.9	4	3332	54.3	192	7,363	89		
27.7	1.33	3132	50.8	179	4,047	85		
27.7	1.97	3233	50.8	178	3,391	87		
28.6	4	3332	49.1	173	7,391	89		
28.5	10	3432	49.3	173	11,933	91		
32.0	1.53	3132	43.9	155	4,091	85		
32.0	5	3332	43.9	155	7,418	89		
33.8	12	3432	41.6	146	11,967	91		

<sup>1</sup> motor not concerned by the IE

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.55 kW - 50 Hz</b>		<b>LS 71 L<sup>1</sup> LS 71 L FFB<sup>1</sup></b>						
35.9	1.72	3132	39.1	138	4,121	85		
36.8	6	3332	38.1	135	7,448	89		
37.5	13	3432	37.4	131	11,985	91		
40.1	1.91	3132	35.1	124	4,146	85		
36.2	3.33	3232	38.9	137	3,461	87		
41.6	6	3332	33.7	119	7,471	89		
41.5	14	3432	33.9	119	12,001	91		
45.8	2.18	3132	30.7	108	4,174	85		
42.2	3.89	3232	33.3	118	3,495	87		
45.3	7	3332	31	110	7,485	89		
45.0	15	3432	31.2	110	12,013	91		
48.5	2.30	3132	29	102	4,185	85		
46.3	4	3232	30.4	107	3,513	87		
51.3	8	3332	27.4	97	7,504	89		
52.4	16	3432	26.8	94	12,032	91		
57.5	2.72	3132	24.4	86	4,213	85		
51.1	5	3232	27.5	97	3,531	87		
57.5	9	3332	24.4	86	7,520	89		
61.1	2.88	3132	23	81	4,222	85		
59.9	6	3232	23.5	83	3,556	87		
64.1	10	3332	21.9	77	7,533	89		
68.9	3.23	3132	20.4	72	4,239	85		
67.4	6	3232	20.9	74	3,571	87		
69.7	10	3332	20.2	71	7,542	89		
78.7	3.68	3132	17.8	63	4,255	85		
75.0	7	3232	18.7	66	3,584	87		
78.4	12	3332	17.9	63	7,554	89		
89.5	4	3132	15.7	56	4,268	85		
85.2	7	3232	16.5	58	3,598	87		
90.1	13	3332	15.6	55	7,243	89		
94.6	8	3232	14.9	53	3,608	87		
107	9	3232	13.1	46	3,619	87		
129	6	3132	10.9	38	4,299	85		
115	9	3232	12.3	43	3,624	87		
136	5	3132	10.3	36	4,302	85		
132	10	3232	10.6	38	3,634	87		

<sup>1</sup> motor not concerned by the IE

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>0.75 kW - 50 Hz</b>		<b>LSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/IE1 - LSES 80 LG FFB1 IFT/IE3</b>					<b>1.31 kW - 87 Hz*</b>	
0.35	0.80	3835	3980	18,511	42,630	108		
0.42	0.95	3835	3360	15,616	44,868	108		
0.46	1.05	3835	3030	14,064	46,068	108		
0.51	1.16	3835	2740	12,733	47,097	108		
0.55	1.26	3835	2530	11,731	47,871	108		
0.63	0.79	3735	2220	10,349	41,077	108		
0.65	1.46	3835	2170	10,082	49,145	108		
0.72	0.90	3735	1950	9,109	42,235	108		
0.80	1.00	3735	1760	8,201	43,082	108		
0.90	1.14	3735	1550	7,226	43,992	108		
0.97	1.22	3735	1450	6,763	44,425	108		
1.15	0.78	3635	1220	5,677	22,225	108		
1.11	1.40	3735	1260	5,866	45,262	108		
1.23	0.84	3635	1140	5,313	22,612	108		
1.24	1.54	3734	1130	5,343	45,750	108		
1.42	0.97	3635	988	4,608	23,360	108		
1.44	1.80	3734	970	4,575	46,467	108		
1.42	3.20	3834	983	4,617	53,369	108		
1.57	1.06	3634	890	4,197	23,797	108		
1.58	1.97	3734	885	4,172	46,843	108		
1.69	3.79	3834	829	3,895	53,928	108		
1.84	1.24	3634	762	3,594	24,437	108		
1.75	2.18	3734	801	3,779	47,210	108		
1.87	4	3834	747	3,508	54,227	108		
1.84	0.84	3535	763	3,616	15,797	108		
2.01	1.36	3634	695	3,277	24,774	108		
2.05	2.55	3734	684	3,223	47,728	108		
2.07	5	3834	676	3,176	54,483	108		
2.10	0.96	3535	667	3,164	16,320	108		
2.22	1.50	3634	630	2,969	25,101	108		
2.30	2.87	3734	608	2,865	48,063	108		
2.25	5	3834	623	2,926	54,676	108		
2.38	1.09	3535	587	2,784	14,365	108	4.26	1.12
2.61	1.76	3634	537	2,532	25,564	108		
2.56	3.19	3734	546	2,575	48,334	108		
2.61	6	3834	535	2,515	54,994	108		
2.80	1.27	3535	500	2,372	14,816	108	5.0	1.31
2.93	1.98	3634	477	2,251	25,863	108		
2.91	3.63	3734	481	2,266	48,622	108		
3.32	1.51	3535	421	1,997	15,225	108	5.93	1.56
3.26	2.20	3634	429	2,023	26,105	108		
3.23	4	3734	433	2,040	48,833	108		
3.32	0.86	3434	421	2,018	9,609	108	5.93	0.89
3.53	1.60	3535	397	1,882	15,351	108	6.3	1.65
3.71	2.50	3634	378	1,780	26,363	108		
3.67	5	3734	381	1,797	49,059	108		
3.78	0.98	3434	371	1,776	9,914	108	6.74	1.01
3.98	1.81	3535	352	1,668	15,585	108	7.11	1.87
4.12	2.78	3634	340	1,603	26,551	108		
3.92	5	3734	357	1,682	49,167	108		
4.70	1.22	3434	298	1,427	10,354	108	8.39	1.26
4.57	1.70	3534	306	1,468	15,804	108	8.16	1.76
4.67	3.15	3634	300	1,412	26,754	108		
4.52	6	3734	310	1,459	49,375	108		

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

Selection tables

Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>0.75 kW - 50 Hz</b>		<b>LSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/IE1 - LSES 80 LG FFB1 IFT/IE3</b>					<b>1.31 kW - 87 Hz*</b>	
4.99	1.30	3434	281	1,344	10,458	108	8.91	1.33
5.10	1.90	3534	274	1,315	15,970	108	9.11	1.96
4.99	3.37	3634	280	1,321	26,850	108		
5.15	6	3734	272	1,279	49,543	108		
5.63	1.46	3434	249	1,191	10,650	108	10.05	1.51
5.96	1.56	3433	235	1,127	10,731	91	10.63	1.6
5.83	2.17	3534	240	1,151	16,150	108	10.41	2.24
6.59	1.73	3433	212	1,019	10,868	91	11.77	1.77
7.29	0.85	3333	192	926	6,277	89	13.02	0.88
7.37	1.93	3433	190	912	11,003	91	13.15	1.97
8.20	0.95	3333	171	823	6,429	89	14.64	0.99
8.48	2.22	3433	165	792	11,154	91	15.15	2.27
9.12	1.06	3333	153	740	6,553	89	16.29	1.1
9.59	2.50	3433	146	700	11,269	91	17.12	2.55
10.4	1.20	3333	135	651	6,684	89	18.51	1.25
10.4	2.72	3433	134	644	11,340	91	18.62	2.78
11.5	1.33	3333	122	586	6,780	89	20.56	1.38
11.8	3.07	3433	119	569	11,434	91	21.08	3.13
12.3	0.79	3233	113	547	2,752	87		
13.1	1.50	3333	107	516	6,883	89	23.33	1.57
13.3	3.44	3433	106	507	11,513	91	23.65	3.47
14.1	0.90	3233	99.3	478	2,870	87	25.19	0.78
14.0	1.60	3333	100	483	6,932	89	24.93	1.67
14.8	3.83	3433	94.8	455	11,578	91	26.36	3.8
14.9	0.95	3233	93.8	452	2,915	87	26.64	0.81
16.1	1.83	3333	87	419	7,027	89	28.74	1.86
16.0	4	3433	87.3	419	11,624	91	28.64	4.06
17.7	1.07	3233	79	381	3,039	87	31.64	0.9
18.3	2.08	3333	76.3	368	7,103	89	32.75	2.12
18.1	5	3433	77.5	372	11,683	91	32.25	4.43
18.8	1.12	3233	74.5	359	3,077	87	33.57	0.93
20.7	5	3433	67.5	324	11,743	91	37.02	4.88
21.2	1.22	3233	66	318	3,148	87	37.88	1.0
25.1	0.88	3132	55.8	272	3,883	85	44.83	0.9
24.2	1.32	3233	57.8	278	3,217	87	43.29	1.09
25.8	2.91	3332	54.3	265	7,256	89	46.03	3.06
27.6	0.96	3132	50.8	247	3,926	85	49.22	0.98
27.6	1.43	3233	50.8	245	3,275	87	49.19	1.18
28.5	3.21	3332	49.1	239	7,294	89	50.95	3.38
28.4	7	3432	49.3	239	11,850	91	50.74	6.74
31.9	1.11	3132	43.9	214	3,986	85	56.98	1.13
31.9	3.58	3332	43.9	214	7,331	89	56.93	3.76
33.7	8	3432	41.6	201	11,897	91	60.14	7.57
35.8	1.25	3132	39.1	191	4,028	85	63.9	1.26
36.7	4	3332	38.1	186	7,372	89	65.56	4.31
37.4	9	3432	37.4	181	11,922	91	66.78	8.12
39.9	1.39	3132	35.1	171	4,063	85	71.32	1.41
36.0	2.42	3232	38.9	189	3,371	87	64.32	2.49
41.5	5	3332	33.7	164	7,245	89	74.09	4.62
41.3	10	3432	33.9	164	11,944	91	73.76	8.67
45.6	1.58	3132	30.7	149	4,101	85	81.5	1.6
42.1	2.82	3232	33.3	162	3,418	87	75.11	2.84
45.1	5	3332	31	151	7,071	89	80.6	5.01
44.8	11	3432	31.2	151	11,960	91	80.06	9.14
48.3	1.67	3132	29	141	4,116	85	86.21	1.69
46.1	3.09	3232	30.4	148	3,443	87	82.36	3.07
51.1	6	3332	27.4	133	6,859	89	91.23	5.93
52.2	12	3432	26.8	130	11,987	91	93.15	10.09

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>0.75 kW - 50 Hz</b>		<b>LSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3</b>					<b>1.31 kW - 87 Hz*</b>	
57.3	1.97	3132	24.4	119	4,155	85	102.37	1.99
50.9	3.42	3232	27.5	134	3,467	87	90.91	3.31
57.3	6	3332	24.4	119	6,644	89	102.39	6.62
60.8	2.09	3132	23	112	4,168	85	108.64	2.11
59.7	4	3232	23.5	114	3,501	87	106.56	3.7
63.9	7	3332	21.9	107	6,438	89	114.11	6.99
68.6	2.35	3132	20.4	99	4,190	85	122.58	2.37
67.1	5	3232	20.9	102	3,523	87	119.88	4.03
69.4	8	3332	20.2	98	6,287	89	123.95	7.95
78.5	2.67	3132	17.8	87	4,148	85	140.09	2.7
74.7	5	3232	18.7	91	3,541	87	133.38	4.32
78.2	9	3332	17.9	87	6,070	89	139.58	8.9
89.2	3.02	3132	15.7	76	4,023	85	159.19	3.05
84.9	5	3232	16.5	80	3,560	87	151.52	4.72
89.7	10	3332	15.6	76	5,840	89	160.26	10.15
94.2	6	3232	14.9	72	3,574	87	168.28	5.08
107	6	3232	13.1	64	3,589	87	190.99	5.54
129	4	3132	10.9	53	3,646	85	229.89	4.1
114	7	3232	12.3	60	3,596	87	204.08	5.81
136	3.54	3132	10.3	50	3,598	85	242.31	3.07
132	7	3232	10.6	52	3,610	87	235.24	6.39
150	8	3232	9.32	45	3,621	87	268.12	7.02

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

Selection tables

Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>0.9 kW - 50 Hz</b>		<b>LSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3</b>					<b>1.57 kW - 87 Hz*</b>	
0.42	0.80	3835	3360	18,478	42,656	108		
0.47	0.89	3835	3030	16,641	44,076	108		
0.52	0.98	3835	2740	15,066	45,293	108		
0.56	1.06	3835	2530	13,881	46,209	108		
0.66	1.24	3835	2170	11,930	47,717	108		
0.81	0.85	3735	1760	9,697	41,686	108		
0.92	0.96	3735	1550	8,544	42,762	108		
0.98	1.03	3735	1450	7,996	43,273	108		
1.13	1.19	3735	1260	6,936	44,263	108		
1.26	1.30	3734	1130	6,317	44,840	108		
1.44	0.82	3635	988	5,449	22,468	108		
1.47	1.52	3734	970	5,410	45,687	108		
1.45	2.70	3834	983	5,463	52,716	108		
1.60	0.90	3634	890	4,963	22,984	108		
1.61	1.67	3734	885	4,933	46,133	108		
1.72	3.20	3834	829	4,609	53,376	108		
1.87	1.05	3634	762	4,250	23,741	108		
1.78	1.84	3734	801	4,469	46,566	108		
1.91	3.56	3834	747	4,150	53,730	108		
2.05	1.15	3634	695	3,875	24,139	108		
2.08	2.16	3734	684	3,812	47,179	108		
2.11	3.93	3834	676	3,757	54,034	108		
2.14	0.81	3535	667	3,738	13,322	108	3.73	0.81
2.26	1.27	3634	630	3,511	24,526	108		
2.34	2.43	3734	608	3,388	47,574	108		
2.29	4	3834	623	3,462	54,262	108		
2.43	0.92	3535	587	3,290	13,812	108	4.24	0.92
2.65	1.49	3634	537	2,994	25,074	108		
2.61	2.70	3734	546	3,045	47,895	108		
2.66	5	3834	535	2,975	54,638	108		
2.85	1.08	3535	500	2,802	14,345	108	4.98	1.08
2.98	1.67	3634	477	2,662	25,427	108		
2.96	3.07	3734	481	2,680	48,236	108		
3.38	1.28	3535	421	2,360	14,829	108	5.91	1.28
3.32	1.86	3634	429	2,392	25,713	108		
3.29	3.41	3734	433	2,413	48,485	108		
3.59	1.36	3535	397	2,223	14,977	108	6.27	1.36
3.77	2.12	3634	378	2,105	26,018	108		
3.74	3.87	3734	381	2,126	48,753	108		
3.84	0.83	3434	371	2,098	9,508	108	6.72	0.83
4.05	1.53	3535	352	1,971	15,254	108	7.08	1.54
4.19	2.35	3634	340	1,896	26,240	108		
3.99	4	3734	357	1,989	48,881	108		
4.78	1.03	3434	298	1,686	10,028	108	8.36	1.03
4.65	1.44	3534	306	1,734	15,513	108	8.13	1.44
4.76	2.67	3634	300	1,670	26,480	108		
4.60	5	3734	310	1,725	49,127	108		
5.08	1.10	3434	281	1,588	10,150	108	8.87	1.10
5.19	1.61	3534	274	1,554	15,710	108	9.07	1.61
5.08	2.85	3634	280	1,562	26,594	108		
5.24	5	3734	272	1,513	49,325	108		
5.73	1.24	3434	249	1,408	10,378	108	10.0	1.24
6.06	1.32	3433	235	1,334	10,471	91	10.6	1.31
5.93	1.84	3534	240	1,359	15,922	108	10.4	1.84
6.71	1.46	3433	212	1,205	10,633	91	11.7	1.45
7.50	1.63	3433	190	1,079	10,792	91	13.1	1.62

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>0.9 kW - 50 Hz</b>		<b>LSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3</b>					<b>1.57 kW - 87 Hz*</b>	
8.35	0.80	3333	171	973	6,207	89	14.6	0.82
8.63	1.87	3433	165	937	10,971	91	15.1	1.86
9.29	0.89	3333	153	874	6,353	89	16.2	0.91
9.76	2.11	3433	146	829	11,107	91	17.1	2.10
10.6	1.01	3333	135	770	6,508	89	18.4	1.03
10.6	2.30	3433	134	762	11,191	91	18.6	2.28
11.7	1.12	3333	122	693	6,622	89	20.5	1.14
12.0	2.59	3433	119	673	11,303	91	21.0	2.57
13.3	1.27	3333	107	611	6,743	89	23.2	1.29
13.5	2.91	3433	106	600	11,396	91	23.6	2.85
14.2	1.35	3333	100	571	6,801	89	24.8	1.37
15.0	3.23	3433	94.8	538	11,473	91	26.3	3.12
15.2	0.80	3233	93.8	535	2,772	87		
16.4	1.55	3333	87	496	6,913	89	28.6	1.53
16.3	3.51	3433	87.3	495	11,527	91	28.5	3.34
18.0	0.91	3233	79	450	2,919	87		
18.7	1.76	3333	76.3	435	7,003	89	32.6	1.74
18.4	3.94	3433	77.5	440	11,597	91	32.1	3.64
19.1	0.94	3233	74.5	424	2,964	87		
21.1	5	3433	67.5	383	11,668	91	36.9	4
21.6	1.02	3233	66	376	3,047	87	37.7	0.83
24.7	1.11	3233	57.8	329	3,129	87	43.1	0.90
26.2	2.45	3332	54.3	313	7,184	89	45.9	2.52
28.1	0.82	3132	50.8	292	3,846	85	49.0	0.81
28.0	1.20	3233	50.8	290	3,197	87	49.0	0.97
29.0	2.71	3332	49.1	283	7,229	89	50.8	2.78
28.9	6	3432	49.3	283	11,795	91	50.5	6
32.5	0.94	3132	43.9	253	3,917	85	56.8	0.93
32.5	3.02	3332	43.9	253	7,273	89	56.7	3.09
34.3	7	3432	41.6	238	11,851	91	59.9	6
36.4	1.05	3132	39.1	225	3,966	85	63.6	1.04
37.4	3.46	3332	38.1	220	7,322	89	65.3	3.54
38.1	8	3432	37.4	215	11,881	91	66.5	7
40.7	1.17	3132	35.1	202	4,007	85	71.0	1.16
36.7	2.04	3232	38.9	224	3,311	87	64.1	2.05
42.2	3.86	3332	33.7	194	7,117	89	73.8	3.8
42.0	8	3432	33.9	194	11,906	91	73.5	7
46.5	1.33	3132	30.7	177	4,052	85	81.2	1.32
42.8	2.39	3232	33.3	192	3,367	87	74.8	2.34
45.9	4	3332	31	179	6,964	89	80.3	4
45.6	9	3432	31.2	179	11,925	91	79.7	8
49.1	1.41	3132	29	167	4,070	85	85.9	1.39
46.9	2.62	3232	30.4	175	3,396	87	82.0	2.53
52.0	5	3332	27.4	158	6,746	89	90.9	5
53.1	10	3432	26.8	154	11,957	91	92.8	8
58.4	1.67	3132	24.4	141	4,117	85	102	1.64
51.8	2.89	3232	27.5	158	3,425	87	90.6	2.73
58.4	5	3332	24.4	141	6,542	89	102	5
61.9	1.77	3132	23	133	4,131	85	108	1.74
60.7	3.39	3232	23.5	135	3,465	87	106	3.05
65.0	6	3332	21.9	126	6,350	89	114	6
69.9	1.98	3132	20.4	117	4,158	85	122	1.95
68.3	3.81	3232	20.9	120	3,491	87	119	3.31
70.7	6	3332	20.2	116	6,223	89	123	7
79.9	2.26	3132	17.8	103	4,048	85	140	2.22
76.0	4	3232	18.7	108	3,512	87	133	3.55
79.6	7	3332	17.9	103	6,013	89	139	7

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox						LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	
<b>0.9 kW - 50 Hz</b>		LSES 80 LG IFT/IE2 - LSES 80 LG IFT/IE3 LS 80 L FFB1 IFT/NIE - LSES 80 LG FFB1 IFT/IE3						<b>1.57 kW - 87 Hz*</b>	
90.7	2.56	3132	15.7	90	3,934	85	159	2.50	
86.4	5	3232	16.5	95	3,535	87	151	3.88	
91.4	8	3332	15.6	90	5,775	89	160	8	
95.9	5	3232	14.9	86	3,551	87	168	4	
109	5.37	3232	13.1	75	3,569	87	190	5	
131	3.64	3132	10.9	63	3,589	85	229	3.38	
116	6	3232	12.3	71	3,577	87	203	5	
138	2.98	3132	10.3	59	3,547	85	241	2.52	
134	6	3232	10.6	61	3,593	87	234	5	
153	7	3232	9.32	54	3,606	87	267	6	

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



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>1.1 kW - 50 Hz</b>		<b>LSES 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3</b>					<b>1.91 kW - 87 Hz*</b>	
0.52	0.80	3835	2740	18,482	42,653	108		
0.56	0.87	3835	2530	17,028	43,776	108		
0.66	1.01	3835	2170	14,635	45,626	108		
0.70	1.08	3835	2020	13,637	46,397	108		
0.8	1.24	3835	1770	11,942	47,708	108		
0.92	0.79	3735	1550	10,474	40,960	108		
0.91	1.40	3835	1570	10,555	48,780	108		
0.98	0.84	3735	1450	9,802	41,588	108		
1.02	1.57	3835	1390	9,399	49,673	108		
1.13	0.97	3735	1260	8,503	42,800	108		
1.14	1.75	3835	1250	8,421	50,429	108		
1.33	2.05	3835	1070	7,206	51,368	108		
1.47	1.24	3734	970	6,632	44,547	108		
1.45	2.20	3834	983	6,701	51,758	108		
1.61	1.36	3734	885	6,047	45,093	108		
1.72	2.61	3834	829	5,653	52,568	108		
1.87	0.85	3634	762	5,210	22,721	108		
1.78	1.50	3734	801	5,478	45,624	108		
1.91	2.90	3834	747	5,091	53,003	108		
2.05	0.94	3634	695	4,751	23,209	108		
2.08	1.76	3734	684	4,673	46,375	108		
2.11	3.20	3834	676	4,609	53,375	108		
2.26	1.03	3634	630	4,304	23,684	108		
2.34	1.98	3734	608	4,154	46,860	108		
2.29	3.48	3834	623	4,247	53,655	108		
2.65	1.21	3634	537	3,671	24,355	108		
2.61	2.20	3734	546	3,733	47,253	108		
2.66	4	3834	535	3,650	54,117	108		
2.98	1.36	3634	477	3,263	24,788	108		
2.96	2.50	3734	481	3,286	47,670	108		
2.86	4	3834	499	3,401	54,309	108		
3.38	1.04	3535	421	2,890	14,249	108	5.99	1.07
3.32	1.52	3634	429	2,933	25,139	108		
3.29	2.78	3734	433	2,958	47,976	108		
3.26	5	3834	437	2,978	54,636	108		
3.59	1.11	3535	397	2,724	14,431	108	6.36	1.14
3.77	1.73	3634	378	2,581	25,512	108		
3.74	3.16	3734	381	2,606	48,304	108		
3.69	6	3834	386	2,632	54,903	108		
4.05	1.25	3535	352	2,414	14,769	108	7.18	1.28
4.19	1.92	3634	340	2,324	25,786	108		
3.99	3.37	3734	357	2,439	48,461	108		
4.14	6	3834	344	2,344	55,126	108		
4.78	0.84	3434	298	2,065	9,550	108	8.48	0.87
4.65	1.18	3534	306	2,124	15,086	108	8.24	1.21
4.76	2.18	3634	300	2,047	26,079	108		
4.60	3.89	3734	310	2,115	48,763	108		
4.62	7	3834	308	2,100	55,315	108		
5.08	0.89	3434	281	1,946	9,700	108	9.00	0.92
5.19	1.31	3534	274	1,903	15,328	108	9.20	1.35
5.08	2.32	3634	280	1,916	26,219	108		
5.24	4	3734	272	1,855	49,005	108		
6.06	1.08	3433	235	1,637	10,090	91	10.7	1.10
5.93	1.50	3534	240	1,665	15,588	108	10.5	1.54
5.66	2.83	3633	252	1,749	26,396	95-101		
5.85	5	3733	244	1,692	49,158	97-103		

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

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>1.1 kW - 50 Hz</b>		<b>LSES 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3</b>					<b>1.91 kW - 87 Hz*</b>	
6.71	1.19	3433	212	1,478	10,289	91	11.9	1.21
6.63	1.77	3533	215	1,491	15,778	93	11.8	1.81
6.59	3.29	3633	216	1,501	26,659	95-101		
6.57	6	3733	217	1,506	49,332	97-103		
7.50	1.33	3433	190	1,323	10,484	91	13.3	1.35
7.73	2.05	3533	184	1,280	16,009	93	13.7	2.10
7.17	3.57	3633	199	1,380	26,788	95-101		
7.20	6	3733	198	1,373	49,455	97-103		
8.63	1.53	3433	165	1,149	10,704	91	15.3	1.55
8.41	2.23	3533	169	1,177	16,122	93	14.9	2.28
8.23	4	3633	173	1,202	26,977	95-101		
8.15	7	3733	175	1,214	49,604	97-103		
9.76	1.72	3433	146	1,017	10,870	91	17.3	1.75
9.65	2.55	3533	148	1,025	16,287	93	17.1	2.61
9.33	5	3633	153	1,060	27,127	95-101	16.5	5
10.6	0.82	3333	135	943	6,251	89	18.7	0.86
10.6	1.87	3433	134	935	10,974	91	18.8	1.90
10.9	2.89	3533	130	904	16,419	93	19.4	2.96
10.4	5	3633	137	951	27,243	95-101		
11.7	0.91	3333	122	849	6,390	89	20.8	0.95
12.0	2.12	3433	119	826	11,111	91	21.3	2.15
12.2	3.21	3533	117	811	16,521	93	21.6	3.29
11.7	6	3633	122	847	27,354	95-101		
13.3	1.03	3333	107	748	6,539	89	23.6	1.08
13.5	2.37	3433	106	736	11,224	91	23.9	2.38
13.7	3.60	3533	104	722	16,618	93	24.3	3.68
14.2	1.10	3333	100	700	6,610	89	25.2	1.15
15.0	2.64	3433	94.8	660	11,319	91	26.6	2.60
16.4	1.26	3333	87	608	6,748	89	29.0	1.28
16.3	2.86	3433	87.3	608	11,385	91	28.9	2.78
18.7	1.44	3333	76.3	533	6,858	89	33.1	1.45
18.4	3.21	3433	77.5	540	11,471	91	32.6	3.03
21.1	3.68	3433	67.5	470	11,559	91	37.4	3.34
21.6	0.84	3233	66	461	2,900	87		
24.7	0.91	3233	57.8	403	3,000	87		
26.2	2.00	3332	54.3	383	7,080	89	46.5	2.10
28.0	0.98	3233	50.8	355	3,084	87	49.7	0.81
29.0	2.21	3332	49.1	346	7,135	89	51.5	2.32
28.9	5	3432	49.3	347	11,714	91	51.2	5
29.7	13	3632	48.1	337	27,895	95-101		
31.7	1.06	3233	44.9	314	3,155	87	56.2	0.87
32.5	2.46	3332	43.9	310	7,189	89	57.5	2.58
34.3	6	3432	41.6	292	11,783	91	60.7	5
33.3	14	3632	42.8	300	27,934	95-101		
36.4	0.86	3132	39.1	276	3,875	85	64.5	0.87
35.8	1.14	3233	39.8	278	3,217	87	63.4	0.94
37.4	2.82	3332	38.1	269	7,067	89	66.2	2.96
38.1	6	3432	37.4	263	11,819	91	67.5	6
36.5	16	3632	39	274	27,962	95-101		
40.7	0.96	3132	35.1	247	3,926	85	72.0	0.97
40.5	1.23	3233	35.2	246	3,273	87	71.8	1.01
42.2	3.15	3332	33.7	238	6,878	89	74.8	3.17
42.0	7	3432	33.9	238	11,851	91	74.5	6
41.3	19	3632	34.5	242	27,996	95-101		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>1.1 kW - 50 Hz</b>		<b>LSES 90 SL IFT/IE2 - LSES 90 SL IFT/IE3 LS 90 SL FFB2 IFT/NIE - LSES 90 SL FFB2 IFT/IE3</b>					<b>1.91 kW - 87 Hz*</b>	
46.5	1.09	3132	30.7	216	3,981	85	82.3	1.10
42.8	1.95	3232	33.3	235	3,292	87	75.9	1.95
45.9	3.42	3332	31	219	6,745	89	81.4	3.44
45.6	7	3432	31.2	220	11,874	91	80.9	6
44.0	10	3532	32.4	227	14,445	93	77.9	10
49.1	1.15	3132	29	205	4,002	85	87.1	1.16
46.9	2.13	3232	30.4	214	3,328	87	83.2	2.10
52.0	3.89	3332	27.4	193	6,552	89	92.1	4
53.1	8	3432	26.8	189	11,913	91	94.1	7
51.2	11	3532	27.8	195	13,820	93	90.7	12
58.4	1.36	3132	24.4	172	4,060	85	103	1.37
51.8	2.36	3232	27.5	194	3,363	87	91.8	2.27
58.4	4	3332	24.4	172	6,376	89	103	5
57.0	8	3432	25	176	11,910	91	101	7
55.7	13	3532	25.6	179	13,480	93	98.7	14
61.9	1.44	3132	23	162	4,069	85	110	1.45
60.7	2.76	3232	23.5	166	3,412	87	108	2.53
65.0	5	3332	21.9	155	6,196	89	115	5
65.1	9	3432	21.9	154	11,479	91	115	8
63.9	14	3532	22.3	156	12,950	93	113	14
69.9	1.62	3132	20.4	144	3,983	85	124	1.63
68.3	3.11	3232	20.9	147	3,444	87	121	2.76
70.7	5	3332	20.2	142	6,067	89	125	5
73.6	10	3432	19.4	136	11,079	91	130	9
72.5	17	3532	19.7	138	12,472	93	128	18
79.9	1.84	3132	17.8	126	3,891	85	141	1.85
76.0	3.37	3232	18.7	132	3,470	87	135	2.96
79.6	6	3332	17.9	126	5,875	89	141	6
82.7	11	3432	17.2	121	10,708	91	146	9
80.8	19	3532	17.6	124	12,058	93	143	21
90.7	2.08	3132	15.7	111	3,783	85	161	2.09
86.4	3.71	3232	16.5	116	3,497	87	153	3.23
91.4	7	3332	15.6	110	5,658	89	162	7
92.3	11	3432	15.4	109	10,338	91	164	10
90.7	20	3532	15.7	110	11,630	93	161	21
103	2.35	3132	13.9	98	3,685	85	182	2.35
95.9	4	3232	14.9	105	3,518	87	170	3.48
108	13	3432	13.2	93	9,879	91	191	11
116	2.64	3132	12.3	87	3,588	85	205	2.57
109	4	3232	13.1	92	3,539	87	193	3.79
131	2.97	3132	10.9	77	3,483	85	232	2.81
116	5	3232	12.3	86	3,549	87	206	3.98
138	2.43	3132	10.3	73	3,437	85	245	2.10
134	5	3232	10.6	75	3,569	87	238	4
141	10	3332	10.1	71	5,007	89	250	10
155	2.60	3132	9.19	65	3,340	85	275	2.25
153	6	3232	9.32	66	3,585	87	271	5
163	12	3332	8.76	62	4,803	89	288	11
196	2.99	3132	7.28	51	3,149	85	347	2.59
201	14	3332	7.09	50	4,511	89	356	12
241	7	3232	5.91	42	3,627	87	427	6
289	8	3232	4.94	35	3,639	87	511	7

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

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>1.5 kW - 50 Hz</b>		<b>LSES 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3</b>					<b>2.61 kW - 87 Hz*</b>	
0.71	0.79	3835	2020	18,612	42,552	108		
0.81	0.91	3835	1770	16,298	44,341	108		
0.91	1.03	3835	1570	14,405	45,804	108		
1.03	1.15	3835	1390	12,828	47,023	108		
1.15	1.29	3835	1250	11,493	48,055	108		
1.34	1.50	3835	1070	9,835	49,336	108		
1.45	1.61	3834	983	9,146	49,869	108		
1.47	0.91	3734	970	9,044	42,295	108		
1.62	1.00	3734	885	8,247	43,039	108		
1.72	1.91	3834	829	7,716	50,974	108		
1.78	1.10	3734	801	7,471	43,764	108		
1.91	2.13	3834	747	6,949	51,567	108		
2.09	1.29	3734	684	6,373	44,788	108		
2.11	2.35	3834	676	6,291	52,075	108		
2.35	1.45	3734	608	5,665	45,449	108		
2.30	2.55	3834	623	5,796	52,458	108		
2.66	0.89	3634	537	5,007	22,937	108		
2.62	1.62	3734	546	5,091	45,985	108		
2.67	2.96	3834	535	4,982	53,088	108		
3.00	1.00	3634	477	4,450	23,528	108		
2.97	1.84	3734	481	4,481	46,554	108		
2.87	3.18	3834	499	4,642	53,350	108		
3.33	1.11	3634	429	4,000	24,006	108		
3.30	2.04	3734	433	4,035	46,971	108		
3.27	3.63	3834	437	4,065	53,796	108		
3.60	0.81	3535	397	3,711	13,352	108	6.35	0.83
3.79	1.27	3634	378	3,520	24,515	108		
3.75	2.31	3734	381	3,555	47,419	108		
3.70	4	3834	386	3,593	54,161	108		
4.06	0.92	3535	352	3,289	13,813	108	7.16	0.93
4.20	1.41	3634	340	3,170	24,888	108		
4.01	2.47	3734	357	3,326	47,632	108		
4.16	5	3834	344	3,199	54,465	108		
4.67	0.86	3534	306	2,894	14,245	108	8.23	0.88
4.77	1.59	3634	300	2,793	25,288	108		
4.62	2.85	3734	310	2,885	48,044	108		
4.64	5	3834	308	2,866	54,722	108		
5.21	0.96	3534	274	2,593	14,574	108	9.18	0.98
5.10	1.70	3634	280	2,613	25,478	108		
5.26	3.25	3734	272	2,531	48,374	108		
6.08	0.79	3433	235	2,234	9,338	91	10.7	0.80
5.95	1.10	3534	240	2,269	14,928	108	10.5	1.12
5.68	2.07	3633	252	2,388	25,717	95-101		
5.87	3.67	3733	244	2,311	48,580	97-103		
5.42	6	3834	264	2,453	55,042	108		
6.73	0.87	3433	212	2,018	9,610	91	11.9	0.88
6.66	1.29	3533	215	2,037	15,182	93	11.7	1.31
6.61	2.41	3633	216	2,050	26,076	95-101		
6.59	4	3733	217	2,057	48,817	97-103		
7.52	0.97	3433	190	1,806	9,877	91	13.3	0.98
7.76	1.50	3533	184	1,748	15,497	93	13.7	1.53
7.19	2.62	3633	199	1,885	26,252	95-101		
7.23	5	3733	198	1,876	48,986	97-103		
8.66	1.12	3433	165	1,568	10,176	91	15.3	1.13
8.44	1.63	3533	169	1,607	15,651	93	14.9	1.66
8.26	3.00	3633	173	1,642	26,510	95-101		
8.18	5	3733	175	1,658	49,189	97-103		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>1.5 kW - 50 Hz</b>		<b>LSES 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3</b>					<b>2.61 kW - 87 Hz*</b>	
9.79	1.26	3433	146	1,388	10,403	91	17.3	1.27
9.68	1.87	3533	148	1,400	15,877	93	17.1	1.9
9.36	3.39	3633	153	1,448	26,716	95-101		
10.7	1.37	3433	134	1,276	10,544	91	18.8	1.38
11.0	2.12	3533	130	1,235	16,058	93	19.4	2.14
10.4	3.77	3633	137	1,300	26,873	95-101		
12.1	1.55	3433	119	1,127	10,732	91	21.3	1.56
12.2	2.35	3533	117	1,108	16,196	93	21.6	2.38
11.7	4	3633	122	1,157	27,025	95-101		
13.5	1.74	3433	106	1,004	10,886	91	23.8	1.73
13.7	2.64	3533	104	987	16,329	93	24.2	2.67
14.3	0.81	3333	100	955	6,234	89	25.1	0.83
15.1	1.93	3433	94.8	901	11,016	91	26.6	1.89
16.4	0.93	3333	87	829	6,421	89	29.0	0.93
16.4	2.09	3433	87.3	829	11,106	91	28.9	2.02
18.7	1.05	3333	76.3	727	6,571	89	33.0	1.06
18.4	2.35	3433	77.5	737	11,223	91	32.5	2.20
21.2	2.69	3433	67.5	642	11,343	91	37.3	2.43
26.3	1.47	3332	54.3	523	6,874	89	46.4	1.53
29.1	1.62	3332	49.1	472	6,863	89	51.4	1.69
29.0	3.63	3432	49.3	473	11,555	91	51.1	3.35
29.8	10	3632	48.1	460	27,764	95-101		
32.6	1.80	3332	43.9	423	6,762	89	57.4	1.88
34.4	4	3432	41.6	399	11,648	91	60.6	3.76
33.4	10	3632	42.8	410	27,818	95-101		
35.9	0.83	3233	39.8	379	3,042	87		
37.5	2.07	3332	38.1	367	6,620	89	66.1	2.15
38.2	5	3432	37.4	359	11,698	91	67.3	4.0
36.7	12	3632	39	374	27,856	95-101		
40.6	0.90	3233	35.2	335	3,118	87		
42.4	2.31	3332	33.7	325	6,481	89	74.7	2.31
42.2	5	3432	33.9	325	11,741	91	74.4	4
41.5	14	3632	34.5	330	27,902	95-101		
46.6	0.80	3132	30.7	295	3,750	85	82.2	0.80
43.0	1.43	3232	33.3	320	3,144	87	75.7	1.42
46.1	2.51	3332	31	299	6,382	89	81.2	2.50
45.8	5	3432	31.2	300	11,773	91	80.7	5
44.1	7	3532	32.4	311	14,102	93	77.7	7
49.3	0.84	3132	29	279	3,748	85	86.9	0.84
47.1	1.57	3232	30.4	292	3,193	87	83.0	1.53
52.2	2.85	3332	27.4	264	6,227	89	92.0	2.96
53.3	6	3432	26.8	258	11,813	91	93.9	5
51.4	8	3532	27.8	267	13,519	93	90.6	9
58.6	1.00	3132	24.4	235	3,721	85	103	0.99
52.0	1.73	3232	27.5	265	3,241	87	91.6	1.65
58.6	3.19	3332	24.4	235	6,085	89	103	3.30
57.2	6	3432	25	240	11,589	91	101	5
55.9	9	3532	25.6	245	13,210	93	98.5	10
62.1	1.06	3132	23	221	3,697	85	110	1.05
61.0	2.03	3232	23.5	226	3,308	87	107	1.84
65.3	3.51	3332	21.9	211	5,938	89	115	3.49
65.3	7	3432	21.9	210	11,198	91	115	6
64.2	11	3532	22.3	214	12,704	93	113	10
70.1	1.19	3132	20.4	196	3,656	85	124	1.18
68.6	2.28	3232	20.9	201	3,351	87	121	2.01
70.9	3.83	3332	20.2	194	5,827	89	125	3.97
73.9	7	3432	19.4	186	10,828	91	130	6
72.8	12	3532	19.7	188	12,260	93	128	13

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>1.5 kW - 50 Hz</b>		<b>LSES 90 L IFT/IE2 - LSES 90 LU IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 90 LU FFB2 IFT/IE3</b>					<b>2.61 kW - 87 Hz*</b>	
80.1	1.35	3132	17.8	172	3,602	85	141	1.34
76.3	2.47	3232	18.7	180	3,387	87	134	2.15
79.8	4	3332	17.9	172	5,664	89	141	4
83.0	8	3432	17.2	165	10,487	91	146	7
81.1	14	3532	17.6	169	11,867	93	143	16
91.1	1.53	3132	15.7	151	3,540	85	160	1.52
86.7	2.72	3232	16.5	159	3,424	87	153	2.35
91.7	5	3332	15.6	150	5,473	89	162	5
92.6	8	3432	15.4	148	10,165	91	163	7
91.1	15	3532	15.7	150	11,485	93	160	15
103	1.72	3132	13.9	134	3,459	85	182	1.71
96.3	2.94	3232	14.9	143	3,451	87	170	2.53
108	9	3432	13.2	127	9,708	91	191	8
116	1.93	3132	12.3	118	3,392	85	205	1.87
109	3.21	3232	13.1	126	3,481	87	193	2.76
131	2.18	3132	10.9	105	3,307	85	232	2.04
117	3.37	3232	12.3	118	3,495	87	206	2.89
139	1.78	3132	10.3	99	3,279	85	244	1.53
135	3.70	3232	10.6	102	3,522	87	237	3.18
142	7	3332	10.1	97	4,894	89	249	7.61
156	1.91	3132	9.19	88	3,200	85	274	1.64
153	4	3232	9.32	90	3,544	87	270	3.49
163	8	3332	8.76	84	4,701	89	288	8
196	2.19	3132	7.28	70	3,033	85	346	1.88
202	10	3332	7.09	68	4,433	89	355	9
242	5	3232	5.91	57	3,601	87	426	5
261	12	3332	5.49	53	4,112	89	459	11
290	6	3232	4.94	48	3,617	87	510	5
365	6	3232	3.92	38	3,634	87	643	5

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>1.8 kW - 50 Hz</b>		<b>LSES 90 LU IFT/IE2 - LSES 100 L IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 100 L FFB2 IFT/IE3</b>					<b>3.13 kW - 87 Hz*</b>	
0.92	0.86	3835	1570	17,260	43,597	108		
1.03	0.96	3835	1390	15,370	45,058	108		
1.15	1.07	3835	1250	13,770	46,295	108		
1.34	1.25	3835	1070	11,785	47,829	108		
1.46	1.35	3834	983	10,959	48,468	108		
1.62	0.83	3734	885	9,878	41,517	108		
1.73	1.60	3834	829	9,245	49,792	108		
1.79	0.92	3734	801	8,949	42,384	108		
1.92	1.77	3834	747	8,326	50,503	108		
2.10	1.08	3734	684	7,634	43,612	108		
2.12	1.96	3834	676	7,538	51,112	108		
2.36	1.21	3734	608	6,785	44,403	108		
2.30	2.13	3834	623	6,945	51,570	108		
2.63	1.35	3734	546	6,098	45,045	108		
2.68	2.47	3834	535	5,969	52,324	108		
3.01	0.84	3634	477	5,331	22,593	108		
2.98	1.53	3734	481	5,368	45,727	108		
2.88	2.66	3834	499	5,562	52,639	108		
3.34	0.93	3634	429	4,791	23,166	108		
3.31	1.70	3734	433	4,833	46,226	108		
3.28	3.03	3834	437	4,871	53,173	108		
3.80	1.06	3634	378	4,217	23,776	108		
3.76	1.93	3734	381	4,258	46,762	108		
3.72	3.43	3834	386	4,305	53,611	108		
4.22	1.17	3634	340	3,797	24,222	108		
4.02	2.06	3734	357	3,985	47,018	108		
4.17	3.85	3834	344	3,833	53,975	108		
4.79	1.33	3634	300	3,345	24,701	108		
4.63	2.38	3734	310	3,457	47,511	108		
4.66	4	3834	308	3,434	54,283	108		
5.23	0.81	3534	274	3,104	16,389	108		
5.12	1.42	3634	280	3,130	24,929	108		
5.28	2.71	3734	272	3,032	47,907	108		
5.98	0.92	3534	240	2,716	14,439	108	10.5	0.93
5.70	1.73	3633	252	2,863	25,214	95-101		
5.89	3.06	3733	244	2,770	48,152	97-103		
5.44	5	3834	264	2,939	54,666	108		
6.68	1.08	3533	215	2,441	14,739	93	11.8	1.09
6.64	2.01	3633	216	2,457	25,644	95-101		
6.62	3.44	3733	217	2,465	48,436	97-103		
7.55	0.81	3433	190	2,164	9,426	91	13.3	0.82
7.78	1.25	3533	184	2,095	15,117	93	13.7	1.27
7.22	2.18	3633	199	2,259	25,855	95-101		
7.25	3.76	3733	198	2,248	48,638	97-103		
8.69	0.93	3433	165	1,879	9,784	91	15.3	0.94
8.47	1.36	3533	169	1,926	15,302	93	14.9	1.38
8.29	2.50	3633	173	1,968	26,163	95-101		
8.20	4	3733	175	1,988	48,882	97-103		
9.83	1.05	3433	146	1,663	10,057	91	17.3	1.06
9.72	1.56	3533	148	1,678	15,573	93	17.1	1.58
9.40	2.83	3633	153	1,735	26,410	95-101		
10.7	1.15	3433	134	1,528	10,226	91	18.8	1.15
11.0	1.76	3533	130	1,480	15,790	93	19.4	1.78
10.5	3.15	3633	137	1,558	26,599	95-101		
12.1	1.29	3433	119	1,350	10,450	91	21.3	1.30
12.3	1.96	3533	117	1,328	15,956	93	21.7	1.98
11.8	3.53	3633	122	1,387	26,781	95-101		

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



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>1.8 kW - 50 Hz</b>		<b>LSES 90 LU IFT/IE2 - LSES 100 L IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 100 L FFB2 IFT/IE3</b>					<b>3.13 kW - 87 Hz*</b>	
13.6	1.45	3433	106	1,203	10,636	91	23.9	1.44
13.8	2.20	3533	104	1,182	16,115	93	24.3	2.22
15.1	1.61	3433	94.8	1,080	10,791	91	26.7	1.57
16.4	1.75	3433	87.3	994	10,899	91	29.0	1.68
18.8	0.88	3333	76.3	871	6,358	89	33.2	0.88
18.5	1.96	3433	77.5	883	11,039	91	32.6	1.83
21.3	2.25	3433	67.5	769	11,183	91	37.5	2.02
26.4	1.22	3332	54.3	626	6,453	89	46.6	1.27
29.3	1.35	3332	49.1	566	6,417	89	51.6	1.40
29.1	3.03	3432	49.3	567	11,437	91	51.3	2.78
29.9	8	3632	48.1	552	27,667	95-101		
32.7	1.51	3332	43.9	506	6,369	89	57.6	1.56
34.5	3.57	3432	41.6	478	11,549	91	60.9	3.12
33.6	9	3632	42.8	491	27,732	95-101		
37.6	1.73	3332	38.1	440	6,270	89	66.4	1.79
38.3	3.87	3432	37.4	431	11,609	91	67.6	3.35
36.8	10	3632	39	448	27,777	95-101		
42.5	1.93	3332	33.7	389	6,175	89	75.0	1.92
42.3	4.16	3432	33.9	390	11,660	91	74.7	3.58
41.6	11	3632	34.5	396	27,833	95-101		
43.1	1.19	3232	33.3	384	3,034	87	76.0	1.18
46.3	2.09	3332	31	358	6,097	89	81.6	2.08
46.0	4	3432	31.2	359	11,699	91	81.0	3.77
44.3	6	3532	32.4	372	13,824	93	78.0	6
47.3	1.31	3232	30.4	350	3,093	87	83.3	1.27
52.4	2.38	3332	27.4	316	5,979	89	92.3	2.46
53.5	5	3432	26.8	309	11,538	91	94.3	4
51.6	7	3532	27.8	320	13,278	93	90.9	7
58.8	0.83	3132	24.4	281	3,415	85	104	0.83
52.2	1.44	3232	27.5	317	3,150	87	92.0	1.37
58.8	2.66	3332	24.4	281	5,851	89	104	2.75
57.4	5	3432	25	288	11,347	91	101	4
56.1	8	3532	25.6	294	12,983	93	98.9	8
62.4	0.88	3132	23	265	3,420	85	110	0.88
61.2	1.69	3232	23.5	270	3,231	87	108	1.53
65.5	2.93	3332	21.9	253	5,744	89	115	2.91
65.5	6	3432	21.9	252	10,951	91	116	5
64.4	9	3532	22.3	256	12,485	93	114	9
70.4	0.99	3132	20.4	235	3,410	85	124	0.99
68.8	1.90	3232	20.9	240	3,283	87	121	1.67
71.2	3.20	3332	20.2	232	5,652	89	125	3
74.1	6	3432	19.4	223	10,612	91	131	5
73.0	10	3532	19.7	226	12,065	93	129	11
80.4	1.13	3132	17.8	206	3,376	85	142	1.12
76.6	2.06	3232	18.7	216	3,325	87	135	1.79
80.1	3.59	3332	17.9	206	5,507	89	141	3.70
83.3	6	3432	17.2	198	10,295	91	147	6
81.4	11	3532	17.6	203	11,723	93	143	13
91.4	1.28	3132	15.7	181	3,342	85	161	1.27
87.0	2.27	3232	16.5	190	3,370	87	153	1.95
92.0	4	3332	15.6	180	5,335	89	162	4
92.9	7	3432	15.4	178	9,992	91	164	6
91.4	12	3532	15.7	180	11,333	93	161	13
103	1.44	3132	13.9	160	3,294	85	182	1.42
96.6	2.46	3232	14.9	171	3,402	87	170	2.10
109	8	3432	13.2	152	9,583	91	191	6.57

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



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>1.8 kW - 50 Hz</b>		LSES 90 LU IFT/IE2 - LSES 100 L IFT/IE3 LS 90 L FFB2 IFT/NIE - LSES 100 L FFB2 IFT/IE3					<b>3.13 kW - 87 Hz*</b>	
117	1.61	3132	12.3	142	3,235	85	206	1.56
110	2.68	3232	13.1	151	3,438	87	193	2.29
132	1.82	3132	10.9	125	3,175	85	233	1.70
117	2.81	3232	12.3	141	3,455	87	207	2.40
139	1.48	3132	10.3	119	3,147	85	245	1.27
135	3.09	3232	10.6	123	3,487	87	238	2.65
142	6	3332	10.1	116	4,800	89	250	6
156	1.59	3132	9.19	106	3,082	85	275	1.36
154	3.39	3232	9.32	107	3,513	87	271	2.91
164	7	3332	8.76	101	4,617	89	289	7
197	1.83	3132	7.28	84	2,937	85	348	1.57
202	9	3332	7.09	82	4,359	89	357	8
243	4	3232	5.91	68	3,581	87	428	3.74
261	10	3332	5.49	63	4,060	89	461	9
291	5	3232	4.94	57	3,601	87	512	4
366	5	3232	3.92	45	3,621	87	646	4

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

Selection tables

Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>2.2 kW - 50 Hz</b>		<b>LSES 100 L IFT/IE2 - LSES 100 LR IFT/IE3 LS 100 L FFB2 IFT/NIE - LSES 100 LR FFB2 IFT/IE3</b>					<b>3.83 kW - 87 Hz*</b>	
1.03	0.78	3835	1390	18,820	42,392	108		
1.15	0.88	3835	1250	16,861	43,906	108		
1.34	1.02	3835	1070	14,430	45,785	108		
1.46	1.10	3834	983	13,419	46,566	108		
1.73	1.30	3834	829	11,320	48,188	108		
1.92	1.45	3834	747	10,195	49,058	108		
2.10	0.88	3734	684	9,344	42,015	108		
2.12	1.60	3834	676	9,230	49,804	108		
2.36	0.99	3734	608	8,306	42,984	108		
2.30	1.74	3834	623	8,504	50,365	108		
2.63	1.10	3734	546	7,465	43,769	108		
2.68	2.02	3834	535	7,309	51,289	108		
2.98	1.25	3734	481	6,571	44,604	108		
2.88	2.17	3834	499	6,811	51,674	108		
3.31	1.39	3734	433	5,916	45,215	108		
3.28	2.48	3834	437	5,964	52,328	108		
3.80	0.86	3634	378	5,162	22,772	108		
3.76	1.58	3734	381	5,213	45,872	108		
3.72	2.80	3834	386	5,271	52,864	108		
4.22	0.96	3634	340	4,648	23,318	108		
4.02	1.69	3734	357	4,878	46,184	108		
4.17	3.15	3834	344	4,694	53,310	108		
4.79	1.09	3634	300	4,095	23,905	108		
4.63	1.94	3734	310	4,231	46,787	108		
4.66	3.51	3834	308	4,205	53,688	108		
5.12	1.16	3634	280	3,832	24,184	108		
5.28	2.22	3734	272	3,712	47,272	108		
5.70	1.41	3633	252	3,506	24,530	95-101		
5.89	2.50	3733	244	3,393	47,570	97-103		
5.44	4	3834	264	3,599	54,156	108		
6.68	0.88	3533	215	2,990	14,140	93	11.8	0.90
6.64	1.64	3633	216	3,010	25,058	95-101		
6.62	2.81	3733	217	3,019	47,919	97-103		
7.78	1.02	3533	184	2,567	14,603	93	13.8	1.05
7.22	1.78	3633	199	2,767	25,315	95-101		
7.25	3.07	3733	198	2,754	48,166	97-103		
8.47	1.11	3533	169	2,359	14,829	93	15.0	1.13
8.29	2.04	3633	173	2,411	25,694	95-101		
8.20	3.47	3733	175	2,435	48,464	97-103		
9.83	0.86	3433	146	2,036	9,587	91	17.4	0.87
9.72	1.27	3533	148	2,056	15,161	93	17.2	1.30
9.40	2.31	3633	153	2,126	25,996	95-101		
9.11	3.84	3733	158	2,193	48,690	97-103		
10.7	0.94	3433	134	1,871	9,794	91	18.9	0.95
11.0	1.44	3533	130	1,813	15,426	93	19.5	1.47
10.5	2.57	3633	137	1,908	26,227	95-101		
10.2	4	3733	141	1,956	48,911	97-103		
12.1	1.06	3433	119	1,653	10,069	91	21.4	1.07
12.3	1.60	3533	117	1,627	15,629	93	21.7	1.63
11.8	2.88	3633	122	1,698	26,450	95-101		
11.1	5	3733	129	1,799	49,058	97-103		
13.6	1.18	3433	106	1,473	10,295	91	24.0	1.18
13.8	1.80	3533	104	1,448	15,825	93	24.4	1.83
12.8	3.14	3633	112	1,556	26,601	95-101		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>2.2 kW - 50 Hz</b>		<b>LSES 100 L IFT/IE2 - LSES 100 LR IFT/IE3 LS 100 L FFB2 IFT/NIE - LSES 100 LR FFB2 IFT/IE3</b>					<b>3.83 kW - 87 Hz*</b>	
15.1	1.32	3433	94.8	1,322	10,486	91	26.7	1.29
15.1	1.96	3533	95.3	1,327	15,957	93	26.6	1.99
14.9	3.62	3633	96.6	1,345	26,825	95-101		
16.4	1.43	3433	87.3	1,217	10,618	91	29.0	1.38
17.4	2.26	3533	82.4	1,147	16,128	93	30.8	2.30
16.4	4	3633	87.3	1,216	26,962	95-101		
18.5	1.60	3433	77.5	1,081	10,790	91	32.7	1.51
19.3	2.49	3533	74.5	1,037	15,914	93	34.0	2.53
20.8	0.79	3333	68.9	963	5,663	89	36.8	0.79
21.3	1.84	3433	67.5	941	10,965	91	37.5	1.66
23.5	0.89	3333	61	852	5,770	89	41.6	0.87
23.5	2.03	3433	61.1	852	11,078	91	41.5	1.78
25.1	0.96	3333	57.2	798	5,818	89	44.3	0.96
27.0	2.25	3433	53.2	742	11,216	91	47.6	1.96
29.7	1.13	3333	48.4	676	5,864	89	52.4	1.07
29.1	2.47	3432	49.3	694	11,277	91	51.5	2.29
29.9	7	3632	48.1	676	27,535	95-101		
32.7	1.23	3332	43.9	620	5,838	89	57.7	1.29
34.5	2.92	3432	41.6	585	11,414	91	61.0	2.57
33.6	7	3632	42.8	602	27,614	95-101		
37.6	1.41	3332	38.1	538	5,815	89	66.5	1.48
38.3	3.16	3432	37.4	527	11,487	91	67.7	2.76
36.8	8	3632	39	549	27,670	95-101		
42.5	1.58	3332	33.7	476	5,771	89	75.1	1.58
42.3	3.39	3432	33.9	477	11,550	91	74.8	2.95
41.6	9	3632	34.5	485	27,738	95-101		
46.3	1.71	3332	31	438	5,725	89	81.7	1.72
46.0	3.60	3432	31.2	440	11,548	91	81.2	3.11
44.3	5	3532	32.4	456	13,454	93	78.2	5
46.2	11	3632	31.1	437	27,789	95-101	81.6	11
52.4	1.94	3332	27.4	387	5,647	89	92.5	2.03
53.5	3.97	3432	26.8	378	11,181	91	94.5	3.43
51.6	6	3532	27.8	391	12,967	93	91.1	6
51.8	11	3632	27.7	390	27,839	95-101		
52.2	1.18	3232	27.5	388	3,027	87	92.2	1.13
58.8	2.17	3332	24.4	345	5,555	89	104	2.27
57.4	4	3432	25	352	11,025	91	101	4
56.1	6	3532	25.6	360	12,693	93	99.1	7
56.3	13	3632	25.5	358	27,873	95-101		
61.2	1.38	3232	23.5	331	3,126	87	108	1.26
65.5	2.39	3332	21.9	309	5,467	89	116	2.39
65.5	5	3432	21.9	308	10,669	91	116	3.92
64.4	7	3532	22.3	314	12,239	93	114	7
70.4	0.81	3132	20.4	288	3,076	85	124	0.81
68.8	1.55	3232	20.9	294	3,189	87	122	1.37
71.2	2.61	3332	20.2	285	5,389	89	126	2.72
74.1	5	3432	19.4	273	10,360	91	131	4
73.0	8	3532	19.7	276	11,853	93	129	9
80.4	0.92	3132	17.8	252	3,086	85	142	0.92
76.6	1.69	3232	18.7	264	3,241	87	135	1.47
80.1	2.93	3332	17.9	253	5,275	89	142	3.05
83.3	5	3432	17.2	243	10,068	91	147	5
81.4	9.28	3532	17.6	248	11,502	93	144	11

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

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### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>2.2 kW - 50 Hz</b>		<b>LSES 100 L IFT/IE2 - LSES 100 LR IFT/IE3 LS 100 L FFB2 IFT/NIE - LSES 100 LR FFB2 IFT/IE3</b>					<b>3.83 kW - 87 Hz*</b>	
91.4	1.04	3132	15.7	222	3,084	85	161	1.04
87.0	1.86	3232	16.5	233	3,296	87	154	1.61
92.0	3.35	3332	15.6	220	5,138	89	163	3.47
92.9	6	3432	15.4	218	9,790	91	164	5
91.4	10	3532	15.7	221	11,159	93	161	11
103	1.17	3132	13.9	196	3,061	85	183	1.17
96.6	2.01	3232	14.9	210	3,336	87	171	1.73
102	3.68	3332	14.1	199	5,035	89	180	3.82
109	6	3432	13.2	186	9,394	91	192	5
99.7	11	3532	14.4	202	10,885	93	176	13
117	1.32	3132	12.3	174	3,033	85	206	1.28
110	2.19	3232	13.1	185	3,379	87	194	1.89
117	4	3332	12.3	174	4,888	89	206	4
115	11	3532	12.4	175	10,437	93	204	11
132	1.48	3132	10.9	153	2,999	85	233	1.40
117	2.29	3232	12.3	173	3,400	87	207	1.98
128	13	3532	11.2	158	10,149	93	225	12
139	1.21	3132	10.3	146	2,972	85	246	1.05
135	2.52	3232	10.6	150	3,439	87	239	2.18
142	5	3332	10.1	143	4,669	89	251	5
156	1.30	3132	9.19	130	2,926	85	276	1.12
154	2.77	3232	9.32	132	3,471	87	272	2.39
164	6	3332	8.76	124	4,511	89	289	5
170	2.96	3232	8.42	119	3,493	87	301	2.56
197	1.49	3132	7.28	103	2,818	85	348	1.29
193	3.21	3232	7.45	105	3,517	87	340	2.77
202	7	3332	7.09	100	4,277	89	357	6
205	3.29	3232	6.99	99	3,528	87	363	2.84
243	3.57	3232	5.91	83	3,555	87	429	3.08
261	8	3332	5.49	77	3,992	89	462	7
291	3.84	3232	4.94	70	3,578	87	513	3.32
366	4	3232	3.92	55	3,603	87	647	3.68

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

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## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — — —> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>3 kW - 50 Hz</b>		<b>LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3</b>					<b>5.22 kW - 87 Hz*</b>	
1.46	0.81	3834	983	18,339	42,764	108		
1.73	0.95	3834	829	15,471	44,980	108		
1.92	1.06	3834	747	13,932	46,169	108		
2.12	1.17	3834	676	12,614	47,188	108		
2.30	1.27	3834	623	11,622	47,955	108		
2.63	0.81	3734	546	10,198	41,218	108		
2.68	1.48	3834	535	9,988	49,218	108		
2.98	0.92	3734	481	8,977	42,358	108		
2.88	1.59	3834	499	9,308	49,744	108		
3.31	1.02	3734	433	8,083	43,193	108		
3.28	1.81	3834	437	8,151	50,638	108		
3.76	1.15	3734	381	7,121	44,090	108		
3.72	2.05	3834	386	7,204	51,370	108		
4.02	1.23	3734	357	6,664	44,517	108		
4.17	2.30	3834	344	6,415	51,980	108		
4.79	0.80	3634	300	5,595	22,313	108		
4.63	1.42	3734	310	5,781	45,341	108		
4.66	2.57	3834	308	5,747	52,496	108		
5.12	0.85	3634	280	5,235	22,694	108		
5.28	1.62	3734	272	5,072	46,003	108		
5.70	1.03	3633	252	4,794	23,163	95-101		
5.89	1.83	3733	244	4,638	46,408	97-103		
5.44	3.00	3834	264	4,918	53,136	108		
6.64	1.20	3633	216	4,114	23,884	95-101		
6.62	2.05	3733	217	4,128	46,884	97-103		
7.22	1.30	3633	199	3,782	24,237	95-101		
7.25	2.25	3733	198	3,765	47,223	97-103		
8.47	0.81	3533	169	3,226	12,998	93	15.0	0.83
8.29	1.49	3633	173	3,296	24,754	95-101		
8.20	2.54	3733	175	3,329	47,630	97-103		
9.72	0.93	3533	148	2,810	13,572	93	17.2	0.95
9.40	1.69	3633	153	2,906	25,167	95-101		
9.11	2.81	3733	158	2,999	47,938	97-103		
11.0	1.05	3533	130	2,478	13,936	93	19.5	1.07
10.5	1.88	3633	137	2,608	25,484	95-101		
10.2	3.15	3733	141	2,674	48,241	97-103		
12.3	1.17	3533	117	2,224	14,158	93	21.7	1.19
11.8	2.11	3633	122	2,322	25,788	95-101		
11.1	3.41	3733	129	2,459	48,442	97-103		
13.6	0.87	3433	106	2,013	9,615	91	24.0	0.86
13.8	1.31	3533	104	1,980	14,288	93	24.4	1.33
12.8	2.30	3633	112	2,127	25,995	95-101		
15.1	0.96	3433	94.8	1,807	9,876	91	26.7	0.94
15.1	1.43	3533	95.3	1,814	14,348	93	26.6	1.45
14.9	2.65	3633	96.6	1,839	26,301	95-101		
16.4	1.04	3433	87.3	1,663	10,056	91	29.0	1.01
17.4	1.65	3533	82.4	1,568	14,342	93	30.8	1.67
16.4	2.92	3633	87.3	1,662	26,488	95-101		
18.5	1.17	3433	77.5	1,477	10,291	91	32.7	1.10
19.3	1.82	3533	74.5	1,418	14,297	93	34.0	1.85
21.3	1.34	3433	67.5	1,286	10,531	91	37.5	1.21
23.5	1.48	3433	61.1	1,164	10,685	91	41.5	1.30
27.0	1.65	3433	53.2	1,014	10,873	91	47.6	1.43
29.7	0.83	3333	48.4	923	4,724	89	52.4	0.78
29.1	1.81	3432	49.3	948	10,956	91	51.5	1.67
29.9	5	3632	48.1	924	27,272	95-101		

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

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## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>S</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>S</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>3 kW - 50 Hz</b>		<b>LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3</b>					<b>5.22 kW - 87 Hz*</b>	
32.7	0.90	3332	43.9	846	4,796	89	57.7	0.94
34.5	2.13	3432	41.6	800	11,113	91	61.0	1.88
33.6	5	3632	42.8	822	27,380	95-101		
37.6	1.03	3332	38.1	735	4,905	89	66.5	1.08
38.3	2.32	3432	37.4	721	10,994	91	67.7	2.01
36.8	6	3632	39	750	27,457	95-101		
42.5	1.15	3332	33.7	650	4,968	89	75.1	1.15
42.3	2.48	3432	33.9	652	10,863	91	74.8	2.15
41.6	7	3632	34.5	663	27,549	95-101		
46.3	1.25	3332	31	598	4,987	89	81.7	1.25
46.0	2.63	3432	31.2	601	10,738	91	81.2	2.27
44.3	3.58	3532	32.4	623	12,746	93	78.2	3.54
46.2	8	3632	31.1	597	27,619	95-101		
52.4	1.42	3332	27.4	528	4,996	89	92.5	1.48
53.5	2.91	3432	26.8	517	10,482	91	94.5	2.50
51.6	4	3532	27.8	535	12,356	93	91.1	4
51.8	8	3632	27.7	533	27,687	95-101		
52.2	0.86	3232	27.5	530	2,781	87	92.2	0.82
58.8	1.59	3332	24.4	471	4,974	89	104	1.65
57.4	3.05	3432	25	481	10,376	91	101	2.62
56.1	5	3532	25.6	492	12,133	93	99.1	5
56.3	10	3632	25.5	490	27,733	95-101		
61.2	1.01	3232	23.5	452	2,916	87	108	0.92
65.5	1.75	3332	21.9	422	4,945	89	116	1.75
65.5	3.32	3432	21.9	422	10,095	91	116	2.85
64.4	5	3532	22.3	429	11,751	93	114	5.18
68.8	1.14	3232	20.9	402	3,003	87	122	1.00
71.2	1.91	3332	20.2	389	4,909	89	126	1.98
74.1	3.60	3432	19.4	373	9,856	91	131	3.10
73.0	6	3532	19.7	378	11,421	93	129	6
76.6	1.23	3232	18.7	361	3,073	87	135	1.07
80.1	2.15	3332	17.9	345	4,851	89	142	2.22
83.3	3.87	3432	17.2	332	9,621	91	147	3.33
81.4	7	3532	17.6	339	11,117	93	144	8
87.0	1.36	3232	16.5	318	3,148	87	154	1.17
92.0	2.45	3332	15.6	301	4,764	89	163	2.53
92.9	4	3432	15.4	297	9,393	91	164	3.57
91.4	7	3532	15.7	302	10,816	93	161	8
103	0.86	3132	13.9	268	2,607	85	183	0.86
96.6	1.47	3232	14.9	286	3,203	87	171	1.26
102	2.70	3332	14.1	272	4,697	89	180	2.79
109	5	3432	13.2	254	9,052	91	192	3.95
99.7	8	3532	14.4	277	10,567	93	176	10
117	0.97	3132	12.3	237	2,636	85	206	0.94
110	1.60	3232	13.1	252	3,262	87	194	1.38
117	3.05	3332	12.3	237	4,598	89	206	3.02
115	8	3532	12.4	239	10,165	93	204	8
132	1.09	3132	10.9	210	2,640	85	233	1.02
117	1.68	3232	12.3	236	3,290	87	207	1.44
128	9	3532	11.2	216	9,903	93	225	9
139	0.89	3132	10.3	199	3,454	85		
135	1.85	3232	10.6	205	3,344	87	239	1.59
142	3.71	3332	10.1	195	4,429	89	251	3.81
156	0.95	3132	9.19	177	2,630	85	276	0.82
154	2.03	3232	9.32	180	3,388	87	272	1.75
164	4	3332	8.76	169	4,303	89	289	4

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

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## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>3 kW - 50 Hz</b>		LSES 100 LR IFT/IE2 - LSES 100 LG IFT/IE3 LS 100 L FFB3 IFT/NIE - LSES 100 LG FFB3 IFT/IE3					<b>5.22 kW - 87 Hz*</b>	
170	2.17	3232	8.42	162	3,418	87	301	1.87
197	1.09	3132	7.28	140	2,585	85	348	0.94
193	2.35	3232	7.45	144	3,450	87	340	2.02
202	5	3332	7.09	137	4,105	89	357	5
205	2.41	3232	6.99	135	3,466	87	363	2.07
243	2.61	3232	5.91	114	3,502	87	429	2.25
261	6	3332	5.49	106	3,859	89	462	5
291	2.81	3232	4.94	95	3,534	87	513	2.42
366	3.12	3232	3.92	75	3,561	87	647	2.69

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

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N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>4 kW - 50 Hz</b>		<b>LSES 112 MU IFT/IE2 - LSES 112 MU IFT/IE3 LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3</b>					<b>6.96 kW - 87 Hz*</b>	
1.91	0.79	3834	747	18,670	42,507	108		
2.11	0.87	3834	676	16,903	43,873	108		
2.30	0.95	3834	623	15,574	44,901	108		
2.67	1.10	3834	535	13,385	46,593	108		
2.87	1.18	3834	499	12,473	47,298	108		
3.27	1.35	3834	437	10,922	48,496	108		
3.75	0.86	3734	381	9,541	41,831	108		
3.70	1.53	3834	386	9,653	49,477	108		
4.01	0.92	3734	357	8,928	42,403	108		
4.16	1.72	3834	344	8,596	50,294	108		
4.62	1.06	3734	310	7,746	43,507	108		
4.64	1.92	3834	308	7,701	50,985	108		
5.26	1.21	3734	272	6,795	44,394	108		
5.87	1.37	3733	244	6,217	44,934	97-103		
5.42	2.24	3834	264	6,591	51,844	108		
6.61	0.90	3633	216	5,515	22,397	95-101		
6.59	1.53	3733	217	5,533	45,573	97-103		
7.19	0.97	3633	199	5,070	22,870	95-101		
7.23	1.68	3733	198	5,047	46,026	97-103		
8.26	1.11	3633	173	4,417	23,563	95-101		
8.18	1.89	3733	175	4,462	46,572	97-103		
9.36	1.26	3633	153	3,895	24,117	95-101		
9.07	2.10	3733	158	4,020	46,985	97-103		
11.0	0.79	3533	130	3,322	10,356	93	19.5	0.79
10.4	1.40	3633	137	3,496	24,541	95-101		
10.2	2.35	3733	141	3,584	47,392	97-103		
12.2	0.87	3533	117	2,981	10,945	93	21.7	0.88
11.7	1.57	3633	122	3,112	24,949	95-101		
11.1	2.55	3733	129	3,296	47,661	97-103		
13.7	0.98	3533	104	2,654	11,430	93	24.4	0.99
12.8	1.71	3633	112	2,851	25,226	95-101		
12.9	2.96	3733	111	2,828	48,098	97-103		
15.0	1.07	3533	95.3	2,432	11,728	93	26.6	1.08
14.8	1.98	3633	96.6	2,465	25,636	95-101		
14.1	3.22	3733	102	2,593	48,316	97-103		
16.6	0.79	3433	87.3	2,205	9,373	91		
17.4	1.23	3533	82.4	2,102	12,076	93	30.8	1.24
16.4	2.18	3633	87.3	2,228	25,887	95-101		
15.9	3.63	3733	89.9	2,293	48,596	97-103		
18.4	0.88	3433	77.5	1,979	8,676	91	32.7	0.81
19.2	1.36	3533	74.5	1,900	12,252	93	34.0	1.37
18.6	2.47	3633	76.9	1,961	26,171	95-101		
18.6	4	3733	76.8	1,958	48,909	97-103		
21.2	1.00	3433	67.5	1,724	9,129	91	37.5	0.90
21.8	1.54	3533	65.5	1,672	12,362	93	38.7	1.55
20.2	2.68	3633	70.8	1,807	26,334	95-101		
20.9	5	3733	68.3	1,742	49,111	97-103		
23.4	1.11	3433	61.1	1,560	9,363	91	41.5	0.96
23.7	1.67	3533	60.4	1,541	12,394	93	42.0	1.68
22.7	3.00	3633	63	1,606	26,548	95-101		
26.9	1.23	3433	53.2	1,359	9,606	91	47.6	1.06
26.6	1.87	3533	53.7	1,370	12,397	93	47.2	1.86
25.4	3.35	3633	56.2	1,434	26,730	95-101		
29.7	1.32	3433	48.2	1,230	9,716	91	52.6	1.14
29.8	2.09	3533	47.9	1,223	12,342	93	52.9	2.02
29.8	3.63	3632	48.1	1,239	26,938	95-101		
29.8	7	3732	48	1,238	49,582	97-103		

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



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>4 kW - 50 Hz</b>		<b>LSES 112 MU IFT/IE2 - LSES 112 MU IFT/IE3 LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3</b>					<b>6.96 kW - 87 Hz*</b>	
32.7	1.42	3433	43.7	1,116	9,780	91	58.0	1.22
33.3	2.33	3533	43	1,096	12,254	93	59.0	2.16
33.4	3.86	3632	42.8	1,102	27,083	95-101		
33.3	7	3732	43	1,108	49,703	97-103		
38.2	1.73	3432	37.4	966	9,761	91	67.7	1.49
36.5	2.54	3533	39.2	1,000	12,149	93	64.7	2.27
36.7	4	3632	39	1,006	27,185	95-101		
35.6	8	3732	40.2	1,035	49,771	97-103		
42.4	0.86	3332	33.7	871	3,948	89	75.1	0.86
42.2	1.86	3432	33.9	874	9,746	91	74.8	1.59
41.8	2.87	3533	34.2	873	11,964	93	74.1	2.44
41.5	5	3632	34.5	889	27,309	95-101		
39.8	9	3732	36	927	49,872	97-103		
46.1	0.93	3332	31	801	4,051	89	81.7	0.93
45.8	1.97	3432	31.2	805	9,711	91	81.2	1.68
44.1	2.67	3532	32.4	836	11,842	93	78.2	2.62
46.0	6	3632	31.1	801	27,403	95-101		
44.9	10	3732	31.8	821	49,971	97-103		
52.2	1.06	3332	27.4	707	4,170	89	92.5	1.10
53.3	2.17	3432	26.8	692	9,602	91	94.5	1.86
51.4	3.07	3532	27.8	717	11,584	93	91.1	3.24
51.6	6	3632	27.7	714	27,495	95-101		
50.3	10	3732	28.4	732	50,054	97-103		
58.6	1.19	3332	24.4	630	4,241	89	104	1.23
57.2	2.28	3432	25	645	9,551	91	101	1.94
55.9	3.48	3532	25.6	659	11,425	93	99.1	3.68
56.1	7	3632	25.5	657	27,556	95-101		
56.8	12	3732	25.2	649	50,131	97-103		
65.3	1.31	3332	21.9	566	4,280	89	116	1.30
65.3	2.48	3432	21.9	565	9,376	91	116	2.12
64.2	3.91	3532	22.3	574	11,137	93	114	3.84
65.4	8	3632	21.9	563	27,655	95-101		
63.4	14	3732	22.6	582	50,194	97-103		
68.6	0.85	3232	20.9	538	2,766	87		
70.9	1.43	3332	20.2	521	4,301	89	126	1.47
73.9	2.69	3432	19.4	499	9,223	91	131	2.30
72.8	5	3532	19.7	507	10,873	93	129	5
71.3	8	3632	20	517	27,704	95-101		
71.1	15	3732	20.1	519	50,253	97-103		
76.3	0.92	3232	18.7	484	2,861	87	135	0.80
79.8	1.60	3332	17.9	462	4,311	89	142	1.65
83.0	2.89	3432	17.2	445	9,053	91	147	2.47
81.1	5	3532	17.6	455	10,625	93	144	6
80.7	9	3632	17.7	457	27,768	95-101		
80.2	16	3732	17.8	460	50,308	97-103		
86.7	1.01	3232	16.5	426	2,961	87	154	0.87
91.7	1.83	3332	15.6	403	4,293	89	163	1.88
92.6	3.10	3432	15.4	398	8,884	91	164	2.65
91.1	5	3532	15.7	405	10,378	93	161	6
94.5	9	3632	15.1	390	27,839	95-101		
91.2	18	3732	15.7	404	50,360	97-103		
96.3	1.10	3232	14.9	384	3,035	87	171	0.94
101	2.01	3332	14.1	364	4,274	89	180	2.07
108	3.43	3432	13.2	341	8,614	91	192	2.93
99.4	6	3532	14.4	371	10,169	93	176	7
106	11	3632	13.5	347	27,885	95-101		
104	19	3732	13.8	356	50,405	97-103		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>4 kW - 50 Hz</b>		<b>LSES 112 MU IFT/IE2 - LSES 112 MU IFT/IE3 LS 112 MG FFB3 IFT/NIE - LSES 112 MU FFB3 IFT/IE3</b>					<b>6.96 kW - 87 Hz*</b>	
109	1.20	3232	13.1	338	3,114	87	194	1.02
116	2.28	3332	12.3	318	4,224	89	206	2.24
119	3.63	3432	12	309	8,440	91	212	3.10
115	6	3532	12.4	321	9,817	93	204	6
117	1.25	3232	12.3	316	3,151	87	207	1.07
128	2.50	3332	11.1	287	4,178	89	228	2.46
135	3.92	3432	10.6	272	8,221	91	240	3.35
127	7	3532	11.2	290	9,589	93	225	7
135	1.38	3232	10.6	274	3,224	87	239	1.18
142	2.77	3332	10.1	261	4,124	89	251	2.83
151	4	3432	9.46	244	8,015	91	268	3.57
145	8	3532	9.89	255	9,282	93	256	9
153	1.52	3232	9.32	241	3,282	87	272	1.30
163	3.15	3332	8.76	226	4,041	89	289	2.96
170	4	3432	8.42	217	7,800	91	301	4
157	8	3532	9.12	235	9,086	93	278	9
170	1.62	3232	8.42	217	3,322	87	301	1.38
190	5	3432	7.53	194	7,587	91	337	4
176	9	3532	8.11	209	8,806	93	313	10
192	1.76	3232	7.45	192	3,366	87	340	1.50
202	3.84	3332	7.09	183	3,893	89	357	3
198	9	3532	7.24	187	8,544	93	350	9
205	1.80	3232	6.99	180	3,387	87	363	1.54
230	5	3432	6.22	160	7,230	91	408	5
221	13	3532	6.48	167	8,290	93	391	11
242	1.95	3232	5.91	153	3,435	87	429	1.67
261	5	3332	5.49	142	3,692	89	462	4
242	13	3532	5.91	152	8,080	93	429	11
290	2.10	3232	4.94	128	3,478	87	513	1.8
298	6	3432	4.8	124	6,744	91	529	5
277	14	3532	5.17	133	7,777	93	491	12
365	2.33	3232	3.92	101	3,375	87	647	1.99

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — — — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>5.5 kW - 50 Hz</b>		<b>LSES 132 SU IFT/IE2 - LSES 132 SM IFT/IE3 LS 132 S FFB3 IFT/NIE - LSES 132 SM FFB4 IFT/IE3</b>					<b>9.57 kW - 87 Hz*</b>	
2.71	0.81	3834	535	18,172	42,893	108		
2.91	0.87	3834	499	16,933	43,850	108		
3.32	1.00	3834	437	14,828	45,477	108		
3.75	1.13	3834	386	13,106	46,808	108		
4.22	1.27	3834	344	11,670	47,918	108		
4.68	0.78	3734	310	10,514	40,923	108		
4.71	1.41	3834	308	10,456	48,856	108		
5.34	0.89	3734	272	9,224	42,127	108		
5.95	1.01	3733	244	8,442	42,857	97-103		
5.5	1.65	3834	264	8,948	50,022	108		
6.69	1.13	3733	217	7,513	43,724	97-103		
7.33	1.23	3733	198	6,853	44,340	97-103		
8.37	0.82	3633	173	5,998	21,884	95-101		
8.29	1.39	3733	175	6,059	45,082	97-103		
9.50	0.93	3633	153	5,289	22,637	95-101		
9.20	1.54	3733	158	5,458	45,642	97-103		
10.6	1.03	3633	137	4,747	23,212	95-101		
10.3	1.73	3733	141	4,867	46,194	97-103		
11.9	1.16	3633	122	4,226	23,766	95-101		
11.2	1.88	3733	129	4,476	46,559	97-103		
13.0	1.26	3633	112	3,872	24,142	95-101		
13.1	2.18	3733	111	3,840	47,153	97-103		
15.2	0.79	3533	95.3	3,302	8,064	93	26.5	0.78
15.0	1.45	3633	96.6	3,347	24,699	95-101		
14.3	2.37	3733	102	3,521	47,450	97-103		
17.6	0.91	3533	82.4	2,854	8,908	93	30.7	0.90
16.6	1.61	3633	87.3	3,026	25,041	95-101		
16.1	2.68	3733	89.9	3,114	47,830	97-103		
19.5	1.00	3533	74.5	2,580	9,368	93	34.0	0.99
18.9	1.82	3633	76.9	2,662	25,426	95-101		
18.9	3.12	3733	76.8	2,659	48,255	97-103		
22.1	1.13	3533	65.5	2,270	9,841	93	38.6	1.13
20.5	1.97	3633	70.8	2,454	25,648	95-101		
21.2	3.5	3733	68.3	2,365	48,529	97-103		
23.7	0.81	3433	61.1	2,117	9,484	91		
24.0	1.23	3533	60.4	2,093	10,067	93	41.9	1.22
23.0	2.21	3633	63	2,181	25,937	95-101		
27.2	0.90	3433	53.2	1,845	9,827	91		
27.0	1.38	3533	53.7	1,860	10,331	93	47.1	1.35
25.8	2.47	3633	56.2	1,948	26,185	95-101		
30.1	0.97	3433	48.2	1,670	7,512	91	52.5	0.83
30.2	1.54	3533	47.9	1,661	10,494	93	52.8	1.47
30.2	2.67	3632	48.1	1,682	26,467	95-101		
30.2	5	3732	48	1,681	49,168	97-103		
33.2	1.04	3433	43.7	1,516	7,776	91	57.9	0.88
33.8	1.71	3533	43	1,488	10,601	93	58.9	1.57
33.9	2.84	3632	42.8	1,497	26,664	95-101		
33.7	5	3732	43	1,504	49,333	97-103		
38.7	1.27	3432	37.4	1,311	8,033	91	67.6	1.08
37.0	1.87	3533	39.2	1,357	10,644	93	64.6	1.65
37.2	3.29	3632	39	1,365	26,803	95-101		
36.1	6	3732	40.2	1,405	49,425	97-103		
42.8	1.36	3432	33.9	1,187	8,177	91	74.7	1.16
42.4	2.11	3533	34.2	1,186	10,650	93	73.9	1.78
42.0	3.72	3632	34.5	1,207	26,971	95-101		
40.3	6	3732	36	1,258	49,562	97-103		
46.4	1.44	3432	31.2	1,094	8,268	91	81.0	1.22
44.7	1.97	3532	32.4	1,135	10,587	93	78.0	1.91
46.7	4.34	3632	31.1	1,087	27,098	95-101		
45.5	7	3732	31.8	1,115	49,697	97-103		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>5.5 kW - 50 Hz</b>		<b>LSES 132 SU IFT/IE2 - LSES 132 SM IFT/IE3 LS 132 S FFB3 IFT/NIE - LSES 132 SM FFB4 IFT/IE3</b>					<b>9.57 kW - 87 Hz*</b>	
52.9	0.78	3332	27.4	960	3,008	89	92.3	0.80
54.0	1.59	3432	26.8	940	8,363	91	94.3	1.35
52.1	2.25	3532	27.8	974	10,503	93	90.9	2.35
52.3	4.61	3632	27.7	970	27,223	95-101		
51.0	7.36	3732	28.4	994	49,809	97-103		
59.4	0.87	3332	24.4	856	3,198	89	104	0.89
58.0	1.67	3432	25	876	8,388	91	101	1.41
56.7	2.55	3532	25.6	895	10,433	93	98.9	2.67
56.9	5	3632	25.5	892	27,306	95-101		
57.6	9	3732	25.2	881	49,914	97-103		
66.2	0.96	3332	21.9	768	3,369	89	115	0.94
66.2	1.82	3432	21.9	767	8,360	91	116	1.54
65.1	2.88	3532	22.3	780	10,262	93	114	2.79
66.3	6	3632	21.9	765	27,441	95-101		
64.3	10	3732	22.6	790	50,000	97-103		
71.9	1.05	3332	20.2	707	3,461	89	125	1.07
74.9	1.97	3432	19.4	678	8,322	91	131	1.67
73.8	3.29	3532	19.7	688	10,105	93	129	3.43
72.3	6	3632	20	702	27,508	95-101		
72.1	11	3732	20.1	704	50,080	97-103		
81.0	1.18	3332	17.9	628	3,560	89	141	1.20
84.1	2.12	3432	17.2	604	8,253	91	147	1.80
82.2	3.71	3532	17.6	617	9,967	93	143	4
81.8	7	3632	17.7	621	27,594	95-101		
81.3	12	3732	17.8	624	50,154	97-103		
93.0	1.34	3332	15.6	547	3,642	89	162	1.37
93.9	2.27	3432	15.4	541	8,165	91	164	1.92
92.3	3.98	3532	15.7	550	9,763	93	161	4
95.8	7	3632	15.1	530	27,691	95-101		
92.5	13	3732	15.7	549	50,225	97-103		
97.6	0.80	3232	14.9	521	2,797	87		
103	1.48	3332	14.1	495	3,681	89	179	1.50
110	2.51	3432	13.2	463	8,018	91	191	2.13
101	5	3532	14.4	504	9,605	93	176	5
108	8	3632	13.5	471	27,753	95-101		
105	14	3732	13.8	483	50,286	97-103		
111	0.88	3232	13.1	459	2,904	87		
118	1.68	3332	12.3	431	3,702	89	206	1.63
121	2.66	3432	12	419	7,901	91	211	2.25
117	4	3532	12.4	435	9,352	93	203	4
118	0.92	3232	12.3	429	2,955	87		
130	1.84	3332	11.1	390	3,710	89	227	1.79
137	2.87	3432	10.6	370	7,727	91	240	2.43
129	5	3532	11.2	393	9,152	93	225	5
136	1.01	3232	10.6	372	3,054	87	238	0.86
144	2.04	3332	10.1	354	3,702	89	250	2.06
153	3.06	3432	9.46	331	7,589	91	267	2.60
147	6	3532	9.89	346	8,895	93	256	6
156	1.11	3232	9.32	327	3,133	87	271	0.94
166	2.32	3332	8.76	307	3,668	89	289	2.16
172	3.27	3432	8.42	295	7,418	91	300	2.78
159	6	3532	9.12	319	8,742	93	277	7
172	1.19	3232	8.42	295	3,185	87	300	1.01
193	3.49	3432	7.53	264	7,244	91	336	2.95
179	7	3532	8.11	284	8,497	93	312	7

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>5.5 kW - 50 Hz</b>		LSES 132 SU IFT/IE2 - LSES 132 SM IFT/IE3 LS 132 S FFB3 IFT/NIE - LSES 132 SM FFB4 IFT/IE3					<b>9.57 kW - 87 Hz*</b>	
195	1.29	3232	7.45	261	3,212	87	340	1.09
204	2.83	3332	7.09	249	3,589	89	357	2.44
200	7	3532	7.24	253	8,264	93	350	7
208	1.32	3232	6.99	245	3,221	87	362	1.12
233	3.91	3432	6.22	218	6,944	91	407	3.32
224	9	3532	6.48	227	8,044	93	390	7.94
245	1.43	3232	5.91	207	3,223	87	428	1.21
264	3.35	3332	5.49	192	3,465	89	461	2.84
245	10	3532	5.91	207	7,854	93	428	8
294	1.54	3232	4.94	173	3,193	87	512	1.31
302	5	3432	4.8	168	6,532	91	527	3.88
281	10	3532	5.17	181	7,579	93	490	9
370	2	3232	3.92	137	3,120	87	646	1.45

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>7.5 kW - 50 Hz</b>		<b>LSES 132 M IFT/IE2 - LSES 132 MU IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 132 MU FFB4 IFT/IE3</b>					<b>13.1 kW - 87 Hz*</b>	
3.75	0.83	3834	386	17,887	43,113	108		
4.22	0.93	3834	344	15,928	44,627	108		
4.71	1.04	3834	308	14,270	45,908	108		
5.50	1.21	3834	264	12,213	47,499	108		
6.69	0.83	3733	217	10,256	41,164	97-103		
6.61	1.46	3833	220	10,375	48,919	99-105		
7.33	0.90	3733	198	9,355	42,005	97-103		
7.38	1.63	3833	196	9,286	49,760	99-105		
8.29	1.02	3733	175	8,270	43,018	97-103		
7.90	1.75	3833	184	8,675	50,233	99-105		
9.20	1.13	3733	158	7,451	43,783	97-103		
8.82	1.95	3833	164	7,768	50,934	99-105		
10.3	1.27	3733	141	6,643	44,536	97-103		
10.0	2.20	3833	146	6,881	51,619	99-105		
11.9	0.85	3633	122	5,769	22,128	95-101		
11.2	1.37	3733	129	6,110	45,034	97-103		
11.2	2.46	3833	130	6,138	52,194	99-105		
13.0	0.92	3633	112	5,285	22,642	95-101		
13.1	1.60	3733	111	5,241	45,845	97-103		
12.6	2.77	3833	115	5,441	52,732	99-105		
15.0	1.07	3633	96.6	4,569	23,402	95-101		
14.3	1.74	3733	102	4,807	46,250	97-103		
14.1	3.09	3833	103	4,876	53,169	99-105		
16.6	1.18	3633	87.3	4,130	23,868	95-101		
16.1	1.96	3733	89.9	4,251	46,769	97-103		
15.8	3.45	3833	92	4,348	53,578	99-105		
18.9	1.33	3633	76.9	3,634	24,394	95-101		
18.9	2.29	3733	76.8	3,630	47,349	97-103		
17.8	3.89	3833	81.5	3,853	53,960	99-105		
22.1	0.83	3533	65.5	3,099	6,242	93	39.1	0.83
20.5	1.44	3633	70.8	3,350	24,696	95-101		
21.2	2.56	3733	68.3	3,229	47,723	97-103		
20.2	4.40	3833	71.7	3,389	54,319	99-105		
24.0	0.90	3533	60.4	2,857	6,751	93	42.4	0.90
23.0	1.62	3633	63	2,977	25,092	95-101		
23.0	4.99	3833	63.1	2,984	54,632	99-105		
27.0	1.01	3533	53.7	2,539	7,373	93	47.7	1.00
25.8	1.81	3633	56.2	2,658	25,430	95-101		
26.0	6	3833	55.7	2,632	54,904	99-105		
30.2	1.13	3533	47.9	2,267	7,858	93	53.4	1.08
30.2	1.95	3632	48.1	2,296	25,815	95-101		
30.2	3.56	3732	48	2,294	48,596	97-103		
28.7	6	3833	50.5	2,387	55,093	99-105		
33.8	1.25	3533	43	2,031	8,231	93	59.6	1.16
33.9	2.08	3632	42.8	2,043	26,084	95-101		
33.7	3.96	3732	43	2,053	48,820	97-103		
32.9	7	3833	44.1	2,083	55,328	99-105		
38.7	0.93	3432	37.4	1,789	5,570	91	68.4	0.80
37.0	1.37	3533	39.2	1,853	8,480	93	65.3	1.22
37.2	2.41	3632	39	1,864	26,274	95-101		
36.1	4	3732	40.2	1,918	48,946	97-103		
36.8	8	3833	39.4	1,862	55,498	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>7.5 kW - 50 Hz</b>		<b>LSES 132 M IFT/IE2 - LSES 132 MU IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 132 MU FFB4 IFT/IE3</b>					<b>13.1 kW - 87 Hz*</b>	
42.8	1.00	3432	33.9	1,620	5,948	91	75.5	0.85
42.4	1.55	3533	34.2	1,619	8,750	93	74.8	1.31
42.0	2.73	3632	34.5	1,648	26,504	95-101		
40.3	5	3732	36	1,718	49,134	97-103		
41.3	9	3833	35.1	1,659	55,656	99-105		
46.4	1.06	3432	31.2	1,493	6,205	91	82.0	0.90
44.7	1.44	3532	32.4	1,549	8,765	93	79.0	1.41
46.7	3.18	3632	31.1	1,484	26,677	95-101		
45.5	5	3732	31.8	1,522	49,317	97-103		
45.9	10	3833	31.6	1,492	55,785	99-105		
54.0	1.17	3432	26.8	1,283	6,586	91	95.4	1.00
52.1	1.65	3532	27.8	1,329	8,939	93	92.0	1.74
52.3	3.38	3632	27.7	1,324	26,848	95-101		
51.0	5	3732	28.4	1,357	49,470	97-103		
52.4	11	3833	27.7	1,307	55,927	99-105		
58.0	1.22	3432	25	1,195	6,741	91	102	1.04
56.7	1.87	3532	25.6	1,222	8,994	93	100	1.98
56.9	3.85	3632	25.5	1,217	26,961	95-101		
57.6	7	3732	25.2	1,203	49,614	97-103		
66.2	1.33	3432	21.9	1,047	6,915	91	117	1.14
65.1	2.11	3532	22.3	1,065	9,014	93	115	2.06
66.3	4	3632	21.9	1,044	27,144	95-101		
64.3	7	3732	22.6	1,078	49,731	97-103		
74.9	1.44	3432	19.4	925	7,050	91	132	1.23
73.8	2.41	3532	19.7	939	9,007	93	130	2.54
72.3	5	3632	20	958	27,236	95-101		
72.1	8	3732	20.1	961	49,840	97-103		
81.0	0.86	3332	17.9	856	2,478	89	143	0.89
84.1	1.55	3432	17.2	824	7,094	91	149	1.33
82.2	2.72	3532	17.6	843	8,950	93	145	3.10
81.8	5	3632	17.7	847	27,354	95-101		
81.3	9	3732	17.8	852	49,942	97-103		
93.0	0.99	3332	15.6	746	2,698	89	164	1.01
93.9	1.66	3432	15.4	738	7,130	91	166	1.42
92.3	2.92	3532	15.7	750	8,865	93	163	3.06
95.8	5	3632	15.1	723	27,485	95-101		
92.5	9	3732	15.7	749	50,038	97-103		
103	1.08	3332	14.1	675	2,828	89	181	1.11
110	1.84	3432	13.2	632	7,114	91	194	1.57
101	3.33	3532	14.4	687	8,784	93	178	3.80
108	6	3632	13.5	643	27,570	95-101		
105	10	3732	13.8	660	50,121	97-103		
118	1.23	3332	12.3	588	2,960	89	208	1.21
121	1.95	3432	12	572	7,084	91	214	1.66
117	3.19	3532	12.4	594	8,623	93	206	3.08
130	1.35	3332	11.1	532	3,032	89	230	1.33
137	2.10	3432	10.6	505	7,009	91	243	1.80
129	3.71	3532	11.2	537	8,493	93	228	3.58
144	1.49	3332	10.1	483	3,085	89	253	1.52
153	2.24	3432	9.46	452	6,934	91	271	1.92
147	4	3532	9.89	473	8,317	93	259	5
166	1.70	3332	8.76	419	3,133	89	292	1.59
172	2.40	3432	8.42	403	6,835	91	304	2.05
159	4	3532	9.12	436	8,197	93	281	5

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>7.5 kW - 50 Hz</b>		LSES 132 M IFT/IE2 - LSES 132 MU IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 132 MU FFB4 IFT/IE3					<b>13.1 kW - 87 Hz*</b>	
193	2.55	3432	7.53	360	6,726	91	340	2.18
179	5	3532	8.11	387	8,020	93	316	5
204	2.07	3332	7.09	339	3,156	89	361	1.80
200	5	3532	7.24	346	7,835	93	354	5
233	2.87	3432	6.22	297	6,514	91	412	2.45
224	7	3532	6.48	310	7,654	93	395	6
264	2.46	3332	5.49	262	3,126	89	466	2.10
245	7	3532	5.91	283	7,497	93	433	6
302	3.35	3432	4.8	229	6,193	91	534	2.86
281	7	3532	5.17	247	7,270	93	495	7

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



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>9 kW - 50 Hz</b>		<b>LSES 132 M IFT/IE2 - LSES 160 MR IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 160 MR FFB4 IFT/IE3</b>					<b>15.7 kW - 87 Hz*</b>	
4.69	0.86	3834	308	17,191	43,651	108		
5.48	1.00	3834	264	14,712	45,567	108		
6.58	1.21	3833	220	12,500	47,277	99-105		
7.35	1.36	3833	196	11,189	48,290	99-105		
8.26	0.85	3733	175	9,963	41,437	97-103		
7.87	1.45	3833	184	10,452	48,859	99-105		
9.17	0.94	3733	158	8,976	42,359	97-103		
8.79	1.62	3833	164	9,359	49,704	99-105		
10.28	1.05	3733	141	8,004	43,266	97-103		
9.93	1.83	3833	146	8,290	50,530	99-105		
11.18	1.14	3733	129	7,360	43,867	97-103		
11.13	2.05	3833	130	7,395	51,222	99-105		
13.04	1.33	3733	111	6,314	44,843	97-103		
12.6	2.30	3833	115	6,556	51,871	99-105		
15.0	0.88	3633	96.6	5,504	22,409	95-101		
14.2	1.44	3733	102	5,791	45,332	97-103		
14.0	2.56	3833	103	5,875	52,397	99-105		
16.5	0.98	3633	87.3	4,976	22,970	95-101		
16.1	1.63	3733	89.9	5,122	45,956	97-103		
15.7	2.87	3833	92	5,238	52,889	99-105		
18.8	1.11	3633	76.9	4,378	23,604	95-101		
18.8	1.90	3733	76.8	4,373	46,655	97-103		
17.7	3.23	3833	81.5	4,642	53,350	99-105		
20.4	1.20	3633	70.8	4,035	23,968	95-101		
21.2	2.13	3733	68.3	3,890	47,106	97-103		
20.2	3.66	3833	71.7	4,083	53,782	99-105		
23.0	1.34	3633	63	3,587	24,444	95-101		
23.6	2.37	3733	61.2	3,488	47,481	97-103		
22.9	4.14	3833	63.1	3,595	54,159	99-105		
26.9	0.84	3533	53.7	3,059	5,180	93	47.6	0.83
25.7	1.50	3633	56.2	3,203	24,852	95-101		
26.1	2.61	3733	55.4	3,154	47,793	97-103		
26.0	5	3833	55.7	3,171	54,487	99-105		
30.1	0.94	3533	47.9	2,731	5,900	93	53.3	0.90
28.7	1.67	3633	50.4	2,870	25,206	95-101		
30.1	2.96	3732	48	2,764	48,157	97-103		
28.6	5	3833	50.5	2,876	54,715	99-105		
33.6	1.04	3533	43	2,447	6,475	93	59.5	0.97
33.8	1.73	3632	42.8	2,462	25,639	95-101		
33.6	3.29	3732	43	2,474	48,428	97-103		
32.8	6	3833	44.1	2,510	54,998	99-105		
36.9	1.14	3533	39.2	2,232	6,881	93	65.2	1.01
37.0	2.00	3632	39	2,245	25,869	95-101		
36.0	3.52	3732	40.2	2,311	48,580	97-103		
36.7	7	3833	39.4	2,244	55,204	99-105		
42.2	1.28	3533	34.2	1,950	7,360	93	74.6	1.09
41.9	2.26	3632	34.5	1,985	26,145	95-101		
42.0	2.42	3633	34.4	1,960	26,172	95-101		
40.2	3.91	3732	36	2,069	48,805	97-103		
41.2	7	3833	35.1	1,998	55,393	99-105		
47.1	0.81	3433	30.7	1,750	7,695	91		
46.5	2.64	3632	31.1	1,788	26,354	95-101		
45.4	4	3732	31.8	1,833	49,026	97-103		
47.0	6	3832	30.8	1,769	55,570	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>9 kW - 50 Hz</b>		<b>LSES 132 M IFT/IE2 - LSES 160 MR IFT/IE3 LS 132 M FFB4 IFT/NIE - LSES 160 MR FFB4 IFT/IE3</b>					<b>15.7 kW - 87 Hz*</b>	
53.8	0.97	3432	26.8	1,545	5,276	91	95.2	0.83
49.2	1.40	3533	29.3	1,672	7,752	93	87.1	1.18
52.2	2.80	3632	27.7	1,595	26,560	95-101		
50.9	4	3732	28.4	1,635	49,211	97-103		
52.6	7	3832	27.5	1,581	55,716	99-105		
57.8	1.02	3432	25	1,440	5,508	91	102	0.87
54.9	1.48	3533	26.3	1,501	7,954	93	97.0	1.24
56.7	3.20	3632	25.5	1,466	26,696	95-101		
57.4	6	3732	25.2	1,450	49,384	97-103		
58.9	10	3832	24.5	1,411	55,847	99-105		
66.0	1.11	3432	21.9	1,261	5,839	91	117	0.95
64.8	1.75	3532	22.3	1,283	8,089	93	115	1.72
66.1	3.48	3632	21.9	1,258	26,917	95-101		
64.0	6	3732	22.6	1,299	49,525	97-103		
65.9	11	3832	21.9	1,262	55,963	99-105		
74.7	1.20	3432	19.4	1,114	6,098	91	132	1.03
73.5	2.01	3532	19.7	1,131	8,192	93	130	2.11
72.1	3.75	3632	20	1,154	27,028	95-101		
71.8	7	3732	20.1	1,158	49,656	97-103		
74.0	12	3832	19.5	1,124	56,069	99-105		
83.8	1.29	3432	17.2	992	6,274	91	148	1.10
81.9	2.26	3532	17.6	1,015	8,220	93	145	2.58
81.5	4	3632	17.7	1,020	27,170	95-101		
81.0	7	3732	17.8	1,026	49,779	97-103		
83.1	13	3832	17.4	1,000	56,165	99-105		
93.6	1.38	3432	15.4	889	6,392	91	165	1.18
92.0	2.43	3532	15.7	904	8,212	93	163	2.55
95.5	4	3632	15.1	871	27,328	95-101		
92.1	8	3732	15.7	903	49,894	97-103		
93.9	14	3832	15.4	886	56,253	99-105		
109	1.53	3432	13.2	761	6,482	91	193	1.31
100	2.77	3532	14.4	828	8,186	93	178	3.16
107	5	3632	13.5	775	27,430	95-101		
105	8	3732	13.8	795	49,995	97-103		
105	16	3832	13.7	788	56,329	99-105		
121	1.62	3432	12	689	6,511	91	213	1.38
116	2.65	3532	12.4	716	8,123	93	205	2.57
120	6	3632	12.1	695	27,515	95-101		
119	9	3732	12.2	701	50,083	97-103		
116	16	3832	12.5	718	56,383	99-105		
137	1.75	3432	10.6	608	6,503	91	242	1.50
129	3.08	3532	11.2	647	8,043	93	227	2.98
132	6	3632	10.9	628	27,586	95-101		
131	9	3732	11	636	50,144	97-103		
131	18	3832	11	635	56,447	99-105		
153	1.87	3432	9.46	545	6,477	91	270	1.60
146	3.45	3532	9.89	569	7,923	93	258	3.87
150	6	3632	9.63	554	27,664	95-101		
150	10	3732	9.64	555	50,219	97-103		
145	19	3832	9.96	573	56,495	99-105		
172	1.99	3432	8.42	485	6,432	91	303	1.71
158	3.64	3532	9.12	525	7,832	93	280	4
169	7	3632	8.53	491	27,732	95-101		
168	11	3732	8.62	496	49,904	97-103		
165	21	3832	8.75	504	56,549	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <— > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>9 kW - 50 Hz</b>		<b>LSES 132 M IFT/IE2 - LSES 160 MR IFT/IE3 LS 132 M FFB4 IFT/IE1 - LSES 160 MR FFB4 IFT/IE3</b>					<b>15.7 kW - 87 Hz*</b>	
192	2.12	3432	7.53	434	6,363	91	339	1.82
178	4	3532	8.11	467	7,690	93	315	5
190	6	3632	7.62	439	27,787	95-101		
188	11	3732	7.68	442	48,203	97-103		
178	21	3832	8.11	467	56,577	99-105		
200	4	3532	7.24	417	7,542	93	353	4
208	5	3632	6.93	399	27,829	95-101		
208	24	3832	6.95	400	56,629	99-105		
232	2.38	3432	6.22	358	6,214	91	411	2.04
223	6	3532	6.48	373	7,394	93	394	5
232	6	3632	6.22	358	27,873	95-101		
233	11	3732	6.21	357	45,080	97-103		
228	26	3832	6.33	364	56,656	99-105		
244	6	3532	5.91	340	7,263	93	432	5
257	7	3632	5.62	324	27,909	95-101		
257	12	3732	5.63	324	43,710	97-103		
252	27	3832	5.73	330	56,683	99-105		
301	2.79	3432	4.8	276	5,961	91	533	2.38
280	6	3532	5.17	297	7,065	93	494	5
291	8	3632	4.96	285	27,950	95-101		
294	13	3732	4.91	283	41,896	97-103		
289	26	3832	5.01	288	55,362	99-105		
326	7	3532	4.43	255	6,823	93	577	6
329	8	3632	4.39	253	27,985	95-101		
329	13	3732	4.39	253	40,427	97-103		
329	29	3832	4.4	253	53,093	99-105		
363	5	3532	3.98	229	6,653	93	643	5
368	6	3632	3.92	226	28,013	95-101		
369	14	3732	3.91	225	38,981	97-103		
355	29	3832	4.08	234	51,804	99-105		
414	32	3832	3.49	201	49,281	99-105		
454	32	3832	3.18	183	47,827	99-105		
502	35	3832	2.88	166	46,285	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>S</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>S</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>11 kW - 50 Hz</b>		<b>LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE - LSES 160 M FFB5 IFT/IE3</b>					<b>19.1 kW - 87 Hz*</b>	
5.51	0.83	3834	264	17,901	43,102	108		
6.61	1.00	3833	220	15,211	45,181	99-105		
7.39	1.11	3833	196	13,615	46,414	99-105		
7.91	1.19	3833	184	12,720	47,107	99-105		
8.83	1.33	3833	164	11,389	48,135	99-105		
10.33	0.86	3733	141	9,739	41,646	97-103		
9.97	1.50	3833	146	10,089	49,140	99-105		
11.24	0.94	3733	129	8,956	42,377	97-103		
11.18	1.68	3833	130	8,999	49,983	99-105		
13.10	1.09	3733	111	7,683	43,565	97-103		
12.6	1.89	3833	115	7,978	50,772	99-105		
14.3	1.19	3733	102	7,047	44,160	97-103		
14.1	2.11	3833	103	7,149	51,412	99-105		
16.6	0.80	3633	87.3	6,054	21,825	95-101		
16.2	1.34	3733	89.9	6,232	44,920	97-103		
15.8	2.36	3833	92	6,374	52,011	99-105		
18.9	0.91	3633	76.9	5,328	22,596	95-101		
18.9	1.56	3733	76.8	5,321	45,770	97-103		
17.8	2.65	3833	81.5	5,649	52,572	99-105		
20.5	0.98	3633	70.8	4,910	23,039	95-101		
21.3	1.75	3733	68.3	4,733	46,319	97-103		
20.3	3.00	3833	71.7	4,968	53,098	99-105		
23.1	1.10	3633	63	4,365	23,619	95-101		
23.7	1.94	3733	61.2	4,244	46,776	97-103		
23.0	3.40	3833	63.1	4,374	53,557	99-105		
25.8	1.23	3633	56.2	3,897	24,115	95-101		
26.2	2.14	3733	55.4	3,838	47,155	97-103		
26.1	3.84	3833	55.7	3,858	53,956	99-105		
28.8	1.37	3633	50.4	3,492	24,545	95-101		
30.2	2.43	3732	48	3,363	47,598	97-103		
28.8	4	3833	50.5	3,500	54,233	99-105		
33.8	0.86	3533	43	2,978	4,232	93	59.4	0.79
34.0	1.42	3632	42.8	2,995	25,073	95-101		
33.8	2.70	3732	43	3,010	47,927	97-103		
32.9	5	3833	44.1	3,055	54,577	99-105		
37.1	0.94	3533	39.2	2,716	4,836	93	65.1	0.83
37.2	1.65	3632	39	2,732	25,352	95-101		
36.2	2.89	3732	40.2	2,812	48,112	97-103		
36.9	5	3833	39.4	2,731	54,827	99-105		
42.4	1.05	3533	34.2	2,373	5,572	93	74.5	0.90
42.1	1.86	3632	34.5	2,416	25,688	95-101		
42.2	1.99	3633	34.4	2,385	25,720	95-101		
40.4	3.21	3732	36	2,518	48,387	97-103		
41.4	6	3833	35.1	2,432	55,058	99-105		
46.7	2.17	3632	31.1	2,176	25,942	95-101		
45.6	3.61	3732	31.8	2,231	48,655	97-103		
47.2	5	3832	30.8	2,153	55,274	99-105		
54.1	0.8	3432	26.8	1,880	6,296	91		
49.5	1.15	3533	29.3	2,034	6,228	93	86.9	0.97
52.4	2.30	3632	27.7	1,940	26,193	95-101		
51.1	3.68	3732	28.4	1,990	48,880	97-103		
52.8	6	3832	27.5	1,924	55,450	99-105		
58.1	0.83	3432	25	1,752	6,571	91		
55.1	1.21	3533	26.3	1,826	6,586	93	96.8	1.02
57.0	2.63	3632	25.5	1,784	26,358	95-101		
57.7	5	3732	25.2	1,764	49,091	97-103		
59.2	8	3832	24.5	1,718	55,610	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>11 kW - 50 Hz</b>		<b>LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE - LSES 160 M FFB5 IFT/IE3</b>					<b>19.1 kW - 87 Hz*</b>	
66.3	0.91	3432	21.9	1,534	7,005	91		
65.1	1.44	3532	22.3	1,561	6,949	93	114	1.41
66.4	2.86	3632	21.9	1,531	26,628	95-101		
64.3	5	3732	22.6	1,581	49,262	97-103		
66.2	9	3832	21.9	1,535	55,751	99-105		
75.0	0.98	3432	19.4	1,356	4,880	91	132	0.84
73.9	1.64	3532	19.7	1,377	7,148	93	130	1.73
72.4	3.08	3632	20	1,404	26,762	95-101		
72.2	6	3732	20.1	1,409	49,422	97-103		
74.3	10	3832	19.5	1,368	55,881	99-105		
84.2	1.06	3432	17.2	1,208	5,188	91	148	0.91
82.3	1.85	3532	17.6	1,236	7,282	93	145	2.12
81.9	3.39	3632	17.7	1,242	26,935	95-101		
81.4	6	3732	17.8	1,249	49,571	97-103		
83.5	11	3832	17.4	1,217	55,997	99-105		
94.0	1.13	3432	15.4	1,082	5,421	91	165	0.97
92.5	1.99	3532	15.7	1,100	7,405	93	162	2.09
95.9	3.38	3632	15.1	1,060	27,127	95-101		
92.6	6	3732	15.7	1,098	49,712	97-103		
94.4	12	3832	15.4	1,078	56,105	99-105		
110	1.25	3432	13.2	926	5,652	91	193	1.07
101	2.27	3532	14.4	1,008	7,444	93	177	2.59
108	3.88	3632	13.5	943	27,252	95-101		
105	7	3732	13.8	967	49,834	97-103		
106	13	3832	13.7	959	56,196	99-105		
121	1.33	3432	12	839	5,757	91	213	1.14
117	2.18	3532	12.4	871	7,465	93	205	2.11
120	5	3632	12.1	846	27,355	95-101		
119	7	3732	12.2	853	49,941	97-103		
116	13	3832	12.5	874	56,263	99-105		
138	1.43	3432	10.6	740	5,840	91	242	1.23
129	2.53	3532	11.2	787	7,449	93	227	2.45
133	5	3632	10.9	765	27,441	95-101		
131	8	3732	11	774	50,015	97-103		
132	15	3832	11	773	56,341	99-105		
153	1.53	3432	9.46	663	5,895	91	269	1.31
147	2.83	3532	9.89	693	7,397	93	258	3.18
151	5	3632	9.63	675	27,537	95-101		
151	8	3732	9.64	675	50,107	97-103		
146	16	3832	9.96	698	56,399	99-105		
172	1.64	3432	8.42	590	5,903	91	303	1.4
159	2.98	3532	9.12	639	7,348	93	280	3.35
170	6	3632	8.53	597	27,619	95-101		
168	9	3732	8.62	604	49,496	97-103		
166	17	3832	8.75	613	56,464	99-105		
193	1.74	3432	7.53	528	5,889	91	339	1.49
179	3.29	3532	8.11	568	7,262	93	315	3.69
191	5	3632	7.62	534	27,686	95-101		
189	9	3732	7.68	538	47,750	97-103		
179	17	3832	8.11	568	56,499	99-105		
201	3.44	3532	7.24	507	7,169	93	352	3.31
209	3.88	3632	6.93	486	27,737	95-101		
209	20	3832	6.95	486	56,562	99-105		
234	1.95	3432	6.22	435	5,833	91	410	1.67
224	5	3532	6.48	454	7,058	93	393	4
234	5	3632	6.22	435	27,791	95-101		
234	9	3732	6.21	435	44,720	97-103		
229	21	3832	6.33	443	56,595	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>11 kW - 50 Hz</b>		<b>LSES 160 MR IFT/IE2 - LSES 160 M IFT/IE3 LS 160 MP FFB5 IFT/NIE - LSES 160 M FFB5 IFT/IE3</b>					<b>19.1 kW - 87 Hz*</b>	
245	5	3532	5.91	414	6,955	93	431	4.18
258	6	3632	5.62	394	27,835	95-101		
258	10	3732	5.63	394	43,390	97-103		
254	22	3832	5.73	401	56,628	99-105		
303	2.29	3432	4.8	336	5,664	91	532	1.96
281	5	3532	5.17	362	6,789	93	494	4.45
293	6	3632	4.96	347	27,884	95-101		
295	10	3732	4.91	344	41,618	97-103		
290	22	3832	5.01	350	55,107	99-105		
328	6	3532	4.43	310	6,594	93	576	4.73
331	7	3632	4.39	308	27,927	95-101		
331	11	3732	4.39	308	40,137	97-103		
330	23	3832	4.4	308	52,868	99-105		
365	4	3532	3.98	278	6,453	93	641	4.16
370	5	3632	3.92	275	27,961	95-101		
371	12	3732	3.91	274	38,724	97-103		
356	23	3832	4.08	285	51,596	99-105		
416	26	3832	3.49	244	49,068	99-105		
456	26	3832	3.18	223	47,631	99-105		
505	29	3832	2.88	202	46,078	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>15 kW - 50 Hz</b>		<b>LSES 160 L IFT/IE2 - LSES 160 LUR IFT/IE3 LS 160 LR FFB5 IFT/NIE - LSES 160 LUR FFB5 IFT/IE3</b>					<b>26.1 kW - 87 Hz*</b>	
7.40	0.82	3833	196	18,552	42,599	99-105		
7.92	0.87	3833	184	17,331	43,542	99-105		
8.85	0.98	3833	164	15,518	44,943	99-105		
9.99	1.10	3833	146	13,746	46,313	99-105		
11.2	1.23	3833	130	12,262	47,461	99-105		
13.1	0.80	3733	111	10,468	40,966	97-103		
12.6	1.39	3833	115	10,870	48,536	99-105		
14.3	0.87	3733	102	9,601	41,775	97-103		
14.1	1.55	3833	103	9,741	49,409	99-105		
16.2	0.98	3733	89.9	8,491	42,811	97-103		
15.8	1.73	3833	92	8,685	50,225	99-105		
18.9	1.14	3733	76.8	7,250	43,970	97-103		
17.8	1.95	3833	81.5	7,697	50,989	99-105		
21.3	1.28	3733	68.3	6,449	44,718	97-103		
20.3	2.20	3833	71.7	6,769	51,706	99-105		
23.1	0.81	3633	63	5,947	21,939	95-101		
23.8	1.43	3733	61.2	5,782	45,340	97-103		
23.0	2.50	3833	63.1	5,960	52,331	99-105		
25.9	0.91	3633	56.2	5,310	22,615	95-101		
26.3	1.57	3733	55.4	5,229	45,857	97-103		
26.1	2.82	3833	55.7	5,257	52,875	99-105		
28.9	1.01	3633	50.4	4,758	23,202	95-101		
30.3	1.78	3732	48	4,582	46,460	97-103		
28.8	3.10	3833	50.5	4,768	53,252	99-105		
34.0	1.04	3632	42.8	4,081	23,920	95-101		
33.8	1.98	3732	43	4,101	46,909	97-103		
33.0	3.54	3833	44.1	4,162	53,721	99-105		
37.3	1.21	3632	39	3,723	24,300	95-101		
36.2	2.12	3732	40.2	3,832	47,161	97-103		
36.9	3.95	3833	39.4	3,720	54,062	99-105		
42.2	1.37	3632	34.5	3,291	24,759	95-101		
42.3	1.46	3633	34.4	3,250	24,802	95-101		
40.4	2.36	3732	36	3,431	47,535	97-103		
41.4	4.42	3833	35.1	3,313	54,377	99-105		
46.8	1.59	3632	31.1	2,965	25,105	95-101		
45.7	2.65	3732	31.8	3,039	47,900	97-103		
47.3	3.52	3832	30.8	2,934	54,670	99-105		
49.5	0.84	3533	29.3	2,772	5,884	93		
52.5	1.69	3632	27.7	2,644	25,446	95-101		
51.2	2.70	3732	28.4	2,711	48,207	97-103		
52.9	4	3832	27.5	2,622	54,911	99-105		
55.2	0.89	3533	26.3	2,488	6,424	93		
57.1	1.93	3632	25.5	2,431	25,672	95-101		
57.7	3.33	3732	25.2	2,403	48,494	97-103		
59.3	6	3832	24.5	2,340	55,129	99-105		
65.2	1.06	3532	22.3	2,127	4,508	93	115	1.03
66.5	2.10	3632	21.9	2,086	26,039	95-101		
64.4	3.70	3732	22.6	2,153	48,727	97-103		
66.3	7	3832	21.9	2,092	55,321	99-105		
74.0	1.21	3532	19.7	1,876	5,032	93	130	1.27
72.5	2.26	3632	20	1,913	26,222	95-101		
72.3	4	3732	20.1	1,920	48,945	97-103		
74.4	7	3832	19.5	1,863	55,498	99-105		

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



Selection tables

Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>15 kW - 50 Hz</b>		<b>LSES 160 L IFT/IE2 - LSES 160 LUR IFT/IE3 LS 160 LR FFB5 IFT/NIE - LSES 160 LUR FFB5 IFT/IE3</b>					<b>26.1 kW - 87 Hz*</b>	
82.4	1.36	3532	17.6	1,683	5,386	93	145	1.55
82.0	2.49	3632	17.7	1,692	26,457	95-101		
81.5	4	3732	17.8	1,702	49,149	97-103		
83.7	8	3832	17.4	1,658	55,656	99-105		
94.2	0.83	3432	15.4	1,474	5,680	91	163	1.54
92.6	1.46	3532	15.7	1,499	5,687	93		
96.1	2.48	3632	15.1	1,444	26,719	95-101		
92.7	5	3732	15.7	1,497	49,340	97-103		
94.5	8	3832	15.4	1,468	55,803	99-105		
110	0.92	3432	13.2	1,261	3,949	91	194	0.79
101.1	1.66	3532	14.4	1,373	5,873	93	178	1.90
108	2.85	3632	13.5	1,285	26,889	95-101		
105.3	5	3732	13.8	1,318	49,507	97-103		
106.1	9	3832	13.7	1,307	55,928	99-105		
121	0.97	3432	12	1,142	4,217	91	214	0.83
117	1.60	3532	12.4	1,187	6,106	93	206	1.55
120	3.44	3632	12.1	1,152	27,030	95-101		
119	5	3732	12.2	1,162	49,652	97-103		
117	10	3832	12.5	1,191	56,018	99-105		
138	1.05	3432	10.6	1,008	4,478	91	243	0.90
129	1.85	3532	11.2	1,073	6,220	93	228	1.80
133	3.64	3632	10.9	1,042	27,147	95-101		
132	6	3732	11	1,054	49,753	97-103		
132	11	3832	11	1,053	56,124	99-105		
154	1.12	3432	9.46	903	4,665	91	271	0.96
147	2.07	3532	9.89	944	6,318	93	259	2.33
151	3.89	3632	9.63	919	27,277	95-101		
151	6	3732	9.64	920	49,878	97-103		
146	12	3832	9.96	950	56,203	99-105		
173	1.20	3432	8.42	804	4,817	91	304	1.03
159	2.19	3532	9.12	870	6,356	93	281	2.46
171	4	3632	8.53	814	27,389	95-101		
169	7	3732	8.62	823	48,566	97-103		
166	13	3832	8.75	835	56,292	99-105		
193	1.28	3432	7.53	719	4,920	91	340	1.09
179	2.41	3532	8.11	773	6,382	93	316	2.71
191	3.88	3632	7.62	727	27,481	95-101		
189	7	3732	7.68	733	47,017	97-103		
179	13	3832	8.11	774	56,340	99-105		
201	2.52	3532	7.24	691	6,371	93	354	2.43
210	2.85	3632	6.93	662	27,551	95-101		
209	15	3832	6.95	663	56,426	99-105		
234	1.43	3432	6.22	593	5,025	91	412	1.23
224	3.38	3532	6.48	619	6,343	93	395	2.94
234	3.77	3632	6.22	593	27,623	95-101		
234	7	3732	6.21	592	44,128	97-103		
230	15	3832	6.33	604	56,471	99-105		
246	3.55	3532	5.91	564	6,305	93	433	3.07
259	4	3632	5.62	536	27,683	95-101		
258	7	3732	5.63	537	42,851	97-103		
254	16	3832	5.73	546	56,516	99-105		

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



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>15 kW - 50 Hz</b>		LSES 160 L IFT/IE2 - LSES 160 LUR IFT/IE3 LS 160 LR FFB5 IFT/NIE - LSES 160 LUR FFB5 IFT/IE3					<b>26.1 kW - 87 Hz*</b>	
303	1.68	3432	4.8	458	5,041	91	534	1.44
281	3.75	3532	5.17	493	6,228	93	495	3.26
293	5	3632	4.96	473	27,750	95-101		
296	8	3732	4.91	469	41,098	97-103		
290	16	3832	5.01	478	54,709	99-105		
328	4	3532	4.43	423	6,105	93	578	3.47
331	5	3632	4.39	419	27,808	95-101		
331	8	3732	4.39	419	39,719	97-103		
331	17	3832	4.4	420	52,466	99-105		
366	3.19	3532	3.98	379	6,012	93	644	3.05
370	3.88	3632	3.92	374	27,855	95-101		
372	9	3732	3.91	373	38,315	97-103		
357	17	3832	4.08	389	51,223	99-105		
417	19.37	3832	3.49	333	48,752	99-105		
457	19.16	3832	3.18	304	47,342	99-105		
505	21	3832	2.88	275	45,854	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>18.5 kW - 50 Hz</b>		<b>LSES 180 MT IFT/IE2 - LSES 180 M IFT/IE3</b>					<b>32.2 kW - 87 Hz*</b>	
		<b>LS 180 MT FCPL 54H1D</b>						
8.86	0.79	3833	164	19,119	42,161	99-105		
10.0	0.90	3833	146	16,936	43,848	99-105		
11.2	1.00	3833	130	15,106	45,262	99-105		
12.7	1.13	3833	115	13,392	46,587	99-105		
14.1	1.25	3833	103	12,001	47,662	99-105		
16.2	0.8	3733	89.9	10,461	40,973	97-103		
15.8	1.40	3833	92	10,700	48,667	99-105		
19.0	0.93	3733	76.8	8,932	42,400	97-103		
17.9	1.58	3833	81.5	9,483	49,609	99-105		
21.3	1.04	3733	68.3	7,944	43,322	97-103		
20.3	1.79	3833	71.7	8,340	50,492	99-105		
23.8	1.16	3733	61.2	7,124	44,088	97-103		
23.1	2.03	3833	63.1	7,343	51,262	99-105		
26.3	1.28	3733	55.4	6,441	44,725	97-103		
26.2	2.29	3833	55.7	6,477	51,932	99-105		
28.9	0.82	3633	50.4	5,861	22,030	95-101		
30.3	1.45	3732	48	5,645	45,468	97-103		
28.8	2.52	3833	50.5	5,875	52,397	99-105		
34.0	0.84	3632	42.8	5,028	22,915	95-101		
33.9	1.61	3732	43	5,053	46,021	97-103		
33.0	2.88	3833	44.1	5,128	52,975	99-105		
37.3	0.98	3632	39	4,586	23,384	95-101		
36.3	1.72	3732	40.2	4,720	46,331	97-103		
37.0	3.21	3833	39.4	4,584	53,395	99-105		
42.2	1.11	3632	34.5	4,054	23,948	95-101		
42.3	1.18	3633	34.4	4,004	24,002	95-101		
40.5	1.91	3732	36	4,227	46,792	97-103		
41.5	3.59	3833	35.1	4,082	53,783	99-105		
46.9	1.29	3632	31.1	3,653	24,375	95-101		
45.7	2.15	3732	31.8	3,744	47,242	97-103		
47.4	2.85	3832	30.8	3,614	54,144	99-105		
52.6	1.37	3632	27.7	3,257	24,795	95-101		
51.3	2.19	3732	28.4	3,340	47,620	97-103		
53.0	3.28	3832	27.5	3,231	54,441	99-105		
57.2	1.56	3632	25.5	2,995	25,073	95-101		
57.8	2.71	3732	25.2	2,961	47,974	97-103		
59.4	5	3832	24.5	2,883	54,709	99-105		
65.3	0.86	3532	22.3	2,620	2,468	93	113.73	0.83
66.6	1.70	3632	21.9	2,569	25,525	95-101		
64.5	3.01	3732	22.6	2,653	48,261	97-103		
66.4	6	3832	21.9	2,577	54,946	99-105		
74.1	0.98	3532	19.7	2,311	3,220	93	129	1.02
72.6	1.83	3632	20	2,357	25,751	95-101		
72.4	3.29	3732	20.1	2,366	48,529	97-103		
74.6	6	3832	19.5	2,296	55,163	99-105		
82.5	1.10	3532	17.6	2,074	3,756	93	144	1.25
82.1	2.02	3632	17.7	2,084	26,040	95-101		
81.7	3.55	3732	17.8	2,096	48,780	97-103		
83.8	7	3832	17.4	2,043	55,359	99-105		
92.7	1.18	3532	15.7	1,846	4,265	93	161	1.23
96.2	2.01	3632	15.1	1,780	26,364	95-101		
92.8	3.83	3732	15.7	1,844	49,016	97-103		
94.6	7	3832	15.4	1,809	55,540	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>18.5 kW - 50 Hz</b>		<b>LSES 180 MT IFT/IE2 - LSES 180 M IFT/IE3</b>					<b>32.2 kW - 87 Hz*</b>	
		<i>LS 180 MT FCPL 54H1D</i>						
101	1.35	3532	14.4	1,691	4,569	93	176	1.53
108	2.31	3632	13.5	1,583	26,572	95-101		
105	4	3732	13.8	1,623	49,222	97-103		
106	8	3832	13.7	1,610	55,693	99-105		
122	0.79	3432	12	1,407	4,935	91	204	1.24
117	1.30	3532	12.4	1,462	4,976	93		
121	2.79	3632	12.1	1,419	26,746	95-101		
120	4	3732	12.2	1,432	49,401	97-103		
117	8	3832	12.5	1,467	55,804	99-105		
138	0.85	3432	10.6	1,241	5,287	91	225	1.44
130	1.51	3532	11.2	1,322	5,211	93		
133	2.95	3632	10.9	1,283	26,890	95-101		
132	5	3732	11	1,299	49,525	97-103		
132	9	3832	11	1,297	55,935	99-105		
154	0.91	3432	9.46	1,113	5,517	91	256	1.87
147	1.68	3532	9.89	1,163	5,430	93		
151	3.15	3632	9.63	1,132	27,051	95-101		
151	5	3732	9.64	1,134	49,372	97-103		
146	9	3832	9.96	1,171	56,033	99-105		
173	0.97	3432	8.42	990	3,910	91	301	0.83
160	1.77	3532	9.12	1,072	5,535	93	278	1.97
171	3.36	3632	8.53	1,002	27,189	95-101		
169	5	3732	8.62	1,013	47,850	97-103		
166	10	3832	8.75	1,029	56,143	99-105		
193	1.04	3432	7.53	886	4,105	91	337	0.88
180	1.96	3532	8.11	953	5,649	93	313	2.17
191	3.15	3632	7.62	896	27,302	95-101		
190	6	3732	7.68	902	46,292	97-103		
180	10	3832	8.11	953	56,201	99-105		
201	2.05	3532	7.24	851	5,727	93	350	1.95
210	2.31	3632	6.93	815	27,388	95-101		
210	12	3832	6.95	816	56,307	99-105		
234	1.16	3432	6.22	731	4,356	91	408	0.99
225	2.74	3532	6.48	762	5,766	93	391	2.36
234	3.06	3632	6.22	731	27,477	95-101		
235	6	3732	6.21	730	43,541	97-103		
230	13	3832	6.33	744	56,363	99-105		
246	2.88	3532	5.91	695	5,777	93	429	2.47
259	3.47	3632	5.62	661	27,551	95-101		
259	6	3732	5.63	662	42,321	97-103		
254	13	3832	5.73	673	56,418	99-105		
304	1.36	3432	4.8	564	4,530	91	529	1.16
282	3.05	3532	5.17	607	5,766	93	491	2.62
294	3.75	3632	4.96	583	27,634	95-101		
296	6.23	3732	4.91	578	40,686	97-103		
291	12.88	3832	5.01	588	54,303	99-105		
329	3.29	3532	4.43	521	5,717	93	572	2.79
332	4	3632	4.39	516	27,705	95-101		
331	7	3732	4.39	516	39,352	97-103		
331	14	3832	4.4	517	52,165	99-105		
366	2.59	3532	3.98	467	5,663	93	638	2.45
371	3.15	3632	3.92	461	27,763	95-101		
372	7	3732	3.91	460	37,988	97-103		
357	14	3832	4.08	479	50,944	99-105		
417	15.72	3832	3.49	410	48,513	99-105		
458	15.55	3832	3.18	374	47,092	99-105		
506	17.02	3832	2.88	338	45,628	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — — — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>22 kW - 50 Hz</b>		<b>LSES 180 LR IFT/IE2 - LSES 180 LUR IFT/IE3 LS 180 LR FCPL 54H1D</b>					<b>38.3 kW - 87 Hz*</b>	
11.2	0.84	3833	130	17,968	43,050	99-105		
12.7	0.95	3833	115	15,929	44,626	99-105		
14.1	1.05	3833	103	14,274	45,905	99-105		
15.8	1.18	3833	92	12,727	47,101	99-105		
19.0	0.78	3733	76.8	10,623	40,821	97-103		
17.9	1.33	3833	81.5	11,279	48,220	99-105		
21.3	0.88	3733	68.3	9,449	41,917	97-103		
20.3	1.50	3833	71.7	9,920	49,271	99-105		
23.8	0.97	3733	61.2	8,473	42,828	97-103		
23.1	1.70	3833	63.1	8,734	50,187	99-105		
26.3	1.07	3733	55.4	7,662	43,586	97-103		
26.2	1.93	3833	55.7	7,704	50,983	99-105		
30.3	1.22	3732	48	6,714	44,470	97-103		
28.8	2.12	3833	50.5	6,988	51,537	99-105		
33.9	1.35	3732	43	6,010	45,127	97-103		
33.0	2.42	3833	44.1	6,099	52,224	99-105		
37.3	0.82	3632	39	5,455	22,461	95-101		
36.3	1.45	3732	40.2	5,614	45,496	97-103		
37.0	2.70	3833	39.4	5,452	52,724	99-105		
42.2	0.93	3632	34.5	4,822	23,133	95-101		
42.3	0.99	3633	34.4	4,762	23,196	95-101		
40.5	1.61	3732	36	5,027	46,045	97-103		
41.5	3.02	3833	35.1	4,855	53,185	99-105		
46.9	1.09	3632	31.1	4,345	23,640	95-101		
45.7	1.81	3732	31.8	4,453	46,580	97-103		
47.4	2.40	3832	30.8	4,299	53,615	99-105		
52.6	1.15	3632	27.7	3,874	24,140	95-101		
51.3	1.84	3732	28.4	3,972	47,029	97-103		
53.0	2.76	3832	27.5	3,843	53,968	99-105		
57.2	1.32	3632	25.5	3,563	24,470	95-101		
57.8	2.27	3732	25.2	3,521	47,450	97-103		
59.4	4	3832	24.5	3,429	54,287	99-105		
66.6	1.43	3632	21.9	3,056	25,008	95-101		
64.5	2.53	3732	22.6	3,156	47,792	97-103		
66.4	5	3832	21.9	3,065	54,569	99-105		
74.1	0.82	3532	19.7	2,748	3,828	93		
72.6	1.54	3632	20	2,803	25,277	95-101		
72.4	2.76	3732	20.1	2,814	48,111	97-103		
74.6	5	3832	19.5	2,731	54,827	99-105		
82.5	0.93	3532	17.6	2,467	4,440	93		
82.1	1.70	3632	17.7	2,479	25,621	95-101		
81.7	2.99	3732	17.8	2,493	48,410	97-103		
83.8	6	3832	17.4	2,430	55,060	99-105		
92.7	1.00	3532	15.7	2,196	4,988	93		
96.2	1.69	3632	15.1	2,117	26,006	95-101		
92.8	3.22	3732	15.7	2,193	48,690	97-103		
94.6	6	3832	15.4	2,152	55,275	99-105		
101	1.14	3532	14.4	2,012	5,342	93		
108	1.94	3632	13.5	1,883	26,254	95-101		
105	3.46	3732	13.8	1,931	48,935	97-103		
106	6	3832	13.7	1,916	55,457	99-105		
117	1.09	3532	12.4	1,739	5,803	93		
121	2.35	3632	12.1	1,688	26,461	95-101		
120	3.71	3732	12.2	1,703	49,147	97-103		
117	7	3832	12.5	1,745	55,589	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>22 kW - 50 Hz</b>		<b>LSES 180 LR IFT/IE2 - LSES 180 LUR IFT/IE3</b> <i>LS 180 LR FCPL 54H1D</i>					<b>38.3 kW - 87 Hz*</b>	
130	1.27	3532	11.2	1,572	4,134	93	226	1.21
133	2.48	3632	10.9	1,526	26,632	95-101		
132	3.90	3732	11	1,545	49,295	97-103		
132	7	3832	11	1,543	55,745	99-105		
147	1.41	3532	9.89	1,383	4,483	93	257	1.58
151	2.65	3632	9.63	1,347	26,823	95-101		
151	4.20	3732	9.64	1,348	48,565	97-103		
146	8	3832	9.96	1,393	55,861	99-105		
173	0.82	3432	8.42	1,178	4,767	91		
160	1.49	3532	9.12	1,275	4,674	93	278	1.66
171	2.83	3632	8.53	1,192	26,987	95-101		
169	4	3732	8.62	1,205	47,128	97-103		
166	9	3832	8.75	1,224	55,992	99-105		
193	0.87	3432	7.53	1,053	5,014	91		
180	1.64	3532	8.11	1,133	4,885	93	313	1.83
191	2.65	3632	7.62	1,066	27,122	95-101		
190	5	3732	7.68	1,073	45,647	97-103		
180	9	3832	8.11	1,134	56,061	99-105		
201	1.72	3532	7.24	1,012	5,036	93	351	1.64
210	1.94	3632	6.93	969	27,224	95-101		
210	10	3832	6.95	971	56,187	99-105		
234	0.98	3432	6.22	869	3,662	91	408	0.83
225	2.30	3532	6.48	907	5,143	93	392	1.99
234	2.57	3632	6.22	869	27,330	95-101		
235	4.65	3732	6.21	868	43,021	97-103		
230	11	3832	6.33	885	56,254	99-105		
246	2.42	3532	5.91	827	5,217	93	429	2.08
259	2.92	3632	5.62	786	27,418	95-101		
259	5	3732	5.63	787	41,850	97-103		
254	11	3832	5.73	801	56,244	99-105		
304	1.14	3432	4.8	671	3,992	91	529	0.97
282	2.56	3532	5.17	722	5,278	93	491	2.21
294	3.15	3632	4.96	694	27,517	95-101		
296	5	3732	4.91	687	40,276	97-103		
291	11	3832	5.01	700	53,956	99-105		
329	2.77	3532	4.43	619	5,296	93	573	2.35
332	3.38	3632	4.39	614	27,601	95-101		
331	6	3732	4.39	614	38,984	97-103		
331	12	3832	4.4	615	51,859	99-105		
366	2.18	3532	3.98	556	5,281	93	639	2.07
371	2.65	3632	3.92	549	27,276	95-101		
372	5.80	3732	3.91	547	37,660	97-103		
357	12	3832	4.08	570	50,662	99-105		
417	13	3832	3.49	488	48,270	99-105		
458	13	3832	3.18	445	46,871	99-105		
506	14	3832	2.88	402	45,429	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — — —> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>30 kW - 50 Hz</b>		<b>LSES 200 LR IFT/IE2 - LSES 200 LU IFT/IE3 LS 200 LT FCPL 54H1D + CDF7</b>					<b>52.2 kW - 87 Hz*</b>	
15.9	0.87	3833	92	17,313	43,556	99-105		
17.9	0.98	3833	81.5	15,343	45,079	99-105		
20.4	1.11	3833	71.7	13,494	46,508	99-105		
23.1	1.25	3833	63.1	11,882	47,754	99-105		
26.4	0.79	3733	55.4	10,422	41,009	97-103		
26.2	1.42	3833	55.7	10,480	48,838	99-105		
29.9	0.89	3733	48.8	9,195	42,154	97-103		
28.9	1.56	3833	50.5	9,505	49,591	99-105		
33.8	0.97	3733	43.2	8,140	43,139	97-103		
33.1	1.78	3833	44.1	8,297	50,525	99-105		
37.8	1.03	3733	38.7	7,275	43,946	97-103		
37.1	1.98	3833	39.4	7,416	51,206	99-105		
40.3	1.07	3733	36.3	6,828	44,364	97-103		
41.6	2.22	3833	35.1	6,605	51,833	99-105		
47.3	0.79	3633	30.9	5,815	16,656	95-101		
45.6	1.15	3733	32	6,022	45,116	97-103		
47.5	1.76	3832	30.8	5,848	52,418	99-105		
51.4	1.35	3732	28.4	5,403	45,694	97-103		
53.1	2.03	3832	27.5	5,227	52,898	99-105		
58.0	1.67	3732	25.2	4,790	46,266	97-103		
59.5	2.96	3832	24.5	4,665	53,332	99-105		
66.8	1.05	3632	21.9	4,157	23,839	95-101		
64.7	1.86	3732	22.6	4,292	46,731	97-103		
66.6	3.40	3832	21.9	4,170	53,715	99-105		
72.8	1.13	3632	20	3,813	24,205	95-101		
72.6	2.03	3732	20.1	3,827	47,165	97-103		
74.8	3.52	3832	19.5	3,714	54,067	99-105		
82.4	1.25	3632	17.7	3,372	24,673	95-101		
81.9	2.19	3732	17.8	3,392	47,571	97-103		
84.0	4	3832	17.4	3,305	54,383	99-105		
96.5	1.24	3632	15.1	2,879	25,196	95-101		
93.1	2.37	3732	15.7	2,983	47,953	97-103		
94.9	4	3832	15.4	2,927	54,676	99-105		
108	1.43	3632	13.5	2,561	25,534	95-101		
106	2.54	3732	13.8	2,627	48,285	97-103		
107	5	3832	13.7	2,606	54,924	99-105		
121	1.72	3632	12.1	2,296	25,815	95-101		
120	2.73	3732	12.2	2,317	48,575	97-103		
117	5	3832	12.5	2,373	55,104	99-105		
130	0.93	3532	11.2	2,138	1,749	93	225	0.95
134	1.82	3632	10.9	2,076	26,048	95-101		
132	2.86	3732	11	2,101	48,185	97-103		
133	5	3832	11	2,095	55,318	99-105		
148	1.04	3532	9.89	1,882	2,379	93	256	1.23
152	1.95	3632	9.63	1,832	26,308	95-101		
151	3.08	3732	9.64	1,834	46,732	97-103		
149	3.91	3832	9.81	1,866	55,495	99-105		
160	1.09	3532	9.12	1,734	2,726	93	278	1.3
171	2.08	3632	8.53	1,622	26,531	95-101		
169	3.26	3732	8.62	1,639	45,491	97-103		
167	6	3832	8.73	1,661	55,654	99-105		

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

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>30 kW - 50 Hz</b>		<b>LSES 200 LR IFT/IE2 - LSES 200 LU IFT/IE3 LS 200 LT FCPL 54H1D + CDF7</b>					<b>52.2 kW - 87 Hz*</b>	
180	1.21	3532	8.11	1,542	3,150	93	313	1.43
192	1.95	3632	7.62	1,450	26,714	95-101		
190	3.45	3732	7.68	1,460	44,188	97-103		
189	5	3832	7.73	1,471	55,801	99-105		
202	1.26	3532	7.24	1,376	3,500	93	350	1.28
204	2.01	3632	7.15	1,360	26,809	95-101		
207	3.11	3732	7.04	1,338	43,249	97-103		
212	7	3832	6.88	1,309	55,926	99-105		
225	1.69	3532	6.48	1,233	3,768	93	391	1.55
235	1.89	3632	6.22	1,182	26,998	95-101		
235	3.42	3732	6.21	1,180	41,845	97-103		
233	7	3832	6.27	1,192	56,016	99-105		
247	1.78	3532	5.91	1,125	3,952	93	429	1.62
260	2.15	3632	5.62	1,069	27,118	95-101		
259	3.59	3732	5.63	1,071	40,779	97-103		
283	1.88	3532	5.17	983	4,171	93	491	1.72
294	2.32	3632	4.96	943	27,251	95-101		
297	3.85	3732	4.91	935	39,293	97-103		
330	2.03	3532	4.43	842	4,355	93	572	1.83
333	2.48	3632	4.39	835	26,705	95-101		
332	4	3732	4.39	835	38,109	97-103		
367	1.60	3532	3.98	756	4,437	93	638	1.61
372	1.95	3632	3.92	746	26,084	95-101		
373	4	3732	3.91	744	36,881	97-103		
396	2.01	3632	3.68	700	25,727	95-101		
449	2.35	3632	3.25	618	24,987	95-101		

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



Selection tables

Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>37 kW - 50 Hz</b>		<b>LSES 225 ST IFT/IE2 - LSES 225 SR IFT/IE3 LS 225 ST FCPL 54H1D + CDF7</b>					<b>64.4 kW - 87 Hz</b>	
18.0	0.80	3833	81.5	18,822	42,390	99-105		
20.5	0.90	3833	71.7	16,554	44,143	99-105		
23.3	1.02	3833	63.1	14,576	45,672	99-105		
26.4	1.15	3833	55.7	12,856	47,001	99-105		
29.1	1.27	3833	50.5	11,661	47,925	99-105		
34.0	0.79	3733	43.2	9,986	41,416	97-103		
33.3	1.45	3833	44.1	10,178	49,071	99-105		
38.0	0.84	3733	38.7	8,925	42,406	97-103		
37.3	1.62	3833	39.4	9,098	49,906	99-105		
40.5	0.87	3733	36.3	8,376	42,919	97-103		
41.8	1.81	3833	35.1	8,103	50,675	99-105		
45.9	0.94	3733	32	7,388	43,841	97-103		
46.5	2.01	3833	31.6	7,288	51,305	99-105		
53.1	2.28	3833	27.7	6,387	52,002	99-105		
59.8	2.41	3832	24.5	5,723	52,514	99-105		
65.1	1.51	3732	22.6	5,266	45,822	97-103		
67.0	2.77	3832	21.9	5,116	52,984	99-105		
73.0	1.65	3732	20.1	4,695	46,355	97-103		
75.2	2.86	3832	19.5	4,557	53,416	99-105		
82.8	1.02	3632	17.7	4,137	20,686	95-101		
82.3	1.79	3732	17.8	4,161	46,853	97-103		
84.5	3.29	3832	17.4	4,055	53,804	99-105		
97.0	1.01	3632	15.1	3,532	24,503	95-101		
93.6	1.93	3732	15.7	3,659	47,321	97-103		
95.4	3.44	3832	15.4	3,591	54,163	99-105		
109	1.16	3632	13.5	3,142	24,917	95-101		
106	2.07	3732	13.8	3,222	47,729	97-103		
107	3.85	3832	13.7	3,197	54,467	99-105		
122	1.40	3632	12.1	2,817	25,262	95-101		
121	2.22	3732	12.2	2,842	47,042	97-103		
118	3.97	3832	12.5	2,911	54,688	99-105		
134	1.48	3632	10.9	2,547	25,548	95-101		
133	2.33	3732	11	2,578	46,245	97-103		
133	4	3832	11	2,575	54,948	99-105		
152	1.58	3632	9.63	2,247	25,867	95-101		
152	2.51	3732	9.64	2,250	45,044	97-103		
147	5	3832	9.96	2,324	55,141	99-105		
172	1.69	3632	8.53	1,989	26,141	95-101		
170	2.65	3732	8.62	2,011	43,987	97-103		
168	5	3832	8.75	2,042	55,359	99-105		
193	1.59	3632	7.62	1,778	26,365	95-101		
191	2.81	3732	7.68	1,791	42,853	97-103		
181	5	3832	8.11	1,892	55,475	99-105		
205	1.64	3632	7.15	1,669	26,481	95-101		
211	6	3832	6.95	1,620	55,685	99-105		
236	1.54	3632	6.22	1,451	26,713	95-101		
237	2.78	3732	6.21	1,448	40,703	97-103		
232	6	3832	6.33	1,477	55,796	99-105		
261	1.75	3632	5.62	1,312	26,562	95-101		
261	2.92	3732	5.63	1,314	39,747	97-103		
256	7	3832	5.73	1,336	54,430	99-105		

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MI-MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MI <—> page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>37 kW - 50 Hz</b>		<b>LSES 225 ST IFT/IE2 - LSES 225 SR IFT/IE3 LS 225 ST FCPL 54H1D + CDF7</b>					<b>64.4 kW - 87 Hz</b>	
296	1.89	3632	4.96	1,157	26,068	95-101		
299	3.13	3732	4.91	1,147	38,397	97-103		
293	6.47	3832	5.01	1,168	52,374	99-105		
334	2.02	3632	4.39	1,024	25,556	95-101		
334	3.30	3732	4.39	1,025	37,310	97-103		
334	7	3832	4.4	1,026	50,423	99-105		
374	1.59	3632	3.92	916	25,024	95-101		
375	3.46	3732	3.91	913	36,173	97-103		
360	7	3832	4.08	951	49,332	99-105		
399	1.64	3632	3.68	859	24,712	95-101		
421	8	3832	3.49	814	47,100	99-105		
452	2	3632	3.25	758	24,096	95-101		
461	8	3832	3.18	742	45,845	99-105		
510	9	3832	2.88	671	44,471	99-105		

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>S</sub> (min <sup>-1</sup> )	Kp	Mub / MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MU* < — > page	N <sub>S</sub> (min <sup>-1</sup> )	Kp
<b>45 kW - 50 Hz</b>		<b>LSES 225 MR IFT/IE2 - LSES 225 MG IFT/IE3 LS 225 MR FCPL 54H1D + CDF7</b>					<b>78.3 kW - 87 Hz</b>	
23.3	0.84	3833	63.1	17,730	43,234	99-105-106		
26.4	0.95	3833	55.7	15,638	44,851	99-105-106		
29.1	1.04	3833	50.5	14,184	45,975	99-105-106		
33.3	1.19	3833	44.1	12,380	47,369	99-105-106		
37.3	1.33	3833	39.4	11,067	48,384	99-105-106		
41.8	1.49	3833	35.1	9,856	49,320	99-105-106		
46.5	1.65	3833	31.6	8,865	50,086	99-105-106		
53.1	1.87	3833	27.7	7,769	50,933	99-105-106		
59.8	1.99	3832	24.5	6,961	51,557	99-105-106		
65.1	1.24	3732	22.6	6,405	44,759	97-103-106		
67.0	2.28	3832	21.9	6,223	52,128	99-105-106		
73.0	1.36	3732	20.1	5,711	45,406	97-103-106		
75.2	2.35	3832	19.5	5,543	52,654	99-105-106		
82.8	0.84	3632	17.7	5,032	8,298	95-101-106		
82.3	1.47	3732	17.8	5,061	46,013	97-103-106		
84.5	2.71	3832	17.4	4,932	53,125	99-105-106		
97.0	0.83	3632	15.1	4,296	13,801	95-101-106		
93.6	1.58	3732	15.7	4,451	46,134	97-103-106		
95.4	2.83	3832	15.4	4,368	53,562	99-105-106		
109	0.96	3632	13.5	3,821	17,413	95-101-106		
106	1.70	3732	13.8	3,919	45,585	97-103-106		
107	3.17	3832	13.7	3,888	53,933	99-105-106		
122	1.15	3632	12.1	3,427	20,078	95-101-106		
121	1.82	3732	12.2	3,457	44,722	97-103-106		
118	3.26	3832	12.5	3,541	54,201	99-105-106		
134	1.22	3632	10.9	3,098	22,278	95-101-106		
133	1.91	3732	11	3,135	44,144	97-103-106		
133	3.65	3832	11	3,132	54,517	99-105-106		
152	2.06	3732	9.64	2,737	43,209	97-103-106		
152	1.30	3632	9.63	2,734	24,507	95-101-106		
147	3.89	3832	9.96	2,827	54,753	99-105-106		
172	1.39	3632	8.53	2,420	25,130	95-101-106		
170	2.18	3732	8.62	2,446	42,346	97-103-106		
168	4	3832	8.75	2,484	55,018	99-105-106		
193	1.30	3632	7.62	2,163	25,164	95-101-106		
191	2.31	3732	7.68	2,179	41,389	97-103-106		
181	4	3832	8.11	2,302	55,159	99-105-106		
205	1.35	3632	7.15	2,030	25,193	95-101-106		
211	5	3832	6.95	1,971	55,414	99-105-106		
236	1.27	3632	6.22	1,764	25,061	95-101-106		
237	2.29	3732	6.21	1,761	39,521	97-103-106		
232	5	3832	6.33	1,797	54,953	99-105-106		
261	1.44	3632	5.62	1,595	24,889	95-101-106		
261	2.40	3732	5.63	1,598	38,676	97-103-106		
256	6	3832	5.73	1,625	53,531	99-105-106		
296	1.55	3632	4.96	1,408	24,584	95-101-106		
299	2.57	3732	4.91	1,395	37,462	97-103-106		
293	5	3832	5.01	1,421	51,589	99-105-106		
334	1.66	3632	4.39	1,246	24,244	95-101-106		
334	2.71	3732	4.39	1,247	36,473	97-103-106		
334	6	3832	4.4	1,248	49,734	99-105-106		

\* : 1<sup>st</sup> pages for gearbox only (Mub hollow shaft H - Mub output shaft S) - 3<sup>rd</sup> page for motor + MU

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>	Mub / MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MU* < — > page	N <sub>s</sub> (min <sup>-1</sup> )	K <sub>p</sub>
<b>45 kW - 50 Hz</b>		<b>LSES 225 MR IFT/IE2 - LSES 225 MG IFT/IE3 LS 225 MR FCPL 54H1D + CDF7</b>					<b>78.3 kW - 87 Hz</b>	
374	1.30	3632	3.92	1,114	23,854	95-101-106		
375	2.85	3732	3.91	1,110	35,430	97-103-106		
360	5.77	3832	4.08	1,157	48,693	99-105-106		
399	1.35	3632	3.68	1,045	23,611	95-101-106		
421	6	3832	3.49	990	46,554	99-105-106		
452	1.57	3632	3.25	922	23,127	95-101-106		
461	6	3832	3.18	903	45,342	99-105-106		
510	7	3832	2.88	817	44,018	99-105-106		

\* : 1<sup>st</sup> pages for gearbox only (Mub hollow shaft H - Mub output shaft S) - 3<sup>rd</sup> page for motor + MU

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>S</sub> (min <sup>-1</sup> )	Kp	Mub / MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MU* < — > page	N <sub>S</sub> (min <sup>-1</sup> )	Kp
<b>55 kW - 50 Hz</b>		<b>LSES 250 ME IFT/IE2 - LSES 250 ME IFT/IE3</b>					<b>95.7 kW - 87 Hz</b>	
		<b>LS 250 ME FCPL 60H2D</b>						
26.7	0.78	3833	55.7	18,909	42,323	99-105-106		
29.4	0.86	3833	50.5	17,151	43,682	99-105-106		
33.7	0.98	3833	44.1	14,970	45,367	99-105-106		
37.7	1.10	3833	39.4	13,382	46,595	99-105-106		
42.3	1.23	3833	35.1	11,917	47,727	99-105-106		
47.0	1.36	3833	31.6	10,719	48,653	99-105-106		
53.7	1.55	3833	27.7	9,393	49,678	99-105-106		
60.5	1.64	3832	24.5	8,417	50,432	99-105-106		
65.8	1.03	3732	22.6	7,744	41,558	97-103-106		
67.7	1.88	3832	21.9	7,524	51,122	99-105-106		
73.8	1.12	3732	20.1	6,905	42,067	97-103-106		
76.0	1.94	3832	19.5	6,702	51,758	99-105-106		
83.2	1.21	3732	17.8	6,119	42,363	97-103-106		
85.4	2.23	3832	17.4	5,964	52,328	99-105-106		
94.6	1.30	3732	15.7	5,382	42,401	97-103-106		
96.4	2.33	3832	15.4	5,281	52,856	99-105-106		
110	0.79	3632	13.5	4,620	5,771	95-101-106		
107	1.40	3732	13.8	4,739	42,303	97-103-106		
108	2.61	3832	13.7	4,702	53,304	99-105-106		
123	0.95	3632	12.1	4,143	9,492	95-101-106		
122	1.50	3732	12.2	4,180	41,837	97-103-106		
119	2.69	3832	12.5	4,282	53,628	99-105-106		
136	1.00	3632	10.9	3,746	12,686	95-101-106		
134	1.58	3732	11	3,791	41,530	97-103-106		
134	3.00	3832	11	3,787	54,011	99-105-106		
154	1.07	3632	9.63	3,305	15,870	95-101-106		
154	1.70	3732	9.64	3,309	40,819	97-103-106		
149	3.21	3832	9.96	3,419	54,296	99-105-106		
174	1.14	3632	8.53	2,926	18,404	95-101-106		
172	1.80	3732	8.62	2,958	40,214	97-103-106		
170	3.49	3832	8.75	3,004	54,616	99-105-106		
195	1.08	3632	7.62	2,615	20,474	95-101-106		
193	1.90	3732	7.68	2,634	39,502	97-103-106		
183	3.54	3832	8.11	2,783	54,787	99-105-106		
207	1.11	3632	7.15	2,454	21,641	95-101-106		
214	4	3832	6.95	2,383	54,785	99-105-106		
239	1.05	3632	6.22	2,133	22,731	95-101-106		
239	1.89	3732	6.21	2,130	38,002	97-103-106		
234	4	3832	6.33	2,173	53,611	99-105-106		
264	1.19	3632	5.62	1,929	22,784	95-101-106		
264	1.98	3732	5.63	1,932	37,247	97-103-106		
259	5	3832	5.73	1,965	52,247	99-105-106		
299	1.28	3632	4.96	1,702	22,736	95-101-106		
302	2.12	3732	4.91	1,686	36,223	97-103-106		
296	4	3832	5.01	1,718	50,476	99-105-106		
338	1.37	3632	4.39	1,507	22,576	95-101-106		
338	2.23	3732	4.39	1,507	35,328	97-103-106		
337	5	3832	4.4	1,509	48,764	99-105-106		
378	1.08	3632	3.92	1,347	22,370	95-101-106		
379	2.35	3732	3.91	1,342	34,415	97-103-106		
364	5	3832	4.08	1,398	47,750	99-105-106		
403	1.11	3632	3.68	1,264	22,218	95-101-106		
425	5	3832	3.49	1,197	45,755	99-105-106		
457	1.30	3632	3.25	1,115	21,880	95-101-106		
466	5	3832	3.18	1,092	44,585	99-105-106		
516	6	3832	2.88	988	43,305	99-105-106		

\* : 1<sup>st</sup> pages for gearbox only (Mub hollow shaft H - Mub output shaft S) - 3<sup>rd</sup> page for motor + MU

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>S</sub> (min <sup>-1</sup> )	Kp	Mub / MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MU* < — > page	N <sub>S</sub> (min <sup>-1</sup> )	Kp
<b>75 kW - 50 Hz</b>		<b>LSES 280 SD IFT/IE2 - LSES 280 SD IFT/IE3 LS 280 SC FCPL 60H2D</b>					<b>130 kW - 87 Hz</b>	
37.7	0.81	3833	39.4	18,225	41,123	99-105-106		
42.4	0.90	3833	35.1	16,231	44,393	99-105-106		
47.1	1.00	3833	31.6	14,599	45,654	99-105-106		
53.7	1.14	3833	27.7	12,793	47,050	99-105-106		
60.6	1.20	3832	24.5	11,464	48,077	99-105-106		
67.8	1.38	3832	21.9	10,247	49,017	99-105-106		
73.9	0.82	3732	20.1	9,405	32,606	97-103-106		
76	1.42	3832	19.5	9,128	49,883	99-105-106		
83	0.89	3732	17.8	8,334	34,059	97-103-106		
86	1.64	3832	17.4	8,123	50,660	99-105-106		
95	0.96	3732	15.7	7,330	34,964	97-103-106		
97	1.71	3832	15.4	7,193	51,379	99-105-106		
108	1.03	3732	13.8	6,454	35,649	97-103-106		
108	1.91	3832	13.7	6,403	51,989	99-105-106		
122	1.10	3732	12.2	5,693	36,128	97-103-106		
119	1.97	3832	12.5	5,832	52,430	99-105-106		
135	1.16	3732	11	5,163	36,218	97-103-106		
135	2.20	3832	11	5,158	52,951	99-105-106		
154	0.79	3632	9.63	4,502	200	95-101-106		
154	1.25	3732	9.64	4,507	36,298	97-103-106		
149	2.35	3832	9.96	4,656	53,339	99-105-106		
174	0.84	3632	8.53	3,985	3,174	95-101-106		
172	1.32	3732	8.62	4,029	36,175	97-103-106		
170	2.56	3832	8.75	4,091	53,776	99-105-106		
195	0.79	3632	7.62	3,562	6,806	95-101-106		
194	1.40	3732	7.68	3,588	35,818	97-103-106		
183	2.59	3832	8.11	3,791	53,740	99-105-106		
208	0.82	3632	7.15	3,343	8,373	95-101-106		
214	2.95	3832	6.95	3,246	52,105	99-105-106		
239	1.39	3732	6.21	2,901	35,094	97-103-106		
235	3.13	3832	6.33	2,959	51,083	99-105-106		
264	0.87	3632	5.62	2,627	13800	95-101-106		
264	1.45	3732	5.63	2,631	34,611	97-103-106		
259	3.33	3832	5.73	2,677	50,039	99-105-106		
300	0.94	3632	4.96	2,318	16039	95-101-106		
302	1.56	3732	4.91	2,297	33918	97-103-106		
297	3.22	3832	5.01	2,339	48485	99-105-106		
338	1.01	3632	4.39	2,052	17864	95-101-106		
338	1.64	3732	4.39	2,053	33269	97-103-106		
338	3.49	3832	4.4	2,055	47013	99-105-106		
379	0.79	3632	3.92	1,834	19269	95-101-106		
380	1.72	3732	3.91	1,828	32546	97-103-106		
365	3.49	3832	4.08	1,905	46128	99-105-106		
403	0.82	3632	3.68	1,721	19517	95-101-106		
426	3.92	3832	3.49	1,631	44367	99-105-106		
457	0.95	3632	3.25	1,518	19499	95-101-106		
467	3.90	3832	3.18	1,487	43322	99-105-106		
516	4	3832	2.88	1,345	42,197	99-105-106		

\* : 1<sup>st</sup> pages for gearbox only (Mub hollow shaft H - Mub output shaft S) - 3<sup>rd</sup> page for motor + MU

# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>S</sub> (min <sup>-1</sup> )	Kp	Mub / MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MU* < ——— > page	N <sub>S</sub> (min <sup>-1</sup> )	Kp
<b>90 kW - 50 Hz</b>		<b>LSES 280 MD IFT/IE2 - LSES 280 MD IFT/IE3 LS 280 MD FCPL 60H2D + CDF7</b>					<b>157 kW - 87 Hz</b>	
47.0	0.83	3833	31.6	17,544	31,890	99-105-106		
53.7	0.95	3833	27.7	15,374	39,740	99-105-106		
76.0	1.18	3832	19.5	10,969	48,460	99-105-106		
85.4	1.36	3832	17.4	9,761	49,393	99-105-106		
96.4	1.42	3832	15.4	8,643	50,257	99-105-106		
108	1.59	3832	13.7	7,695	50,990	99-105-106		
119	1.64	3832	12.5	7,008	51,521	99-105-106		
134	0.96	3732	11	6,205	32,426	97-103-106		
134	1.84	3832	11	6,199	52,147	99-105-106		
154	1.04	3732	9.64	5,416	32,872	97-103-106		
149	1.96	3832	9.96	5,595	52,613	99-105-106		
172	1.1	3732	8.62	4,841	33,113	97-103-106		
170	2.13	3832	8.75	4,916	51,878	99-105-106		
193	1.16	3732	7.68	4,311	33,176	97-103-106		
183	2.16	3832	8.11	4,555	51,370	99-105-106		
214	2.46	3832	6.95	3,901	50,068	99-105-106		
234	2.60	3832	6.33	3,556	49,317	99-105-106		
264	1.21	3732	5.63	3,162	32,606	97-103-106		
259	2.77	3832	5.73	3,217	48,362	99-105-106		
302	1.30	3732	4.91	2,760	32,172	97-103-106		
296	2.68	3832	5.01	2,811	47,082	99-105-106		
338	1.36	3732	4.39	2,467	31,708	97-103-106		
337	2.91	3832	4.4	2,470	45,780	99-105-106		
379	1.43	3732	3.91	2,197	31,190	97-103-106		
364	2.91	3832	4.08	2,289	44,984	99-105-106		
425	3.27	3832	3.49	1,960	43,385	99-105-106		
466	3.25	3832	3.18	1,787	42,427	99-105-106		
516	3.55	3832	2.88	1,616	41,355	99-105-106		

\* : 1<sup>st</sup> pages for gearbox only (Mub hollow shaft H - Mub output shaft S) - 3<sup>rd</sup> page for motor + MU



# Geared Motors 3000 Range - IMfinity® - Manubloc

## Selection tables

### Manubloc: Mub / LS, LSES motors / 4 poles

LS, LSES 1500 min <sup>-1</sup> - 50 Hz		Mub - Gearbox					LS, LSES 2600 min <sup>-1</sup> - 87 Hz	
N <sub>s</sub> (min <sup>-1</sup> )	Kp	Mub / MU	i	M (Nm)	F <sub>R</sub> E/2 (N)	Dim. MU* < — > page	N <sub>s</sub> (min <sup>-1</sup> )	Kp
<b>110 kW - 50 Hz</b>		<b>LSES 315 SP IFT/IE2 - LSES 315 SP IFT/IE3</b> <i>LS 315 FCPL : nous consulter</i>					<b>191 kW - 87 Hz</b>	
53.8	0.78	3833	27.7	18,740	15403	99-105-106		
76.2	0.97	3832	19.5	13,371	35730	99-105-106		
85.6	1.12	3832	17.4	11,899	41133	99-105-106		
96.7	1.17	3832	15.4	10,536	45452	99-105-106		
109	1.31	3832	13.7	9,380	48735	99-105-106		
119	1.35	3832	12.5	8,543	49090	99-105-106		
135	1.5	3832	11	7,556	49042	99-105-106		
149	1.61	3832	9.96	6,820	48982	99-105-106		
170	1.75	3832	8.75	5,993	48533	99-105-106		
183	1.77	3832	8.11	5,553	48267	99-105-106		
214	2.01	3832	6.95	4,755	47419	99-105-106		
235	2.13	3832	6.33	4,335	46813	99-105-106		
260	2.27	3832	5.73	3,921	46098	99-105-106		
297	2.19	3832	5.01	3,427	45107	99-105-106		
338	2.38	3832	4.4	3,011	44047	99-105-106		
365	2.38	3832	4.08	2,790	43382	99-105-106		
426	2.68	3832	3.49	2,389	42015	99-105-106		
468	2.66	3832	3.18	2,178	41143	99-105-106		
517	2.91	3832	2.88	1,970	40226	99-105-106		

\* : \* 1<sup>st</sup> pages for gearbox only - 3<sup>rd</sup> page for motor + MU

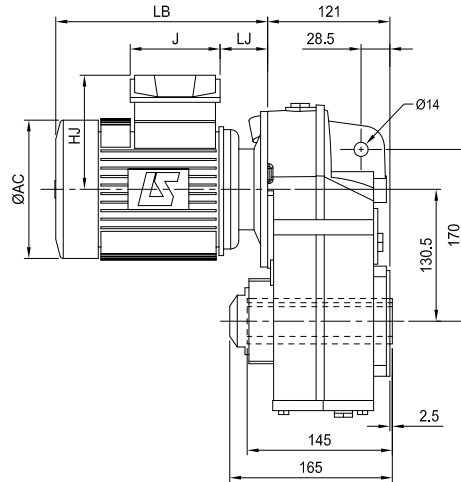
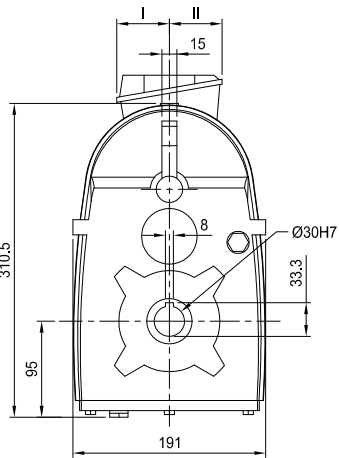
Dimensions

Mub 3132 - Integral mounting MI

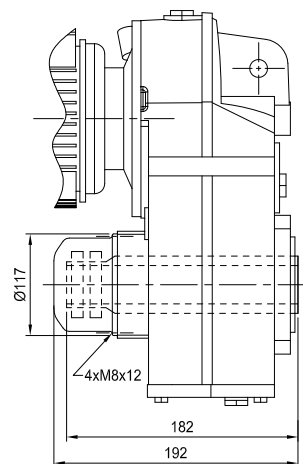
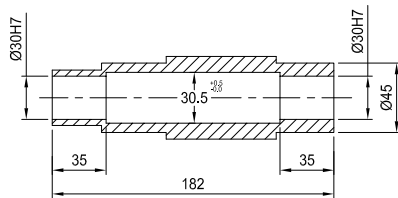
Dimensions in millimetres

- R form, H cylindrical hollow shaft

Mub: 15.5 kg  
+ mot



- SDB form (shrink disc option)




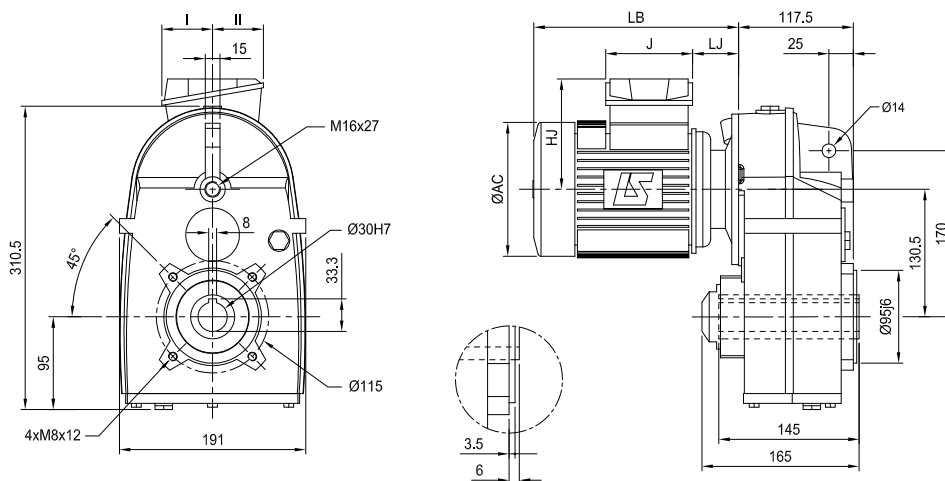
## Dimensions

### Mub 3132 - Integral mounting MI

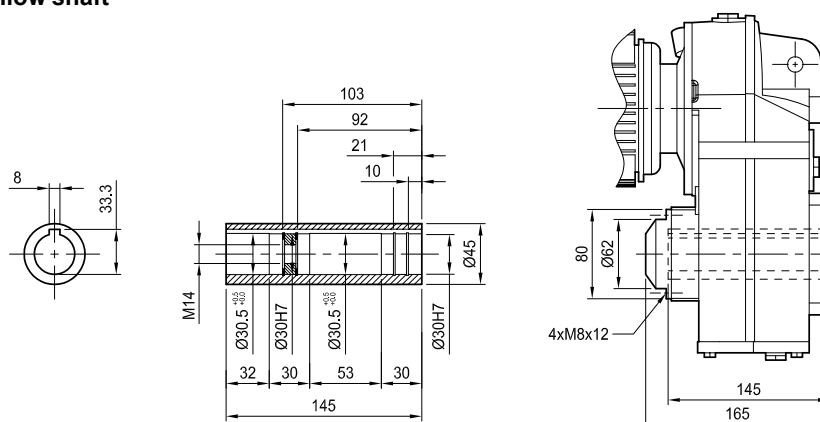
Dimensions in millimetres

#### - BT flange form, H cylindrical hollow shaft

 Mub: 15.5 kg + mot



#### - Details of the H standard hollow shaft



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II			AC	HJ	J	LB	LJ	I	II	
<i>LS 71 L</i>	140	109	86	207.5	37	43.5	43.5	8.3	<i>FFB 1</i>	140	130	160	299.5	26	55	55	11.3
<i>LS 80 L</i>	-	-	-	-	-	-	-	-	<i>FFB 1</i>	170	141	160	347	50	55	55	13.9
<i>LSES 80 LG</i>	190	135	86	288	67.5	43.5	43.5	14.1	<i>FFB 1</i>	190	151	160	430	55.5	55	55	18
<i>LS 90 SL</i>	-	-	-	-	-	-	-	-	<i>FFB 2</i>	190	151	160	434.5	59	55	55	18.2
<i>LSES 90 SL</i>	190	135	86	290	71	43.5	43.5	16.2	<i>FFB 2</i>	190	151	160	434.5	59	55	55	22.4
<i>LS 90 L</i>	-	-	-	-	-	-	-	-	<i>FFB 2</i>	190	151	160	434.5	59	55	55	21
<i>LSES 90 L</i>	190	135	86	290	71	43.5	43.5	16.2	-	-	-	-	-	-	-	-	-
<i>LSES 90 LU</i>	190	135	86	321.5	71	43.5	43.5	20.4	<i>FFB 2</i>	190	151	160	434.5	59	55	55	26.6
<i>LS 100 L</i>	-	-	-	-	-	-	-	-	<i>FFB 2</i>	200	156	160	482.5	60	55	55	29.6
<i>LSES 100 L</i>	200	140	86	335.5	72	43.5	43.5	23	<i>FFB 2</i>	200	156	160	482.5	60	55	55	29.6
<i>LSES 100 LR</i>	200	140	86	354.5	72	43.5	43.5	25.8	<i>FFB 2</i>	200	156	160	482.5	60	55	55	32
<i>LSES 100 LG</i>	235	149	86	350.5	71	43.5	43.5	31	<i>FFB 3</i>	235	165	160	458.5	59	55	55	37.6

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE

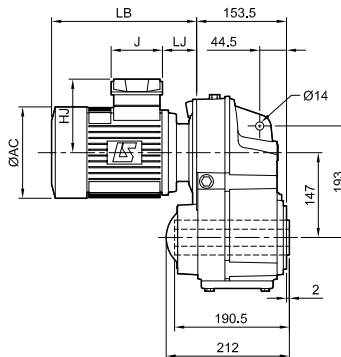
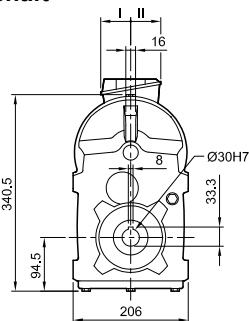
Dimensions

Mub 3232 and Mub 3233 - Integral mounting MI

Dimensions in millimetres

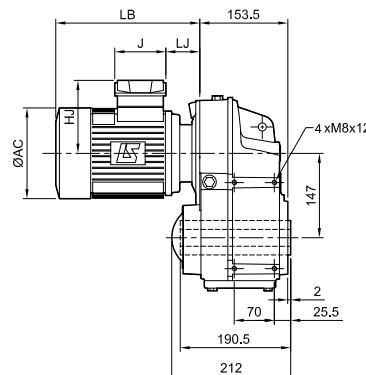
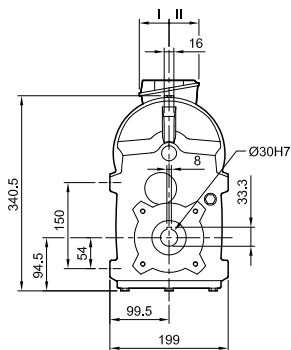
- R form, H cylindrical hollow shaft

Mub: 26 kg + mot



- NUL<sup>1</sup> tapped holes form, H standard hollow shaft

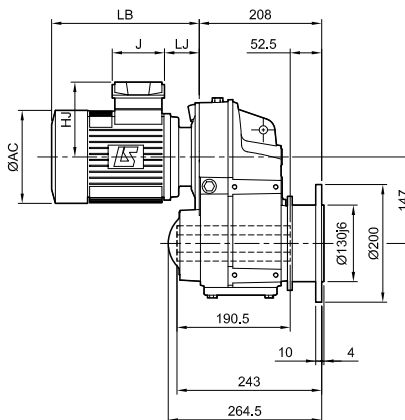
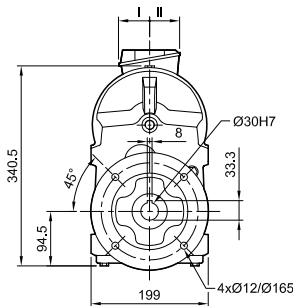
Mub: 26 kg + mot



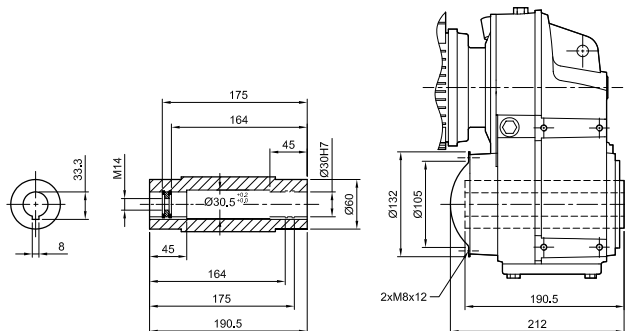
1. NUR right option: identical tapped holes

- BD flange form, H cylindrical hollow shaft

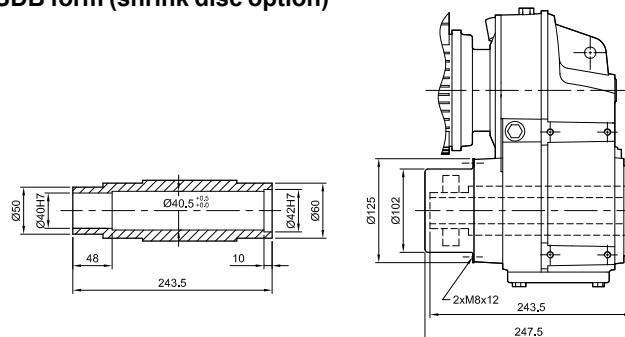
Mub: 30 kg + mot



- Details H standard hollow shaft



- SDB form (shrink disc option)




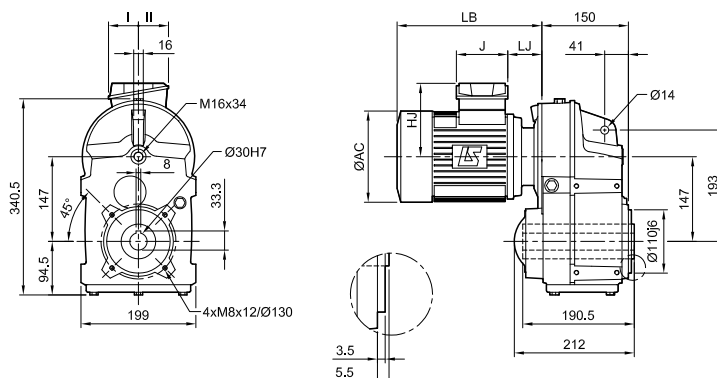
## Dimensions

### Mub 3232 and Mub 3233 - Integral mounting MI


Dimensions in millimetres

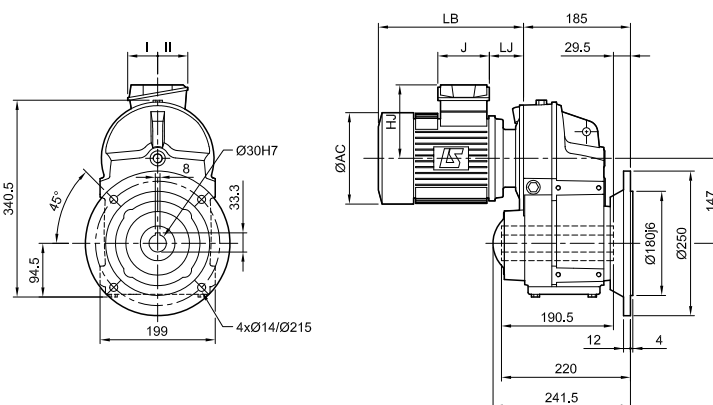
#### - BT flange form, H cylindrical hollow shaft


 Mub: 26 kg  
+ mot




#### - BS flange form, H cylindrical hollow shaft

 Mub: 31 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							 kg
	AC	HJ	J	LB	LJ	I	II	
<i>LS 71 L</i>	140	109	87	207.5	37	43.5	43.5	8.3
<i>LS 80 L</i>	-	-	-	-	-	-	-	-
<b>LSES 80 LG</b>	190	135	86	288	67.5	43.5	43.5	14.1
<i>LS 90 SL</i>	-	-	-	-	-	-	-	-
<b>LSES 90 SL</b>	190	135	86	290	71	43.5	43.5	16.2
<i>LS 90 L</i>	-	-	-	-	-	-	-	-
<b>LSES 90 L</b>	190	135	86	290	71	43.5	43.5	16.2
<b>LSES 90 LU</b>	190	135	86	321.5	71	43.5	43.5	20.4
<i>LS 100 L</i>	-	-	-	-	-	-	-	-
<b>LSES 100 L</b>	200	140	86	335.5	72	43.5	43.5	22.6
<b>LSES 100 LR</b>	200	140	86	354.5	72	43.5	43.5	25.8
<b>LSES 100 LG</b>	235	149	86	350.5	71	43.5	43.5	31
<i>LS 112 MG</i>	-	-	-	-	-	-	-	-
<b>LSES 112 MU</b>	235	149	86	368.5	71	43	43	37
<i>LS 132 S</i>	-	-	-	-	-	-	-	-
<b>LSES 132 SU</b>	227	172	126	403	52	63	63	42.1
<b>LSES 132 SM</b>	272	190	126	437	69	63	63	52

Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							 kg
	AC	HJ	J	LB	LJ	I	II	
<b>FFB 1</b>	140	130	160	299.5	26	55	55	11.3
<b>FFB 1</b>	170	141	160	347	50	55	55	13.9
<b>FFB 1</b>	190	151	160	430	55.5	55	55	17.1
<b>FFB 2</b>	190	151	160	434.5	59	55	55	18.2
<b>FFB 2</b>	190	151	160	434.5	59	55	55	22.4
<b>FFB 2</b>	190	151	160	434.5	59	55	55	21
-	-	-	-	-	-	-	-	-
<b>FFB 2</b>	190	151	160	434.5	59	55	55	26.6
<b>FFB 2</b>	200	156	160	482.5	60	55	55	29.1
<b>FFB 2</b>	200	156	160	482.5	60	55	55	29.6
<b>FFB 2</b>	200	156	160	482.5	60	55	55	32
<b>FFB 3</b>	235	165	160	458.5	59	55	55	37.6
<b>FFB 3</b>	235	165	160	486	61.5	55	55	37.6
<b>FFB 3</b>	235	165	160	483.5	59	55	55	40.9
<b>FFB 3</b>	227	168	160	509	61	55	55	44.6
-	-	-	-	-	-	-	-	-
<b>FFB 4</b>	272	186	160	648	77.5	55	55	66.5


<sup>1</sup> except motor, brake motor in italics: not concerned by the IE

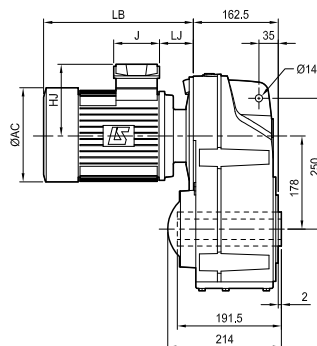
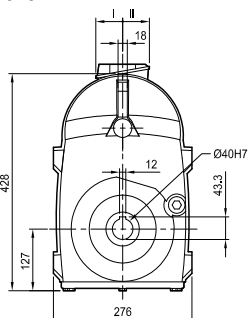
## Dimensions

### Mub 3332 and Mub 3333 - Integral mounting MI

Dimensions in millimetres


#### - R form, H cylindrical hollow shaft

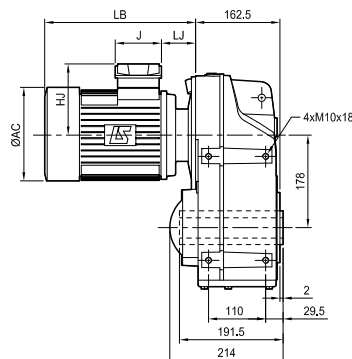
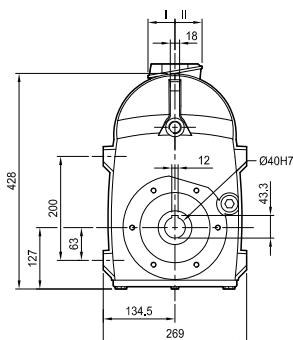
  
Mub: 43 kg  
+ mot



#### - NUL<sup>1</sup> tapped holes form, H standard hollow shaft

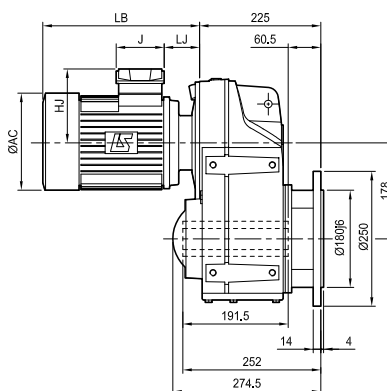
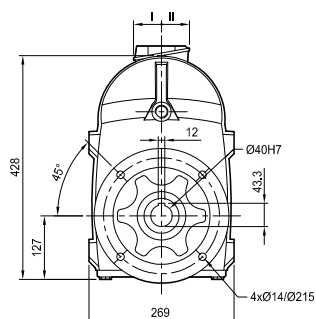
1. NUR right option: identical tapped holes

  
Mub: 43 kg  
+ mot

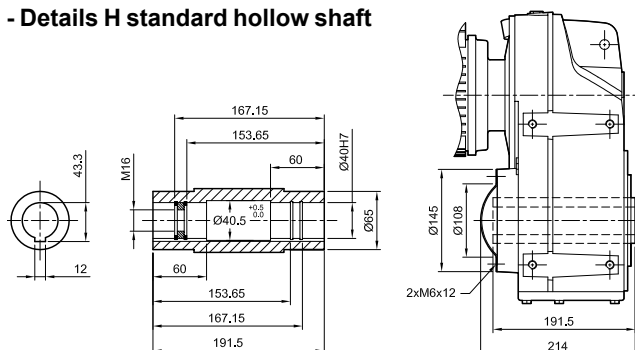


#### - BD flange form, H cylindrical hollow shaft

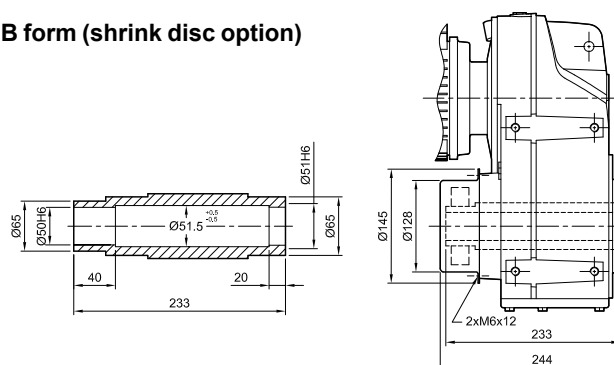
  
Mub: 50 kg  
+ mot



#### - Details H standard hollow shaft



#### - SDB form (shrink disc option)




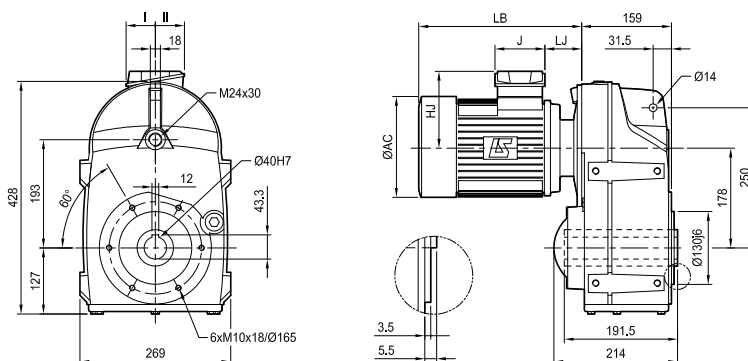
## Dimensions

### Mub 3332 and Mub 3333 - Integral mounting MI


Dimensions in millimetres

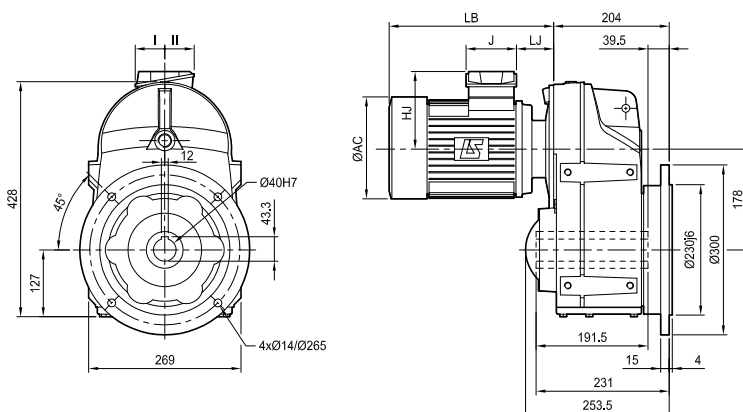
#### - BT flange form, H cylindrical hollow shaft

  
Mub: 43 kg  
+ mot



#### - BS flange form, H cylindrical hollow shaft

  
Mub: 51 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II	
<i>LS 71 L</i>	140	109	86	203.5	33	43	43	9
<i>LS 80 L</i>	-	-	-	-	-	-	-	-
<b>LSES 80 LG</b>	190	135	86	284	63.5	43	43	15
<i>LS 90 SL</i>	-	-	-	-	-	-	-	-
<b>LSES 90 SL</b>	190	135	86	286	67	43	43	16.2
<i>LS 90 L</i>	-	-	-	-	-	-	-	-
<b>LSES 90 L</b>	190	135	86	286	67	43	43	16.2
<b>LSES 90 LU</b>	190	135	86	317.5	67	43	43	20.4
<i>LS 100 L</i>	-	-	-	-	-	-	-	-
<b>LSES 100 L</b>	200	140	86	331.5	68	43	43	23
<b>LSES 100 LR</b>	200	140	86	331.5	68	43	43	25.8
<b>LSES 100 LG</b>	235	149	86	346.5	67	43	43	31
<i>LS 112 MG</i>	-	-	-	-	-	-	-	-
<b>LSES 112 MU</b>	235	149	86	364.5	67	43	43	37
<i>LS 132 S</i>	-	-	-	-	-	-	-	-
<b>LSES 132 SU</b>	227	172	126	399	48	63	63	42.1
<b>LSES 132 SM</b>	265	190	126	433	65	63	63	52
<i>LS 132 M</i>	-	-	-	-	-	-	-	-
<b>LSES 132 M</b>	265	190	126	433	65	63	63	52.1
<b>LSES 132 MU</b>	265	190	126	460	65	63	63	62.6

Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II	
<b>FFB 1</b>	140	130	160	295.5	22	55	55	11.3
<b>FFB 1</b>	170	141	160	343	46	55	55	13.9
<b>FFB 1</b>	190	151	160	426	51.5	55	55	18
<b>FFB 2</b>	190	151	160	430.5	55	55	55	18.2
<b>FFB 2</b>	190	151	160	430.5	55	55	55	22.4
<b>FFB 2</b>	190	151	160	430.5	55	55	55	21
<b>FFB 2</b>	190	151	160	430.5	55	55	55	26.6
<b>FFB 2</b>	200	156	160	478.5	56	55	55	29.1
<b>FFB 2</b>	200	156	160	478.5	56	55	55	29.6
<b>FFB 2</b>	200	156	160	478.5	56	55	55	32
<b>FFB 3</b>	235	165	160	454.5	55	55	55	37.6
<b>FFB 3</b>	235	165	160	448	28.5	55	55	37.6
<b>FFB 3</b>	235	165	160	479.5	55	55	55	40.9
<b>FFB 3</b>	227	168	160	505	57	55	55	44.6
<b>FFB 4</b>	265	186	160	644	73.5	55	55	66.5
<b>FFB 4</b>	265	186	160	644	74	55	55	67.4
<b>FFB 4</b>	265	186	160	644	73.5	55	55	77.1

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE



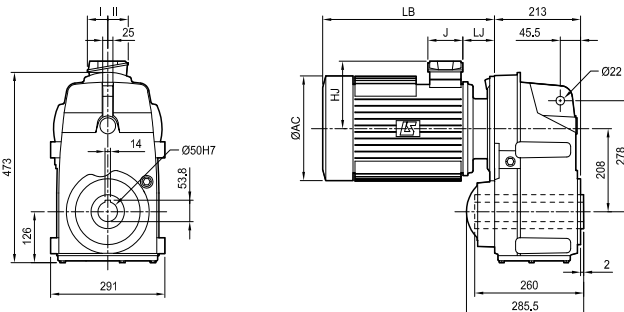
Dimensions

Mub 3432 and Mub 3433 - Integral mounting MI

Dimensions in millimetres

- R form, H cylindrical hollow shaft

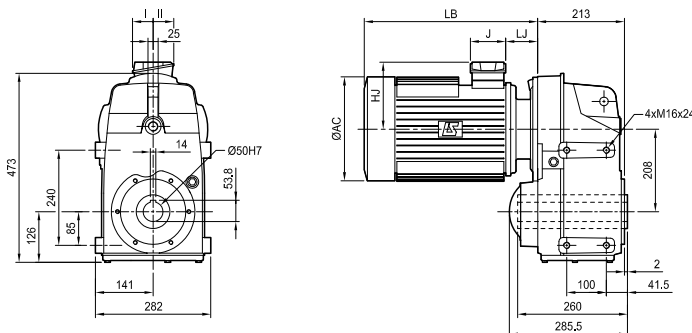
Mub: 70 kg + mot



- NUL<sup>1</sup> tapped holes form, H standard hollow shaft

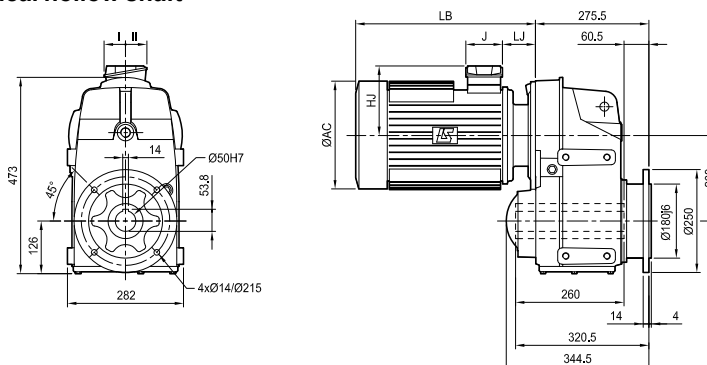
1. NUR right option: identical tapped holes

Mub: 65 kg + mot

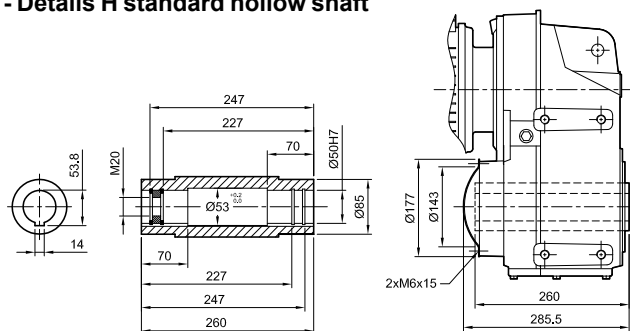


- BD flange form, H cylindrical hollow shaft

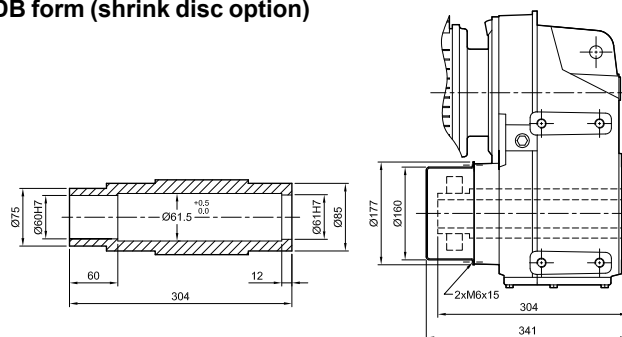
Mub: 78 kg + mot



- Details H standard hollow shaft



- SDB form (shrink disc option)




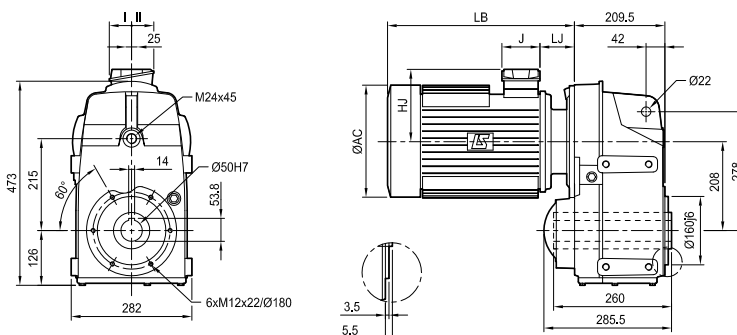
## Dimensions

### Mub 3432 and Mub 3433 - Integral mounting MI


Dimensions in millimetres

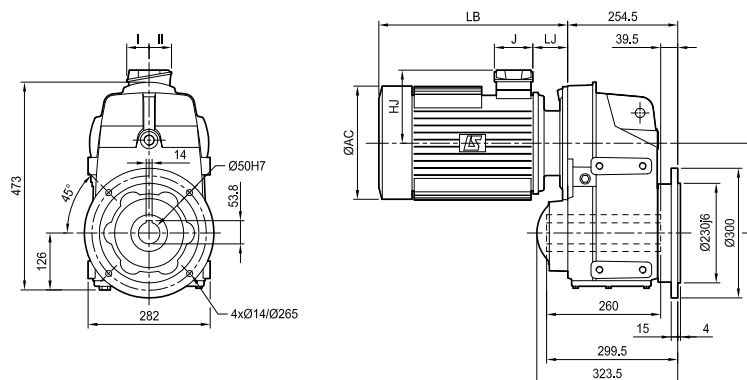
#### - BT flange form, H cylindrical hollow shaft

  
Mub: 69 kg  
+ mot



#### - BS flange form, H cylindrical hollow shaft

  
Mub: 79 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>								kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>								kg
	AC	HJ	J	LB	LJ	I	II	AC			HJ	J	LB	LJ	I	II			
LS 80 L	-	-	-	-	-	-	-	-	-	<b>FFB 1</b>	170	141	160	347.5	50	55	55	13.9	
LSES 80 LG	190	135	86	288.5	68	43	43	15	-	<b>FFB 1</b>	190	151	160	430.5	56	55	55	18	
LS 90 SL	-	-	-	-	-	-	-	-	-	<b>FFB 2</b>	190	151	160	430.5	55	55	55	18.2	
LSES 90 SL	190	135	86	286	67	43	43	16.2	-	<b>FFB 2</b>	190	151	160	430.5	55	55	55	22.4	
LS 90 L	-	-	-	-	-	-	-	-	-	<b>FFB 2</b>	190	151	160	430.5	55	55	55	21	
LSES 90 L	190	135	86	286	67	43	43	16.2	-	<b>FFB 2</b>	190	151	160	430.5	55	55	55	26.6	
LSES 90 LU	190	135	86	317.5	67	43	43	20.4	-	<b>FFB 2</b>	200	156	160	478.5	56	55	55	29.1	
LS 100 L	-	-	-	-	-	-	-	-	-	<b>FFB 2</b>	200	156	160	478.5	55	55	55	29.6	
LSES 100 L	200	140	86	331.5	68	43	43	23	-	<b>FFB 2</b>	200	156	160	478.5	55	55	55	32	
LSES 100 LR	200	140	86	350.5	68	43	43	25.8	-	<b>FFB 3</b>	235	165	160	454.5	55	55	55	37.6	
LSES 100 LG	235	149	86	346.5	67	43	43	31	-	<b>FFB 3</b>	235	165	160	482	28.5	55	55	37.6	
LS 112 MG	-	-	-	-	-	-	-	-	-	<b>FFB 3</b>	235	165	160	479.5	55	55	55	40.9	
LSES 112 MU	235	149	86	364.5	67	43	43	37	-	<b>FFB 3</b>	227	168	160	509	61	55	55	44.6	
LS 132 S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 132 SU	227	172	126	403	52	63	63	42.1	-	<b>FFB 4</b>	272	186	160	648	77.5	55	55	66.5	
LSES 132 SM	272	190	126	437	69	63	63	52	-	<b>FFB 4</b>	272	186	160	648	78	55	55	67.4	
LS 132 M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 132 M	272	190	126	437	69	63	63	59.1	-	<b>FFB 4</b>	272	186	160	648	77.5	55	55	77.1	
LSES 132 MU	272	190	126	464	69	63	63	62.6	-	<b>FFB 4</b>	272	186	160	683	79.5	55	55	92.3	
LSES 160 MR	272	190	126	506	69.5	63	63	78	-	<b>FFB 5</b>	272	186	160	682	78.5	55	55	82.9	
LS 160 MP	-	-	-	-	-	-	-	-	-	<b>FFB 5</b>	272	186	160	682	78.5	55	55	96.1	
LS 160 LR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 160 L	312	235	135	508	55.8	88	64	90	-	<b>FFB 5</b>	312	235	160	695	58.8	55	55	110	
LSES 160 M	312	235	135	508	55.8	88	64	93	-	<b>FFB 5</b>	312	235	160	690	58.8	55	55	117	
LSES 160 LUR	312	235	135	523	55.8	88	64	100	-	-	-	-	-	-	-	-	-	-	
LSES 180 MT	312	248	186	508	67.8	112	98	100	-	<b>FCPL54-H1D</b>	312	249	186	696	68	112	98	152	
LS 180 LR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 180 M	350	256	186	565	76.5	112	98	130	-	-	-	-	-	-	-	-	-	-	
LSES 180 LUR	350	256	186	627	76.5	112	98	155	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE

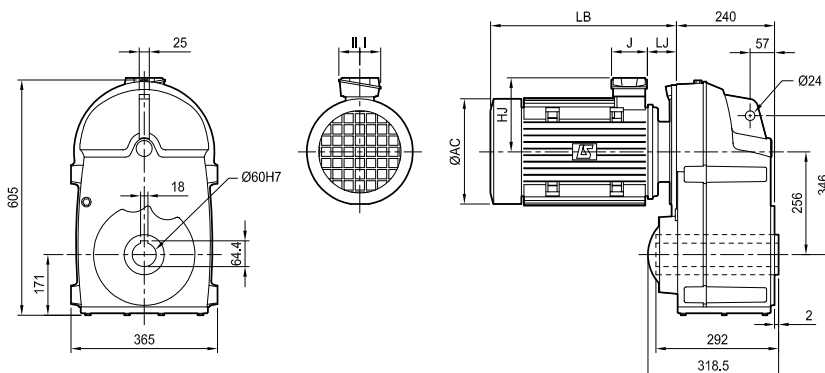
Dimensions

Mub 3532 and Mub 3533 - Integral mounting MI

Dimensions in millimetres

- R form, H cylindrical hollow shaft

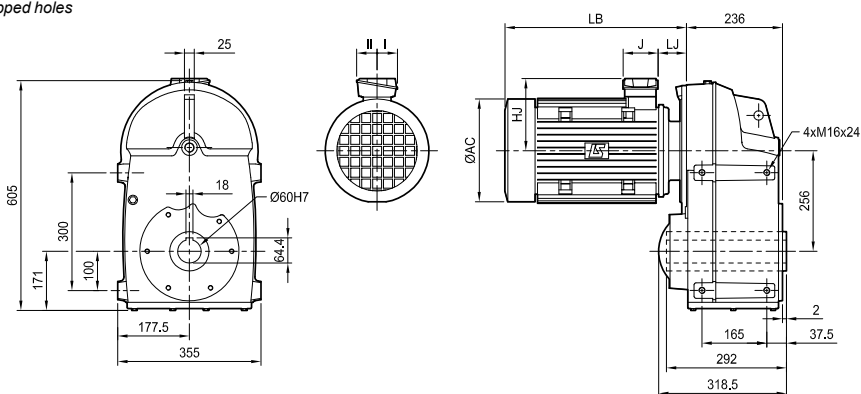
Mub: 116 kg + mot



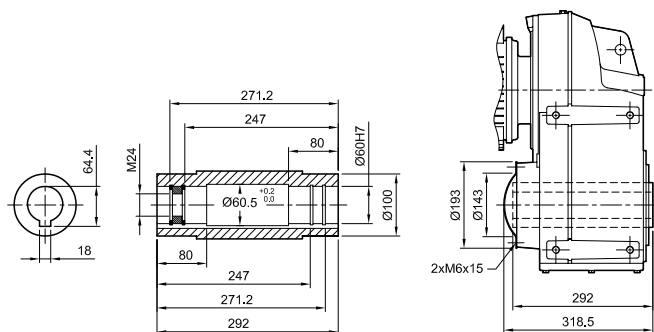
- NUL<sup>1</sup> tapped holes form, H standard hollow shaft

1. NUR right option: identical tapped holes

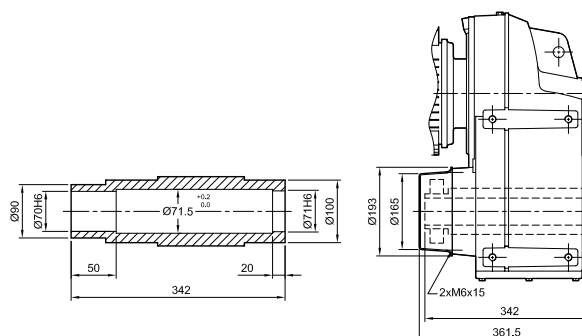
Mub: 115 kg + mot



- Details H standard hollow shaft



- SDB form (shrink disc option)



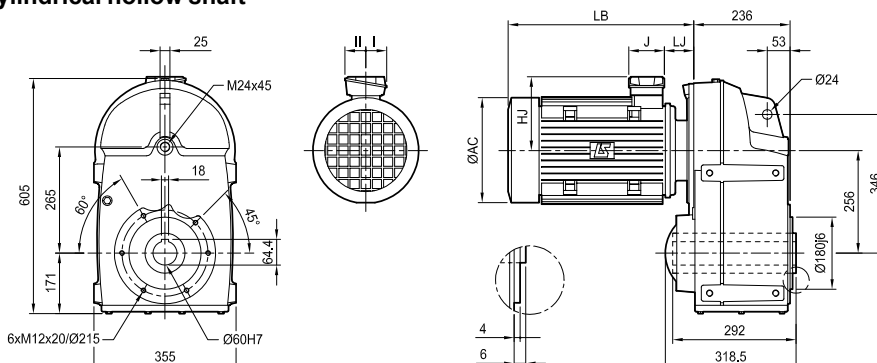
## Dimensions

### Mub 3532 and Mub 3533 - Integral mounting MI

Dimensions in millimetres

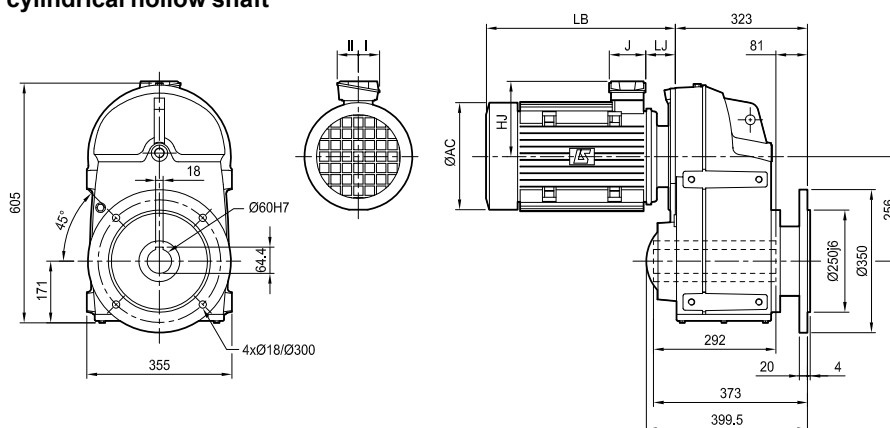
#### - BT flange form, H cylindrical hollow shaft

Mub: 115 kg  
+ mot



#### - BS flange form, H cylindrical hollow shaft

Mub: 130 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>								kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>								kg
	AC	HJ	J	LB	LJ	I	II	AC			HJ	J	LB	LJ	I	II			
LS 90 SL	-	-	-	-	-	-	-	-	-	FFB 2	190	151	160	425.5	50	55	55	18.2	
LSES 90 SL	190	135	86	281	62	43	43	16.2	-	FFB 2	190	151	160	425.5	50	55	55	22.4	
LS 90 L	-	-	-	-	-	-	-	-	-	FFB 2	190	151	160	425.5	50	55	55	21	
LSES 90 L	190	135	86	326.5	63	43	43	16.2	-	FFB 2	190	151	160	425.5	50	55	55	26.6	
LSES 90 LU	190	135	86	312.5	62	43	43	20.4	-	FFB 2	200	156	160	473.5	51	55	55	29.1	
LS 100 L	-	-	-	-	-	-	-	-	-	FFB 2	200	156	160	473.5	50	55	55	29.6	
LSES 100 L	200	140	86	326.5	63	43	43	22.6	-	FFB 2	200	156	160	473.5	50	55	55	32	
LSES 100 LR	200	140	86	345.5	63	43	43	25.8	-	FFB 3	235	165	160	449.5	50	55	55	37.6	
LSES 100 LG	235	149	86	341.5	62	43	43	31	-	FFB 3	235	165	160	477	52.5	55	55	37.6	
LS 112 MG	-	-	-	-	-	-	-	-	-	FFB 3	235	165	160	474.5	50	55	55	40.9	
LSES 112 MU	235	149	86	359.5	62	43	43	37	-	FFB 3	227	168	160	500	52	55	55	44.6	
LS 132 S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 132 SU	227	172	126	394	43	63	63	42.1	-	FFB 4	272	186	160	639	68.5	55	55	66.5	
LSES 132 SM	272	190	126	428	60	63	63	52	-	FFB 4	272	186	160	639	68.5	55	55	67.4	
LS 132 M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 132 M	272	190	126	428	60	63	63	59.1	-	FFB 4	272	186	160	639	68.5	55	55	77.1	
LSES 132 MU	272	190	126	455	60	63	63	62.6	-	FFB 4	272	186	160	674	69.5	55	55	92.3	
LSES 160 MR	272	190	126	498	61.5	63	63	77.8	-	FFB 5	272	186	160	674	69.5	55	55	82.9	
LS 160 MP	-	-	-	-	-	-	-	-	-	FFB 5	272	186	160	674	69.5	55	55	96.1	
LS 160 LR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 160 L	312	235	135	499	46.8	88	64	90	-	FFB 5	312	235	160	687	54.8	55	55	110	
LSES 160 M	312	235	135	499	46.8	88	64	93	-	FFB 5	312	235	160	682	54.8	55	55	117	
LSES 160 LUR	312	235	135	514	46.8	88	64	100	-	-	-	-	-	-	-	-	-	-	
LSES 180 MT	312	248	186	499	58.8	112	98	100	-	FCPL54-H1D	312	249	186	687	59	112	98	152	
LS 180 LR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 180 LR	312	248	186	524	58.8	112	98	108	-	-	-	-	-	-	-	-	-	-	
LSES 180 M	350	256	186	556	67.5	112	98	130	-	-	-	-	-	-	-	-	-	-	
LSES 180 LUR	350	256	186	618	67.5	112	98	155	-	-	-	-	-	-	-	-	-	-	
LSES 200 LR	350	256	186	618	67.5	112	98	166	-	FCPL54-H1D <sup>2</sup>	350	256	186	783	68	112	98	200	
LS 200 LR/LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LSES 200 LU	390	276	186	683	91	112	98	225	-	-	-	-	-	-	-	-	-	-	

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE.

<sup>2</sup> with CDF board.

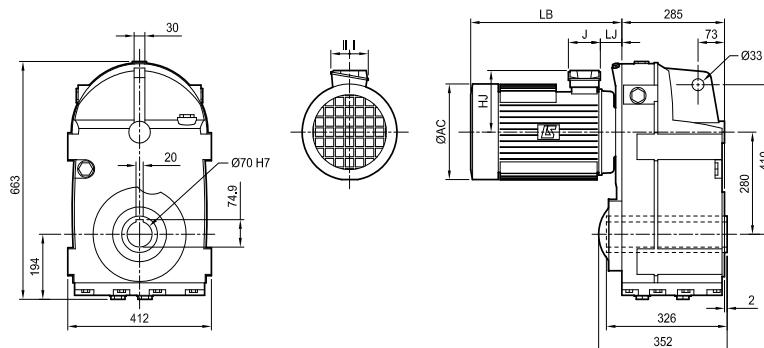
## Dimensions

### Mub 3632 and Mub 3633 - Integral mounting MI

Dimensions in millimetres

#### - R form, H cylindrical hollow shaft

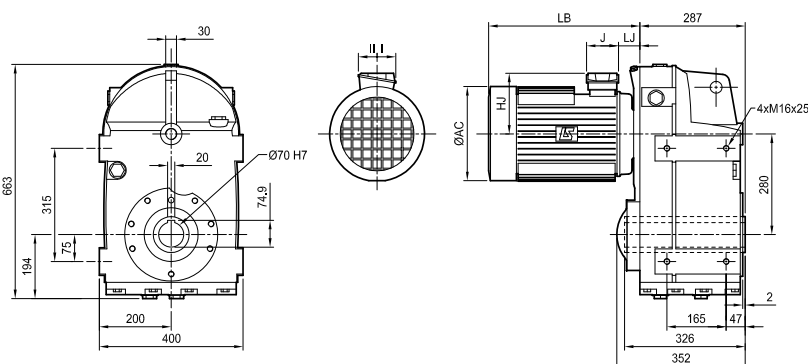
Mub: 197 kg  
+ mot



#### - NUL<sup>1</sup> tapped holes form, H standard hollow shaft

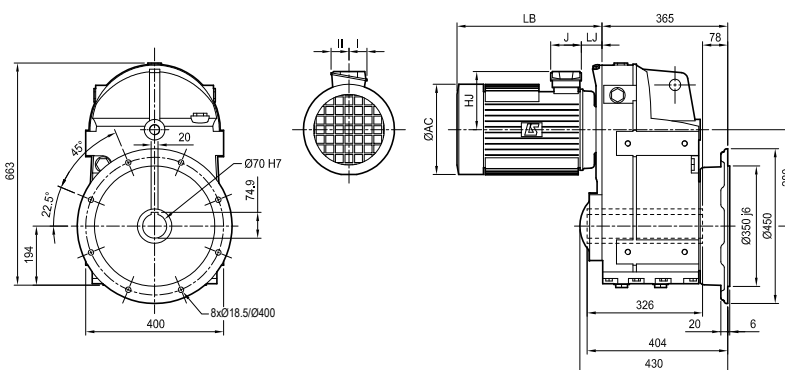
1. NUR right option: identical tapped holes

Mub: 195 kg  
+ mot

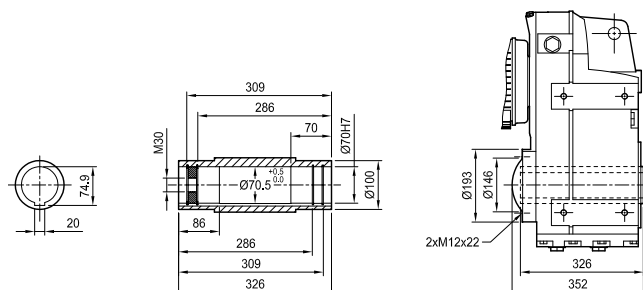


#### - BD flange form, H cylindrical hollow shaft

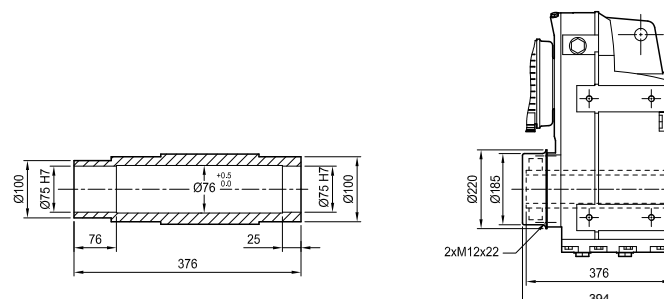
Mub: 223 kg  
+ mot



#### - Details H standard hollow shaft



#### - SDB form (shrink disc option)



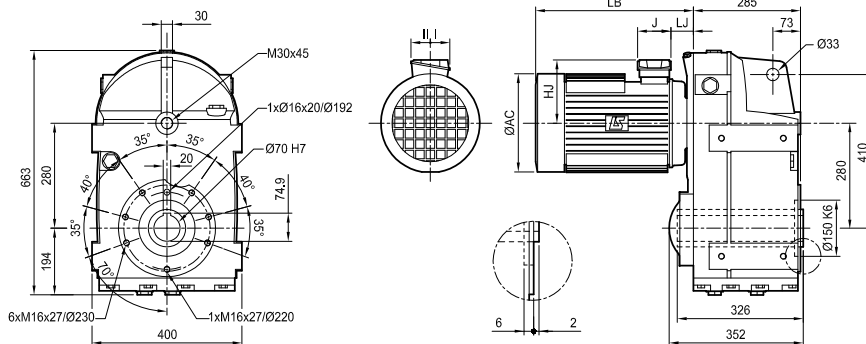
## Dimensions

### Mub 3632 and Mub 3633 - Integral mounting MI

Dimensions in millimetres

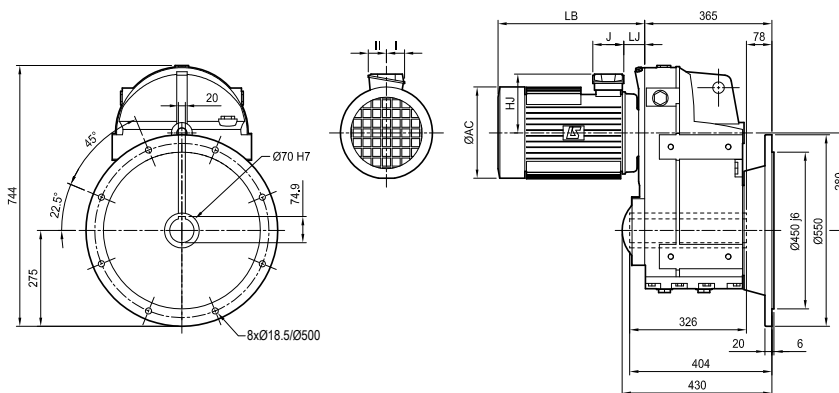
#### - BT flange form, H cylindrical hollow shaft

Mub: 195 kg  
+ mot



#### - BS flange form, H cylindrical hollow shaft

Mub: 229 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg	Motor type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II			AC	HJ	J	LB	LJ	I	II	
LS 90 SL	-	-	-	-	-	-	-	-	<i>FFB 2</i>	190	151	160	416.5	41	55	55	18.2
LSES 90 SL	190	135	86	272	53	43	43	16.2	<i>FFB 2</i>	190	151	160	416.5	41	55	55	22.4
LS 90 L	-	-	-	-	-	-	-	-	<i>FFB 2</i>	190	151	160	416.5	41	55	55	21
LSES 90 L	190	135	86	272	53	43	43	16.2	-	-	-	-	-	-	-	-	-
LSES 90 LU	190	135	86	303.5	53	43	43	20.4	<i>FFB 2</i>	190	151	160	416.5	41	55	55	26.6
LS 100 L	-	-	-	-	-	-	-	-	<i>FFB 2</i>	200	156	160	464.5	41	55	55	29.1
LSES 100 L	200	140	86	317.5	54	43	43	22.6	<i>FFB 2</i>	200	156	160	464.5	41	55	55	29.6
LSES 100 LR	200	140	86	336.5	54	43	43	25.8	<i>FFB 2</i>	200	156	160	464.5	41	55	55	32
LSES 100 LG	235	149	86	332.5	53	43	43	31	<i>FFB 3</i>	235	165	160	440.5	41	55	55	37.6
LS 112 MG	-	-	-	-	-	-	-	-	<i>FFB 3</i>	235	165	160	468	43.5	55	55	37.6
LSES 112 MU	235	149	86	350.5	53	43	43	37	<i>FFB 3</i>	235	165	160	465.5	41	55	55	40.9
LS 132 S	-	-	-	-	-	-	-	-	<i>FFB 3</i>	227	168	160	491	43	55	55	44.6
LSES 132 SU	227	172	126	385	28.5	63	63	42.1	-	-	-	-	-	-	-	-	-
LSES 132 SM	272	190	126	419	51	63	63	52	<i>FFB 4</i>	272	186	160	630	60	55	55	66.5
LS 132 M	-	-	-	-	-	-	-	-	<i>FFB 4</i>	272	186	160	630	60	55	55	67.4
LSES 132 M	272	190	126	419	51	63	63	59.1	-	-	-	-	-	-	-	-	-
LSES 132 MU	272	190	126	446	51	63	63	62.6	<i>FFB 4</i>	272	186	160	630	59.5	55	55	77.1
LSES 160 MR	272	190	126	489	52.5	63	63	77.8	<i>FFB 4</i>	272	186	160	651	59	55	55	92.3
LS 160 MP	-	-	-	-	-	-	-	-	<i>FFB 5</i>	272	186	160	651	59	55	55	82.9
LS 160 LR	-	-	-	-	-	-	-	-	<i>FFB 5</i>	272	186	160	651	59	55	55	96.1
LSES 160 L	312	235	135	490	37.8	88	64	90	-	-	-	-	-	-	-	-	-
LSES 160 M	312	235	135	490	37.8	88	64	93	<i>FFB 5</i>	312	235	160	667	55.8	55	55	110
LSES 160 LUR	312	235	135	505	37.8	88	64	100	<i>FFB 5</i>	312	235	160	652	55.8	55	55	117
LSES 180 MT	312	248	186	490	49.8	112	98	100	-	-	-	-	-	-	-	-	-
LS 180 LR	-	-	-	-	-	-	-	-	<i>FCPL54-H1D</i>	345	248	186	678	49	112	98	152
LSES 180 LR	312	248	186	515	49.8	112	98	108	-	-	-	-	-	-	-	-	-
LSES 180 M	350	256	186	547	58.8	112	98	130	-	-	-	-	-	-	-	-	-
LSES 180 LUR	350	256	186	609	58.8	112	98	155	-	-	-	-	-	-	-	-	-
LSES 200 LR	350	256	186	609	58.8	112	98	166	-	-	-	-	-	-	-	-	-
LS 200 LR/LT	-	-	-	-	-	-	-	-	<i>FCPL54-H1D<sup>2</sup></i>	350	256	186	774	59	112	98	200
LSES 200 LU	390	276	186	674	82	112	98	225	-	-	-	-	-	-	-	-	-
LSES 225 ST	390	310	231	626	59.5	119	142	205	-	-	-	-	-	-	-	-	-
LSES 225 SR	390	310	231	674	72.5	119	142	236	-	-	-	-	-	-	-	-	-

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE.

<sup>2</sup> with CDF board.

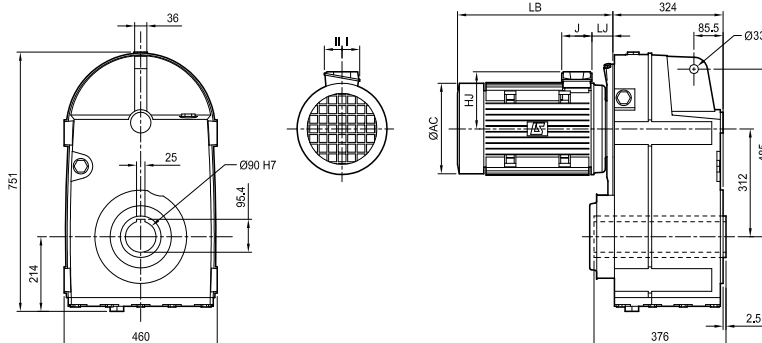
## Dimensions

### Mub 3732 and Mub 3733 - Integral mounting MI

Dimensions in millimetres

#### - R form, H cylindrical hollow shaft

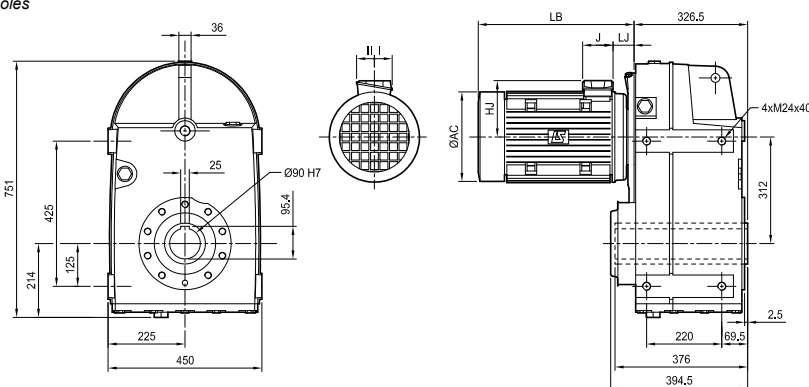
Mub: 283 kg  
+ mot



#### - NUL<sup>1</sup> tapped holes form, H standard hollow shaft

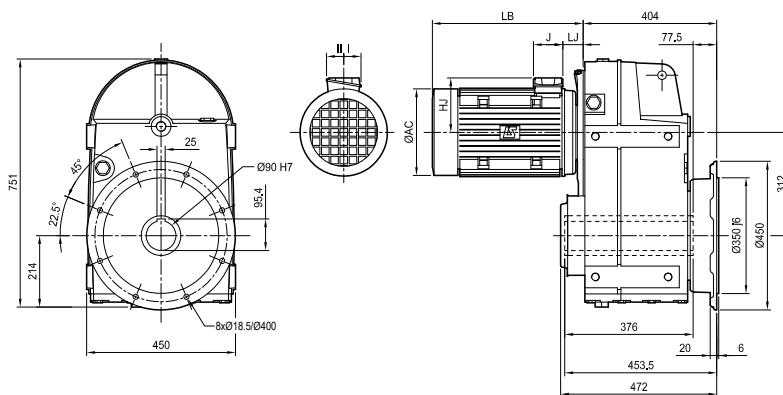
1. NUR right option: identical tapped holes

Mub: 280 kg  
+ mot

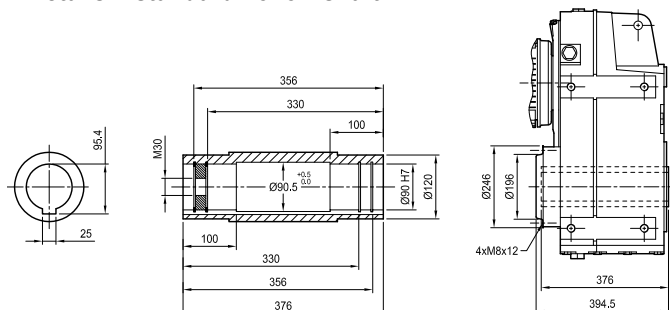


#### - BD flange form, H cylindrical hollow shaft

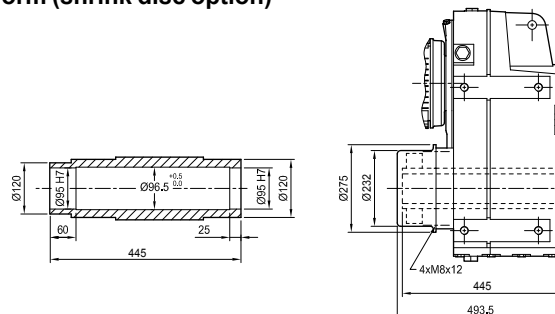
Mub: 310 kg  
+ mot



#### - Details H standard hollow shaft



#### - SDB form (shrink disc option)





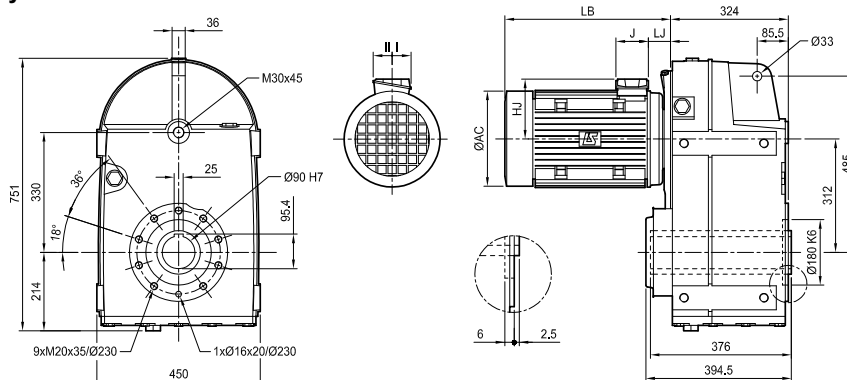
## Dimensions

### Mub 3732 and Mub 3733 - Integral mounting MI

Dimensions in millimetres

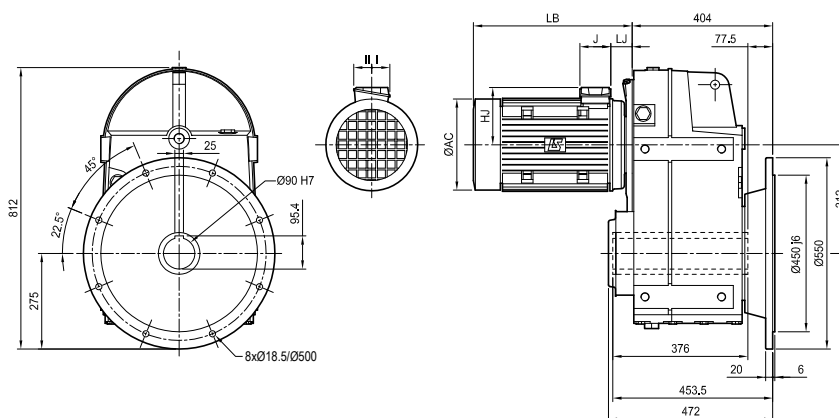
#### - BT flange form, H cylindrical hollow shaft

Mub: 280 kg  
+ mot



#### - BS flange form, H cylindrical hollow shaft

Mub: 316 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II			AC	HJ	J	LB	LJ	I	II	
LS 90 SL	-	-	-	-	-	-	-	-	FFB 2	190	151	160	416.5	41	55	55	18.2
LSES 90 SL	190	135	86	272	53	43	43	16.2	FFB 2	190	151	160	416.5	41	55	55	22.4
LS 90 L	-	-	-	-	-	-	-	-	FFB 2	190	151	160	416.5	41	55	55	21
LSES 90 L	190	135	86	272	53	43	43	16.2	-	-	-	-	-	-	-	-	-
LSES 90 LU	190	135	86	303.5	53	43	43	20.4	FFB 2	190	151	160	416.5	41	55	55	26.6
LS 100 L	-	-	-	-	-	-	-	-	FFB 2	200	156	160	464.5	41	55	55	29.1
LSES 100 L	200	140	86	317.5	54	43	43	22.6	FFB 2	200	156	160	464.5	41	55	55	29.6
LSES 100 LR	200	140	86	336.5	54	43	43	25.8	FFB 2	200	156	160	464.5	41	55	55	32
LSES 100 LG	235	149	86	332.5	53	43	43	31	FFB 3	235	165	160	440.5	41	55	55	37.6
LS 112 MG	-	-	-	-	-	-	-	-	FFB 3	235	165	160	468	43.5	55	55	37.6
LSES 112 MU	235	149	86	350.5	53	43	43	37	FFB 3	235	165	160	465.5	41	55	55	40.9
LS 132 S	-	-	-	-	-	-	-	-	FFB 3	227	168	160	491	43	55	55	44.6
LSES 132 SU	227	172	126	385	28.5	63	63	42.1	-	-	-	-	-	-	-	-	-
LSES 132 SM	272	190	126	419	51	63	63	52	FFB 4	272	186	160	630	60	55	55	66.5
LS 132 M	-	-	-	-	-	-	-	-	FFB 4	272	186	160	630	60	55	55	67.4
LSES 132 M	272	190	126	419	51	63	63	59.1	-	-	-	-	-	-	-	-	-
LSES 132 MU	272	190	126	446	51	63	63	62.6	FFB 4	272	186	160	630	59.5	55	55	77.1
LSES 160 MR	272	190	126	489	52.5	63	63	77.8	FFB 4	272	186	160	651	59	55	55	92.3
LS 160 MP	-	-	-	-	-	-	-	-	FFB 5	272	186	160	651	59	55	55	82.9
LS 160 LR	-	-	-	-	-	-	-	-	FFB 5	272	186	160	651	59	55	55	96.1
LSES 160 L	312	235	135	490	37.8	88	64	90	-	-	-	-	-	-	-	-	-
LSES 160 M	312	235	135	490	37.8	88	64	93	FFB 5	312	235	160	667	55.8	55	55	110
LSES 160 LUR	312	235	135	505	37.8	88	64	100	FFB 5	312	235	160	652	55.8	55	55	117
LSES 180 MT	312	248	186	490	49.8	112	98	100	-	-	-	-	-	-	-	-	-
LS 180 LR	-	-	-	-	-	-	-	-	FCPL54-H1D	345	248	186	678	49	112	98	152
LSES 180 LR	312	248	186	515	49.8	112	98	108	-	-	-	-	-	-	-	-	-
LSES 180 M	350	256	186	547	58.8	112	98	130	-	-	-	-	-	-	-	-	-
LSES 180 LUR	350	256	186	609	58.8	112	98	155	-	-	-	-	-	-	-	-	-
LSES 200 LR	350	256	186	609	58.8	112	98	166	-	-	-	-	-	-	-	-	-
LS 200 LRLT	-	-	-	-	-	-	-	-	FCPL54-H1D <sup>2</sup>	350	256	186	774	59	112	98	200
LSES 200 LU	390	276	186	674	82	112	98	225	-	-	-	-	-	-	-	-	-
LSES 225 ST	390	310	231	626	59.5	119	142	205	-	-	-	-	-	-	-	-	-
LSES 225 SR	390	310	231	674	72.5	119	142	236	-	-	-	-	-	-	-	-	-

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE.

<sup>2</sup> with CDF board.

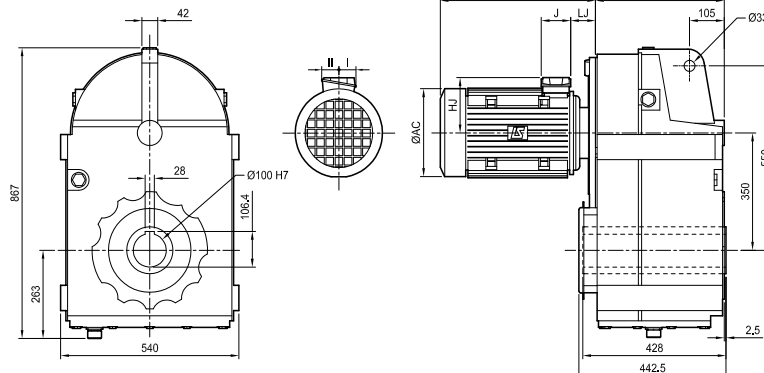
Dimensions

Mub 3832 and Mub 3833 - Integral mounting MI

Dimensions in millimetres

- R form, H cylindrical hollow shaft

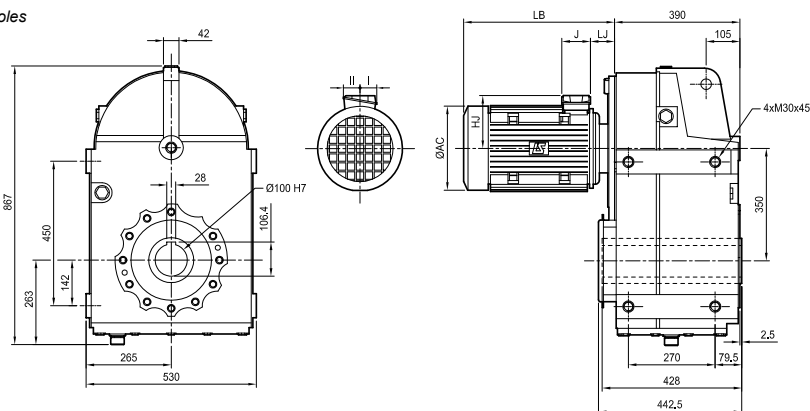
Mub: 335 kg + mot



- NUL<sup>1</sup> tapped holes form, H standard hollow shaft

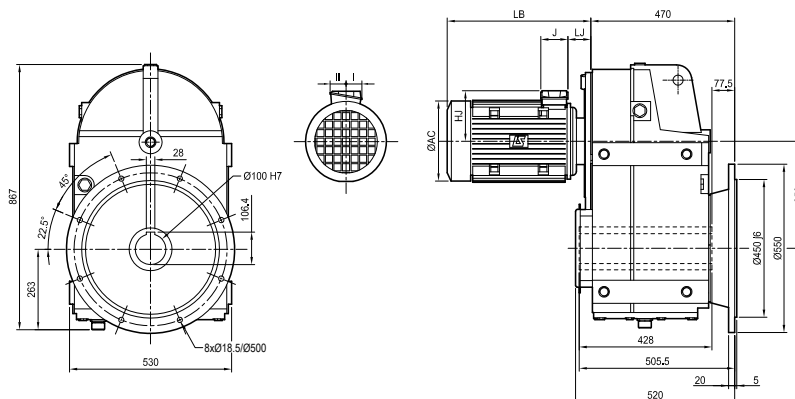
1. NUR right option: identical tapped holes

Mub: 332 kg + mot

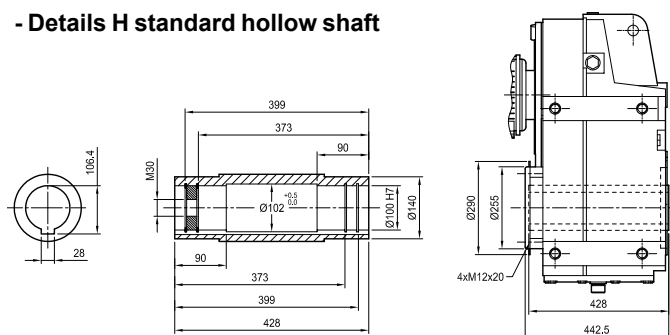


- BD flange form, H cylindrical hollow shaft

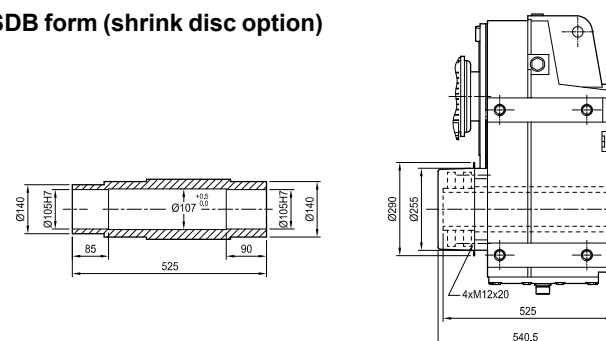
Mub: 367 kg + mot



- Details H standard hollow shaft



- SDB form (shrink disc option)



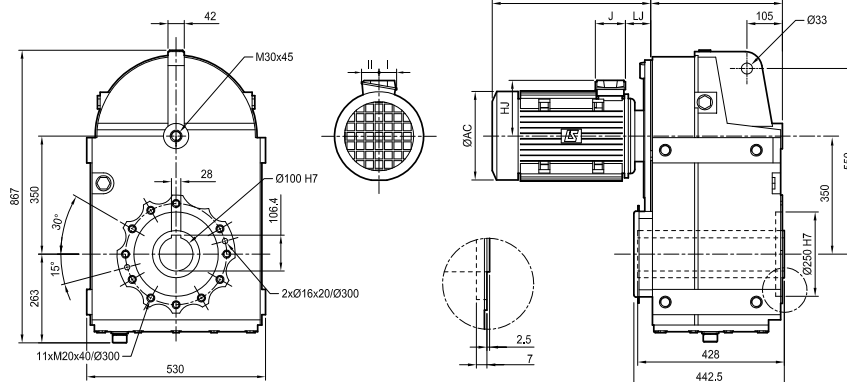
## Dimensions

### Mub 3832 and Mub 3833 - Integral mounting MI

Dimensions in millimetres

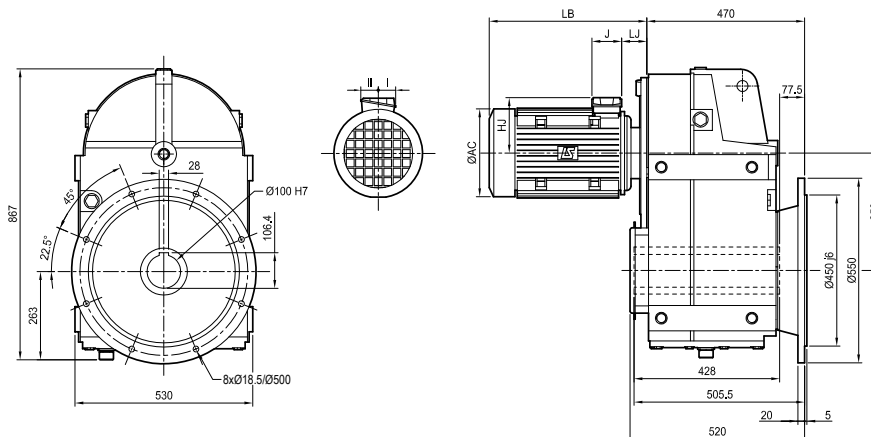
#### - BT flange form, H cylindrical hollow shaft

Mub: 332 kg  
+ mot



#### - BS flange form, H cylindrical hollow shaft

Mub: 390 kg  
+ mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>								kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>								kg
	AC	HJ	J	LB	LJ	I	II	AC			HJ	J	LB	LJ	I	II			
<i>LS 132 M</i>	-	-	-	-	-	-	-	-	-	<i>FFB 4</i>	265	186	160	617	46.5	55	55	67.4	
<b>LSES 132 M</b>	272	190	126	406	38	63	63	59.1	-	<b>FFB 4</b>	265	186	160	617	46.5	55	55	77.1	
<b>LSES 132 MU</b>	272	190	126	433	38	63	63	62.6	-	<b>FFB 4</b>	264	186	160	651	47.5	55	55	92.3	
<b>LSES 160 MR</b>	272	190	126	476	40	63	63	77.8	-	<b>FFB 5</b>	264	186	160	651	47.5	55	55	82.9	
<i>LS 160 MP</i>	-	-	-	-	-	-	-	-	-	<b>FFB 5</b>	265	186	160	651	47.5	55	55	96.1	
<i>LS 160 LR</i>	-	-	-	-	-	-	-	-	-	<b>FFB 5</b>	312	201	160	664	35	55	55	110	
<b>LSES 160 L</b>	312	235	135	477	26	92	63	90	-	<b>FFB 5</b>	312	201	160	659	35	55	55	117	
<b>LSES 160 M</b>	312	235	135	477	27	92	63	93	-	<i>FCPL54-H1D</i>	312	248	186	665	36	112	98	152	
<b>LSES 160 LUR</b>	312	235	135	492	26	92	63	100	-	-	-	-	-	-	-	-	-		
<b>LSES 180 MT</b>	312	248	186	477	36	112	98	100	-	-	-	-	-	-	-	-	-		
<i>LS 180 LR</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<b>LSES 180 LR</b>	312	248	186	502	36	112	98	108	-	-	-	-	-	-	-	-	-		
<b>LSES 180 M</b>	350	256	186	534	46	112	98	130	-	-	-	-	-	-	-	-	-		
<b>LSES 180 LUR</b>	350	256	186	596	46	112	98	155	-	-	-	-	-	-	-	-	-		
<b>LSES 200 LR</b>	350	256	186	596	46	112	98	166	-	-	-	-	-	-	-	-	-		
<i>LS 200 LR/LT</i>	-	-	-	-	-	-	-	-	-	<i>FCPL54-H1D<sup>2</sup></i>	350	256	186	761	46	112	98	240	
<b>LSES 200 LU</b>	390	276	186	661.5	69.5	112	98	225	-	-	-	-	-	-	-	-	-		
<b>LSES 225 ST</b>	390	310	231	612.5	46.5	119	142	205	-	-	-	-	-	-	-	-	-		
<b>LSES 225 SR</b>	390	365	231	661.5	60.5	151	181	236	-	-	-	-	-	-	-	-	-		

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE

<sup>2</sup> with CDF board.

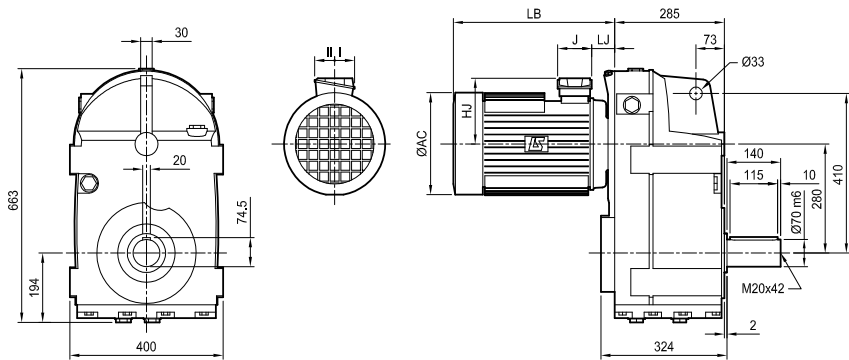
Dimensions

Mub 3632 and Mub 3633 - Integral mounting MI

Dimensions in millimetres

- R form, S output shaft

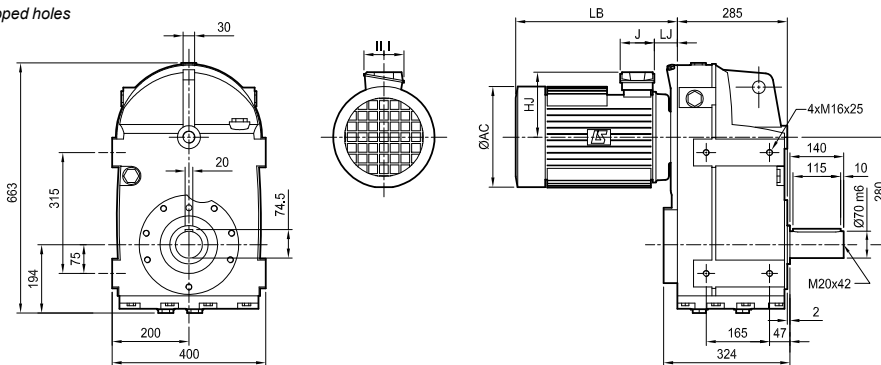
Mub: 207 kg + mot



- NUL<sup>1</sup> tapped holes form, S output shaft

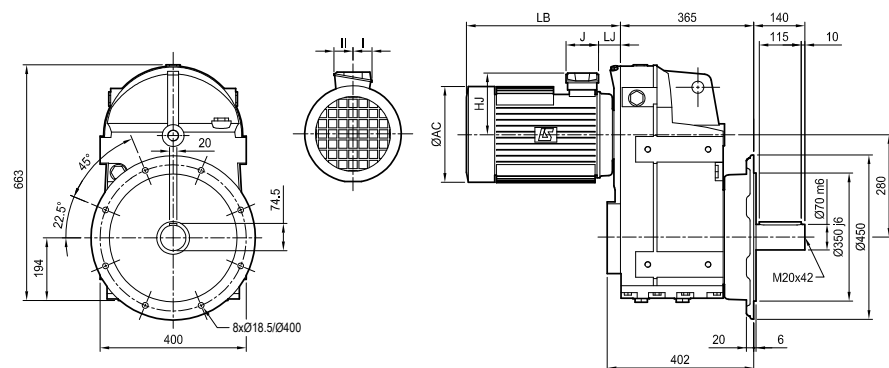
1. NUR right option: identical tapped holes

Mub: 205 kg + mot



- BD flange form, S output shaft

Mub: 233 kg + mot



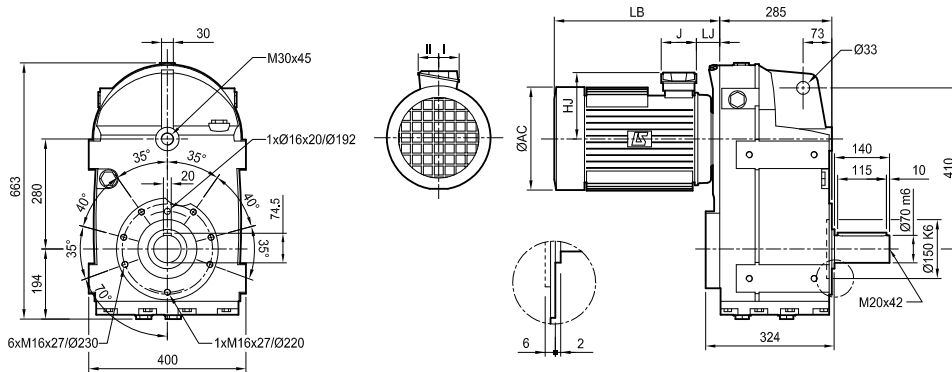
Dimensions

Mub 3632 and Mub 3633 - Integral mounting MI

Dimensions in millimetres

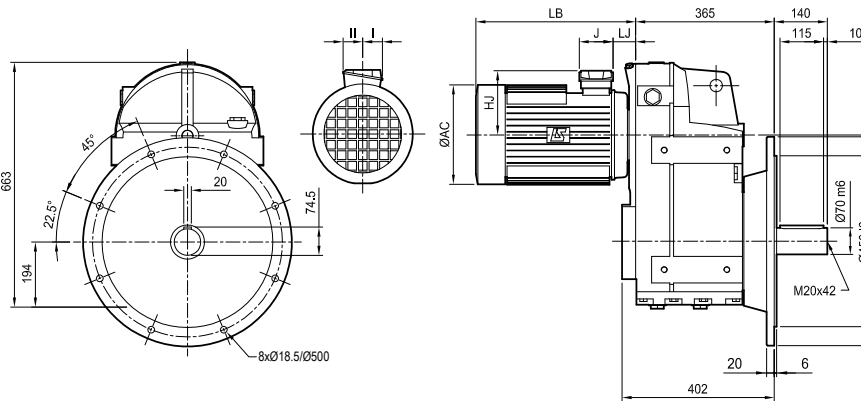
- BT flange form, S output shaft

Mub: 205 kg + mot



- BS flange form, S output shaft

Mub: 239 kg + mot



Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II	
LS 90 SL	-	-	-	-	-	-	-	-
LSES 90 SL	190	135	86	272	53	43	43	16.2
LS 90 L	-	-	-	-	-	-	-	-
LSES 90 L	190	135	86	272	53	43	43	16.2
LSES 90 LU	190	135	86	303.5	53	43	43	20.4
LS 100 L	-	-	-	-	-	-	-	-
LSES 100 L	200	140	86	317.5	54	43	43	22.6
LSES 100 LR	200	140	86	336.5	54	43	43	25.8
LSES 100 LG	235	149	86	332.5	53	43	43	31
LS 112 MG	-	-	-	-	-	-	-	-
LSES 112 MU	235	149	86	350.5	53	43	43	37
LS 132 S	-	-	-	-	-	-	-	-
LSES 132 SU	227	172	126	385	28.5	63	63	42.1
LSES 132 SM	272	190	126	419	51	63	63	52
LS 132 M	-	-	-	-	-	-	-	-
LSES 132 M	272	190	126	419	51	63	63	59.1
LSES 132 MU	272	190	126	446	51	63	63	62.6
LSES 160 MR	272	190	126	489	52.5	63	63	77.8
LS 160 MP	-	-	-	-	-	-	-	-
LS 160 LR	-	-	-	-	-	-	-	-
LSES 160 L	312	235	135	490	37.8	88	64	90
LSES 160 M	312	235	135	490	37.8	88	64	93
LSES 160 LUR	312	235	135	505	37.8	88	64	100
LSES 180 MT	312	248	186	490	49.8	112	98	100
LS 180 LR	-	-	-	-	-	-	-	-
LSES 180 LR	312	248	186	515	49.8	112	98	108
LSES 180 M	350	256	186	547	58.8	112	98	130
LSES 180 LUR	350	256	186	609	58.8	112	98	155
LSES 200 LR	350	256	186	609	58.8	112	98	166
LS 200 LR/LT	-	-	-	-	-	-	-	-
LSES 200 LU	390	276	186	674	82	112	98	225
LSES 225 ST	390	310	231	626	59.5	119	142	205
LSES 225 SR	390	310	231	674	72.5	119	142	236

Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II	
FFB 2	190	151	160	416.5	41	55	55	18.2
FFB 2	190	151	160	416.5	41	55	55	22.4
FFB 2	190	151	160	416.5	41	55	55	21
FFB 2	190	151	160	416.5	41	55	55	26.6
FFB 2	200	156	160	464.5	41	55	55	29.1
FFB 2	200	156	160	464.5	41	55	55	29.6
FFB 2	200	156	160	464.5	41	55	55	32
FFB 3	235	165	160	440.5	41	55	55	37.6
FFB 3	235	165	160	468	43.5	55	55	37.6
FFB 3	235	165	160	465.5	41	55	55	40.9
FFB 3	227	168	160	491	43	55	55	44.6
FFB 4	272	186	160	630	60	55	55	66.5
FFB 4	272	186	160	630	60	55	55	67.4
FFB 4	272	186	160	630	59.5	55	55	77.1
FFB 4	272	186	160	651	59	55	55	92.3
FFB 5	272	186	160	651	59	55	55	82.9
FFB 5	272	186	160	651	59	55	55	96.1
FFB 5	312	235	160	667	55.8	55	55	110
FFB 5	312	235	160	652	55.8	55	55	117
FCPL54-H1D	345	248	186	678	49	112	98	152
FCPL54-H1D <sup>2</sup>	350	256	186	774	59	112	98	200

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE.

<sup>2</sup> with CDF board.

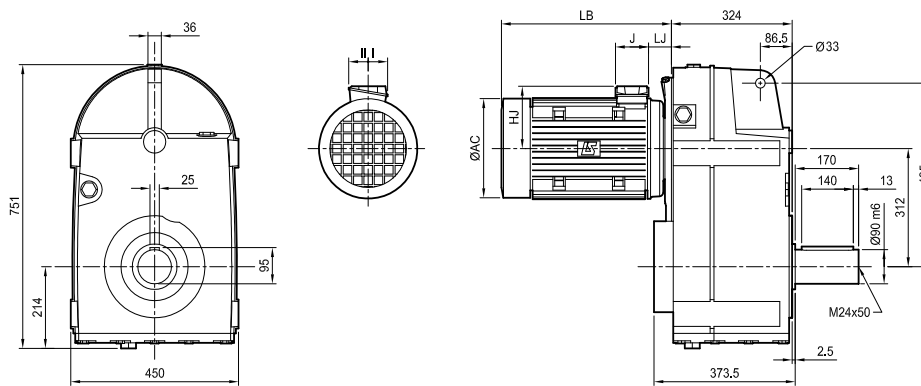
Dimensions

Mub 3732 and Mub 3733 - Integral mounting MI

Dimensions in millimetres

- R form, S output shaft

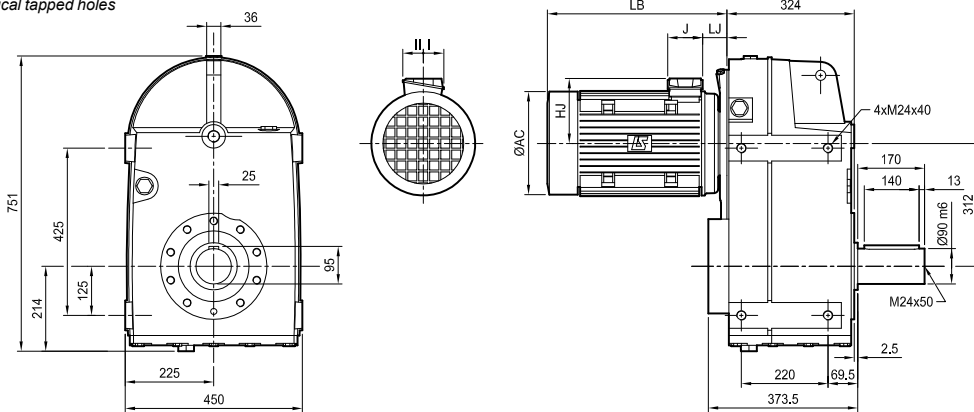
Mub: 297 kg  
+ mot



- NUL<sup>1</sup>tapped holes form, S output shaft

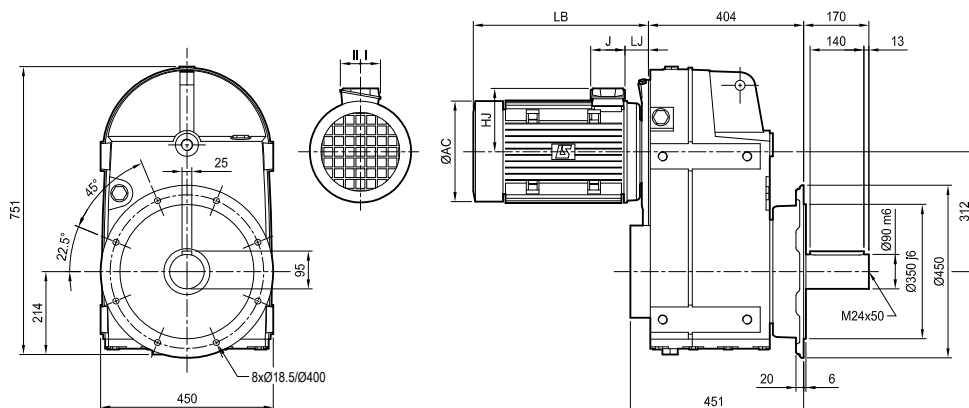
1. NUR right option: identical tapped holes

Mub: 294 kg  
+ mot



- BD flange form, S output shaft

Mub: 324 kg  
+ mot

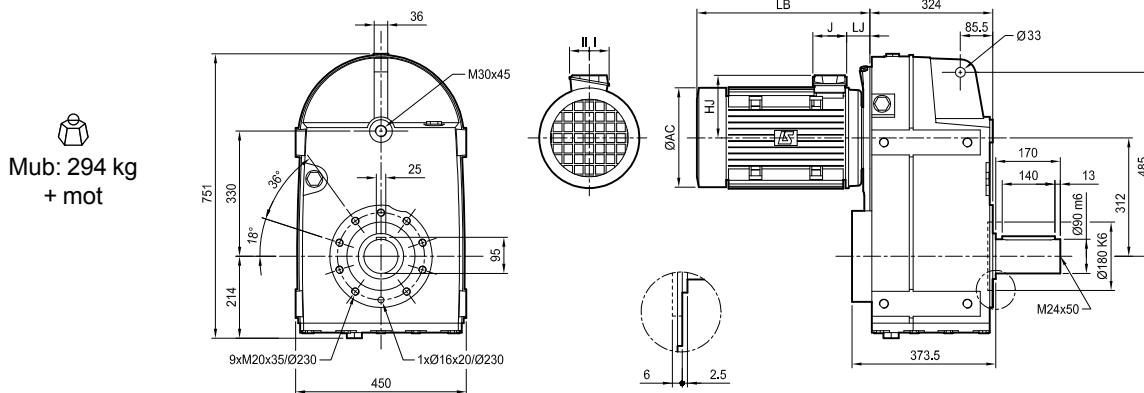


## Dimensions

### Mub 3732 and Mub 3733 - Integral mounting MI

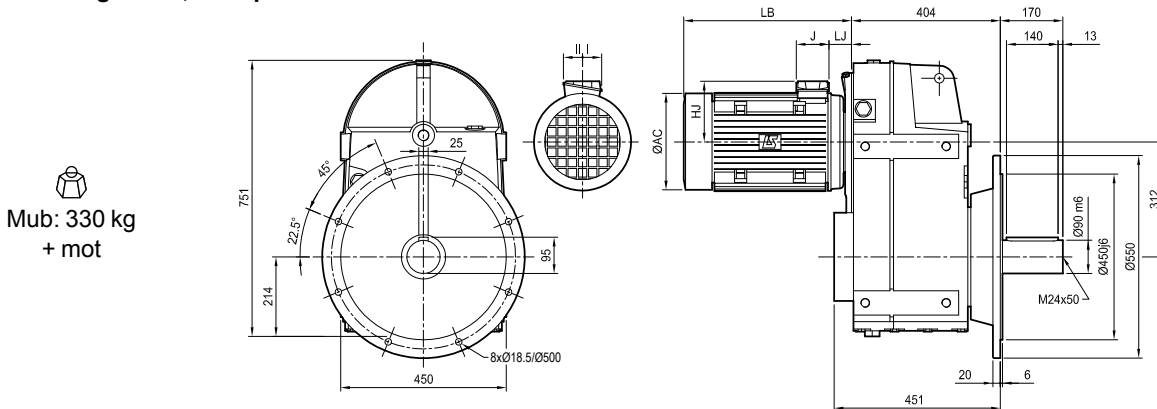
Dimensions in millimetres

#### - BT flange form, S output shaft



Mub: 294 kg  
+ mot

#### - BS flange form, S output shaft



Mub: 330 kg  
+ mot

Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>								kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>								kg
	AC	HJ	J	LB	LJ	I	II				AC	HJ	J	LB	LJ	I	II		
<i>LS 90 SL</i>	-	-	-	-	-	-	-	-	-	<i>FFB 2</i>	190	151	160	416.5	41	55	55	18.2	
<i>LSES 90 SL</i>	190	135	86	272	53	43	43	16.2	<i>FFB 2</i>	190	151	160	416.5	41	55	55	22.4		
<i>LS 90 L</i>	-	-	-	-	-	-	-	-	-	<i>FFB 2</i>	190	151	160	416.5	41	55	55	21	
<i>LSES 90 L</i>	190	135	86	272	53	43	43	16.2	-	-	-	-	-	-	-	-	-		
<i>LSES 90 LU</i>	190	135	86	303.5	53	43	43	20.4	<i>FFB 2</i>	190	151	160	416.5	41	55	55	26.6		
<i>LS 100 L</i>	-	-	-	-	-	-	-	-	-	<i>FFB 2</i>	200	156	160	464.5	41	55	55	29.1	
<i>LSES 100 L</i>	200	140	86	317.5	54	43	43	22.6	<i>FFB 2</i>	200	156	160	464.5	41	55	55	29.6		
<i>LSES 100 LR</i>	200	140	86	336.5	54	43	43	25.8	<i>FFB 2</i>	200	156	160	464.5	41	55	55	32		
<i>LSES 100 LG</i>	235	149	86	332.5	53	43	43	31	<i>FFB 3</i>	235	165	160	440.5	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>LSES 112 MU</i>	235	149	86	350.5	53	43	43	37	<i>FFB 3</i>	235	165	160	465.5	41	55	55	40.9		
<i>LS 132 S</i>	-	-	-	-	-	-	-	-	-	<i>FFB 3</i>	227	168	160	491	43	55	55	44.6	
<i>LSES 132 SU</i>	227	172	126	385	28.5	63	63	42.1	-	-	-	-	-	-	-	-	-		
<i>LSES 132 SM</i>	272	190	126	419	51	63	63	52	<i>FFB 4</i>	272	186	160	630	60	55	55	66.5		
<i>LS 132 M</i>	-	-	-	-	-	-	-	-	-	<i>FFB 4</i>	272	186	160	630	60	55	55	67.4	
<i>LSES 132 M</i>	272	190	126	419	51	63	63	59.1	-	-	-	-	-	-	-	-	-		
<i>LSES 132 MU</i>	272	190	126	446	51	63	63	62.6	<i>FFB 4</i>	272	186	160	630	60	55	55	77.1		
<i>LSES 160 MR</i>	272	190	126	489	52.5	63	63	77.8	<i>FFB 4</i>	272	186	160	651	59	55	55	92.3		
<i>LS 160 MP</i>	-	-	-	-	-	-	-	-	-	<i>FFB 5</i>	272	186	160	651	59	55	55	82.9	
<i>LS 160 LR</i>	-	-	-	-	-	-	-	-	-	<i>FFB 5</i>	272	186	160	651	59	55	55	96.1	
<i>LSES 160 L</i>	312	235	135	490	37.8	88	64	90	-	-	-	-	-	-	-	-	-		
<i>LSES 160 M</i>	312	235	135	490	37.8	88	64	93	<i>FFB 5</i>	312	235	160	667	55.8	55	55	110		
<i>LSES 160 LUR</i>	312	235	135	505	37.8	88	64	100	<i>FFB 5</i>	312	235	160	652	55.8	55	55	117		
<i>LSES 180 MT</i>	312	248	186	490	49.8	112	98	100	-	-	-	-	-	-	-	-	-		
<i>LS 180 LR</i>	-	-	-	-	-	-	-	-	-	<i>FCPL54-H1D</i>	345	248	186	678	49	112	98	152	
<i>LSES 180 LR</i>	312	248	186	515	49.8	112	98	108	-	-	-	-	-	-	-	-	-		
<i>LSES 180 M</i>	350	256	186	547	58.8	112	98	130	-	-	-	-	-	-	-	-	-		
<i>LSES 180 LUR</i>	350	256	186	609	58.8	112	98	155	-	-	-	-	-	-	-	-	-		
<i>LSES 200 LR</i>	350	256	186	609	58.8	112	98	166	-	-	-	-	-	-	-	-	-		
<i>LS 200 LR/LT</i>	-	-	-	-	-	-	-	-	-	<i>FCPL54-H1D<sup>2</sup></i>	350	256	186	774	59	112	98	200	
<i>LSES 200 LU</i>	390	276	186	674	82	112	98	225	-	-	-	-	-	-	-	-	-		
<i>LSES 225 ST</i>	390	310	231	626	59.5	119	142	205	-	-	-	-	-	-	-	-	-		
<i>LSES 225 SR</i>	390	310	231	674	72.5	119	142	236	-	-	-	-	-	-	-	-	-		

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE.

<sup>2</sup> with CDF board

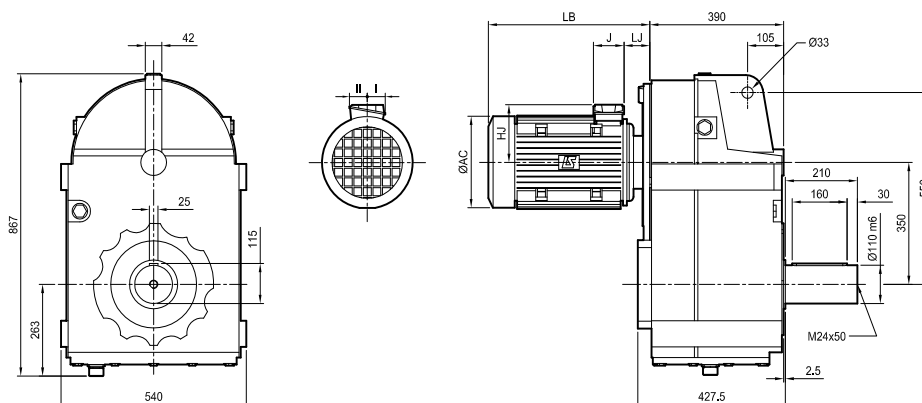
## Dimensions

### Mub 3832 and Mub 3833 - Integral mounting MI

Dimensions in millimetres

#### - R form, S output shaft

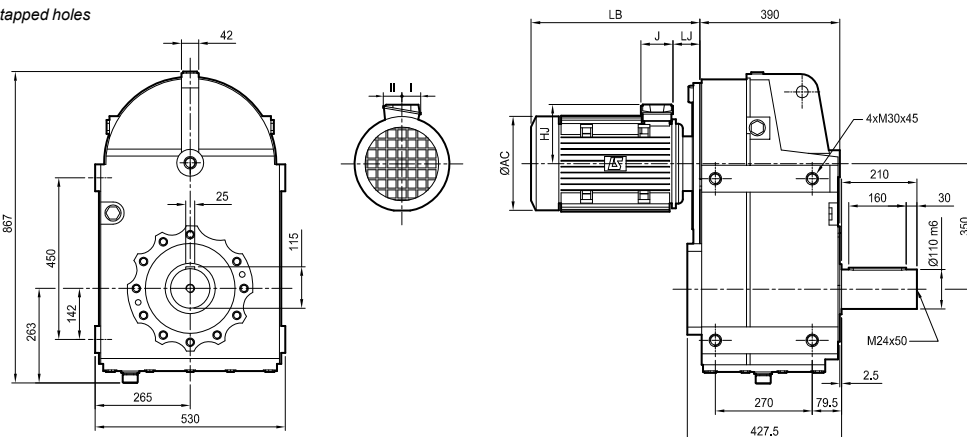
Mub: 352 kg  
+ mot



#### - NUL<sup>1</sup>tapped holes form, S output shaft

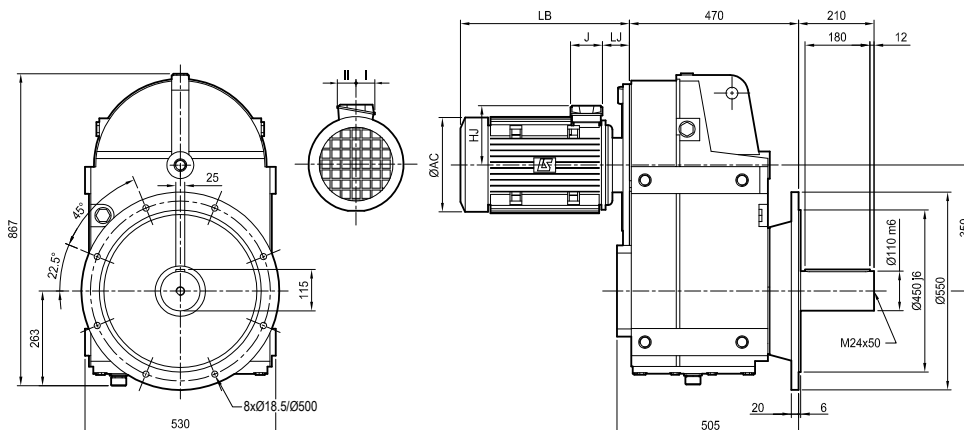
1. NUR right option: identical tapped holes

Mub: 348 kg  
+ mot



#### - BD flange form, S output shaft

Mub: 384 kg  
+ mot





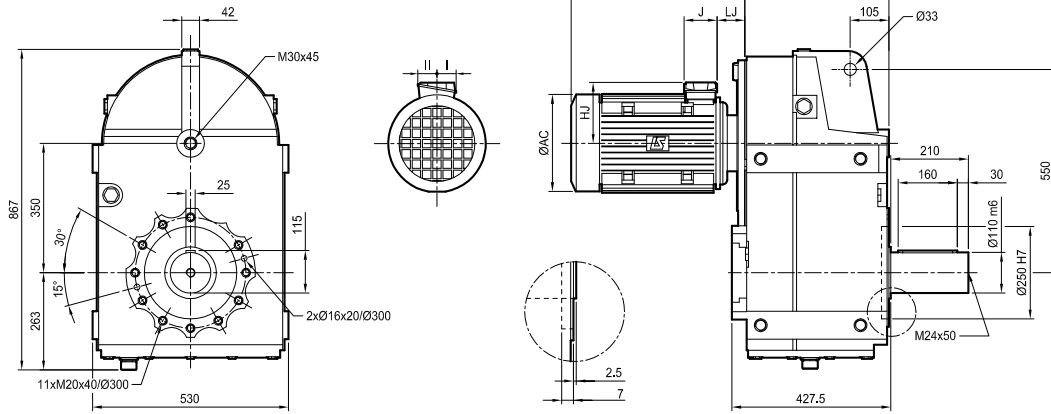
Dimensions

Mub 3832 and Mub 3833 - Integral mounting MI

Dimensions in millimetres

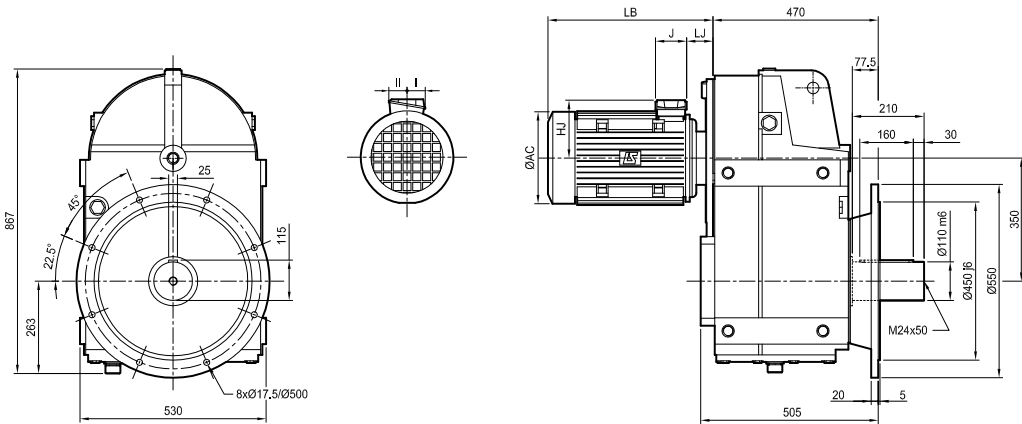
- BT flange form, S output shaft

Mub: 348 kg  
+ mot



- BS flange form, S output shaft

Mub: 410 kg  
+ mot



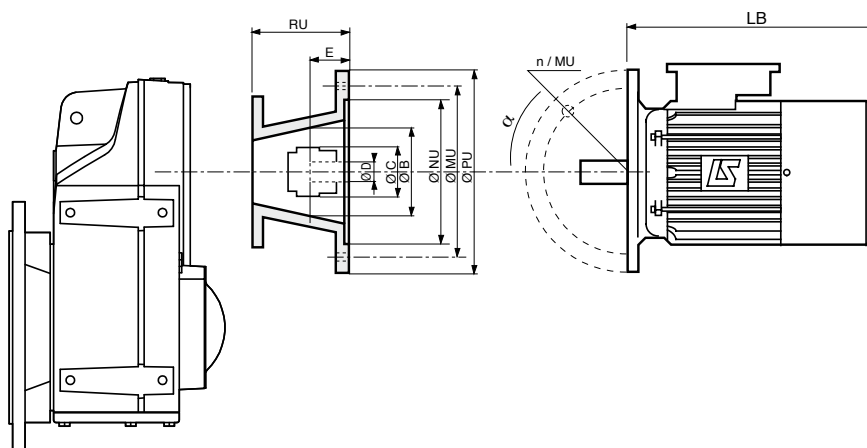
Motor type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
	AC	HJ	J	LB	LJ	I	II			AC	HJ	J	LB	LJ	I	II	
<i>LS 132 M</i>	-	-	-	-	-	-	-	-	<i>FFB 4</i>	265	186	160	617	46.5	55	55	67.4
<b>LSES 132 M</b>	272	190	126	406	38	63	63	59.1	-	-	-	-	-	-	-	-	-
<b>LSES 132 MU</b>	272	190	126	433	38	63	63	62.6	<b>FFB 4</b>	264	186	160	651	47.5	55	55	92.3
<b>LSES 160 MR</b>	272	190	126	476	40	63	63	77.8	<b>FFB 5</b>	264	186	160	651	47.5	55	55	82.9
<i>LS 160 MP</i>	-	-	-	-	-	-	-	-	<b>FFB 5</b>	265	186	160	651	47.5	55	55	96.1
<i>LS 160 LR</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>LSES 160 L</b>	312	235	135	477	26	92	63	90	<b>FFB 5</b>	312	201	160	664	35	55	55	110
<b>LSES 160 M</b>	312	235	135	477	27	92	63	93	<b>FFB 5</b>	312	201	160	659	35	55	55	117
<b>LSES 160 LUR</b>	312	235	135	492	26	92	63	100	-	-	-	-	-	-	-	-	-
<b>LSES 180 MT</b>	312	248	186	477	36	112	98	100	-	-	-	-	-	-	-	-	-
<i>LS 180 LR</i>	-	-	-	-	-	-	-	-	<i>FCPL54-H1D</i>	312	248	186	665	36	112	98	152
<b>LSES 180 LR</b>	312	248	186	502	36	112	98	108	-	-	-	-	-	-	-	-	-
<b>LSES 180 M</b>	350	256	186	534	46	112	98	130	-	-	-	-	-	-	-	-	-
<b>LSES 180 LUR</b>	350	256	186	596	46	112	98	155	-	-	-	-	-	-	-	-	-
<b>LSES 200 LR</b>	350	256	186	596	46	112	98	166	-	-	-	-	-	-	-	-	-
<i>LS 200 LR/LT</i>	-	-	-	-	-	-	-	-	<i>FCPL54-H1D<sup>2</sup></i>	350	256	186	761	46	112	98	240
<b>LSES 200 LU</b>	390	276	186	661.5	69.5	112	98	225	-	-	-	-	-	-	-	-	-
<b>LSES 225 ST</b>	390	310	231	612.5	46.5	119	142	205	-	-	-	-	-	-	-	-	-
<b>LSES 225 SR</b>	390	365	231	661.5	60.5	151	181	236	-	-	-	-	-	-	-	-	-

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE

<sup>2</sup> with CDF board

Dimensions

Mub - Universal mounting MU



Dimensions in millimetres

Type	LS, LSES IM 3001										U-mounts															
	(IM B5) CEI										Mub 31		Mub 32		Mub 33		Mub 34		Mub 35		Mub 36		Mub 37		Mub 38	
	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	
LS 71 M	14j6	30	186	286	FF130	110	160	4	45	65	122	65	122	65	118	65	122	-	-	-	-	-	-	-	-	
LS 71 L	14j6	30	186	296	FF130	110	160	4	45	65	122	65	122	65	118	65	122	-	-	-	-	-	-	-	-	
LS 80 L	19j6	40	-	312	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LSES 80 LG	19j6	40	265	409	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LS 90 SL	24j6	50	-	409	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LSES 90 SL	24j6	50	265	409	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LS 90 L	24j6	50	-	409	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LSES 90 L	24j6	50	265	409	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LSES 90 LU	24j6	50	296	409	FF165	130	200	4	45	65	130	65	130	65	126	65	130	65	121	-	-	-	-	-	-	
LS 100 L	28j6	60	-	437	FF215	180	250	4	45	65	144	65	144	65	140	65	144	65	135	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	144	65	135	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	144	65	135	65	148	65	148	65	136	
LSES 100 LG	28j6	60	315	423	FF215	180	250	4	45	65	144	65	144	65	140	65	144	65	135	65	148	65	148	65	136	
LS 112 MG	28j6	60	-	448	FF215	180	250	4	45	65	144	65	144	65	140	65	144	65	135	65	148	65	148	65	136	
LSES 112 MU	28j6	60	332	448	FF215	180	250	4	45	65	144	65	144	65	140	65	144	65	135	65	148	65	148	65	136	
LS 132 S	38k6	80	-	490	FF265	230	300	4	45	-	-	-	-	65	162	65	169	65	157.5	65	167	65	167	65	156	
LSES 132 SM	38k6	80	385	621	FF265	230	300	4	45	-	-	-	-	65	162	65	169	65	157.5	65	167	65	167	65	156	
LS 132 M	38k6	80	385	596	FF265	230	300	4	45	-	-	-	-	65	162	65	169	65	157.5	65	167	65	167	65	156	
LSES 132 M	38k6	80	385	596	FF265	230	300	4	45	-	-	-	-	65	162	65	169	65	157.5	65	167	65	167	65	156	
LSES 132 MU	38k6	80	412	596	FF265	230	300	4	45	-	-	-	-	65	162	65	169	65	157.5	65	167	65	167	65	156	
LSES 160 MR	42k6	110	495	671	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LS 160 MP	42k6	110	-	671	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LS 160 LR	42k6	110	-	671	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 160 L	42k6	110	495	682	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 160 M	42k6	110	495	682	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 160 LUR	42k6	110	510	677	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LS 180 MT	48k6	110	-	668	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 180 MT	48k6	110	495	-	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LS 180 LR	48k6	110	-	683	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 180 LR	48k6	110	520	-	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 180 M	48k6	110	552	-	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 180 LUR	48k6	110	614	-	FF300	250	350	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 200 LR	55m6	110	620	-	FF350	300	400	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LS 200 LT	55m6	110	-	785	FF350	300	400	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LSES 200 LU	55m6	110	669	-	FF350	300	400	4	45	-	-	-	-	95	194	95	183	95	199	95	199	95	199	95	187	
LS 225 ST <sup>1</sup>	60m6	140	-	838	FF400	350	450	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	120	233		
LSES 225 ST <sup>1</sup>	60m6	140	627	-	FF400	350	450	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	120	233		
LSES 225 SR <sup>1</sup>	60m6	140	676	-	FF400	350	450	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	120	233		
LS 225 MR <sup>1</sup>	60m6	140	-	880	FF400	350	450	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	120	233		
LSES 225 MR <sup>1</sup>	60m6	140	676	-	FF400	350	450	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	120	233		
LSES 225 MG <sup>1</sup>	60m6	140	810	-	FF400	350	450	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	120	233		
LS 250 ME <sup>1</sup>	65m6	140	-	1116	FF500	450	550	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	160	316		
LSES 250 ME <sup>1</sup>	65m6	140	810	-	FF500	450	550	8	23	-	-	-	-	-	-	-	-	-	120	311	120	311	150	316		
LSES 280 SD <sup>1</sup>	75m6	140	870	-	FF500	450	550	8	23	-	-	-	-	-	-	-	-	-	-	-	-	120	311	150	316	
LS 280 SC <sup>1</sup>	75m6	140	-	1116	FF500	450	550	8	23	-	-	-	-	-	-	-	-	-	-	-	-	120	311	150	316	
LS 280 MD <sup>1</sup>	75m6	140	-	1116	FF500	450	550	8	23	-	-	-	-	-	-	-	-	-	-	-	-	120	311	150	316	
LSES 280 MD <sup>1</sup>	75m6	140	870	-	FF500	450	550	8	23	-	-	-	-	-	-	-	-	-	-	-	-	120	311	150	316	
LSES 315 SP <sup>1</sup>	80m6	170	947	-	FF600	550	660	8	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	366	
LS 315 SP <sup>1</sup>	80m6	170	-	1116	FF600	550	660	8	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	366	

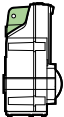
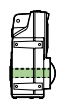

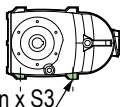
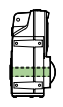

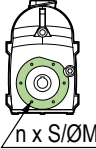
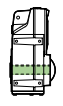

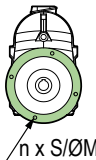
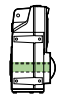

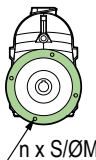
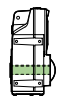


1. Motors with feet and flange (B35), horizontal mounting: motor support is recommended.

	Mub							
	Mub 31	Mub 32	Mub 33	Mub 34	Mub 35	Mub 36	Mub 37	Mub 38
MU max (kg)	4	8	14	20	35	75	75	117
LS LSES max (kg) <sup>1</sup>	65	70	120	150	205	350	350	350

1. maximum permissible motor weight in B5

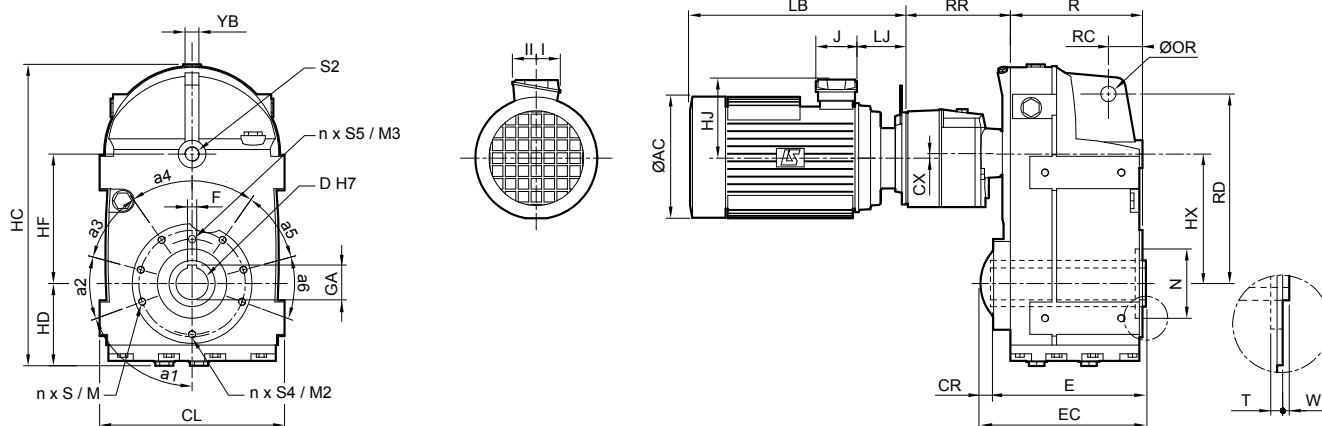
## Dimensions Synthesis

Dimensions in millimetres

Forms Ø x L		MANUBLOC									
		Mub 31	Mub 32	Mub 33	Mub 34	Mub 35	Mub 36	Mub 37	Mub 38		
	H		30H7 x 145	30H7 x 190.5	40H7 x 191.5	50H7 x 260	60H7 x 292	70H7 x 326	90H7 x 376	100H7 x 428	
	Shaft	S		-	-	-	-	-	70m6 x 140	90m6 x 170	110m6 x 210
 n x S3	H		-	4 x M8 x 12	4 x M10 x 18	4 x M16 x 24	4 x M16 x 24	4 x M16 x 25	4 x M24 x 40	4 x M30 x 45	
	Shaft	S		-	-	-	-	-	4 x M16 x 25	4 x M24 x 40	4 x M30 x 45
									70m6 x 140	90m6 x 170	110m6 x 210
 n x S/ØM	H		4 x M8 x 12 / Ø115	4 x M8 x 12 / Ø130	6 x M10 x 18 / Ø165	6 x M12 x 22 / Ø180	6 x M12 x 20 / Ø215	6 x M16 x 27 / Ø230	9 x M20 x 35 / Ø230	11 x M20 x 40 / Ø300	
	Shaft	S		-	-	-	-	-	6 x M16 x 27 / Ø230	9 x M20 x 35 / Ø230	11 x M20 x 40 / Ø300
			30H7 x 145	30H7 x 190.5	40H7 x 191.5	50H7 x 260	60H7 x 292	70H7 x 326	90H7 x 376	100H7 x 428	
			-	-	-	-	-	70m6 x 140	90m6 x 170	110m6 x 210	
 n x S/ØM	H		-	4 x 14 / Ø215	4 x 14 / Ø265	4 x 14 / Ø265	4 x 18 / Ø300	8 x 18,5 / Ø500	8 x 18,5 / Ø500	8 x 24 / Ø600	
	Shaft	S		-	-	-	-	-	8 x 18,5 / Ø500	8 x 18,5 / Ø500	8 x 24 / Ø600
			-	30H7 x 190.5	40H7 x 191.5	50H7 x 260	60H7 x 292	70H7 x 326	90H7 x 376	100H7 x 428	
			-	-	-	-	-	70m6 x 140	90m6 x 170	110m6 x 210	
 n x S/ØM	H		-	4 x 12 / Ø165	4 x 14 / Ø215	4 x 14 / Ø215	-	4 x 18,5 / Ø400	8 x 18,5 / Ø400	8 x 18,5 / Ø500	
	Shaft	S		-	-	-	-	-	4 x 18,5 / Ø400	8 x 18,5 / Ø400	8 x 18,5 / Ø500
			-	30H7 x 190.5	40H7 x 191.5	50H7 x 260	-	70H7 x 326	90H7 x 376	100H7 x 428	
			-	-	-	-	-	70m6 x 140	90m6 x 170	110m6 x 210	
 MU / LS, LSES			71	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	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60	FF215 - 28x60
			112	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	FF500 - 65x140
			280	-	-	-	-	FF500 - 75x140	FF500 - 75x140	FF500 - 75x140	FF500 - 75x140
			315	-	-	-	-	-	-	-	FF600 - 80x170

## Dimensions Combined Mub

Dimensions in millimetres



Manubloc BT																				Ⓢ		
Type	i	a1°	a2°	a3°	a4°	a5°	a6°	a7°	a8°	a9°	a10°	a11°	nxS <sup>1</sup>	ØM	nxS4 <sup>1</sup>	ØM2	nxS5 <sup>1</sup>	ØM3	ØN	T	W	kg
<b>Mub 38</b>	264 -> 21000	30	30	30	60	30	30	60	30	30	30	30	11xM20x40	300	1x16x20/75°	300	1x16x20/75°	300	250H7	7	2.5	387
<b>Mub 37</b>	272 -> 20300	36	36	36	36	36	36	36	36	-	-	-	9xM20x35	230	1x16x20	230	-	180K6	6	2.5	298.7	
<b>Mub 36</b>	280 -> 19500	70	35	40	70	40	35	70	-	-	-	-	6xM16x27	230	1xM16x27/0°	220	1x16x20	192	150K6	6	2	213.7
<b>Mub 35</b>	240 -> 12100	30	60	60	60	60	60	-	-	-	-	-	6xM12x20	215	-	-	-	180j6	4	2	128.4	
<b>Mub 34</b>	249 -> 21100	30	60	60	60	60	60	-	-	-	-	-	6xM12x22	180	-	-	-	160j6	3.5	2	82.4	
<b>Mub 33</b>	358 -> 20500	30	60	60	60	60	60	-	-	-	-	-	6xM10x18	165	-	-	-	130j6	3.5	2	48	
<b>Mub 32</b>	246 -> 15200	45	90	90	90	-	-	-	-	-	-	-	4xM8x12	130	-	-	-	110j6	3.5	2	31	

1. Refer to detailed plan page of gearbox concerned

Manubloc BT															Shaft H					
Type	i	CR	CL	EC	CX	HC	HD	HF	HX	OR	R	RC	RD	RR	S2	YB	ØD	E	F	GA
<b>Mub 38</b>	264 -> 21000	15	530	442	26	867	263	350	350	33	390	105	550	229	M30x45	42	100H7	428	28	106.4
<b>Mub 37</b>	272 -> 20300	18.5	450	394.5	10	751	214	330	312	33	324	85.5	485	177.5	M30x45	36	90H7	376	25	95.4
<b>Mub 36</b>	280 -> 19500	26	400	352	10	663	194	280	280	33	285	73	410	177.5	M30x45	30	70H7	326	20	74.9
<b>Mub 35</b>	240 -> 12100	26.5	355	318.5	8.5	605	171	265	256	24	236	53	346	173.5	M24x45	25	60H7	292	18	64.4
<b>Mub 34</b>	249 -> 21100	24	282	285.5	8.5	473	126	215	208	22	209.5	42	278	173.5	M24x45	25	50H7	260	14	53.8
<b>Mub 33</b>	358 -> 20500	44	269	214	-7	428	127	193	178	14	159	31.5	250	166.5	M24x30	18	40H7	191.5	12	43.3
<b>Mub 32</b>	246 -> 15200	21.5	199	212	-7	340.5	94.5	147	147	14	150	44.5	193	166.5	M16x34	16	30H7	190.5	8	33.3

Type gearbox	Type type	IMfinity® three-phase 4-pole motors <sup>1</sup>							kg	Brake type	IMfinity® three-phase 4-pole motors and brake <sup>1</sup>							kg
		AC	HJ	J	LB	LJ	I	II			AC	HJ	J	LB	LJ	I	II	
<b>Mub 38</b>		page 91									page 91							
<b>Mub 37</b>		page 87									page 87							
<b>Mub 36</b>		page 87									page 87							
<b>Mub 35</b>		page 85									page 85							
<b>Mub 34</b>		page 85									page 85							
	<b>LS 71 M</b>	140	100	80	197	38	40	40	6.4	<b>FFB 1</b>	140	130	160	236	23.5	55	55	10.3
<b>Mub 33</b>	<b>LS 71 L</b>	140	109	87	228	57	43.5	43.5	8.3	<b>FFB 1</b>	140	130	160	320	45.5	55	55	11.3
<b>Mub 32</b>	<b>LS 80 L</b>	-	-	-	-	-	-	-	-	<b>FFB 1</b>	170	141	160	367	69.5	55	55	13.9
	<b>LS 80 LG</b>	190	135	86	308	87.5	43	43	14.1	<b>FBB 1</b>	190	151	160	450	74.5	55	55	18

<sup>1</sup> except motor, brake motor in italics: not concerned by the IE

## Equipment and options

### Shrink disc SDB

#### 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  $-50^{\circ}\text{C}$  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) is given below. Consider the torque transmissible by the gearbox.

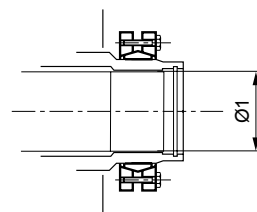
No axial movement between shaft/hub (shrink disc  $F_A$ ).

Takes little time to assemble.

Quick to dismantle.

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

Type	Shrink disc torque	Fastening torque	Dimensions
	$M$ N.m	of shrink disc screws N.m	
Mub 38	20000	100	98
Mub 37	15000	59	96
Mub 36	7500	30	94
Mub 35	6000	30	92
Mub 34	3200	30	90
Mub 33	2200	12	88
Mub 32	1106	12	86
Mub 3132	570	12	84



#### DETERMINATION

For gearboxes with hollow shaft, the form must be defined specifically:

- **NU SDB**: housing with tapped holes on side.

L: on left, R: on right.

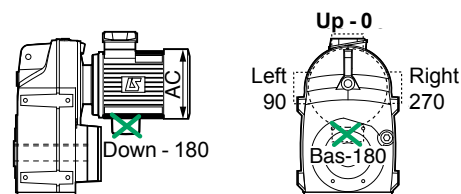
- **BT SDB**: face-mounted housing.

- **R SDB**: flexible mounting form.

Restriction: in the majority of cases, motors cannot be supplied with the terminal box in position Down-180.

#### POSSIBILITY OF SHRINK DISC MOUNTING

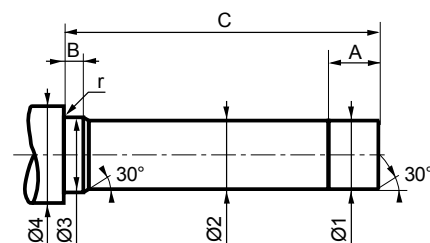
Type	Integral mounting MI		Universal mounting MU	
	ØAC (mm)	LS/LSES type	ØAC (mm)	LS/LSES type
Mub 38	≤ 390	132 to 225	≤ 390	132 to 225
Mub 37	≤ 350	90 to 200 LR	≤ 390	90 to 225
Mub 36	≤ 312	90 to 180 MT, LR	≤ 390	90 to 225
Mub 35	≤ 312	80 to 180 MT, LR	≤ 350	80 to 200
Mub 34	≤ 235	80 to 112	≤ 235	71 to 112
Mub 33	≤ 200	71 to 100	≤ 190	71 to 90
Mub 32	≤ 190	71	≤ 160	71
Mub 3132	-	-	≤ 160	71



#### CLIENT SHAFT FOR SHRINK DISC

Type	A min.	B max.	C	Ø 1	Ø 2	Ø 3h6	Ø 4
Mub 38	85	90	524	105g6	104	105	140
Mub 37	64	30	444	95g6	94.5	95	115
Mub 36	52	30	355	75g6	74	75	95
Mub 35	37	25	341	70g6	69.5	71	95
Mub 34	40	12	294	60g6	59.5	61	80
Mub 33	37	10	232	50h6	49.5	51	65
Mub 32	30	8	233.5	40h6	39.5	42	55
Mub 3132	25	30	172	30h6	29.5	30	45

These values are given for information only.

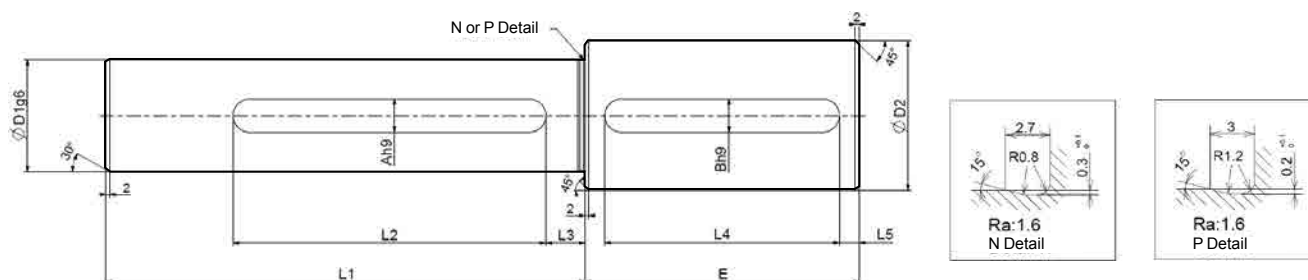


## Equipment and options

### DRIVEN SHAFT

Dimensions in millimetres

Whether R, NUL, with BT flange, BS or BD smooth hole flange, we provide below for information the values for producing a driven shaft (steel recommended: C45E) for Mub 31 to 38.



Driven shaft for hollow output shaft H

Type	A	B for D2 max	D1	D2 max	L1 max	L2	L3	E	L4	L5	Detail
<b>Mub 38</b>	28	32	100	130	365	250	20	180	160	10	P
<b>Mub 37</b>	25	28	90	110	320	200	20	160	140	10	P
<b>Mub 36</b>	20	25	70	90	270	180	20	140	120	10	P
<b>Mub 35</b>	18	25	60	90	245	160	20	140	120	10	N
<b>Mub 34</b>	14	20	50	80	220	150	15	120	100	10	N
<b>Mub 33</b>	12	18	40	60	150	100	15	100	80	10	N
<b>Mub 32</b>	12	14	30	50	160	90	15	90	70	10	N
<b>Mub 31</b>	8	12	30	40	90	50	10	70	50	10	N

### FM FLEXIBLE JOINT

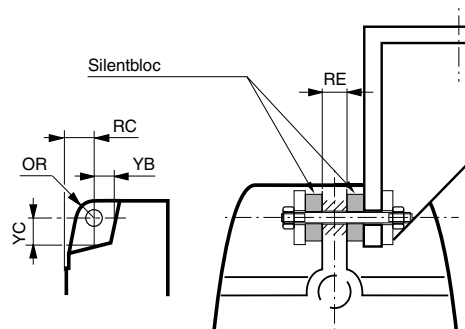
Dimensions in millimetres

The reaction torque of the Manublocs must be absorbed by a suitable torque arm (not supplied).

End play that is too great risks to produce dangerous jolts when the running direction is reversed or the speed switched; the use of flexible joints is recommended: compressed rubber damping components (of the Silentbloc type) as shown in the diagram opposite.

The flat surface of the housing has a transverse hole in it that can be used for mounting such joints as shown in the sketch. The other components are not supplied by Nidec.

Type	OR	RC	RE	YB	YC	Flexible joint (Silentbloc)		
						internal Ø	external Ø	thickness
<b>Mub 38</b>	33	105	42	75	166	35	100	40
<b>Mub 37</b>	33	85.5	36	65	110	33	80	30
<b>Mub 36</b>	33	73	30	70	90	33	80	30
<b>Mub 35</b>	20	53	25	44	42	22	60	30
<b>Mub 34</b>	35	42	25	55	32	22	60	30
<b>Mub 33</b>	19	31.5	18	37	23	14	40	15
<b>Mub 32</b>	19	44.5	16	37	23	14	40	15
<b>Mub 31</b>	25	28.5	15	26	19	14	40	15



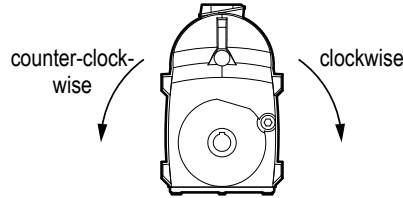
## Equipment and options

### BACKSTOP

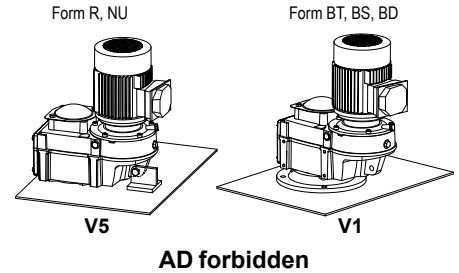
Gearboxes Mub 36 to 38 can be made in version gearbox with **input shaft AP with backstop option**: device allowing rotation in a single direction.

Sizes **36 to 38** are also available in version **geared motor with universal mounting MU with backstop option**. Indicate in the order the direction of rotation of the output shaft: **clockwise or counter-clockwise**.

View facing the gearbox: face F, motor at the back



### Operating positions



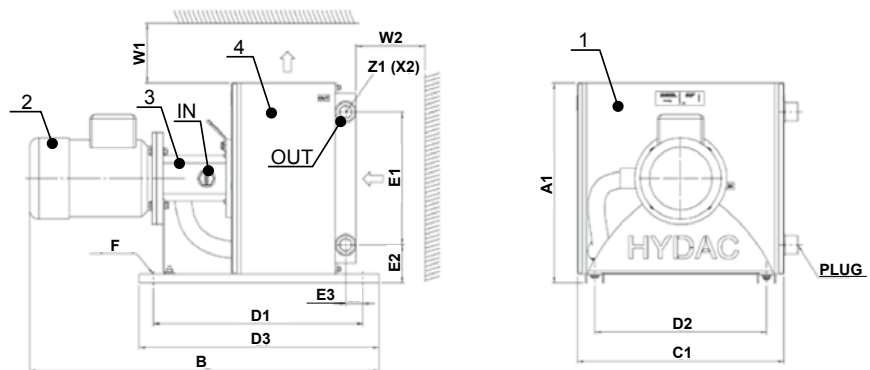
### HEAT EXCHANGER

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 opposite.

Dimensions in millimetres

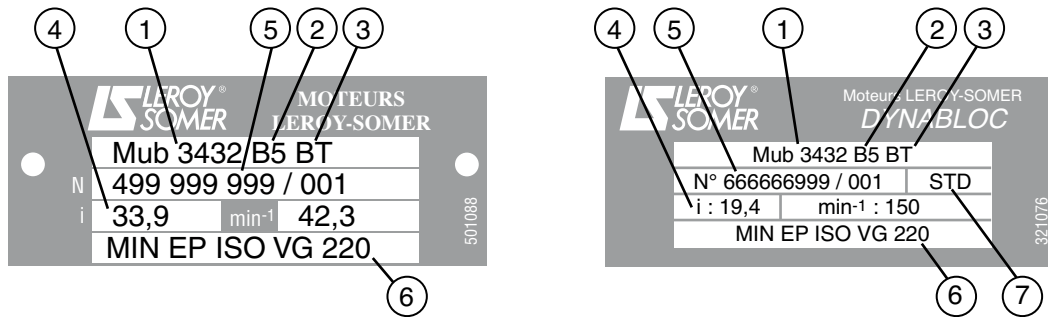


Dimensions (mm)														kg
A1	B	C1	D1	D2	D3	E1	E2	E3	F	W1 min	W2 min	Z1 IN	Z2 OUT	
433	766	449	455	373	521	288	83	37.5	9	1.000	300	G1"	G3/4"	40

## 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:

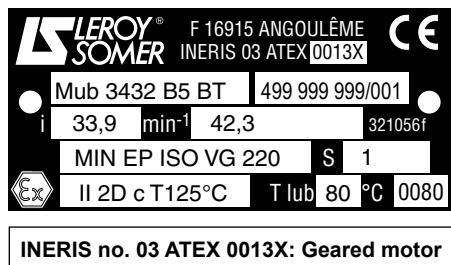
① <b>Mub:</b> gearbox Manubloc <b>3432:</b> gearbox type	② <b>B5:</b> operating position	③ <b>BT:</b> fixing form	④ <b>i:</b> exact reduction	⑤ <b>No.:</b> serial number <b>N/ 001:</b> order number in the series	⑥ <b>MIN EP ISO VG:</b> lubrication according to ISO <b>220:</b> viscosity grade at 40°C in cSt  Option: lubrication synthetic oil PAO ISO VG 150	<b>min<sup>-1</sup>:</b> number of revolutions per minute	⑦ Dynabloc option <b>STD:</b> standard backlash
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## Identification ATEX gearboxes

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### SPECIAL MARKING (ATEX)



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 m(ax)** : 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

## Identification

### LSES motor - Aluminium housing

#### NAMEPLATES

##### IE2 power < 7.5 kW

Mains supply plate

3~LSES112MU T 2014 IP55 IK08 IE2  
N° 123456 N14 001  
Leroy-Somer  
Ta 40°C Ins.Cl. F S1 1000m 35kg 86.6%

V	Hz	min-1	kW	cosφ	A
Δ 380	50	1435	4.00	0.85	8.25
Δ 230	50	1445	4.00	0.84	13.60
Δ 400	50	1445	4.00	0.84	7.85
Δ 415	50	1450	4.00	0.82	7.70
Δ 460	60	1756	4.00	0.82	6.85

Drive supply plate

3~LSES112MU T 2014 IP55 IK08  
N° 123456 N14 001  
Leroy-Somer  
Ta 40°C Ins.Cl. F S9 1000m 35kg

Inverter settings					
V	Hz	min-1	kW	cosφ	A
Δ 400	50	1435	4.00	0.86	8.50
Δ 400	87	2545	6.96	0.86	14.80

Motor performance					min.Fs <sub>min</sub> (Hz)
Hz	10	17	25	50	87
T/Tn%	85	100	100	100	57
Tn/min	3				
Tn/min	26.4				

##### IE3 power ≥ 7.5 kW\*

Mains supply plate

3~LSES200LU T 2014 IP55 IK08 IE3  
N° 789457 F14 001  
Leroy-Somer  
Ta 40°C Ins.Cl. F S1 1000m 225kg 94.1%

V	Hz	min-1	kW	cosφ	A
Δ 380	50	1472	30.0	0.85	56.8
Δ 230	50	1476	30.0	0.84	95.6
Δ 400	50	1476	30.0	0.84	55.2
Δ 415	50	1478	30.0	0.82	53.9
Δ 460	60	1778	30.0	0.83	48.1

Drive supply plate

3~LSES200LU T 2014 IP55 IK08  
N° 789457 F14 001  
Leroy-Somer  
Ta 40°C Ins.Cl. F S9 1000m 225kg

Inverter settings					
V	Hz	min-1	kW	cosφ	A
Δ 400	50	1472	30.0	0.85	59.1
Δ 400	87	2582	52.2	0.85	103

Motor performance					min.Fs <sub>min</sub> (Hz)
Hz	10	17	25	50	87
T/Tn%	80	90	100	100	57
Tn/min	19.6				

##### IE3 power < 7.5 kW\*

Mains supply plate

3~LSES112MU T 2015 IP55 IK08 IE3  
N° 123456 A15 001  
Leroy-Somer  
Ta 40°C Ins.Cl. F S1 1000m 37kg 88.6%

V	Hz	min-1	kW	cosφ	A
Δ 380	50	1450	4.00	0.83	8.30
Δ 230	50	1458	4.00	0.80	14.10
Δ 400	50	1458	4.00	0.80	8.10
Δ 415	50	1462	4.00	0.78	8.05
Δ 460	60	1764	4.00	0.79	7.10

Drive supply plate

3~LSES112MU T 2015 IP55 IK08  
N° 123456 A15 001  
Leroy-Somer  
Ta 40°C Ins.Cl. F S9 1000m 37kg

Inverter settings					
V	Hz	min-1	kW	cosφ	A
Δ 400	50	1452	4.00	0.85	8.45
Δ 400	87	2562	6.96	0.85	14.70

Motor performance					min.Fs <sub>min</sub> (Hz)
Hz	10	17	25	50	87
T/Tn%	90	100	100	100	57
Tn/min	26.2				

\* Valid only for 2 & 4 pole motors except 2P 3 kW and 4P 2.2 kW.

Aluminium 6P motors all powers and 2P 3 kW and 4P 2.2 kW are available in CSAe, ee, cCSAus, NEMA Premium version as options upon specific request.

## Identification

### LSES motor - Aluminium housing

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

#### 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

**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<sup>-1</sup>** : Number of revolutions per minute  
**kW** : Rated output power  
**cos φ** : Power factor  
**A** : Rated current  
**Δ** : Delta connection  
**Y** : Star connection

#### Bearings

**DE** : Drive end  
 Drive end bearing  
**NDE** : Non-drive end

**g** : Amount of grease at each regreasing (in g)  
**h** : Greasing interval (hours)

**POLYREX EM103** : Type of grease



: Vibration level



: Balancing mode

**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<sup>-1</sup>):** Maximum mechanical speed acceptable for the motor

Plate values provided for information only.

## Identification FFB Brake motors

### NAMEPLATES

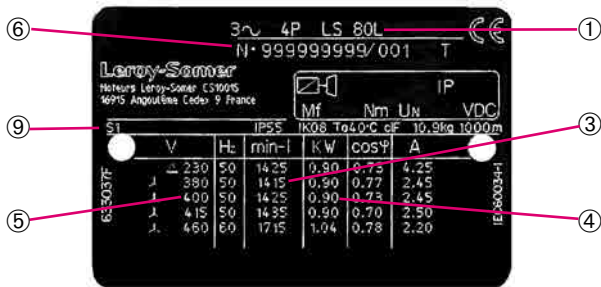
Check equipment conformity: construction shape, indications on nameplates.

Information ① to ⑪ to be reminded whenever ordering spare parts.

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

Example: LS 80 L IFT/NIE

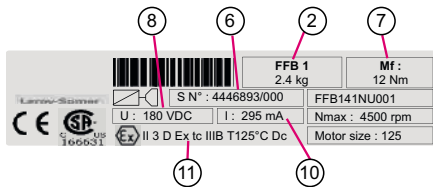
### MOTOR NAMEPLATE



#### Definition of symbols

- T: Impregnation class
- IE2: Efficiency class
- IP-- IK--: Ingress protection\*
- CI.F: Insulation class
- (Ta) 40°C: contractual ambient operating temperature
- cos P or φ: power factor
- A: Rated intensity
- Δ: Delta connection
- Λ: Star connection
- A: Vibration level
- H: Balancing mode

### BRAKE NAMEPLATE



#### Bearings

- DE: Drive end bearing
- NDE: Non drive end bearing

#### Marking

Definition of nameplates symbols  
 CE: Legal sign that the equipment conforms to the requirements of European Directives.

CSA: CSA certified product, compliant with UL

Essential information included on the nameplates:

①	Serial motor, frame size
②	Brake type FFB
③	Speed of rotation (min <sup>-1</sup> )
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 - Duty (operating) factor
⑩	I: Coil current (mA)
⑪	Special marking (ATEX)

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

#### \*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.**

## 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 NAMEPLATE 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

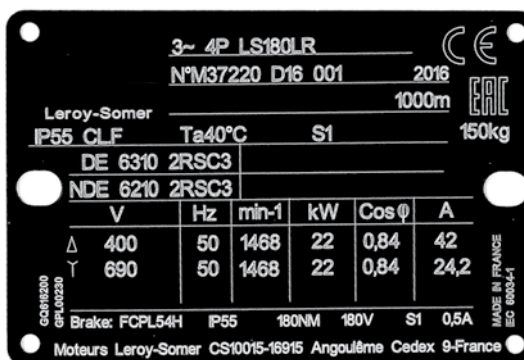
**LS** ..... : series  
**180** ..... : frame size  
**LR** ..... : housing description

#### 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°, contractual ambient temperature  
**min<sup>-1</sup>** ..... : 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



**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 quality 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. (p2)

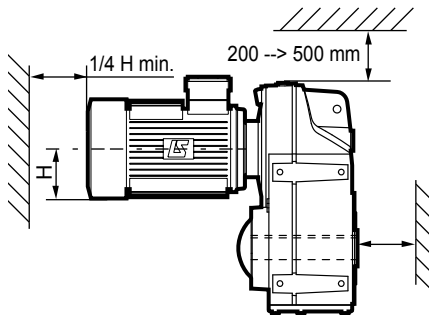
Allow sufficient room around the geared motor for plugs (or expansion tank) accessibility:

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

500 mm: G3/4" plug with dipstick for Mub 36 to 38.

### LUBRICATION

For operation in ambient temperature between -10°C and +40°C, Manubloc 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 112) and installation manual reference 4031 for the quantity required for the operating position of your unit.



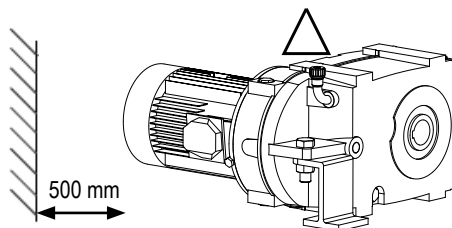
### Lubrication kit

Certain operating positions or a high input speed require a lubrication kit to preserve the initial performance of Mub 36 to 38 gearboxes (manual reference 5088).

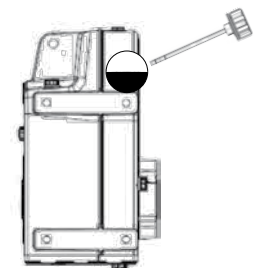
In this case, allow sufficient room around the geared motor for plugs (or expansion tank) accessibility, machine stopped. (Installation manual reference 5088).

**!** 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.



Example: Mub 36 in operating position B7 (gearbox R, NUL) or B54 (flange mounted gearbox).



Plugs:  
 ● Level      △ Breather

## Installation

### PACKAGING WEIGHT AND DIMENSIONS ROAD TRANSPORT (CODE 30) OR AIR TRANSPORT (CODE 40)

Cardboard boxes <sup>1</sup>		
Ref.	Tare	Dimensions (L x W x H) <sup>2</sup>
	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) <sup>2</sup>	Inner dimensions (L x W x H) <sup>2</sup>
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) <sup>2</sup>	Inner dimensions (L x W x H) <sup>2</sup>
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

<sup>1</sup> maximum permissible weight: 50 kg

<sup>2</sup> 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.



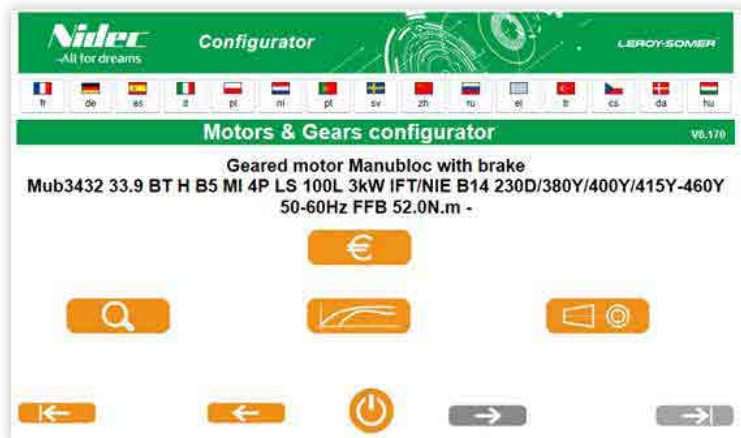
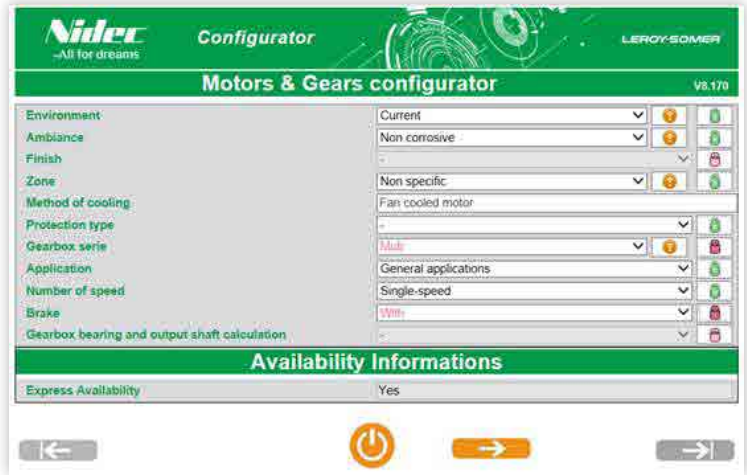
## Configurator



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

Online registration:  
<http://www.emersonindustrial.com/fr-FR/leroy-somer-motors-drives/Products/Configurator/>

- Product selection help
- Printing technical specifications
- Printing of 2D and 3D CAM files
- Equivalent to 300 catalogues in 11 languages.





## Service for drive systems

---

### 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

### 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.

## 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 delivery time for each 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	<b>MI</b>
Universal mounting	<b>MU</b>
Input shaft mounting	<b>AP</b>

#### 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 on the mentioned availability will be added. 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 N.m	Mounting	Rated power P <sub>n</sub> kW	400 V	Cb 30-	Cb 31-	Cb 32-	Cb 33-	Cb 34-	Cb 35-	Cb 36-*	Cb 37-*	Cb 38-*	Ot 39-
						Ot 31-	Ot 32-, 33-	Ot 34-	Ot 35-	Mub 35-	Mub 36-*	Mub 37-*	Mub 38-*		
<i>LS 71 M</i>	FFB1	4.5	MI or MU	0.25	Y	5	5	5	5						
<i>LS 71 M</i>	FFB1	4.5	MI or MU	0.37	Y	5	5	5	5						
<i>LS 71 L</i>	FFB1	6	MI or MU	0.55	Y	5	5	5	5						
<i>LS 80 L</i>	FFB1	12	MI or MU	0.75	Y	5	5	5	5						
<i>LS 80 L</i>	FFB1	12	MI or MU	0.9	Y	5	5	5	5						
<i>LS 90 SL</i>	FFB2	19	MI or MU	1.1	Y		5	5	5		5				
<i>LS 90 L</i>	FFB2	19	MI or MU	1.5	Y		5	5	5		5	2	2		
<i>LS 90 L</i>	FFB2	26	MI or MU	1.8	Y		5	5	5		5	2	2		
<i>LS 100 L</i>	FFB2	26	MI or MU	2.2	Y		5	5	5		5	2	2		
<i>LS 100 L</i>	FFB3	52	MI or MU	3	Y		5	5	5	5	5	2	2		
<i>LS 112 MG</i>	FFB3	52	MI or MU	4	Y			5	5	5	5	2	2		
<i>LS 132 S</i>	FFB3	67	MI or MU	5.5	Y			5	5	5	5	2	2		
<i>LS 132 M</i>	FFB4	110	MI or MU	7.5	Δ				5	5	5	2	2	2	
<i>LS 132 M</i>	FFB4	110	MI or MU	9	Δ					5	5	2	2	2	
<i>LS 160 MP</i>	FFB5	140	MI or MU	11	Δ						2	2	2	2	
<i>LS 160 LR</i>	FFB5	180	MI or MU	15	Δ						2	2	2	2	

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

#### MANUBLOC - MECHANICAL OPTIONS CORRESPONDING TO THE MOUNTING FORM AND H HOLLOW SHAFT, S SOLID SHAFT

Type	Shaft	Tapped holes	Mub MI forms				Shrink disc <sup>1</sup>	Joint	Backstop <sup>2</sup>	Mub mounting	
			Flange mounted	BD	SDB	FM				Universal	Input shaft
Mub 3132 H shaft	R	NUL/R/LR	BT	BS		2					
Mub 32-- H shaft						2					
Mub 33-- H shaft						2					
Mub 34-- H shaft						2					
Mub 35-- H shaft						2					
Mub 36-- H shaft											
Mub 37-- H shaft											
Mub 38-- H shaft											
Mub 36-- S shaft											
Mub 37-- S shaft											
Mub 38-- S shaft											

1. Gearbox with shrink disc: maximum quantity = 2  
2. Mub 36 to 38: AD (backstop) not allowed for V5, V1 operating positions.

## SAVING YOUR TIME

The delivery charter for products in Express Availability are accessible strictly through our web pages: <http://lrsm.co/disprof> (chapter 6: Gearboxes-Geared motors)

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



**Express  
Availability**



## The *Express Availability* commitment

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



**LEROY-SOMER™**

**LEROY-SOMER**<sup>TM</sup>

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[youtube.com/user/LeroySomerOfficiel](https://youtube.com/user/LeroySomerOfficiel)

[theautomationengineer.com](http://theautomationengineer.com) (blog)



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