

Electromechanical products - variable speed Multibloc 2000 / LS VARMECA

General information



Multibloc 2000 geared motors with worm and wheel 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 gear box ($n_{\text{mini}}-n_{\text{maxi}}$) in revolutions per minute (min^{-1}).

The main characteristic of the speed reducers is the maximum rated output torque ($M_n \text{ max.}$) expressed in Newton-metres (N.m) :

$$M_{n \text{ max.}} = \frac{P \times 9\,550}{n_{\text{max.}}} \times \text{efficiency}$$

A range of six sizes : 31, 22, 23, 24, 25, 26.
Rated output torque : from 20 N.m to 1500 N.m.

Power rating : from 0.25 to 9 kW.

Reduction ratios : 7.3 to 100.

From two to three reduction stages.

High efficiency : 55 % to 88 %.

Silent operation.

Construction

Component	Materials	Remarks
Housing	Cast iron	<ul style="list-style-type: none"> - use of FGL cast iron (flake graphite : tensile strength -150 MPa) single component perlite to ensure the complete sealing of the unit - monobloc with reinforced internal ribbing to absorb vibrations and noise and to increase rigidity - with NU housing, it becomes general-purpose for sizes 22, 23, 24, 25 by the adaptation of S baseplate or BS, BD flanges or R torque arm kit. They are compact and meet industrial application-related requirements
Wheel	Bronze	<ul style="list-style-type: none"> - moulded on steel or cast iron inserts, blocked with respect to the worm, supported by two large-diameter bearings without intermediate shields (except Mb 26)
Worm	Steel	<ul style="list-style-type: none"> - cut on whirl lathe, tempered and ground
Shafts	Steel	<ul style="list-style-type: none"> - grinding of the sealing surfaces - hollow cylindrical or output with key in accordance with ISO R773, standard keying and protective cover - diameter tolerance h6 - tapped holes at output shaft end in accordance with DIN 332 form DR for mounting connecting equipment
Seals	Nitrile	<ul style="list-style-type: none"> - anti-dust lipseals according to DIN 3760 form AS - ground sealing surfaces, tempered on worm
End shields	Cast iron	<ul style="list-style-type: none"> - on size 26, reinforced by large ribs, ensuring ruggedness of the gearbox under heavy loads
Lubrication	Oil	<ul style="list-style-type: none"> - in accordance with ISO 6743 / 6 - delivered with the quantity of oil corresponding to a multi-position operation, it is fitted with drain, level and vent plugs (excepting Mb 31)
Mounting		MU : geared motor with IEC motor
VARMECA variable speed motor		VARMECA : power supply - single phase 200/240 V, 3-phase 200 V to 480 V LS motor : 3-phase 230/400 V <ul style="list-style-type: none"> - pressed steel fan cover, on request fitted with a drip cover for operation in vertical position (shaft facing down = V1) - aluminium VARMECA terminal box fitted with cable gland - VARMECA IP 65 protection - IP 55 motor protection, class F
VARMECA variable speed motor and brake		FCR : failsafe brake, from 0.25 to 9 kW, IP 55 protection (see C.12)
Finish	Paint	Shade : RAL 6000 (green), system I (1 polyurethane vinyl layer of 25/30 μm)

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Forms and operating positions

Standard position : gearbox seen from side F, motor to the rear, side D facing the ground.

1 - Definition of mounting type :

NU	NS baseplate except Mb 3101				mounting flange		
NU	NS D	NS F	NS U	NS K	BS L	BD L	BN L
all tapped hole with sides	baseplate mounted on side D	baseplate mounted on side F	baseplate mounted on side U	non-mounted baseplate supplied in kit	flange with plain holes on the left	flange with flange with (different diameter) Other position of the flange on the right R, supplied in kit --K	flange with plain holes on the left

[save for Mb 3101 : side F option, side U excepted and Mb 26-- sides L and R excepted]

2 - Definition of the output shaft

H	HL	HR	HLR	RK
hollow cylindrical shaft	solid output cylindrical shaft on the left	solid output cylindrical shaft on the right	2 solid output cylindrical shafts on the left and on the right	non-mounted torque arm supplied in kit

3 - Option : R torque arm

4 - Definition of operating position

4.1 - Mounting on NU housing, with NSD, NSF, NSU baseplate or R torque arm

B3	B6	B7	B8	V5	V6

4.2 - Mounting with BS, BN or BD flange

B5	B52	B53	B54	V1	V3

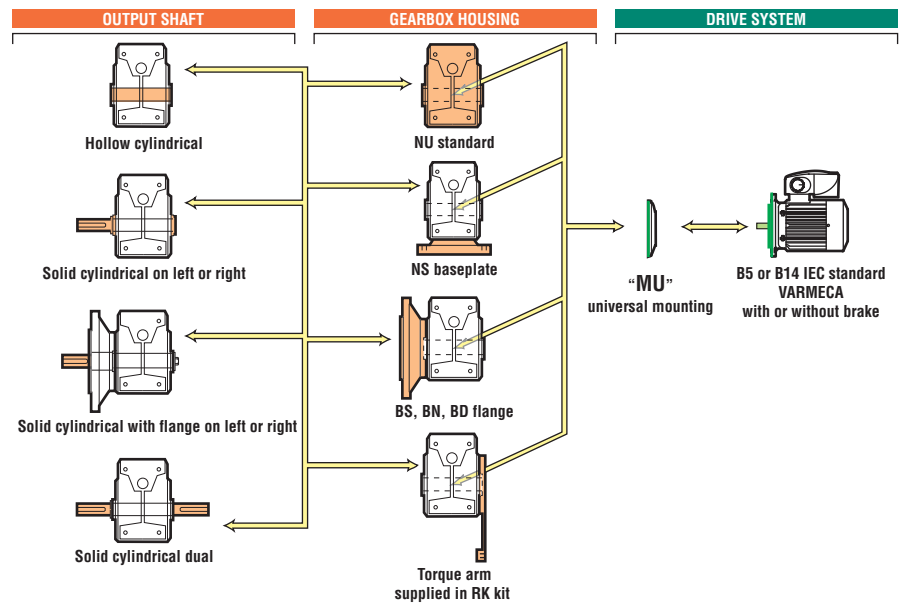
5 - Positions of VARMECA

A : Standard	1 : Standard

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Adaptation possibilities

Leroy-Somer offers several drives for its gearboxes which meet a diverse range of needs. They are described below and offered in this catalogue.
For other drives, consult Leroy-Somer technical specialists who will be pleased to assist you.



Designation / Coding

Mb	2401	B3	NS	D	H	50	MU-FT	4P	LS 90 L	1.5 kW	VMA 32T 150	A1	BMA
Gearbox type	Manufacturer index and size	Operating position	Mounting type	Mounting position	Output shaft definition	Exact reduction	Input type	No. of poles	Series, frame size, manufacturer index	Rated power in kW	VARMECA rating	Position VARMECA, PE	Option

Example of selection :

Power :	1.5 kW
Speed :	6.4 to 45 min ⁻¹
Duty factor necessary for the application :	kp = 1
Mounting :	baseplate, to the ground, hollow shaft
PE position :	PE on the right
Designation : Mb 2401 B3 NSD H 50 MU-FT - 4P LS 90 L 1.5 kW - VMA 32T 150 A1	

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Selection

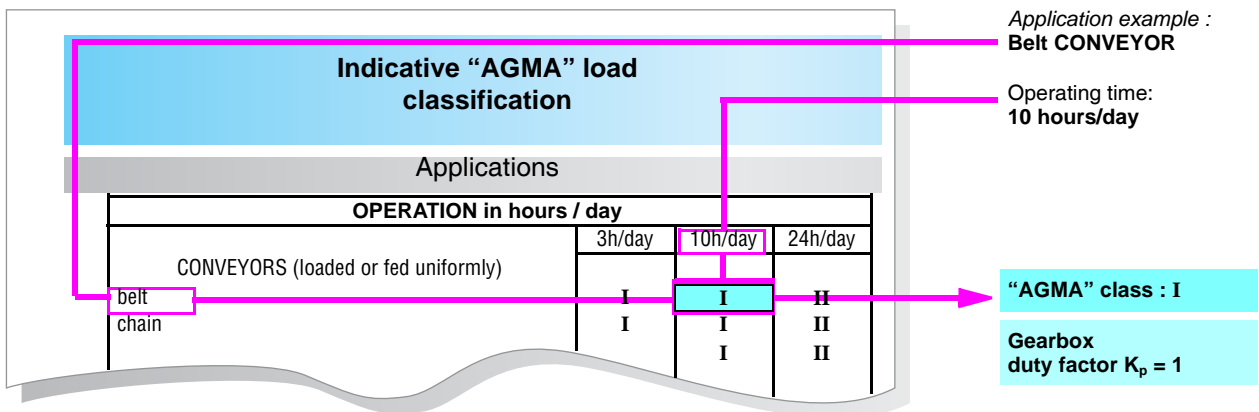
The selection of a gearbox or of a geared motor should take account of the application. Some of these applications are listed in the indicative "AGMA" load classification, page D0.10.

The opposite table summarises the relationship between the "AGMA" class and the gearbox duty factor K_p .

"AGMA" class	Gearbox duty factor K_p
I	1
II	1.4
III	2

1st case. – Your application is listed

Follow the indicative "AGMA" load classification table, page D0.10 of this catalogue. ▾



2nd case. – Your application is not listed

The "AGMA" selection class is defined by the daily operating time and by the application operating type, according to the table below. ▾

Type of application	Daily operating time	"AGMA" class
Shock-free, few starts	10 hours / day	I
Damped shocks	10 hours / day	II
Shock-free, few starts	24 hours / day	II
Violent shocks, many starts	10 hours / day	III
Damped shocks	24 hours / day	III

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Conditions

Mb 3101, Mb 2000 : NU, NS, BS, BD, BN
LS VARMECA, LS VARMECA brake FCR - IP 55 - Cl.F - 50 Hz

Inputs		Maximum quantity by order					
MU B14 or B5 modified		Mb 3101	Mb 2201	Mb 2301	Mb 2401	Mb 2501	Mb 2601
LS VMA 3-ph	0.25-4 kW	3	3	3	3	3	2
	5.5-9 kW	-	-	-	3	3	-
LS VMA 1-ph	0.25-1.5 kW	3	3	3	3	3	-
LS VMA 3-ph FCR	0.25-9 kW	3	3	3	3	3	2
LS VMA 1-ph FCR	0.25-1.5 kW	3	3	3	3	3	-

		Mechanical options						
		NU H NU HL	NS H NS HL	BSL H BSL HL	BDL H BDL HL	BNL H BNL HL	RK	BT LR H
Mb 3101			-	-				-
Mb 2201								-
Mb 2301								-
Mb 2401								-
Mb 2501								-
Mb 2601								-
Mounting	Shaft	Page(s) of dimensions corresponding to mounting						
MU-FT	H	D15.8	D15.10	D15.12	D15.12	D15.12	D9.34	D15.8
MU-FF	H	D15.9	D15.11	D15.13	D15.13	D15.13	D9.34	D15.9

Inputs		Brake options		VARMECA options						
4p / MU		DLRA	Drip cover	B	BMA	BMAVAR	CVI VMA	CDC VMA PX LCD	PEGASE	LC VMA
LS VMA 3-ph	0.25-4 kW	-	-							
	5.5-9 kW	-	-							
LS VMA 1-ph	0.25-1.5 kW	-	-							
LS VMA 3-ph FCR	0.25-9 kW									
LS VMA 1-ph FCR	0.25-1.5 kW									

Inputs		VARMECA options									
4p / MU		FLT	RF 100 RF 200	RF 600	SO VMA	VMA ESFR	VMA COM CB	POT10K1T	POT10K10T	4 PE	PX KEY
LS VMA 3-ph	0.25-4 kW	-		-							
	5.5-9 kW	-	-								
LS VMA 1-ph	0.25-1.5 kW										
LS VMA 3-ph FCR	0.25-4 kW	-		-							
	5.5-9 kW	-	-								
LS VMA 1-ph FCR	0.25-1.5 kW										

□ < □ < □ < □ < □ < □

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AGMA I

Mb 3101, Mb 2000
LS VARMECA, LS VARMECA brake FCR - IP 55 - CI.F - 50 Hz

Mb 3101, Mb 2000

		LS VARMECA (kW)															
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5	9		
		LS VARMECA 4p															
		71 L			80 L			90 L			100 L		112 MG	132 SM	132 M		
		Type VMA ...T... 3-phase 400/480V															
		31T025	31T037	31T055	31T075	31T090	31T110	32T150	32T180	32T220	32T300	32T400	33T550	33T750	34T900 ⁶		
		Type VMA ...TL... 3-phase 200/240V															
		31TL025	31TL037	31TL055	31TL075	32TL090	32TL110	32TL150	32TL180	32TL220	33TL300	33TL400	34TL550	34TL750 ⁶			
		Type VMA ...M... single phase 230V															
		31M025	31M037	31M055	31M075	32M090	32M110	32M150									
Minimum output speed min ⁻¹	Maximum output speed min ⁻¹	Reduction index															
3.3	23.2	100		2201								2601					
4	29	80					2401										
5.4	38.7	60			2201												
6.4	46.4	50									2501 ⁴						
8	58	40				2201											
10.7	77.3	30				<				2401				2601 ⁵			
12.6	91	25.5		3101 ¹		<	2201		2301 ³								
16.1	116	20				<	<	<									
21.5	155	15				<	<	<	<	<		2401		<	<		
31.1	225	10.3				<	<	<	2201 ²	<	<	<		<	<		
44	318	7.3				<	<	<	<	<	<	<		<	<		
4p LS VARMECA brake																	
FCR⁷			FCR J01			FCR J01			FCR J01			FCR J01		FCR J01		FCR J02	

- Mb 3101 < LS 71, 80 : FT85, ba 14 x 30 obligatory.
- Mb 2201 < FF130, ba 19 x 40 obligatory.
- Mb 2301 < LS 100, 112 : FF165, ba 24 x 50 obligatory.
- Mb 2501 < LS 132 : FF215, ba 28 x 60 obligatory.
- Mb 2601 < LS 132 : MU-FT obligatory ; LS 112, 100, 90 : MU-FF obligatory.
- Attention : for combinations, continuous duty and constant torque, as below, forced ventilation is necessary, for brake and non-brake motors
In these cases, the minimum delivery time moves to 18 working days

4-pole geared motor		
kW	T	TL
7.5	-	All motor speeds
9	Between 10 and 20 Hz for the motor	-

7. See chapter C12.

Exact reductions

Type	Reduction indices										
	100	80	60	50	40	30	25.5	20	15	10.3	7.3
Mb 2601	100	80	60	50	40	30	25.5	20.5	15.5	10.3	7.5
Mb 2501	100	80	60	50	40	30	25.5	20.5	15.5	10.3	7.25
Mb 2401	100	80	60	50	40	30	25.5	19.5	14.5	10.3	7.25
Mb 2301	100	80	60	50	40	30	25.5	20	15	10.3	7.5
Mb 2201	100	80	60	50	40	30	25.5	20	15	10.3	7.33
Mb 3101	100	80	60	50	40	30	25	20	15	10	7.5

Example of selection :

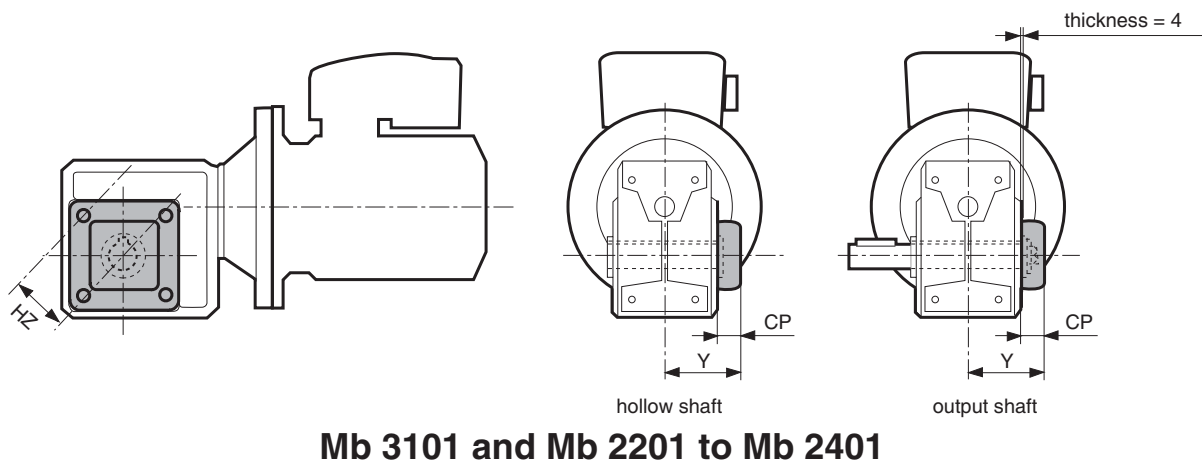
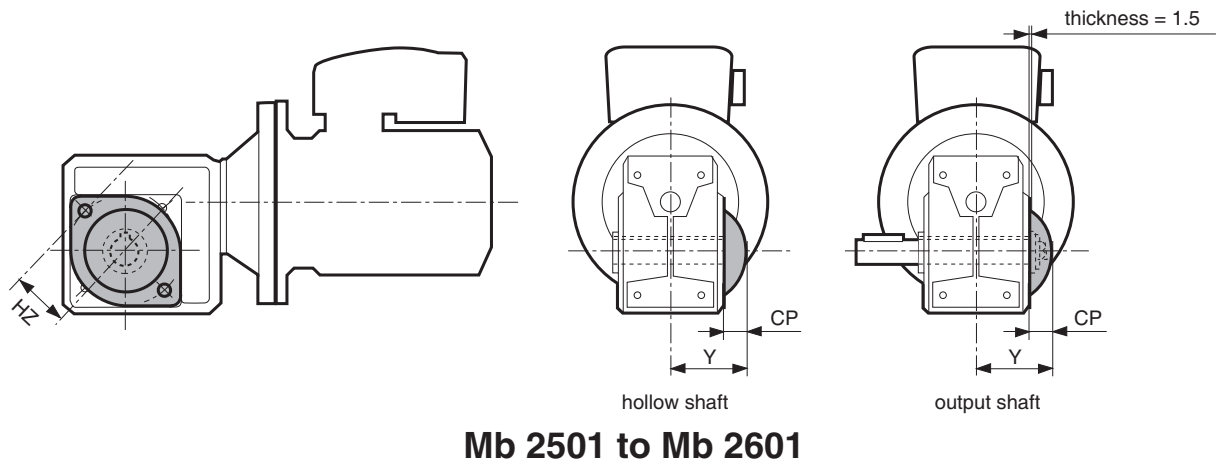
Power : 1.5 kW
 Speed : 6.4 to 45 min⁻¹
 Duty factor necessary for the application : kp = 1
 Mounting : baseplate, to the ground, hollow shaft
 PE position : PE on the right
Designation : Mb 2401 B3 NSD H 50 MU-FT - 4P LS 90 L 1.5 kW - VMA 32T 150 A1

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Dimensions

Dimensions of protective cap for hollow shaft and opposite side to the output shaft,
Mb 3101 and Mb 2201 to Mb 2601

Dimensions in millimetres



Protective cap

Type	CP	HZ	Y
Mb 2601	33	-	127
Mb 2501	28.5	90	106.5
Mb 2401	28	65	92
Mb 2301	22.5	57.2	76.5
Mb 2201	23.5	52.5	72.5
Mb 3101	22.5	42.5	63.5

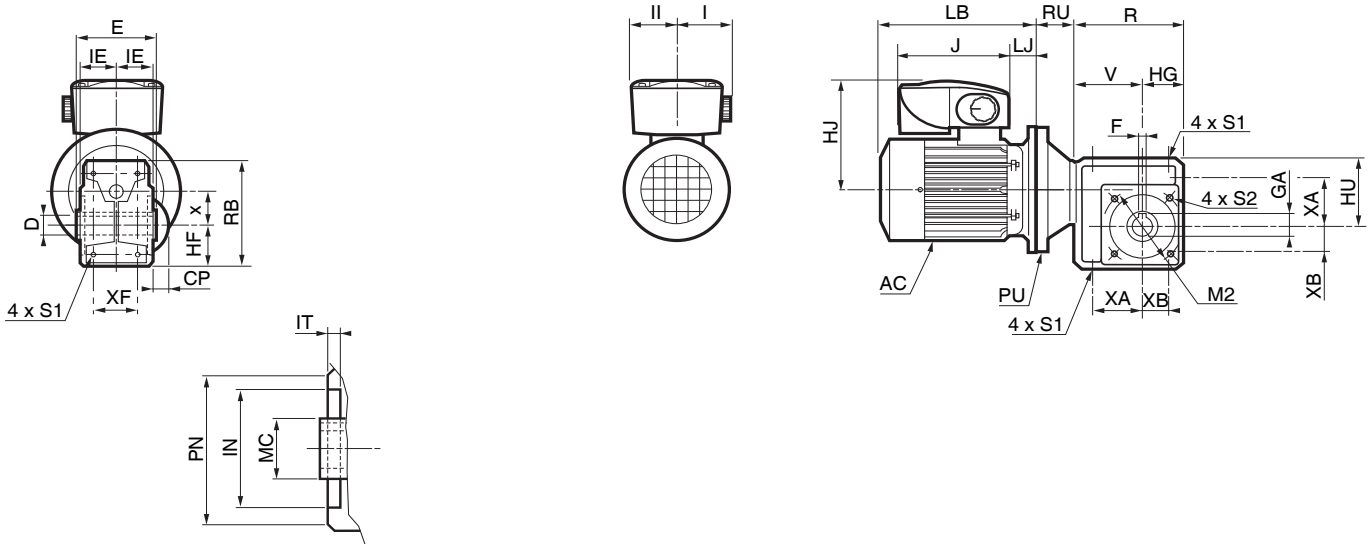
Electromechanical products - variable speed Multibloc 2000 / LS VARMECA

Dimensions

Dimensions of VARMECA variable speed geared motors with Multibloc (Mb), MU-FF universal mounting, IM 3001 (IM B5), Mb 2201 to Mb 2601

- NU standard, H hollow shaft

Dimensions in millimetres



Type	Gearbox														Hollow output shaft				Max weight kg	
	CP	HF	HG	HU	IE	M2	R	RB	S1	S2	V	XA	XB	XF	x	D	E	F		GA
Mb 2601	33	100	100	160	93.5	⁻¹	260	260	M14 x 20	⁻¹	160	125	65	100	100	50	188	14	53.8	51.5
Mb 2501	28.5	90	90	135	78	180	225	225	M12 x 20	M12 x 20	135	110	65	90	80	45	168	14	48.8	46.5
Mb 2401	28	75	75	115	64	130	190	190	M10 x 15	M10 x 15	115	101	61	86	63	35	138	10	38.3	29.5
Mb 2301	22.5	63	63	97	54	115	160	160	M8 x 12	M8 x 12	97	77	43	70	55	30	118	8	33.3	17
Mb 2201	23.5	56	56	84	49	105	140	140	M8 x 12	M8 x 12	84	67	38	60	45	25	108	8	28.3	12.5

1. Option for Mb 2601 BT : M2 = 165, S2 = 6 x M10 x 15.

Type	Spigot on housing			
	IN	IT	MC	∅ PN
Mb 2601	130 ¹	4 ¹	65	⁻¹
Mb 2501	140	4.5	90	166
Mb 2401	110	3.5	60	132
Mb 2301	95	3.5	60	114
Mb 2201	80	3	40	98

1. Option for Mb 2601 BT : ∅ 186

Frame size	VARMECA variable speed motors																									
	3-phase LS							LS and FCR brake							Gearboxes											
	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	2201	2301	2401	2501	2601					
71	140	195	218	183	8	94	75	12.5	140	195	218	271	34	94	75	15.2	24	160	24	160	-	-	-	-		
80	170	205	231	215	12	94	75	15	172	205	231	292	38	94	75	22.2	31	200	31	200	50	200	-	-	-	
90	190	215	231	265	32	94	75	19.4	184	215	231	324	12	94	75	30.9	31	200 ²	31	200	50	200	50	200	59	200
100	200	270	336	290	12	141	115	29	200	270	336	388	40	141	115	36.2	-	-	31	200 ²	50	250	50	250	51	250
112	235	280	336	425	42	141	115	37.5	235	280	336	425	42	141	115	48.7	-	-	31	200 ²	50	250	50	250	51	250
132¹	280	300	336	532	26	141	115	61	280	300	336	532	26	141	115	-	-	-	-	-	50	250 ²	50	250 ²	-	-

1. Dimension I includes the control knob ; for supply without knob, take the value of dimension II. 2. Attention : motor with smaller flange and IEC shaft extension.

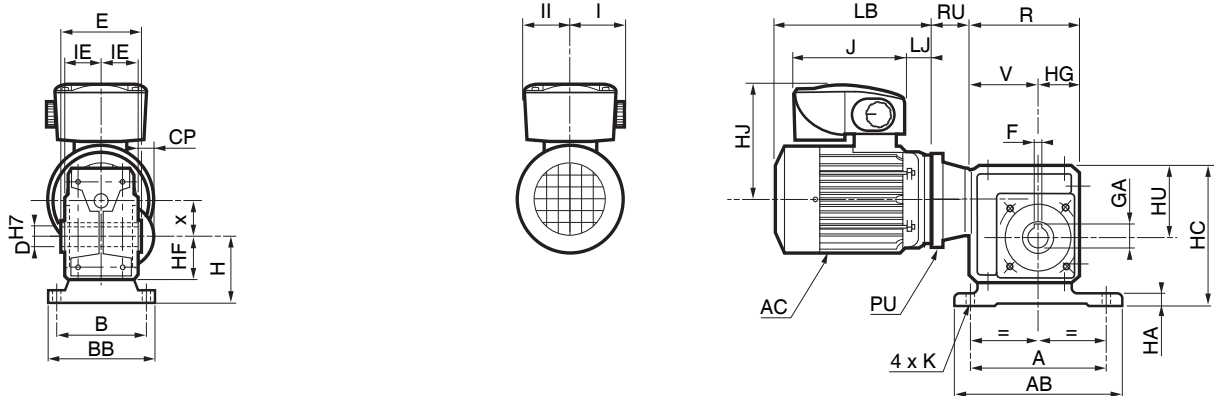
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Dimensions

Dimensions of VARMECA variable speed geared motors with Multibloc (Mb), MU-FT universal mounting, IM 3601 (IM B14), Mb 2201 to Mb 2601

- NSD baseplate, H hollow shaft

Dimensions in millimetres



Type	Gearbox with baseplate																Hollow output shaft				Max weight kg
	A	AB	B	BB	CP	H	HA	HC	HF	HG	HU	IE	K	R	V	x	D	E	F	GA	
Mb 2601	250	296	180	216	33	125	20	285	100	100	160	93.5	18	260	160	100	50	188	14	53.8	55
Mb 2501	220	270	156	188	28.5	112	16	247	90	90	135	78	16	225	135	80	45	168	14	48.8	48.5
Mb 2401	202	235	156	187	28	90	15	205	75	75	115	64	14	190	115	63	35	138	10	38.3	29.5
Mb 2301	154	184	128	156	22.5	80	6	177	63	63	97	54	11	160	97	55	30	118	8	33.3	17
Mb 2201	134	164	125	153	23.5	71	6	155	56	56	84	49	11	140	84	45	25	108	8	28.3	12.5

Frame size	VARMECA variable speed motors																									
	3-phase LS							LS and FCR brake							Gearboxes											
	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	2201	2301	2401	2501	2601					
																RU	PU	RU	PU	RU	PU	RU	PU	RU	PU	
71	140	179	218	193	8	94	75	12.5	140	195	218	245	8	94	75	15	31	105	35	105	-	-	-	-	-	-
80	172	189	231	215	12	94	75	15	172	205	231	265	12	94	75	22	33	120	36	120	50	120	-	-	-	-
90	190	199	231	245	12	94	75	20	184	215	231	304	12	94	75	29	33	120 ²	38	140	50	140	50	140	-	-
100	200	204	336	290	4	141	115	25	200	270	336	388	4	141	115	36	-	-	35	140 ²	50	160	50	160	-	-
112	235	213	336	396	13	141	115	38.4	235	280	336	396	13	141	115	52	-	-	35	140 ²	50	160	50	160	-	-
132¹	280	282	336	492	8	141	115	61	280	300	336	492	8	141	115	86	-	-	-	-	50	160 ²	50	160 ²	51	250

1. Dimension I includes the control knob ; for supply without knob, take the value of dimension II. 2. Attention : motor with smaller flange and IEC shaft extension.

Electromechanical products - variable speed

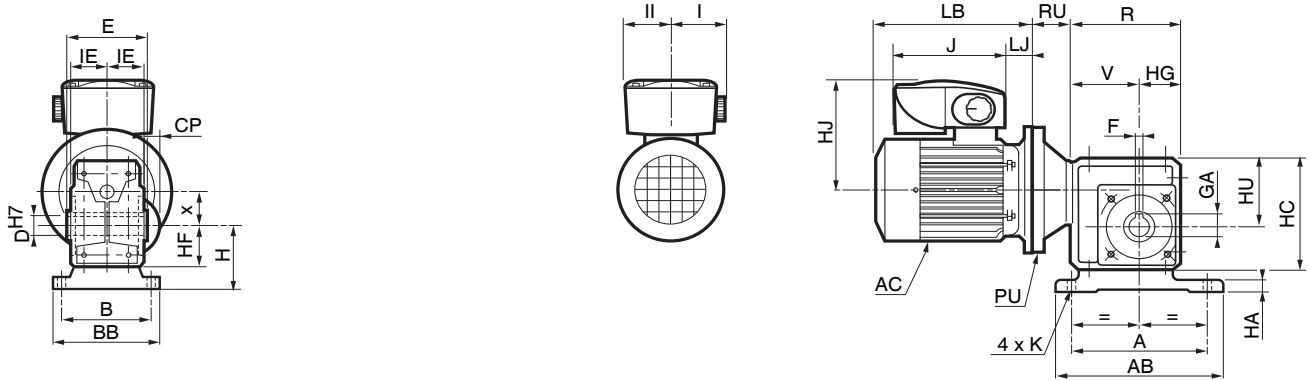
Multibloc 2000 / LS VARMECA

Dimensions

Dimensions of VARMECA variable speed geared motors with Multibloc (Mb), MU-FF universal mounting, IM 3001 (IM B5), Mb 2201 to Mb 2601

- NSD baseplate, H hollow shaft

Dimensions in millimetres



Type	Gearbox with baseplate															Hollow output shaft				Max weight kg	
	A	AB	B	BB	CP	H	HA	HC	HF	HG	HU	IE	K	R	V	x	D	E	F		GA
Mb 2601	250	296	180	216	33	125	20	285	100	100	160	93.5	18	260	160	100	50	188	14	53.8	56.5
Mb 2501	220	270	156	188	28.5	112	16	247	90	90	135	78	16	225	135	80	45	168	14	48.8	50
Mb 2401	202	235	156	187	28	90	15	205	75	75	115	64	14	190	115	63	35	138	10	38.3	31
Mb 2301	154	184	128	156	22.5	80	6	177	63	63	97	54	11	160	97	55	30	118	8	33.3	18
Mb 2201	134	164	125	153	23.5	71	6	155	56	56	84	49	11	140	84	45	25	108	8	28.3	13.5

Frame size	VARMECA variable speed motors																									
	3-phase LS							LS and FCR brake							Gearboxes											
	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	2201		2301		2401		2501		2601	
71	140	195	218	183	8	94	75	12.5	140	195	218	271	34	94	75	15.2	24	160	24	160	-	-	-	-	-	-
80	170	205	231	215	12	94	75	15	172	205	231	292	38	94	75	22.2	31	200	31	200	50	200	-	-	-	-
90	190	215	231	265	32	94	75	19.4	184	215	231	324	12	94	75	30.9	31	200 ²	31	200	50	200	50	200	59	200
100	200	270	336	290	12	141	115	29	200	270	336	388	40	141	115	36.2	-	-	31	200 ²	50	250	50	250	51	250
112	235	280	336	425	42	141	115	37.5	235	280	336	425	42	141	115	48.7	-	-	31	200 ²	50	250	50	250	51	250
132¹	280	300	336	532	26	141	115	61	280	300	336	532	26	141	115	-	-	-	-	-	50	250 ²	50	250 ²	-	-

1. Dimension I includes the control knob ; for supply without knob, take the value of dimension II.

2. Attention : motor with smaller flange and IEC shaft extension.

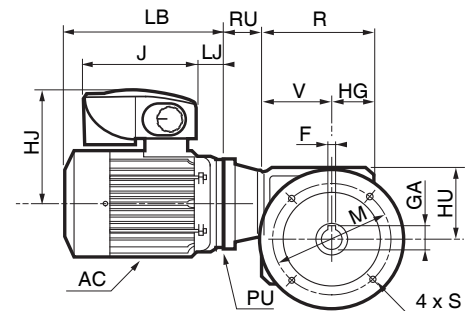
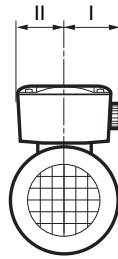
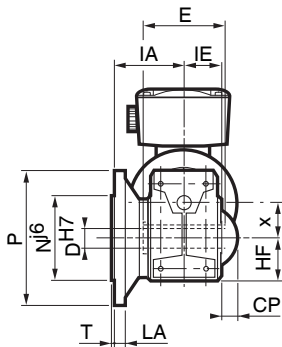
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Dimensions

Dimensions of VARMECA variable speed geared motors with Multibloc (Mb), MU-FT universal mounting, IM 3601 (IM B14), Mb 3101, Mb 2201 to Mb 2601

Dimensions in millimetres

- BS L or BDL standard flange [or flange without BN L spigot], H hollow shaft



Type	Gearbox									BS or BN ¹ flange						Max weight kg
	CP	HF	HG	HU	IA	IE	R	V	x	M	N ¹	P	LA	S	T ¹	
Mb 2601	33	100	100	160	153	93.5	260	160	100	300	250	350	14	18	4	56.5
Mb 2501	28.5	90	90	135	126	78	225	135	80	265	230	300	12	14	4	50.5
Mb 2401	28	75	75	115	126	64	190	115	63	215	180	250	12	14	4	32.5
Mb 2301	22.5	63	63	97	106	54	160	97	55	165	130	200	10	11	3.5	19
Mb 2201	23.5	56	56	84	100	49	140	84	45	165	130	200	10	11	3.5	14.5
Mb 3101	22.5	50 ²	45	77	77	41	120 ²	54.5	40	100	-	120	7	7 ³	-	6

1. BN flange without spigot : Nj6 = 0 and T = 0.

2. See details Mb 3101 page D15.8.

3. 4 open holes on radius.

Type	Hollow output shaft				BD flange								Max weight kg
	D	E	F	GA	IA	M	N	P	LA	S	T		
Mb 2601	50	188	14	53.8	153	265			consult Leroy-Somer			55.5	
Mb 2501	45	168	14	48.8	138	215	180	250	12	14	4	49.5	
Mb 2401	35	138	10	38.3	126	165	130	200	10	11	3.5	31.5	
Mb 2301	30	118	8	33.3	106	130	110	160	9	9	3.5	18.5	
Mb 2201	25	108	8	28.3	100	130	110	160	9	10	3.5	14	
Mb 3101	20	90	6	22.8	76	85	-	105	6	7 ¹	-	6	
Mb 3101	20	90	6	22.8	79	115	-	140	8	9	-	6.7	

1. 4 open holes on radius.

Frame size	VARMECA variable speed motors																											
	3-phase LS								LS and FCR brake																			
	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg	AC	HJ	max J	max LB	min LJ	max I ¹	max II	Max weight kg												
71	140	179	218	193	8	94	75	12.5	140	195	218	245	8	94	75	15	-	105	31	105	35	105	-	-	-	-	-	-
80	172	189	231	215	12	94	75	15	172	205	231	265	12	94	75	22	-	105 ²	33	120	36	120	50	120	-	-	-	-
90	190	199	231	245	12	94	75	20	184	215	231	304	12	94	75	29	-	-	33	120 ²	38	140	50	140	50	140	50	140
100	200	204	336	290	4	141	115	25	200	270	336	388	4	141	115	36	-	-	-	-	35	140 ²	50	160	50	160	50	160
112	235	213	336	396	13	141	115	38.4	235	280	336	396	13	141	115	52	-	-	-	-	35	140 ²	50	160	50	160	50	160
132	280	282	336	492	8	141	115	61	280	300	336	492	8	141	115	86	-	-	-	-	-	-	50	160 ²	50	160 ²	51	250

1. Dimension I includes the control knob ; for supply without knob, take the value of dimension II.

2. Attention : motor with smaller flange and IEC shaft extension.

3. For Mb 3101, input flange integrated to the housing, that is V + RU = 75

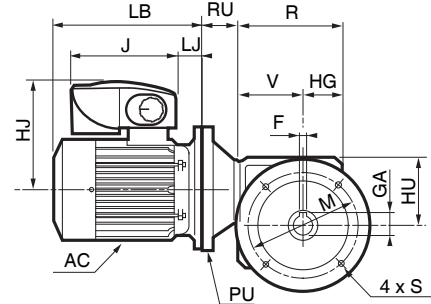
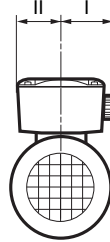
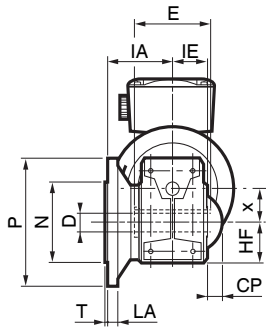
Electromechanical products - variable speed Multibloc 2000 / LS VARMECA

Dimensions

Dimensions of VARMECA variable speed geared motors with Multibloc (Mb), MU-FF universal mounting, IM 3001 (IM B5), Mb 2201 to Mb 2601

Dimensions in millimetres

- BS L or BDL standard flange, [or BN L flange without spigot], H hollow shaft



Type	Gearbox									BS or BN ¹ flange						Max weight kg
	CP	HF	HG	HU	IA	IE	R	V	x	M	N ¹	P	LA	S	T ¹	
Mb 2601	33	100	100	160	153	93.5	260	160	100	300	250	350	14	18	4	58
Mb 2501	28.5	90	90	135	126	78	225	135	80	265	230	300	12	14	4	52
Mb 2401	28	75	75	115	126	64	190	115	63	215	180	250	12	14	4	34
Mb 2301	22.5	63	63	97	106	54	160	97	55	165	130	200	10	11	3.5	20
Mb 2201	23.5	56	56	84	100	49	140	84	45	165	130	200	10	11	3.5	15.5

1. BN flange without spigot : Nj6 = 0 and T = 0.

Type	Hollow output shaft				BD flange						Max weight kg	
	D	E	F	GA	IA	M	N	P	LA	S		T
Mb 2601	50	188	14	53.8	153	265			consult Leroy-Somer			55.5
Mb 2501	45	168	14	48.8	138	215	180	250	12	14	4	49.5
Mb 2401	35	138	10	38.3	126	165	130	200	10	11	3.5	31.5
Mb 2301	30	118	8	33.3	106	130	110	160	9	9	3.5	18.5
Mb 2201	25	108	8	28.3	100	130	110	160	9	10	3.5	14

Frame size	VARMECA variable speed motors																									
	3-phase LS								LS and FCR brake								Gearboxes									
	AC	HJ	max J	max LB	min LJ	max I'	max II	Max weight kg	AC	HJ	max J	max LB	min LJ	max I'	max II	Max weight kg	2201	2301	2401	2501	2601					
71	140	195	218	183	8	94	75	12.5	140	195	218	271	34	94	75	15.2	24	160	24	160	-	-	-	-		
80	170	205	231	215	12	94	75	15	172	205	231	292	38	94	75	22.2	31	200	31	200	50	200	-	-	-	
90	190	215	231	265	32	94	75	19.4	184	215	231	324	12	94	75	30.9	31	200 ²	31	200	50	200	50	200	59	200
100	200	270	336	290	12	141	115	29	200	270	336	388	40	141	115	36.2	-	-	31	200 ²	50	250	50	250	51	250
112	235	280	336	425	42	141	115	37.5	235	280	336	425	42	141	115	48.7	-	-	31	200 ²	50	250	50	250	51	250
132¹	280	300	336	532	26	141	115	61	280	300	336	532	26	141	115	-	-	-	-	-	50	250 ²	50	250 ²	-	-

1. Dimension I includes the control knob ; for supply without knob, take the value of dimension II.
2. Attention : motor with smaller flange and IEC shaft extension.

