



Réf. 2975 GB - 2.32 / d - 1.03



# Fractional power geared motors

Technical catalogue

---

This catalogue presents, in three sections, the LEROY-SOMER range of fractional power gearboxes and geared motors.

#### • 1st section

Each type of gearbox is presented in a format allowing the reader to see the following clearly :

- Product presentation : characteristics and construction
- Adaptation possibilities and designation
- Mounting positions
- Quick selection data (duty factor  $K_P \geq 1$ )
- Table of technical characteristics for a precise definition of slow speed shaft torques at the exact output speed, duty factor, and the most common motor types
- The force on the slow speed shafts (axial and radial)
- Dimensions (feet, baseplate, flange etc.)

#### • 2nd section

- The motors most commonly used :
  - 3-phase and single phase induction with or without brake
  - D.C. with and without brake,  
with their main characteristics.

#### • 3rd section

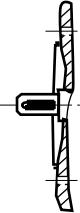
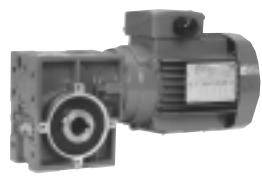
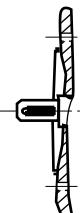
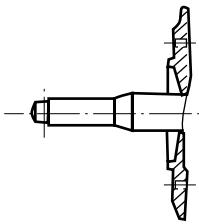
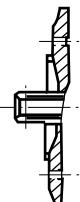
- Variable speed drives :
  - based on induction motors
  - based on D.C. motors  
with their main characteristics.

---

For additional features and higher power ratings, please contact your Leroy-Somer representative.

# Electromechanical products

## Shafts and motor flanges for gearboxes

Type	Dimensions	Use
<b>Mb 21</b>	IEC B14 standard motors LS 56 : Ø 9 × 20 - FT 65 flange LS 63 : Ø 11 × 23 - FT 75 flange LS 71 : Ø 14 × 30 - FT 85 flange	 Mb 21 
<b>MVA</b>	Ø 11 × 23 W = 0 FT 65 flange (8 holes)	 MVA 
<b>MVB</b>	Ø 10 × 36.5 W = 26.5 FT 65 flange (8 holes)	 MVB - MVAB - MVDE - MVBE 
<b>Cb 1000</b>	Hollow Ø 9  FT 65 flange (8 holes) or monobloc special flange (Cb 1700 only)  "U mounting" - LS 56 Ø 9 × 20 FT 100 flange - LS 63 Ø 11 × 23 FT 115 flange - LS 71 Ø 14 × 30 FT 130 flange  Note : All these flanges can be combined with any of these shaft extensions, but there are no other possibilities.	 Cb 1700 - Cb 1500 
<b>FMC brake</b>	Ø 12 × 12 W = 6 + pin hole Fixing using 3 M4 holes on Ø 72 (at 120°)	At rear of all motors (with the exception of MS)

All shaft diameters have a tolerance limit of j6 as standard.

# Electromechanical products

## Compabloc 1000

### General



Compabloc 1000 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 reducer is the nominal output torque ( $M_{nS}$ ) expressed in Newton-metres (N.m).

Two sizes : 15 - 17.  
Nominal output torque : from 10 to 80 N.m.  
Power rating : from 0.06 to 0.45 kW.  
Reduction ratios : from 1.6 to 296.  
From one to four reduction stages : 1, 2, 3, 4.  
High efficiency.  
Reversible.  
Very quiet operation.

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

### Construction

#### Description of Compabloc gearboxes (Cb)

Component	Materials	Remarks
Housing	Aluminium	- Use of die-cast aluminium - Monobloc, internally ribbed - The use of aluminium considerably decreases its weight and improves the heat dissipation - With S baseplate or with BS-BD flanges, they are compact and meet industrial requirements
Gears	Steel Ni Cr Mo	- Cut by the gear hob, they are heat treated and tempered and then undergo final machining - The input train also undergoes microfinishing which ensures a particularly low noise level during operation
Lipseals	Acrylonitrile	- Seals between the housing and the flange - Antidust lipseals on slow speed shaft
Shaft	Steel	- Grinding of sealing surfaces - Key in accordance with DIN 6883 (high version) - Tolerance of diameters in accordance with IEC 72-1 (DIN 748) - Tapped hole at the shaft end for fixing connecting devices in accordance with DIN 332 version I
End shield	Aluminium	Strongly reinforced, it ensures ruggedness of the gearbox under heavy loads
Lubrication	Synthetic oil	- Requiring no maintenance, lubricated for the lifetime of the gearbox - Delivered with the quantity of oil corresponding to the operating position - No drain or fill-level plug. Vent hole on request
Mounting		AP : gearbox with input shaft MI : geared motor with integrated motor MU : geared motor with IEC motor, manufactured with universal mounting
Standard motors		LS : multivoltage 220/380 V, 230/400 V, 240/415 V 3-phase and 230 V single phase - Pressed steel fan cover, on request fitted with a drip cover for operation in vertical position (shaft facing down) - Terminal box fitted with a cable gland with system preventing accidental removal of cable - IP 55 standard protection
Brake motors		FMC : 3-phase or single phase failsafe brake motor for 0.06 to 0.25 kW motors FCO / FCL : 3-phase failsafe brake induction motor from 0.25 to 0.55 kW FAST : 3-phase failsafe brake induction motor with field deviator, from 0.25 to 0.55 kW
Other motors		MFA : D.C. motor IP 23 - IP 44 from 0.075 to 0.37 kW (3000 min <sup>-1</sup> ) MBT : low voltage D.C. motor
Finish	Paint	Shade : RAL 6000 (green), system I (1 polyurethane vinyl layer of 25/30 µm)

A

AXIAL OUTPUT GEARED MOTORS

# Electromechanical products

## Compabloc 1000

### Adaptation possibilities

Leroy-Somer offers several drives for its gearboxes which respond to very wide-ranging needs. They are described below and offered in this catalogue, either in the section relating to gearboxes for fixed-speed motors, or in the section on Variable speed control for the types of drive selected.

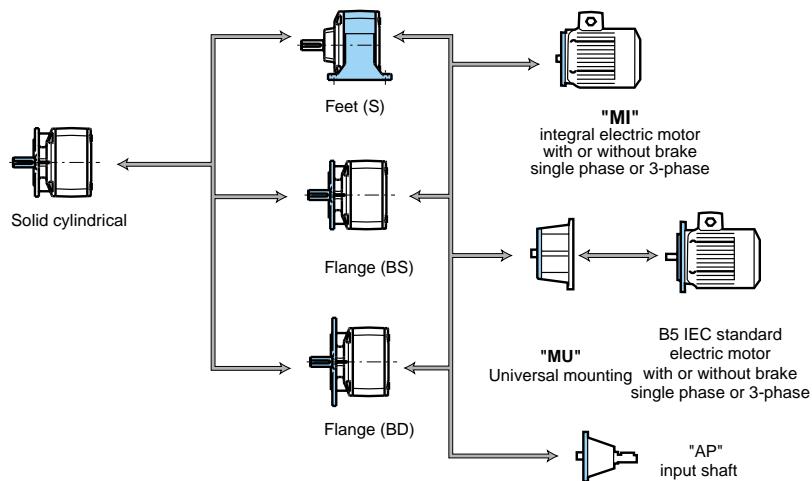
For other drives, consult the Leroy-Somer technical specialists who will be glad to assist.

A

 Compabloc 1000 gearboxes can be used in conjunction with the following drives :

- single phase motors :
  - LS motor from 0.06 to 0.37 kW,
  - FMC brake motor from 0.06 to 0.37 kW.
- 3-phase induction motors :
  - LS motor from 0.06 to 0.55 kW,
  - FMC brake motor from 0.06 to 0.37 kW,
  - FCR brake motor from 0.25 to 0.55 kW,
  - FAST brake motor from 0.25 to 0.55 kW.
- D.C. motors :
  - MFA from 0.075 to 0.37 kW ( $3000 \text{ min}^{-1}$ ).
- electronic drives :
  - MVE from 0.075 to 0.37 kW ( $3000 \text{ min}^{-1}$ ).
- low voltage D.C. motors  
(12 to 48 V) :
  - MBT from 0.07 to 0.55 kW.

OUTPUT SHAFT      GEARBOX HOUSING      DRIVE SYSTEM



AXIAL OUTPUT GEARED MOTORS

### Designation / Coding

Cb	1703	S	50	MI	4P, LS63	0.18 kW
Gearbox type	Size	Type of mounting	Exact reduction	Integral mounting	Polarity, type of LS motor and frame size	Motor power

 Example of coding :

Cb 1703 - S - 50 - MI - 4P LS63 - 0.18 kW -  
230/400 V - 3-PH - 50 Hz

# Electromechanical products

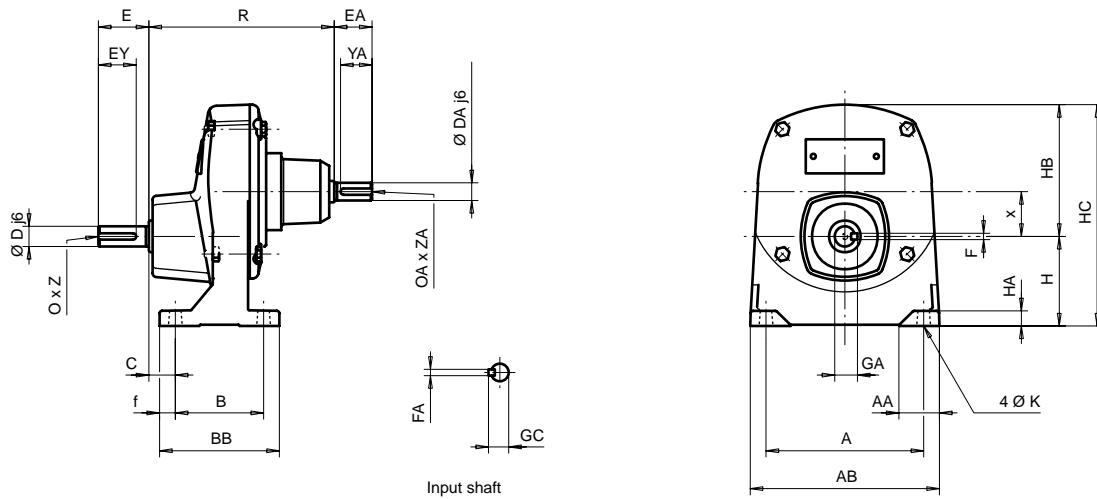
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) gearboxes, AP input shaft mounting,  
Cb 1701

*Dimensions in millimetres*

#### - S baseplate form



Type	Gearboxes with baseplate													Solid output shaft						Weight kg		
	R	A	AA	AB	B	BB	x	H	HB	HC	C	f	K	HA	D	E	EY	GA	F	O	Z	
Cb 1701	147	125	32,5	150	70	95	35,5	71	104,5	175,5	21	12,5	9	12	16	40	30	18	5	M5	15	2,95

Type	Input shaft						
	DA	EA	YA	GC	FA	OA	ZA
Cb 1701	14	30	25	16	5	M5	14

# Electromechanical products

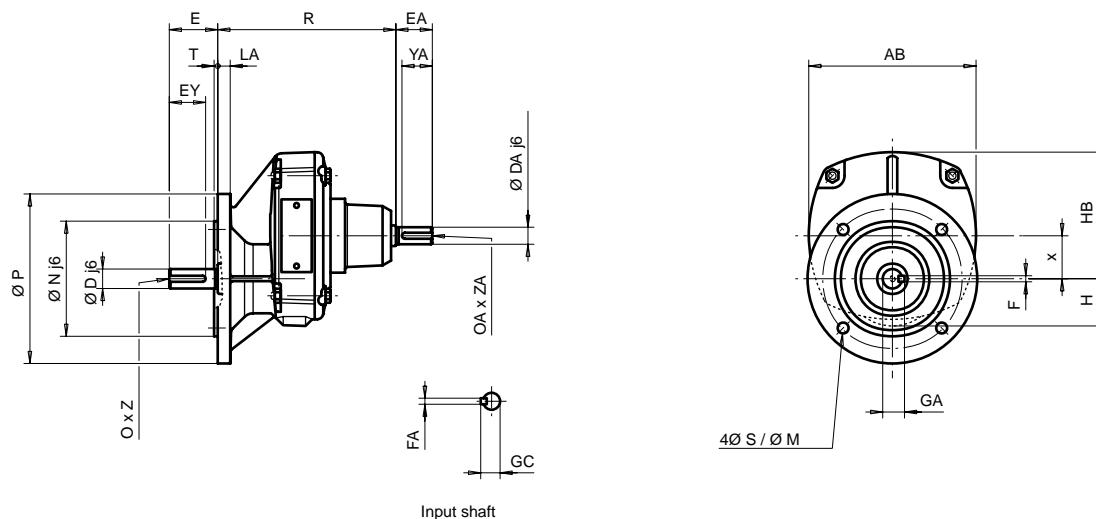
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) gearboxes, AP input shaft mounting,  
Cb 1701

Dimensions in millimetres

#### - BS, BD1, BD2 flange form



Type	Gearboxes with BS flange											Solid output shaft						Weight kg	
	R	AB	M	N	P	S	LA	T	HB	H	x	D	E	EY	GA	F	O	Z	
Cb 1701	147	138	115	95	140	9	10	3	104,5	39	35,5	16	40	30	18	5	M5	15	2,85

Type	Input shaft						
	DA	EA	YA	GC	FA	OA	ZA
Cb 1701	14	30	25	16	5	M5	14

Type	Other possible flanges <sup>1</sup>											
	BD1			BD2								
Cb 1701	M1	N1	P1	S1	LA1	T1	M2	N2	P2	S2	LA2	T2
	100	80	120	7	10	3	130	110	160	9	10	3

1. The letters are indexed to differentiate them from the letters shown on the standard flange diagram.

A

AXIAL OUTPUT GEARED MOTORS

# Electromechanical products

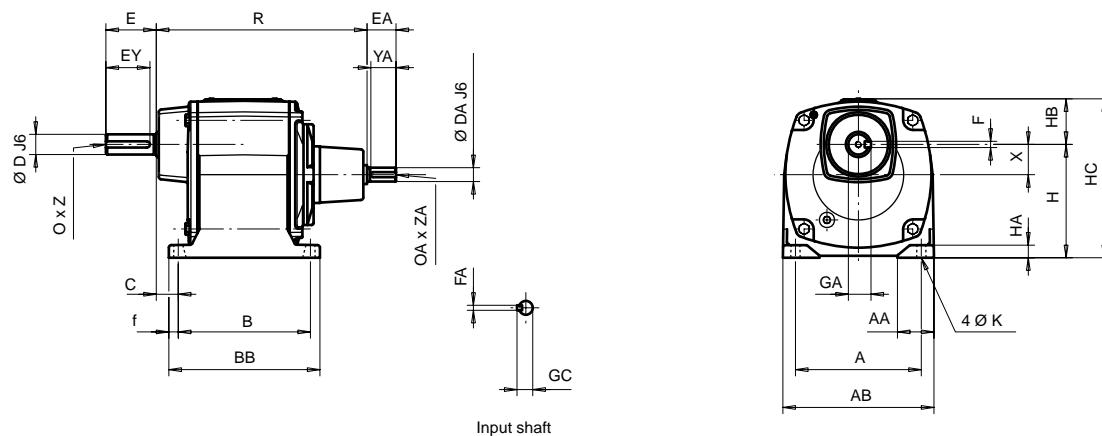
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) gearboxes, AP input shaft mounting,  
Cb 1502, Cb 1503, Cb 1504

*Dimensions in millimetres*

#### - S baseplate form



Type	Gearboxes with baseplate													Solid output shaft						Weight kg		
	R	A	AA	AB	B	BB	x	H	HB	HC	C	f	K	HA	D	E	EY	GA	F	O	Z	
Cb 1502	167,5	100	29	120	105	120	24	90	36,5	126	17,5	7,5	7	10	16	40	37	18	5	M5	15	2,8
Cb 1503	167,5	100	29	120	105	120	24	90	36,5	126	17,5	7,5	7	10	16	40	37	18	5	M5	15	3,1
Cb 1504	167,5	100	29	120	105	120	24	90	36,5	126	17,5	7,5	7	10	16	40	37	18	5	M5	15	3,2

Type	Input shaft						
	DA	EA	YA	GC	FA	OA	ZA
Cb 1502 - 3 - 4	11	23	20	12,5	4	M4	10

# Electromechanical products

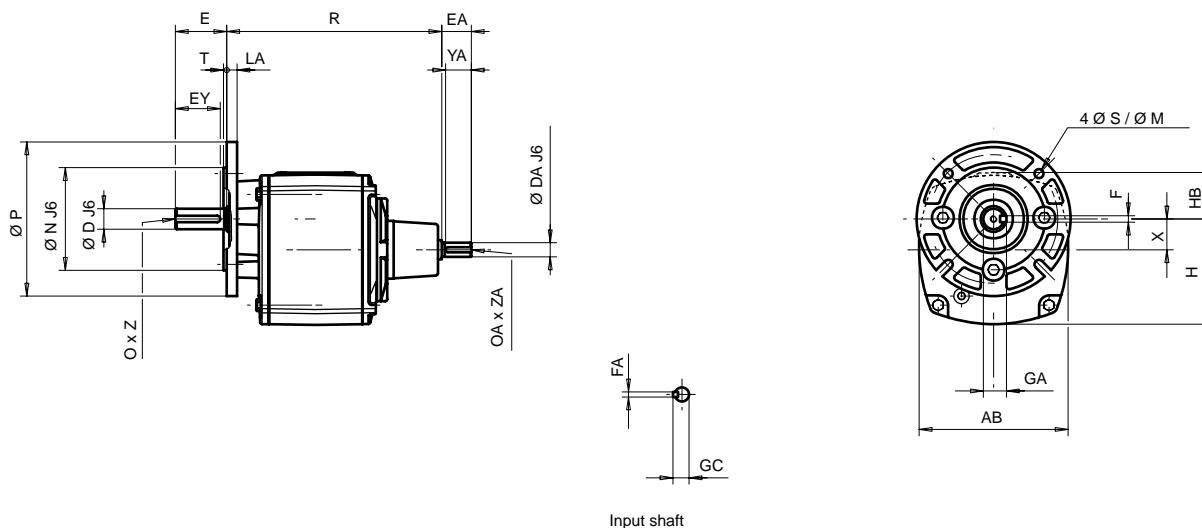
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) gearboxes, AP input shaft mounting,  
Cb 1502, Cb 1503, Cb 1504

Dimensions in millimetres

#### - BS, BD1, BD2 flange form



Type	Gearboxes with BS flange										Solid output shaft						Weight kg		
	R	AB	M	N	P	S *	LA	T	HB	H	x	D	E	EY	GA	F	O	Z	
Cb 1502	167,5	116	100	80	120	7	8	2,5	36,5	82	24	16	40	37	18	5	M5	15	2,9
Cb 1503	167,5	116	100	80	120	7	8	2,5	36,5	82	24	16	40	37	18	5	M5	15	3,2
Cb 1504	167,5	116	100	80	120	7	8	2,5	36,5	82	24	16	40	37	18	5	M5	15	3,3

Type	Input shaft						
	DA	EA	YA	GC	FA	OA	ZA
Cb 1502 - 3 - 4	11	23	20	12,5	4	M4	10

Type	Other possible flanges <sup>1</sup>											
	BD1						BD2					
M1	N1	P1	S1*	LA1	T1	M2	N2	P2	S2*	LA2	T2	
Cb 1502 - 3 - 4	85	70	105	7	8	2,5	115	95	140	9	8	2,5

1. The letters are indexed to differentiate them from the letters shown on the standard flange diagram.

\* To simplify mounting the gearbox, the 2 lower holes on the flange have been replaced by 2 notches.

A

AXIAL OUTPUT GEARED MOTORS

# Electromechanical products

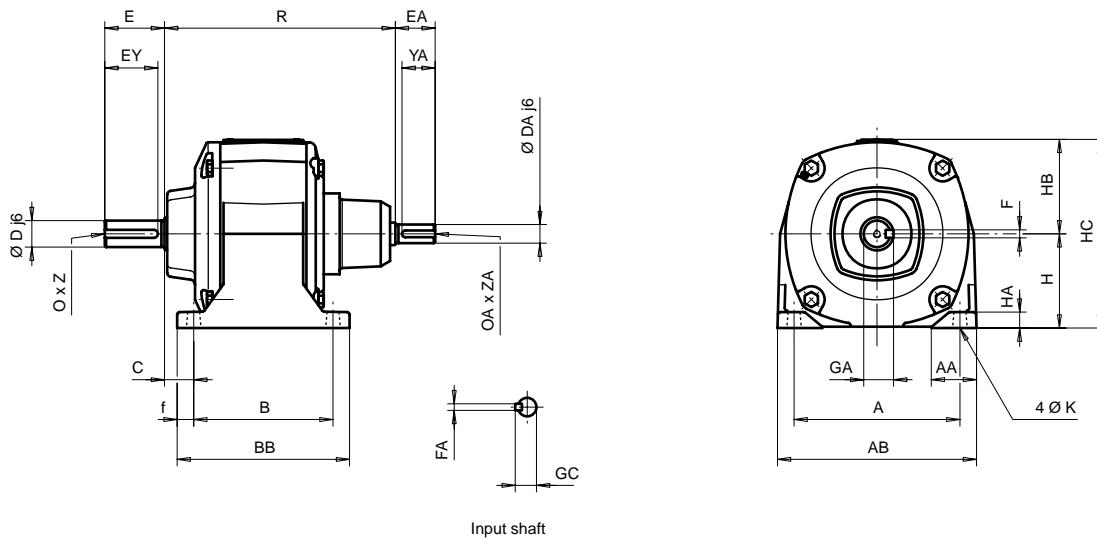
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) gearboxes, AP input shaft mounting,  
Cb 1702, Cb 1703

*Dimensions in millimetres*

#### - S baseplate form



Type	Gearboxes with baseplate												Solid output shaft						Weight kg		
	R	A	AA	AB	B	BB	H	HB	HC	C	f	K	HA	D	E	EY	GA	F	O	Z	
Cb 1702	174	125	31,5	150	105	130	71	72	143	22	12,5	9	12	20	45	40	22,5	6	M6	15	4,3
Cb 1703	194	125	31,5	150	125	150	71	72	143	22	12,5	9	12	20	45	40	22,5	6	M6	15	5,15

Type	Input shaft						
	DA	EA	YA	GC	FA	OA	ZA
Cb 1702	14	30	25	16	5	M5	14
Cb 1703	14	30	25	16	5	M5	14

# Electromechanical products

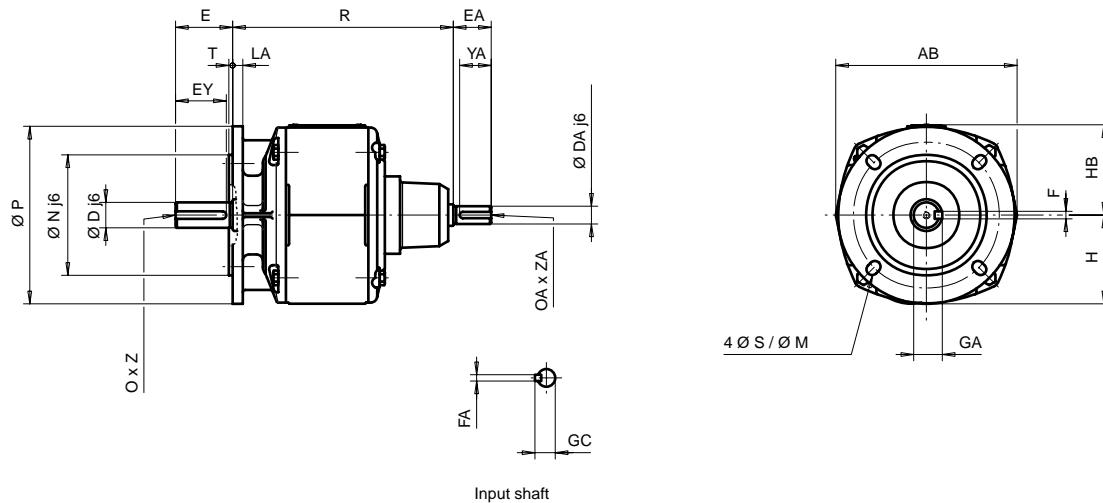
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) gearboxes, AP input shaft mounting,  
Cb 1702, Cb 1703

Dimensions in millimetres

#### - BS, BD1, BD2 flange form



Type	Gearboxes with BS flange									Solid output shaft						Weight kg		
	R	AB	M	N	P	S	LA	T	HB	H	D	E	EY	GA	F	O	Z	
Cb 1702	174	143	115	95	140	9	8	3	72	69	20	45	40	22,5	6	M6	15	4,35
Cb 1703	194	143	115	95	140	9	8	3	72	69	20	45	40	22,5	6	M6	15	5,25

Type	Input shaft						
	DA	EA	YA	GC	FA	OA	ZA
Cb 1702	14	30	25	16	5	M5	14
Cb 1703	14	30	25	16	5	M5	14

Type	Other possible flanges <sup>1</sup>											
	BD1			BD2								
Cb 1702 - 03	M1	N1	P1	S1	LA1	T1	M2	N2	P2	S2	LA2	T2

1. The letters are indexed to differentiate them from the letters shown on the standard flange diagram.

A

AXIAL OUTPUT GEARED MOTORS

# Electromechanical products

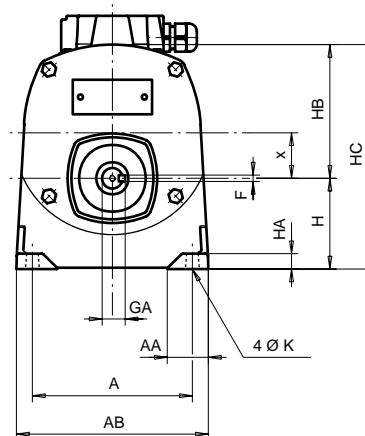
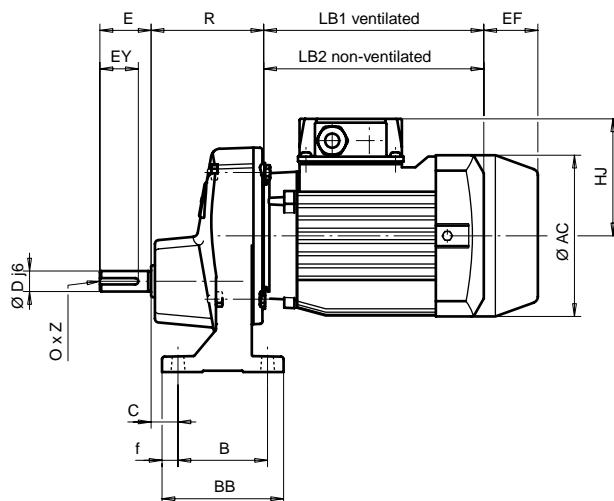
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) geared motors, MI integral mounting,  
Cb 1701

*Dimensions in millimetres*

#### - S baseplate form



Type	Gearboxes with baseplate													Solid output shaft						Weight*		
	R	A	AA	AB	B	BB	x	H	HB	HC	C	f	K	HA	D	E	EY	GA	F	O	Z	
Cb 1701	88	125	32,5	150	70	95	35,5	71	104,5	175,5	21	12,5	9	12	16	40	30	18	5	M5	15	2,05

\* Gearbox only.

Induction and brake motors																		
LS 3-phase					LS single phase					Brakes								
Frame size	Max weight				AC	HJ	LB1	LB2	Max weight				FMC	FAST	FCR	Weight <sup>1</sup> kg		
	AC	HJ	LB1	LB2					kg	kg	kg	kg				FMC	FAST	FCR
56	110	85	156	135	3,4	110	90	156	135	3,5	50	-	-	0,9	-	-	-	-
63	124	95	172	150	4,3	124	110	172	150	4,5	50	-	-	0,9	-	-	-	-
71 <sup>2</sup>	140	102	183	155	6,5	140	129	183	155	7,5	50	28	90	0,9	2	2,5	2,5	2,5

1. Additional brake weight.

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

# Electromechanical products

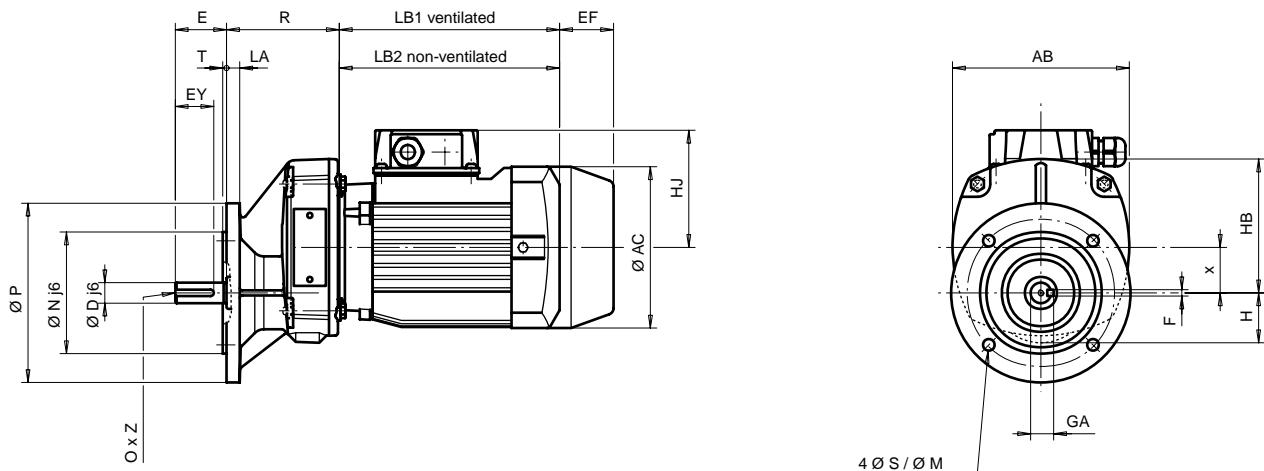
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) geared motors, MI integral mounting,  
Cb 1701

Dimensions in millimetres

- BS, BD1, BD2 flange form



Type	Gearboxes with flange											Solid output shaft						Weight*	
	R	AB	M	N	P	S	LA	T	HB	H	x	D	E	EY	GA	F	O	Z	
Cb 1701	88	138	115	95	140	9	10	3	104,5	39	35,5	16	40	30	18	5	M5	15	1,95

\* Gearbox only.

Type	Other possible flanges <sup>1</sup>											
	BD1					BD2						
M1	N1	P1	S1	LA1	T1	M2	N2	P2	S2	LA2	T2	
Cb 1701	100	80	120	7	10	3	130	110	160	9	10	3

1. The letters are indexed to differentiate them from the letters shown on the standard flange diagram.

Frame size	Induction and brake motors												
	LS 3-phase				LS single phase				Brakes				
	AC	HJ	LB1	LB2	Max weight	AC	HJ	LB1	LB2	Max weight	EF max.	Weight <sup>1</sup> kg	
56	110	85	156	135	3,4	110	90	156	135	3,5	50	-	-
63	124	95	172	150	4,3	124	110	172	150	4,5	50	-	-
71 <sup>2</sup>	140	102	183	155	6,5	140	129	183	155	7,5	50	28	90
											FMC	FAST	FCR
											0,9	-	-
											0,9	-	-
											0,9	2	2,5

1. Additional brake weight.

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

# Electromechanical products

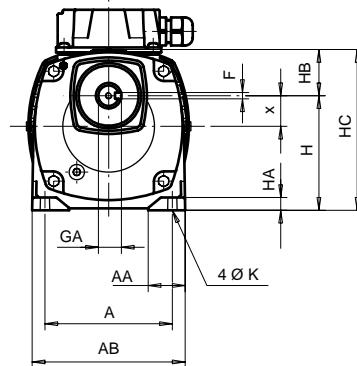
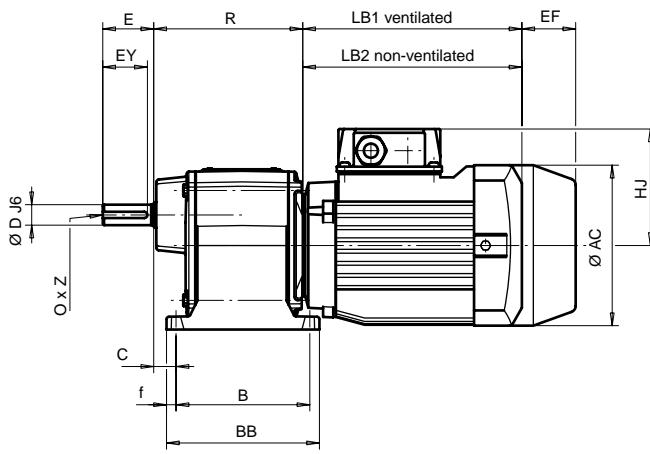
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) geared motors, MI integral mounting,  
Cb 1502, Cb 1503, Cb 1504

*Dimensions in millimetres*

#### - S baseplate form



Type	Gearboxes with baseplate													Solid output shaft						Weight*		
	R	A	AA	AB	B	BB	x	H	HB	HC	C	f	K	HA	D	E	EY	GA	F	O	Z	
Cb 1502	117	100	29	120	105	120	24	90	36,5	126	17,5	7,5	7	10	16	40	37	18	5	M5	15	2,5
Cb 1503	117	100	29	120	105	120	24	90	36,5	126	17,5	7,5	7	10	16	40	37	18	5	M5	15	2,8
Cb 1504	117	100	29	120	105	120	24	90	36,5	126	17,5	7,5	7	10	16	40	37	18	5	M5	15	2,9

\* Gearbox only.

Frame size	Induction and brake motors												Brakes					
	LS 3-phase				LS single phase				Max weight				Brakes					
	AC	HJ	LB1	LB2	kg	AC	HJ	LB1	LB2	kg	FMC	FAST	FCR	FMC	FAST	FCR		
56	110	85	156	135	3,4	110	90	156	135	3,5	50	-	-	0,9	-	-		
63	124	95	172	150	4,3	124	110	172	150	4,5	50	-	-	0,9	-	-		
71 <sup>2</sup>	140	102	183	155	6,5	140	129	183	155	7,5	50	28	90	0,9	2	2,5		

1. Additional brake weight.

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

# Electromechanical products

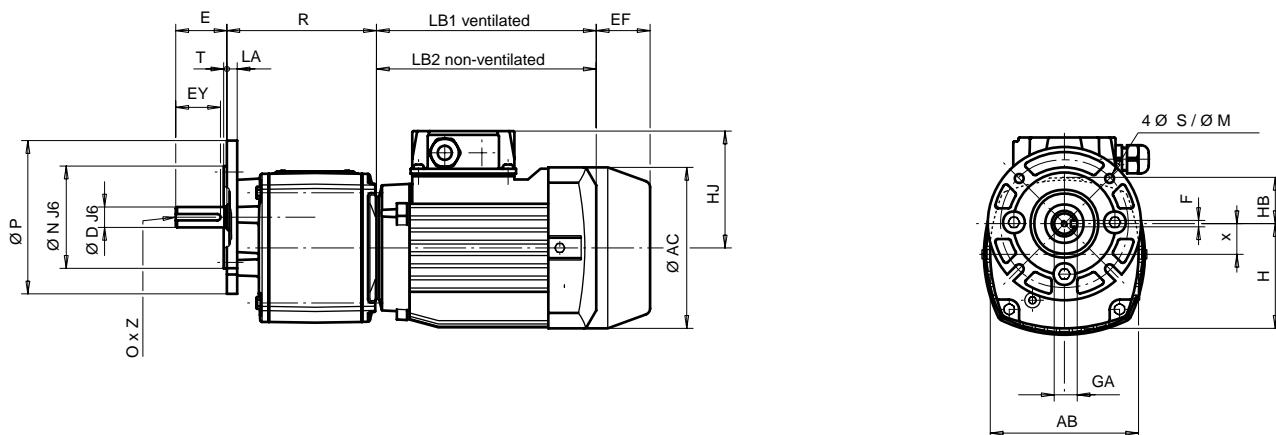
## Compabloc 1000

### Dimensions

Dimensions of Compabloc (Cb) geared motors, MI integral mounting,  
Cb 1502, Cb 1503, Cb 1504

Dimensions in millimetres

#### - BS, BD1, BD2 flange form



A

AXIAL OUTPUT GEARED MOTORS

Type	Gearboxes with flange										Solid output shaft							Weight*	
	R	AB	M	N	P	S *	LA	T	HB	H	x	D	E	EY	GA	F	O	Z	
Cb 1502	117	116	100	80	120	7	8	2,5	36,5	82	24	16	40	37	18	5	M5	15	2,5
Cb 1503	117	116	100	80	120	7	8	2,5	36,5	82	24	16	40	37	18	5	M5	15	2,8
Cb 1504	117	116	100	80	120	7	8	2,5	36,5	82	24	16	40	37	18	5	M5	15	2,9

\* Gearbox only.

Type	Other possible flanges <sup>1</sup>											
	BD1					BD2						
M1	N1	P1	S1*	LA1	T1	M2	N2	P2	S2*	LA2	T2	
Cb 1502 - 3 - 4	85	70	105	7	8	2,5	115	95	140	9	8	2,5

1. The letters are indexed to differentiate them from the letters shown on the standard flange diagram.

\* To simplify mounting the gearbox, the 2 lower holes on the flange have been replaced by 2 notches.

Frame size	Induction and brake motors												
	LS 3-phase				LS single phase				Brakes				
	AC	HJ	LB1	LB2	Max weight	AC	HJ	LB1	LB2	Max weight	EF max.	Weight <sup>1</sup> kg	
size	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	FMC	FAST	FCR
56	110	85	156	135	3,4	110	90	156	135	3,5	50	-	-
63	124	95	172	150	4,3	124	110	172	150	4,5	50	-	-
71 <sup>2</sup>	140	102	183	155	6,5	140	129	183	155	7,5	50	28	90

1. Additional brake weight.

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

# Electromechanical products

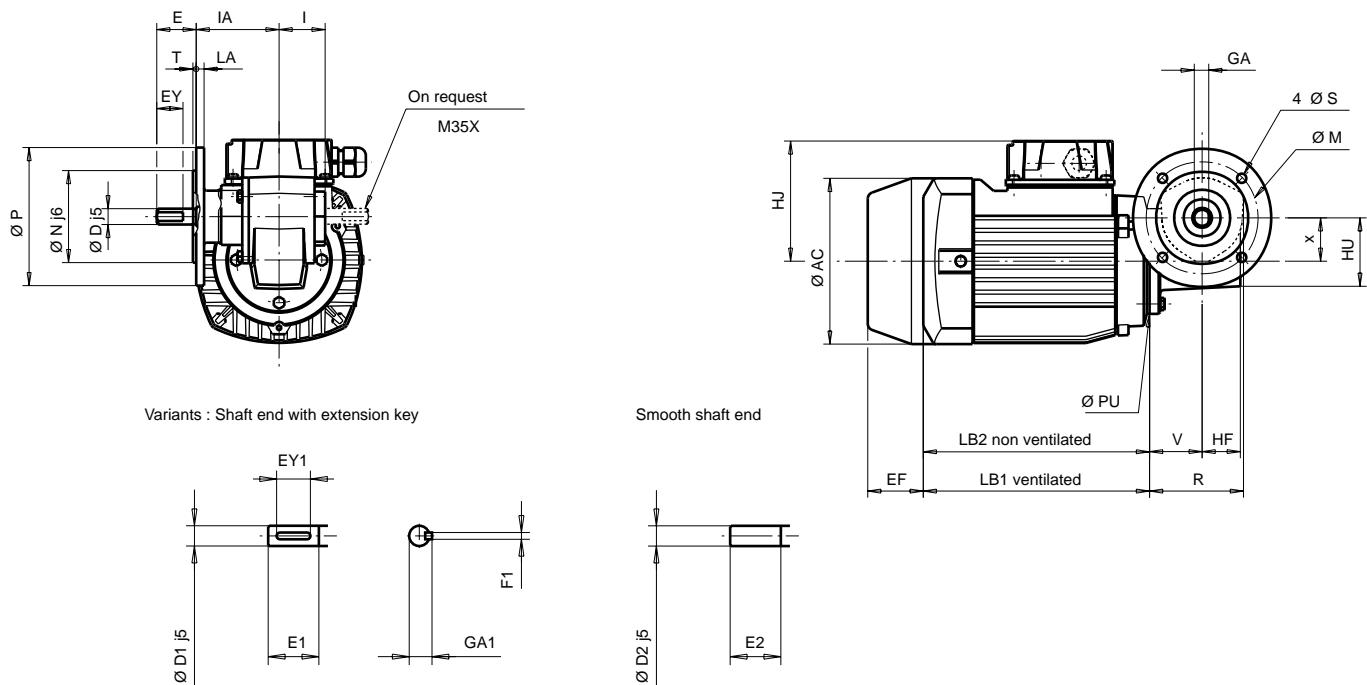
## Minibloc MVB

### Dimensions

Dimensions of Minibloc MVB geared motors, MI integral mounting, solid output shaft, terminal box in position C

Dimensions in millimetres

#### - M35D flange form



Type	Gearboxes with flange													Weight*	
	R	x	M	N	P	S	LA	T	I	IA	V	HF	HU	PU	
<b>MVB</b>	72	33	85	70	105	7	7	2,5	35	63	40	29	55	80	1,1

\* Gearbox only.

Type	Other possible flanges <sup>1</sup>					
	BD1			BD2		
Type	M1	N1	P1	S1	LA1	T1
<b>MVB</b>	65	50	80	5,5	7	2,5
	75	60	90	7	8	3

1. The letters are indexed to differentiate them from the letters shown on the standard shaft diagram.

Type	Solid output shaft with flat end (standard)				Solid output shaft with key <sup>1</sup>					Smooth solid output shaft <sup>1</sup>	
	D	E	EY	GA	D1	E1	EY1	GA1	F1	D2	E2
<b>MVB</b>	12	30	20	11	12	30	25	13,5	4	12	30

1. The letters are indexed to differentiate them from the letters shown on the standard shaft diagram.

Frame size	Induction and brake motors												
	LS 3-phase				LS single phase				Brakes				
	Max. weight				Max. weight				EF max.				
Frame size	AC	HJ	LB1	LB2	kg	AC	HJ	LB1	LB2	kg	FMC	FAST	FCR
<b>56</b>	110	85	156	135	3,4	110	90	156	135	3,5	50	-	-
<b>63</b>	124	95	172	150	4,3	124	110	172	150	4,5	50	-	-
<b>71<sup>2</sup></b>	140	102	183	155	6,5	140	129	183	155	7,5	50	28	90
											FMC	FAST	FCR
											0,9	2	2,5

1. Additional brake weight.

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

# Electromechanical products

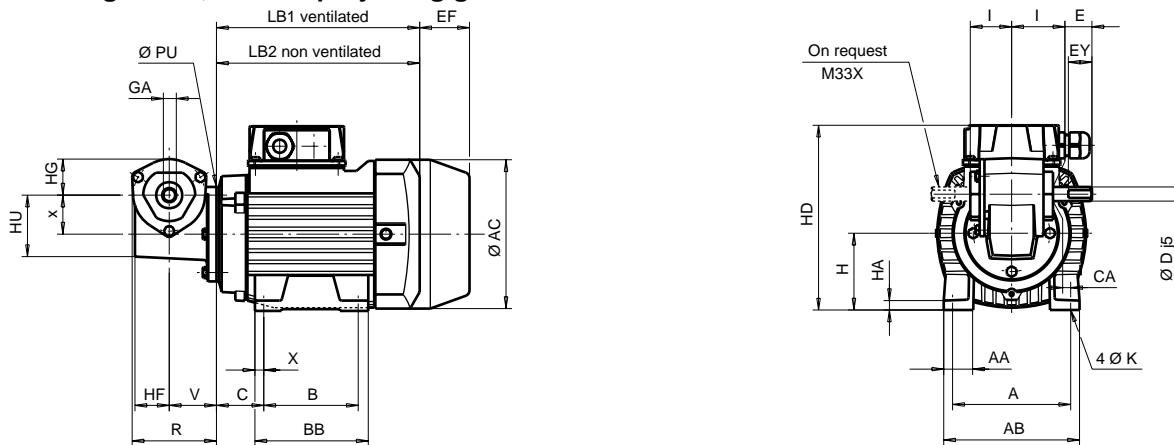
## Minibloc MVB

### Dimensions

Dimensions of Minibloc MVB geared motors, MI integral mounting

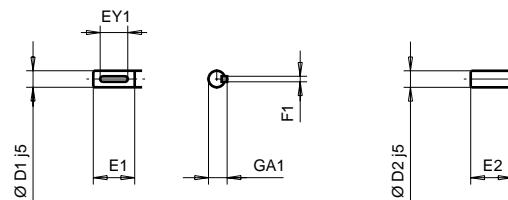
Dimensions in millimetres

#### - Foot mounting motor, PF M33 projecting gearbox



Variants : Shaft extension with key

Smooth shaft end



Type	Projecting gearboxes							Weight*
	R	x	HG	V	HF	HU	PU	
MVB	72	33	31	40	29	55	80	0,84

\* Gearbox only.

Type	Solid output shaft with flat end (standard)				Solid output shaft with key <sup>1</sup>				Smooth solid output shaft <sup>1</sup>		
	D	E	EY	GA	D1	E1	EY1	GA1	F1	D2	E2
MVB	12	30	20	11	12	30	25	13,5	4	12	30

1. The letters are indexed to differentiate them from the letters shown on the standard shaft diagram.

Frame size	Induction motors												Max. weight kg	Max. weight kg		
	AC	A	AA	AB	B	BB	C	X	CA	K	H	HA	LB1	LB2		
56	110	90	24	104	71	89	36	9	5	6	56	5	156	132	141	3,4
63	124	100	30	115	80	94	40	8	10	7	63	6	172	150	158	4,3
71 <sup>1</sup>	140	112	22	126	90	104	45	7	16	7	71	6	183	155	173	6,5

1. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

Type	Additional brake dimensions			Weight <sup>1</sup> kg
	FMC	FAST	FCR	
56	50	-	-	0,9
63	50	-	-	0,9
71 <sup>2</sup>	50	28	90	0,9
				2
				2,5

1. Additional brake weight.

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

# Electromechanical products

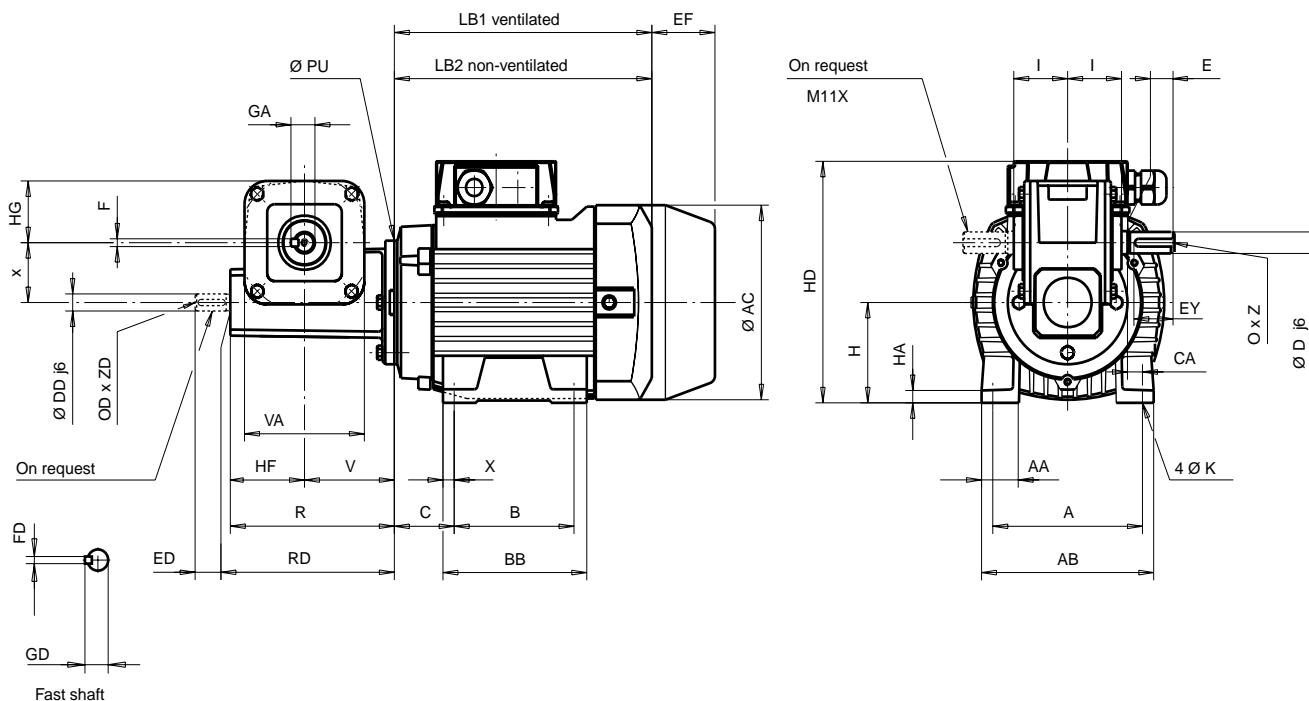
## Minibloc MVA

### Dimensions

Dimensions of Minibloc MVA geared motors, MI integral mounting, solid output shaft

Dimensions in millimetres

#### - Foot mounting motor, PF M33 projecting gearbox



Type	Projecting gearboxes								Weight*	
	RD	R	x	HG	V	VA	HF	I	PU	
<b>MVA</b>	110	109,5	38,6	40	60,5	80	49	36	80	1,7

\* Gearbox only.

Type	Solid output shaft						Fast shaft (on request)							
	D	E	EY	GA	F	O	Z	Type	DD	ED	GD	FD	OD	ZD
<b>MVA</b>	14	30	25	16	5	M5	15	<b>MVA</b>	11	23	12,5	4	M4	10

Frame size	Induction motors												Max. weight	Max. weight		
	LS 3-phase and single phase												LS 3-phase	LS single phase		
	AC	A	AA	AB	B	BB	C	CA	H	HA	LB1	LB2	HD	kg	HD	kg
<b>56</b>	110	90	24	104	71	89	36	5	56	5	156	132	141	3,4	146	3,5
<b>63</b>	124	100	30	115	80	94	40	10	63	6	172	150	158	4,3	173	4,5
<b>71<sup>1</sup></b>	140	112	22	126	90	104	45	16	71	6	183	155	173	6,5	200	7,5

1. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.

Type	Additional brake dimensions						Weight <sup>1</sup> kg	
	EF max.			FCR				
	FMC	FAST	FCR	FMC	FAST	FCR		
<b>56</b>	50	-	-	0,9	-	-		
<b>63</b>	50	-	-	0,9	-	-		
<b>71<sup>2</sup></b>	50	28	90	0,9	2	2,5		

1. Additional brake weight

2. For LS 71 : 0.25 kW 6-pole 3-phase, 0.37 kW 4-pole single phase, 0.55 kW 4-pole 3-phase : dimension LB = + 9.