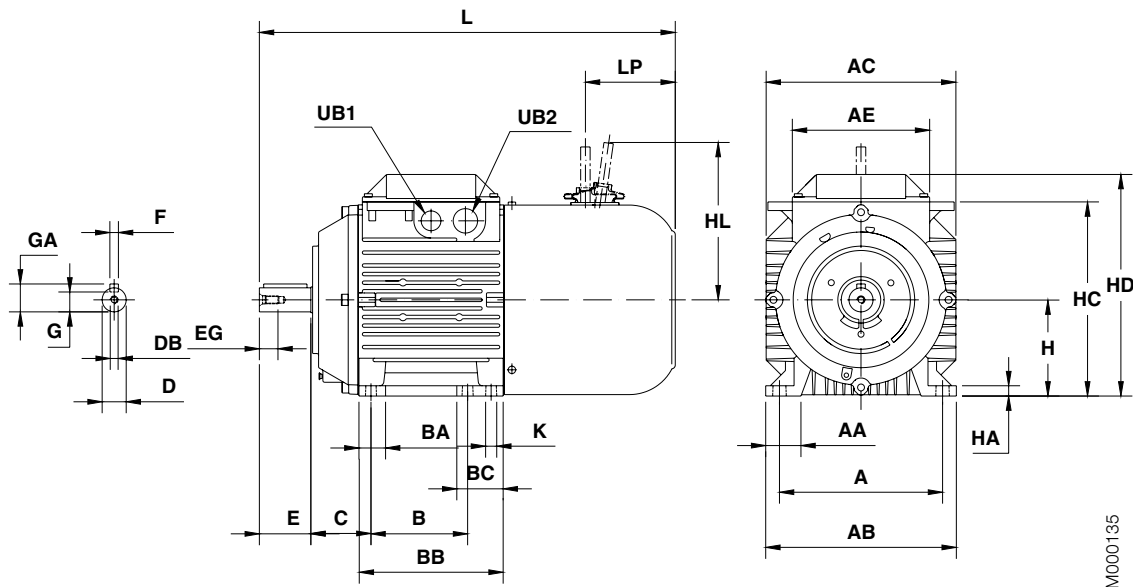


# Dimension drawings

## Brake motors, sizes 63 - 132

### IM B3 (IM 1001)



Motor size	A	AA	AB	AC	AE	B	BA	BB	BC	C	D	DB	E	EG
63 A/B	100	26	120	123	85	80	21	96	21	40	11	M4	23	10
71	112	24	136	139	85	90	31	110	31	45	14	M5	30	13
80	125	28	154	156	97	100	34	125	34	50	19	M6	40	16
90S	140	27	170	177	110	100	30	125	30	56	24	M8	50	19
90 L	140	27	170	177	110	125	30	150	30	56	24	M8	50	19
100 L	160	32	197	197	110	140	34	172	34	63	28	M10	60	22
112 M	190	41	222	221	160	140	31	168	31	70	28	M10	60	22
132 S	216	47	262	261	160	140	40	212	76	89	38	M12	80	28
132 M	216	47	262	261	160	178	40	212	76	89	38	M12	80	28

Motor size	F	GA	H	HA	HC	HD	HL	K	L	LP	UB1	UB2
63 A/B	4	12.5	63	10	-	180	107	7	270	66	M16	Pg11
71	5	16	71	9	-	176	114	7	316	76	M20	Pg16
80	6	21.5	80	10	-	190	124	10	360	70	M20	Pg16
90S	8	27	90	10	177	217	161	10	370	70	M20	M25
90 L	8	27	90	10	177	217	161	10	395	70	M20	M25
100 L	8	31	100	12	197	237	173	12	453	105	M20	M25
112 M	8	31	112	12	226	258	184	12	487	105	M20	M25
132 S	10	41	132	14	264	296	225	12	606	119	M20	M25
132 M	10	41	132	14	264	296	225	12	606	119	M20	M25

Brake motors in frame sizes 160-180, please select from Low voltage Process performance motors catalog, aluminum motors with variant code 412.

Tolerances:

D ISO j6 ( $\leq 28 \text{ Ø}$ )

D ISO k6 (38-42 Ø)

F ISO h9

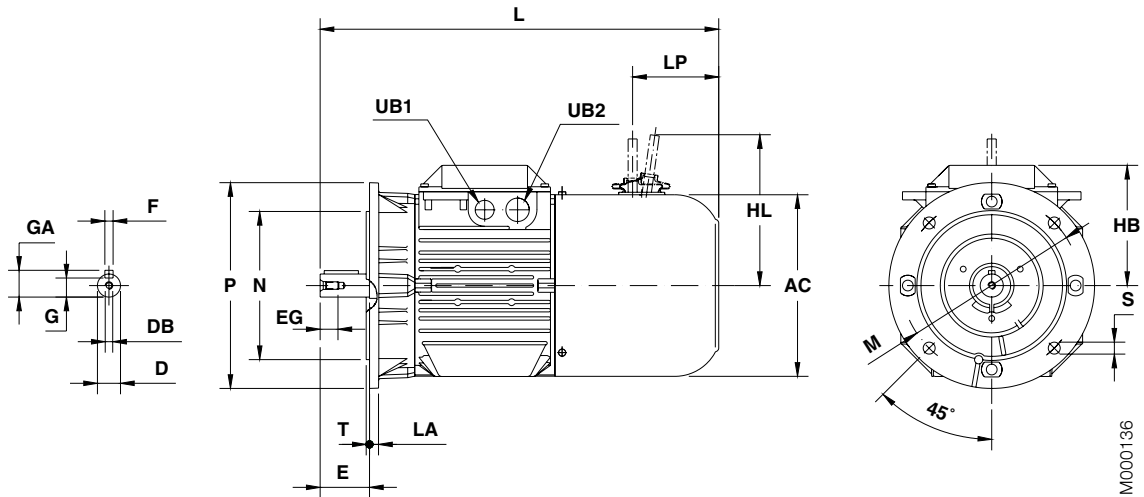
H +0, -0.5

Above table gives the main dimensions in mm. For detailed drawings please see our web-pages 'www.abb.com/motors&generators' or contact us.

# Dimension drawings

## Brake motors, sizes 63 - 132

IM B5 (IM 3001), IM V1 (IM 3011), IM B14 (IM 3601)



### IM B5 (IM 3001)

Motor

size	AC	D	DB	E	EG	F	GA	HB	HL	L	LP	UB1	UB2
63 A/B	123	11	M4	23	10	4	12.5	117	107	270	66	M16	Pg 11
71	139	14	M5	30	13	5	16	105	114	316	76	M20	Pg 16
80	156	19	M6	40	16	6	21.5	110	124	360	70	M20	Pg16
90S	178	24	M8	50	19	8	27	127	161	370	70	M20	M25
90 L	178	24	M8	50	19	8	27	127	161	395	70	M20	M25
100 L	198	28	M10	60	22	8	31	137	173	453	105	M20	M25
112 M	223	28	M10	60	22	8	31	146	184	487	105	M20	M25
132 S,M	264	38	M12	80	28	10	41	164	225	606	119	M20	M25

### IM B5 (IM 3001)

Motor

size	IEC flange	LA	M	N	P	S <sup>1)</sup>	T
63 A/B	FF115	10	115	95	140	M8	3
71	FF130	10	130	110	160	M8	3.5
80	FF165	12	165	130	200	M10	3.5
90	FF165	11	165	130	200	M10	3.5
100	FF215	11	215	180	250	M12	4
112	FF215	11	215	180	250	M12	4
132	FF265	12	265	230	300	M12	4

### IM B14 (IM 3601)

Motor

size	IEC flange	LA	M	N	P	S	T
63 A/B	FT75	10	75	60	90	M5	2.5
71	FT85	10	85	70	105	M6	2.5
80	FT100	10	100	80	120	M6	3
90	FT115	14	115	95	140	M8	3
100	FT130	16	130	110	160	M8	3.5
112 <sup>2)</sup>	FT130	9.5	130	110	160	M8	3.5
132	FT165	14.5	165	130	200	M8	3.5

Tolerances:

- D ISO j6 ( $\leq 28 \text{ } \varnothing$ )
- D ISO k6 (38-42  $\varnothing$ )
- F ISO h9

<sup>1)</sup> Clearance holes for bolt.

<sup>2)</sup> Two pieces modular flange.

Modular flanges:

Brake motors sizes 71 - 132 can be supplied with several non standard modular flange dimensions

Brake motors in frame sizes 160-180, please select from Low voltage Process performance motors catalog, aluminum motors with variant code 412.

Above table gives the main dimensions in mm. For detailed drawings please see our web-pages 'www.abb.com/motors&generators' or contact us.

# Brake motors in brief

## Basic design

Motor size	63	71	80	90	100	112	132
<b>Stator and feet</b>	Die-cast aluminum alloy.						
Material	Detachable feet			Feet integrated with stator			
Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 BO5G / RAL 5014						
Paint	Epoxy polyester powder paint, $\geq 30 \mu\text{m}$ .					2-pack polyurethane paint, $\geq 20 \mu\text{m}$ .	
<b>Bearing end shields</b>	Die-cast aluminum alloy.						
Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 BO5G						
Paint	Epoxy polyester powder paint, $\geq 30 \mu\text{m}$ .					2-pack polyurethane paint, $\geq 20 \mu\text{m}$	
<b>Flanges</b>	Die-cast aluminum alloy.						
Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 BO5G / RAL 5014						
Paint	Epoxy polyester powder paint, $\geq 30 \mu\text{m}$ .					2-pack polyurethane paint, $\geq 20 \mu\text{m}$	
<b>Bearings</b>	6202- 2Z/C3	6203- 2Z/C3	6204- 2Z/C3	6205- 2Z/C3	6306- 2Z/C3	6206- 2Z/C3	6208- 2Z/C3
D-end	6202- 2Z/C3	6203- 2Z/C3	6204- 2Z/C3	6205- 2Z/C3	6206- 2Z/C3	6206- 2Z/C3	6208- 2Z/C3
N-end	6202- 2Z/C3	6203- 2Z/C3	6204- 2Z/C3	6205- 2Z/C3	6206- 2Z/C3	6206- 2Z/C3	6208- 2Z/C3
<b>Axially locked bearings</b>	Inner bearing circlip, on request.			Inner bearing cover at D-end.			
System	In sizes 71-80 mounting large flange.						
<b>Bearing seals</b>	D-end: V-ring						
	N-end: V-ring						
<b>Lubrication</b>	Permanently lubricated bearings. Grease for bearing temperatures $-40 \dots +160^\circ\text{C}$ .						
<b>Terminal box</b>	Material: Die-cast aluminum alloy.						
	Surface treatment: Similar to stator.						
	Screws: Steel 5 G, chromated.						
<b>Connections</b>	1 x M16 +						
Knock-out openings	Pg11	2xM20 + Pg16		2 x(M25 + M20)		2 x(M25 + M20)	
Max Cu area, $\text{mm}^2$	2.5	4		6		10	
Terminal box	Screw terminal, 6 terminals.					Cable lugs, 6 terminals.	
<b>Fan</b>	Material: Polypropylene. Reinforced with 20% glass fibre.						
<b>Fan cover</b>	Material: Steel.						
<b>Stator winding</b>	Material: Copper.						
	Impregnation: Polyester varnish. Tropicallised.						
	Insulation class: Insulation class F. Temperature rise class B, unless otherwise stated.						
<b>Stator winding temperature sensors</b>	Optional.						
<b>Rotor winding</b>	Material: Die-cast aluminum.						
<b>Balancing method</b>	Half key balancing.						
<b>Key ways</b>	Closed key way.						
<b>Enclosure</b>	Motor, terminal box and brake electrical components: IP 55. Brake mechanical components: IP23 S (IP 55 optional).						
<b>Cooling method</b>	IC 411						

Brake motors in frame sizes 160-180, please select from Low voltage Process performance motors catalog, aluminum motors.