

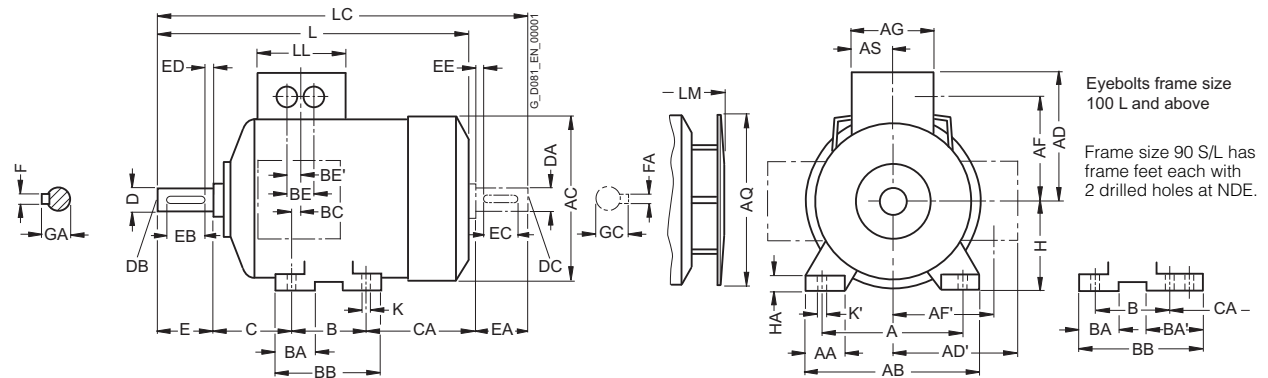
SIMOTICS GP 1LA Standard Motors

Dimensions

Aluminum series 1LA9
Frame sizes 63 M to 200 L

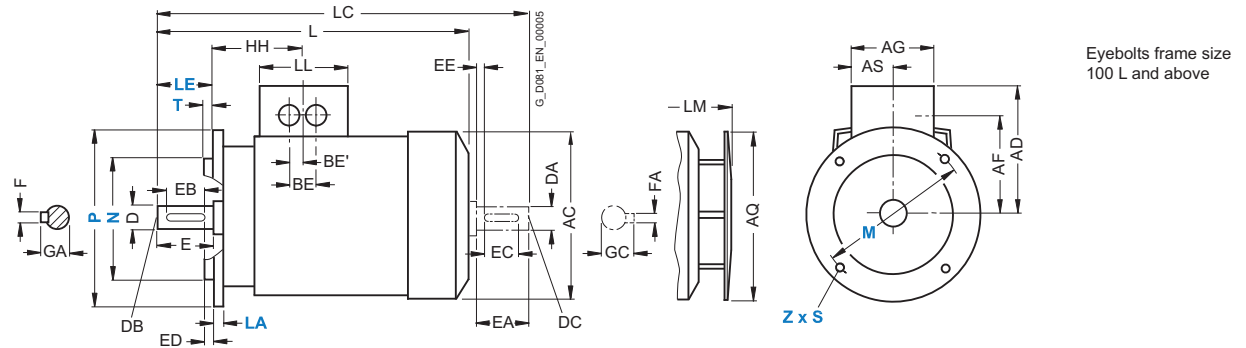
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see section flange dimension (Z = the number of retaining holes)



For motor		Dimension designation acc. to IEC																						
Frame size	Type	Number of poles	A	AA	AB	AC ¹⁾	AD	AD'	AF	AF'	AG	AQ	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*	H	HA
63 M	1LA9060	2, 4	100	27	120	124	101	101	78	78	75	124	37.5	80	28	-	96	30	32	18	40	66	63	7
	1LA9063																							
71 M	1LA9070	2, 4	112	30.5	132	145	111	111	88	88	75	124	37.5	90	27	-	106	18	32	18	45	83	71	7
	1LA9073																							
80 M	1LA9080	2, 4	125	30.5	150	163	120	120	97	97	75	124	37.5	100	32	-	118	14	32	18	50	94	80	8
	1LA9083																							
90 S	1LA9090	2, 4, 6	140	30.5	165	180	128	128	105	105	75	170	37.5	100	33	54	143	23	32	18	56	143	90	10
100 L	1LA9106	2, 4, 6	160	42	196	203	135	163	78	123	120	170	60	140	47	-	176	39	42	21	63	160	100	12
	1LA9107																							
112 M	1LA9113	2, 4, 6	190	46	226	227	148	176	91	136	120	170	60	140	47	-	176	32	42	21	70	179	112	12
132 S	1LA9130	2, 4	216	53	256	267	167	194	107	154	140	250	70	140	49	-	180	39	42	21	89	162.5	132	15
132 M	1LA9133	6	216	53	256	267	167	194	107	154	140	250	70	178	49	-	218	39	42	21	89	124.5	132	15
160 M	1LA9163	2, 4, 6	254	60	300	320	197	226	127	183	165	250	82.5	210	57	-	256	52.5	54	27	108	183	160	18
	1LA9164																							
160 L	1LA9166	2, 4, 6	254	60	300	320	197	226	127	183	165	250	82.5	254	57	-	300	52.5	54	27	108	179	160	18
180 M	1LA9183	2, 4	279	69.5	339	363	258	258	216	216	152	340	71	241	50	-	287	38	54	27	121	259	180	18
200 L	1LA9206	2, 6	318	83	388	402	305	305	252	252	260	340	96	305	58.5	-	355	45	85	42.5	133	239	200	24

* This dimension is assigned in DIN EN 50347 to the frame size listed.

¹⁾ Measured across the bolt heads.

²⁾ Only for 1LA9107-4KA.

SIMOTICS GP 1LA Standard Motors

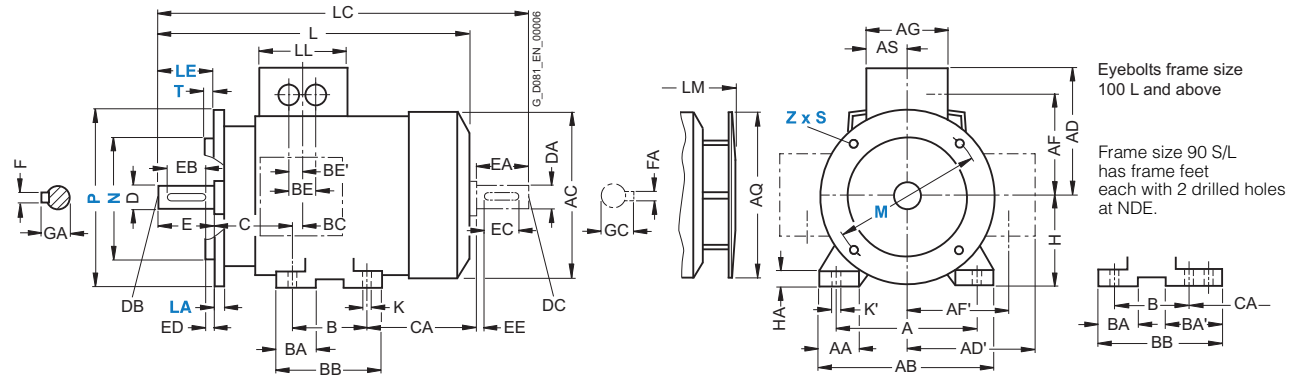
Dimensions

Aluminum series 1LA9
Frame sizes 63 M to 200 L

Dimensional drawings (continued)

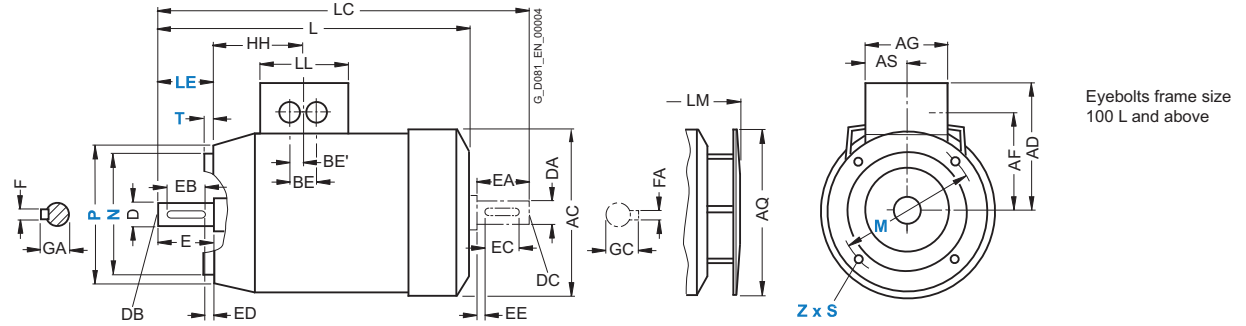
Type of construction IM B35

For flange dimensions, see section flange dimension (Z = the number of retaining holes)



Type of construction IM B14

Type of construction IM B14 not possible for 1LA9 motors, frame sizes 180 M to 200 L
For flange dimensions, see section flange dimension (Z = the number of retaining holes)



For motor		Dimension designation acc. to IEC										DE shaft extension					NDE shaft extension						
Frame size	Type	Number of poles	HH	K	K'	L	LC	LL	LM	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
63 M	1LA9060	2, 4	69.5	7	10	202.5 ¹⁾	232 ¹⁾	75	231.5	11	M4	23	16	3.5	4	12.5	11	M4	23	16	3.5	4	12.5
	228.5					258	257.5																
71 M	1LA9070	2, 4	63.5	7	10	240	278	75	268	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
	1LA9073																						
80 M	1LA9080	2, 4	63.5	9.5	13.5	273.5	324	75	299.5	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
	1LA9083					308.5	364		334.5														
90 S	1LA9090	2, 4, 6	79	10	14	331	389	75	382.5	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
90 L	1LA9096					376 ²⁾	434 ²⁾		427.5 ²⁾														
						358 ³⁾	414 ³⁾		409.5 ³⁾														
100 L	1LA9106	2, 4, 6	102	12	16	407	473	120	458.5	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1LA9107					442 ⁴⁾	508 ⁴⁾		493 ⁴⁾														
112 M	1LA9113	2, 4, 6	102	12	16	431	499	120	482.5	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1LA9130	2, 4	128	12	16	452.5	551.5	140	505	38	M12	80	70	5	10	41	38	M12	80	70	5	10	41
	1LA9131					490.5	589.5		543														
132 M	1LA9133	6	128	12	16	452.5	551.5	140	505	38	M12	80	70	5	10	41	38	M12	80	70	5	10	41
	1LA9134					490.5	589.5		543														
160 M	1LA9163	2, 4, 6	160.5	15	19	588	721	165	640.5	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
	1LA9164								680.5														
160 L	1LA9166	2, 4, 6	160.5	15	19	628	761	165	680.5	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1LA9183	2, 4	159	15	19	712	841	132	793.5	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
	1LA9186					712	841		793.5														
180 L	1LA9186	4, 6	159	15	19	712	841	132	793.5	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
200 L	1LA9206	2, 6	178	19	25	768.5	897	192	850	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
	1LA9207								850														

1) For 1LA9060 in the case of type of construction code 1 (IM B5, IM V1 without protective cover, IM V3), dimensions L, LC and LM are 26 mm longer.

2) Only for 1LA9096-6KA.

3) Only for 1LA9096-2 and 1LA9096-4.

4) Only for 1LA9107-4KA