

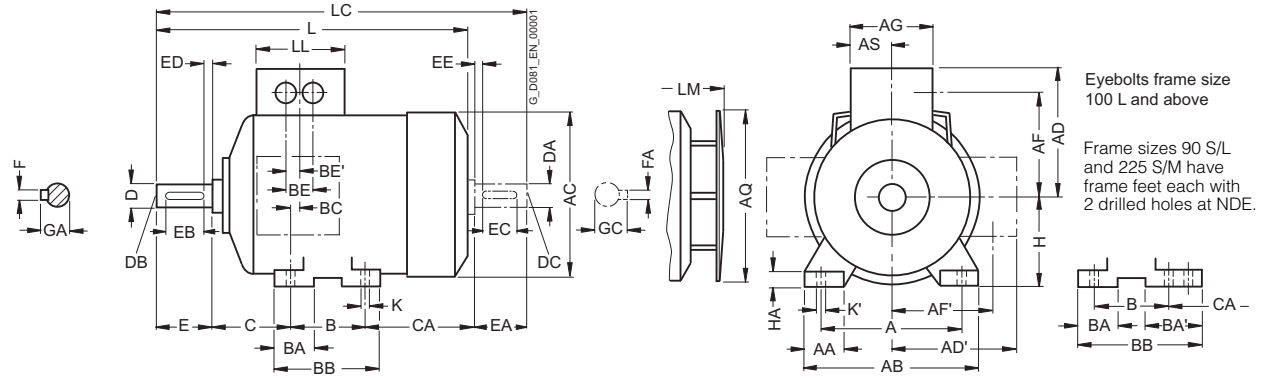
SIMOTICS XP 1LA Explosion-Proof Motors

Dimensions

Aluminum series 1LA7, 1LA5
Frame sizes 63 M to 225 M

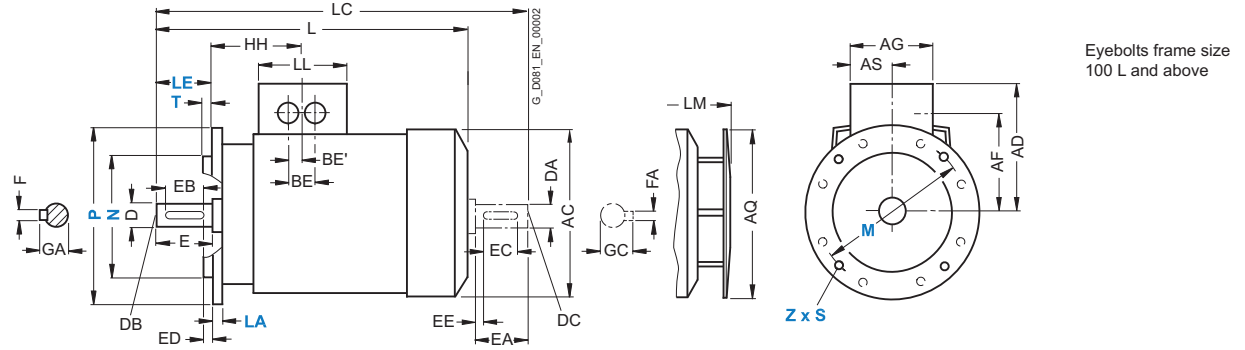
Dimensional drawings

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	1LA7060 1LA7063	2, 4, 6	100	27	120	124	135	135	95	95	120	124	37	80	28	-	96	52	32	18	40	66	63	7
71 M	1LA7070 1LA7073	2, 4, 6, 8	112	27	132	145	145	145	105	105	120	124	37	90	27	-	106	41	32	18	45	83	71	7
80 M	1LA7080 1LA7083	2, 4, 6, 8	125	30.5	150	163	154	154	114	114	120	124	37.5	100	32	-	118	36	32	18	50	94	80	8
90 S 90 L	1LA7090 1LA7096	2, 4, 6, 8	140	30.5	165	180	162	162	122	122	120	170	37.5	100 125	33	54	143	45.5	32	18	56	143 118	90	10
100 L	1LA7106 1LA7107	2, 4, 6, 8 4, 8	160	42	196	203	135	163	78	123	120	170	60	140	47	-	176	39	42	21	63	125	100	12
112 M	1LA7113	2, 4, 6, 8	190	46	226	227	148	176	91	136	120	170	60	140	47	-	176	32	42	21	70	141	112	12
132 S	1LA7130 1LA7131	2, 4, 6, 8 2	216	53	256	267	167	194	107	154	140	250	70	140	49	-	180	39	42	21	89	162.5	132	15
132 M	1LA7133 1LA7134	4, 6, 8 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	1LA7163 1LA7164	2, 4, 6, 8 2, 8	254	60	300	320	197	226	127	183	165	250	82.5	210	57	-	256	52.5	54	27	108	183	160	18
160 L	1LA7166	2, 4, 6, 8	254	60	300	320	197	226	127	183	165	250	82.5	254	57	-	300	52.5	54	27	108	139	160	18
180 M	1LA5183	2, 4	279	69.5	339	363	258	258	216	216	152	340	71	241	50	-	287	38	54	27	121	259	180	18
180 L	1LA5186	4, 6, 8	279	69.5	339	363	258	258	216	216	152	340	71	279	50	-	325	38	54	27	121	221	180	18
200 L	1LA5206 1LA5207	2, 6 2, 4, 6, 8	318	83	388	402	305	305	252	252	260	340	96	305	58.5	-	355	45	85	42.5	133	239	200	24
225 S	1LA5220	4, 8	356	103	426	402	305	305	252	252	260	340	96	286	58	83	361	36	85	42.5	149	248.5	225	24
225 M	1LA5223	2 4, 6, 8	356	103	426	402	305	305	252	252	260	340	96	311	58	83	361	36	85	42.5	149	223.5	225	24

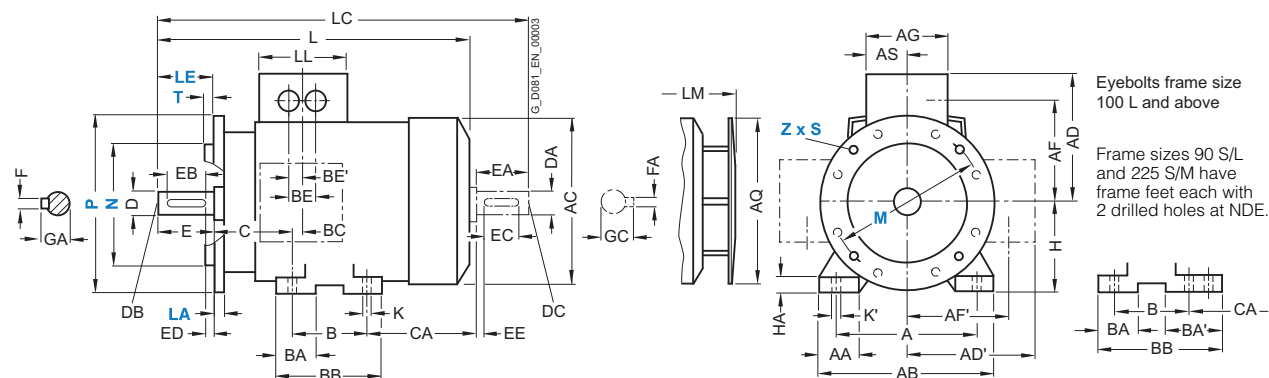
* This dimension is assigned in DIN EN 50347 to the frame size listed.

¹⁾ Measured across the bolt heads.

Dimensional drawings (continued)

Type of construction IM B35

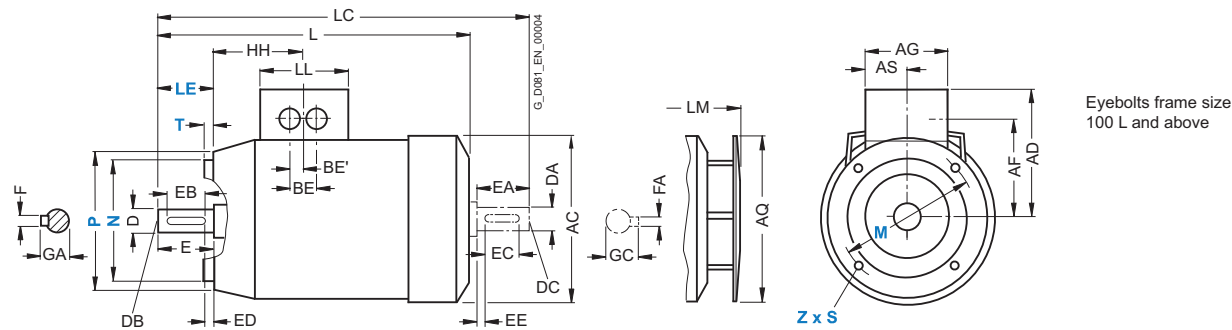
For flange dimensions, see section flange dimension (Z = the number of retaining holes)



Eyebolts frame size 100 L and above
Frame sizes 90 S/L and 225 S/M have frame feet each with 2 drilled holes at NDE.

Type of construction IM B14

Type of construction IM B14 not possible for 1LA5 motors, frame sizes 180 M to 225 M
For flange dimensions, see section flange dimension (Z = the number of retaining holes)



Eyebolts frame size 100 L and above

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	1LA7060 1LA7063	2, 4, 6	69.5	7	10	202.5 ¹⁾	232 ¹⁾	120	231.5 ²⁾	11	M4	23	16	3.5	4	12.5	11	M4	23	16	3.5	4	12.5
71 M	1LA7070 1LA7073	2, 4, 6, 8	63.5	7	10	240	278	120	268	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
80 M	1LA7080 1LA7083	2, 4, 6, 8	63.5	9.5	13.5	273.5	324 364	120	299.5	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 S 90 L	1LA7090 1LA7096	2, 4, 6, 8	79	10	14	331	389	120	382.5	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
100 L	1LA7106 1LA7107	2, 4, 6, 8 4, 8	102	12	16	372	438	120	423.5	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1LA7113	2, 4, 6, 8	102	12	16	393	461	120	444.5	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1LA7130 1LA7131	2, 4, 6, 8 2	128	12	16	452.5 ²⁾	551.5	140	505 ²⁾	38	M12	80	70	5	10	41	38	M12	80	70	5	10	41
132 M	1LA7133 1LA7134	4, 6, 8 6	128	12	16	452.5 ²⁾	551.5	140	505 ²⁾	38	M12	80	70	5	10	41	38	M12	80	70	5	10	41
160 M	1LA7163 1LA7164	2, 4, 6, 8 2, 8	160.5	15	19	588	721	165	640.5	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1LA7166	2, 4, 6, 8	160.5	15	19	588	721	165	640.5	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1LA5183	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
180 L	1LA5186	4, 6, 8	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	1LA5206 1LA5207	2, 6 2, 4, 6, 8	178	19	25	769.5	897	192	850	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
225 S	1LA5220	4, 8	184.5	19	25	806	933.5	192	887.5	60	M20	140	125	7.5	18	64	55	M20	110	100	5	16	59
225 M	1LA5223	2 4, 6, 8	184.5	19	25	776 806	903.5 933.5	192	857.5 887.5	55 60	M20	110 140	100 125	5 7.5	16 18	59 64	55	M20	110	100	5	16	59

¹⁾ For 1LA7063 in the case of type of construction code 1 (IM B5, IM V3), dimensions L, LC and LM are 26 mm longer.

²⁾ In a low-noise version, the dimension L is 8 mm greater and the dimension LM is 11.5 mm greater.