

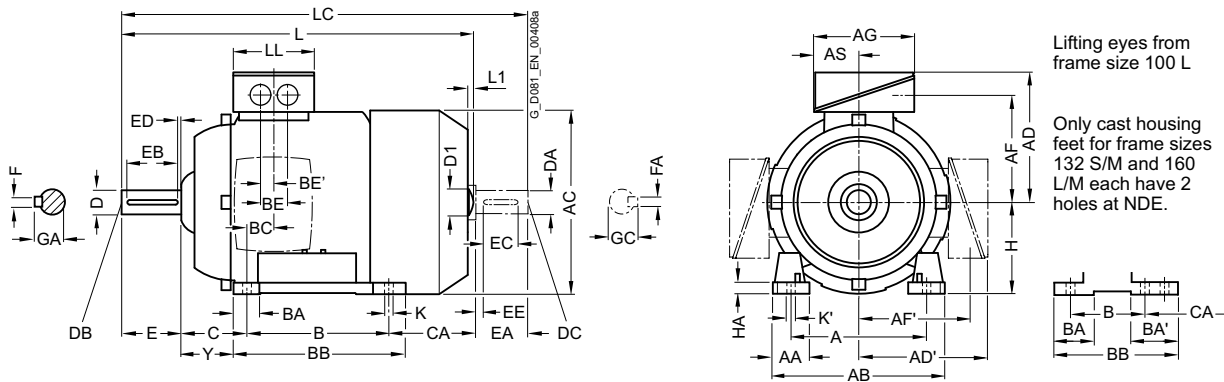
## Dimensions

### SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE4 · Frame sizes 100 L to 160 L

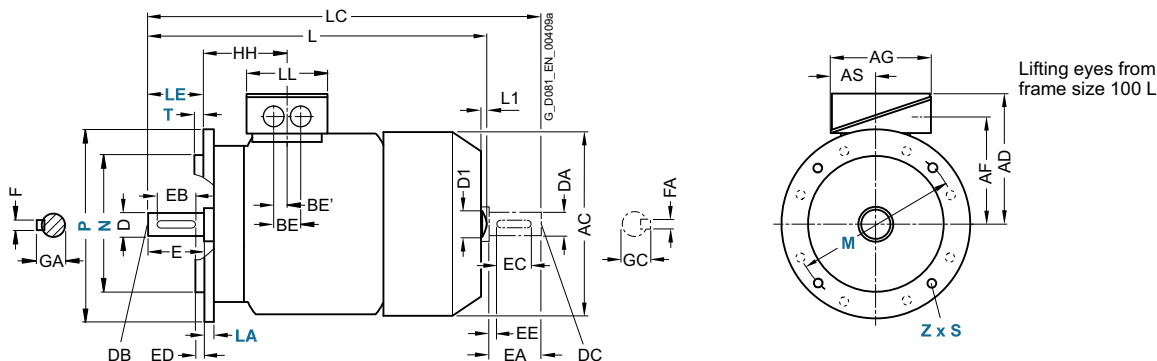
#### Dimensional drawings

##### Type of construction IM B3



##### Types of construction IM B5 and IM V1

For flange dimensions, see page 1/53 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC																					
Frame size	Motor type	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	H	HA	Y
100 L	1AA4	2	160	42	196	217	193	193	147	147	163	80.5	140	48	48	176	37.5	48	24	63	176	100	12	45
	1AB4	4																						
	1AB5	4																						
112 M	1BA2	2	190	46	226	239	195	195	150	150	163	80.5	140	48	48	176	30	48	24	70	155	112	12	52
	1BB2	4																						
132 S	1CA0	2	216	53	256	281	214.5	214.5	169	169	163	80.5	140	52 <sup>1)</sup>	89 <sup>5)</sup>	218 <sup>2)</sup>	26.5	48	24	89	130	132	15	69
	1CA1, 1CB0	2, 4																			178.5			
132 M	1CB2	4	216	53	256	281	214.5	214.5	169	169	163	80.5	178	52 <sup>1)</sup>	89 <sup>6)</sup>	218	26.5	48	24	89	178.5	132	15	69
160 M	1DA2	2	254	60	300	333.5	261	261	213	213	190	92	210	73 <sup>3)</sup>	117 <sup>7)</sup>	300 <sup>4)</sup>	37	60	30	108	148	160	18	85
	1DA3, 1DB2	2, 4																						
160 L	1DA4	2	254	60	300	333.5	261	261	213	213	190	92	254	73 <sup>3)</sup>	117 <sup>8)</sup>	300	37	60	30	108	208	160	18	85
	1DB4	4																						

1) With screwed-on feet, dimension BA is 41 mm.  
 2) With screwed-on feet, dimension BB is 180 mm.  
 3) With screwed-on feet, dimension BA is 51 mm.  
 4) With screwed-on feet, dimension BB is 256 mm.

5) With screwed-on feet, dimension BA' is 41 mm.  
 6) With screwed-on feet, dimension BA' is 79 mm.  
 7) With screwed-on feet, dimension BA' is 51 mm.  
 8) With screwed-on feet, dimension BA' is 95 mm.

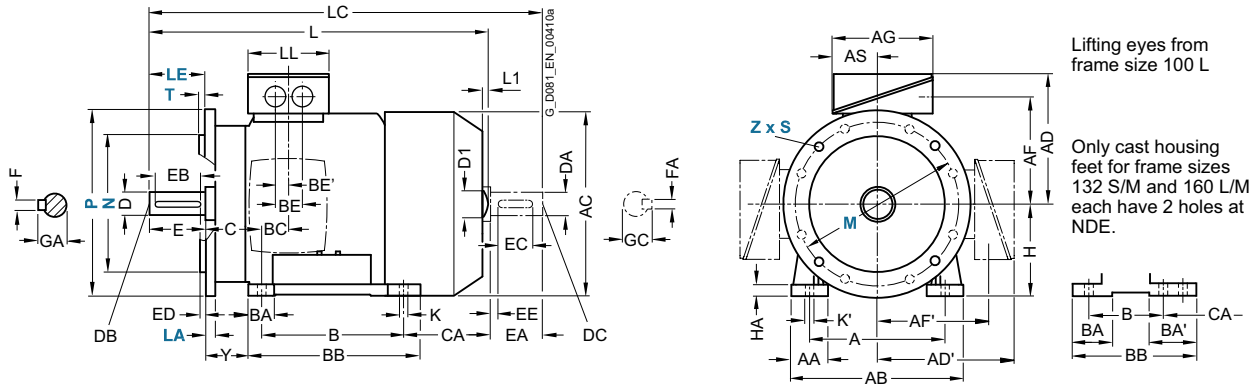
# Dimensions SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE4 · Frame sizes 100 L to 160 L

## Dimensional drawings (continued)

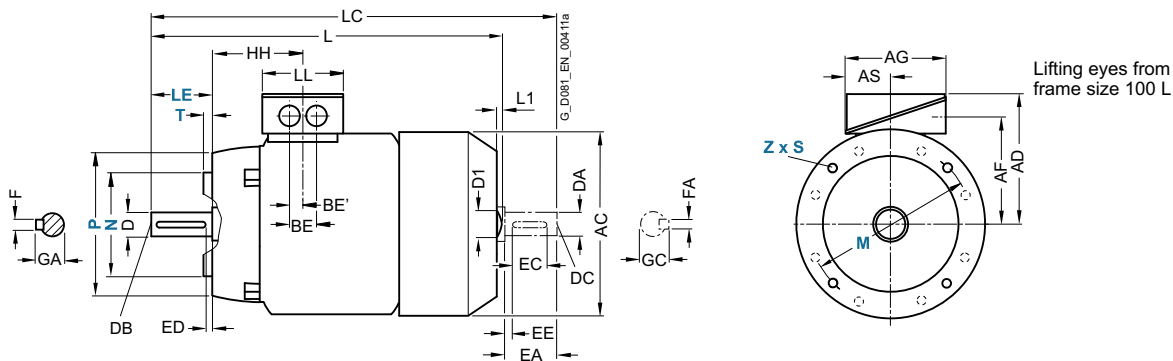
### Type of construction IM B35

For flange dimensions, see page 1/53 ( $Z$  = the number of retaining holes)



### Type of construction IM B14

For flange dimensions, see page 1/53 ( $Z$  = the number of retaining holes)



Frame size	Motor type	No. of poles	Dimension designation acc. to IEC							DE shaft extension					NDE shaft extension													
			HH	K	K'	L <sup>1)</sup>	L <sup>1)2)</sup>	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC				
100 L	1AA4	2	100.5	12	16	432.5	7	32	489	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27				
	1AB4	4																							482.5	7	475	529
	1AB5	4																										
112 M	1BA2	2	100.5	12	16	415.5	7	32	475	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27				
	1BB2	4																							465.5	515		
132 S	1CA0	2	115.5	12	16	466.5	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31				
	1CA1, 1CB0	2, 4																							516.5	585.5		
132 M	1CB2	4	115.5	12	16	516.5	8.5	39	585.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31				
	1DA2	2																							666	666		
160 M	1DA2	2	145	15	19	606	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45				
	1DA3, 1DB2	2, 4																										
160 L	1DA4	2	145	15	19	666	10	45	790	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45				
	1DB4	4																										

1) For 1LE16 motors less dimension L1.

2) Only for 1LE15 motors.

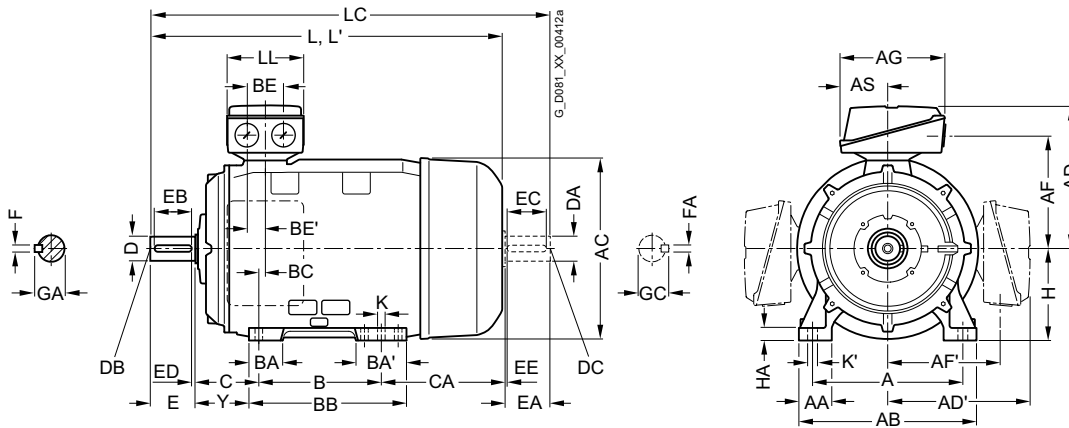
## Dimensions

### SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE4 · Frame sizes 180 M to 315 L

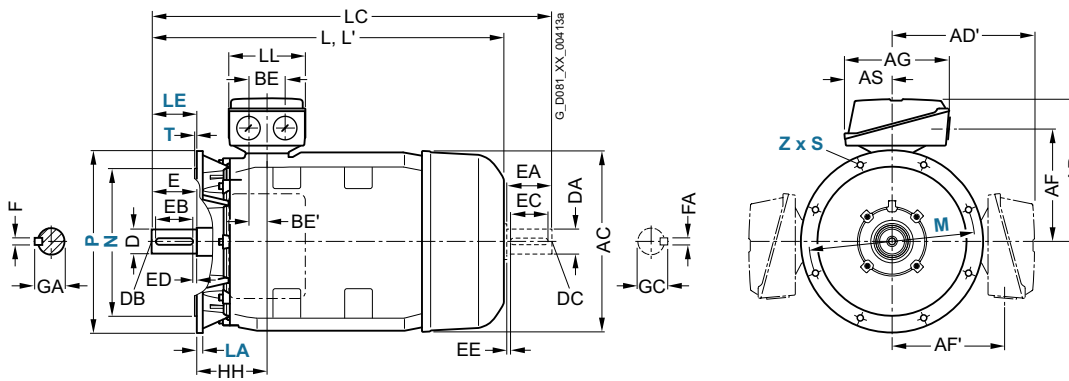
#### Dimensional drawings

##### Type of construction IM B3



##### Types of construction IM B5 and IM V1

For flange dimensions, see page 1/53 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC																		
Frame size	Motor type 1LE1504- 1LE1604-	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*
180 M	1EA2	2	279	65	339	356	286	286	234	234	189	92	241/ 279	85	120	328	34	60	30	121	202
180 M	1EB2	4																			
180 L	1EB4	4																			
200 L	2AA4 2AA5, 2AB5	2 2, 4	318	70	378	396	315	315	258.5	258.5	265	112	305	104	104	355	31	85	42.5	133	177
225 S	2BB0	4	356	80	436	449	338	338	282	282	266	112	286	92	117	361	15	85	42.5	149	218
225 M	2BA2 2BB2	2 4	356	80	436	449	338	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
250 M	2CA2 2CB2	2 4	406	100	490	497	410	410	322	322	319	145	349	102	102	409	24	110	55	168	230
280 S	2DA0 2DB0	2 4	457	100	540	551	433	433	345	345	319	145	368	101	152	479	20	110	55	190	267
280 M	2DA2 2DB2	2 4	457	100	540	551	433	433	345	345	319	145	419	101	152	479	20	110	55	190	216 326
315 S	3AA0	2	508	120	610	616	515	515	404	404	374	164	406	113	170	527	22	110	55	216	295
315 M <sup>2)</sup>	3AB0	4	508	120	610	616	515	515	404	404	374	164	457	113	170	578	22	110	55	216	295
315 M <sup>1)</sup>	3AA2 3AB2	2 4																			409
315 L <sup>1)</sup>	3AA4 3AB4 3AA5 3AB5	2 4 2 4	508	120	610	616	515	515	404	404	374	164	508	113	170	578	22	110	55	216	358
														176	227	648					513

\* Please note that version 3AB0 does not comply with EN 50347 with respect to assignment of this dimension to the frame size.

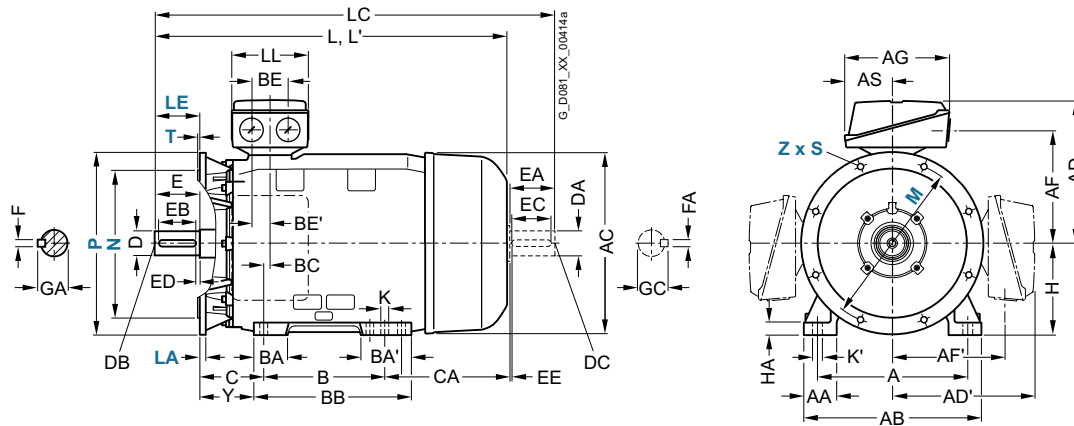
<sup>1)</sup> With terminal box position right, terminal box left, and with order code **H01** only screwed-on feet with 3 drilled holes with dimension "B" (406, 457, and 508 mm). The dimension "BB" will then be 666 mm.

<sup>2)</sup> 1LE1504-3AB0 and 1LE1604-3AB0 4-pole motors cannot be constructed in standard frame size 315 S because they require the longer housing of frame size 315 M in order to achieve the requisite efficiency levels. The foot clearance dimension "B" therefore changes from 406 to 457 mm. The motors comply with standard IEC 60034, but not with standard EN 50347 in this respect.

#### Dimensional drawings (continued)

##### Type of construction IM B35

For flange dimensions, see page 1/53 ( $Z$  = the number of retaining holes)



For motor Motor type 1LE1504- 1LE1604-	No. of poles	Dimension designation acc. to IEC										DE shaft extension						NDE shaft extension							
		H	HA	Y	HH	K	K'	L	LC <sup>1)</sup>	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC	
1EA2	2	180	20	95	155	15	19	698	814	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5	
1EB2	4							668	784																
1EB4	4							698	814																
2AA4 2AA5, 2AB5	2, 4	200	25	108	164	19	25	746 746	860	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59	
2BB0	4	225	34	124	164	19	25	848	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59	
2BA2	2	225	34	124	164	19	25	818	933	197	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5	
2BB2	4							928	963		60		140	125	10	18	64	55	M20				16	59	
2CA2	2	250	40	138	192	24	30	887	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59	
2CB2	4							957	1032		65					69		60		140	125	10	18	64	
2DA0	2	280	40	160	210	24	30	1070	1105	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64	
2DB0	4										75					20	79.5	65						69	
2DA2	2	280	40	160	210	24	30	1070	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64	
2DB2	4										75					20	79.5	65						69	
3AA0	2	315	50	181	238	28	35	1052	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64	
3AB0	4	315	50	181	238	28	35	1247	1392	299	80	M20	170	140	25	22	85	70	M20	140	125	10	20	74.5	
3AA2	2							1217	1362		65		140	125	10	18	69	60						18	64
3AB2	4							1247	1392		80		170	140	25	22	85	70						20	74.5
3AA4	2	315	50	181	238	28	35	1217	1362	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64	
3AB4	4							1402	1392		80		170	140	25	22	85	70						20	74.5
3AA5	2			146				1372	1517		65		140	125	10	18	69	60						18	64
3AB5	4							1402	1547		80		170	140	25	22	85	70						20	74.5

<sup>1)</sup> In the low-noise version, a second shaft extension and/or mounted encoder is not possible.