

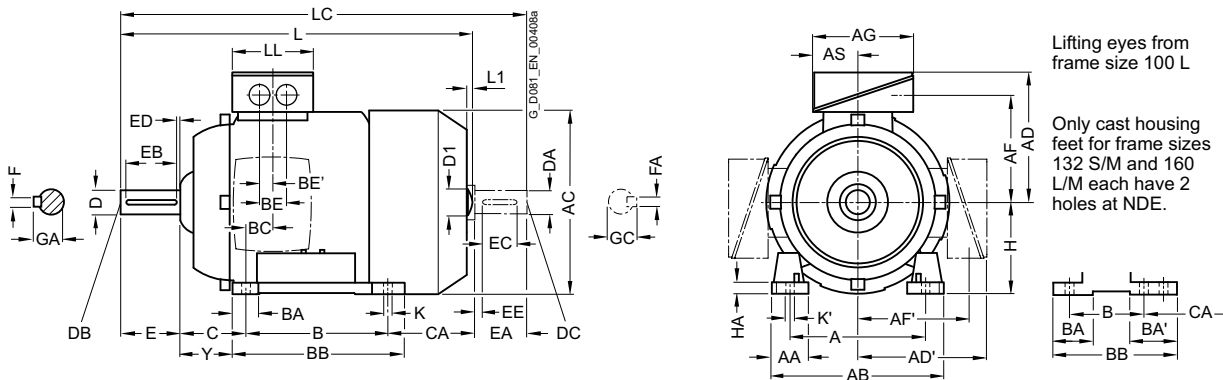
## Dimensions

### SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE1, IE2, NEMA Energy Efficient · Frame sizes 71 M to 160 L

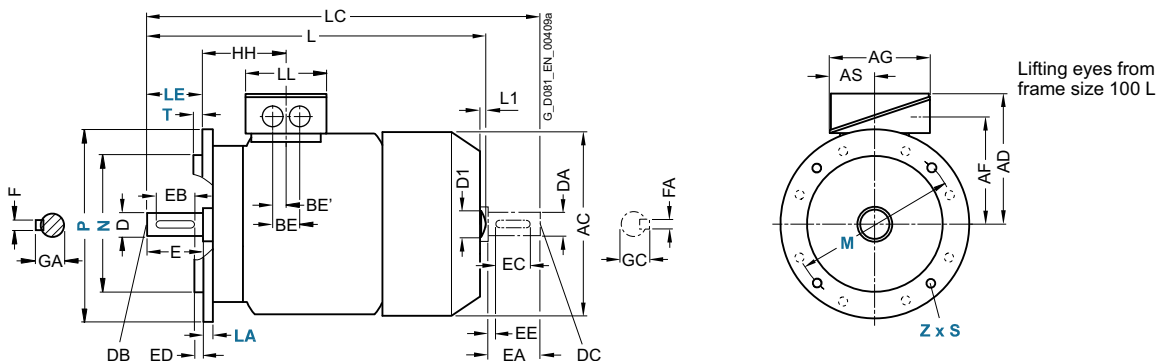
#### Dimensional drawings

##### 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
71 M	1LE15.1, 1LE16.1, 1LE1502	2, 4, 6	112	30.5	132	145	149	149	112	112	126	62	90	32	32	106	21	36	18	45	83	71	7	37
80 M	1LE15.1	2, 4, 6	125	30.5	150	162	159	159	122	122	126	62	100	32	32	118	22.5	36	18	50	112.5	80	8	41
90 S	1LE15.1	2, 4, 6	140	30.5	165	180	164	164	127	127	126	62	100	33	54	143	24.5	36	18	56	159	90	11	47
90 L	1LE15.1	2, 4, 6	140	30.5	165	180	164	164	127	127	126	62	125	33	54	143	24.5	36	18	56	134	90	11	47
100 L	All	2, 4, 6, 8	160	42	196	217	193	193	147	147	163	80.5	140	48	48	176	37.5	48	24	63	141	100	12	45
112 M	All	2, 4, 6, 8	190	46	226	239	195	195	150	150	163	80.5	140	48	48	176	30	48	24	70	130	112	12	52
132 S	All	2, 4, 6, 8	216	53	256	281	214.5	214.5	169	169	163	80.5	140	52 <sup>5)</sup>	89 <sup>1)</sup>	218 <sup>3)</sup>	26.5	48	24	89	166.5	132	15	69
132 M	All	2, 4, 6, 8	216	53	256	281	214.5	214.5	169	169	163	80.5	178	52 <sup>5)</sup>	89 <sup>1)</sup>	218	26.5	48	24	89	128.5	132	15	69
160 M	All	2, 4, 6, 8	254	60	300	333.5	265	265	213	213	190	92	210	73 <sup>6)</sup>	117 <sup>2)</sup>	300 <sup>4)</sup>	37	60	30	108	192	160	18	85
160 L	All	2, 4, 6, 8	254	60	300	333.5	265	265	213	213	190	92	254	73 <sup>6)</sup>	117 <sup>2)</sup>	300	37	60	30	108	148	160	18	85

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

# Dimensions

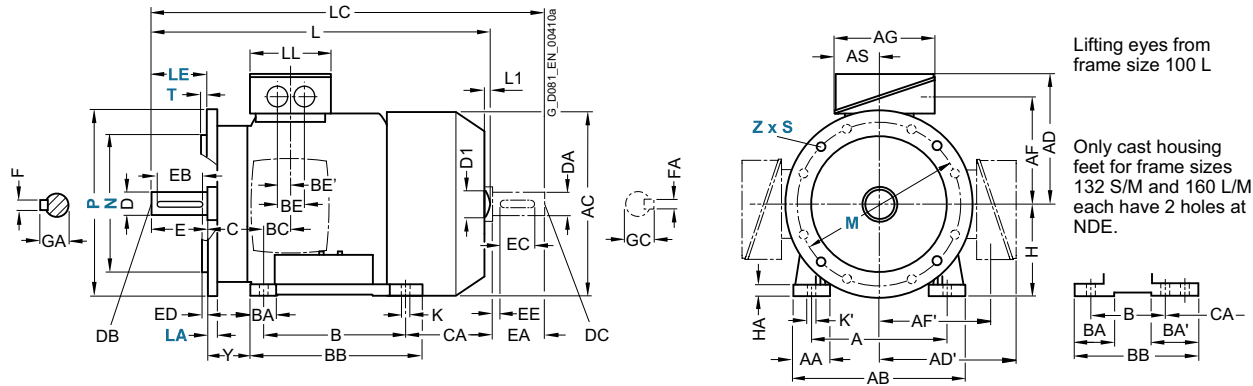
## SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE1, IE2, NEMA Energy Efficient · Frame sizes 71 M to 160 L

### Dimensional drawings (continued)

#### Type of construction IM B35

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

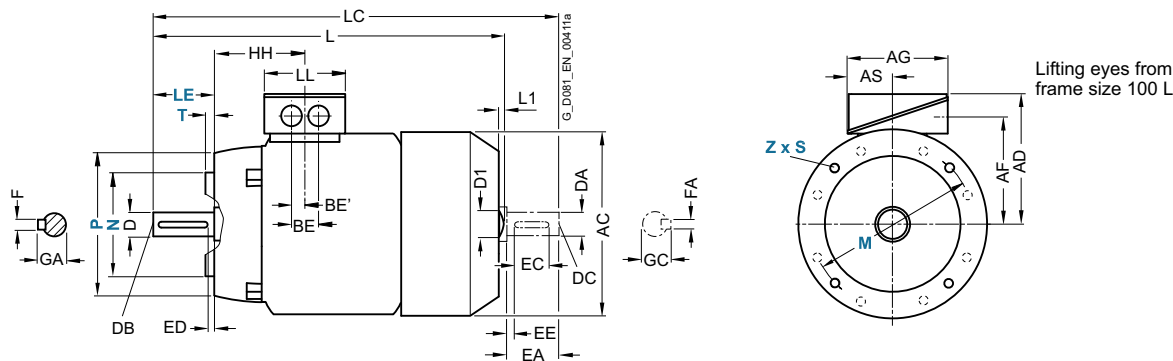


Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

#### Type of construction IM B14

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



Lifting eyes from frame size 100 L

For motor			Dimension designation acc. to IEC							DE shaft extension					NDE shaft extension									
Frame size	Motor type	No. of poles	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
71 M	1LE15.1	2, 4, 6	64.5	7.5	7.5	240	-	-	278	102	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
80 M	1LE15.1	2, 4, 6	71.5	10	10	292	-	-	342.5	102	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 S	1LE15.1	2, 4, 6	79.5	10	10	347	-	-	405	102	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
90 L	1LE15.1	2, 4, 6	79.5	10	10	347	-	-	405	102	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
100 L	All	2, 4, 6, 8	100.5	12	16	397.5	7	32	454	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4, 6, 8	100.5	12	16	390.5	7	32	450	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
						415.5			475															
132 S	All	2, 4, 6, 8	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
132 M	All	2, 4, 6, 8	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
160 M	All	2, 4, 6, 8	145	14.5	18	606	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6, 8	145	14.5	18	606	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

1) For 1LE16 motors less dimension L1.

2) Only for 1LE15 motors.

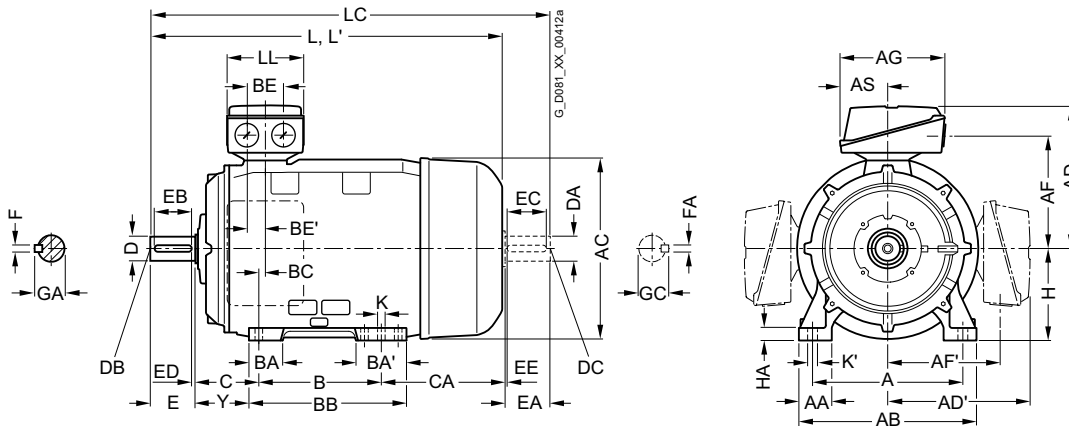
## Dimensions

### SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE1, IE2, NEMA Energy Efficient · Frame sizes 180 M to 250 M

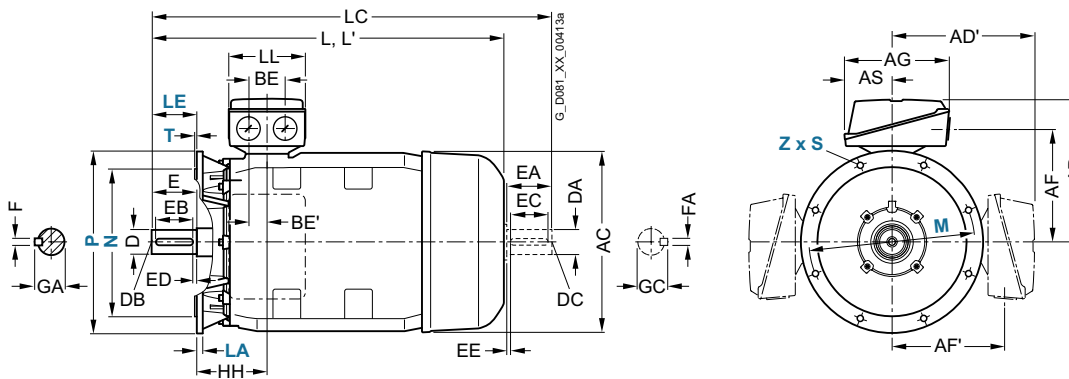
#### Dimensional drawings

##### 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		No. of poles	Dimension designation acc. to IEC																		
Frame size	Motor type		A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA
180 M/ 180 L	1LE1501-, 1LE1521-, 1LE1541- 1LE1601- 1LE1502-	2, 4, 6	279	65	339	356	286	286	234	234	189	91	241	85	120	328	34	60	30	121	202
	1EB4, 1EA6, 1EB6, 1EC6	2, 4, 6											279								
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	2, 4, 6, 8	318	70	378	396	315	315	258.5	258.5	265	112	305	104	104	355	31	85	42.5	133	177
	2AA6, 2AB6, 2AC6, 2AD6	2, 4, 6, 8																			
225 S/ 225 M	2BB0, 2BD0,	4, 8	356	80	436	449	338	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
	2BB2, 2BC2, 2BD2, 2BB6, 2BC6, 2BD6	4, 6, 8											286 <sup>1)</sup>								
	2BA2, 2BA6	2											286 <sup>1)</sup>								
250 M	2CA2, 2CA6	2	406	100	490	497	410	410	322	322	319	145	349	102	102	409	24	110	55	168	230
	2CB2, 2CC2, 2CD2, 2CC6, 2CD6,	4, 6, 8																			
	2CB6	4																			

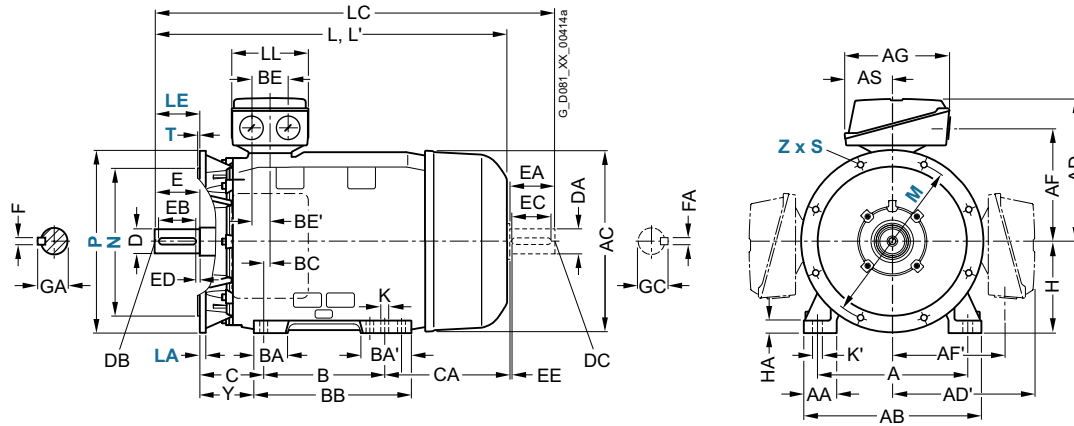
300

<sup>1)</sup> Only applicable for 1LE1502.

### 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	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
1LE1501-, 1LE1521-, 1LE1541- 1LE1601- 1LE1502-																							
1EB2 <sup>2)</sup> , 1EA2, 1EB2, 1EC4 1EB4, 1EA6, 1EB6, 1EC6	180	20	95	155	15	19	668	784	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	200	25	108	164	19	25	721	835	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
2AA6, 2AB6, 2AC6, 2AD6							746	860															
2BB0, 2BD0	225	34	124	164	19	25	788	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BB2, 2BC2, 2BD2, 2BB6, 2BC6, 2BD6							848	963															
2BA2, 2BA6							818	933	55		110	100	5	16	59	48	M16					14	51.5
2CA2, 2CA6	250	40	138	192	24	30	887	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2CB2, 2CC2, 2CD2, 2CC6, 2CD6							1032		65							69	60		140	125	10	18	64
2CB6							957	1072															

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

<sup>2)</sup> Only applicable for 1LE1502.

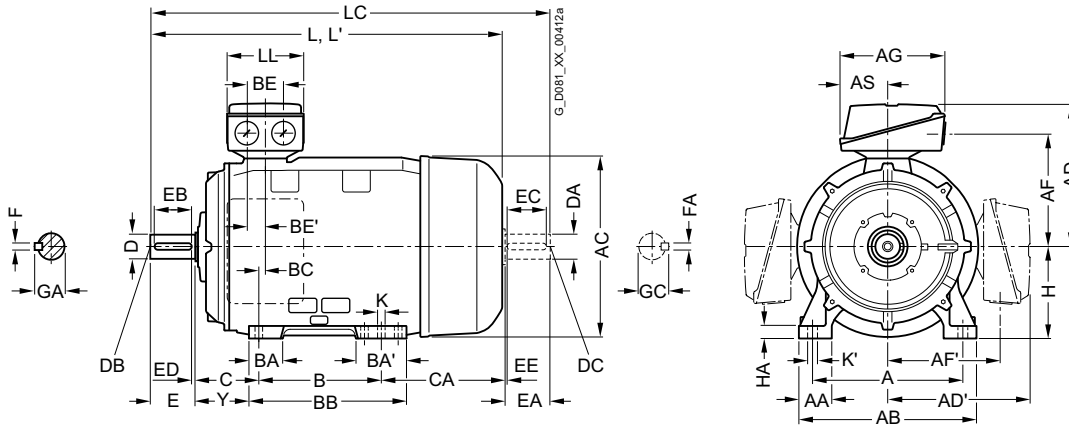
## Dimensions

### SIMOTICS SD 1LE1 standard motors

Cast-iron series, self-ventilated – IE1, IE2, NEMA Energy Efficient · Frame sizes 280 S to 315 L

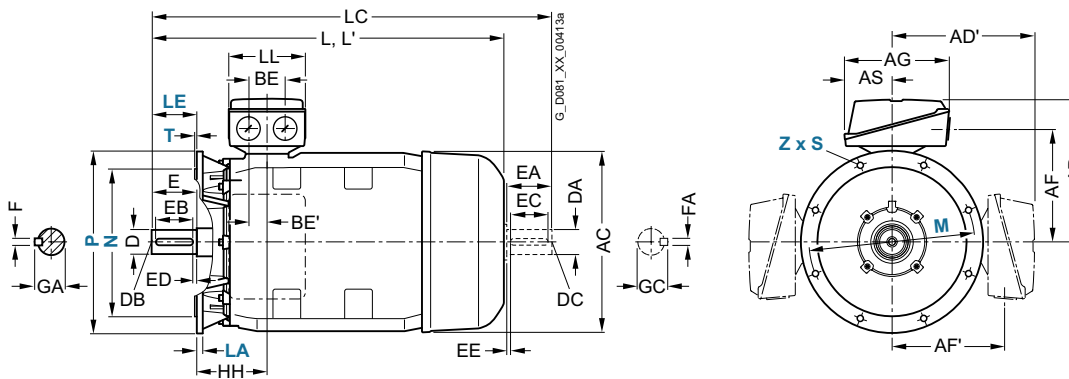
#### Dimensional drawings

##### 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	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA
280 S	2DA0	2	457	100	540	551	433	433	345	345	319	145	368	101	152	479	20	110	55	190	267
	2DB0, 2DC0, 2DD0	4, 6, 8																			267
280 M	2DA6	2											419								326
	2DA2																				216
	2DB2, 2DC2, 2DD2, 2DC6, 2DD6	4, 6, 8																			
	2DB6	4																			326
315 S	3AA0, 3AA2 <sup>2)</sup>	2	508	120	610	616	515	515	404	404	374	164	406	113	170	527	22	110	55	216	295
	3AB0, 3AC0, 3AD0	4, 6, 8																			
315 M	3AA2 <sup>1)</sup> , 3AA5 <sup>2)</sup>	2											457			578					409
	3AB2 <sup>1)</sup>	4																			
	3AC2, 3AD2	6, 8																			
315 L <sup>1)</sup>	3AA4	2											508			578					358
	3AB4, 3AC4, 3AD4, 3AC5, 3AD5, 3AD6	4, 6, 8																			
	3AA5, 3AA6	2											508	176	227	648					
	3AB5, 3AB6, 3AC6	4, 6																			

<sup>1)</sup> For orders with screwed-on feet (order code **H01**), these screwed-on feet have 3 drilled holes on the NDE side with the dimension B 406 mm, 457 mm, and 508 mm respectively; the dimension BB is 666 mm.

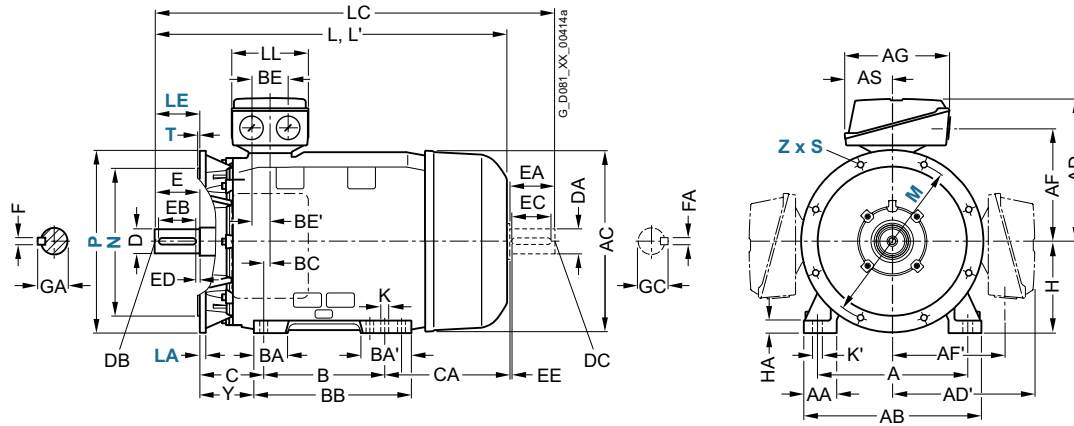
<sup>2)</sup> Only applicable for 1LE1502.

Cast-iron series, self-ventilated – IE1, IE2, NEMA Energy Efficient · Frame sizes 280 S to 315 L

### 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 1LE1501-, 1LE1521-, 1LE1541- 1LE1601- 1LE1502-	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
2DA0	280	40	160	210	24	30	960	1105	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB0, 2DC0, 2DD0										75					20	79.5	65						69
2DA6							1070	1215		65					18	69	60						64
2DA2							960	1105								20	79.5	65					
2DB2, 2DC2, 2DD2, 2DC6, 2DD6										75						20	79.5	65					69
2DB6							1070	1215															
3AA0, 3AA2 <sup>2)</sup>	315	50	181	238	28	35	1052	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB0, 3AC0, 3AD0							1082	1227		80		170	140	25	22	85	70					20	74.5
3AA2, 3AA5 <sup>2)</sup>							1217	1362		65		140	125	10	18	69	60					18	64
3AB2							1247	1392		80		170	140	25	22	85	70					20	74.5
3AC2, 3AD2							1082	1227															
3AA4							1217	1362		65		140	125	10	18	69	60					18	64
3AB4, 3AC4, 3AD4, 3AC5, 3AD5, 3AD6							1247	1392		80		170	140	25	22	85	70					20	74.5
3AA5, 3AA6			146				1372	1517		65		140	125	10	18	69	60					18	64
3AB5, 3AB6, 3AC6							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.

<sup>2)</sup> Only applicable for 1LE1502.