

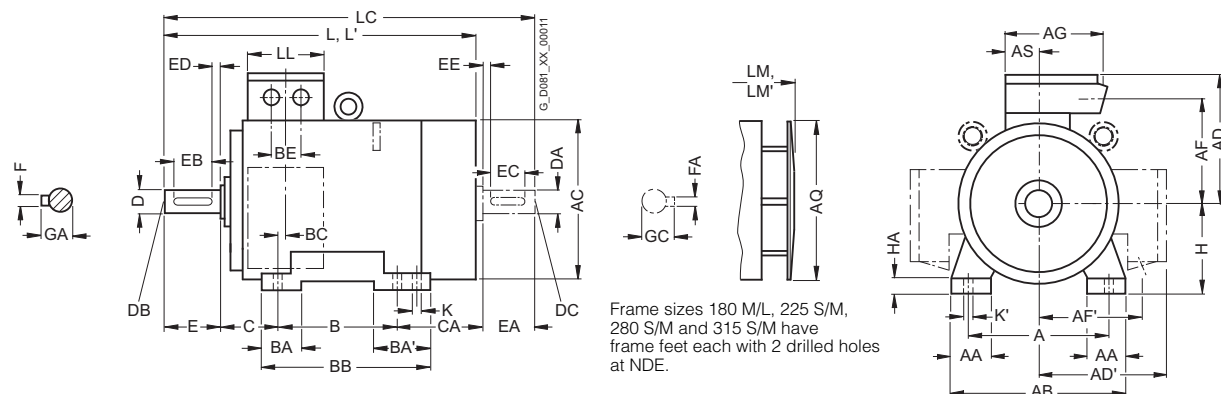
# SIMOTICS XP 1MA Explosion-Proof Motors

## Dimensions

Cast-iron series 1MA6  
Frame sizes 180 M to 315 L

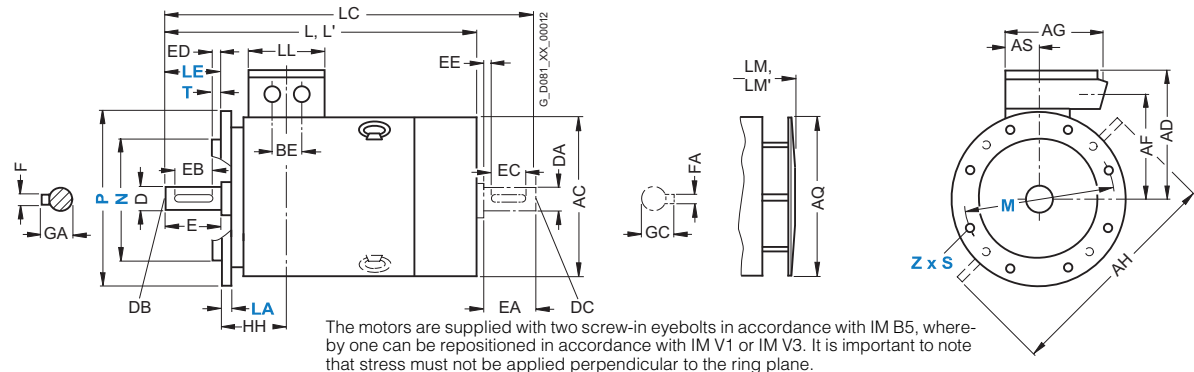
### Dimensional drawings

#### Type of construction IM B3



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

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



For motor	Frame size	Type	Number of poles	Dimension designation acc. to IEC																					
				A	AA	AB	AC <sup>1)</sup>	AD	AD'	AF	AF'	AG	AH	AQ	AS	B*	BA	BA'	BB	BC	BE	C	CA*	H	HA
180 M	1MA6183	2	2	279	65	344	375	274	274	227	227	220	470	340	82	241	70	108	319	35	75	121	259	180	26
180 L	1MA6186	4, 6, 8	4, 6, 8	279	65	344	375	274	274	227	227	220	470	340	82	279	70	108	319	35	75	121	221	180	26
200 L	1MA6206	2	2	318	80	398	402	308	308	248	248	262	530	340	99	305	85	85	355	42	85	133	239	200	34
	1MA6207	4, 6, 8	4, 6, 8	318	80	398	402	308	308	248	248	262	530	340	99	305	85	85	355	42	85	133	239	200	34
225 S	1MA6220	4, 8	4, 8	356	80	436	442	339	339	269	269	264	580	425	100	286	85	110	361	25	85	149	269	225	34
225 M	1MA6223	2	2	356	80	436	442	339	339	269	269	264	580	425	100	311	85	110	361	25	85	149	244	225	34
		4, 6, 8	4, 6, 8	356	80	436	442	339	339	269	269	264	580	425	100	311	85	110	361	25	85	149	244	225	34
250 M	1MA6253	2	2	406	100	506	505	427	427	333	333	338	645	470	120	349	100	100	409	39	95	168	283	250	42
		4, 6, 8	4, 6, 8	406	100	506	505	427	427	333	333	338	645	470	120	349	100	100	409	39	95	168	283	250	42
280 S	1MA6280	2	2	457	100	557	555	452	452	358	358	338	700	525	120	368	100	151	471	30	95	190	317	280	42
		4, 6, 8	4, 6, 8	457	100	557	555	452	452	358	358	338	700	525	120	368	100	151	471	30	95	190	317	280	42
280 M	1MA6283	2	2	457	100	557	555	452	452	358	358	338	700	525	120	419	100	151	471	30	95	190	366	280	42
		4, 6, 8	4, 6, 8	457	100	557	555	452	452	358	358	338	700	525	120	419	100	151	471	30	95	190	366	280	42
315 S	1MA6310	2	2	508	120	628	620	515	515	395	395	405	805	590	134	406	125	171	527	32	90	216	358	315	52
		4, 6, 8	4, 6, 8	508	120	628	620	515	515	395	395	405	805	590	134	406	125	171	527	32	90	216	358	315	52
315 M	1MA6313	2	2	508	120	628	620	515	515	395	395	405	805	590	134	457	125	171	527	32	90	216	307	315	52
		4, 6, 8	4, 6, 8	508	120	628	620	515	515	395	395	405	805	590	134	457	125	171	527	32	90	216	307	315	52
315 L	1MA6316	2	2	508	120	628	620	515	515	395	395	405	805	590	134	508	120	120	578	32	90	216	396	315	52
	1MA6317	2	2	508	120	628	620	515	515	395	395	405	805	590	134	508	120	120	578	32	90	216	396	315	52
	1MA6318	4, 6, 8	4, 6, 8	508	120	628	620	515	515	395	395	405	805	590	134	508	120	120	578	32	90	216	396	315	52

Dimensions for 9-terminal connection box available on request.

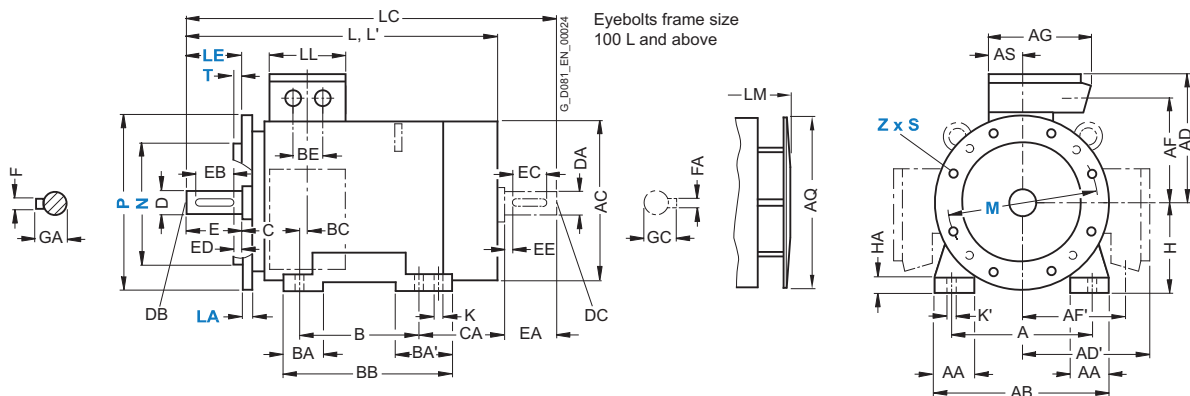
<sup>1)</sup> Measured across the bolt heads.

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

### Dimensional drawings (continued)

#### Type of construction IM B35

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



For motor		Number of poles	Dimension designation acc. to IEC										DE shaft extension					NDE shaft extension							
Frame size	Type		HH	K	K'	L	L <sup>(1)</sup>	LC <sup>(2)</sup>	LL	LM	LM <sup>(1)</sup>	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
180 M	1MA6183	2	156	15	20	715	770	841	164	796.5	855	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
		4																							
180 L	1MA6186	4, 6, 8	156	15	20	715	—	841	164	796.5	—	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
200 L	1MA6206	2	175	19	25	—	819.5	897	197	853	901	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5
		6				771.5	—												55	M20					16 59
	1MA6207	2	175	19	25	771.5	819.5	897	197	853	901	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5
		4, 6, 8				—	—				—								55	M20					16 59
225 S	1MA6220	4, 8	174	19	25	839	—	954	200	935	—	60	M20	140	125	10	18	64	55	M20	110	100	10	16	59
225 M	1MA6223	2	174	19	25	809	855	924	200	909	955	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5
		4, 6, 8				839	—	954		935	—	60		140	125	10	18	64	55	M20		100	10	16	59
250 M	1MA6253	2	207	24	30	935	1010	1050	234	1035	1110	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
		4, 6, 8				—	—	1080			—	65						69	60		140	125		18 64	
280 S	1MA6280	2	220	24	30	1010	1080	1155	234	1120	1230	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
		4, 6, 8				—	—				—	75						79.5	65					69	
280 M	1MA6283	2	220	24	30	1010	1080	1155	234	1120	1230	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
		4, 6, 8				—	—				—	75						79.5	65					69	
315 S	1MA6310	2	248	28	35	1114	1185	1260	266	1224	1295	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
		4, 6, 8				1144	—	1290		1254	—	80		170	140			22	85	70				20 74.5	
315 M	1MA6313	2	248	28	35	1114	1185	1260	266	1224	1295	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
		4, 6, 8				1144	—	1290		1254	—	80		170	140			22	85	70				20 74.5	
315 L	1MA6316	2	248	28	35	1254	1325	1400	266	1364	1435	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	1MA6317	4, 6, 8				1284	—	1430		1394	—	80		170	140			22	85	70				20 74.5	
	1MA6318	6, 8				1284	—	1430		1394	—	80		170	140			22	85	70				20 74.5	

<sup>1)</sup> For version with low-noise fan.

<sup>2)</sup> In the low-noise version, a second shaft extension is not possible.