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Selection and ordering data

P_{rated}, 50 Hz	P_{rated}, 60 Hz 1)	Frame size	Operating values at rated output: n_{rated}, 50 Hz	T_{rated}, 50 Hz	IE class		η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	cos φ_{rated}, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series: 1LE1503 – *Basic Line*; 1LE1603 – *Performance Line*; *IE3 version in accordance with IEC 60034-30*; Article No.	$m_{IM\ B3}$	J	Torque class
kW	kW	FS	rpm	Nm	50 Hz	60 Hz	%	%	%		A				dB(A)	dB(A)		kg	kgm²	CL
• Cooling: self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC416)																				
• Efficiency: IE3 Premium Efficiency, service factor (SF) 1.15																				
• Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																				
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz 1)																				
0.37	**0.43**	**71 M**	2850	1.2	–	–	73.8	73.2	69.6	0.76	0.95	3.5	5.8	3.5	52	63	**1LE1 5 03-0CA2 ■-■■■■**	13	0.00045	16
0.55	**0.63**	**71 M**	2850	1.8	–	–	77.8	77.6	74.7	0.76	1.34	3.7	6.1	3.7	52	63	**1LE1 5 03-0CA3 ■-■■■■**	14.5	0.00056	16
0.75	**0.86**	**80 M**	2850	2.5	IE3	IE3	80.7	82	81.5	0.86	1.56	2.6	6.2	3	60	71	**1LE1 5 03-0DA2 ■-■■■■**	18	0.0011	16
1.1	**1.27**	**80 M**	2885	3.6	IE3	IE3	82.7	82.7	81.7	0.85	2.25	2.8	7.4	3.8	60	71	**1LE1 5 03-0DA3 ■-■■■■**	21	0.0013	16
1.5	**1.75**	**90 S**	2910	4.9	IE3	IE3	84.2	84.5	83.5	0.86	3	2.7	8.1	4.2	65	77	**1LE1 5 03-0EA0 ■-■■■■**	25.5	0.0021	16
2.2	**2.55**	**90 L**	2910	7.2	IE3	IE3	85.9	86.8	86.1	0.88	4.2	2.6	8.3	4	65	77	**1LE1 5 03-0EA4 ■-■■■■**	32	0.0031	16
3	**3.45**	**100 L**	2920	9.8	IE3	IE2	87.1	87.1	86.1	0.88	5.6	2.8	8	4.3	67	79	**1LE1 ■ 03-1AA4 ■-■■■■**	36	0.0054	16
4	**4.55**	**112 M**	2945	13	IE3	IE2	88.1	89.1	88.7	0.9	7.3	1.8	8.2	3.5	69	81	**1LE1 ■ 03-1BA2 ■-■■■■**	45	0.012	16
5.5	**6.3**	**132 S**	2950	17.8	IE3	IE3	89.2	89.2	88.2	0.9	9.9	1.8	7.4	3.6	68	80	**1LE1 ■ 03-1CA0 ■-■■■■**	58	0.024	16
7.5	**8.6**	**132 S**	2950	24.3	IE3	IE3	90.1	90.1	89.1	0.92	13.1	1.9	8.3	3.9	68	80	**1LE1 ■ 03-1CA1 ■-■■■■**	73	0.031	16
11	**12.6**	**160 M**	2955	35.5	IE3	IE3	91.2	91.2	90.2	0.89	19.6	2.4	7.9	3.8	70	82	**1LE1 ■ 03-1DA2 ■-■■■■**	100	0.053	16
15	**17.3**	**160 M**	2960	48.4	IE3	IE3	91.9	91.9	90.9	0.87	27	2.7	8.7	4.3	70	82	**1LE1 ■ 03-1DA3 ■-■■■■**	110	0.061	16
18.5	**21.3**	**160 L**	2955	60	IE3	IE3	92.4	92.4	91.4	0.9	32	2.8	9	4.2	70	82	**1LE1 ■ 03-1DA4 ■-■■■■**	127	0.068	16
22	**24.5**	**180 M**	2950	71	IE3	IE3	92.7	93	92.4	0.89	38.5	2.3	7.5	3.5	73	80	**1LE1 ■ 03-1EA2 ■-■■■■**	160	0.08	16
30	**33.5**	**200 L**	2955	97	IE3	IE3	93.3	93.7	93.3	0.87	53	2.5	7	3.3	73	80	**1LE1 ■ 03-2AA4 ■-■■■■**	225	0.134	16
37	**41.5**	**200 L**	2955	120	IE3	IE3	93.7	94.1	93.8	0.88	65	2.5	7.1	3.2	74	81	**1LE1 ■ 03-2AA5 ■-■■■■**	250	0.158	16
45	**51**	**225 M**	2960	145	IE3	IE3	94	94.5	94.4	0.89	78	2.4	6.9	3.3	73	87	**1LE1 ■ 03-2BA2 ■-■■■■**	315	0.26	16
55	**62**	**250 M**	2975	177	IE3	IE3	94.3	94.5	93.9	0.89	95	2.3	6.7	3.1	73	87	**1LE1 ■ 03-2CA2 ■-■■■■**	385	0.46	13
75	**84**	**280 S**	2975	241	IE3	IE2	94.7	94.8	94.1	0.89	128	2.4	6.8	3	74	88	**1LE1 ■ 03-2DA0 ■-■■■■**	510	0.77	13
90	**101**	**280 M**	2975	289	IE3	IE2	95	95.1	94.6	0.9	152	2.4	7.2	3.1	74	88	**1LE1 ■ 03-2DA2 ■-■■■■**	590	0.94	13
110	**123**	**315 S**	2982	352	IE3	IE3	95.2	95.4	94.9	0.91	183	2.4	7.1	3.1	75	89	**1LE1 ■ 03-3AA0 ■-■■■■**	750	1.39	13
132	**148**	**315 M**	2982	423	IE3	IE3	95.4	95.5	95.2	0.91	220	2.5	7.2	3.1	75	89	**1LE1 ■ 03-3AA2 ■-■■■■**	880	1.6	13
160	**180**	**315 L**	2982	512	IE3	IE2	95.6	95.7	95.2	0.92	265	2.8	7.8	3.3	77	91	**1LE1 ■ 03-3AA4 ■-■■■■**	980	1.9	13
200	**224**	**315 L**	2982	640	IE3	IE3	95.8	95.9	95.5	0.92	330	2.5	7.2	3	77	91	**1LE1 ■ 03-3AA5 ■-■■■■**	1150	2.3	13

	Relubrication	Motor protection	Fan cover	Bearing size	Liability for defects	
Basic Line	Optional (standard from FS 280 upwards)	Optional	Plastic	62 (63 from FS 280 upwards)	12 months	5
Performance Line	Standard from FS 160 (optional for FS 100 to 132)	Standard PTC	Steel	63	36 months	6

Voltages 2)			No. of poles	Frame size	Motor type	Version			Order code(s)
50 Hz	230 VΔ/400 VY	60 Hz 1) 460 VY	2	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	2	2	–
50 Hz	400 VΔ/690 VY	60 Hz 1) 460 VΔ	2	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	3	4	–
50 Hz	500 VY		2	71 M ... 315 L	1LE1■03-0C … -3A	Without add. chrg.	2	7	–
50 Hz	500 VΔ		2	100 L ... 315 L	1LE1■03-1A … -3A	Without add. chrg.	4	0	–
Further voltages 1)		For price information, code numbers, order codes and descriptions, see from Page 2/60					9	0	. . .

Types of construction		No. of poles	Frame size	Motor type	Version		Order code(s)
Without flange	IM B3 3)	2	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	A	–
With flange	IM B5 3)	2	71 M ... 315 M	1LE1■03-0C … -3A	With additional charge	F	–
Further types of construction	For price information, code letters and descriptions, see from Page 2/66					■	. . .

Motor protection	Line	No. of poles	Frame size	Motor type	Version		Order code(s)
Without	Only possible for **Basic Line**	2	71 M ... 315 L	1LE1503-0C … -3A	**Standard**	A	–
PTC thermistor with 3 temperature sensors	**Basic Line**	2	71 M ... 315 L	1LE1503-0C … -3A	With additional charge	B	–
	Performance Line	2	100 L ... 315 L	1LE1603-1A … -3A	**Standard**	B	–
Further motor protection	For price information, code letters and descriptions, see from Page 2/71					■	. . .

Terminal box position	No. of poles	Frame size	Motor type	Version		Order code(s)
Terminal box at top	2	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	4	–
Further terminal box positions	For price information, code numbers and descriptions, see from Page 2/73					

Special versions	No. of poles	Frame size	Motor type			Order code(s)
Forced-air cooled motors without ext. fan/fan cover (IC 416)	2	71 M ... 315 L	1LE1■03-	**1LE1■03- . . . .**	■-■■■■-Z	**F90+. . .+. . .+. . .**
Options	For price information, order codes and descriptions, see from Page 2/80			**1LE1■03- . . . .**	■-■■■■-Z	. . .+. . .+. . .+. . .

1) Operating values at rated output for 60 Hz are stored in the Drive Technology (DT) Configurator.

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (Order code **R52**) or a larger terminal box (Order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

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Selection and ordering data (continued)

P_{rated}, 50 Hz	P_{rated}, 60 Hz 1)	Frame size	Operating values at rated output: n_{rated}, 50 Hz	T_{rated}, 50 Hz	IE class 50 Hz	IE class 60 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	cos φ_{rated}, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series: **1LE1503** – *Basic Line*; **1LE1603** – *Performance Line*; *IE3 version in accordance with IEC 60034-30*; Article No.	$m_{IM B3}$	J	Torque class
kW	kW	FS	rpm	Nm			%	%	%		A				dB(A)	dB(A)		kg	kgm²	CL
• Cooling: self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC416)																				
• Efficiency: IE3 Premium Efficiency, service factor (SF) 1.15																				
• Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																				
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz 1)																				
0.25	**0.29**	**71 M**	1395	1.7	–	–	73.5	73.6	70.3	0.72	0.68	2.5	4.2	2.6	44	55	**1LE1 5 03-0CB2 ■-■■■■**	13	0.00095	16
0.37	**0.43**	**71 M**	1410	2.5	–	–	77.3	76.9	73.6	0.7	0.99	3.1	4.8	3.1	44	55	**1LE1 5 03-0CB3 ■-■■■■**	16	0.0014	16
0.55	**0.63**	**80 M**	1440	3.6	–	–	81.3	82	80.2	0.78	1.25	2.1	5.9	3.1	53	64	**1LE1 5 03-0DB2 ■-■■■■**	18.5	0.0021	16
0.75	**0.86**	**80 M**	1450	4.9	IE3	IE2	82.5	82.5	81.5	0.75	1.75	2.7	7.1	3.9	53	64	**1LE1 5 03-0DB3 ■-■■■■**	22.5	0.0029	16
1.1	**1.27**	**90 S**	1440	7.3	IE3	IE2	84.1	84.1	83.1	0.78	2.4	2.9	6.9	3.6	56	68	**1LE1 5 03-0EB0 ■-■■■■**	25	0.0036	16
1.5	**1.75**	**90 L**	1445	9.9	IE3	IE3	85.3	85.9	84.9	0.8	3.15	2.6	7.2	2.7	56	68	**1LE1 5 03-0EB4 ■-■■■■**	31	0.0049	16
2.2	**2.55**	**100 L**	1465	14.3	IE3	IE2	86.7	86.7	85.7	0.83	4.4	2.1	7.6	3.6	60	72	**1LE1 ■ 03-1AB4 ■-■■■■**	40	0.014	16
3	**3.45**	**100 L**	1460	19.6	IE3	IE3	87.7	87.7	86.7	0.83	5.9	2.3	7.3	3.7	60	72	**1LE1 ■ 03-1AB5 ■-■■■■**	40	0.014	16
4	**4.55**	**112 M**	1460	26	IE3	IE3	88.6	88.6	87.6	0.82	7.9	2.4	7.1	3.7	58	70	**1LE1 ■ 03-1BB2 ■-■■■■**	46	0.017	16
5.5	**6.3**	**132 S**	1470	35.7	IE3	IE2	89.6	89.6	88.6	0.84	10.5	2.1	7.2	3.4	64	76	**1LE1 ■ 03-1CB0 ■-■■■■**	74	0.046	16
7.5	**8.6**	**132 M**	1470	48.7	IE3	IE2	90.4	90.4	89.4	0.84	14.3	2.4	7.4	3.5	64	76	**1LE1 ■ 03-1CB2 ■-■■■■**	80	0.046	16
11	**12.6**	**160 M**	1475	71	IE3	IE3	91.4	91.4	90.4	0.84	20.5	2.2	6.9	3.2	65	77	**1LE1 ■ 03-1DB2 ■-■■■■**	109	0.083	16
15	**17.3**	**160 L**	1475	97	IE3	IE3	92.1	92.1	91.1	0.82	28.5	2.5	8.5	3.8	65	77	**1LE1 ■ 03-1DB4 ■-■■■■**	127	0.099	16
18.5	**21.3**	**180 M**	1470	120	IE3	IE3	92.6	93.2	93.2	0.82	35	2.5	7.2	3.3	66	73	**1LE1 ■ 03-1EB2 ■-■■■■**	165	0.13	16
22	**25.3**	**180 L**	1470	143	IE3	IE3	93	93.7	93.7	0.83	41	2.3	6.8	3.3	68	75	**1LE1 ■ 03-1EB4 ■-■■■■**	170	0.14	16
30	**34.5**	**200 L**	1470	195	IE3	IE2	93.6	94.3	94.4	0.84	55	2.6	7.3	3.1	65	72	**1LE1 ■ 03-2AB5 ■-■■■■**	240	0.22	16
37	**42.5**	**225 S**	1478	239	IE3	IE2	93.9	94.5	94.4	0.86	66	2.5	6.4	2.7	65	78	**1LE1 ■ 03-2BB0 ■-■■■■**	285	0.42	16
45	**52**	**225 M**	1478	291	IE3	IE2	94.2	94.9	95.1	0.86	80	2.6	6.4	2.7	65	78	**1LE1 ■ 03-2BB2 ■-■■■■**	320	0.47	16
55	**63**	**250 M**	1482	354	IE3	IE2	94.6	95.1	95	0.87	96	2.5	6.8	2.9	66	79	**1LE1 ■ 03-2CB2 ■-■■■■**	420	0.85	16
75	**86**	**280 S**	1485	482	IE3	IE2	95	95.3	95	0.86	133	2.5	6.9	3	69	83	**1LE1 ■ 03-2DB0 ■-■■■■**	570	1.39	16
90	**104**	**280 M**	1485	579	IE3	IE2	95.2	95.5	95.3	0.87	157	2.6	7.2	3	70	84	**1LE1 ■ 03-2DB2 ■-■■■■**	670	1.7	16
110	**127**	**315 S**	1488	706	IE3	IE3	95.4	95.8	95.5	0.87	191	2.6	6.8	2.9	70	84	**1LE1 ■ 03-3AB0 ■-■■■■**	760	2.2	16
132	**152**	**315 M**	1490	846	IE3	IE3	95.6	95.9	95.9	0.87	230	2.8	7.3	3	73	87	**1LE1 ■ 03-3AB2 ■-■■■■**	960	2.9	16
160	**184**	**315 L**	1490	1025	IE3	IE3	95.8	96.1	96.1	0.87	275	2.9	7.3	3.1	73	87	**1LE1 ■ 03-3AB4 ■-■■■■**	990	3.1	16
200	**230**	**315 L**	1488	1284	IE3	IE2	96	96.3	96.1	0.88	340	3.2	7.4	3	73	87	**1LE1 ■ 03-3AB5 ■-■■■■**	1190	3.7	16

	Relubrication	Motor protection	Fan cover	Bearing size	Liability for defects	
Basic Line	Optional (standard from FS 280 upwards)	Optional	Plastic	62 (63 from FS 280 upwards)	12 months	**5**
Performance Line	Standard from FS 160 (optional for FS 100 to 132)	Standard PTC	Steel	63	36 months	**6**

Voltages 2)				No. of poles	Frame size	Motor type	Version			Order code(s)
50 Hz	230 VΔ/400 VY	60 Hz 1)	460 VY	4	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	**2**	**2**	–
50 Hz	400 VΔ/690 VY	60 Hz 1)	460 VΔ	4	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	**3**	**4**	–
50 Hz	500 VY			4	71 M ... 315 L	1LE1■03-0C … -3A	Without add. chrg.	**2**	**7**	–
50 Hz	500 VΔ			4	100 L ... 315 L	1LE1■03-1A … -3A	Without add. chrg.	**4**	**0**	–
Further voltages 1)		For price information, code numbers, order codes and descriptions, see from Page 2/60						**9**	**0**	. . .

Types of construction		No. of poles	Frame size	Motor type	Version		Order code(s)
Without flange	IM B3 3)	4	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	**A**	–
With flange	IM B5 3)	4	71 M ... 315 M	1LE1■03-0C … -3A	With additional charge	**F**	–
Further types of construction	For price information, code letters and descriptions, see from Page 2/66					■	. . .

Motor protection	Line	No. of poles	Frame size	Motor type	Version		Order code(s)
Without	Only possible for **Basic Line**	4	71 M ... 315 L	1LE1503-0C … -3A	**Standard**	**A**	–
PTC thermistor with 3 temperature sensors	**Basic Line**	4	71 M ... 315 L	1LE1503-0C … -3A	With additional charge	**B**	–
	Performance Line	4	100 L ... 315 L	1LE1603-1A … -3A	**Standard**	**B**	–
Further motor protection	For price information, code letters and descriptions, see from Page 2/71					■	. . .

Terminal box position	No. of poles	Frame size	Motor type	Version		Order code(s)
Terminal box at top	4	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	**4**	–
Further terminal box positions	For price information, code numbers and descriptions, see from Page 2/73					

Special versions	No. of poles	Frame size	Motor type			Order code(s)
Forced-air cooled motors without ext. fan/fan cover (IC 416)	4	71 M ... 315 L	1LE1■03-0C … -3A	**1LE1■03- . . . .**	**■-■■■■-Z**	**F90+. . .+. . .+. . .**
Options	For price information, order codes and descriptions, see from Page 2/80			**1LE1■03- . . . .**	**■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated output for 60 Hz are stored in the Drive Technology (DT) Configurator.

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (Order code **R52**) or a larger terminal box (Order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

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Selection and ordering data (continued)

P_{rated}, 50 Hz	P_{rated}, 60 Hz 1)	Frame size	Operating values at rated output: n_{rated}, 50 Hz	T_{rated}, 50 Hz	IE class		η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	cos φ_{rated}, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series: 1LE1503 – *Basic Line*; 1LE1603 – *Performance Line*; *IE3 version in accordance with IEC 60034-30*; Article No.	$m_{IM B3}$	J	Torque class
kW	kW	FS	rpm	Nm	50 Hz	60 Hz	%	%	%		A				dB(A)	dB(A)		kg	kgm²	CL
• Cooling: self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC416)																				
• Efficiency: IE3 Premium Efficiency, service factor (SF) 1.15																				
• Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																				
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz 1)																				
0.18	**0.21**	**71 M**	885	1.9	–	–	63.9	64.6	60.8	0.69	0.59	2.3	2.8	2.3	39	50	**1LE1 5 03-0CC2 ■-■■■■**	12.5	0.001	16
0.25	**0.29**	**71 M**	885	2.7	–	–	68.6	69.5	67.1	0.69	0.76	2.6	3.2	2.6	39	50	**1LE1 5 03-0CC3 ■-■■■■**	15.5	0.0015	16
0.37	**0.43**	**80 M**	940	3.8	–	–	74.8	74.3	70.5	0.66	1.08	2.3	4.2	2.7	42	53	**1LE1 5 03-0DC2 ■-■■■■**	18.5	0.0025	13
0.55	**0.63**	**80 M**	935	5.6	–	–	77.2	77.2	75.5	0.67	1.53	2.5	4.5	2.8	42	53	**1LE1 5 03-0DC3 ■-■■■■**	22.5	0.0031	13
0.75	**0.86**	**90 S**	945	7.6	IE3	IE3	78.9	80	78.5	0.7	1.96	2.2	4.6	2.6	43	55	**1LE1 5 03-0EC0 ■-■■■■**	26.5	0.004	13
1.1	**1.27**	**90 L**	940	11	IE3	–	81	81	80	0.69	2.85	2.3	4.6	2.7	43	55	**1LE1 5 03-0EC4 ■-■■■■**	32	0.0048	13
1.5	**1.75**	**100 L**	970	15	IE3	IE2	82.5	83.1	81.7	0.73	3.6	1.9	5.2	2.8	59	71	**1LE1 ■ 03-1AC4 ■-■■■■**	36	0.011	13
2.2	**2.55**	**112 M**	970	22	IE3	IE2	84.3	85.1	83.8	0.75	5	2.2	5.6	2.8	65	74	**1LE1 ■ 03-1BC2 ■-■■■■**	53	0.017	13
3	**3.45**	**132 S**	975	29	IE3	IE2	85.6	87.5	87	0.77	6.6	1.6	5.3	2.4	63	75	**1LE1 ■ 03-1CC0 ■-■■■■**	61	0.029	13
4	**4.55**	**132 M**	975	39	IE3	IE2	86.8	88.1	87.9	0.77	8.6	1.7	5.6	2.5	63	75	**1LE1 ■ 03-1CC2 ■-■■■■**	70	0.037	13
5.5	**6.3**	**132 M**	975	54	IE3	IE2	88	89	88.8	0.77	11.7	1.8	5.7	2.6	63	75	**1LE1 ■ 03-1CC3 ■-■■■■**	83	0.046	13
7.5	**8.6**	**160 M**	980	73	IE3	IE2	89.1	89.9	89.3	0.76	16	1.9	4.9	2.3	67	79	**1LE1 ■ 03-1DC2 ■-■■■■**	122	0.098	13
11	**12.6**	**160 L**	975	108	IE3	IE2	90.3	91.1	90.7	0.77	23	1.9	5	2.3	67	79	**1LE1 ■ 03-1DC4 ■-■■■■**	147	0.12	13
15	**18**	**180 L**	975	147	IE3	IE2	91.2	91.9	91.9	0.8	29.5	2.3	5.9	2.8	55	68	**1LE1 ■ 03-1EC4 ■-■■■■**	180	0.19	16
18.5	**22**	**200 L**	978	181	IE3	IE2	91.7	92.5	92.5	0.79	37	2.5	5.6	2.6	63	76	**1LE1 ■ 03-2AC4 ■-■■■■**	215	0.28	16
22	**26.5**	**200 L**	978	215	IE3	IE2	92.2	93	92.9	0.79	43.5	2.5	5.6	2.6	63	76	**1LE1 ■ 03-2AC5 ■-■■■■**	230	0.32	16
30	**36**	**225 M**	982	292	IE3	IE2	92.9	93.6	93.5	0.83	56	2.6	6.6	3	64	77	**1LE1 ■ 03-2BC2 ■-■■■■**	325	0.67	16
37	**44.5**	**250 M**	985	359	IE3	IE2	93.3	94	94	0.85	67	2.7	7	2.9	62	75	**1LE1 ■ 03-2CC2 ■-■■■■**	405	1	16
45	**54**	**280 S**	988	435	IE3	IE2	93.7	94.3	94.2	0.85	82	3	6.8	2.8	60	74	**1LE1 ■ 03-2DC0 ■-■■■■**	510	1.4	16
55	**66**	**280 M**	988	532	IE3	IE2	94.1	94.6	94.4	0.85	99	3.2	7.2	3	60	74	**1LE1 ■ 03-2DC2 ■-■■■■**	560	1.6	16
75	**90**	**315 S**	990	723	IE3	IE3	94.6	94.9	94.4	0.84	136	2.6	7.5	3.1	63	78	**1LE1 ■ 03-3AC0 ■-■■■■**	750	2.6	16
90	**108**	**315 M**	991	867	IE3	IE2	94.9	95.3	95	0.85	161	2.5	6.7	2.8	63	78	**1LE1 ■ 03-3AC2 ■-■■■■**	890	3.1	16
110	**132**	**315 L**	991	1060	IE3	IE2	95.1	95.5	95.3	0.84	199	2.8	7.2	3	63	78	**1LE1 ■ 03-3AC4 ■-■■■■**	990	3.9	16
132	**158**	**315 L**	991	1272	IE3	IE2	95.4	95.9	95.8	0.84	240	2.7	7.2	3	67	82	**1LE1 ■ 03-3AC5 ■-■■■■**	1110	4.4	16

	Relubrication	Motor protection	Fan cover	Bearing size	Liability for defects	
Basic Line	Optional (standard from FS 280 upwards)	Optional	Plastic	62 (63 from FS 280 upwards)	12 months	5
Performance Line	Standard from FS 160 (optional for FS 100 to 132)	Standard PTC	Steel	63	36 months	6

Voltages 2)			No. of poles	Frame size	Motor type	Version			Order code(s)
50 Hz	230 VΔ/400 VY	60 Hz 1) 460 VY	6	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	2	2	–
50 Hz	400 VΔ/690 VY	60 Hz 1) 460 VΔ	6	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	3	4	–
50 Hz	500 VY		6	71 M ... 315 L	1LE1■03-0C … -3A	Without add. chrg.	2	7	–
50 Hz	500 VΔ		6	100 L ... 315 L	1LE1■03-1A … -3A	Without add. chrg.	4	0	–
Further voltages 1)		For price information, code numbers, order codes and descriptions, see from Page 2/60					9	0	. . .

Types of construction		No. of poles	Frame size	Motor type	Version		Order code(s)
Without flange	IM B3 3)	6	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	A	–
With flange	IM B5 3)	6	71 M ... 315 M	1LE1■03-0C … -3A	With additional charge	F	–
Further types of construction	For price information, code letters and descriptions, see from Page 2/66					■	. . .

Motor protection	Line	No. of poles	Frame size	Motor type	Version		Order code(s)
Without	Only possible for **Basic Line**	6	71 M ... 315 L	1LE1503-0C … -3A	**Standard**	A	–
PTC thermistor with 3 temperature sensors	**Basic Line**	6	71 M ... 315 L	1LE1503-0C … -3A	With additional charge	B	–
	Performance Line	6	100 L ... 315 L	1LE1603-1A … -3A	**Standard**	B	–
Further motor protection	For price information, code letters and descriptions, see from Page 2/71					■	. . .

Terminal box position		No. of poles	Frame size	Motor type	Version		Order code(s)
Terminal box at top		6	71 M ... 315 L	1LE1■03-0C … -3A	**Standard**	4	–
Further terminal box positions	For price information, code numbers and descriptions, see from Page 2/73						

Special versions		No. of poles	Frame size	Motor type			Order code(s)
Forced-air cooled motors without ext. fan/fan cover (IC 416)		6	71 M ... 315 L	1LE1■03-0C … -3A	**1LE1■03- . . . .**	**■-■■■■-Z**	**F90+. . .+. . .+. . .**
Options	For price information, order codes and descriptions, see from Page 2/80				**1LE1■03- . . . .**	**■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated output for 60 Hz are stored in the Drive Technology (DT) Configurator.

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (Order code **R52**) or a larger terminal box (Order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

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Selection and ordering data

Motor version	Motor type (cast-iron)	Motor type – frame size												
		71	80	90	100	112	132	160	180	200	225	250	280	315
IE2 High Efficiency	1LE1501	1LE1501 Basic Line ①												
	1LE1601				1LE1601 Performance Line ②									
	1LE1541								1LE1541 APAC Line ③					
IE3 Premium Efficiency	1LE1503	1LE1503 Basic Line ④												
	1LE1603				1LE1603 Performance Line ⑤									
	1LE1543									1LE1543 Basic Line ⑥				
	1LE1643									1LE1643 Performance Line ⑦				
IE4 Super Premium Efficiency	1LE1504				1LE1504 Basic Line ⑧									
	1LE1604				1LE1604 Performance Line ⑨									
NEMA Energy Efficient	1LE1521	1LE1521 Eagle Line Basic ⑩												
	1LE1621				1LE1621 Eagle Line Performance ⑪									
NEMA Premium Efficient	1LE1523	1LE1523 Eagle Line Basic ⑫												
	1LE1623				1LE1623 Eagle Line Performance ⑬									

Voltages	Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Motor category: Motor version	Motor type	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315
1LE1. . . - . . . . ■ - ■ . . .			Order code															
Voltage at 50 Hz or 60 Hz																		
50 Hz 230 VΔ/400 VY, 60 Hz 460 VY	2	2	–	All	All	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ 1)	3	4	–	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘
50 Hz 400 VΔ, 60 Hz 460 VΔ 1)				Only applicable for ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘
50 Hz 500 VY/575 VY	2	7	–	All, not possible for ⑧ and ⑨ frame sizes 100 … 160		○	○	○	○	○	○	○	○	○	○	○	○	○
50 Hz 500 VΔ, 60 Hz 575 VΔ	4	0	–	All	All	–	–	–	○	○	○	○	○	○	○	○	○	○
50 Hz 220 VΔ/380 VY, 60 Hz 440 VY	2	1	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ 1)	3	3	–	All except ⑧, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 380 VΔ 1)				Only applicable for ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	2	3	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Voltage at 60 Hz and required output																		
220 VΔ/380 VY; 50 Hz output	9	0	M2A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
220 VΔ/380 VY; 60 Hz output 2)	9	0	M1A	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ/660 VY; 50 Hz output 1)	9	0	M2B	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ; 50 Hz output 1)				Only applicable for ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ/660 VY; 60 Hz output 1) 2)	9	0	M1B	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VY; 50 Hz output	9	0	M2C	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/61.

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Voltages	Voltage code 12th and 13th position of the Article No.	Additional identification code with order code and plain text if required	Motor category															
			Motor version	**Motor type (cast-iron)**	**Motor type – frame size**													
					71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
			IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**													
				1LE1601				**1LE1601 Performance Line ②**										
				1LE1541								**1LE1541 APAC Line ③**						
			IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**													
				1LE1603				**1LE1603 Performance Line ⑤**										
				1LE1543									**1LE1543 Basic Line ⑥**					
				1LE1643									**1LE1643 Performance Line ⑦**					
			IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**										
				1LE1604				**1LE1604 Performance Line ⑨**										
			NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**													
				1LE1621				**1LE1621 Eagle Line Performance ⑪**										
			NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**													
				1LE1623				**1LE1623 Eagle Line Performance ⑬**										
1LE1. . . - . . . . ■ - ■ . . .		Order code	Motor version	Motor type	Frame size													
					71	80	90	100	112	132	160	180	200	225	250	280	315
Voltage at 60 Hz and required output (continued)																		
440 VY; 60 Hz output [2]	**9**	**0**	**M1C**	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 50 Hz output	**9**	**0**	**M2D**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 60 Hz output [2]	**9**	**0**	**M1D**	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VY; 50 Hz output	**9**	**0**	**M2E**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VY; 60 Hz output [2]	**9**	**0**	**M1E**	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬	–	–	–	○	○	○	○	○	○	○	○	○	○
460 VΔ; 50 Hz output	**9**	**0**	**M2F**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VΔ; 60 Hz output [2]	**9**	**0**	**M1F**	All except ③, ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬	–	–	–	○	○	○	○	○	○	○	○	○	○
575 VY; 50 Hz output	**9**	**0**	**M2G**	All, not possible for ⑧ and ⑨ frame sizes 100 … 160	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VY; 60 Hz output [2]	**9**	**0**	**M1G**	All except ③, ⑩, ⑪, ⑫ and ⑬; not possible for ⑧ and ⑨ frame sizes 100 … 160	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 50 Hz output	**9**	**0**	**M2H**	All, not possible for ⑧ and ⑨ frame sizes 100 … 160	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 60 Hz output [2]	**9**	**0**	**M1H**	All except ③, ⑩, ⑪, ⑫ and ⑬; not possible for ⑧ and ⑨ frame sizes 100 … 160	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Voltage at 87 Hz and 87 Hz output																		
400 VΔ [3]	**9**	**0**	**M3A**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard voltage and/or frequencies																		
Non-standard winding [4]	**9**	**0**	**M1Y** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

□ Standard version
○ Without additional charge
• This order code only determines the price of the version – Additional plain text is required.
✓ With additional charge
O. R. Possible on request

[1] For North America export versions Eagle Line 1LE1521/1LE1621 NEMA Energy Efficient and 1LE1523/1LE1623 NEMA Premium Efficient, voltages above 600 V will not be stamped.

[2] Not admissible for North America export versions Eagle Line 1LE1521/1LE1621 NEMA Energy Efficient and 1LE1523/1LE1623 NEMA Premium Efficient.

[3] Only possible for 4-pole, 6-pole and 8-pole motors. The operating data for converter operation is also provided in a table on the rating plate.

[4] Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated output in kW.

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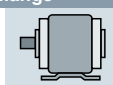
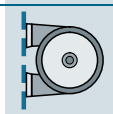
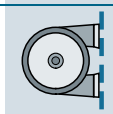
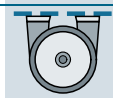
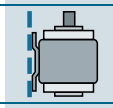
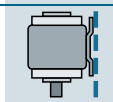
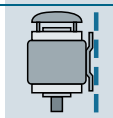
Selection and ordering data

Types of construction	Type of construc. letter 14th pos. of Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category: Motor version	Motor type (cast-iron)	Motor type – frame size: 71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-pole, 6-pole, 8-pole
			IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**														
				1LE1601				**1LE1601 Performance Line ②**											
				1LE1541								**1LE1541 APAC Line ③**							
			IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**														
				1LE1603				**1LE1603 Performance Line ⑤**											
				1LE1543									**1LE1543 Basic Line ⑥**						
				1LE1643									**1LE1643 Performance Line ⑦**						
			IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**											
				1LE1604				**1LE1604 Performance Line ⑨**											
			NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**														
				1LE1621				**1LE1621 Eagle Line Performance ⑪**											
			NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**														
				1LE1623				**1LE1623 Eagle Line Performance ⑬**											
1LE1. . . - . . . . . - . ■ . . (-Z)		Order code	Motor version	Motor type	Frame size: 71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-pole, 6-pole, 8-pole
Without flange																			
IM B3 1) 2) 3) 	**A**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
IM B6 2) 3) 	**T**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
IM B7 2) 3) 	**U**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
IM B8 2) 3) 	**V**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
IM V6 2) 3) 	**D**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	✓	◻
IM V5 without protective cover 2) 3) 	**C**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	✓	◻
IM V5 with protective cover 2) 3) 4) 5) 	**C**	**H00**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/69.

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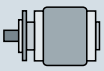
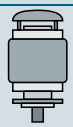
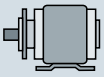
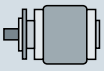
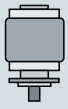
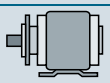
Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

Types of construction	Type of construc. letter 14th pos. of Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category																
			Motor version	**Motor type (cast-iron)**	**Motor type – frame size**														
					71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315 S/M**	**315 L 2-pole**	**315 L 4-pole, 6-pole, 8-pole**
			IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**														
				1LE1601				**1LE1601 Performance Line ②**											
				1LE1541								**1LE1541 APAC Line ③**							
			IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**														
				1LE1603				**1LE1603 Performance Line ⑤**											
				1LE1543									**1LE1543 Basic Line ⑥**						
				1LE1643									**1LE1643 Performance Line ⑦**						
			IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**											
				1LE1604				**1LE1604 Performance Line ⑨**											
			NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**														
				1LE1621				**1LE1621 Eagle Line Performance ⑪**											
			NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**														
				1LE1623				**1LE1623 Eagle Line Performance ⑬**											
1LE1. . . - . . . . . - . ■ . . (-Z)		Order code	Motor version	Motor type	Frame size														
					71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-pole, 6-pole, 8-pole
With flange	**Acc. to EN 50347**				**FF130**	**FF165**	**FF165**	**FF215**	**FF215**	**FF265**	**FF300**	**FF300**	**FF350**	**FF400**	**FF500**	**FF500**	**FF600**	**FF600**	**FF600**
	Acc. to DIN 42948				**A 160**	**A 200**	**A 200**	**A 250**	**A 250**	**A 300**	**A 350**	**A 350**	**A 400**	**A 450**	**A 550**	**A 550**	**A 660**	**A 660**	**A 660**
IM B5 2) 6) 	**F**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–
IM V1 without protective cover 2)	**G**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IM V1 with protective cover 2) 4) 5) 	**G**	**H00**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IM V3 5)	**H**	**–**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–
IM B35 3) 	**J**	**–**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
With special flange next larger	**Acc. to EN 50347**				–	–	–	**FF265**	**FF265**	**FF300**	–	–	–	–	–	–	–	–	–
	Acc. to DIN 42948				–	–	–	**A 300**	**A 300**	**A 350**	–	–	–	–	–	–	–	–	–
IM B5 2) 6) 	**F**	**P01**	All	All	–	–	–	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM V1 without protective cover 2) 	**G**	**P01**	All	All	–	–	–	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM V1 with protective cover 2) 4) 5)	**G**	**P01+ H00**	All	All	–	–	–	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM V3 5)	**H**	**P01**	All	All	–	–	–	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM B35 3) 	**J**	**P01**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp; for ⑧ and ⑨ on request		–	–	–	✓	✓	✓	–	–	–	–	–	–	–	–	–

For legends and footnotes, see Page 2/69.

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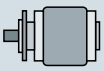
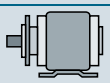
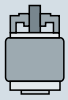
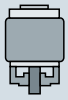
Supplements to article numbers and special versions

SIMOTICS SD 1LE1 Standard Motors

Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

2

Motor version	Motor type (cast-iron)	Motor type – frame size 71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-pole, 6-pole, 8-pole
IE2 High Efficiency	1LE1501	1LE1501 Basic Line ①														
	1LE1601				1LE1601 Performance Line ②											
	1LE1541								1LE1541 APAC Line ③							
IE3 Premium Efficiency	1LE1503	1LE1503 Basic Line ④														
	1LE1603				1LE1603 Performance Line ⑤											
	1LE1543									1LE1543 Basic Line ⑥						
	1LE1643									1LE1643 Performance Line ⑦						
IE4 Super Premium Efficiency	1LE1504				1LE1504 Basic Line ⑧											
	1LE1604				1LE1604 Performance Line ⑨											
NEMA Energy Efficient	1LE1521	1LE1521 Eagle Line Basic ⑩														
	1LE1621				1LE1621 Eagle Line Performance ⑪											
NEMA Premium Efficient	1LE1523	1LE1523 Eagle Line Basic ⑫														
	1LE1623				1LE1623 Eagle Line Performance ⑬											

Types of construction		Type of construc. letter 14th pos. of Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor version	Motor type	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-pole, 6-pole, 8-pole
1LE1. . . - . . . . . - . ■ . . (-Z)			Order code																	
With special flange next smaller		**Acc. to EN 50347**				–	–	–	FF165	FF165	FF215	FF265	–	–	–	–	–	–	–	–
		Acc. to DIN 42948				–	–	–	A 200	A 200	A 250	A 300	–	–	–	–	–	–	–	–
IM B5 2) 6)		F	P02	All	All	–	–	–	O.R.	O.R.	O.R.	O.R.	–	–	–	–	–	–	–	–
IM V1 without protective cover 2)		G	P02	All	All	–	–	–	O.R.	O.R.	O.R.	O.R.	–	–	–	–	–	–	–	–
IM V1 with protective cover 2) 4) 5)		G	P02+ H00	All	All	–	–	–	O.R.	O.R.	O.R.	O.R.	–	–	–	–	–	–	–	–
IM V3 5)		H	P02	All	All	–	–	–	O.R.	O.R.	O.R.	O.R.	–	–	–	–	–	–	–	–
IM B35 3)		J	P02	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		–	–	–	O.R.	O.R.	O.R.	O.R.	–	–	–	–	–	–	–	–
With flange		**Acc. to EN 50347**				FT85	FT100	FT115	FT130	FT130	FT165	FT215	–	–	–	–	–	–	–	–
		Acc. to DIN 42948				C 105	C 120	C 140	C 160	C 160	C 200	C 250	–	–	–	–	–	–	–	–
IM B14 2) 7)		K	–	All	All	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–
IM V19 2)		L	–	All	All	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–
IM V18 without protective cover 2)		M	–	All	All	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–
IM V18 with protective cover 2) 4) 5)		M	H00	All	All	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–
IM B34 3)		N	–	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–

For legends and footnotes, see Page 2/69.

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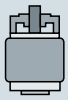
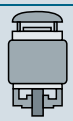
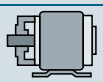
Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

Types of construction	Type of construc. letter 14th pos. of Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	Motor category																	
			Motor version	**Motor type (cast-iron)**	**Motor type – frame size**															
					71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315 S/M**	**315 L 2-pole**	**315 L 4-pole, 6-pole, 8-pole**
			IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**														
				1LE1601				**1LE1601 Performance Line ②**											
				1LE1541								**1LE1541 APAC Line ③**							
			IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**														
				1LE1603				**1LE1603 Performance Line ⑤**											
				1LE1543									**1LE1543 Basic Line ⑥**						
				1LE1643									**1LE1643 Performance Line ⑦**						
			IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**											
				1LE1604				**1LE1604 Performance Line ⑨**											
			NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**														
				1LE1621				**1LE1621 Eagle Line Performance ⑪**											
			NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**														
				1LE1623				**1LE1623 Eagle Line Performance ⑬**											
1LE1. . . - . . . . . - . ■ . . (-Z)		Order code	Motor version	Motor type	Frame size														
					71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-pole, 6-pole, 8-pole
With special flange next larger		**Acc. to EN 50347**			**FT100**	**FT115**	**FT130**	**FT165**	**FT165**	**FT215**	–	–	–	–	–	–	–	–	–
		Acc. to DIN 42948			**C 120**	**C 140**	**C 160**	**C 200**	**C 200**	**C 250**	–	–	–	–	–	–	–	–	–
IM B14 2) 7) 8)	**K**	**P01**	All	All	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM V19 2) 8) 	**L**	**P01**	All	All	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM V18 without protective cover 2) 8)	**M**	**P01**	All	All	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM V18 with protective cover 2) 4) 5) 8) 	**M**	**P01+ H00**	All	All	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–
IM B34 3) 8) 	**N**	**P01**	All except ③, ⑩, ⑪ 2, 4, 6-pole ≤ 200 hp and ⑫, ⑬ 8-pole ≤ 200 hp		✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–

□ Standard version
✓ With additional charge
O. R. Possible on request
– Not possible

1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

2) The type of construction is stamped on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

3) For North America export version Eagle Line 1LE1521/1LE1621 NEMA Energy Efficient, types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with NEMA MG1 Table 12-11.

4) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard design (without extra price).

5) The "Standard cylindrical shaft extension" option (order code **L05**) is not possible.

6) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

7) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

8) The flange installed for frame sizes 71 and 80 is 2 sizes larger (according to standard).

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Selection and ordering data

Motor protection	Motor protection letter 15th position in Article No.	Additional identification code with order code and plain text if required
1LE1. . . - . . . . . - . . ■ .		Order code

Motor version	Motor type (cast-iron)	71	80	90	100	112	132	160	180	200	225	250	280	315
IE2 High Efficiency	1LE1501	1LE1501 Basic Line ①												
	1LE1601				1LE1601 Performance Line ②									
	1LE1541								1LE1541 APAC Line ③					
IE3 Premium Efficiency	1LE1503	1LE1503 Basic Line ④												
	1LE1603				1LE1603 Performance Line ⑤									
	1LE1543									1LE1543 Basic Line ⑥				
	1LE1643									1LE1643 Performance Line ⑦				
IE4 Super Premium Efficiency	1LE1504				1LE1504 Basic Line ⑧									
	1LE1604				1LE1604 Performance Line ⑨									
NEMA Energy Efficient	1LE1521	1LE1521 Eagle Line Basic ⑩												
	1LE1621				1LE1621 Eagle Line Performance ⑪									
NEMA Premium Efficient	1LE1523	1LE1523 Eagle Line Basic ⑫												
	1LE1623				1LE1623 Eagle Line Performance ⑬									

Motor protection (winding protection)	Motor protection letter	Order code	Motor version	Motor type	71	80	90	100	112	132	160	180	200	225	250	280	315
Without motor protection [1]	A	–	All except ②, ⑤, ⑦, ⑨, ⑪ and ⑬		◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
Motor protection by PTC thermistors with 1 or 3 embedded temperature sensors for tripping [1] [2]	B	–	Standard version for Performance Line ②, ⑤, ⑦, ⑨, ⑪ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor protection by PTC thermistors with 2 or 6 embedded temperature sensors for alarm and tripping [2]	C	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor KTY 84-130 [2]	F	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor 2 × KTY 84-130 [2]	G	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 3 Pt100 resistance thermometers	H	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 6 Pt100 resistance thermometers	J	–	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
NTC thermistors for tripping	Z	Q2A	All	All	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–
Temperature detectors for tripping [2]	Z	Q3A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

◻ Standard version
✓ With additional charge
– Not possible

Note:

Options are available specifically for bearing protection –
For order codes and descriptions, see from Page 2/80.

[1] For the Performance Line, motor protection by means of PTC thermistors with 3 built-in temperature sensors for tripping (motor protection code B) is already included in the basic price. For the Performance Line, the option "without motor protection" (motor protection code A) is not possible.

[2] Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

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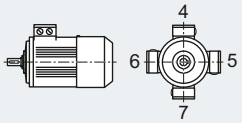
Selection and ordering data

Terminal box position



Motor version	Motor type (cast-iron)	Motor type – frame size 71	80	90	100	112	132	160	180	200	225	250	280	315
IE2 High Efficiency	1LE1501	1LE1501 Basic Line												
	1LE1601				1LE1601 Performance Line									
	1LE1541								1LE1541 APAC Line					
IE3 Premium Efficiency	1LE1503	1LE1503 Basic Line												
	1LE1603				1LE1603 Performance Line									
	1LE1543									1LE1543 Basic Line				
	1LE1643									1LE1643 Performance Line				
IE4 Super Premium Efficiency	1LE1504				1LE1504 Basic Line									
	1LE1604				1LE1604 Performance Line									
NEMA Energy Efficient	1LE1521	1LE1521 Eagle Line Basic												
	1LE1621				1LE1621 Eagle Line Performance									
NEMA Premium Efficient	1LE1523	1LE1523 Eagle Line Basic												
	1LE1623				1LE1623 Eagle Line Performance									

1LE1. . . - . . . . . - . . . ■	Order code	Motor version	Motor type	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315
Terminal box position																
Terminal box top [1] **4**	–	All	All	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
Terminal box on RHS [2] **5**	–	All	All	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box on LHS [2] **6**	–	All	All	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box at bottom [3] **7**	–	All	All	–	–	–	✓	✓	✓	✓	–	–	–	–	–	–

◻ Standard version
✓ With additional charge
– Not possible

[1] For types of construction with feet and flange-mounted with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

[2] For types of construction with feet and flange-mounted with feet, screwed-on feet are standard. Except for frame sizes 225, 250, 280 and 315: in which case for types of construction with feet and flange-mounted with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

[3] Not generally possible for motors with feet.

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Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category														
		Motor version	**Motor type (cast-iron)**	**Motor type – frame size**												
				71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
		IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**												
			1LE1601				**1LE1601 Performance Line ②**									
			1LE1541								**1LE1541 APAC Line ③**					
		IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**												
			1LE1603				**1LE1603 Performance Line ⑤**									
			1LE1543									**1LE1543 Basic Line ⑥**				
			1LE1643									**1LE1643 Performance Line ⑦**				
		IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**									
			1LE1604				**1LE1604 Performance Line ⑨**									
		NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**												
			1LE1621				**1LE1621 Eagle Line Performance ⑪**									
		NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**												
			1LE1623				**1LE1623 Eagle Line Performance ⑬**									
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
				71	80	90	100	112	132	160	180	200	225	250	280	315
Motor protection (bearing protection)																
Prepared for mounting a SIPLUS CMS 1000 vibration sensor	**Q05**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor protection with PTC thermistor with 3 embedded temperature sensors for tripping	**Q11** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor protection with PTC thermistor with 6 embedded temperature sensors for tripping and alarm	**Q12** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor KTY 84-130	**Q23** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with 2 × embedded temperature sensors KTY 84-130	**Q25** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature detectors for tripping	**Q31** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 × 3 temperature detectors for alarm and tripping	**Q32**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 3 Pt100 resistance thermometers in stator winding (2-wire circuit)	**Q60** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 6 Pt100 resistance thermometers in stator winding (2-wire circuit) [27]	**Q61** *New!*	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 1 Pt100 resistance thermometer in stator winding, 2-wire circuit	**Q62**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 3 Pt100 resistance thermometers in stator winding, three-wire circuit [30]	**Q63**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 6 Pt100 resistance thermometers in stator winding, three-wire circuit [30]	**Q64**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 2 Pt100 screw-in resistance thermometers in basic circuit for monitoring bearing temperature with rolling-contact bearings [2]	**Q72**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Installation of 2 Pt100 screw-in resistance thermometers in 3-wire circuit for monitoring bearing temperature with rolling-contact bearings	**Q78**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Installation of 2 Pt100 double screw-in resistance thermometers in 3-wire circuit for monitoring bearing temperature with rolling-contact bearings	**Q79**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Motor connection and terminal box																
External grounding	**H04**	All	All	✓	✓	✓	✓	✓	✓	✓	◻	◻	◻	◻	◻	◻
Terminal box on NDE [27]	**H08**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Second external grounding	**H70**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rotation of the terminal box through 90°, entry from DE	**R10**	All	All	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓
Rotation of the terminal box through 90°, entry from NDE	**R11**	All	All	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/87.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category													
		Motor version	**Motor type (cast-iron)**	**Motor type – frame size**											
				71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
		IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**												
			1LE1601				**1LE1601 Performance Line ②**									
			1LE1541								**1LE1541 APAC Line ③**					
		IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**												
			1LE1603				**1LE1603 Performance Line ⑤**									
			1LE1543									**1LE1543 Basic Line ⑥**				
			1LE1643									**1LE1643 Performance Line ⑦**				
		IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**									
			1LE1604				**1LE1604 Performance Line ⑨**									
		NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**												
			1LE1621				**1LE1621 Eagle Line Performance ⑪**									
		NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**												
			1LE1623				**1LE1623 Eagle Line Performance ⑬**									
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
				71	80	90	100	112	132	160	180	200	225	250	280	315
Motor connection and terminal box (continued)																
Rotation of the terminal box through 180°	**R12**	All	All	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓
One EMC cable gland	**R14**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
One metal cable gland	**R15**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EMC cable gland, maximum configuration	**R16**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stud terminal for cable connection, accessories pack (3 items)	**R17**	All	All	–	–	–	–	–	–	–	–	–	–	✓	✓	✓
Cable gland, maximum configuration	**R18**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Saddle terminal for connection without cable lug, accessories pack	**R19**	All	All	–	–	–	–	–	–	–	–	–	–	✓	✓	✓
3 cables protruding, 0.5 m long	**R20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–
3 cables protruding, 1.5 m long	**R21**	All	All	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
6 cables protruding, 0.5 m long	**R22**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–
6 cables protruding, 1.5 m long	**R23**	All	All	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
6 cables protruding, 3 m long	**R24**	All	All	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.
Reduction piece for M cable gland in accordance with British Standard, mounted on both cable entry openings	**R30**	All	All	–	–	–	✓	✓	✓	✓	–	–	–	–	–	–
Larger terminal box	**R50**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box without cable entry opening	**R51**	All	All	–	–	–	○	○	○	○	○	○	○	○	○	○
Drilled removable entry plate	**R52**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Undrilled removable entry plate	**R53**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Cast-iron auxiliary terminal box (small) 27)	**R62**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Silicon-free version	**R74**	All	All	–	–	–	◘	◘	◘	◘	◘	◘	◘	✓	✓	✓
Non-standard threaded through hole (NPT or G thread)	**Y61** • and customer specifications	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Windings and insulation																
Temperature class 155 (F), utilized acc. to 155 (F), with service factor	**N01**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 155 (F), with increased output	**N02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	**N03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/87.

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Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category														
		Motor version	**Motor type (cast-iron)**	**Motor type – frame size**												
				71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
		IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**												
			1LE1601				**1LE1601 Performance Line ②**									
			1LE1541								**1LE1541 APAC Line ③**					
		IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**												
			1LE1603				**1LE1603 Performance Line ⑤**									
			1LE1543									**1LE1543 Basic Line ⑥**				
			1LE1643									**1LE1643 Performance Line ⑦**				
		IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**									
			1LE1604				**1LE1604 Performance Line ⑨**									
		NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**												
			1LE1621				**1LE1621 Eagle Line Performance ⑪**									
		NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**												
			1LE1623				**1LE1623 Eagle Line Performance ⑬**									
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
				71	80	90	100	112	132	160	180	200	225	250	280	315
Windings and insulation (continued)																
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 180 (H)	**N10**	All except ③, ⑥, ⑦, ⑧, ⑨, ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 180 (H) at rated output and max. CT 60 °C [4) 5)]	**N11**	All except ⑧ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 60 to 100 g water per m^3 of air	**N21**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude	**Y50 •** and specified output, CT .. °C or IA .... m above sea level	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 155 (F), other requirements [5)]	**Y52 •** and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 180 (H), utilized according to 155 (F)	**Y75 •** and specified output, CT .. °C or IA .... m above sea level	All except ⑧ and ⑨		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Colors and paint finish																
Standard finish in RAL 7030 stone gray		Only possible for ①, ③, ④, ⑥, ⑧, ⑩ and ⑫		◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘
Unpainted (only cast-iron parts primed)	**S00**	All	All	○	○	○	○	○	○	○	○	○	○	○	○	○
Unpainted, only primed	**S01**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special finish	**S02** *New!*	All, standard version for Performance Line ②, ⑤, ⑦, ⑨, ⑪ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special finish sea air resistant	**S03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special paint for use offshore	**S04**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal coating	**S05**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Top coat polyurethane [33)]	**S06** *New!*	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog Section 1 "Introduction")	**Y53 •** and finish RAL....	Only possible for ①, ③, ④, ⑥, ⑧, ⑩ and ⑫		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog Section 1 "Introduction")	**Y56 •** *New!* and finish RAL	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category														
		Motor version	**Motor type (cast-iron)**	**Motor type – frame size**												
				71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
		IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**												
			1LE1601				**1LE1601 Performance Line ②**									
			1LE1541								**1LE1541 APAC Line ③**					
		IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**												
			1LE1603				**1LE1603 Performance Line ⑤**									
			1LE1543									**1LE1543 Basic Line ⑥**				
			1LE1643									**1LE1643 Performance Line ⑦**				
		IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**									
			1LE1604				**1LE1604 Performance Line ⑨**									
		NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**												
			1LE1621				**1LE1621 Eagle Line Performance ⑪**									
		NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**												
			1LE1623				**1LE1623 Eagle Line Performance ⑬**									
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
				71	80	90	100	112	132	160	180	200	225	250	280	315
Modular technology – Basic versions [6]																
Mounting of holding brake (standard assignment) [7) 31) 32)]	**F01**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of separately driven fan [28) 34)]	**F70**	Possible only for ⑧ and ⑨, except in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of 1XP8012-10 (HTL) rotary pulse encoder [8) 9)]	**G01**	Possible only for ⑧ and ⑨, except in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of 1XP8012-20 (TTL) rotary pulse encoder [8) 9)]	**G02**	Possible only for ⑧ and ⑨, except in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Modular technology – Additional versions																
Brake supply voltage 24 V DC	**F10**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Brake supply voltage 230 V AC, 50/60 Hz	**F11**	All	All	–	–	–	○	○	○	○	○	○	○	○	○	○
Brake supply voltage 400 V AC, 50/60 Hz [32)]	**F12**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mechanical manual brake release with lever (no locking)	**F50**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special technology [5)]																
Mounting of LL 861 900 220 rotary pulse encoder [10)]	**G04**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of HOG 9 D 1024 I rotary pulse encoder [10)]	**G05**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of HOG 10 D 1024 I rotary pulse encoder [10)]	**G06**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of POG10D rotary pulse encoder (only in combination with separately driven fan or brake) [11)]	**G07**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Mounting of POG9 rotary pulse encoder (only in combination with separately driven fan or brake) [11)]	**G08**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box moisture protection	**G15**	All except in combination with order code F90		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box dust protection	**G16**	All except in combination with order code F90		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed ... rpm), terminal box moisture protection	**Y74 •** and requ. speed .... rpm	All except in combination with order code F90		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed ... rpm), terminal box dust protection	**Y76 •** and requ. speed .... rpm	All except in combination with order code F90		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Mounting of rotary pulse encoder HOG 10 DN 1024 I + ESL 93, (integrated electronic speed switch, speed ... rpm), terminal box dust protection	**Y79 •** and requ. speed (max 3) .... rpm	All except in combination with order code F90		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓

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Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category													
		Motor version	**Motor type (cast-iron)**	**Motor type – frame size**											
				71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
		IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**												
			1LE1601				**1LE1601 Performance Line ②**									
			1LE1541								**1LE1541 APAC Line ③**					
		IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**												
			1LE1603				**1LE1603 Performance Line ⑤**									
			1LE1543									**1LE1543 Basic Line ⑥**				
			1LE1643									**1LE1643 Performance Line ⑦**				
		IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**									
			1LE1604				**1LE1604 Performance Line ⑨**									
		NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**												
			1LE1621				**1LE1621 Eagle Line Performance ⑪**									
		NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**												
			1LE1623				**1LE1623 Eagle Line Performance ⑬**									
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
				71	80	90	100	112	132	160	180	200	225	250	280	315
Mechanical design and degrees of protection																
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**	Possible only for ⑧ and ⑨, except in combination with order code F90 and only for 2-pole motors		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	**F78**	Possible only for ⑧ and ⑨, except in combination with order code F90 and only for 2-pole motors		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Prepared for mountings, center hole only	**G40**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	✓	✓	✓	✓	✓	✓	◻	◻	◻	◻	◻	◻
Prepared for mountings with D12 shaft	**G41**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Prepared for mountings with D16 shaft	**G42**	Possible only for ⑧ and ⑨, except in combination with order code F90		–	O. R.	O. R.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Protective cover for encoder (pre-assembled or supplied loose depending on frame size)	**G43**	Possible only for ⑧ and ⑨, except in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Protective cover [8) 10) 12)]	**H00**	Possible only for ⑧ and ⑨, except in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Screwed-on (instead of cast) feet	**H01**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3	**H02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	◻	◻
Condensation drainage holes	**H03**	All	All	✓	✓	✓	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻
Rust-resistant screws (externally)	**H07**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP65 degree of protection [14)]	**H20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP54 degree of protection	**H21**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
IP56 degree of protection [15)]	**H22**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar [13) 29)]	**H23**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grounding brush for converter operation	**L52**	All	All	–	–	–	–	–	–	–	–	–	–	–	✓	✓
Coolant temperature and installation altitude																
Coolant temperature –50 to +40 °C (degree of protection IP54)	**D02**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Coolant temperature –40 to +40 °C [16)]	**D03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Coolant temperature –30 to +40 °C [17)]	**D04**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Designs in accordance with standards and specifications																
VIK version	**C02**	Not possible for ⑧ and ⑨		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Motor without CE marking for export outside EEA (see EU Directive 640/2009)	**D22**	Not possible for ⑧ and ⑨		O	O	O	O	O	O	O	O	O	O	O	O	O
Electrical according to NEMA MG1-12 [18)]	**D30**	All, standard version for Eagle Line ⑩, ⑪, ⑫, ⑬ and ⑥, ⑦		O	O	O	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Version according to UL with "Recognition Mark" [18)]	**D31**	All, standard version for Eagle Line ⑩, ⑪, ⑫, ⑬ and ⑥, ⑦		O	O	O	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KEMCO Korea Energy Efficiency Label	**D33**	Only possible for ⑥ and ⑦		–	–	–	–	–	–	–	–	O	O	O	O	O
China Energy Efficiency Label	**D34**	All, for Eagle Line ①, ②, ④, ⑤, ⑩, ⑪, ⑫ and ⑬ from frame size 80 upwards		O	O	O	O	O	O	O	O	O	O	O	O	O
Canadian regulations (CSA) [17)]	**D40**	All, standard version for Eagle Line ⑥, ⑦, ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TR CU product safety certificate EAC for Eurasian customs union [35)]	**D47** *New!*	All	All	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category													
		Motor version	**Motor type (cast-iron)**	**Motor type – frame size**											
				71	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**
		IE2 High Efficiency	1LE1501	**1LE1501 Basic Line ①**												
			1LE1601				**1LE1601 Performance Line ②**									
			1LE1541								**1LE1541 APAC Line ③**					
		IE3 Premium Efficiency	1LE1503	**1LE1503 Basic Line ④**												
			1LE1603				**1LE1603 Performance Line ⑤**									
			1LE1543									**1LE1543 Basic Line ⑥**				
			1LE1643									**1LE1643 Performance Line ⑦**				
		IE4 Super Premium Efficiency	1LE1504				**1LE1504 Basic Line ⑧**									
			1LE1604				**1LE1604 Performance Line ⑨**									
		NEMA Energy Efficient	1LE1521	**1LE1521 Eagle Line Basic ⑩**												
			1LE1621				**1LE1621 Eagle Line Performance ⑪**									
		NEMA Premium Efficient	1LE1523	**1LE1523 Eagle Line Basic ⑫**												
			1LE1623				**1LE1623 Eagle Line Performance ⑬**									
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
				71	80	90	100	112	132	160	180	200	225	250	280	315
Bearings and lubrication																
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	**L19**	All, for ②, ⑤, ⑪ and ⑬ from frame size 160 upwards, for ⑨ from frame size 180 upwards and for ⑧ without additional charge		–	–	–	–	–	–	–	✓	✓	✓	✓	○	○
Located bearing DE	**L20**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Located bearing NDE	**L21**	All	All	✓	✓	✓	✓	✓	✓	◘	◘	◘	◘	◘	◘	◘
Bearing design for increased cantilever forces [36)]	**L22**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Regreasing device [1)]	**L23**	All, for ②, ⑤, ⑪ and ⑬ from frame size 160 upwards, for ⑨ from frame size 180 upwards and for ⑧ from frame size 280 upwards without additional charge		–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	◘	◘
Deep-groove bearings reinforced at both ends for DE and NDE, bearing size 63 [19)]	**L25**	All, standard version for ②, ⑤, ⑪ and ⑬, for ⑧ from frame size 280 upwards, for ⑨ from frame size 160 upwards		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	◘	◘
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	**L28**	All	All	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Bearing insulation DE	**L50**	All	All	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓
Bearing insulation NDE	**L51**	All	All	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓
Measuring nipple for SPM shock pulse measurement for bearing inspection [1)]	**Q01**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Balance and vibration quantity																
Vibration quantity level A		All	All	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘
Vibration quantity level B[20)]	**L00**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Half-key balancing (standard)		All	All	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘
Balancing without feather key, feather key is supplied	**L01**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Full-key balancing	**L02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shaft and rotor																
Shaft extension with standard dimensions, without feather keyway	**L04**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Standard cylindrical shaft extension	**L05**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Standard shaft made of stainless steel (e.g. 1.4021)	**L06**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	**L07**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	**L08**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard shaft extension, DE [21)]	**Y58** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard shaft extension, NDE [21)]	**Y59** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special shaft steel as requested by customer	**Y60** • and customer specifications	All	All	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.

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Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

Motor version	Motor type (cast-iron)	Motor type – frame size												
		71	80	90	100	112	132	160	180	200	225	250	280	315
IE2 High Efficiency	1LE1501	1LE1501 Basic Line ①												
	1LE1601				1LE1601 Performance Line ②									
	1LE1541								1LE1541 APAC Line ③					
IE3 Premium Efficiency	1LE1503	1LE1503 Basic Line ④												
	1LE1603				1LE1603 Performance Line ⑤									
	1LE1543									1LE1543 Basic Line ⑥				
	1LE1643									1LE1643 Performance Line ⑦				
IE4 Super Premium Efficiency	1LE1504				1LE1504 Basic Line ⑧									
	1LE1604				1LE1604 Performance Line ⑨									
NEMA Energy Efficient	1LE1521	1LE1521 Eagle Line Basic ⑩												
	1LE1621				1LE1621 Eagle Line Performance ⑪									
NEMA Premium Efficient	1LE1523	1LE1523 Eagle Line Basic ⑫												
	1LE1623				1LE1623 Eagle Line Performance ⑬									

Special versions	Additional identification code **-Z** with order code and plain text if required	Motor category: Motor version	Motor type	71	80	90	100	112	132	160	180	200	225	250	280	315
1LE1. . . - . . . . . - . . . . -Z	Order code	Motor version	Motor type	Frame size												
Heating and ventilation																
Sheet metal fan cover	**F74**	All, standard version for Performance Line ②, ⑤, ⑦, ⑨, ⑪, ⑬ and frame sizes 71 to 90		◻	◻	◻	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Metal external fan [22) 28)]	**F76**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Without external fan and without fan cover	**F90**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Anti-condensation heating for 230 V	**Q02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Anti-condensation heating for 115 V	**Q03**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Separately driven fan with non-standard voltage and/or frequency	**Y81** • and customer specifications	All	All	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓
Rating plate and extra rating plates																
Extra rating plate for voltage tolerance [23)]	**B07**	All, with the exception of 8-pole motors		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Second rating plate, loose	**M10**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rating plate, stainless steel	**M11**	All, for ②, ⑤, ⑪ and ⑬ without additional charge, for ⑨ normal version		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extra rating plate or rating plate with deviating rating plate data	**Y80** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extra rating plate with customer specifications	**Y82** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Additional information on rating plate and on package label (max. 20 characters)	**Y84** • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Adhesive label, supplied loose (Printed with: Article No., Serial No.: 2 lines of text)	**Y85** • and customer specifications	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extension of the liability for defects																
Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery [24)]	**Q80**	All, for Performance Line ②, ⑤, ⑦, ⑨, ⑪ and ⑬ 36 months standard		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery [24)]	**Q82**	All, for Performance Line ②, ⑤, ⑦, ⑨, ⑪ and ⑬ 36 months standard		–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓
Packaging, safety notes, documentation and test certificates																
Acceptance test certificate 3.1 according to EN 10204 [25)]	**B02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Printed German/English Operating Instructions enclosed [26)]	**B04**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Document - Electrical data sheet	**B60**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Document - Order dimensional drawing	**B61**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Standard test (routine test) with acceptance	**B65**	All	All	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Type test with heat run for horizontal motors, without acceptance	**B82**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Type test with heat run for horizontal motors, with acceptance	**B83**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connected in star for dispatch	**M01**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connected in delta for dispatch	**M02**	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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- ◘ Standard version
- ○ Without additional charge
- • This order code only determines the price of the version – Additional plain text is required
- ✓ With additional charge
- O. R. Possible on request
- – Not possible

1) Up to frame size 160 not possible when brake is mounted.

2) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

3) Parallel Whitworth threaded pipe ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) Threaded pipe for connections not sealed in the thread (cylindrical), external = G.

4) Cannot be used for motors in UL version (order code **D31**). The grease lifetime specified in Catalog Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.

5) Not possible for 1LE15 and 1LE16 motors with increased output.

6) A second shaft extension is not possible. Please inquire for mounted brakes.

7) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.

8) The 1XP8 rotary pulse encoders are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

9) In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.

10) The LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

11) Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without a separately driven fan). This option can be used in combination with brakes of type KFB. This option cannot be used in combination with brakes of type 2LM8.

12) Order code **H00** provides mechanical protection for encoders.

13) Not possible for type of construction IM V3.

14) Not possible in combination with HOG 9 D 1024I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).

15) Not possible in combination with brake 2LM8 – order code **F01**.

16) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.

17) The rated voltage is indicated on the rating plate without voltage range. Order code **D40** does not authorize importing into Canada. The North America export versions Eagle Line 1LE1521/1LE1621 NEMA Energy Efficient and 1LE1523/1LE1623
NEMA Premium Efficient are available for this purpose.

18) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes **D30** and **D31** do not authorize importing into USA and Mexico. The North America export versions Eagle Line 1LE1521/1LE1621 NEMA Energy Efficient and 1LE1523/1LE1623 NEMA Premium Efficient are available for this purpose.

19) For Performance Line motors (all frame sizes) and Basic Line motors (from frame size 280) in the standard version.

20) On request for 2-pole motors (concerns frame sizes 225 to 315).

21) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
– Dimensions E and EA ≤2 × length E (normal) of the shaft extension.

22) Converter operation is permitted for 1LE1 motors with metal external fans.

23) Can be ordered for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code "**22**" or "**34**"). Not possible for 8-pole motors and in combination with order code **D34**.

24) Wear parts (bearings) are excluded from the warranty extension.

25) The delivery time for the factory test certificate may differ from the delivery time for the motor.

26) The Operating Instructions (compact) are available in PDF format for all official EU languages at
http://support.automation.siemens.com/WW/view/en/10803948/133300.

27) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").

28) Order codes **F70** and **F76** cannot be combined.

29) Not possible in combination with order codes **Q72** and **Q78**.

30) For frame sizes 100 to 132 only possible in combination with order code **R50**.

31) Not possible in combination with order codes **N05**, **N06**, **N07**, **N08** and **N11**.

32) For frame size 315, when combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.

33) Order code **S06** cannot be combined with order code **S00**, **S01** and **S02**. It can be combined with **Y53** and **Y56** on request.

34) Order codes **F70** (separately driven fan) and **H02** (vibration-proof version) cannot be combined for motors in frame sizes 71, 80 and 90.

35) Please note the additional use of order code **D22** "Motor without CE marking for export outside EEA (see EU Directive 640/2009)".

36) A minimum cantilever force F_{min} of 0.5 · F_{max} is required for NU bearings (cylindrical roller bearings) in contrast to bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.

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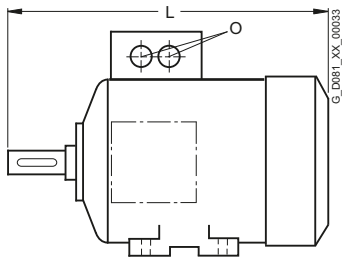
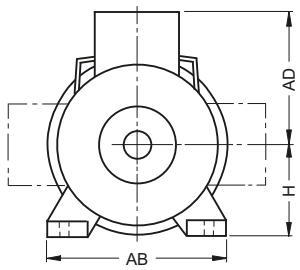
Overview





Frame size	Type	Dimension L	AD	H	AB	O
71 M	Cast-iron series, self-ventilated					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0CA2, 0CB2, 0CC2	240	148	71	132	2 × M25 × 1.5
	1LE1503-, 1LE1523-0CA3, 0CB3, 0CC3	280	148	71	132	2 × M25 × 1.5
80 M	Aluminum series, self-ventilated					
	1LE1001	292	121	80	150	1 × M25 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001	253	121	80	150	1 × M25 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0DA2, 0DB2, 0DC2	292	158	80	150	2 × M25 × 1.5
	1LE1503-, 1LE1523-0DA3, 0DB3, 0DC3	327	158	80	150	2 × M25 × 1.5
90 S/ 90 L	Aluminum series, self-ventilated					
	1LE1001	347	126	90	165	1 × M25 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001	295	126	90	165	1 × M25 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-0EA0, 0EB0, 0EC0	347	163	90	165	2 × M25 × 1.5
	1LE1503-, 1LE1523-0EA4, 0EB4, 0EC4	387	163	90	165	2 × M25 × 1.5
100 L	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	396 [1]	166	100	196	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	431 [1]	166	100	196	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	322	166	100	196	2 × M32 × 1.5
	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	431	166	100	196	2 × M32 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	357	166	100	196	2 × M32 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	389	193	100	196	2 × M32 × 1.5
	1LE1523, 1LE1623	425	193	100	196	2 × M32 × 1.5

Frame size	Type	Dimension L	AD	H	AB	O
112 M	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	389 [1]	177	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	414 [1]	177	112	226	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	311	177	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	414	177	112	226	2 × M32 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	336	177	112	226	2 × M32 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	382	195	112	226	2 × M32 × 1.5
	1LE1523, 1LE1623	409	195	112	226	2 × M32 × 1.5
132 S/M	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	465 [1]	202	132	256	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	515 [1]	202	132	256	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	381	202	132	256	2 × M32 × 1.5
	Aluminum series, self-ventilated					
	1LE1003-, 1LE1023-					
	1CA0, 1CC0, 1CC2	465	202	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3	515	202	132	256	2 × M32 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023-					
	1CA0, 1CC0, 1CC2	381	202	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3	431	202	132	256	2 × M32 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	457	215	132	256	2 × M32 × 1.5
	1LE1523-, LE1623-					
	1CA0, 1CC0, 1CC2	458	215	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3	508	215	132	256	2 × M32 × 1.5

[1] The length is specified as far as the tip of the fan cover.

[2] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension L is 664 mm.

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Overview (continued)

Frame size	Type	Dimension L	AD	H	AB	O
160 M/L	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	604 [1) 2)]	237	160	300	2 × M40 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	664 [1)]	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	510	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	594	265	160	300	2 × M40 × 1.5
160 M	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	604	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	510	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
	1LE1523, 1LE1623	596	261	160	300	2 × M40 × 1.5
160 L	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	664	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	570	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
	1LE1523, 1LE1623	656	261	160	300	2 × M40 × 1.5
180 M	Aluminum series, self-ventilated					
	1LE1001					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1.5
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1.5
	1EA6	698				
	1LE15.3-, 1LE16.3-					
	1EB2	668	286	180	339	2 × M40 × 1.5
	1EA2	698				
180 L	Aluminum series, self-ventilated					
	1LE1001					
	1EB4, 1EC4, 1ED4	668	286	180	339	2 × M40 × 1.5
	1EA6, 1EB6, 1EC6, 1ED6	698				
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	1EC4, 1EC6	668	286	180	339	2 × M40 × 1.5
	1EB6	698				
	1LE15.3-, 1LE16.3-					
	1EC4	668	286	180	339	2 × M40 × 1.5
	1EB4	698				
200 L	Aluminum series, self-ventilated					
	1LE1001					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	721	315	200	378	2 × M50 × 1.5
	2AA6, 2AB6, 2AC6, 2AD6	746				
	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	721	315	200	378	2 × M50 × 1.5
	2AA6	746				
	1LE15.3-, 1LE16.3-					
	2AA4, 2AC4	721	315	200	378	2 × M50 × 1.5
	2AA5, 2AB5, 2AC5	746				

Frame size	Type	Dimension L	AD	H	AB	O
225 S	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	2BB0, 2BD0	788	338	225	436	2 × M50 × 1.5
	1LE15.3-, 1LE16.3-					
	2BB0	788	338	225	436	2 × M50 × 1.5
225 M	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	2BA2, 2BA6	818	338	225	436	2 × M50 × 1.5
	2BB2, 2BB6, 2BC2, 2BC6, 2BD6	848				
	1LE15.3-, 1LE16.3-					
	2BA2	818	338	225	436	2 × M50 × 1.5
	2BB2, 2BC2	848				
250 M	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	2CA2, 2CA6, 2CB2, 2CC2, 2CC6, 2CD2, 2CD6	887	410	250	490	2 × M63 × 1.5
	2CB6	957				
	1LE15.3-, 1LE16.3-					
	2CA2, 2CB2, 2CC2	887	410	250	490	2 × M63 × 1.5
280 S	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	2DA0, 2DB0, 2DC0, 2DD0	960	433	280	540	2 × M63 × 1.5
	1LE15.3, 1LE16.3					
	2DA0, 2DB0, 2DC0	960	433	280	540	2 × M63 × 1.5
280 M	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	2DA2, 2DB2, 2DC2, 2DC6, 2DD2, 2DD6	960	433	280	540	2 × M63 × 1.5
	2DA6, 2DB6	1070				
	1LE15.3-, 1LE16.3-					
	2DC2	960	433	280	540	2 × M63 × 1.5
	2DA2, 2DB2	1070				
315 S	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	3AA0	1052	515	315	610	2 × M63 × 1.5
	3AB0, 3AC0, 3AD0	1082				
	1LE15.3-, 1LE16.3-					
	3AA0	1052	515	315	610	2 × M63 × 1.5
	3AB0, 3AC0	1082				
315 M	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	3AC2, 3AD2	1082	515	315	610	2 × M63 × 1.5
	3AA2	1217				
	3AB2	1247				
	1LE15.3-, 1LE16.3-					
	3AA2	1217	515	315	610	2 × M63 × 1.5
	3AB2, 3AC2	1247				
315 L	Cast-iron series, self-ventilated					
	1LE15.1-, 1LE16.1-					
	3AA4	1217	515	315	610	2 × M63 × 1.5
	3AB4, 3AC4, 3AC5, 3AD4, 3AD5, 3AD6	1247				
	3AA5, 3AA6	1372				
	3AB5, 3AB6, 3AC6	1402				
	1LE15.3-, 1LE16.3-					
	3AA4	1217	515	315	610	2 × M63 × 1.5
	3AB4, 3AC4	1247	515	315	610	2 × M63 × 1.5
	3AA5	1372				
	3AB5, 3AC5, 3AC6	1402				

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Notes on the dimensions

Overview

- Dimensional drawings according to EN 50347 and IEC 60072.
- Fits
  The shaft extensions specified in the dimension tables (DIN 748) and centering spigot diameters (EN 50347) are machined with the following fits:

Dimension designation D, DA	ISO fit ISO 286-2	
	to 30	j6
	over 30 to 50	k6
	over 50	m6
N	to 250	j6
	over 250	h6
F, FA		h9
K		H17
S	Flange (FF)	H17

  The drilled holes of couplings and belt pulleys should have an ISO fit of at least H7.

- Dimension tolerances
  For the following dimensions, the admissible deviations are given below:

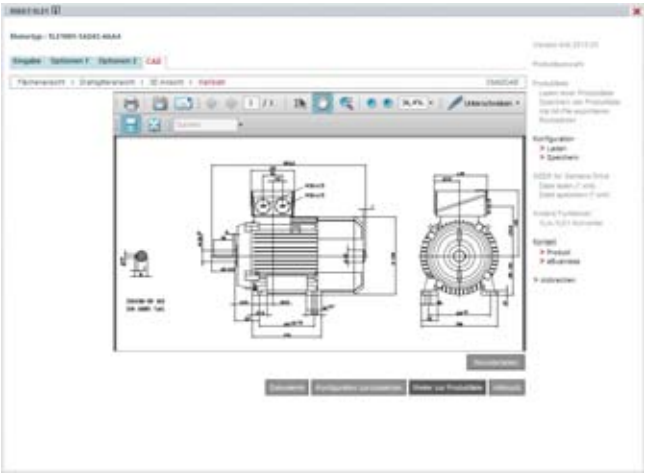
Dimension designation	Dimension	Admissible deviation
H	to 250	– 0.5
	over 250	– 1.0
E, EA		– 0.5

  Keyways and feather keyways (dimensions GA, GC, F and FA) are made in compliance with DIN 6885 Part 1.
- All dimensions are specified in mm.

Dimension sheet generator (within the Drive Technology Configurator)

Overview

A dimensional drawing can be created in the Drive Technology (DT) Configurator for every configurable motor. A dimensional drawing can be requested for every other motor.



When a complete Article No. is entered with or without order codes, a dimensional drawing can be called up under the "Documentation" tab.
These dimensional drawings can be presented in different views and sections and printed.
The corresponding dimension sheets can be exported, saved and processed further in DXF format (interchange/import format for CAD systems) or as bitmap graphics.

Online access in the Siemens Industry Mall

The DT Configurator is integrated into the Siemens Industry Mall and can be used on the Internet without installation.
English: www.siemens.com/dt-configurator

Offline access in the Interactive Catalog CA 01

The DT Configurator is also part of the Interactive Catalog CA 01 on DVD – the offline version of Siemens Industry Mall. CA 01 can be ordered from the relevant Siemens sales office or via the Internet: www.siemens.com/automation/CA01

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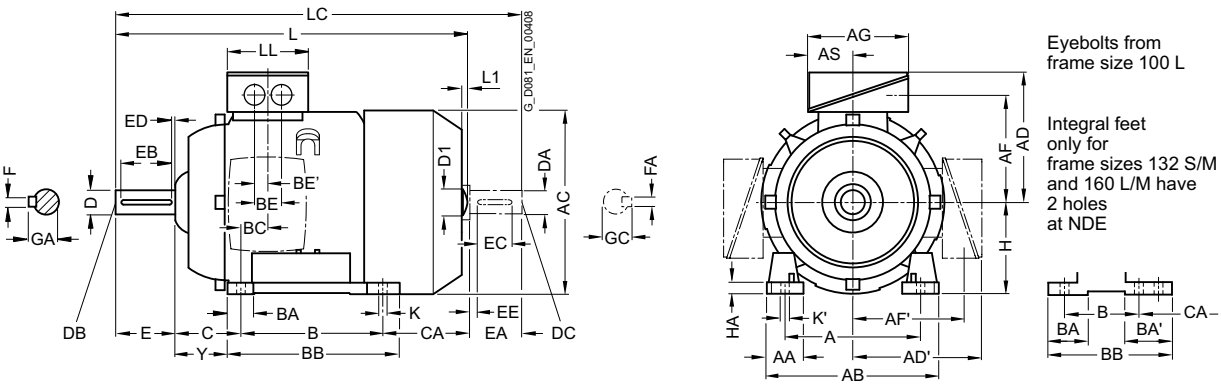
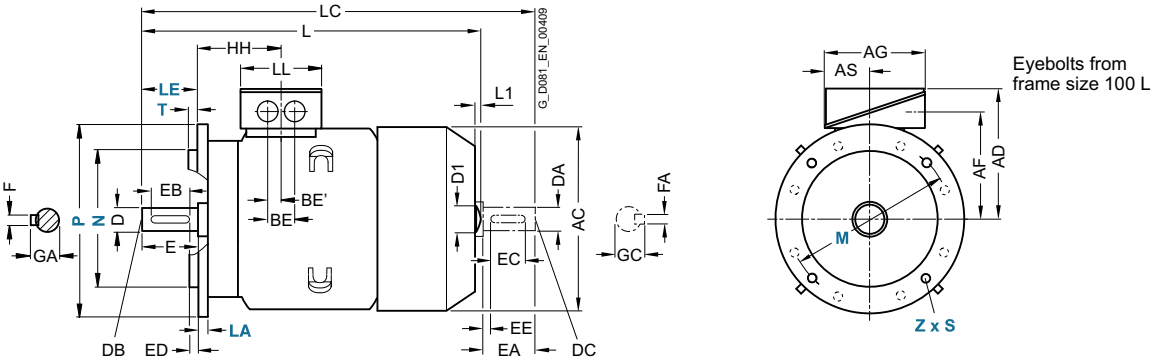
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE15.3- 1LE16.3-	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	1LE15.3- 0..0, 0..2 0..3, 0..4	2, 4, 6	112	27	132	138.5	148	148	112	112	126	62	90	–	–	106	20.5	36	18	45	–	71	7	37
80 M	1LE15.3- 0..0, 0..2 0..3, 0..4	2, 4, 6	125	27	150	156	158	158	122	122	129	62	100	–	–	118	21.5	36	18	50	–	80	8.5	41
90 S	1LE15.3- 0..0, 0..2 0..3, 0..4	2, 4, 6	140	30.5	165	173.5	163	163	127	127	129	62	100	–	–	143	23.5	36	18	56	–	90	11	47
90 L	1LE15.3	2, 4, 6	140	30.5	165	173.5	163	163	127	127	129	62	125	–	–	143	23.5	36	18	56	–	90	11	47
100 L	All	2, 4, 6	160	42	196	198	193	193	147	147	163	80.5	140	40	–	176	37.5	48	24	63	176	100	12	45
112 M	All	2, 4, 6	190	46	226	222	195	195	150	150	163	80.5	140	40	–	176	30	48	24	70	155	112	12	52
132 S	1CA0, 1CC0	2, 6	216	53	256	262	214.5	214.5	169	169	163	80.5	140	44	81 [1]	218 [2]	26.5	48	24	89	128.5	132	15	69
	1CA1, 1CB0	2, 4													–						178.5			
132 M	1CC2	6	216	53	256	262	214.5	214.5	169	169	163	80.5	178	44	81 [1]	218	26.5	48	24	89	128.5	132	15	69
	1CB2, 1CC3	4, 6, 8													–						178.5			
160 M	All	2, 4, 6	254	60	300	314	261	261	213	213	190	92	210	51	95 [3]	300 [4]	37	60	30	108	148	160	18	85
160 L	All	2, 4, 6	254	60	300	314	261	261	213	213	190	92	254	51	95 [3]	300	37	60	30	108	208	160	18	85

* This dimension is assigned in EN 50347 to the frame size listed.
[1] With screwed-on feet, dimension BA' is 43 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.

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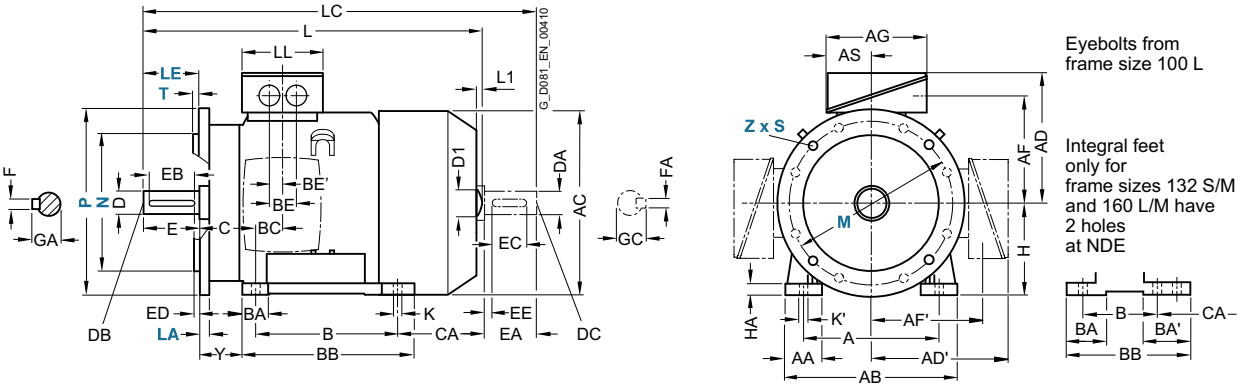
Dimensional drawings (continued)

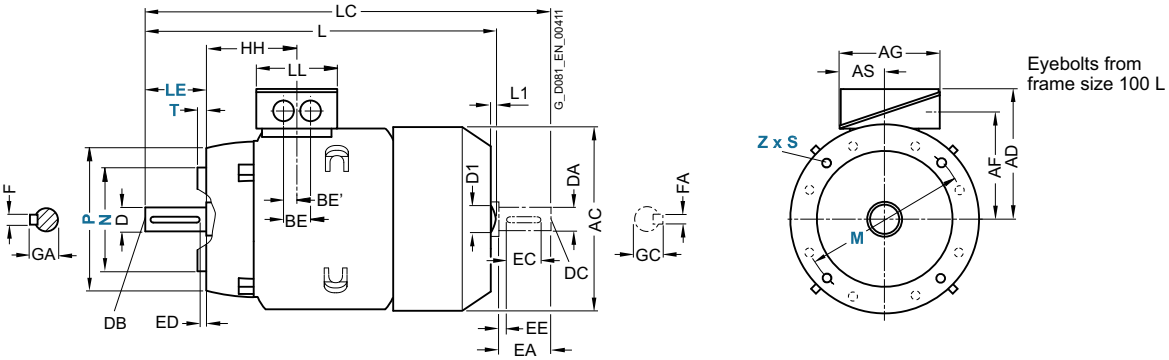
Type of construction IM B35

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE15.3- 1LE16.3-	No. of poles	HH	K	K'	L [1]	L1 [2]	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
71 M	1LE15.3- 0..0, 0..2 0..3, 0..4	2, 4, 6	64.5	7	7	240 280	–	–	278 318	102	14	M5	30	22	4	5	16	14	M5	30	16	4	5	16
80 M	1LE15.3- 0..0, 0..2 0..3, 0..4	2, 4, 6	71.5	10	10	292 327	–	–	343 378	102	19	M6	40	32	4	6	21.5	19	M6	40	16	4	6	21.5
90 S	1LE15.3- 0..0, 0..2 0..3, 0..4	2, 4, 6	79.5	10	10	347 387	–	–	405 445	102	24	M8	50	40	5	8	27	19	M6	40	27	4	6	21.5
90 L	1LE15.3	2, 4, 6	79.5	10	10	387	–	–	445	102	24	M8	50	40	5	8	27	19	M6	40	27	4	6	21.5
100 L	All	2, 4, 6	100.5	12	16	425.5	7	32	489	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4, 6	100.5	12	16	408.5	7	32	475	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0, 1CC0	2, 6	115.5	12	16	458	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CA1, 1CB0	2, 4				508			585.5															
132 M	1CC2	6	115.5	12	16	458	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CB2, 1CC3	4, 6				508			585.5															
160 M	All	2, 4, 6	145	15	19	596	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6	145	15	19	656	10	45	790	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

[1] For 1LE15 motors, plus dimension L1.
[2] Only for 1LE15 motors.

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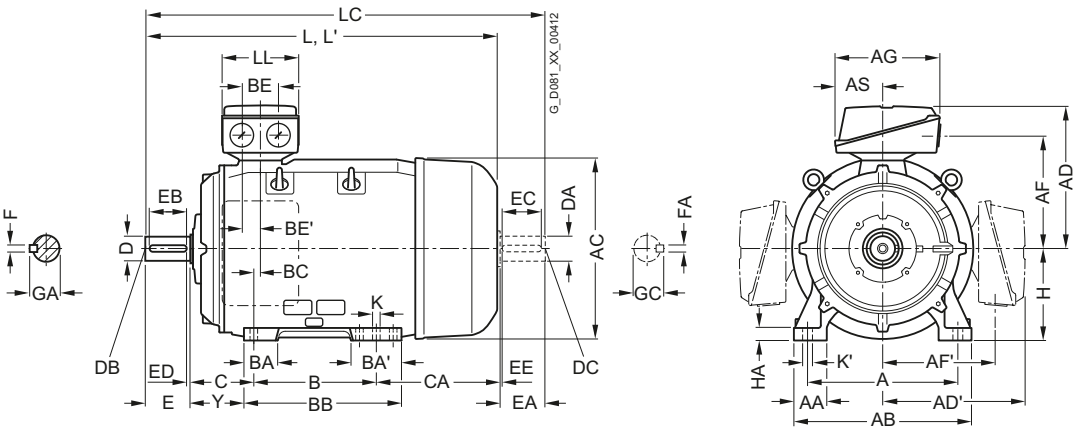
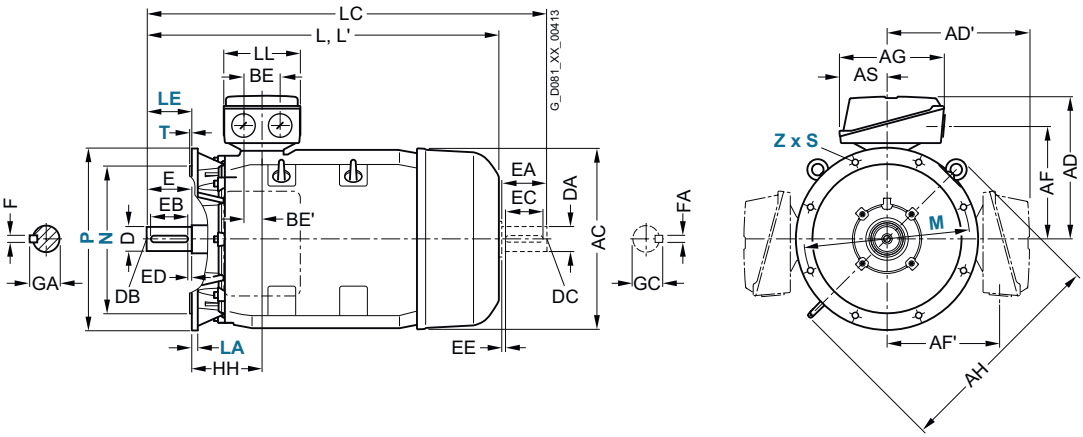
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																			
Frame size	Motor type 1LE1503-, 1LE1523-, 1LE1543- 1LE1603-, 1LE1623-, 1LE1643-	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AH	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*
180 M/	1EB2, 1EC4	4, 6	279	65	339	356	286	286	234	234	190	468	92	241	85	120	328	34	60	30	121	202
180 L	1EA2, 1EB4	2, 4																				
200 L	2AA4, 2AC4	2, 6	318	70	378	396	315	315	259	259	266	533	112	305	104	104	355	31	85	42.5	133	177
	2AA5. 2AB5.2AC5	2, 4, 6																				
225 S	2BB0	4	356	80	436	449	338	338	282	282	266	556	112	286	92	117	361	15	85	42.5	149	218
225 M	2BA2	2	356	80	436	449	338	338	282	282	266	556	112	311	92	117	361	15	85	42.5	149	253
	2BB2, 2BC2	4, 6																				
250 M	2CA2	2	406	100	490	497	410	410	322	322	319	620	145	349	102	102	409	24	110	55	168	230
	2CB2, 2CC2	4, 6																				
280 S	2DA0	2	457	100	540	551	433	433	345	345	319	672	145	368	101	152	479	20	110	55	190	267
	2DB0, 2DC0	4, 6																				
280 M	2DC2	6	457	100	540	551	433	433	345	345	319	672	145	419	101	152	479	20	110	55	190	216
	2DA2	2																				326
	2DB2	4																				
315 S	3AA0	2	508	120	610	616	515	515	404	404	374	780	164	406	113	170	527	22	110	55	216	295
	3AB0, 3AC0	4, 6																				
315 M [1]	3AA2	2	508	120	610	616	515	515	404	404	374	780	164	457	113	170	578	22	110	55	216	409
	3AB2, 3AC2	4, 6																				
315 L [1]	3AA4	2	508	120	610	616	515	515	404	404	374	780	164	508	113	170	578	22	110	55	216	358
	3AB4, 3AC4	4, 6																				
	3AA5	2													176	227	648					513
	3AB5, 3AC5, 3AC6	4, 6																				

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

[1] With order codes for terminal box positions (**K05**, **K06**, **H01**) only screwed-on feet with 3 drilled holes with dimension "B" (406, 457 and 506 mm). The dimension "BB" will then be 666 mm.

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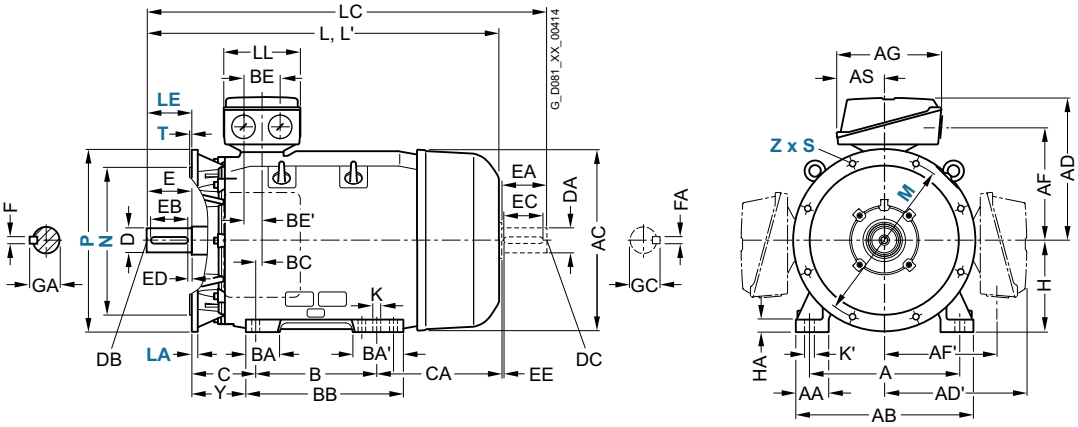
Dimensional drawings (continued)

Type of construction IM B35

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



For motor	Dimension designation acc. to **IEC**										DE shaft extension							NDE shaft extension						
Motor type 1LE1503-, 1LE1523-, 1LE1543- 1LE1603-, 1LE1623-, 1LE1643-	H	HA	Y	HH	K	K'	L	L' [1]	LC [2]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
1EB2, 1EC4	180	20	95	155	15	19	668	668	784	165	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
1EA2, 1EB4							698	698	814															
2AA4, 2AC4	200	25	108	164	19	25	721	755	835	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
2AA5. 2AB5.2AC5							746	780	860															
2BB0	225	34	124	164	19	25	788	–	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BA2	225	34	124	164	19	25	818	852	933	197	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5
2BB2, 2BC2							848	–	963		60		140	125	10	18	64	55	M20				16	59
2CA2	250	40	138	192	24	30	887	924	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2CB2, 2CC2								–	1032		65						69	60		140	125	10	18	64
2DA0	280	40	160	210	24	30	960	998	1105	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB0, 2DC0								–			75					20	79.5	65						69
2DC2	280	40	160	210	24	30	960	–	1105	233	75	M20	140	125	10	20	79.5	65	M20	140	125	10	18	69
2DA2							1070	1108	1215		65					18	69	60						64
2DB2								–			75					20	79.5	65						69
3AA0	315	50	181	238	28	35	1052	1122	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB0, 3AC0							1082	–	1227		80		170	140	25	22	85	70					20	74.5
3AA2	315	50	181	238	28	35	1217	1287	1362	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB2, 3AC2							1247	–	1392		80		170	140	25	22	85	70					20	74.5
3AA4	315	50	181	238	28	35	1217	1287	1362	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB4, 3AC4							1247	–	1392		80		170	140	25	22	85	70					20	74.5
3AA5			146				1372	1442	1517		65		140	125	10	18	69	60					18	64
3AB5, 3AC5, 3AC6							1402	–	1547		80		170	140	25	22	85	70					20	74.5

[1] For version with low-noise fan for 2-pole motors.

[2] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

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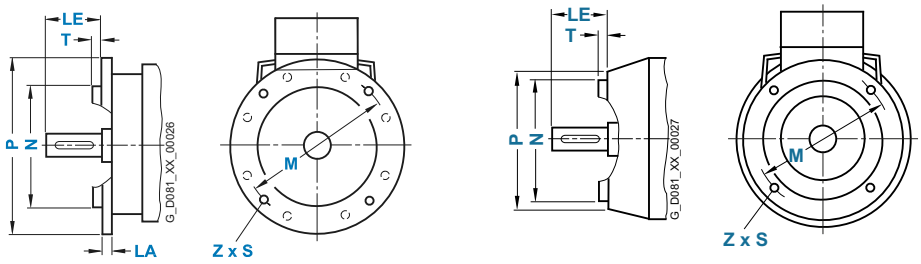
Overview (continued)



In EN 50347, the frame sizes are allocated flange FF with through holes and flange FT with tapped holes.
The designation of flange A and C according to DIN 42948 (invalid since September 2003) are also listed for information purposes. See the table below. (**Z** = the number of retaining holes)

Frame size	Type of construction	Flange type	Flange with through holes (**FF**/A) Flange with tapped holes (**FT**/C)		Dimension designation acc. to **IEC**							
			Acc. to EN 50347	Acc. to DIN 42948	**LA**	**LE**	**M**	**N**	**P**	**S**	**T**	**Z**
71 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF130**	A 160	9	30	130	110	160	10	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT85**	C 105	–	30	85	70	105	M6	2.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT115**	C 140	–	30	115	95	140	M8	3	4
80 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF165**	A 200	10	40	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT100**	C 120	–	40	100	80	120	M6	3	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT130**	C 160	–	40	130	110	160	M8	3.5	4
90 S/L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF165**	A 200	10	50	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT115**	C 140	–	50	115	95	140	M8	3	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT130**	C 160	–	50	130	110	160	M8	3.5	4
100 L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF215**	A 250	11	60	215	180	250	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code **P01**	**FF265**	A 300	12	60	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF165**	A 200	11	60	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT130**	C 160	–	60	130	110	160	M8	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT165**	C 200	–	60	165	130	200	M10	3.5	4
112 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF215**	A 250	11	60	215	180	250	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code **P01**	**FF265**	A 300	12	60	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF165**	A 200	11	60	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT130**	C 160	–	60	130	110	160	M8	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT165**	C 200	–	60	165	130	200	M10	3.5	4
132 S/M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF265**	A 300	12	80	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code **P01**	**FF300**	A 350	13	80	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF215**	A 250	11	80	215	180	250	14.5	4	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT165**	C 200	–	80	165	130	200	M10	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code **P01**	**FT215**	C 250	–	80	215	180	250	M12	4	4
160 M/L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF300**	A 350	13	110	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF265**	A 300	12	110	265	230	300	14.5	4	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	**FT215**	C 250	–	110	215	180	250	M12	4	4
180 M/L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF300**	A 350	13	110	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF 265**	A 300	12	110	265	230	300	14.5	4	4
200 L	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF350**	A 400	15	110	350	300	400	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code **P02**	**FF300**	A 350	13	110	300	250	350	18.5	5	4
225 S/M 2-pole 4- ... 8-pole	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF400**	A 450	16	110 140	400	350	450	18.5	5	8
250 M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF500**	A 550	18	140	500	450	550	18.5	5	8
280 S/M	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF500**	A 550	18	140	500	450	550	18.5	5	8
315 S/M/L 2-pole 4- ... 8-pole	IM B5, IM B35, IM V1, IM V3	Standard flange	**FF600**	A 660	22	140 170	600	550	660	24	6	8