

Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043 – self-ventilated

Selection and ordering data

P _{rated} , 50 Hz/ P50	Frame size	IE class	Operating values at rated power										L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Aluminum series 1LE0323 Cast-iron series 1LE0043 Article No.	m _{IM B3}	J
			η _{rated} 50 Hz	T _{rated} 50 Hz	η _{rated} 50 Hz, 4/4	η _{rated} 50 Hz, 3/4	η _{rated} 50 Hz, 2/4	COSφ _{rated} 50 Hz, 4/4	I _{rated} 50 Hz, 400 V	Star- ting current	Star- ting torque	Break down torque					
kW	FS		rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²
_ Cooling: Self-ventilated (IC 411)																	
_ Efficiency according to IEC 60034-30: IE3 Premium Efficiency																	
_ 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, 230 VΔ / 400 VY																	
0.75	80 M	IE3	2835	2.5	80.7	82.9	82.9	0.86	1.56	6.0	2.6	3.0	54	65	1LE0323-0DA22-2 ■■■■	12.5	0.00208
1.1	80 M	IE3	2850	3.7	82.7	84.0	83.9	0.83	2.30	6.5	2.6	3.4	54	65	1LE0323-0DA32-2 ■■■■	13	0.00154
1.5	90 S	IE3	2870	5.0	84.2	84.8	82.3	0.86	3.00	7.0	2.0	3.0	58	70	1LE0323-0EA02-2 ■■■■	18	0.00276
2.2	90 L	IE3	2890	7.3	85.9	87.2	86.5	0.88	4.20	7.5	2.8	3.6	58	70	1LE0323-0EA42-2 ■■■■	22	0.00356
3	100 L	IE3	2865	10.0	87.1	88.3	88.3	0.87	5.7	8.0	3.7	3.6	60	72	1LE0323-1AA42-2 ■■■■	29	0.00462
4	112 M	IE3	2915	13.1	88.1	89.6	89.8	0.90	7.3	7.8	2.6	3.6	62	74	1LE0323-1BA22-2 ■■■■	36	0.00879
5.5	132 S	IE3	2930	17.9	89.2	90.2	90.3	0.89	10.0	7.5	2.3	3.6	65	77	1LE0323-1CA02-2 ■■■■	50	0.01847
7.5	132 S	IE3	2930	24.4	90.1	91.5	92.2	0.90	13.4	7.5	2.3	3.6	65	77	1LE0323-1CA12-2 ■■■■	56	0.02323
2-pole: 3000 rpm at 50 Hz, 400 VΔ / 690 VY																	
3	100 L	IE3	2865	10.0	87.1	88.3	88.3	0.87	5.7	8.0	3.7	3.6	60	72	1LE0323-1AA43-4 ■■■■	29	0.00462
4	112 M	IE3	2865	10.0	87.1	88.3	88.3	0.87	5.7	8.0	3.7	3.6	60	72	1LE0323-1BA23-4 ■■■■	36	0.00879
5.5	132 S	IE3	2915	13.1	88.1	89.6	89.8	0.90	7.3	7.8	2.6	3.6	62	74	1LE0323-1CA03-4 ■■■■	50	0.01847
7.5	132 S	IE3	2930	17.9	89.2	90.2	90.3	0.89	10.0	7.5	2.3	3.6	65	77	1LE0323-1CA13-4 ■■■■	56	0.02323
11	160 M	IE3	2930	24.4	90.1	91.5	92.2	0.90	13.4	7.5	2.3	3.6	65	77	1LE0323-1DA23-4 ■■■■	84	0.03903
15	160 M	IE3	2935	35.8	91.2	92.0	91.7	0.89	19.6	7.5	2.3	3.4	69	81	1LE0323-1DA33-4 ■■■■	94	0.0472
18.5	160 L	IE3	2935	48.8	91.9	92.6	92.5	0.89	26.5	7.5	2.4	3.4	69	81	1LE0323-1DA43-4 ■■■■	109	0.05773
22	180 M	IE3	2935	60.2	92.4	93.0	92.9	0.89	32.5	7.8	2.4	3.4	69	81	1LE0043-1EA23-4 ■■■■	162	0.0835
30	200 L	IE3	2950	71.2	92.7	93.0	92.4	0.89	38.5	7.8	2.4	3.4	70	83	1LE0043-2AA43-4 ■■■■	219	0.146
37	200 L	IE3	2955	97	93.3	93.4	92.4	0.89	52	7.8	2.4	3.4	71	84	1LE0043-2AA53-4 ■■■■	248	0.181
45	225 M	IE3	2960	119	93.7	93.9	93.3	0.89	64	8.5	2.6	3.4	71	84	1LE0043-2BA23-4 ■■■■	322	0.301

Voltages

For other voltages and more information, see from page 2/6

Types of construction

Without flange IM B3

Version

Standard

For other types of construction and more information, see from page 2/7

Motor protection

Without

Version

Standard

For other motor protection and more information, see from page 2/8

Terminal box position

Terminal box at top

Version

Standard

Special versions

For options, see from page 2/9

1LE0 ... - -Z ...+...+...+...

Order code

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Order code

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Order code

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Order code

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Order code

Innomotics FL standard motors

IE3

Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043 – self-ventilated

Selection and ordering data

P _{rated} , 50 Hz/ P50	Frame size	IE class	Operating values at rated power										L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Aluminum series 1LE0323 Cast-iron series 1LE0043 Article No.	m _M B3	J
			η _{rated} 50 Hz	T _{rated} 50 Hz	η _{rated} 50 Hz, 4/4	η _{rated} 50 Hz, 3/4	η _{rated} 50 Hz, 2/4	COSφ _{rated} 50 Hz, 4/4	I _{rated} 50 Hz, 400 V	Star- ting current	Star- ting torque	Break down torque					
kW	FS		rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²
_ Cooling: Self-ventilated (IC 411)																	
_ Efficiency according to IEC 60034-30: IE3 Premium Efficiency																	
_ 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, 230 VΔ / 400 VY																	
0.55	80 M	IE3	1445	3.6	80.8	81.8	80.2	0.76	1.29	5.5	2.2	3.2	45	56	1LE0323-0DB22-2 ■■■	11	0.00216
0.75	80 M	IE3	1440	5.0	82.5	82.9	80.7	0.75	1.75	6.0	2.6	3.7	45	56	1LE0323-0DB32-2 ■■■	13	0.00250
1.1	90 S	IE3	1445	7.3	84.1	85.1	83.9	0.79	2.4	6.5	2.7	3.7	47	59	1LE0323-0EB02-2 ■■■	18.5	0.00389
1.5	90 L	IE3	1445	9.9	85.3	86.0	85.2	0.79	3.2	6.5	2.8	3.8	47	59	1LE0323-0EB42-2 ■■■	22	0.00499
2.2	100 L	IE3	1445	14.5	86.7	87.1	85.7	0.81	4.5	8.3	3.4	4.6	52	64	1LE0323-1AB42-2 ■■■	32	0.01125
3	100 L	IE3	1440	19.9	87.7	88.1	87.1	0.81	6.1	8.3	3.7	4.6	52	64	1LE0323-1AB52-2 ■■■	36	0.01313
4	112 M	IE3	1450	26.3	88.6	89.6	89.2	0.81	8.0	7.8	3.7	4.6	53	65	1LE0323-1BB22-2 ■■■	43	0.01493
5.5	132 S	IE3	1455	36.1	89.6	90.9	91.1	0.84	10.5	7.8	2.6	3.8	59	71	1LE0323-1CB02-2 ■■■	58	0.02847
7.5	132 M	IE3	1455	49.2	90.4	91.7	93.2	0.85	14.1	7.8	2.6	3.8	59	71	1LE0323-1CB22-2 ■■■	71	0.03561
4-pole: 1500 rpm at 50 Hz, 400 VΔ / 690 VY																	
2.2	100 L	IE3	1445	14.5	86.7	87.1	85.7	0.81	4.5	8.3	3.4	4.6	52	64	1LE0323-1AB43-4 ■■■	32	0.01125
3	100 L	IE3	1440	19.9	87.7	88.1	87.1	0.81	6.1	8.3	3.7	4.6	52	64	1LE0323-1AB53-4 ■■■	36	0.01313
4	112 M	IE3	1450	26.3	88.6	89.6	89.2	0.81	8.0	7.8	3.7	4.6	53	65	1LE0323-1BB23-4 ■■■	43	0.01493
5.5	132 S	IE3	1455	36.1	89.6	90.9	91.1	0.84	10.5	7.8	2.6	3.8	59	71	1LE0323-1CB03-4 ■■■	58	0.02847
7.5	132 M	IE3	1455	49.2	90.4	91.7	93.2	0.85	14.1	7.8	2.6	3.8	59	71	1LE0323-1CB23-4 ■■■	71	0.03561
11	160 M	IE3	1465	72	91.4	92.4	92.6	0.86	20	7.8	2.4	3.8	61	73	1LE0323-1DB23-4 ■■■	95	0.06482
15	160 L	IE3	1465	97.8	92.1	92.9	93.0	0.86	27.5	8.2	2.6	3.8	61	73	1LE0323-1DB43-4 ■■■	112	0.08109
18.5	180 M	IE3	1470	120	92.6	93.0	92.5	0.83	34.5	7.8	2.6	3.6	63	76	1LE0043-1EB23-4 ■■■	162	0.1339
22	180 L	IE3	1470	143	93.0	93.7	93.6	0.83	41	7.8	2.6	3.6	63	76	1LE0043-1EB43-4 ■■■	178	0.1531
30	200 L	IE3	1475	194	93.6	94.3	94.2	0.84	55	7.8	2.6	3.6	63	76	1LE0043-2AB43-4 ■■■	234	0.245
37	225 S	IE3	1482	238	93.9	94.1	93.4	0.85	67	8.3	3.0	3.6	65	78	1LE0043-2BB03-4 ■■■	294	0.515
45	225 M	IE3	1482	290	94.2	94.2	93.7	0.85	81	8.3	3.3	3.6	65	78	1LE0043-2BB23-4 ■■■	322	0.548
Ordering data For other voltages and more information, see from page 2/6 Types of construction Without flange IM B3 For other types of construction and more information, see from page 2/7 Motor protection Without For other motor protection and more information, see from page 2/8 Terminal box position Terminal box at top Special versions For options, see from page 2/9																	
															Order code		

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Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043 – self-ventilated

Selection and ordering data

P _{rated} , 50 Hz/ P50	Frame size	IE class	Operating values at rated power										L _{pfA} , 50 Hz	L _{WA} , 50 Hz	Aluminum series 1LE0323 Cast-iron series 1LE0043 Article No.	m _M B3	J
			η _{rated} 50 Hz	T _{rated} 50 Hz	η _{rated} 50 Hz, 4/4	η _{rated} 50 Hz, 3/4	η _{rated} 50 Hz, 2/4	COSφ _{rated} 50 Hz, 4/4	I _{rated} 50 Hz, 400 V	Start- ing current	Start- ing torque	Break down torque					
kW	FS		rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm ²
_ Cooling: Self-ventilated (IC 411)																	
_ Efficiency according to IEC 60034-30: IE3 Premium Efficiency																	
_ 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, 230 VΔ / 400 VY																	
0.55	80 M	IE3	940	5.6	77.2	77.5	74.6	0.67	1.53	5.0	2.7	3.4	44	55	1LE0323-0DC32-2 ■■■■	15	0.00310
0.75	90 S	IE3	940	7.6	78.9	80.3	78.0	0.70	1.96	5.0	2.4	3.2	45	57	1LE0323-0EC02-2 ■■■■	19	0.00436
1.1	90 L	IE3	945	11.1	81.0	81.6	80.4	0.69	2.85	5.5	2.7	3.5	45	57	1LE0323-0EC42-2 ■■■■	22	0.00513
1.5	100 L	IE3	950	15.1	82.5	84.1	82.9	0.74	3.55	5.5	2.5	3.5	49	61	1LE0323-1AC42-2 ■■■■	33	0.01136
2.2	112 M	IE3	945	22.2	84.3	86.1	85.7	0.74	5.1	6.0	2.7	3.4	53	65	1LE0323-1BC22-2 ■■■■	39	0.01451
3	132 S	IE3	965	29.7	85.6	86.6	86.0	0.75	6.7	6.0	2.7	4.0	57	69	1LE0323-1CC02-2 ■■■■	54	0.02666
4	132 M	IE3	960	40	86.8	88.5	88.7	0.75	8.9	6.0	2.7	3.4	57	69	1LE0323-1CC22-2 ■■■■	63	0.03045
5.5	132 M	IE3	960	54.7	88.0	89.2	89.0	0.76	11.9	6.5	2.7	4.0	57	69	1LE0323-1CC32-2 ■■■■	71	0.04125
6-pole: 1000 rpm at 50 Hz, 400 VΔ / 690 VY																	
1.5	100 L	IE3	950	15.1	82.5	84.1	82.9	0.74	3.55	5.5	2.5	3.5	49	61	1LE0323-1AC43-4 ■■■■	33	0.01136
2.2	112 M	IE3	945	22.2	84.3	86.1	85.7	0.74	5.1	6.0	2.7	3.4	53	65	1LE0323-1BC23-4 ■■■■	39	0.01451
3	132 S	IE3	965	29.7	85.6	86.6	86.0	0.75	6.7	6.0	2.7	4.0	57	69	1LE0323-1CC03-4 ■■■■	54	0.02666
4	132 M	IE3	960	40	86.8	88.5	88.7	0.75	8.9	6.0	2.7	3.4	57	69	1LE0323-1CC23-4 ■■■■	63	0.03045
5.5	132 M	IE3	960	54.7	88.0	89.2	89.0	0.76	11.9	6.5	2.7	4.0	57	69	1LE0323-1CC33-4 ■■■■	71	0.04125
7.5	160 M	IE3	980	73.1	89.1	90.4	90.3	0.78	15.6	6.5	2.7	3.6	61	73	1LE0323-1DC23-4 ■■■■	95	0.07030
11	160 L	IE3	980	107	90.3	90.3	89.8	0.77	23	7.0	2.7	3.6	61	73	1LE0323-1DC43-4 ■■■■	120	0.07068
15	180 L	IE3	975	147	91.2	92.1	91.8	0.80	29.5	7.0	2.3	3.0	59	73	1LE0043-1EC43-4 ■■■■	163	0.2008
18.5	200 L	IE3	978	181	91.7	92.5	92.2	0.80	36.5	7.0	2.3	3.0	59	73	1LE0043-2AC43-4 ■■■■	212	0.312
22	200 L	IE3	980	214	92.2	93.1	93.0	0.80	43	7.0	2.6	3.0	59	73	1LE0043-2AC53-4 ■■■■	229	0.356
30	225 M	IE3	982	291	92.9	93.9	94.3	0.83	56	7.6	2.6	3.0	60	74	1LE0043-2BC23-4 ■■■■	321	0.740

Voltagess	Order code
For other voltages and more information, see from page 2/6	---
Types of construction	Version
Without flange IM B3	Standard
For other types of construction and more information, see from page 2/7	A
Motor protection	Version
Without	Standard
For other motor protection and more information, see from page 2/8	A
Terminal box position	Version
Terminal box at top	Standard
Special versions	Order code
For options, see from page 2/9	1LE0 ... - ... - ... -Z ...+...+...+...

Note:

All Innomotics FL 6-pole motors are intended for ordering with option code T98 Container delivery (see page 2/9).
When ordered from warehouse without option code T98, the typical warehouse delivery time is not achieved.

Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043

[illegible]

- ☐ Standard version
☐ Without additional charge
☒ With additional charge
☐ Not possible

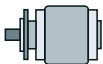
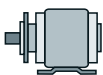
1) Intended for ordering with option code T98 Container delivery (see page 2/9).
When ordered from warehouse without option code T98, the typical warehouse delivery time is not achieved.

Innomotics FL standard motors

Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043

Selection and ordering data

Types of construction	Article No. supplement Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z Order code	Frame size										Motor version	
			80	90	100	112	132	160	180	200	225	IEC	IE3	
			1LE0323						1LE0043					
1LE0...-....		..(-Z)												

Without flange														
IM B3		A	-	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
With flange		EN 50347 DIN 42948		FF165 A 200	FF165 A 200	FF215 A 250	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	FF400 A 450		
IM B5		F	-	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM V1 without protective cover		G	-	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM B35		J	-	✓	✓	✓	✓	✓	✓	✓	✓	✓		
With flange		EN 50347 DIN 42948		FT100 C 120	FT115 C 140	FT130 C 160	FT130 C 160	FT165 C 200	FT215 C 250	-	-	-		
IM B14		K	-	✓	✓	✓	✓	✓	✓	-	-	-		
IM B34		N	-	✓	✓	✓	✓	✓	✓	-	-	-		

☐ Standard version
☒ With additional charge
☐ Not possible

2

Innomotics FL standard motors

Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043

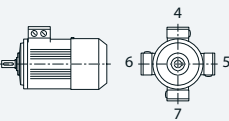
Selection and ordering data

Motor protection	Article No. supplement		Frame size									Motor version	
	Motor protection code letter	Additional identification code with order code and plain text if required	80	90	100	112	132	160	180	200	225	IEC	IE3
	1LE0 ... -	Order code	1LE0323						1LE0043				

Motor protection

Without (standard)	A	-	☐	☐	☐	☐	☐	☐	☐	☐	☐		
3 PTC thermistors – for tripping (2 terminals)	B	-	☒	☒	☒	☒	☒	☒	☒	☒	☒		

- ☐ Standard version
☒ With additional charge

Terminal box position		Article No. supplement		Frame size								Motor version		
	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	80	90	100	112	132	160	180	200	225	IEC	IE3	
			1LE0323											
											1LE0043			
1LE0 ... -		Order code												

Terminal box position

Terminal box top	4	-	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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- ☐ Standard version

Innomotics FL standard motors

Aluminum series Innomotics FL 1LE0323 and cast-iron series Innomotics FL 1LE0043

Selection and ordering data

Special versions	Additional identification code -Z with order code and plain text if required	Frame size									Motor version	
		80	90	100	112	132	160	180	200	225	IEC	IE3
		1LE0323						1LE0043				
1LE0...-...-...-...-Z	Order code											
Mechanical version and degrees of protection												
Condensation drainage holes ²⁾	H03		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Prepared for mountings, threaded hole only	G46		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Versions in accordance with standards and specifications												
CCC China Compulsory Certification ²⁾	D01		✓	✓	-	-	-	-	-	-	-	Only for: Voltage code 2-1 (12th and 13th position of the Article No.)
China Energy Efficiency Label	D34		○	○	○	○	○	○	○	○	○	
TR CU product safety certificate EAC for Eurasian customs union	D47		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Bearings and lubrication												
Located bearing DE	L20		✓	✓	✓	✓	✓	✓	-	-	-	
Bearing design for increased cantilever forces	L22		-	-	✓	✓	✓	✓	✓	✓	✓	
Regreasing device ²⁾	L23		-	-	✓	✓	✓	✓	✓	✓	✓	
Heating and ventilation												
Anti-condensation heating for 230 V (2 terminals) ²⁾	Q02		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rating plate and additional rating plates												
Additional rating plate for voltage tolerance ¹⁾	B07		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Packaging, safety notes, documentation and test certificates												
CE marking			□	□	□	□	□	□	□	□	□	Only for: Combination with option code T98
Sea-worthy packing for export			□	□	□	□	□	□	□	□	□	
Acceptance test certificate 3.1 in accordance with EN 10204	B02		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Without "Made in ..." on the rating plate	B13		○	○	○	○	○	○	○	○	○	
Container delivery instead of warehouse delivery	T98		○	○	○	○	○	○	○	○	○	Please contact Innomotics sales for support with container order

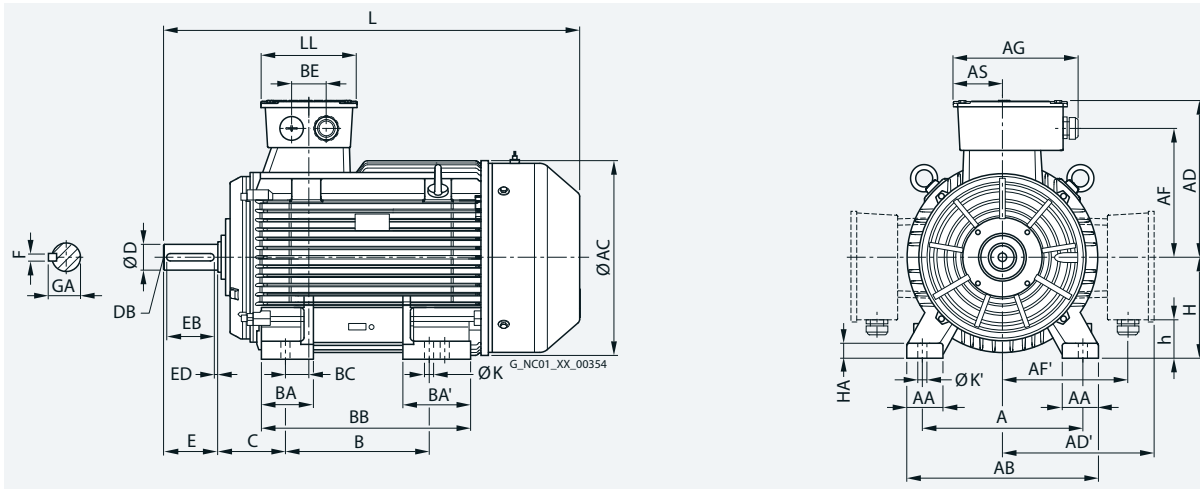
- ☐ Standard version
☐ Without additional charge
☒ With additional charge
☐ Not possible

¹⁾ Can be ordered only for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code "22" or "34")

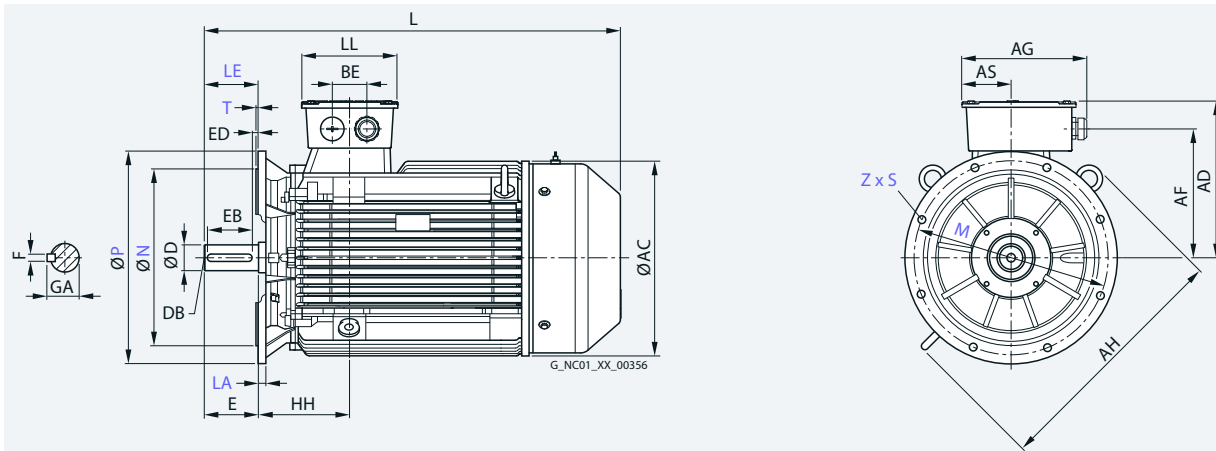
²⁾ Intended for ordering with option code T98 Container delivery. When ordered from warehouse without option code T98, the typical warehouse delivery time is not achieved.

Innomotics FL standard motors

IE3, Premium Efficiency – self-ventilated · Frame sizes 80 M to 160 L

Dimensional drawings**Type of construction IM B3****Types of construction IM B5 and IM V1**

For flange dimensions, see page 2/14 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC																		
Frame size	Motor type 1LE0	No. of poles	A	AA	AB	AC ¹⁾	AD	AD'	AF	AF'	AG	AS	B ²⁾	BA	BA'	BB	BC	BE	C	H	HA
80 M	OD.2. OD.3	2, 4, 6	125	36	165	165	150	150	110.5	110.5	141	65.5	100	32	32	135	26	42	50	80	10
90 S	OE.0	2, 4, 6	140	36	180	185	160	160	120.5	120.5	141	65.5	100	37	37	140	25	42	56	90	10
90 L	OE.4												125			165					
100 L	1A.4 1A.5	2, 4, 6 4	160	40	205	200	185	185	142	142	160	69	140	58	58	176	30.5	54	63	100	12
112 M	1B.2	2, 4, 6	190	45	230	223	193	193	154	154	160	69	140	38.5	38.5	180	22	54	70	112	15.5
132 S	1C.0 1C.1	2, 4, 6 2	216	50	260	265	223	223	177	177	160	69	140	42	42	186	32.5	54	89	132	15
132 M	1C.2 1C.3	4, 6 6											178			224			89		
160 M	1D.2 1D.3	2, 4, 6 2	254	60	320	315	255	255	208	208	209	82	210	47	47	258	49	56	108	160	20
160 L	1D.4	2, 4, 6											254			302			108		

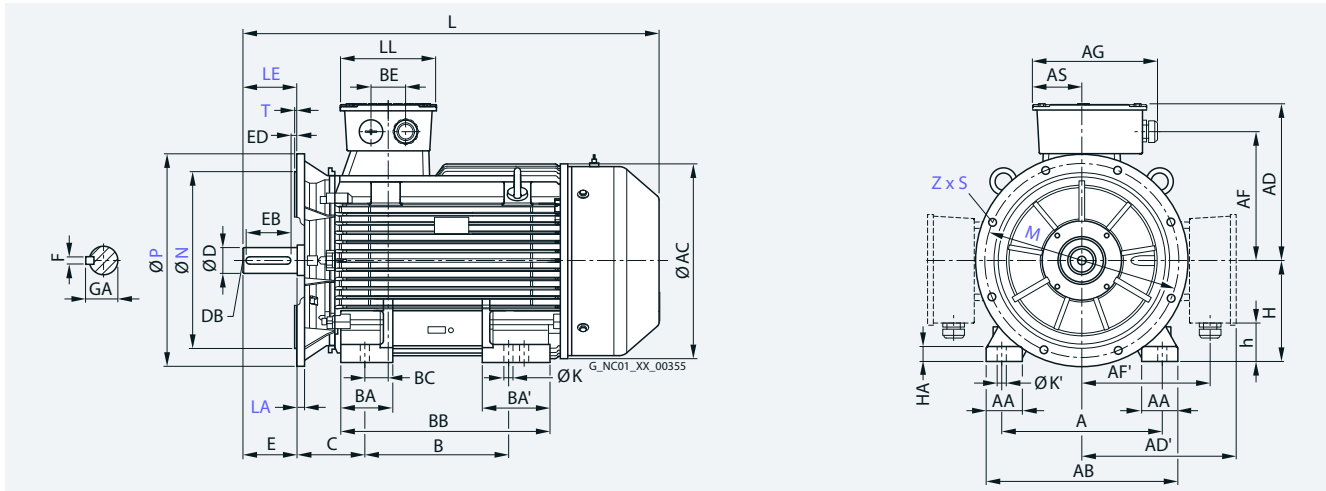
¹⁾ Measured across the bolt heads.²⁾ This dimension is assigned in DIN EN 50347 to the frame size listed.

Innomotics FL standard motors

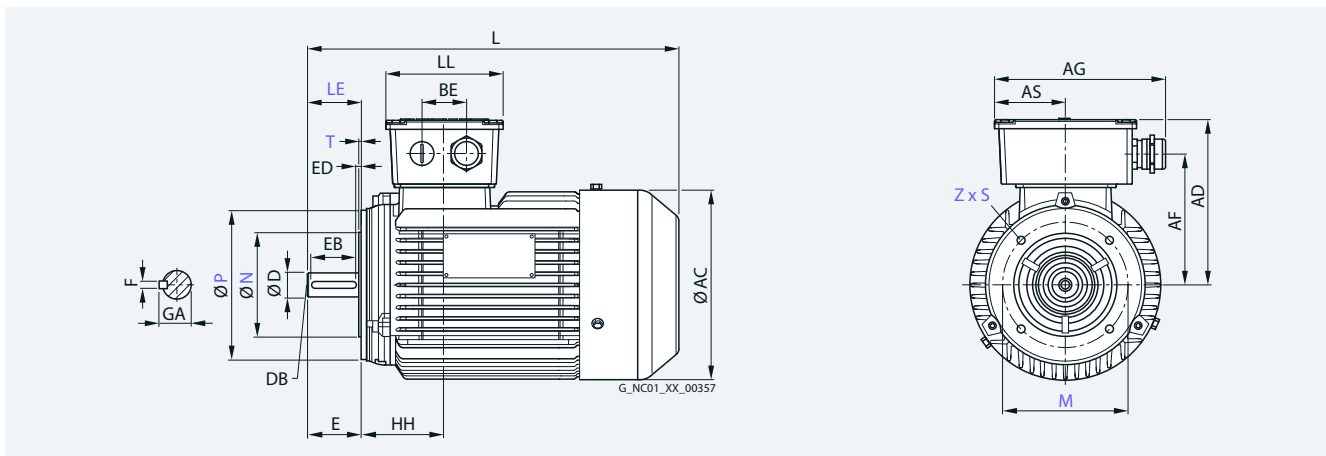
IE3, Premium Efficiency – self-ventilated · Frame sizes 80 M to 160 L

Dimensional drawings**Type of construction IM B35**

For flange dimensions, see page 2/14 (Z = the number of retaining holes)

**Type of construction IM B14**

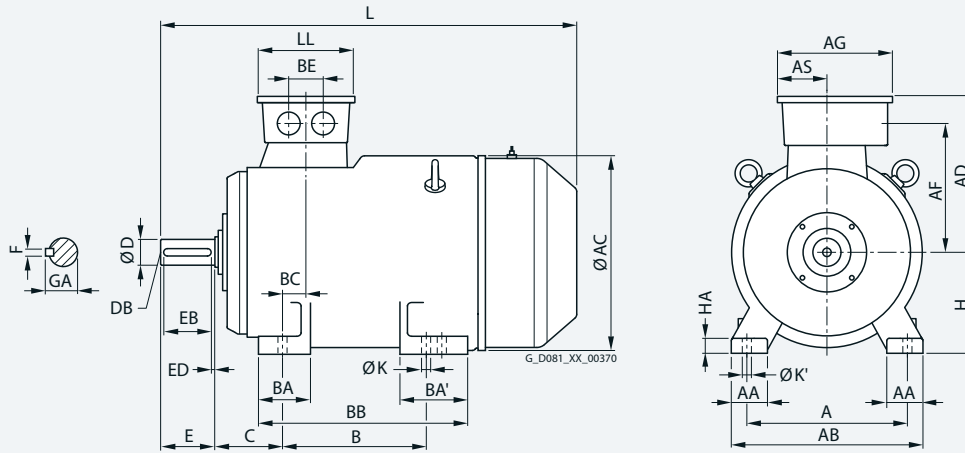
For flange dimensions, see page 2/14 (Z = the number of retaining holes)



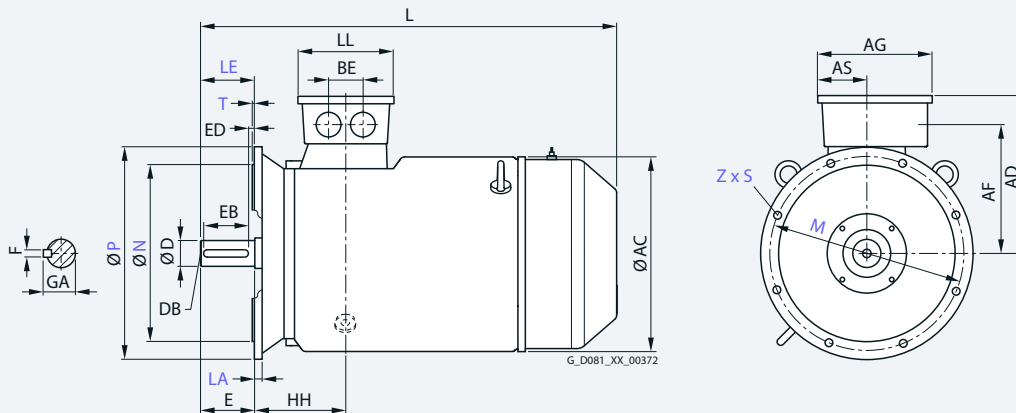
For motor			Dimension designation acc. to IEC							DE shaft extension						
Frame size	Motor type	No. of poles	HH	K	K'	L	LC	LL	D	DB	E	EB	ED	F	GA	
80 M	1LE0	2, 4, 6	76	10	14	335	363	109	19	M6	40	32	3.5	6	21.5	
90 S	OD.2. OD.3	2, 4, 6	76	10	14	370	411	109	24	M8	50	40	3.5	8	27	
90 L	OE.4					395	436									
100 L	1A.4	2, 4, 6	93.5	12	16	465	516.5	116	28	M10	60	50	4	8	31	
	1A.5	4														
112 M	1B.2	2, 4, 6	92	12	16	455	504.5	116	28	M10	60	50	4	8	31	
132 S	1C.0	2, 4, 6	121.5	12	16	515	582	116	38	M12	80	70	4	10	41	
	1C.1	2														
132 M	1C.2	4, 6				560	627									
	1C.3	6														
160 M	1D.2	2, 4, 6	157	15	19	620	701	164	42	M16	110	100	5	12	45	
	1D.3	2														
160 L	1D.4	2, 4, 6				680	761									

Innomotics FL standard motors

IE3, Premium Efficiency – self-ventilated · Frame sizes 180 M to 225 M

Dimensional drawings**Type of construction IM B3****Types of construction IM B5 and IM V1**

For flange dimensions, see page 2/14 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC																
Frame size	Motor type	No. of poles	A	AA	AB	AC ¹⁾	AD	AF	AG	AS	B ²⁾	BA	BA'	BB	BC	BE	C	H	HA
180 M	1E.0	2, 4, 6	279	65	339	368	275	223	231	94	241	80	80	301	30	68	121	180	22
180 L	1E.4	4, 6									279			339			121		
200 L	2A.4 2A.5	2, 6 2, 4, 6	318	70	378	410	305	250	288	108	305	80	80	369	32	85	133	200	25
225 S	2B.0	4	356	80	436	449	330	278	288	108	286	90	90	348	31	85	149	225	34
225 M	2B.2	2 4, 6									311			373			149		

¹⁾ Measured across the bolt heads.²⁾ This dimension is assigned in DIN EN 50347 to the frame size listed.

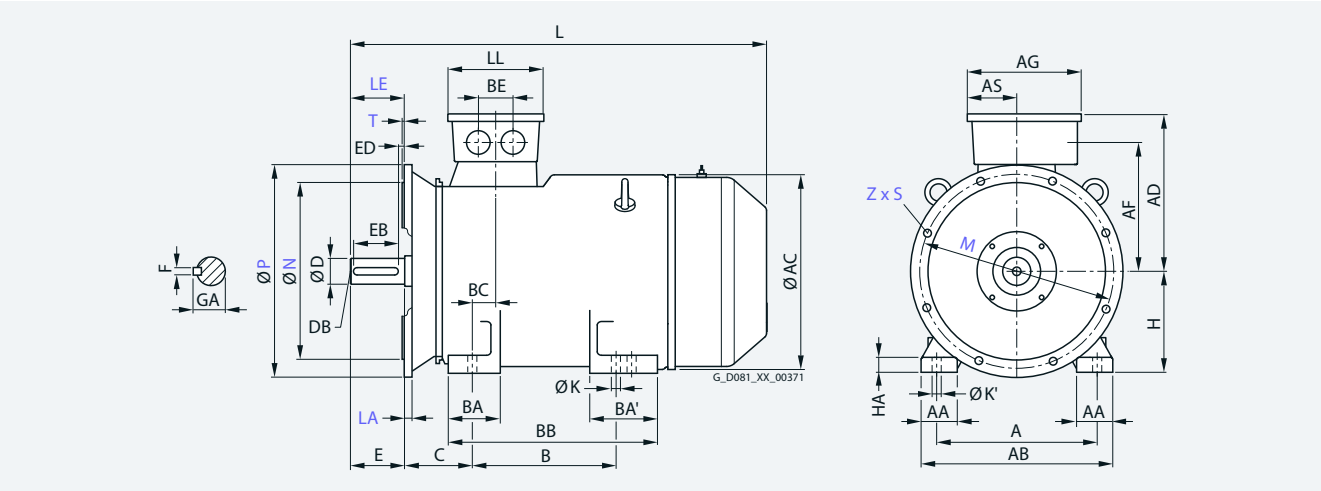
Innomotics FL standard motors

IE3, Premium Efficiency – self-ventilated · Frame sizes 180 M to 225 M

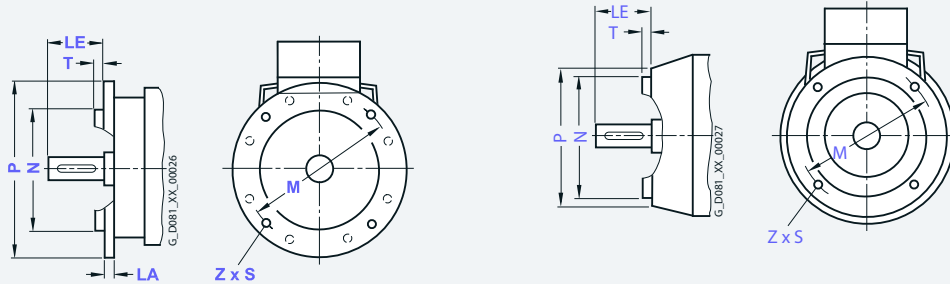
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 2/14 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC				DE shaft extension									
Frame size	Motor type	No. of poles	HH	K	K'	L	LC	LL	D	DB	E	EB	ED	F	GA	
180 M	1E.2	2, 4, 6	158	15	15	695	836	158	48	M16	110	100	5	14	51.5	
180 L	1E.4	4, 6				725	876									
200 L	2A.4	2, 6	203	19	19	790	927	215	55	M20	110	100	5	16	59	
	2A.5	2, 4, 6														
225 S	2B.0	4	212	19	19	825	965	215	60	M20	140	125	10	18	64	
225 M	2B.2	2				850	940		55		110	100	5	16	59	
		4, 6				880	995		60		140	125	10	18	64	

Innomotics FL standard motors**Flange dimensions****Dimensional drawings**

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 ¹⁾	LE	M	N	P	S	T	Z
80	IM B5, IM B35, IM V1	Flange	FF165	A 200	10	40	165	130	200	12	3,5	4
	IM B14, IM B34	Flange	FT100	C 120	–	40	100	80	120	M6	3	4
90	IM B5, IM B35, IM V1	Flange	FF165	A 200	10	50	165	130	200	12	3,5	4
	IM B14, IM B34	Flange	FT115	C 140	–	50	115	95	140	M8	3	4
100	IM B5, IM B35, IM V1	Flange	FF215	A 250	11	60	215	180	250	14,5	4	4
	IM B14, IM B34	Flange	FT130	C 160	–	60	130	110	160	M8	3,5	4
112	IM B5, IM B35, IM V1	Flange	FF215	A 250	11	60	215	180	250	14,5	4	4
	IM B14, IM B34	Flange	FT130	C 160	–	60	130	110	160	M8	3,5	4
132	IM B5, IM B35, IM V1	Flange	FF265	A 300	13	80	265	230	300	14,5	4	4
	IM B14, IM B34	Flange	FT165	C 200	–	80	165	130	200	M10	3,5	4
160	IM B5, IM B35, IM V1	Flange	FF300	A 350	14	110	300	250	350	18,5	5	4
	IM B14, IM B34	Flange	FT215	C 250	–	110	215	180	250	M12	4	4
180	IM B5, IM B35, IM V1	Flange	FF300	A 350	13	110	300	250	350	18,5	5	4
200	IM B5, IM B35, IM V1	Flange	FF350	A 400	15	110	350	300	400	18,5	5	4
225	IM B5, IM B35, IM V1	Flange	FF400	A 450	16	110/140 ²⁾	400	350	450	18,5	5	8

¹⁾ Flange LA size refer to the thickness at the flange mounting hole.²⁾ Dimension 140 valid for 4- and 6-pole motors.