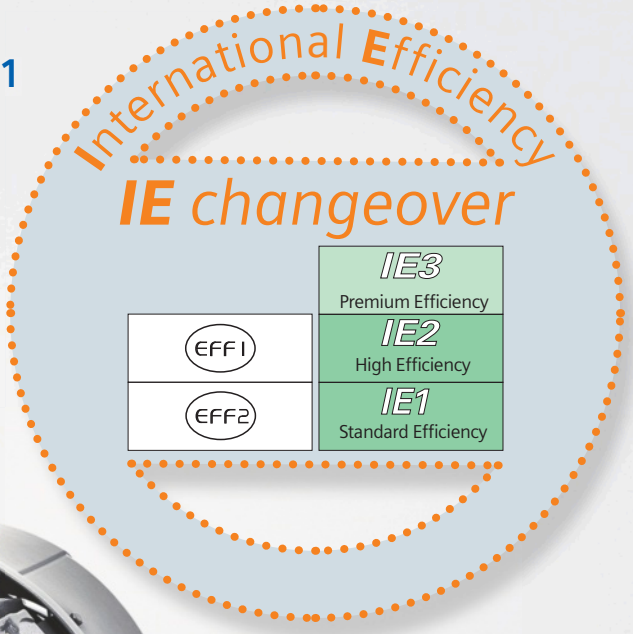
IEC Squirrel-Cage Motors

Type series 1LE, 1PC, 1LA, 1LG, 1LL, 1LP, 1MA, 1MJ, 1PP, 1PQ
Frame sizes 63 to 450
Power range 0.09 to 1250 kW

Order overview to Catalog D 81.1 · July 2011



Motors

Answers for industry.

SIEMENS

Statutory minimum efficiencies in the European economic area

Please note that the minimum efficiency IE2 will be required by law from June 16, 2011 for many low-voltage motors that are sold/ installed in the European economic area. In order to avoid additional costs for changing from IE1 to IE2 in 2011, we as a manufacturer recommend using the newly ordered products only for IE2. The statutory EU regulation (EC) No. 640/2009 (of July 22, 2009) governs the minumum efficiencies for electrical drives in the European economic area. It is based on the directive 2005/32/EC of the European Parliament and of the Council of July 6, 2005.

Energy saving/Energy-saving program SinaSave

Further information regarding energy savings and the Energy-saving program SinaSave can be found at the following internet address:
http://www.siemens.com/energysaving

Selection tool DT configurator

The DT configurator comprises the product range of low-voltage motors and MICROMASTER 4/SINAMICS converters as well as the SIMATIC ET 200 frequency converters. The product range is constantly expanded.

Information for the following products are available:

- 2D/3D-model generator for motors and converters
- Data sheet generator
- Starting calculation for motors
- Extensive product-specific documentation

Online access in the Siemens Industry Mall

The DT configurator is integrated in the Siemens Industry Mall and be used without installation directly in the Internet.
German: www.siemens.de/dt-konfigurator
English: www.siemens.com/dt-configurator

Offline access in the Interactive Catalog CA 01

The DT configurator is also integrated on the DVD of the Interactive Catalog CA 01, the offline version of the Siemens Industry Mall. You can order the CA 01 with your respective Siemens sales person or in the Internet:
www.siemens.com/automation/ca01

Definition of Delivery Time

The total delivery time (motor + supplements) is determined by the longer delivery time of the associated components.

Delivery times apply to clarified orders from the supplying factory.

Currently in stock and available for delivery:

Standard delivery times:

12 Working Weeks	14 Working Weeks	16 Working Weeks

Changes or Cancellation

Costs will be calculated according to expenses occurred through changes or cancelation.

Additional documentation

You will find all information material, such as brochures, catalogs, manuals and operating instructions for standard drive systems up-to-date on the Internet at the address
http://www.siemens.com/motors/printmaterial

You can order the listed documentation or download it in common file formats (PDF, ZIP).

Standard motors
1LE1/1PC1

Standard Motors 1LE1

Selection and ordering data
with base prices and standard delivery times

Overview

1.0 STOCK MOTORS
Aluminum series

1LE1023 [1)]	MG1 Table 12-12 & IE3	NEMA Premium Efficient	(NPE)
1LE1021 [1,2)]	MG1 Table 12-11 & IE2	NEMA Energy Efficient	(NEE)
1LA9 [2)]	MG1 Table 12-11	EPAct	(CC)
1LA7	IE1		

IMB3

IMB5

IMB14

Frame size	$P_{N,50Hz}$ kW	$P_{N,60Hz}$ hp (kW)	eff	Part-Nr. Foot Mounted ▲ Stock in Southaven	Base Price USD	eff	Part-Nr. Footless B5-Flange ▲ Stock in Southaven	Base Price USD	eff	Part-Nr. Footless B14 Flange ▲ Stock in Southaven ▲ Unitl stock is depleted	Base Price USD
2-poles: 3000 min-1 at 50 Hz, 3600 min-1 at 60 Hz											
63 M	0.18	(0.21)				IE1	▲ 1LA70632AA11	296.–	IE1	▲ 1LA70602AA12	296.–
63 M	0.25	(0.29)				IE1	▲ 1LA70632AA11	312.–			
71M	0.37	(0.43)							IE1	▲ 1LA70702AA12	319.–
71 M	0.55	(0.63)	IE1	▲ 1LA70732AA10-Z A11	394.–	IE1	▲ 1LA70732AA11	354.–	IE1	▲ 1LA70732AA12	354.–
80 M	0.75	(1.15)	IE1	▲ 1LA70802AA10-Z A11	443.–	NEE	▲ 1LE1021-0DA20-2FA4	594.–			
80 M	1.1	1.5	CC	▲ 1LA90832KA10	531.–	NEE	▲ 1LE1021-0DA30-2FA4	661.–			
90 S	1.5	2				NEE	▲ 1LE1021-0EA00-2FA4	763.–	CC	▲ 1LA90902KA12	676.–
90 L	2.2	3				NEE	▲ 1LE1021-0EA40-2FA4	940.–			
100 L	3	4	NPE	▲ 1LE1023-1AA42-2AA4	1200.–	NEE	▲ 1LE1021-1AA42-2FA4	1127.–			
112 M	4	5	NPE	▲ 1LE1023-1BA22-2AA4	1420.–	NEE	▲ 1LE1021-1BA22-2FA4	1336.–			
132 S	5.5	7.5	NPE	▲ 1LE1023-1CA02-2AA4	1790.–	NEE	▲ 1LE1021-1CA02-2FA4	1685.–			
132 S	7.5	10	NPE	▲ 1LE1023-1CA12-2AA4	2270.–	NEE	▲ 1LE1021-1CA12-2FA4	2065.–			
160 M	11	15	NPE	▲ 1LE1023-1DA22-2AA4	3140.–	NEE	▲ 1LE1021-1DA22-2FA4	2822.–			
160 M	15	20	NPE	▲ 1LE1023-1DA32-2AA4	4100.–	NEE	▲ 1LE1021-1DA32-2FA4	3582.–			
160 L	18.5	25	NPE	▲ 1LE1023-1DA42-2AA4	4890.–	NEE	▲ 1LE1021-1DA42-2FA4	4202.–			
4-poles: 1500 min-1 at 50 Hz, 1800 min-1 at 60 Hz											
63M	0.12	(0.19)	IE1	▲ 1LA70604AB10	248.–	IE1	▲ 1LA70604AB11	294.–	IE1	▲ 1LA70604AB12	294.–
63M	0.18	(0.28)	IE1	▲ 1LA70634AB10	266.–	IE1	▲ 1LA70634AB11	312.–	IE1	▲ 1LA70634AB12	312.–
71M	0.25	(0.39)				IE1	▲ 1LA70704AB11	316.–	IE1	▲ 1LA70704AB12	316.–
71M	0.37	(0.58)				IE1	▲ 1LA70734AB11	345.–	IE1	▲ 1LA70734AB12	345.–
80M	0.55	(0.84)	IE1	▲ 1LA70804AA10	321.–	IE1	▲ 1LA70804AA11	374.–	IE1	▲ 1LA70804AA12	374.–
80M	0.75	1	CC	▲ 1LA90834KA10	503.–	NEE	▲ 1LE1021-0DB30-2FA4	633.–	CC	▲ 1LA90834KA12	555.–
90 S	1.1	1.5				NEE	▲ 1LE1021-0EB00-2FA4	744.–	CC	▲ 1LA70964AA12	567.–
90 L	1.5	2				NEE	▲ 1LE1021-0EB40-2FA4	856.–	CC	▲ 1LA91064KA12	942.–
100 L	2.2	3	NPE	▲ 1LE1023-1AB42-2AA4	1090.–	NEE	▲ 1LE1021-1AB42-2FA4	1038.–	CC	▲ 1LA91074KA12	1073.–
100 L	3	4	NPE	▲ 1LE1023-1AB52-2AA4	1260.–	NEE	▲ 1LE1021-1AB52-2FA4	1167.–			
112 M	4	5	NPE	▲ 1LE1023-1BB22-2AA4	1540.–	NEE	▲ 1LE1021-1BB22-2FA4	1426.–			
132 S	5.5	7.5	NPE	▲ 1LE1023-1CB02-2AA4	1930.–	NEE	▲ 1LE1021-1CB02-2FA4	1795.–			
132 M	7.5	10	NPE	▲ 1LE1023-1CB22-2AA4	2450.–	NEE	▲ 1LE1021-1CB22-2FA4	2205.–			
160 M	11	15	NPE	▲ 1LE1023-1DB22-2AA4	3210.–	NEE	▲ 1LE1021-1DB22-2FA4	2882.–			
160 L	15	20	NPE	▲ 1LE1023-1DB42-2AA4	4170.–	NEE	▲ 1LE1021-1DB42-2FA4	3632.–			
6-poles: 1000 min-1 at 50 Hz, 1200 min-1 at 60 Hz											
71M	0.25	(0.39)				IE1	▲ 1LA70736AA11	364.–	IE1	▲ 1LA70736AA12	364.–
80M	0.37	(0.58)				IE1	▲ 1LA70806AA11	386.–	IE1	▲ 1LA70806AA12	386.–
80 M	0.55	(0.84)	IE1	▲ 1LA70836AA10	386.–				IE1	▲ 1LA70836AA12	440.–
90 S	0.75	1									
100L	1.5	2				NEE	▲ 1LE1021-1AC42-2FA4	1028.–			
112M	2.2	3				NEE	▲ 1LE1021-1BC22-2FA4	1286.–			
132 S	3	4	NPE	▲ 1LE1023-1CC02-2AA4	1720.–	NEE	▲ 1LE1021-1CC02-2FA4	1635.–			
132 M	4	5	NPE	▲ 1LE1023-1CC22-2AA4	2120.–	NEE	▲ 1LE1021-1CC22-2FA4	1945.–			
132 M	5.5	7.5	NPE	▲ 1LE1023-1CC32-2AA4	2660.–	NEE	▲ 1LE1021-1CC32-2FA4	2375.–			
160 M	7.5	10	NPE	▲ 1LE1023-1DC22-2AA4	3370.–	NEE	▲ 1LE1021-1DC22-2FA4	3012.–			
160 L	11	15	NPE	▲ 1LE1023-1DC42-2AA4	4660.–	NEE	▲ 1LE1021-1DC42-2FA4	4022.–			

Standard Motors 1LE1

Selection and ordering data
with base prices and standard delivery times

Overview

Category: **1.0 STOCK MOTORS**

Series: **Cast-iron series**

1LE1523 [1] MG1 Table 12-12 & IE3 NEMA Premium Efficient (NPE)

IMB3

Frame size	$P_{N,50Hz}$ kW	$P_{N,60Hz}$ hp		Part-Nr. Foot Mounted ▲ Stock in Southaven	Base Price USD
2-poles: 3000 min-1 at 50 Hz, 3600 min-1 at 60 Hz					
100 L	3	4	NPE	▲ 1LE1523-1AA42-2AA4	1300.–
112 M	4	5	NPE	▲ 1LE1523-1BA22-2AA4	1540.–
132 S	5.5	7.5	NPE	▲ 1LE1523-1CA02-2AA4	1940.–
132 S	7.5	10	NPE	▲ 1LE1523-1CA12-2AA4	2460.–
160 M	11	15	NPE	▲ 1LE1523-1DA22-2AA4	3410.–
160 M	15	20	NPE	▲ 1LE1523-1DA32-2AA4	4450.–
160 L	18.5	25	NPE	▲ 1LE1523-1DA42-2AA4	5310.–
180 M	22	30	NPE	▲ 1LE1523-1EA23-4AA4	5930.–
200 L	30	40	NPE	▲ 1LE1523-2AA43-4AA4	7690.–
200 L	37	50	NPE	▲ 1LE1523-2AA53-4AA4	9650.–
225 M	45	60	NPE	▲ 1LE1523-2BA23-4AA4	11000.–
250 M	55	75	NPE	▲ 1LE1523-2CA23-4AA4	13100.–
280 S	75	100	NPE	▲ 1LE1523-2DA03-4AA4	17900.–
280 M	90	125	NPE	▲ 1LE1523-2DA23-4AA4	21200.–
4-poles: 1500 min-1 at 50 Hz, 1800 min-1 at 60 Hz					
100 L	2.2	3	NPE	▲ 1LE1523-1AB42-2AA4	1180.–
100 L	3	4	NPE	▲ 1LE1523-1AB52-2AA4	1370.–
112 M	4	5	NPE	▲ 1LE1523-1BB22-2AA4	1680.–
132 S	5.5	7.5	NPE	▲ 1LE1523-1CB02-2AA4	2090.–
132 M	7.5	10	NPE	▲ 1LE1523-1CB22-2AA4	2650.–
160 M	11	15	NPE	▲ 1LE1523-1DB22-2AA4	3480.–
160 L	15	20	NPE	▲ 1LE1523-1DB42-2AA4	4520.–
180 M	18.5	25	NPE	▲ 1LE1523-1EB23-4AA4	5030.–
180 L	22	30	NPE	▲ 1LE1523-1EB43-4AA4	5850.–
200 L	30	40	NPE	▲ 1LE1523-2AB53-4AA4	7580.–
225 S	37	50	NPE	▲ 1LE1523-2BB03-4AA4	8810.–
225 M	45	60	NPE	▲ 1LE1523-2BB23-4AA4	10400.–
250 M	55	75	NPE	▲ 1LE1523-2CB23-4AA4	12600.–
280 S	75	100	NPE	▲ 1LE1523-2DB03-4AA4	17000.–
280 M	90	125	NPE	▲ 1LE1523-2DB23-4AA4	19900.–
315 S	110	150	NPE	▲ 1LE1523-3AB03-4AA4	24800.–
315 M	132	175	NPE	▲ 1LE1523-3AB23-4AA4	29400.–
315 L	160	200	NPE	▲ 1LE1523-3AB43-4AA4	35500.–

1) Notes for 1LE1X21/1LE1X23 NEMA Energy Efficient motors:
- Comprises CSA, UL and CC-No.
- Only valid for voltages ≤ 600 V

2) For ≤ 200 HP, flange-mounting only

Standard Motors 1LE1/1PC1

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	1.1 — NEMA Premium Efficient MG1 motors	1.1 — NEMA Energy Efficient MG1 motors
Series	Aluminum series 1LE1023 [1]	Aluminum series 1LE1021 [1,2]
Cooling	Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416)	
Degree of protection IP55	IP55, optionally IP56 or IP65	
Insulation	Thermal class 155 (F)	
Utilization	Thermal class 130 (B)	
Number of Poles	2, 4, 6	
Frame size (F)	100 L ... 160 L	80 M ... 160 L
Rated output at 50Hz	2.2 ... 18.5 kW at 50 Hz 3 … 25 hp at 60 Hz	0.75 ... 18.5 kW at 50 Hz 1 … 25 hp at 60 Hz
Synchronous speed	1000 ... 3600 min^{-1}	1000 ... 3600 min^{-1}
Rater torque at 50zh	8.1 ... 89 Nm at 60 Hz	2.1 ... 89 Nm at 60 Hz
efficiency	NEMA Premium Efficient MG1 Table 12-12 [1]	NEMA Energy Efficient MG1 Table 12-11 [1,2]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

	$P_{N,50Hz}$	$P_{N,60Hz}$	Frame Size-	Part-Nr. NEMA Premium & IE3	Base Price		Part-Nr. Energy Efficient & IE2	Base Price	
	kW	hp	FS	▲ New	USD		▲ New	USD	
2-poles: 3000 min-1 at 50 Hz, 3600 min-1 at 60 Hz									
80 M	0.75	1	80 M				▲ 1LE1021-0DA2.-....	542.–	
80 M	1.1	1.5	80 M				▲ 1LE1021-0DA3.-....	609.–	
90 S	1.5	2	90 S				▲ 1LE1021-0EA0.-....	700.–	
90 L	2.2	3	90 L				▲ 1LE1021-0EA4.-....	877.–	
100 L	3	4	100 L	▲ 1LE1023-1AA4.-....	1200.–		▲ 1LE1021-1AA4.-....	1050.–	
112 M	4	5	112 M	▲ 1LE1023-1BA2.-....	1420.–		▲ 1LE1021-1BA2.-....	1240.–	
132 S	5.5	7.5	132 S	▲ 1LE1023-1CA0.-....	1790.–		▲ 1LE1021-1CA0.-....	1560.–	
132 S	7.5	10	132 S	▲ 1LE1023-1CA1.-....	2270.–		▲ 1LE1021-1CA1.-....	1940.–	
160 M	11	15	160 M	▲ 1LE1023-1DA2.-....	3140.–		▲ 1LE1021-1DA2.-....	2660.–	
160 M	15	20	160 M	▲ 1LE1023-1DA3.-....	4100.–		▲ 1LE1021-1DA3.-....	3420.–	
160 L	18.5	25	160 L	▲ 1LE1023-1DA4.-....	4890.–		▲ 1LE1021-1DA4.-....	4040.–	
4-poles: 1500 min-1 at 50 Hz, 1800 min-1 at 60 Hz									
80 M	0.75	1	80 M				▲ 1LE1021-0DB3.-....	581.–	
90 S	1.1	1.5	90 S				▲ 1LE1021-0EB0.-....	681.–	
90 L	1.5	2	90 L				▲ 1LE1021-0EB4.-....	793.–	
100 L	2.2	3	100 L	▲ 1LE1023-1AB4.-....	1090.–		▲ 1LE1021-1AB4.-....	961.–	
100 L	3	4	100 L	▲ 1LE1023-1AB5.-....	1260.–		▲ 1LE1021-1AB5.-....	1090.–	
112 M	4	5	112 M	▲ 1LE1023-1BB2.-....	1540.–		▲ 1LE1021-1BB2.-....	1330.–	
132 S	5.5	7.5	132 S	▲ 1LE1023-1CB0.-....	1930.–		▲ 1LE1021-1CB0.-....	1670.–	
132 M	7.5	10	132 M	▲ 1LE1023-1CB2.-....	2450.–		▲ 1LE1021-1CB2.-....	2080.–	
160 M	11	15	160 M	▲ 1LE1023-1DB2.-....	3210.–		▲ 1LE1021-1DB2.-....	2720.–	
160 L	15	20	160 L	▲ 1LE1023-1DB4.-....	4170.–		▲ 1LE1021-1DB4.-....	3470.–	
6-poles: 1000 min-1 at 50 Hz, 1200 min-1 at 60 Hz									
100 L	1.5	2	100 L				▲ 1LE1021-1AC4.-....	951.–	
112 M	2.2	3	112 M				▲ 1LE1021-1BC2.-....	1190.–	
132 S	3	4	132 S	▲ 1LE1023-1CC0.-....	1720.–		▲ 1LE1021-1CC0.-....	1510.–	
132 M	4	5	132 M	▲ 1LE1023-1CC2.-....	2120.–		▲ 1LE1021-1CC2.-....	1820.–	
132 M	5.5	7.5	132 M	▲ 1LE1023-1CC3.-....	2660.–		▲ 1LE1021-1CC3.-....	2250.–	
160 M	7.5	10	160 M	▲ 1LE1023-1DC2.-....	3370.–		▲ 1LE1021-1DC2.-....	2850.–	
160 L	11	15	160 L	▲ 1LE1023-1DC4.-....	4660.–		▲ 1LE1021-1DC4.-....	3860.–	

1) Notes for 1LE1521/1LE1621 NEMA Energy Efficient motors:
- Comprises CSA, UL and CC-No.
- Only valid for voltages ≤ 600 V

2) For ≤ 200 hp, only flange-mounting types permissible

Standard Motors 1LE1/1PC1

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	1.1 — Motors with High Efficiency IE2		
Series	Aluminum series 1LE1001	Aluminum series 1LE1001 with increased output	Aluminum series 1PC1001 [3]
Cooling	Self-ventilated (IC 411) or with order code	Self-ventilated (IC 411)	Self-cooled without external fan (IC 410)
Degree of protection IP55	IP55, optionally IP56 or IP65	IP55, optionally IP56 or IP65	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)	Thermal class 155 (F)	Thermal class 155 (F)
Utilization	Thermal class 130 (B)	Thermal class 130 (B)	Thermal class 130 (B)
Number of Poles	2, 4, 6, 8	2, 4, 6	2, 4, 6, 8
Frame size (F)	80 M ... 160 L	100 L ... 160 L	100 L ... 160 L
Rated output at 50Hz	0.55 ... 18.5 kW	2.2 ... 22 kW	0.37 ... 9 kW
Synchronous speed	750 ... 3600 min^{-1}	1000 ... 3600 min^{-1}	750 ... 3600 min^{-1}
Rater torque at 50zh	2.6 ... 108 Nm	13 ... 147 Nm	On Request [1]
efficiency	High Efficiency IE2	High Efficiency IE2	

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

Frame size	$P_{N, 50Hz}$	IE-Class	Part-Nr.	Base Price	$P_{N, 50Hz}$	IE-Class	Part-Nr.	Base Price	$P_{N, 50Hz}$	IE-Class	Part-Nr.	Base Price
FS	kW		▲ New	USD	kW			USD	kW			USD
2-Pole: 3000 min^{-1} at 50 Hz												
80 M	0.75	IE2	▲ 1LE1001-0DA2.-....	464.–								
80 M	1.1	IE2	▲ 1LE1001-0DA3.-....	531.–								
90 S	1.5	IE2	▲ 1LE1001-0EA0.-....	613.–								
90 L	2.2	IE2	▲ 1LE1001-0EA4.-....	791.–								
100 L	3	IE2	1LE1001-1AA4.-....	949.–	4	IE2	1LE1001-1AA6.-....	1120.–	1.4		1PC1001-1AA4.-....	1180.–
112 M	4	IE2	1LE1001-1BA2.-....	1120.–	5.5	IE2	1LE1001-1BA6.-....	1410.–	1.6		1PC1001-1BA2.-....	1350.–
132 S	5.5	IE2	1LE1001-1CA0.-....	1410.–					3.1		1PC1001-1CA0.-....	1640.–
132 S	7.5	IE2	1LE1001-1CA1.-....	1790.–					4.3		1PC1001-1CA1.-....	2020.–
132 M					11	IE2	1LE1001-1CA6.-....	2480.–				
160 M	11	IE2	1LE1001-1DA2.-....	2480.–					6.3		1PC1001-1DA2.-....	2710.–
160 M	15	IE2	1LE1001-1DA3.-....	3240.–					6.5		1PC1001-1DA3.-....	3470.–
160 L	18.5	IE2	1LE1001-1DA4.-....	3870.–	22	IE2	1LE1001-1DA6.-....	4560.–	9		1PC1001-1DA4.-....	4090.–
4-Pole: 1500 min^{-1} at 50 Hz												
80 M	0.55	-	▲ 1LE1001-0DB2.-....	461.–								
80 M	0.75	IE2	▲ 1LE1001-0DB3.-....	503.–								
90 S	1.1	IE2	▲ 1LE1001-0EB0.-....	595.–								
90 L	1.5	IE2	▲ 1LE1001-0EB4.-....	706.–								
100 L	2.2	IE2	1LE1001-1AB4.-....	865.–	4	IE2	1LE1001-1AB6.-....	1220.–	1.1		1PC1001-1AB4.-....	1090.–
100 L	3	IE2	1LE1001-1AB5.-....	996.–					1.5		1PC1001-1AB5.-....	1220.–
112 M	4	IE2	1LE1001-1BB2.-....	1220.–	5.5	IE2	1LE1001-1BB6.-....	1520.–	2		1PC1001-1BB2.-....	1450.–
132 S	5.5	IE2	1LE1001-1CB0.-....	1520.–					2.6		1PC1001-1CB0.-....	1750.–
132 M	7.5	IE2	1LE1001-1CB2.-....	1930.–	11	IE2	1LE1001-1CB6.-....	2540.–	4		1PC1001-1CB2.-....	2160.–
160 M	11	IE2	1LE1001-1DB2.-....	2540.–					6		1PC1001-1DB2.-....	2760.–
160 L	15	IE2	1LE1001-1DB4.-....	3290.–	18.5	IE2	1LE1001-1DB6.-....	3880.–	6.2		1PC1001-1DB4.-....	3520.–
6-poles: 1000 min-1 at 50 Hz												
100 L	1.5	IE2	1LE1001-1AC4.-....	855.–	2.2	IE2	1LE1001-1AC6.-....	1080.–	0.85		1PC1001-1AC4.-....	1080.–
112 M	2.2	IE2	1LE1001-1BC2.-....	1080.–	3	IE2	1LE1001-1BC6.-....	1360.–	1.2		1PC1001-1BC2.-....	1310.–
132 S	3	IE2	1LE1001-1CC0.-....	1360.–					1.5		1PC1001-1CC0.-....	1590.–
132 M	4	IE2	1LE1001-1CC2.-....	1670.–	7.5	IE2	1LE1001-1CC6.-....	2670.–	2.5		1PC1001-1CC2.-....	1900.–
132 M	5.5	IE2	1LE1001-1CC3.-....	2110.–					2.7		1PC1001-1CC3.-....	2330.–
160 M	7.5	IE2	1LE1001-1DC2.-....	2670.–					5		1PC1001-1DC2.-....	2890.–
160 L	11	IE2	1LE1001-1DC4.-....	3680.–	15	IE2	1LE1001-1DC6.-....	4780.–	6.5		1PC1001-1DC4.-....	3910.–
8-poles: 750 min-1 at 50 Hz												
100 L	0.75	-	1LE1001-1AD4.-....	957.–					0.37	-	1PC1001-1AD4.-....	1180.–
100 L	1.1	-	1LE1001-1AD5.-....	1210.–					0.55	-	1PC1001-1AD5.-....	1440.–
112 M	1.5	-	1LE1001-1BD2.-....	1440.–					0.75	-	1PC1001-1BD2.-....	1660.–
132 S	2.2	-	1LE1001-1CD0.-....	1860.–					1.1	-	1PC1001-1CD0.-....	2080.–
132 M	3	-	1LE1001-1CD2.-....	2270.–					1.5	-	1PC1001-1CD2.-....	2490.–
160 M	4	-	1LE1001-1DD2.-....	2780.–					2.4	-	1PC1001-1DD2.-....	3000.–
160 M	5.5	-	1LE1001-1DD3.-....	3410.–					3.3	-	1PC1001-1DD3.-....	3640.–
160 L	7.5	-	1LE1001-1DD4.-....	4110.–					4.6	-	1PC1001-1DD4.-....	4340.–

3) Further electrical data can be calculated and supplied on receipt of order.

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	1LE1001
IE2 High efficiency	4	1PC1001

Digit #	12	13	Code
1LE10 . . -	-		. - Z _ _ _

VOLTAGE SELECTION	12	13	Code		Frame Size 80	90	100	112	132	160
Dual Frequency										
50Hz 230VΔ/400VY, 60Hz 460VY [1]	2	2	-	All						
50Hz 400VΔ/690VY, 60Hz 460VΔ [1,2]	3	4	-	3 & 4						
50 Hz 400 VΔ, 60 Hz 460 VΔ [1,2]				1 & 2						
50 Hz 400 VY, 60 Hz 460 VY [1]	0	2	-	All			-	-	-	-
50Hz Voltage Supply										
50Hz 500VY	2	7	-	All	-	-	○	○	○	○
50Hz 500VΔ	4	0	-	All	-	-	○	○	○	○
50Hz 220VΔ/380VY	2	1	-	All	-	-	51.4	62.1	79.7	97.8
50Hz 380VΔ/660VY [2]	3	3	-	3 & 4	-	-	51.4	62.1	79.7	97.8
50Hz 380VΔ [2]				1 & 2	-	-	51.4	62.1	79.7	97.8
50Hz 415VY	2	3	-	All	-	-	51.4	62.1	79.7	97.8
50Hz 415VΔ	3	5	-	All	-	-	51.4	62.1	79.7	97.8
60Hz Voltage Supply, Maximum Output 60Hz										
220VΔ/380VY	9	0	M1A	Only 3 & 4	-	-	51.4	62.1	79.7	97.8
380VΔ/660VY	9	0	M1B	Only 3 & 4	-	-	51.4	62.1	79.7	97.8
440VY	9	0	M1C	Only 3 & 4	-	-	51.4	62.1	79.7	97.8
440VΔ	9	0	M1D	Only 3 & 4	-	-	51.4	62.1	79.7	97.8
460VY	9	0	M1E	Only 3 & 4	-	-	○	○	○	○
460VΔ	9	0	M1F	Only 3 & 4	-	-	○	○	○	○
575Y	9	0	M1G	Only 3 & 4	-	-	51.4	62.1	79.7	97.8
575Δ	9	0	M1H	Only 3 & 4	-	-	51.4	62.1	79.7	97.8

1) PTC for FS 80 & 90 is voltage dependent::

02 - PTC not available

22, 34 - Must be included.

2) Voltages 600V or higher are not stamped on the nameplate of 1LE021 & 1LE023 motors

3) Only for 4,6 & 8 Poles, VSD data is printed on the nameplate in tabular format

4) Voltages between 200 & 690V

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required [4]		

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12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	1LE1001
IE2 High efficiency	4	1PC1001

Digit #	12	13	Code							
1LE10 . . -		-		. . . - Z _ _ _						
					Frame Size					
Voltage					80	90	100	112	132	160
60Hz Voltage Supply, Power Output as 50Hz										
220VΔ/380VY;	9	0	M2A	All	-	-	51.4	62.1	79.7	97.8
380VΔ/660VY;	9	0	M2B	All	-	-	51.4	62.1	79.7	97.8
440VY	9	0	M2C	All	-	-	51.4	62.1	79.7	97.8
440VΔ	9	0	M2D	All	-	-	51.4	62.1	79.7	97.8
460VY	9	0	M2E	All	-	-	51.4	62.1	79.7	97.8
460VΔ	9	0	M2F	All	-	-	51.4	62.1	79.7	97.8
575Y	9	0	M2G	All	-	-	51.4	62.1	79.7	97.8
575Δ	9	0	M2H	All	-	-	51.4	62.1	79.7	97.8
Non-Standard Winding										
400V Δ [3]	9	0	M3A	All	35.3	41.4	51.4	62.1	79.7	97.8
Other Voltage & Frecuency [4]	9	0	M1Y •	All	-	-	103.–	125.–	159.–	198.–

1) The protection for motors with FS 80 & 90 is dependent on the selected voltage.

02 - Available only without PTC protection

22, 34 - Not available wihtout PTC protection.

2) Voltages 600V or higher are not stamped on the nameplate of 1LE021 & 1LE023 motors

3) Only for 4,6 & 8 Poles, VSD data is printed on the nameplate in tabular format

4) Voltages between 200 & 690V, clear text must be specified (Frequency, Voltage, Power, altitude and Ambient Temp.)

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

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Delivery Time

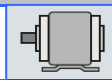
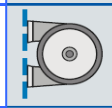
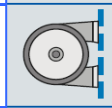
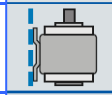
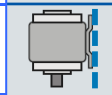
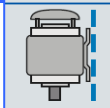
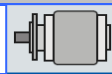
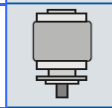
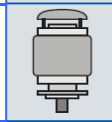
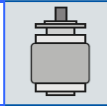
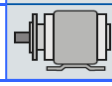
12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	1LE1001
IE2 High efficiency	4	1PC1001

14 Code

1LE10 . . - . . . . . . - Z _ _ _

Frame Size

Mounting		14	Code		80	90	100	112	132	160
Foot Mounted										
IMB3 [1,2,3]		A	-	All but [2]						
IMB6 [2,3]		T	-	All but [2]						
IMB7 [2,3]		U	-	All but [2]						
IMB8 [2,3]		V	-	All but [2]						
IMV6 [2,3]		D	-	All but [2]						
IMV5 (No canopy)		C	-	All but [2]						
IMV5 (With canopy)		C	H00	All but [4]	554	54	78.4	78.4	137.–	137.–
Footless with B5 Flange					A200	A200	A250	A250	A300	A350
IMB5 [2,7]		F	-	All	52.1	65.5	77.4	96.1	125.–	162.–
IMV1 [2] (No canopy)		G	-	All	52.1	65.5	77.4	96.1	125.–	162.–
IMV1 [2,4,5,6] (with canopy)		G	H00	All but [4]	106.1	116.5	155.8	174.5	262.–	299.–
IMV3 [4]		H	-	All	52.1	65.5	77.4	96.1	125.–	162.–
IMB35 [3]		J	-	All but [2]	69.9	79.9	96.1	126.–	158.–	228.–

* See next page for notes

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required *)		

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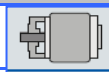
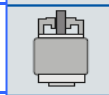
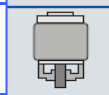
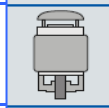
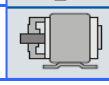
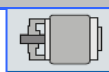
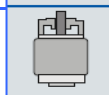
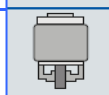
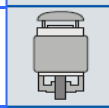
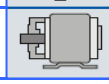
Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	1LE1001
IE2 High efficiency	4	1PC1001

1LE10 . . - . . . . . 14 . - Z _ _ _ Code

Frame Size

Mounting					80	90	100	112	132	160
Footless with B14 Standard Flange					C120	C140	C160	D160	C200	C250
IMB14 [2,8]		K	-	All	52.1	65.5	77.4	96.1	125.–	162.–
IMV19 [2]		L	-	All	52.1	65.5	77.4	96.1	125.–	162.–
IMV18 [2] (No Canopy)		M	-	All	52.1	65.5	77.4	96.1	125.–	162.–
IMV18 [2,4,5,6] (with Canopy)		M	H00	All but 4	106.1	116.5	155.8	174.5	262.–	299.–
IMB34 [3]		N	-	All but 2	69.9	79.9	96.1	126.–	158.–	228.–
					80	**90**	**100**	**112**	**132**	**160**
Footless with B14 Special Flange							C200	**C200**	C250	
IMB14 [2,8]		K	P01	All	-	-	122.8	141.5	181.7	-
IMV19 [2]		L	P01	All	-	-	122.8	141.5	181.7	-
IMV18 [2] (No Canopy)		M	P01	All	-	-	122.8	141.5	181.7	-
IMV18 [2,4,5,6] (with Canopy)		M	P01+H0(	All but 4	-	-	201.2	219.9	318.7	-
IMB34 [3]		N	P01	All but 2	-	-	141.5	171.4	214.7	-

1) The types of construction IM B6/7/8, IM V6 and IM V5 without protective cover/with protective cover are also possible as long as no condensation drainage holes (order code H03) and no stamping of these types of construction on the rating plate are 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. When ordering with condensation drainage holes (order code H03), it is absolutely necessary to specify the type of construction for the exact position of the condensation drainage holes during manufacture.

3) NEMA Energy Efficient (1LE1021) foot mounted motors (2,4,6 Poles) ≤ 200HP are not available due to efficiency regulations in NAFTA.

4) Option second shaft extension (order code L05) not possible.

5) 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 additional charge).

6) The types of construction IM V3 and IM V1 without protective cover/with protective cover are also possible as long as no condensation drainage holes (order code H03) and no stamping of these types of construction on the rating plate are 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 without protective cover/with protective cover are also possible as long as no condensation drainage holes (order code H03) and no stamping of these types of construction on the rating plate are 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.

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required *)		

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	1LE1001
IE2 High efficiency	4	1PC1001

Protection	15	Code		80	90	100	112	132	160
Winding Protection									
Without Protection [1]	A	-	All						
Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping [1,2]	B	-	All	35.3	41.4	114.–	114.–	171.–	171.–
Motor protection with PTC thermistors with 6 embedded temperature sensors for tripping [2]	C	-	All	-	-	195.–	195.–	261.–	261.–
Motor temperature detection with 1 x embedded temperature sensor KTY 84-130 [2]	F	-	All	-	-	114.–	114.–	171.–	171.–
Motor temperature detection with 2 x embedded temperature sensors KTY 84-130 [2]	G	-	All	-	-	229.–	229.–	342.–	342.–
Installation of 3 x embeded resistant thermometers PT100 [2]	H	-	All	-	-	1440.–	1440.–	1440.–	1440.–
NTC Thermistors for triping	Z	Q2A	All	-	-	229.–	229.–	342.–	342.–
Temperature detectors for tripping 1)	Z	Q3A	All	-	-	127.–	127.–	186.–	186.–

1) The protection for motors with FS 80 & 90 is dependent on the selected voltage:
Selcetion A: only available with voltage selection 02 (digits on part # 12 & 13)
Selcetion B: only available with voltage selection 22 or 34 (digits on part # 12 & 13)

2) Evaluation with an appropiate tripping unit (catalog IC 10) is recommended.

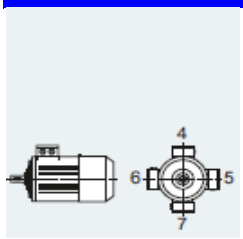
	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required *)		

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks



NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	1LE1001
IE2 High efficiency	4	1PC1001

Terminal Box position	16	Code		80	90	100	112	132	160
Terminal box on top [1]	4	-	All						
Terminal box on the right hand side viewed from the drive end. [2]	5	-	All	-	-	99.5	108.–	117.–	125.–
Terminal box on the left hand side viewed from the drive end. [2]	6	-	All	-	-	99.5	108.–	117.–	125.–
Terminal box under [2,3]	7	-	All	-	-	99.5	108.–	117.–	125.–

1) Foot moutned motors with Terminal box on top will have, as standard, casted feet. Option code H01 must be added if bolted feet are required.

2) Motosr with feet and Terminal box on the side will have bolted feet

3) Normally not available for foot mounted motors.

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required *)		

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		12 Working Weeks	14 Working Weeks	16 Working Weeks
NEMA Premium Efficiency / IE3	1	1LE1023		
Energy efficient / IE2	2	1LE1021		
IE2 High efficiency	3			
IE2 High efficiency	4	1PC1001		

Code

1LE10 . . - . . . . . - . . . . - Z _ _ _

Frame Size

			90	100	112	132	160
Motor connection and connection box							
One cable gland, metal	**R15**	All	59.9	107.–	107.–	107.–	136.–
Rotation of terminal box 90° left, entry from DE	**R10**	All	○	○	○	○	○
Rotation of terminal box 90° right, entry from NDE	**R11**	All	○	○	○	○	○
Rotation of terminal box 180°	**R12**	All	○	○	○	○	○
Larger connection box	**R50**	All	–	274.–	274.–	319.–	355.–
in acc. with BS, both cable entries mounted [1]	**R30**	All	–	–	208.–	208.–	232.–
External earthing	**H04**	All	22.8	22.8	27.5	27.5	27.5
3 cables protruding, 0.5 m long [2)3)]	**R20**	All	–	65.4	78.4	95.8	113.–
3 cables protruding, 1.5 m long [2)3)]	**R21**	All	–	78.9	914.9	116.–	137.–
6 cables protruding, 0.5 m long [2)]	**R22**	All	–	101.–	121.–	150.–	177.–
6 cables protruding, 1.5 m long [2)]	**R23**	All	–	129.–	156.–	189.–	225.–
6 cables protruding, 3 m long [2)]	**R24**	All	–	208.–	245.–	307.–	367.–
Connection box on NDE [4)]	**H08**	All	–	114.–	140.–	181.–	246.–
Windings and insulation							
Temperature class 155 (F), used acc. to 155 (F), with service factor (SF)	**N01**	All	–	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 155 (F), with increased output	**N02**	All	–	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 155 (F), with increased coolant temperature	**N03**	All	39.5	46.–	46.–	61.2	61.2
Temperature class 180 (H) at rated power, and max. CT 60 ºC [5)]	**N11**	All	–	201.–	257.–	325.–	404.–
Increased air humidity/ temperature with 30 to 60g water per m3 of air	**N20**	All	–	141.–	141.–	141.–	214.–
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	All	–	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	All	–	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	All	–	103.–	125.–	159.–	198.–
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	All	–	103.–	125.–	159.–	198.–
Increased air humidity temperature with 60 to 100 g water per m3 of air	**N21**	All	–	275.–	309.–	334.–	444.–
Temperature class 155 (F), used acc. to 130 (B), with higher ambient temperatur or altitude	**Y50 •**	All	–	154.–	186.–	240.–	295.–
Temperature class 155 (F), used acc. to 155 (F), other requirements	**Y52 •**	All	39.5	46.–	46.–	61.2	61.2

Standard

○ No additional price

● Additional text is required *)

\- Not available

O.R On Request

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

		12 Working Weeks	14 Working Weeks	16 Working Weeks
NEMA Premium Efficiency / IE3	1	1LE1023		
Energy efficient / IE2	2	1LE1021		
IE2 High efficiency	3			
IE2 High efficiency	4	1PC1001		

Code

1LE10 . . - . . . . . - . . . . - Z _ _ _

	Code		Frame Size 90	100	112	132	160
Colors and paint finish							
Special finish in RAL 7030 stone gray		All					
Special finish in other standard RAL colors (See Other Standard color table)	Y54 •	All	58.3	98.3	98.3	129.–	129.–
Special finish in special RAL colors (see Special finish in special RAL colors)	Y51 •	All	659.–	745.–	745.–	745.–	787.–
Special finish Offshore	S04 *New!*	All	–	o.R	o.R	o.R	o.R
Special finish sea air resistant	S03	All	–	658.–	658.–	703.–	703.–
Unpainted (only cast iron parts primed)	S00	All	○ ○	○	○	○	
Unpainted, only primed	S01	All	19.9	26.5	26.5	42.2	42.2
Modular technology – Basic versions [6]							
Mounting of separately driven fan	F70	1, 3, 4 no F90	699.–	699.–	832.–	959.–	1110.–
Mounting of brake [7]	F01	1, 3, 4 no F90	–	638.–	775.–	1000.–	1980.–
Mounting of 1XP8012-10 (HTL) rotary pulse encoder [8,9]	G01	1, 3, 4 no F90	–	717.–	717.–	775.–	775.–
Mounting of 1XP8012-20 (TTL) rotary pulse encoder [8,9]	G02	1, 3, 4 no F90	–	994.–	994.–	1050.–	1050.–
Modular technology – Additional versions							
Brake supply voltage 24 V DC	F10	1, 3, 4 no F90	–	51.4	51.4	51.4	51.4
Brake supply voltage 230 V AC, 50/60 Hz	F11	1, 3, 4 no F90	–	○	○	○	○
Brake supply voltage 400 V AC, 50/60 Hz	F12	1, 3, 4 no F90	–	51.4	51.4	51.4	51.4
Mechanical manual brake release with lever (no locking)	F50	1, 3, 4 no F90	–	256.–	256.–	286.–	414.–
Special technology [6]							
Mounting of LL 861 900 220 rotary pulse encoder [8]	G04	1, 3, 4 no F90	–	2970.–	2970.–	3030.–	3030.–
Mounting of HOG 9 D 1024 I rotary pulse encoder [8]	G05	1, 3, 4 no F90	–	3370.–	3370.–	3420.–	3420.–
Mounting of HOG 10 D 1024 I rotary pulse encoder [8]	G06	1, 3, 4 no F90	–	4350.–	4350.–	4440.–	4440.–
Coolant temperature and site altitude							
Coolant temperature –40 °C to +40 °C [16]	D03	All	–	367.–	465.–	539.–	618.–
Coolant temperature –30 °C to +40 °C [16]	D04	All	–	67.4	67.4	80.9	80.9

Standard

○ No additional price

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Selection, Pricing and delivery guide

Delivery Time

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NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	
IE2 High efficiency	4	1PC1001

Code

1LE10 . . - . . . . . - . . . . - Z _ _ _

Frame Size

	Code			90	100	112	132	160
Mechanical design and degrees of protection								
Protective cover for types of construction [8,10]	**H00**		1, 3, 4 no F90	54.–	78.4	78.4	137.–	137.–
Next size normal flange	**P01**	*New!*	All	–	45.4	56.7	56.7	–
Screwed-on feet (instead of cast)	**H01**		All	–	99.5	108.–	117.–	125.–
Radial seal on DE for flange-mounting motors with oil resistance to 0.1 bar [11]	**H23**		All	49.2	54.8	59.9	73.1	107.–
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**		1, 3, 4 no F90	–	–	–	595.–	595.–
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	**F78**		1, 3, 4 no F90	– –	–		595.–	595.–
IP65 degree of protection [12]	**H20**		All	143.–	143.–	143.–	143.–	214.–
IP56 degree of protection (non-heavy-sea) [13]	**H22**		All	158.–	158.–	158.–	158.–	235.–
Vibration-proof version	**H02**		All	–	180.–	199.–	216.–	234.–
Condensation drainage holes [14]	**H03**		All	–	78,70	85,90	93,10	100,–
Non-rusting screws (externally)	**H07**		All	–	148.–	148.–	172.–	172.–
Prepared for mountings, only center hole [15]	**G40**		1, 2, 3 no F90	–	68.1	68.1	90.3	104.–
Prepared for mountings with D12 shaft [15]	**G41**		1, 2, 3 no F90	–	136.–	136.–	180.–	207.–
Prepared for mountings with D16 shaft [15]	**G42**		1, 2, 3 no F90	–	136.–	136.–	180.–	207.–
Protective cover for encoder (loosely enclosed – only for mountings acc. to order codes G40, G41 and G42)	**G43**		1, 2, 3 no F90	–	78.4	78.4	137.–	137.–
Designs in accordance with standards and specifications								
CCC China Compulsory Certification [17]	**D01**	*New!*	All	–	38.6	38.6	–	–
Electrical according to NEMA MG1-12 [18]	**D30**		3 & 4	–	38.6	38.6	38.6	38.6
			1 & 2					
Design according to UL with “Recognition Mark” [18]	**D31**		3 & 4	–	96.1	114.–	146.–	178.–
			1 & 2					
China energy Efficiney Label	**D34**	*New!*	All	–	○	○	○	○
Canadian regulations (CSA) [19]	**D40**		3 & 4	–	96.1	114.–	146.–	178.–
			1 & 2					

Standard

○ No additional price

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LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

		12 Working Weeks	14 Working Weeks	16 Working Weeks
NEMA Premium Efficiency / IE3	1	1LE1023		
Energy efficient / IE2	2	1LE1021		
IE2 High efficiency	3			
IE2 High efficiency	4	1PC1001		

Code

1LE10 . . - . . . . . - . . . . - Z _ _ _

	Code		Frame Size 90	100	112	132	160
Bearings and lubrication							
Measuring nipple for SPM shock pulse measurement for bearing inspection [20]	Q01	All	–	245.–	274.–	302.–	333.–
Bearing design for increased cantilever forces	L22	All	–	95.9	112.–	126.–	167.–
Special bearing for DE and NDE, bearing size 63	L25	All	–	193.–	225.–	252.–	336.–
Regreasing device [20]	L23	All	–	302.–	310.–	319.–	346.–
Located bearing at DE	L20	All	40.2	69.3	82.1	101.–	138.–
Located bearing at NDE	L21	All	– –		44.3	46.9	
Balance and vibration level							
Vibration level A		All					
Vibration level B	L00	All	257.–	270.–	312.–	399.–	494.–
Half-key balancing (standard)		All					
Full-key balancing	L02	All	106.–	106.–	106.–	122.–	122.–
Balancing without key	L01	All	20.8	27.–	27.–	3190.–	3190.–
Shaft and rotor							
movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08	All	201.–	229.–	257.–	287.–	356.–
Second standard shaft exten- sion	L05	1, 3, 4 no F90	93.1	136.–	136.–	180.–	207.–
Shaft extension with standard dimensions, without featherkey way	L04	All	–	500.–	526.–	552.–	581.–
Concentricity of shaft exten- sion in accordance with DIN 42955 Tolerance R	L07	All	232.–	255.–	255.–	388.–	388.–
Standard shaft made of non- rusting steel	L06	All	798.–	916.–	916.–	1060.–	1320.–
Non-standard cylindrical shaft extension [21]	Y55 •	All	472.–	500.–	526.–	552.–	581.–
Non-standard shaft (DE)	Y58 • *New!*	All	–	500.–	526.–	552.–	581.–
Non-standard shaft (NDE)	Y59 • *New!*	All	–	500.–	526.–	552.–	581.–
Heating and ventilation							
Fan cover for textile industry [22]	F75	1, 2, 3 no F90	–	301.–	430.–	545.–	644.–
Metal external fan [23]	F76	1, 3, 4 no F90	–	180.–	214.–	249.–	287.–
Without cooling fan and fan cover	F90	1, 3, 4 no F90	113.–	113.–	113.–	113.–	113.–
Anti-condensation heaters for 230 V	Q02	All	–	410.–	437.–	494.–	549.–
Anti-condensation heaters for 115 V	Q03	All	–	410.–	437.–	494.–	549.–
Sheet metal fan cover	F74	1, 2, 3 no F90	59.4	64.7	70.2	75.5	80.9

Standard

○ No additional price

● Additional text is required *)

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O.R On Request

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1023
Energy efficient / IE2	2	1LE1021
IE2 High efficiency	3	
IE2 High efficiency	4	1PC1001

Code

1LE10 . . - . . . . . - . . . . - Z _ _ _

Frame Size

				90	100	112	132	160
Rating plate and extra rating plates								
Auxiliary nameplate with voltage range [24]	**B07**	*New!*	**All**	–	39.5	39.5	39.5	39.5
Second rating plate, loose [25]	**M10**		**All**	20.1	20.1	20.1	20.1	20.1
Nirosta rating plate	**M11**		**All**	40.2	40.2	40.2	40.2	40.2
Extra rating plate or rating plate with deviating rating plate data	**Y80 •**		**All**	70.8	103.–	125.–	159.–	198.–
Extra rating plate with identifi- cation codes	**Y82 •**		**All**	39.5	39.5	39.5	39.5	39.5
Additional information on rating plate and on package label (max. of 20 characters)	**Y84 •**		**All**	39.5	39.5	39.5	39.5	39.5
Nameplate gluesticker type, loose	**Y85 •**	*New!*	**All**	– –		39.5	39.5	39.5
Packaging, safety notes, documentation and test certificates								
With one safety and start-up guide per box pallet	**B01**		**All**	○	○	○	○	○
Acceptance test certificate 3.1 in accordance with EN 10204 [26]	**B02**		**All**	27.3	27.3	27.3	27.3	27.3
Compact Operation Manual German/English (in box)			**All**					
Printed operating instructions English/German enclosed	**B04**		**All**	–	61.2	61.2	61.2	61.2
Type test with heat run for hori- zontal motors, with acceptance	**B83**		**All**	5400.–	6070.–	6470.–	7020.–	7420.–
Wire-lattice pallet	**B99**		**All**	○	○	○	○	○
Connected in star for dispatch	**M01**		**All**	–	27.5	27.5	27.5	27.5
Connected in delta for dispatch	**M02**		**All**	–	27.5	27.5	27.5	27.5

Standard

○ No additional price

• Additional text is required *)

\- Not available

O.R On Request

LV IEC Standard motors 1LE1 - Aluminum Series

Special Notes

1) Not possible in combination with code R15

2) On-Request with in combination with motor protection (dig. # 15 on the part number) or with option for space heaters

3) Not possible for voltage codes 22 or 34 (dig. # 12 & 13 in the part number) and/or multi-speed motors

4) Not possible in combination with codes: N01, N02, N03, N05, N06, N07, N08, N11. It is only possible for utilization on temperature class155 (F).

5) Not available for motors with UL option (code D31). Grease life is reduced in half with every 10K increase in ambient temperature.

6) A second extension shaft is not possible with this options. On-Request if brake is mounted.

7) The brake operating voltage must be provided with codes F10, F11 or F12

8) As standard encoders motors with encoders are supplied with a protection canopy. If in combination with external blower, the econder is placed inside the fan cover.

9) When in combination with an external blower (code F70) the encoder 1XP8032-10 will be used instead of 1XP8012, and 1XP8032-20 will be used instead of 1XP8020

10) The code H00 represents a mechanical protection

11) No available for mounting type IMV3 (footless flange motor, vertical shaft up)

12) Not possible in combination with encoder HOG 9 D 1021 I (code G05) and/or brake 2LM8 (code F01)

13) Not available in combination with Brake 2LM8 (code F01)

14) The condensation holes on the drive end (DE) and non drive end (NDE) are supplied closed (IP55, IP56, IP65).
For foot mounted motors for side or ceiling mounting (IMB6, IMB7 or IMB8) additional code (H03) must be used so drain holes will be position corre

15) A protective canopy is not provided for motors ordered with shaft mounting preparations (codes G40, G41 & G42).
If a protective canopy is required, it can be provided loose when codes are used in combination with code G43. These options are not available

16) When in combination with shaft mounting preparations (codes G40,G41,G42), preacausion must be taken to assure accessories comply with ambient temperature requirements.

17) CC Certification is required for:
- 2 Piole Motors ≤ 2.2kW
- 4 Piole Motors ≤ 1.1kW
- 6 Pole Mtoors ≤ 0.75 kW
- 8 Pole Mtoors ≤ 0.55 kW

18) Execution up to maximum 600V. The nameplate indicates the voltage supply without voltage tolerance.
Order codes D30 and D31 do not entitle importing status for USA and Mexico.
The eagle line motors (1LE1021 and 1LE023) are available for that purpose.

19) The nameplate indicates the voltage supply without voltage tolerance. Order code D40 do not entitle importing status for Canada.
The eagle line motors (1LE1021 and 1LE023) are available for that purpose.

20) Not possible with brake

21) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the featherkey way must be specified in a sketch.

It must be ensured that only featherkeys in accordance with DIN 6885, Form A are permitted to be used.
The featherkey way is positioned centrally on the shaft extension. The length is defined by the manufacturer normatively.
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 featherkeys are supplied in every case. For order codes Y55 and L05:
- Dimensions D and DA ≤ internal diameter of roller bearing.
- Dimensions E and EA ≤ 2 x length E (normal) of the shaft extension

22) Because of the special requiremetns from the textile industry for a fan housing, it is possible to fit a finger between the fan housing and frame.
For safety reasons, the end user must take meassures to close this gap.

22) Because of the special requiremetns from the textile industry for a fan housing, it is possible to fit a finger between the fan housing and frame.
For safety reasons, the end user must take meassures to close this gap.

23) For 1LE1 motors with metal fan, variable Speed drive operation is permitted.
A Metal fan is not possible with low noise options (codes F77 or F78)

24) Available for voltages 22 and 34, 230VΔ /400VY or 400VΔ/690VY
(dig. # 12 & 13 in the part number).
Not possible for multi-speed, self-ventilated or in combination of 8-Pole and option D34.

25) For FS 80 & 90 as glue-sticker type

26) The delivery of the Test Certificate can be different of that from the motor.

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — NEMA Premium Efficient MG1 motors, Table 12-12 (continued)**
Series	**Cast-iron series 1LE1523/1LE1623** [1] **Basic/Performance Line** **(continued on next page)**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	100 L ... 315 L
Rated output at 50Hz	1.5 ... 200 kW at 50 Hz 2 … 250 hp at 60 Hz
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50zh	8.1 ... 1046 Nm at 60 Hz
efficiency	NEMA Premium Efficient MG1 Table 12-12 [1]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top
(for delivery times refer to colored background of the relevant price)

	$P_{N,50Hz}$	$P_{N,60Hz}$	Frame Size-	Part-Nr. Basic Line	Base Price	Part-Nr. Performance Line	Base Price
	kW	hp	FS	▲ New	USD	▲ New	USD
2-poles: 3000 min-1 at 50 Hz, 3600 min-1 at 60 Hz							
100 L	3	4	100 L	▲ 1LE1523-1AA4.-....	1300.–	▲ 1LE1623-1AA4.-....	1410.–
112 M	4	5	112 M	▲ 1LE1523-1BA2.-....	1540.–	▲ 1LE1623-1BA2.-....	1660.–
132 S	5.5	7.5	132 S	▲ 1LE1523-1CA0.-....	1940.–	▲ 1LE1623-1CA0.-....	2100.–
132 S	7.5	10	132 S	▲ 1LE1523-1CA1.-....	2460.–	▲ 1LE1623-1CA1.-....	2650.–
160 M	11	15	160 M	▲ 1LE1523-1DA2.-....	3410.–	▲ 1LE1623-1DA2.-....	3810.–
160 M	15	20	160 M	▲ 1LE1523-1DA3.-....	4450.–	▲ 1LE1623-1DA3.-....	4970.–
160 L	18.5	25	160 L	▲ 1LE1523-1DA4.-....	5310.–	▲ 1LE1623-1DA4.-....	5930.–
180 M	22	30	180 M	▲ 1LE1523-1EA2.-....	5930.–	▲ 1LE1623-1EA2.-....	6400.–
200 L	30	40	200 L	▲ 1LE1523-2AA4.-....	7690.–	▲ 1LE1623-2AA4.-....	8300.–
200 L	37	50	200 L	▲ 1LE1523-2AA5.-....	9650.–	▲ 1LE1623-2AA5.-....	10400.–
225 M	45	60	225 M	▲ 1LE1523-2BA2.-....	11000.–	▲ 1LE1623-2BA2.-....	11900.–
250 M	55	75	250 M	▲ 1LE1523-2CA2.-....	13100.–	▲ 1LE1623-2CA2.-....	14200.–
280 S	75	100	280 S	▲ 1LE1523-2DA0.-....	17900.–	▲ 1LE1623-2DA0.-....	18300.–
280 M	90	125	280 M	▲ 1LE1523-2DA2.-....	21200.–	▲ 1LE1623-2DA2.-....	22100.–
315 S	110	150	315 S	▲ 1LE1523-3AA0.-....	25400.–	▲ 1LE1623-3AA0.-....	26500.–
315 M	132	175	315 M	▲ 1LE1523-3AA2.-....	30500.–	▲ 1LE1623-3AA2.-....	31700.–
315 L	160	200	315 L	▲ 1LE1523-3AA4.-....	37900.–	▲ 1LE1623-3AA4.-....	39500.–
315 L	200	250	315 L	▲ 1LE1523-3AA5.-....	44300.–	▲ 1LE1623-3AA5.-....	46200.–
4-poles: 1500 min-1 at 50 Hz, 1800 min-1 at 60 Hz							
100 L	2.2	3	100 L	▲ 1LE1523-1AB4.-....	1180.–	▲ 1LE1623-1AB4.-....	1280.–
100 L	3	4	100 L	▲ 1LE1523-1AB5.-....	1370.–	▲ 1LE1623-1AB5.-....	1470.–
112 M	4	5	112 M	▲ 1LE1523-1BB2.-....	1680.–	▲ 1LE1623-1BB2.-....	1810.–
132 S	5.5	7.5	132 S	▲ 1LE1523-1CB0.-....	2090.–	▲ 1LE1623-1CB0.-....	2260.–
132 M	7.5	10	132 M	▲ 1LE1523-1CB2.-....	2650.–	▲ 1LE1623-1CB2.-....	2860.–
160 M	11	15	160 M	▲ 1LE1523-1DB2.-....	3480.–	▲ 1LE1623-1DB2.-....	3900.–
160 L	15	20	160 L	▲ 1LE1523-1DB4.-....	4520.–	▲ 1LE1623-1DB4.-....	5060.–
180 M	18.5	25	180 M	▲ 1LE1523-1EB2.-....	5030.–	▲ 1LE1623-1EB2.-....	5430.–
180 L	22	30	180 L	▲ 1LE1523-1EB4.-....	5850.–	▲ 1LE1623-1EB4.-....	6310.–
200 L	30	40	200 L	▲ 1LE1523-2AB5.-....	7580.–	▲ 1LE1623-2AB5.-....	8180.–
225 S	37	50	225 S	▲ 1LE1523-2BB0.-....	8810.–	▲ 1LE1623-2BB0.-....	9540.–
225 M	45	60	225 M	▲ 1LE1523-2BB2.-....	10400.–	▲ 1LE1623-2BB2.-....	11200.–
250 M	55	75	250 M	▲ 1LE1523-2CB2.-....	12600.–	▲ 1LE1623-2CB2.-....	13600.–
280 S	75	100	280 S	▲ 1LE1523-2DB0.-....	17000.–	▲ 1LE1623-2DB0.-....	17400.–
280 M	90	125	280 M	▲ 1LE1523-2DB2.-....	19900.–	▲ 1LE1623-2DB2.-....	20400.–
315 S	110	150	315 S	▲ 1LE1523-3AB0.-....	24800.–	▲ 1LE1623-3AB0.-....	25400.–
315 M	132	175	315 M	▲ 1LE1523-3AB2.-....	29400.–	▲ 1LE1623-3AB2.-....	30100.–
315 L	160	200	315 L	▲ 1LE1523-3AB4.-....	35500.–	▲ 1LE1623-3AB4.-....	36400.–
315 L	200	250	315 L	▲ 1LE1523-3AB5.-....	41400.–	▲ 1LE1623-3AB5.-....	42500.–

1) Notes for 1LE1521/1LE1621 NEMA Energy Efficient motors:
- Comprises CSA, UL and CC-No.
- Only valid for voltages ≤ 600 V

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — NEMA Premium Efficient MG1 motors, Table 12-12**
Series	**Cast-iron series 1LE1523/1LE1623** [1] **Basic/Performance Line**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	100 L ... 315 L
Rated output at 50Hz	1.5 ... 200 kW at 50 Hz 2 ... 250 hp at 60 Hz
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50zh	8.1 ... 1046 Nm at 60 Hz
efficiency	NEMA Premium Efficient MG1 Table 12-12 [1]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top
(for delivery times refer to colored background of the relevant price)

	$P_{N,50Hz}$	$P_{N,60Hz}$	Frame Size-	Part-Nr. Basic Line	Base Price		Part-Nr. Performance Line	Base Price	
	kW	hp	FS	▲ New	USD		▲ New	USD	
6-poles: 1000 min-1 at 50 Hz, 1200 min-1 at 60 Hz									
132 S	3	4	132 S	▲ 1LE1523-1CC0.-....	1860.–		▲ 1LE1623-1CC0.-....	2020.–	
132 M	4	5	132 M	▲ 1LE1523-1CC2.-....	2300.–		▲ 1LE1623-1CC2.-....	2480.–	
132 M	5.5	7.5	132 M	▲ 1LE1523-1CC3.-....	2890.–		▲ 1LE1623-1CC3.-....	3120.–	
160 M	7.5	10	160 M	▲ 1LE1523-1DC2.-....	3660.–		▲ 1LE1623-1DC2.-....	4100.–	
160 L	11	15	160 L	▲ 1LE1523-1DC4.-....	5060.–		▲ 1LE1623-1DC4.-....	5650.–	
180 L	15	20	180 L	▲ 1LE1523-1EC4.-....	6230.–		▲ 1LE1623-1EC4.-....	6730.–	
200 L	18.5	25	200 L	▲ 1LE1523-2AC4.-....	7630.–		▲ 1LE1623-2AC4.-....	8240.–	
200 L	22	30	200 L	▲ 1LE1523-2AC5.-....	8840.–		▲ 1LE1623-2AC5.-....	9540.–	
225 M	30	40	225 M	▲ 1LE1523-2BC2.-....	11300.–		▲ 1LE1623-2BC2.-....	12300.–	
250 M	37	50	250 M	▲ 1LE1523-2CC2.-....	13800.–		▲ 1LE1623-2CC2.-....	14900.–	
280 S	45	60	280 S	▲ 1LE1523-2DC0.-....	16800.–		▲ 1LE1623-2DC0.-....	17200.–	
280 M	55	75	280 M	▲ 1LE1523-2DC2.-....	19900.–		▲ 1LE1623-2DC2.-....	20400.–	
315 S	75	100	315 S	▲ 1LE1523-3AC0.-....	27000.–		▲ 1LE1623-3AC0.-....	27700.–	
315 M	90	125	315 M	▲ 1LE1523-3AC2.-....	30500.–		▲ 1LE1623-3AC2.-....	31200.–	
315 L	110	150	315 L	▲ 1LE1523-3AC4.-....	36700.–		▲ 1LE1623-3AC4.-....	37600.–	
315 L	132	175	315 L	▲ 1LE1523-3AC5.-....	43700.–		▲ 1LE1623-3AC5.-....	44800.–	
315 L	160	200	315 L	▲ 1LE1523-3AC6.-....	49600.–		▲ 1LE1623-3AC6.-....	50900.–	

1) Notes for 1LE1521/1LE1621 NEMA Energy Efficient motors:
- Comprises CSA, UL and CC-No.
- Only valid for voltages ≤ 600 V

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — NEMA Energy Efficient MG1 motors, Table 12-11 (continued)**
Series	**Cast-iron series 1LE1521/1LE1621** [1] **Basic/Performance Line** **(continued on next page)**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	100 L ... 315 L
Rated output at 50Hz	1.5 ... 200 kW at 50 Hz 2 ... 250 hp at 60 Hz
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50zh	8.1 ... 1048 Nm at 60 Hz
efficiency	NEMA Energy Efficient MG1 Table 12-11 [1]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top
(for delivery times refer to colored background of the relevant price)

Frame Size	$P_{N,}$ 50Hz	$P_{N,}$ 60Hz	Frame Size-	Part-Nr. Basic Line	Base Price	Part-Nr. Performance Line	Base Price
FS	kW	hp	FS	▲ New	USD	▲ New	USD
2-poles: 3000 min-1 at 50 Hz, 3600 min-1 at 60 Hz							
100 L	3	4	100 L	▲ 1LE1521-1AA4.-....	1130.–	▲ 1LE1621-1AA4.-....	1230.–
112 M	4	5	112 M	▲ 1LE1521-1BA2.-....	1340.–	▲ 1LE1621-1BA2.-....	1460.–
132 S	5.5	7.5	132 S	▲ 1LE1521-1CA0.-....	1690.–	▲ 1LE1621-1CA0.-....	1840.–
132 S	7.5	10	132 S	▲ 1LE1521-1CA1.-....	2090.–	▲ 1LE1621-1CA1.-....	2290.–
160 M	11	15	160 M	▲ 1LE1521-1DA2.-....	2880.–	▲ 1LE1621-1DA2.-....	3290.–
160 M	15	20	160 M	▲ 1LE1521-1DA3.-....	3700.–	▲ 1LE1621-1DA3.-....	4230.–
160 L	18.5	25	160 L	▲ 1LE1521-1DA4.-....	4380.–	▲ 1LE1621-1DA4.-....	5000.–
180 M	22	30	180 M	▲ 1LE1521-1EA2.-....	4980.–	▲ 1LE1621-1EA2.-....	5440.–
200 L	30	40	200 L	▲ 1LE1521-2AA4.-....	6470.–	▲ 1LE1621-2AA4.-....	7080.–
200 L	37	50	200 L	▲ 1LE1521-2AA5.-....	8030.–	▲ 1LE1621-2AA5.-....	8790.–
225 M	45	60	225 M	▲ 1LE1521-2BA2.-....	9610.–	▲ 1LE1621-2BA2.-....	10500.–
250 M	55	75	250 M	▲ 1LE1521-2CA2.-....	11400.–	▲ 1LE1621-2CA2.-....	12500.–
280 S	75	100	280 S	▲ 1LE1521-2DA0.-....	15500.–	▲ 1LE1621-2DA0.-....	16000.–
280 M	90	125	280 M	▲ 1LE1521-2DA2.-....	18200.–	▲ 1LE1621-2DA2.-....	19100.–
315 S	110	150	315 S	▲ 1LE1521-3AA0.-....	22000.–	▲ 1LE1621-3AA0.-....	23000.–
315 M	132	175	315 M	▲ 1LE1521-3AA2.-....	26100.–	▲ 1LE1621-3AA2.-....	27400.–
315 L	160	200	315 L	▲ 1LE1521-3AA4.-....	32200.–	▲ 1LE1621-3AA4.-....	33800.–
315 L	200	250	315 L	▲ 1LE1521-3AA5.-....	40000.–	▲ 1LE1621-3AA5.-....	42000.–
4-poles: 1500 min-1 at 50 Hz, 1800 min-1 at 60 Hz							
100 L	2.2	3	100 L	▲ 1LE1521-1AB4.-....	1040.–	▲ 1LE1621-1AB4.-....	1130.–
100 L	3	4	100 L	▲ 1LE1521-1AB5.-....	1180.–	▲ 1LE1621-1AB5.-....	1290.–
112 M	4	5	112 M	▲ 1LE1521-1BB2.-....	1450.–	▲ 1LE1621-1BB2.-....	1570.–
132 S	5.5	7.5	132 S	▲ 1LE1521-1CB0.-....	1800.–	▲ 1LE1621-1CB0.-....	1970.–
132 M	7.5	10	132 M	▲ 1LE1521-1CB2.-....	2240.–	▲ 1LE1621-1CB2.-....	2450.–
160 M	11	15	160 M	▲ 1LE1521-1DB2.-....	2930.–	▲ 1LE1621-1DB2.-....	3350.–
160 L	15	20	160 L	▲ 1LE1521-1DB4.-....	3760.–	▲ 1LE1621-1DB4.-....	4290.–
180 M	18.5	25	180 M	▲ 1LE1521-1EB2.-....	4260.–	▲ 1LE1621-1EB2.-....	4660.–
180 L	22	30	180 L	▲ 1LE1521-1EB4.-....	4910.–	▲ 1LE1621-1EB4.-....	5370.–
200 L	30	40	200 L	▲ 1LE1521-2AB5.-....	6390.–	▲ 1LE1621-2AB5.-....	6990.–
225 S	37	50	225 S	▲ 1LE1521-2BB0.-....	7780.–	▲ 1LE1621-2BB0.-....	8510.–
225 M	45	60	225 M	▲ 1LE1521-2BB2.-....	9070.–	▲ 1LE1621-2BB2.-....	9930.–
250 M	55	75	250 M	▲ 1LE1521-2CB2.-....	11000.–	▲ 1LE1621-2CB2.-....	12000.–
280 S	75	100	280 S	▲ 1LE1521-2DB0.-....	14700.–	▲ 1LE1621-2DB0.-....	15200.–
280 M	90	125	280 M	▲ 1LE1521-2DB2.-....	17200.–	▲ 1LE1621-2DB2.-....	17600.–
315 S	110	150	315 S	▲ 1LE1521-3AB0.-....	21400.–	▲ 1LE1621-3AB0.-....	22000.–
315 M	132	175	315 M	▲ 1LE1521-3AB2.-....	25200.–	▲ 1LE1621-3AB2.-....	26000.–
315 L	160	200	315 L	▲ 1LE1521-3AB4.-....	30300.–	▲ 1LE1621-3AB4.-....	31200.–
315 L	200	250	315 L	▲ 1LE1521-3AB5.-....	37500.–	▲ 1LE1621-3AB5.-....	38600.–

1) Notes for 1LE1521/1LE1621 NEMA Energy Efficient motors:
- Comprises CSA, UL and CC-No.
- Only valid for voltages ≤ 600 V

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — NEMA Energy Efficient MG1 motors, Table 12-11**
Series	**Cast-iron series 1LE1521/1LE1621** [1] **Basic/Performance Line**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	100 L ... 315 L
Rated output at 50Hz	1.5 ... 200 kW at 50 Hz 2 ... 250 hp at 60 Hz
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50zh	8.1 ... 1048 Nm at 60 Hz
efficiency	NEMA Energy Efficient MG1 Table 12-11 [1]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top
(for delivery times refer to colored background of the relevant price)

	$P_{N,50Hz}$	$P_{N,60Hz}$	Frame Size-	Part-Nr. Basic Line	Base Price	Part-Nr. Performance Line	Base Price
	kW	hp	FS	▲ New	USD	▲ New	USD
6-poles: 1000 min-1 at 50 Hz, 1200 min-1 at 60 Hz							
100 L	1.5	2	100 L	▲ 1LE1521-1AC4.-....	1020.–	▲ 1LE1621-1AC4.-....	1120.–
112 M	2.2	3	112 M	▲ 1LE1521-1BC2.-....	1290.–	▲ 1LE1621-1BC2.-....	1400.–
132 S	3	4	132 S	▲ 1LE1521-1CC0.-....	1620.–	▲ 1LE1621-1CC0.-....	1770.–
132 M	4	5	132 M	▲ 1LE1521-1CC2.-....	1820.–	▲ 1LE1621-1CC2.-....	2000.–
132 M	5.5	7.5	132 M	▲ 1LE1521-1CC3.-....	2430.–	▲ 1LE1621-1CC3.-....	2660.–
160 M	7.5	10	160 M	▲ 1LE1521-1DC2.-....	3080.–	▲ 1LE1621-1DC2.-....	3500.–
160 L	11	15	160 L	▲ 1LE1521-1DC4.-....	4170.–	▲ 1LE1621-1DC4.-....	4770.–
180 L	15	20	180 L	▲ 1LE1521-1EC4.-....	5220.–	▲ 1LE1621-1EC4.-....	5710.–
200 L	18.5	25	200 L	▲ 1LE1521-2AC4.-....	6430.–	▲ 1LE1621-2AC4.-....	7030.–
200 L	22	30	200 L	▲ 1LE1521-2AC5.-....	7380.–	▲ 1LE1621-2AC5.-....	8080.–
225 M	30	40	225 M	▲ 1LE1521-2BC2.-....	9870.–	▲ 1LE1621-2BC2.-....	10800.–
250 M	37	50	250 M	▲ 1LE1521-2CC2.-....	12000.–	▲ 1LE1621-2CC2.-....	13100.–
280 S	45	60	280 S	▲ 1LE1521-2DC0.-....	14600.–	▲ 1LE1621-2DC0.-....	15100.–
280 M	55	75	280 M	▲ 1LE1521-2DC2.-....	17200.–	▲ 1LE1621-2DC2.-....	17600.–
315 S	75	100	315 S	▲ 1LE1521-3AC0.-....	23300.–	▲ 1LE1621-3AC0.-....	23900.–
315 M	90	125	315 M	▲ 1LE1521-3AC2.-....	26100.–	▲ 1LE1621-3AC2.-....	26900.–
315 L	110	150	315 L	▲ 1LE1521-3AC4.-....	31300.–	▲ 1LE1621-3AC4.-....	32200.–
315 L	132	175	315 L	▲ 1LE1521-3AC5.-....	37100.–	▲ 1LE1621-3AC5.-....	38100.–
315 L	160	200	315 L	▲ 1LE1521-3AC6.-....	44700.–	▲ 1LE1621-3AC6.-....	46000.–

1) Notes for 1LE1521/1LE1621 NEMA Energy Efficient motors:
- Comprises CSA, UL and CC-No.
- Only valid for voltages ≤ 600 V

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — Motors with High Efficiency IE2 (continued)**
Series	**Cast-iron series 1LE1501/1LE1601 Basic/Performance Line** **(continued on next page)**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6, 8
Frame size (F)	100 L ... 315 L
Rated output at 50Hz	0.75 ... 200 kW
Synchronous speed	750 ... 3600 min^{-1}
Rater torque at 50zh	9.9 ... 1282 Nm
efficiency	High Efficiency IE2

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

Frame size	$P_{N, 50Hz}$	*IE-Class*	Frame Size	Part-Nr. Basic Line	*Base Price*	Part-Nr. Performance Line	*Base Price*
FS	kW		FS	▲ New	USD	▲ New	USD
2-poles: 3000 min-1 at 50 Hz							
100 L	**3**	**IE2**	**100 L**	▲ **1LE1501-1AA4.-....**	**1030.–**	▲ **1LE1601-1AA4.-....**	**1130.–**
112 M	**4**	**IE2**	**112 M**	▲ **1LE1501-1BA2.-....**	**1220.–**	▲ **1LE1601-1BA2.-....**	**1340.–**
132 S	**5.5**	**IE2**	**132 S**	▲ **1LE1501-1CA0.-....**	**1530.–**	▲ **1LE1601-1CA0.-....**	**1690.–**
132 S	**7.5**	**IE2**	**132 S**	▲ **1LE1501-1CA1.-....**	**1950.–**	▲ **1LE1601-1CA1.-....**	**2140.–**
160 M	**11**	**IE2**	**160 M**	▲ **1LE1501-1DA2.-....**	**2690.–**	▲ **1LE1601-1DA2.-....**	**3100.–**
160 M	**15**	**IE2**	**160 M**	▲ **1LE1501-1DA3.-....**	**3510.–**	▲ **1LE1601-1DA3.-....**	**4040.–**
160 L	**18.5**	**IE2**	**160 L**	▲ **1LE1501-1DA4.-....**	**4190.–**	▲ **1LE1601-1DA4.-....**	**4820.–**
180 M	**22**	**IE2**	**180 M**	▲ **1LE1501-1EA2.-....**	**4690.–**	▲ **1LE1601-1EA2.-....**	**5160.–**
200 L	**30**	**IE2**	**200 L**	▲ **1LE1501-2AA4.-....**	**6080.–**	▲ **1LE1601-2AA4.-....**	**6680.–**
200 L	**37**	**IE2**	**200 L**	▲ **1LE1501-2AA5.-....**	**7630.–**	▲ **1LE1601-2AA5.-....**	**8400.–**
225 M	**45**	**IE2**	**225 M**	▲ **1LE1501-2BA2.-....**	**9110.–**	▲ **1LE1601-2BA2.-....**	**10000.–**
250 M	**55**	**IE2**	**250 M**	▲ **1LE1501-2CA2.-....**	**10800.–**	▲ **1LE1601-2CA2.-....**	**11900.–**
280 S	**75**	**IE2**	**280 S**	▲ **1LE1501-2DA0.-....**	**14800.–**	▲ **1LE1601-2DA0.-....**	**15200.–**
280 M	**90**	**IE2**	**280 M**	▲ **1LE1501-2DA2.-....**	**17500.–**	▲ **1LE1601-2DA2.-....**	**18400.–**
315 S	**110**	**IE2**	**315 S**	▲ **1LE1501-3AA0.-....**	**21000.–**	▲ **1LE1601-3AA0.-....**	**22100.–**
315 M	**132**	**IE2**	**315 M**	▲ **1LE1501-3AA2.-....**	**25200.–**	▲ **1LE1601-3AA2.-....**	**26400.–**
315 L	**160**	**IE2**	**315 L**	▲ **1LE1501-3AA4.-....**	**31300.–**	▲ **1LE1601-3AA4.-....**	**32900.–**
315 L	**200**	**IE2**	**315 L**	▲ **1LE1501-3AA5.-....**	**39100.–**	▲ **1LE1601-3AA5.-....**	**41000.–**
4-poles: 1500 min-1 at 50 Hz							
100 L	**2.2**	**IE2**	**100 L**	▲ **1LE1501-1AB4.-....**	**938.–**	▲ **1LE1601-1AB4.-....**	**1030.–**
100 L	**3**	**IE2**	**100 L**	▲ **1LE1501-1AB5.-....**	**1080.–**	▲ **1LE1601-1AB5.-....**	**1190.–**
112 M	**4**	**IE2**	**112 M**	▲ **1LE1501-1BB2.-....**	**1320.–**	▲ **1LE1601-1BB2.-....**	**1460.–**
132 S	**5.5**	**IE2**	**132 S**	▲ **1LE1501-1CB0.-....**	**1650.–**	▲ **1LE1601-1CB0.-....**	**1820.–**
132 M	**7.5**	**IE2**	**132 M**	▲ **1LE1501-1CB2.-....**	**2100.–**	▲ **1LE1601-1CB2.-....**	**2310.–**
160 M	**11**	**IE2**	**160 M**	▲ **1LE1501-1DB2.-....**	**2760.–**	▲ **1LE1601-1DB2.-....**	**3160.–**
160 L	**15**	**IE2**	**160 L**	▲ **1LE1501-1DB4.-....**	**3570.–**	▲ **1LE1601-1DB4.-....**	**4110.–**
180 M	**18.5**	**IE2**	**180 M**	▲ **1LE1501-1EB2.-....**	**3970.–**	▲ **1LE1601-1EB2.-....**	**4370.–**
180 L	**22**	**IE2**	**180 L**	▲ **1LE1501-1EB4.-....**	**4620.–**	▲ **1LE1601-1EB4.-....**	**5080.–**
200 L	**30**	**IE2**	**200 L**	▲ **1LE1501-2AB5.-....**	**5990.–**	▲ **1LE1601-2AB5.-....**	**6590.–**
225 S	**37**	**IE2**	**225 S**	▲ **1LE1501-2BB0.-....**	**7280.–**	▲ **1LE1601-2BB0.-....**	**8010.–**
225 M	**45**	**IE2**	**225 M**	▲ **1LE1501-2BB2.-....**	**8570.–**	▲ **1LE1601-2BB2.-....**	**9430.–**
250 M	**55**	**IE2**	**250 M**	▲ **1LE1501-2CB2.-....**	**10400.–**	▲ **1LE1601-2CB2.-....**	**11400.–**
280 S	**75**	**IE2**	**280 S**	▲ **1LE1501-2DB0.-....**	**14000.–**	▲ **1LE1601-2DB0.-....**	**14400.–**
280 M	**90**	**IE2**	**280 M**	▲ **1LE1501-2DB2.-....**	**16400.–**	▲ **1LE1601-2DB2.-....**	**16900.–**
315 S	**110**	**IE2**	**315 S**	▲ **1LE1501-3AB0.-....**	**20500.–**	▲ **1LE1601-3AB0.-....**	**21100.–**
315 M	**132**	**IE2**	**315 M**	▲ **1LE1501-3AB2.-....**	**24300.–**	▲ **1LE1601-3AB2.-....**	**25000.–**
315 L	**160**	**IE2**	**315 L**	▲ **1LE1501-3AB4.-....**	**29300.–**	▲ **1LE1601-3AB4.-....**	**30200.–**
315 L	**200**	**IE2**	**315 L**	▲ **1LE1501-3AB5.-....**	**36600.–**	▲ **1LE1601-3AB5.-....**	**37700.–**

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — Motors with High Efficiency IE2**
Series	**Cast-iron series 1LE1501/1LE1601** **Basic/Performance Line**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6, 8
Frame size (F)	100 L ... 315 L
Rated output at 50Hz	0.75 ... 200 kW
Synchronous speed	750 ... 3600 min^{-1}
Rater torque at 50zh	9.9 ... 1282 Nm
efficiency	High Efficiency IE2

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top
(for delivery times refer to colored background of the relevant price)

Frame size	$P_{N, 50Hz}$	*IE-Class*	Frame Size-	Part-Nr. Basic Line	*Base Price*	Part-Nr. Performance Line	*Base Price*
FS	kW		FS	▲ New	USD	▲ New	USD
6-poles: 1000 min-1 at 50 Hz							
100 L	**1.5**	**IE2**	**100 L**	▲ **1LE1501-1AC4.-....**	**927.–**	▲ **1LE1601-1AC4.-....**	**1020.–**
112 M	**2.2**	**IE2**	**112 M**	▲ **1LE1501-1BC2.-....**	**1170.–**	▲ **1LE1601-1BC2.-....**	**1290.–**
132 S	**3**	**IE2**	**132 S**	▲ **1LE1501-1CC0.-....**	**1480.–**	▲ **1LE1601-1CC0.-....**	**1620.–**
132 M	**4**	**IE2**	**132 M**	▲ **1LE1501-1CC2.-....**	**1820.–**	▲ **1LE1601-1CC2.-....**	**2000.–**
132 M	**5.5**	**IE2**	**132 M**	▲ **1LE1501-1CC3.-....**	**2290.–**	▲ **1LE1601-1CC3.-....**	**2510.–**
160 M	**7.5**	**IE2**	**160 M**	▲ **1LE1501-1DC2.-....**	**2890.–**	▲ **1LE1601-1DC2.-....**	**3330.–**
160 L	**11**	**IE2**	**160 L**	▲ **1LE1501-1DC4.-....**	**4000.–**	▲ **1LE1601-1DC4.-....**	**4600.–**
180 L	**15**	**IE2**	**180 L**	▲ **1LE1501-1EC4.-....**	**4930.–**	▲ **1LE1601-1EC4.-....**	**5420.–**
200 L	**18.5**	**IE2**	**200 L**	▲ **1LE1501-2AC4.-....**	**6030.–**	▲ **1LE1601-2AC4.-....**	**6640.–**
200 L	**22**	**IE2**	**200 L**	▲ **1LE1501-2AC5.-....**	**6990.–**	▲ **1LE1601-2AC5.-....**	**7680.–**
225 M	**30**	**IE2**	**225 M**	▲ **1LE1501-2BC2.-....**	**9370.–**	▲ **1LE1601-2BC2.-....**	**10300.–**
250 M	**37**	**IE2**	**250 M**	▲ **1LE1501-2CC2.-....**	**11400.–**	▲ **1LE1601-2CC2.-....**	**12500.–**
280 S	**45**	**IE2**	**280 S**	▲ **1LE1501-2DC0.-....**	**13900.–**	▲ **1LE1601-2DC0.-....**	**14300.–**
280 M	**55**	**IE2**	**280 M**	▲ **1LE1501-2DC2.-....**	**16400.–**	▲ **1LE1601-2DC2.-....**	**16900.–**
315 S	**75**	**IE2**	**315 S**	▲ **1LE1501-3AC0.-....**	**22300.–**	▲ **1LE1601-3AC0.-....**	**23000.–**
315 M	**90**	**IE2**	**315 M**	▲ **1LE1501-3AC2.-....**	**25200.–**	▲ **1LE1601-3AC2.-....**	**25900.–**
315 L	**110**	**IE2**	**315 L**	▲ **1LE1501-3AC4.-....**	**30300.–**	▲ **1LE1601-3AC4.-....**	**31200.–**
315 L	**132**	**IE2**	**315 L**	▲ **1LE1501-3AC5.-....**	**36100.–**	▲ **1LE1601-3AC5.-....**	**37200.–**
315 L	**160**	**IE2**	**315 L**	▲ **1LE1501-3AC6.-....**	**43800.–**	▲ **1LE1601-3AC6.-....**	**45100.–**
8-poles: 750 min-1 at 50 Hz	**8-poles: 750 min-1 at 50 Hz**						
100 L	**0.75**	**-**	**100 L**	▲ **1LE1501-1AD4.-....**	**1040.–**	▲ **1LE1601-1AD4.-....**	**1140.–**
100 L	**1.1**	**-**	**100 L**	▲ **1LE1501-1AD5.-....**	**1310.–**	▲ **1LE1601-1AD5.-....**	**1440.–**
112 M	**1.5**	**-**	**112 M**	▲ **1LE1501-1BD2.-....**	**1550.–**	▲ **1LE1601-1BD2.-....**	**1710.–**
132 M	**2.2**	**-**	**132 M**	▲ **1LE1501-1CD0.-....**	**2010.–**	▲ **1LE1601-1CD0.-....**	**2220.–**
132 M	**3**	**-**	**132 M**	▲ **1LE1501-1CD2.-....**	**2460.–**	▲ **1LE1601-1CD2.-....**	**2710.–**
160 M	**4**	**-**	**160 M**	▲ **1LE1501-1DD2.-....**	**3010.–**	▲ **1LE1601-1DD2.-....**	**3460.–**
160 M	**5.5**	**-**	**160 M**	▲ **1LE1501-1DD3.-....**	**3700.–**	▲ **1LE1601-1DD3.-....**	**4260.–**
160 L	**7.5**	**-**	**160 L**	▲ **1LE1501-1DD4.-....**	**4470.–**	▲ **1LE1601-1DD4.-....**	**5140.–**

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — Motors with Premium Efficiency IE3**
Series	**Cast-iron series 1LE1503/1LE1603 Basic/Performance Line (continued on next page)**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	180 M ... 315 L
Rated output at 50Hz	15 ... 200 kW
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50zh	71 ... 1282 Nm
efficiency	Premium Efficiency IE3

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

Frame size	$P_{N, 50Hz}$	*IE-Class*	Frame Size-	Part-Nr. Basic Line	*Base Price*	Part-Nr. Performance Line	*Base Price*
FS	kW		FS	▲ New	USD	▲ New	USD
2-poles: 3000 min-1 at 50 Hz							
180 M	**22**	**IE3**	**180 M**	▲ **1LE1503-1EA2.-....**	**5390.–**	▲ **1LE1603-1EA2.-....**	**5860.–**
200 L	**30**	**IE3**	**200 L**	▲ **1LE1503-2AA4.-....**	**6990.–**	▲ **1LE1603-2AA4.-....**	**7600.–**
200 L	**37**	**IE3**	**200 L**	▲ **1LE1503-2AA5.-....**	**8780.–**	▲ **1LE1603-2AA5.-....**	**9540.–**
225 M	**45**	**IE3**	**225 M**	▲ **1LE1503-2BA2.-....**	**10000.–**	▲ **1LE1603-2BA2.-....**	**10900.–**
250 M	**55**	**IE3**	**250 M**	▲ **1LE1503-2CA2.-....**	**11900.–**	▲ **1LE1603-2CA2.-....**	**13000.–**
280 S	**75**	**IE3**	**280 S**	▲ **1LE1503-2DA0.-....**	**16300.–**	▲ **1LE1603-2DA0.-....**	**16700.–**
280 M	**90**	**IE3**	**280 M**	▲ **1LE1503-2DA2.-....**	**19300.–**	▲ **1LE1603-2DA2.-....**	**20100.–**
315 S	**110**	**IE3**	**315 S**	▲ **1LE1503-3AA0.-....**	**23100.–**	▲ **1LE1603-3AA0.-....**	**24200.–**
315 M	**132**	**IE3**	**315 M**	▲ **1LE1503-3AA2.-....**	**27700.–**	▲ **1LE1603-3AA2.-....**	**29000.–**
315 L	**160**	**IE3**	**315 L**	▲ **1LE1503-3AA4.-....**	**34400.–**	▲ **1LE1603-3AA4.-....**	**36000.–**
315 L	**200**	**IE3**	**315 L**	▲ **1LE1503-3AA5.-....**	**43000.–**	▲ **1LE1603-3AA5.-....**	**45000.–**
4-poles: 1500 min-1 at 50 Hz							
180 M	**18.5**	**IE3**	**180 M**	▲ **1LE1503-1EB2.-....**	**4570.–**	▲ **1LE1603-1EB2.-....**	**4970.–**
180 L	**22**	**IE3**	**180 L**	▲ **1LE1503-1EB4.-....**	**5310.–**	▲ **1LE1603-1EB4.-....**	**5780.–**
200 L	**30**	**IE3**	**200 L**	▲ **1LE1503-2AB5.-....**	**6890.–**	▲ **1LE1603-2AB5.-....**	**7490.–**
225 S	**37**	**IE3**	**225 S**	▲ **1LE1503-2BB0.-....**	**8010.–**	▲ **1LE1603-2BB0.-....**	**8740.–**
225 M	**45**	**IE3**	**225 M**	▲ **1LE1503-2BB2.-....**	**9430.–**	▲ **1LE1603-2BB2.-....**	**10300.–**
250 M	**55**	**IE3**	**250 M**	▲ **1LE1503-2CB2.-....**	**11400.–**	▲ **1LE1603-2CB2.-....**	**12500.–**
280 S	**75**	**IE3**	**280 S**	▲ **1LE1503-2DB0.-....**	**15400.–**	▲ **1LE1603-2DB0.-....**	**15800.–**
280 M	**90**	**IE3**	**280 M**	▲ **1LE1503-2DB2.-....**	**18100.–**	▲ **1LE1603-2DB2.-....**	**18600.–**
315 S	**110**	**IE3**	**315 S**	▲ **1LE1503-3AB0.-....**	**22500.–**	▲ **1LE1603-3AB0.-....**	**23100.–**
315 M	**132**	**IE3**	**315 M**	▲ **1LE1503-3AB2.-....**	**26700.–**	▲ **1LE1603-3AB2.-....**	**27500.–**
315 L	**160**	**IE3**	**315 L**	▲ **1LE1503-3AB4.-....**	**32300.–**	▲ **1LE1603-3AB4.-....**	**33200.–**
315 L	**200**	**IE3**	**315 L**	▲ **1LE1503-3AB5.-....**	**40200.–**	▲ **1LE1603-3AB5.-....**	**41300.–**

Standard Motors 1LE1 Cast Iron

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**1.2 — Motors with Premium Efficiency IE3**
Series	**Cast-iron series 1LE1503/1LE1603 Basic/Performance Line (continued)**
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	180 M ... 315 L
Rated output at 50Hz	15 ... 200 kW
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50zh	71 ... 1282 Nm
efficiency	Premium Efficiency IE3

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

Frame size	$P_{N, 50Hz}$	IE-Class	Frame Size-	Part-Nr. Basic Line	Base Price	Part-Nr. Performance Line	Base Price
FS	kW		FS	▲ New	USD	▲ New	USD
6-poles: 1000 min-1 at 50 Hz							
180 L	**15**	**IE3**	**180 L**	▲ **1LE1503-1EC4.-....**	**5670.–**	▲ **1LE1603-1EC4.-....**	**6160.–**
200 L	**18.5**	**IE3**	**200 L**	▲ **1LE1503-2AC4.-....**	**6940.–**	▲ **1LE1603-2AC4.-....**	**7540.–**
200 L	**22**	**IE3**	**200 L**	▲ **1LE1503-2AC5.-....**	**8030.–**	▲ **1LE1603-2AC5.-....**	**8730.–**
225 M	**30**	**IE3**	**225 M**	▲ **1LE1503-2BC2.-....**	**10300.–**	▲ **1LE1603-2BC2.-....**	**11200.–**
250 M	**37**	**IE3**	**250 M**	▲ **1LE1503-2CC2.-....**	**12500.–**	▲ **1LE1603-2CC2.-....**	**13700.–**
280 S	**45**	**IE3**	**280 S**	▲ **1LE1503-2DC0.-....**	**15300.–**	▲ **1LE1603-2DC0.-....**	**15700.–**
280 M	**55**	**IE3**	**280 M**	▲ **1LE1503-2DC2.-....**	**18100.–**	▲ **1LE1603-2DC2.-....**	**18600.–**
315 S	**75**	**IE3**	**315 S**	▲ **1LE1503-3AC0.-....**	**24600.–**	▲ **1LE1603-3AC0.-....**	**25200.–**
315 M	**90**	**IE3**	**315 M**	▲ **1LE1503-3AC2.-....**	**27700.–**	▲ **1LE1603-3AC2.-....**	**28500.–**
315 L	**110**	**IE3**	**315 L**	▲ **1LE1503-3AC4.-....**	**33400.–**	▲ **1LE1603-3AC4.-....**	**34300.–**
315 L	**132**	**IE3**	**315 L**	▲ **1LE1503-3AC5.-....**	**39700.–**	▲ **1LE1603-3AC5.-....**	**40800.–**
315 L	**160**	**IE3**	**315 L**	▲ **1LE1503-3AC6.-....**	**48200.–**	▲ **1LE1603-3AC6.-....**	**49500.–**

LV IEC Standard motors 1LE1 - Cast Iron Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE15/623
Energy efficient / IE2	2	1LE15/621
IE3 Premium efficiency	3	1LE15/603
IE2 High efficiency	4	1LE15/601

	Digit # 12	13	Add. Code		Votlage	Frame Size 100	112	132	160	180	200	225	250	280	315
1LE15**5/6** . . -		-	. . . Z _ _ _												
Dual Frequency															
50Hz 230VΔ/400VY, 60Hz 460VY [1]	2	2	-	All		○	○	○	○	○	○	○	○	○	○
50Hz 400VΔ/690VY, 60Hz 460VΔ [1,2]	3	4	-	3 & 4		○	○	○	○	○	○	○	○	○	○
50 Hz 400 VΔ, 60 Hz 460 VΔ [1,2]				1 & 2		○	○	○	○	○	○	○	○	○	○
50Hz Voltage Supply															
50Hz 500VY	2	7	-	All		○	○	○	○	○	○	○	○	○	○
50Hz 500VΔ	4	0	-	All		○	○	○	○	○	○	○	○	○	○
50Hz 220VΔ/380VY	2	1	-	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
50Hz 380VΔ/660VY [2]	3	3	-	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392
50Hz 380VΔ [2]				1 & 2		51.4	62.1	79.7	97.8	132	151	205	234	302	392
50Hz 415VY	2	3	-	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
50Hz 415VΔ	3	5	-	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
60Hz Voltage Supply, Maximum Output 60Hz															
220VΔ/380VY;	9	0	M1A	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392
380VΔ/660VY;	9	0	M1B	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392
440VY	9	0	M1C	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392
440VΔ	9	0	M1D	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392
460VY	9	0	M1E	3 & 4		○	○	○	○	132	151	205	234	302	392
460VΔ	9	0	M1F	3 & 4		○	○	○	○	132	151	205	234	302	392
575Y	9	0	M1G	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392
575Δ	9	0	M1H	3 & 4		51.4	62.1	79.7	97.8	132	151	205	234	302	392

1) PTC for FS 80 & 90 is voltage dependent::

02 - PTC not available

22, 34 - Must be included.

2) Voltages 600V or higher are not stamped on the nameplate of 1LE021 & 1LE023 motors

3) Only for 4,6 & 8 Poles, VSD data is printed on the nameplate in tabular format

4) Voltages between 200 & 690V, clear text must be specified (Frequency, Voltage, Power, altitude and Ambient Temp.)

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)		

LV IEC Standard motors 1LE1 - Cast Iron Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE15/623
Energy efficient / IE2	2	1LE15/621
IE3 Premium efficiency	3	1LE15/603
IE2 High efficiency	4	1LE15/601

Digit #		Add.
12	13	Code
1LE15**5/6** . . -	-	. . . Z _ _ _

Dual Frequency	12	13	Add. Code			Frame Size 100	112	132	160	180	200	225	250	280	315
60Hz Voltage Supply, Power Output as 50Hz															
220VΔ/380VY;	9	0	M2A	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
380VΔ/660VY;	9	0	M2B	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
440VY	9	0	M2C	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
440VΔ	9	0	M2D	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
460VY	9	0	M2E	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
460VΔ	9	0	M2F	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
575Y	9	0	M2g	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
575Δ	9	0	M2H	All		51.4	62.1	79.7	97.8	132	151	205	234	302	392
Non-Standard Winding															
400V Δ [3]	9	0	M3A	All		51.4	62.1	79.7	97.8	O.R	O.R	O.R	O.R	O.R	O.R
Other Voltage & Frecuency [4]	9	0	M1Y •	All		103.–	125.–	159.–	198.–	255	311	460	580	742	964

1) PTC for FS 80 & 90 is voltage dependent::

02 - PTC not available

22, 34 - Must be included.

2) Voltages 600V or higher are not stamped on the nameplate of 1LE021 & 1LE023 motors

3) Only for 4,6 & 8 Poles, VSD data is printed on the nameplate in tabular format

4) Voltages between 200 & 690V, clear text must be specified (Frequency, Voltage, Power, altitude and Ambient Temp.)

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)		

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE15/623
Energy efficient / IE2	2	1LE15/621
IE2 High efficiency	3	1LE15/603
IE2 High efficiency	4	1LE15/601

Digit # 14 Code

1LE15/6 . . - . . . . . - . . . . - Z _ _ _

Foot Mounted					Frame Size 100	112	132	160	180	200	225	250	280	S/M	2P	4-8 P
IMB3 [1,2,3]		A	-	All but [2] ≤ 200HP												
IMB6 [2,3]		T	-	All but [2] ≤ 200HP												
IMB7 [2,3]		U	-	All but [2] ≤ 200HP												
IMB8 [2,3]		V	-	All but [2] ≤ 200HP												
IMV6 [2,3]		D	-	All but [2] ≤ 200HP											437.–	
IMV5 (No canopy)		C	-	All but [2] ≤ 200HP											437.–	
IMV5 (With canopy)		C	H00	All but [2] ≤ 200HP	78.–	78.–	137.–	137.–	183.–	275.–	364.–	455.–	546.–	729.–	1170.–	729.–

Footless with B5 Flange					100	112	132	160	180	200	225	250	280	315 S/M	315 L 2P	315 L 4-8 P
					A250	A250	A300	A350	A350	A400	A450	A550	A550	A660	A660	A660
IMB5 [2,7]		F	-	All	77.4	96.1	125.–	162.–	256.–	311.–	402.–	483.–	703.–	1000.–	-	-
IMV1 [2] (No canopy)		G	-	All	77.4	96.1	125.–	162.–	256.–	311.–	402.–	483.–	703.–	1100.–	1430.–	1010.–
IMV1 [2,4,5,6] (with canopy)		G	H00	All	155.8	174.5	262.–	299.–	437.–	584.–	768.–	947.–	1250.–	1740.–	2160.–	1740.–
IMV3 [4]		H	-	All	77.4	96.1	125.–	162.–	256.–	311.–	402.–	483.–	703.–	1000.–	-	-
IMB35 [3]		J	-	All but [2] ≤ 200HP	96.1	126.–	158.–	228.–	346.–	455.–	672.–	915.–	1190.–	1570.–	1570.–	1570.–

Standard
○ No additional price
● Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)

- Not available
O.R On Request

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

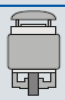
Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3 [1] — 1LE15/623
Energy efficient / IE2 [2] — 1LE15/621
IE2 High efficiency [3] — 1LE15/603
IE2 High efficiency [4] — 1LE15/601

Digit # 14 **Code**

1LE15/6 . . - . . . . . - . . . . - Z _ _ _

					Frame Size											
					100	112	132	160	180	200	225	250	280	315 S/M	315 L 2P	315 L 4-8 P
Footless with B14 Standard Flange					C160	C160	C200	C250								
IMB14 [2,8]		K	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-
IMV19 [2]		L	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-
IMV18 [2] **(No Canopy)**		M	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-
IMV18 [2,4,5,6] **(with Canopy)**		M	H00	All but [4]	155.8	174.5	262.–	299.–	-	-	-	-	-	-	-	-
IMB34 [3]		N	-	All but [2]	96.1	126	158.–	228.–	-	-	-	-	-	-	-	-
Footless with B14 Special Flange					C160	C160	C200									
IMB14 [2,8]		K	P01	All	122.8	141.5	181.7	-	-	-	-	-	-	-	-	-
IMV19 [2]		L	P01	All	122.8	141.5	181.7	-	-	-	-	-	-	-	-	-
IMV18 [2] **(No Canopy)**		M	P01	All	122.8	141.5	181.7	-	-	-	-	-	-	-	-	-
IMV18 [2,4,5,6] **(with Canopy)**		M	P01 +H00	All but [4]	201.2	219.9	318.7	-	-	-	-	-	-	-	-	-
IMB34 [3]		N	P01	All but [2]	141.5	171.4	214.7	-	-	-	-	-	-	-	-	-

1) The types of construction IM B6/7/8, IM V6 and IM V5 without protective cover/with protective cover are also possible as long as no condensation drainage holes (order code H03) and no stamping of these types of construction on the rating plate are 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. When ordering with condensation drainage holes (order code H03), it is absolutely necessary to specify the type of construction for the exact position of the condensation drainage holes during manufacture.

3) NEMA Energy Efficient (1LE1021) foot mounted motors (2,4,6 Poles) ≤ 200HP are not available due to efficiency regulations in NAFTA.

4) Option second shaft extension (order code L05) not possible.

5) 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 additional charge).

6) The types of construction IM V3 and IM V1 without protective cover/with protective cover are also possible as long as no condensation drainage holes (order code H03) and no stamping of these types of construction on the rating plate are 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 without protective cover/with protective cover are also possible as long as no condensation drainage holes (order code H03) and no stamping of these types of construction on the rating plate are 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.

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)		

LV IEC Standard motors 1LE1 - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium Efficiency / IE3	1	1LE1523 (Basic Line)
Energy efficient / IE2	2	1LE1623 (Performance Line)
NEMA Premium Efficiency / IE3	3	1LE1521 (Basic Line)
Energy efficient / IE2	4	1LE1621 (Performance Line)
IE3 Premium efficiency	5	1LE1503 (Basic Line)
IE3 Premium efficiency	6	1LE1603 (Performance Line)
IE2 High efficiency	7	1LE1501 (Basic Line)
IE2 High efficiency	8	1LE1601 (Performance Line)

Digit #	15	Code
1LE15/6 . . - . . . . . - . .	. -	Z _ _ _

Protection				Frame Size 100	112	132	160	180	200	225	250	280	315
Without Protection [1]	A	–	1, 3, 5, & 7										
			2, 4, 6, & 8	–	–	–	–	–	–	–	–	–	–
Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping [1,2]	B	–	1, 3, 5, & 7	114.–	114.–	171.–	171.–	227.–	227.–	310.–	310.–	386.–	386.–
			2, 4, 6, & 8										
Motor protection with PTC thermistors with 6 embedded temperature sensors for tripping [2]	C	–	All	195.–	195.–	261.–	261.–	401.–	401.–	521.–	521.–	647.–	647.–
Motor temperature detection with 1 x embedded temperature sensor KTY 84-130 [2]	F	–	All	114.–	114.–	171.–	171.–	322.–	322.–	441.–	572.–	572.–	843.–
Motor temperature detection with 2 x embedded temperature sensors KTY 84-130 [2]	G	–	All	229.–	229.–	342.–	342.–	523.–	523.–	719.–	974.–	974.–	1430.–
Installation of 3 x embeded resistant thermometers PT100 [2]	H	–	All	1440.–	1440.–	1440.–	1440.–	1440.–	1440.–	1440.–	1590.–	1590.–	1590.–
Installation of 6 x embeded resistant thermometers PT100 [2]	J	–	All	–	–	–	–	2350.–	2350.–	2350.–	2350.–	2350.–	2350.–
Installation of 2 x screwed-on, two-wire resistant thermometers PT100 for antifriction bearings	Z	Q72	All	–	–	–	–	4100.–	4100.–	4100.–	4100.–	4100.–	4100.–
NTC Thermistors for triping	Z	Q2A	All	229.–	229.–	340.–	340.–	–	–	–	–	–	–
Temperature detectors for tripping 1)	Z	Q3A	All	127.–	127.–	186.–	186.–	257.–	257.–	348.–	348.–	431.–	431.–

1) Motor protection with 3 PTC thermistors (Dig 3 15 = B) is standard for the Performance line (1LE16) and is already included in the price of the motor. Therefore the selection "Without Protection" (Dig 3 15 = A) is not available.

2) Evaluation with an appropiate tripping unit (catalog IC 10) is recommended.

○ Standard
○ No additional price
● Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)

\- Not available
O.R On Request

LV IEC Standard motors 1LE1 - Aluminum Series

Delivery Time

Selection, Pricing and delivery guide

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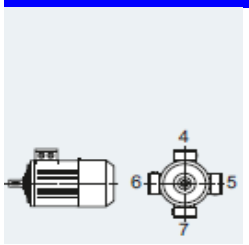

NEMA Premium Efficiency / IE3	1	1LE1523 (Basic Line)
Energy efficient / IE2	2	1LE1623 (Performance Line)
NEMA Premium Efficiency / IE3	3	1LE1521 (Basic Line)
Energy efficient / IE2	4	1LE1621 (Performance Line)
IE3 Premium efficiency	5	1LE1503 (Basic Line)
IE3 Premium efficiency	6	1LE1603 (Performance Line)
IE2 High efficiency	7	1LE1501 (Basic Line)
IE2 High efficiency	8	1LE1601 (Performance Line)

Digit #	16	Code
1LE15/6 . . - . . . . . - . . .		- Z _ _ _

Terminal Box position				Frame Size									
				100	112	132	160	180	200	225	250	280	315
Terminal box on top [1]	4	-	All										
Terminal box on the right hand side viewed from the drive end. [2]	5	-	All	99.5	108	117	125	353	416	492	731	821	946
Terminal box on the left hand side viewed from the drive end. [2]	6	-	All	99.5	108,–	117,–	125,–	353,–	416,–	492,–	731,–	821,–	946,–
Terminal box under [2,3]	7	-	All	99.5	108,–	117,–	125,–	–	–	–	–	–	–

1) Foot moutned motors with Terminal box on top will have, as standard, casted feet. Option code H01 must be added if bolted feet are required.

2) Motosr with feet and Terminal box on the side will have bolted feet

3) Normally not available for foot mounted motors.

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)		

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IE2 High efficiency	8	1LE1601 (Performance Line)

1LE15/6 . . - . . . . . - . . . . - Z Code _ _ _

	Code		Frame Size 100	112	132	160	180	200	225	250	280	315
Motor Protection (bearings)												
PT100 for antifriction bearings [1] 2 x screwed-on	Q72 *New!*	All	–	–	–	–	4100.–	4100.–	4100.–	4100.–	4100.–	4100.–
Motor connection and connection box												
One cable gland, metal	R15	All	107.–	107.–	107.–	136.–	136.–	157.–	157.–	224.–	224.–	224.–
Cable gland, maximum assembly	R18 *New!*	All	151.–	151.–	151.–	199.–	199.–	229.–	229.–	397.–	397.–	397.–
Terminal box rotation 90°, DE entry	R10	All	22.2	22.2	22.2	22.2	42.9	55.6	68.6	82.4	98.4	118.–
Terminal box rotation 90°, NDE entry	R11	All	22.2	22.2	22.2	22.2	42.9	55.6	68.6	82.4	98.4	118.–
Terminal box rotation 180°	R12	All	○	○	○	○	42.9	55.6	68.6	82.4	98.4	118.–
Larger connection box	R50	All	274.–	274.–	319.–	–	–	–	–	–	–	–
External earthing	H04	All	27.5	27.5	27.5	27.5						
Terminal studs for Terminal Box (3 pcs.)	R17 *New!*	All	–	–	–	–	–	–	–	143.–	143.–	180.–
Windings and insulation												
Temperature class 155 (F), used acc. to 155 (F), with increased coolant temperature	N03	All	46.–	46.–	61.2	61.2	–	–	–	–	–	–
Temperature class 180 (H) at rated power and max. CT 60 ºC [2]	N11	All	201.–	257.–	325.–	404.–	–	–	–	–	–	–
Increased air humidity/ temperature with 30 to 60 g water per m3 of air	N20	All	141.–	141.–	141.–	214.–	944.–	1200.–	1460.–	1790.–	2180.–	2670.–
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	N06	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–
Increased air humidity temperature with 60 to 100 g water per m3 of air	N21	All	–	–	–	–	4300.–	4690.–	5450.–	7190.–	8280.–	11800.–
Colors and paint finish												
Standard finish in RAL 7030 stone gray		1, 3, 5 & 7										
Standard finish in other standard RAL colors (See Other Standard color table)	Y53 • *New!*	2, 4, 6 & 8	–	–	–	–	79.3	79.3	79.3	90.3	121.–	194.–
Special finish in RAL 7030 stone gray	S10 *New!*	1, 3, 5 & 7	98.3	98.3	129.–	129.–	180.–	225.–	334.–	404.–	497.–	638.–
		2, 4, 6 & 8										
Special finish in other standard RAL color (See Standard color table)	Y54 •	All	98.3	98.3	129.–	129.–	180.–	225.–	334.–	404.–	497.–	638.–
Special finish in special RAL color. for RAL colors (see Special finish in special RAL colors)	Y51 •	All	745.–	745.–	745.–	745.–	787.–	787.–	787.–	848.–	848.–	848.–
Unpainted (only cast iron parts primed)	S00	All	○	○	○	○	○	○	○	○	○	○
Unpainted, only primed	S01	All	26.5	26.5	42.2	42.2	79.3	79.3	79.3	79.3	79.3	79.3

Standard

○ No additional price

• Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)

\- Not available

O.R On Request

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IE2 High efficiency	8	1LE1601 (Performance Line)

Code

1LE15/6 . . - . . . . . - . . . . - Z _ _ _

Frame Size

	Code		100	112	132	160	180	200	225	250	280	315
Modular technology – Basic versions [3]												
Mounting of separately driven fan	F70	All	699.–	832.–	959.–	1110.–	1330.–	2070.–	2850.–	3500.–	4150.–	4650.–
Mounting of brake [4]	F01	All	638.–	775.–	1000.–	1980.–	4380.–	6120.–	7780.–	24900.–	30700.–	36800.–
Mounting of 1XP8012-10 (HTL) rotary pulse encoder [5,6]	G01	All	717.–	717.–	775.–	775.–	638.–	638.–	1460.–	1460.–	1460.–	1460.–
Mounting of 1XP8012-20 (TTL) rotary pulse encoder [5,6]	G02	All	994.–	994.–	1050.–	1050.–	915.–	915.–	2000.–	2000.–	2000.–	2000.–
Modular technology – Additional versions												
Brake supply voltage 24 V DC	F10	All	47.6	47.6	47.6	47.6	63.5	63.5	63.5	63.5	63.5	63.5
Brake voltage - 230 V AC, 50/60Hz	F11	All	○	○	○	○	○	○	○	○	○	○
Brake voltage - 400 V AC, 50/60Hz	F12	All	47.6	47.6	47.6	47.6	63.5	63.5	63.5	63.5	63.5	63.5
Mechanical manual brake release with lever (no locking)	F50	All	237.–	237.–	265.–	383.–	557.–	650.–	826.–	940.–	1040.–	1320.–
Special technology [3]												
Mounting of LL 861 900 220 rotary pulse encoder [7]	G04	All	2910.–	2910.–	2910.–	2910.–	2910.–	2910.–	4730.–	4730.–	4730.–	4730.–
Mounting of HOG 9 D 1024 I rotary pulse encoder [7]	G05	All	3300.–	3300.–	3300.–	3300.–	3660.–	3660.–	4810.–	4810.–	4810.–	4810.–
Mounting of HOG 10 D 1024 I rotary pulse encoder [7]	G06	All	4290.–	4290.–	4290.–	4290.–	4370.–	4370.–	5710.–	5710.–	5710.–	5710.–
Mechanical design and degrees of protection												
Protective cover for types of construction [5,7,8]	H00	All	78.4	78.4	137.–	137.–	183.–	275.–	364.–	455.–	546.–	729.–
Next size normal flange	P01	All	45.4	56.7	56.7	–	–	–	–	–	–	–
Screwed-on feet (instead of cast)	H01	All	99.5	108.–	117.–	125.–	353.–	416.–	492.–	731.–	821.–	946.–
Radial seal on DE for flange- mounting motors with oil resis- tance to 0.1 bar [9]	H23	All	54.8	59.9	73.1	107.–	138.–	171.–	227.–	194.–	379.–	455.–
IP65 degree of protection [10]	H20	All	143.–	143.–	143.–	214.–	287.–	356.–	430.–	502.–	572.–	644.–
IP56 degree of protection (non-heavy-sea) [11]	H22	All	158.–	158.–	158.–	235.–	313.–	393.–	473.–	551.–	631.–	707.–
Condensation drainage holes	H03	All										
Non-rusting screws (externally)	H07	All	78.7	78.7	93.1	93.1	107.–	121.–	162.–	193.–	201.–	267.–
Coolant temperature and site altitude												
Coolant temperature: –40 °C to +40 °C [12]	D03	All	367.–	465.–	539.–	618.–	686.–	796.–	1020.–	1260.–	1800.–	2320.–

Standard

○ No additional price

● Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)

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IE3 Premium efficiency	6	1LE1603 (Performance Line)
IE2 High efficiency	7	1LE1501 (Basic Line)
IE2 High efficiency	8	1LE1601 (Performance Line)

Code

1LE15<u>5/6</u> . . - . . . . . - . . . . - Z _ _ _

	Code		Frame Size 100	112	132	160	180	200	225	250	280	315
Designs in accordance with standards and specifications												
Electrical according to NEMA MG1-12 [13]	D30	5, 6, 7 & 8	–	–	–	–	66.–	66.–	66.–	82.4	82.4	98.9
		1, 2, 3 & 4	–	–	–	–						
Design according to UL with “Recognition Mark” [13]	D31	5, 6, 7 & 8	96.1	114.–	146.–	178.–	285.–	391.–	492.–	581.–	719.–	939.–
		1, 2, 3 & 4										
Canadian regulations (CSA) [14]	D40	5, 6, 7 & 8	96.1	114.–	146.–	178.–	241.–	321.–	402.–	483.–	643.–	797.–
		1, 2, 3 & 4										
Bearings and lubrication												
Measuring nipple for SPM shock pulse measurement for bearing inspection [15]	Q01	All	245.–	274.–	302.–	333.–	359.–	388.–	417.–	446.–	474.–	503.–
Bearing design for increased cantilever forces	L22	All	95.9	112.–	126.–	167.–	265.–	307.–	346.–	400.–	448.–	500.–
Special bearing for DE and NDE, bearing size 63 [16]	L25	1, 3, 5 & 7	193.–	225.–	252.–	336.–	446.–	549.–	780.–	1080.–		
		2, 4, 6 & 8										
Regreasing device [15]	L23	1, 3, 5 & 7	302.–	310.–	319.–	346.–	364.–	410.–	455.–	546.–		
		2, 4, 6 & 8										
Located bearing at DE	L20	All	69.3	82.1	101.–	138.–	291.–	404.–	568.–	731.–	946.–	1020.–
Insulated bearing (DE)	L50 *New!*	All	–	–	–	–	–	–	1680.–	1800.–	1860.–	1950.–
Insulated bearing (NDE)	L51 *New!*	All	–	–	–	–	–	–	1680.–	1800.–	1860.–	1950.–
Balance and vibration quantity												
Vibration quantity A		All										
Vibration quantity B	L00	All	270.–	312.–	399.–	494.–	–	–	–	–	–	–
Half-key balancing (standard)		All										

Standard

○ No additional price

● Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)

\- Not available

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IE2 High efficiency	8	1LE1601 (Performance Line)

Code

1LE15/6 . . - . . . . . - . . . . - Z _ _ _

			Frame Size									
			100	112	132	160	180	200	225	250	280	315
Shaft and rotor												
Concentricity of shaft extension. Coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08	All	229.–	257.–	287.–	356.–	430.–	502.–	572.–	644.–	717.–	787.–
Second standard shaft exten- sion	L05	All	136.–	136.–	180.–	207.–	313.–	347.–	365.–	381.–	450.–	494.–
Concentricity of shaft exten- sion in accordance with DIN 42955 Tolerance R	L07	All	255.–	255.–	388.–	388.–	201.–	226.–	269.–	352.–	352.–	538.–
Standard shaft made of non- rusting steel	L06	All	–	–	–	–	643.–	959.–	1320.–	1570.–	2620.–	3190.–
Non-standard cylindrical shaft extension [17]	Y55 •	All	500.–	526.–	552.–	581.–	674.–	742.–	809.–	877.–	944.–	1010.–
Heating and ventilation												
Metal external fan [18]	F76	All	180.–	214.–	249.–	287.–	322.–	356.–	393.–	430.–	465.–	502.–
Anti-condensation heaters for 230 V	Q02	All	410.–	437.–	494.–	549.–	608.–	699.–	839.–	866.–	866.–	902.–
Anti-condensation heaters for 115 V	Q03	All	410.–	437.–	494.–	549.–	608.–	699.–	839.–	866.–	866.–	902.–
Sheet metal fan cover	F74	1, 3, 5 & 7	64.7	70.2	75.5	80.9	80.6	99.3	111.–	159.–	204.–	224.–
		2, 4, 6 & 8										
Rating plate and extra rating plates												
Auxiliary nameplate with voltage range [19]	B07 *New!*	All but 8 Pole	39.5	39.5	39.5	39.5	66.–	66.–	66.–	82.4	82.4	104.–
Second rating plate, loose	M10	All	20.1	20.1	20.1	20.1	64.4	64.4	64.4	64.4	64.4	64.4
Nirosta rating plate	M11	All	40.2	40.2	40.2	40.2	49.1	49.1	66.–	66.–	66.–	66.–
Extra rating plate or rating plate with deviating rating plate data	Y80 •	All	103.–	125.–	159.–	198.–	255.–	311.–	460.–	580.–	742.–	964.–
Extra rating plate with identifi- cation codes	Y82 •	All	39.5	39.5	39.5	39.5	66.–	66.–	66.–	82.4	82.4	104.–
Additional information on rating plate and on package label (max. of 20 characters)	Y84 •	All	39.5	39.5	39.5	39.5	66.–	66.–	66.–	82.4	82.4	104.–
Packaging, safety notes, documentation and test certificates												
Acceptance test certificate 3.1 in accordance with EN 10204 [20]	B02	All	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
Compact Operation Manual German/English (in box)		All										

Standard

○ No additional price

• Additional text is required (Voltage, Frequency, Power, Altitude and Abient Temperature)

\- Not available

O.R On Request

Special Notes

1) Evaluation with an appropiate tripping unit (catalog IC 10) is recommended.

2) Not available for motors with UL option (code D31). Grease life is reduced in half with every 10K increase in ambient temperature.

3) A second extension shaft is not possible with this options. On-Request if brake is mounted.

4) The brake operating voltage must be provided with codes F10, F11 or F12

5) As standard encoders motors with encoders 1XP are supplied with a protection canopy. If in combination with external blower, the econder is placed inside the fan cover.

6) When in combination with an external blower (code F70) the encoder 1XP8032-10 will be used instead of 1XP8012, and 1XP8032-20 will be used instead of 1XP8020

7) As standard encoders motors with encoders LL and HOG up to FS 160 are supplied with a protection canopy.
If in combination with external blower, the econder is placed inside the fan cover.

8) The code H00 represents a mechanical protection

9) No available for mounting type IMV3 (footless flange motor, vertical shaft up)

10) Not possible in combination with encoder HOG 9 D 1021 I (code G05) and/or brake 2LM8 (code F01)

11) Not available in combination with Brake 2LM8 (code F01)

12) When in combination with shaft mounting preparations (codes G40,G41,G42), preacausion must be taken to assure accessories comply with ambient temperature requirements.

13) Execution up to maximum 600V. The nameplate indicates the voltage supply without voltage tolerance.
Order codes D30 and D31 do not entitle importing status for USA and Mexico.
The eagle line motors (1LE15/621 and 1LE5/623) are available for that purpose

14) The nameplate indicates the voltage supply without voltage tolerance. Order code D40 do not entitle importing status for Canada.
The eagle line motors (1LE15/621 and 1LE5/623) are available for that purpose

15) Not possible with brake

16) Standards for all Preformance line motors (1LE16) and Basic Line motors (1LE15) FS 280 and above.

17) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the featherkey way must be specified in a sketch.

It must be ensured that only featherkeys in accordance with DIN 6885, Form A are permitted to be used.

The featherkey way is positioned centrally on the shaft extension. The length is defined by the manufacturer normatively.
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 featherkeys are supplied in every case. For order codes Y55 and L05:
- Dimensions D and DA ≤ internal diameter of roller bearing.
- Dimensions E and EA ≤ 2 x length E (normal) of the shaft extension

18) For 1LE1 motors with metal fan, variable Speed drive operation is permitted.
A Metal fan is not possible with low noise options (codes F77 or F78)

19) Available for voltages 22 and 34, 230VΔ /400VY or 400VΔ/690VY (dig. # 12 & 13 in the part number).
Not possible for multi-speed self ventilated or 8-Pole motors or in combination with D34.

20) The delivery of the Test Certificate can be different of that from the motor.

Standard Motors 1LA Aluminum Series

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	2.1 — Motors in Aluminum frame
Series	Aluminum series 1LA9
	High efficiency IE2 / NEMA Energy Efficiency / IE2
Cooling	Self-ventilated (IC 411) / Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65 / IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F) / Thermal class 155 (F)
Utilization	Thermal class 130 (B) / Thermal class 130 (B)
Number of Poles	2, 4, 6 / 2, 4, 6
Frame size (F)	63 M … 200 L / 80 M … 1460 L
Rated output at 50Hz	0.12 ... 37 kW / 0.12 ... 37 kW
Synchronous speed	1000 ... 3600 min^{-1} / 1000 ... 3600 min^{-1}
Rater torque at 50Hz	0.6 ... 215 Nm / 0.6 ... 215 Nm
efficiency	High Efficiency IE2 / NEMA Energy Efficient MG1 Table 12-11 / IE2 [1]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ Replaced by: 1LE001	Base Price USD	Part-Nr. ▲ Replaced by: 1LE021	Base Price USD
2-Pole: 3000 min-1 at 50 Hz						
0.18	-	63 M	1LA9060-2KA..	349.–		o.R
0.25	-	63 M	1LA9063-2KA..	369.–		o.R
0.37	-	71 M	1LA9070-2KA..	374.–		o.R
0.55	-	71 M	1LA9073-2KA..	422.–		o.R
0.75	IE2	80 M	▶ 1LA9080-2KA..	464.–	▶ 1LA9080-2KA..-Z D42	o.R
1.1	IE2	80 M	▶ 1LA9083-2KA..	531.–	▶ 1LA9083-2KA..-Z D42	o.R
1.5	IE2	90 S	▶ 1LA9090-2KA..	613.–	▶ 1LA9090-2KA..-Z D42	o.R
2.2	IE2	90 L	▶ 1LA9096-2KA..	791.–	▶ 1LA9096-2KA..-Z D42	o.R
3	IE2	100 L	▶ 1LA9106-2KA..	949.–	▶ 1LA9106-2KA..-Z D42	o.R
4	IE2	112 M	▶ 1LA9113-2KA..	1120.–	▶ 1LA9113-2KA..-Z D42	o.R
5.5	IE2	132 S	▶ 1LA9130-2KA..	1410.–	▶ 1LA9130-2KA..-Z D42	o.R
7.5	IE2	132 S	▶ 1LA9131-2KA..	1790.–	▶ 1LA9131-2KA..-Z D42	o.R
11	IE2	160 M	▶ 1LA9163-2KA..	2480.–	▶ 1LA9163-2KA..-Z D42	o.R
15	IE2	160 M	▶ 1LA9164-2KA..	3240.–	▶ 1LA9164-2KA..-Z D42	o.R
18.5	IE2	160 L	▶ 1LA9166-2KA..	3870.–	▶ 1LA9166-2KA..-Z D42	o.R
22	IE2	180 M	1LA9183-2WA..	4560.–		o.R
30	IE2	200 L	1LA9206-2WA..	5910.–		o.R
37	IE2	200 L	1LA9207-2WA..	7420.–		o.R
4-Pole: 1500 min-1 at 50 Hz						
0.12	-	63 M	1LA9060-4KA..	356.–		o.R
0.18	-	63 M	1LA9063-4KA..	384.–		o.R
0.25	-	71 M	1LA9070-4KA..	382.–		o.R
0.37	-	71 M	1LA9073-4KA..	428.–		o.R
0.55	-	80 M	▶ 1LA9080-4KA..	461.–		o.R
0.75	IE2	80 M	▶ 1LA9083-4KA..	503.–	▶ 1LA9083-4KA..-Z D42	o.R
1.1	IE2	90 S	▶ 1LA9090-4KA..	595.–	▶ 1LA9090-4KA..-Z D42	o.R
1.5	IE2	90 L	▶ 1LA9096-4KA..	706.–	▶ 1LA9096-4KA..-Z D42	o.R
2.2	IE2	100 L	▶ 1LA9106-4KA..	865.–	▶ 1LA9106-4KA..-Z D42	o.R
3	IE2	100 L	▶ 1LA9107-4KA..	996.–	▶ 1LA9107-4KA..-Z D42	o.R
4	IE2	112 M	▶ 1LA9113-4KA..	1220.–	▶ 1LA9113-4KA..-Z D42	o.R
5.5	IE2	132 S	▶ 1LA9130-4KA..	1520.–	▶ 1LA9130-4KA..-Z D42	o.R
7.5	IE2	132 M	▶ 1LA9133-4KA..	1930.–	▶ 1LA9133-4KA..-Z D42	o.R
11	IE2	160 M	▶ 1LA9163-4KA..	2540.–	▶ 1LA9163-4KA..-Z D42	o.R
15	IE2	160 L	▶ 1LA9166-4KA..	3290.–	▶ 1LA9166-4KA..-Z D42	o.R
18.5	IE2	180 M	1LA9183-4WA..	3880.–		o.R
22	IE2	180 L	1LA9186-4WA..	4490.–		o.R
30	IE2	200 L	1LA9207-4WA..	5810.–		o.R
6-Pole: 1000 min-1 at 50 Hz						
0.75	IE2	90 S	▶ 1LA9090-6KA..	584.–	▶ 1LA9090-6KA..-Z D42	o.R
1.100	IE2	90 L	▶ 1LA9096-6KA..	723.–	▶ 1LA9096-6KA..-Z D42	o.R
1.5	IE2	100 L	▶ 1LA9106-6KA..	855.–	▶ 1LA9106-6KA..-Z D42	o.R
2.2	IE2	112 M	▶ 1LA9113-6KA..	1070.–	▶ 1LA9113-6KA..-Z D42	o.R
4	IE2	132 M	▶ 1LA9133-6KA..	1670.–	▶ 1LA9133-6KA..-Z D42	o.R
5.5	IE2	132 M	▶ 1LA9134-6KA..	2110.–	▶ 1LA9134-6KA..-Z D42	o.R
7.5	IE2	160 M	▶ 1LA9163-6KA..	2670.–	▶ 1LA9163-6KA..-Z D42	o.R
11	IE2	160 L	▶ 1LA9166-6KA..	3680.–	▶ 1LA9166-6KA..-Z D42	o.R
15	IE2	180 L	1LA9186-6WA..	4780.–		o.R
18.5	IE2	200 L	1LA9206-6WA..	5890.–		o.R
22	IE2	200 L	1LA9207-6WA..	6790.–		o.R

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	2.3 — Motors with higher power output	
Series	Aluminum Series 1LA9	
	Standard efficiency	
Cooling	Self-ventilated (IC 411)	Self-ventilated (IC 411)
Degree of protection IP55	IP55,	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)	Thermal class 155 (F)
Utilization	Thermal class 130 (B)	Thermal class 130 (B)
Number of Poles	2, 4,	2, 4, 6
Frame size (F)	180 M ... 315 L	200 L ... 280 M
Rated output at 50Hz	11 ... 315 kW	45 ... 110 kW
Synchronous speed	1500 ... 3600 min^{-1}	1000 ... 3600 min^{-1}
Rater torque at 50Hz	1 ... 9 Nm	71 ... 2070 Nm
efficiency		NEMA Energy Efficient MG1 Table 12-11 / IE2 [1]

$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ Replaced by 1LE1501/1LE1601	Base Price USD	$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ Replaced by 1LE1501/1LE1601	Base Price USD
2-Pole: 3000 min-1 at 50 Hz									
0.33	-	**63 M**	**1LA9060-2LA..**	**282.–**					
0.45	-	**63 M**	**1LA9063-2LA..**	**298.–**					
0.65	-	**71 M**	**1LA9070-2LA..**	**330.–**					
0.94	-	**71 M**	**1LA9073-2LA..**	**377.–**					
1.5	-	**80 M**	▶ **1LA9080-2LA..**	**450.–**					
1.75	-	**80 M**	▶ **1LA9083-2LA..**	**512.–**					
4-Pole: 1500 min-1 at 50 Hz									
0.21	-	**63 M**	**1LA9060-4LA..**	**282.–**					
0.29	-	**63 M**	**1LA9063-4LA..**	**298.–**					
0.45	-	**71 M**	**1LA9070-4LA..**	**330.–**					
0.6	-	**71 M**	**1LA9073-4LA..**	**352.–**					
0.9	-	**80 M**	▶ **1LA9080-4LA..**	**388.–**					
1.25	-	**80 M**	▶ **1LA9083-4LA..**	**469.–**					

Standard Motors 1LA Aluminum Series

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	**2.1 — Motors in Aluminum frame**
Series	**Aluminum series 1LA7**
	Standard efficiency IE1
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6, 8
Frame size (F)	63 M … 160 L
Rated output at 50Hz	0.12 ... 7.5 kW
Synchronous speed	750 ... 3600 min^{-1}
Rater torque at 50Hz	0.6 ... 100 Nm
efficiency	Standard efficiency IE1

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

$P_{N, 50Hz}$	IE-Class	Frame Size	Part-Nr.	Base Price		Part-Nr.	Base Price
kW		FS	▲ Replaced by: 1LE001	USD		▲ Replaced by: 1LE021	USD
2-Pole: 3000 min-1 at 50 Hz							
0.18	-	63 M	1LA7060-2AA..	259.–			
0.25	-	63 M	1LA7063-2AA..	274.–			
0.37	-	71 M	1LA7070-2AA..	278.–			
0.55	-	71 M	1LA7073-2AA..	312.–			
4-Pole: 1500 min-1 at 50 Hz							
0.12	-	63 M	1LA7060-4AB..	254.–			
0.18	-	63 M	1LA7063-4AB..	274.–			
0.25	-	71 M	1LA7070-4AB..	272.–			
0.37	-	71 M	1LA7073-4AB..	306.–			
0.55	-	80 M	1LA7080-4AA..	329.–			
6-Pole: 1000 min-1 at 50 Hz							
0.09	-	63 M	1LA7063-6AB..	275.–			
0.18	-	71 M	1LA7070-6AA..	291.–			
0.25	-	71 M	1LA7073-6AA..	325.–			
0.37	-	80 M	1LA7080-6AA..	343.–			
0.55	-	80 M	1LA7083-6AA..	397.–			
8-Pole: 750 min-1 at 50 Hz							
0.09	-	71 M	1LA7070-8AB..	307.–			
0.12	-	71 M	1LA7073-8AB..	345.–			
0.18	-	80 M	1LA7080-8AB..	351.–			
0.25	-	80 M	1LA7083-8AB..	435.–			
0.37	-	90 S	1LA7090-8AB..	512.–			
0.55	-	90 L	1LA7096-8AB..	622.–			
0.75	-	100 L	▶ 1LA7106-8AB..	684.–			
1.1	-	100 L	▶ 1LA7107-8AB..	866.–			
1.5	-	112 M	▶ 1LA7113-8AB..	1030.–			
2.2	-	132 S	▶ 1LA7130-8AB..	1330.–			
3	-	132 M	▶ 1LA7133-8AB..	1620.–			
4	-	160 M	▶ 1LA7163-8AB..	1990.–			
5.5	-	160 M	▶ 1LA7164-8AB..	2470.–			
7.5	-	160 L	▶ 1LA7166-8AB..	3050.–			

Standard motors 1LA - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2 [1]
High efficiency IE2 [2]
Standard Efficiency IE1 [3]

1LA 9 . . - . . . . . - Z +D42
1LA 9 (For export purposes only)
1LA7 (For Export purposes only)

Digit # 11 — Code

1LA . . . - . . . . — - Z _ _ _

VOLTAGE SELECTION				Frame Size 63	71	80	90	100	112	132	160
60Hz Voltage Supply, Maximum Output 60Hz											
220 VΔ/380 VY; 60-Hz-Output [2]	9	L2B	2 & 3	26.7	31.2	35.3	41.4	51.4	62.1	79.7	97.8
380 VΔ/660 VY; 60-Hz-Output [2]	9	L2D	2 & 3	26.7	31.2	35.3	41.4	51.4	62.1	79.7	97.8
440 VY; 60-Hz-Output [2]	9	L2W	2 & 3	26.7	31.2	35.3	41.4	51.4	62.1	79.7	97.8
440 VΔ; 60-Hz-Output [2]	9	L2X	2 & 3	26.7	31.2	35.3	41.4	51.4	62.1	79.7	97.8
460 VY; 60-Hz-Output [2]	9	L2E	2 & 3	○	○	○	○	○	○	○	○
460 VΔ; 60-Hz-Output [2]	9	L2F	2 & 3	○	○	○	○	○	○	○	○
575 VY; 60-Hz-Output [2]	9	L2L	2 & 3	26.7	31.2	35.3	41.4	51.4	62.1	79.7	97.8
575 VΔ; 60-Hz-Output [2]	9	L2M	2 & 3	26.7	31.2	35.3	41.4	51.4	62.1	79.7	97.8
60Hz Voltage Supply, Maximum Output 60Hz											
230 VYY/460 VY 60 Hz; 50 Hz output, 9 main terminals and electrical design to NEMA [3]	9	L3E	All	125.–	125.–	146.–	164.–	194.–	227.–	279.–	336.–
230 VYY/460 VY 60 Hz; 60 Hz output, 9 main terminals and electrical design to NEMA [3]	9	LEF	All	125.–	125.–	146.–	164.–	194.–	227.–	279.–	336.–
230 VΔΔ/460 VΔ 60 Hz; 50 Hz output, 12 main terminals and electrical design to NEMA [3]	9	LEG	All	-	-	-	-	287.–	322.–	361.–	395.–
230 VΔΔ/460 VΔ60 Hz; 60 Hz output, 12 main terminals and electrical design to NEMA [3]	9	LEH	All	-	-	-	-	287.–	322.–	361.–	395.–
Non-Stanadard voltage or frequency											
Non Standard widning [4]	9	L1Y •	All	63.1	64.4	70.8	83.3	103.–	125.–	159.–	198.–

1) Voltages 600V or higher are not stamped on the nameplate of 1LA9 NEMA Energy efficient motors (code D42)
2) Not allowed in combination with order code D42 (NEMA Energy Efficient)
3) For 1LA7 motors FS 63-90 with brake (option code G26), only 6 terminals are available for the motor.
4) Voltages between 200 & 690V, clear text must be specified (Frequency, Voltage, Power, altitude and Ambient Temp.)

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA - Aluminum Series

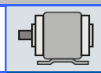
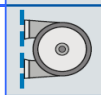
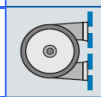
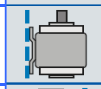
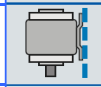
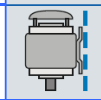
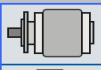
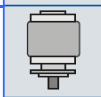
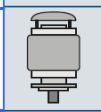
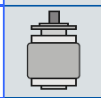
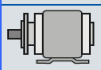
Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2	1	1LA 9 . . - . . . . . - Z +D42
High efficiency IE2	2	1LA 9 (For export purposes only)
Standard Efficiency IE1	3	1LA7 (For Export purposes only)

	Digit #	12	Code
	1LA . . . -		- Z _ _ _

Mounting					Frame Size							
					63	71	80	90	100	112	132	160
Foot Mounted												
IMB3 [1]		0	-	2 & 3								
IMB6 [1]		0	-	2 & 3								
IMB7 [1]		0	-	2 & 3								
IMB8 [1]		0	-	2 & 3								
IMV6 [1]		0	-	2 & 3								
IMV5 [1] (No canopy)		0	-	2 & 3								
IMV5 [1,2] (With canopy)		9	M1F	2 & 3	41.–	45.7	54.6	54.6	78.4	78.4	137.–	137.–
Footless with B5 Flange					A140	A160	A200	A200	A250	A250	A300	A350
IMB5		1	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMV1 (No canopy)		1	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMV1 [2] (with canopy)		4	-	All	82.4	91.5	106.–	117.–	156.–	175.–	262.–	303.–
IMV3		1	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMB35 [1]		6	-	2 & 3	58.6	62.5	69.9	79.9	96.1	126.–	159.–	228.–

1) NEMA Energy Efficient (1LE1021) foot mounted motors (2,4,6 Poles) ≤ 200HP are not available due to efficiency regulations in NAFTA.
2) Option second shaft extension (order code K16) not possible.

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required [4]		

Standard motors 1LA - Aluminum Series

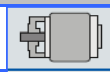
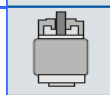
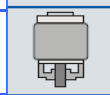
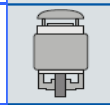
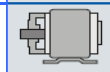
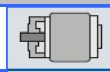
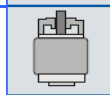
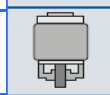
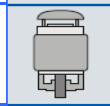
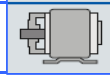
Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2	1	1LA 9 . . - . . . . . - Z +D42
High efficiency IE2	2	1LA 9 (For export purposes only)
Standard Efficiency IE1	3	1LA7 (For Export purposes only)

Digit #	12	Code
1LA . . . -		- Z _ _ _

Mounting					Frame Size							
					63	71	80	90	100	112	132	160
Footless with Standard B14 Flange					C90	C105	C120	C140	C160	C160	C200	C250
IMB14 [2,8]		2	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMV19 [2]		2	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMV18 [2] (No Canopy)		2	-	All	82.4	91.5	106.–	117.–	156.–	175.–	262.–	303.–
IMV18 [2] (with Canopy)		9	M2A	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMB34 [1]		7	-	2 & 3	58.6	62.5	69.9	79.9	96.1	126.–	159.–	228.–
Footless with Special B14 Flange					C120	C140	C160	C160	C200	C200	C250	C300
IMB14 [2,8]		2	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMV19 [2]		2	-	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMV18 [2] (No Canopy)		2	-	All	82.4	91.5	106.–	117.–	156.–	175.–	262.–	303.–
IMV18 [2] (with Canopy)		9	M2A	All	41.4	45.9	52.1	62.5	77.4	96.1	125.–	162.–
IMB34 [1]		7	-	2 & 3	58.6	62.5	69.9	79.9	96.1	126.–	159.–	228.–

1) NEMA Energy Efficient (1LE1021) foot mounted motors (2,4,6 Poles) ≤ 200HP are not available due to efficiency regulations in NAFTA.
2) Option second shaft extension (order code K16) not possible.

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required [#]		

Standard motors 1LA - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

NEMA Energy efficiency / IE2 1
High efficiency IE2 2
Standard Efficiency IE1 3

1LA 9 . . - . . . . . - Z +D42
1LA 9 (For export purposes only)
1LA7 (For Export purposes only)

Code

1LA . . . - . . . . . - Z _ _ _

ADDITIONAL OPTIONS			Frame Size 63	71	80	90	100	112	132	160
Motor protection										
Motor protection with PTC thermistors 3 X embedded sensors for tripping and alarm [1)]	A11	All	85.9	85.9	100.–	100.–	114.–	114.–	171.–	171.–
Motor protection with PTC thermistors 6 X embedded sensors for tripping and alarm [1)]	A12	All	146.–	146.–	168.–	168.–	195.–	195.–	261.–	261.–
Motor temperature detection with embedded temperature sensor KTY 84-130 [1)]	A23	All	85.9	85.9	100.–	100.–	114.–	114.–	171.–	171.–
Motor temperature detection with embedded temperature sensors 2 x KTY 84-130 [1)]	A25	All	172.–	172.–	201.–	201.–	229.–	229.–	342.–	342.–
Temperature detectors for tripping [1)]	A31	All	96.–	96.–	112.–	112.–	127.–	127.–	186.–	186.–
Installation of 3 PT 100 resistance thermometers [1)]	A60	All	–	–	–	–	1440.–	1440.–	1440.–	1440.–
Motor connection and connection box										
ECOFAST motor plug Han- Drive 10e for 230 VΔ/400 VY [2)]	G55	All	91.6	91.6	91.6	91.6	91.6	91.6	99.3	–
ECOFAST motor plug EMC Han-Drive 10e for 230 VΔ/400 VY [3)]	G56	All	210.–	210.–	210.–	210.–	228.–	228.–	257.–	–
Connection box on RHS	K09	All	–	–	34.2	38.6	99.5	108.–	117.–	125.–
Connection box on LHS	K10	All	–	–	34.2	38.6	99.5	108.–	117.–	125.–
One cable gland, metal	K54	3,	56.9	56.9	56.9	56.9	107.–	107.–	107.–	136.–
		1, 2	–	–	56.9	56.9	107.–	107.–	107.–	136.–
Cable gland, maximum configuration	K55	All	81.4	81.4	81.4	81.4	151.–	151.–	151.–	199.–
Terminal box rotation 90°, entry from DE	K83	All	15.6	17.2	18.8	22.2	56.4	70.2	93.1	114.–
Terminal box rotation 90°, entry from NDE	K84	All	15.6	17.2	18.8	22.2	56.4	70.2	93.1	114.–
Terminal box rotation 180°	K85	All	15.6	17.2	18.8	22.2	○	○	○	○
Next larger connection box	L00	All	–	–	–	–	–	–	–	–
External earthing	L13	All	22.8	22.8	22.8	22.8	27.5	27.5	27.5	27.5
3 cables protruding, 0.5 m long [4,5)]	L44	All	54.6	54.6	54.6	54.6	65.4	78.4	95.8	113.–
3 cables protruding, 1.5 m long [4,5)]	L45	All	66.–	66.–	66.–	66.–	78.9	94.9	116.–	137.–
6 cables protruding, 0.5 m long [4)]	L47	All	84.6	84.6	84.6	84.6	101.–	121.–	150.–	177.–
6 cables protruding, 1.5 m long [4)]	L48	All	108.–	108.–	108.–	108.–	129.–	156.–	189.–	225.–
6 cables protruding, 3 m long [4)]	L49	All	172.–	172.–	172.–	172.–	208.–	245.–	307.–	367.–
Connection box on NDE	M64	All	60.2	68.7	77.4	88.7	114.–	140.–	181.–	246.–
Terminal strip for main and auxiliary terminals	M69	3,	83.9	83.9	83.9	83.9	–	–	–	–

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required		

Standard motors 1LA - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2 [1] — 1LA 9 . . - . . . . . - Z +D42

High efficiency IE2 [2] — 1LA 9 (For export purposes only)

Standard Efficiency IE1 [3] — 1LA7 (For Export purposes only)

Code

1LA . . . - . . . . . - Z _ _ _

ADDITIONAL OPTIONS			Frame Size 63	71	80	90	100	112	132	160
Motor protection										
Temperature class 155 (F), used acc. to 155 (F), with service factor (SF)	C11	All	39.5	39.5	39.5	39.5	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 155 (F), with increased output	C12	ALL	39.5	39.5	39.5	39.5	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 155 (F), with increased coolant temperature	C13	ALL	39.5	39.5	39.5	39.5	46.–	46.–	61.2	61.2
Temperature class 180 (H) at rated output max. CT 60 °C [6]	C18	[3],	143.–	143.–	143.–	143.–	201.–	257.–	325.–	404.–
Increased air humidity/tempe- rature with 30 to 60 g water per m3 of air	C19	ALL	141.–	141.–	141.–	141.–	141.–	141.–	141.–	214.–
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % [7]	C22	ALL	39.5	39.5	39.5	39.5	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % [7]	C23	ALL	39.5	39.5	39.5	39.5	46.–	46.–	61.2	61.2
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % [7]	C24	ALL	53.1	62.4	70.8	83.3	103.–	125.–	159.–	198.–
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	C25	ALL	53.1	62.4	70.8	83.3	103.–	125.–	159.–	198.–
Increased air humidity/tempe- rature with 60 to 100 g water per m3 of air	C26	ALL	258.–	258.–	267.–	267.–	275.–	309.–	334.–	444.–
Temperature class 155 (F), used acc. to 130 (B), with increased coolant temperature and/or site altitude	Y50 •	ALL	79.6	93.4	106.–	125.–	154.–	186.–	240.–	295.–
Temperature class 155 (F), used acc. to 155 (F), other requirements	Y52 •	ALL	39.5	39.5	39.5	39.5	46.–	46.–	61.2	61.2
Colors and paint finish										
Special finish in RAL 7030 stone gray		ALL								
Special finish in other standard RAL colors:	Y54 •	ALL	58.3	58.3	58.3	58.3	98.3	98.3	129.–	129.–
Special finish in special RAL colors: see “Special finish in special RAL colors”	Y51 •	ALL	550.–	550.–	659.–	659.–	745.–	745.–	745.–	787.–
Sea air resistant special finish	M94	ALL	624.–	624.–	624.–	624.–	658.–	658.–	703.–	703.–
Unpainted (only cast iron parts primed)	K23	ALL	○	○	○	○	○	○	○	○
Unpainted, only primed	K24	ALL	19.9	19.9	19.9	26.5	26.5	26.5	42.2	42.2

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2	1	1LA 9 . . - . . . . . - Z +D42
High efficiency IE2	2	1LA 9 (For export purposes only)
Standard Efficiency IE1	3	1LA7 (For Export purposes only)

Code

1LA . . . - . . . . . - Z _ _ _

ADDITIONAL OPTIONS			Frame Size 63	71	80	90	100	112	132	160
Modular technology – Basic versions [8]										
Mounting of separately driven fan	G17	3,	–	–	–	–	699.–	832.–	959.–	1110.–
Mounting of brake [9]	G26	3,	455.–	455.–	455.–	546.–	638.–	775.–	1000.–	1980.–
Mounting of 1XP8 001-1 (HTL) rotary pulse encoder	H57	3,	–	730.–	702.–	702.–	638.–	638.–	638.–	638.–
Mounting of 1XP8 001-2 (TTL) rotary pulse encoder	H58	3,	–	1060.–	1000.–	1000.–	915.–	915.–	915.–	915.–
Modular technology – Combinations of basic versions 7)										
Mounting of separately driven fan and 1XP8 001-1 rotary pulse encoder	H61	3,	–	–	–	–	1330.–	1490.–	1600.–	1750.–
Mounting of brake and 1XP8 001-1 rotary pulse encoder [9]	H62	3,	–	–	–	–	1270.–	1400.–	1630.–	2590.–
Mounting of brake and separately driven fan [9]	H63	3,	–	–	–	–	1330.–	1570.–	1890.–	3070.–
Mounting of brake, separately driven fan and 1XP8 001-1 rotary pulse encoder [9]	H64	3,	–	–	–	–	1990.–	2170.–	2540.–	3720.–
Mounting of separately driven fan and 1XP8 001-2 rotary pulse encoder	H97	3,	–	–	–	–	1620.–	1750.–	1870.–	2030.–
Mounting of brake and 1XP8 001-2 rotary pulse encoder [9]	H98	3,	–	–	–	–	1560.–	1660.–	1930.–	2870.–
Mounting of brake, separately driven fan and 1XP8 001-2 rotary pulse encoder [9]	H99	3,	–	–	–	–	2260.–	2450.–	2800.–	3970.–
Modular technology – Additional versions										
Brake supply voltage 24 V DC	C00	3,	33.4	34.2	34.2	34.2	51.4	51.4	51.4	51.4
Brake supply voltage 400 V AC	C01	3,	33.4	34.2	34.2	34.2	51.4	51.4	51.4	51.4
Brake supply voltage 180 V DC, MICROMASTER 411- ECOFAST [10]	C02	3,	33.4	34.2	34.2	34.2	51.4	51.4	51.4	–
Mechanical manual brake release with lever (no locking)	K82	3,	229.–	229.–	243.–	243.–	256.–	256.–	286.–	414.–
Special technology 8)										
Prepared for mounting MMI [11]	H15	3,	o.R	455.–	455.–	455.–	478.–	478.–	517.–	–
Mounting of LL 861 900 220 rotary pulse encoder	H70	3,	–	–	–	–	2910.–	2910.–	2910.–	2910.–
Mounting of HOG 9 D 1024 I rotary pulse encoder	H72	3,	–	–	–	–	3300.–	3300.–	3300.–	3300.–
Mounting of HOG 10 D 1024 I rotary pulse encoder	H73	3,	–	–	–	–	4290.–	4290.–	4290.–	4290.–
Prepared for mounting LL 861 900 220	H78	3,	–	–	–	–	581.–	581.–	581.–	581.–
Prepared for mounting HOG 9 D 1024 I	H79	3,	–	–	–	–	581.–	581.–	581.–	581.–
Prepared for mounting HOG 10 D 1024 I	H80	3,	–	–	–	–	581.–	581.–	581.–	581.–

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required [a]		

Standard motors 1LA - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2 1
High efficiency IE2 2
Standard Efficiency IE1 3

1LA 9 . . - . . . . . - Z +D42
1LA 9 (For export purposes only)
1LA7 (For Export purposes only)

Code

1LA . . . - . . . . . - Z _ _ _

Frame Size

ADDITIONAL OPTIONS			63	71	80	90	100	112	132	160
Mechanical design and degrees of protection										
Drive-end seal for flange-mounting motors, oil resistant to 0.1 bar [12]	K17	ALL	41.5	43.6	46.–	49.2	54.8	59.9	73.1	107.–
With two additional eyebolts for IM V1/IM V3	K32	3,	–	–	–	–	–	–	–	–
Low-noise version for 2-pole motors with clock- wise direction of rotation [10]	K37	3,	–	–	–	–	–	–	595.–	595.–
		1, 2	–	–	–	–	–	–	–	–
Low-noise version for 2-pole motors with counter-clockwise direction of rotation [10]	K38	3,	–	–	–	–	–	–	595.–	595.–
		1, 2	–	–	–	–	–	–	–	–
IP65 degree of protection [13]	K50	ALL	143.–	143.–	143.–	143.–	143.–	143.–	143.–	214.–
IP56 degree of protection (non-heavy-sea) [14]	K52	ALL	158.–	158.–	158.–	158.–	158.–	158.–	158.–	235.–
Vibration-proof version	L03	ALL	104.–	123.–	141.–	160.–	180.–	199.–	216.–	234.–
Condensation drainage holes [15]	L12	ALL	50.2	57.5	64.4	71.8	78.7	85.9	93.1	100.–
Non-rusting screws (externally)	M27	ALL	53.7	53.7	64.4	64.4	78.7	78.7	93.1	93.1
Mechanical protection for encoder [16]	M68	3,	–	–	531.–	531.–	557.–	557.–	644.–	644.–
Designs in accordance with standards and specifications										
CCC China Compulsory Certification [18]	D01	3,	38.6	38.6	38.6	38.6	38.6	38.6	–	–
		1, 2	38.6	38.6	38.6	38.6	–	–	–	–
IE1-Motor without CE-marking for Export outside EU (640/2009)	D22 *New!*	3,	○	○	○	○	○	○	○	○
Electrical according to NEMA MG1-12 [19]	D30	2, 3	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
Design according to UL with "Recognition Mark" [19]	D31	2, 3	68.5	72.9	77.7	86.6	96.1	114.–	146.–	178.–
For Korean certificate according to KS C4202 [20]	D33	1, 2	–	–	39.1	39.1	39.1	39.1	39.1	39.1
China Energy Efficiency Label	D34 *New!*	1, 2	○	○	○	○	○	○	○	○
Canadian regulations (CSA) [21]	D40	2, 3	68.5	72.9	77.7	86.6	96.1	114.–	146.–	178.–
NEMA Energy Efficient, NAFTA regulations NEMA MG1, Table 12-11, inkl. UL und CSA	D42 *New!*	1,	o.R.	o.R.	o.R.	o.R.	o.R.	o.R.	o.R.	o.R.
PSE Mark Japan [22]	D46	ALL	38.6	38.6	38.6	38.6	38.6	38.6	38.6	–
VIK version (includes Zone 2 for mains-fed operation, without Ex nA II on rating plate) [23]	K30	1, 2, 8P < 0.75kW	126.–	144.–	163.–	184.–	208.–	241.–	308.–	389.–
Ex nA II nameplate -for VIK-requirements-	C27	1, 2, 8P < 0.75kW	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required		

Standard motors 1LA - Aluminum Series

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12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2	1	1LA 9 . . - . . . . . - Z +D42
High efficiency IE2	2	1LA 9 (For export purposes only)
Standard Efficiency IE1	3	1LA7 (For Export purposes only)

Code

1LA . . . - . . . . . - Z _ _ _

ADDITIONAL OPTIONS			Frame Size 63	71	80	90	100	112	132	160
Coolant temperature and site altitude										
Coolant temperature –40 to +40 °C	D03	3,	220.–	220.–	245.–	307.–	367.–	465.–	539.–	618.–
		1, 2	–	–	245.–	307.–	367.–	465.–	539.–	618.–
Coolant temperature –30 to +40 °C	D04	ALL	40.6	40.6	54.–	54.–	67.4	67.4	80.9	80.9
Bearings and lubrication										
Measuring nipple for SPM shock pulse measurement for bearing inspection [24]	G50	ALL	–	–	–	–	245.–	274.–	302.–	333.–
Bearing design for increased cantilever forces	K20	ALL	–	–	–	–	95.9	112.–	126.–	167.–
Regreasing device [24,25]	K40	ALL	–	–	–	–	302.–	310.–	319.–	346.–
Located bearing DE	K94	ALL	37.9	37.9	37.9	40.2	69.3	82.1	101.–	138.–
Located bearing NDE	L04	ALL	34.–	36.3	37.9	40.2	42.–	44.3	46.9	
Balance and vibration quantity										
Vibration quantity A		ALL								
Vibration quantity B	K02	ALL	211.–	229.–	243.–	257.–	270.–	312.–	399.–	494.–
Full key balancing	L68	ALL	91.5	91.5	91.5	106.–	106.–	106.–	122.–	122.–
Balancing without key	M37	ALL	20.8	20.8	20.8	20.8	27.–	27.–	31.9	31.9
Shaft and rotor										
Concentricity of shaft exten- sion, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors [26]	K04	ALL	114.–	143.–	171.–	201.–	229.–	257.–	287.–	356.–
Second standard shaft extension	K16	ALL	80.7	80.7	93.1	93.1	136.–	136.–	180.–	207.–
Shaft extension with standard dimensions without featherkey way	K42	ALL	391.–	417.–	446.–	472.–	500.–	526.–	552.–	581.–
Concentricity of shaft exten- sion in accordance with DIN 42955 Tolerance R	L39	ALL	232.–	232.–	232.–	232.–	255.–	255.–	388.–	388.–
Standard shaft made of non- rusting steel	M65	3,	–	–	798.–	798.–	916.–	916.–	1060.–	1320.–
Non-standard cylindrical shaft extension [27]	Y55 •	ALL	391.–	417.–	446.–	472.–	500.–	526.–	552.–	581.–
Heating and ventilation										
Fan cover for textile industry [28]	H17	3,	–	–	114.–	186.–	301.–	430.–	545.–	644.–
		1, 2	–	–	–	–	–	430.–	545.–	–
Metal fan [29]	K35	ALL	143.–	143.–	143.–	143.–	180.–	214.–	249.–	287.–
Anti-condensation heaters for 230 V [30]	K45	ALL	350.–	394.–	394.–	394.–	410.–	437.–	494.–	549.–
Anti-condensation heaters for 115 V [30]	K46	ALL	350.–	394.–	394.–	394.–	410.–	437.–	494.–	549.–

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA - Aluminum Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Energy efficiency / IE2	1	1LA 9 . . - . . . . . - Z +D42
High efficiency IE2	2	1LA 9 (For export purposes only)
Standard Efficiency IE1	3	1LA7 (For Export purposes only)

Code

1LA . . . - . . . . . - Z _ _ _

Frame Size

ADDITIONAL OPTIONS			63	71	80	90	100	112	132	160
Rating plate and extra rating plates										
Second lubricating plate, supplied loose	**B06**	ALL	–	–	–	–	20.1	20.1	20.1	20.1
Auxiliary nameplate with voltage tolerance[31]	**B07** *New!*	ALL	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
Second rating plate, loose	**K31**	ALL	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
Non-rusting steel nameplate	**M40** *New!*	1, 2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
Extra rating plate or rating plate with deviating rating plate data	**Y80 •**	ALL	53.1	62.4	70.8	83.3	103.–	125.–	159.–	198.–
Extra rating plate with identifi- cation codes	**Y82 •**	ALL	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
Additional information on rating plate and on package label (maximum of 20 characters)	**Y84 •**	ALL	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5
Packaging, safety notes and test certificate										
With one safety and startup guide per box pallet	**B01**	ALL								
Acceptance test certificate 3.1 according to EN 10204[32]	**B02**	ALL	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
Operating instructions compact German/English in print included in box		ALL								
Operating instructions German/English in print	**B23**	ALL	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
Type test with heat run for verti- cal motors, with acceptance	**F83**	ALL	4050.–	4050.–	4720.–	5400.–	6070.–	6470.–	7020.–	7420.–
Wire-lattice pallet	**L99**	ALL	○	○	○	○	○	○	○	○
Connected in star for dispatch	**M32**	ALL	22.8	22.8	22.8	22.8	27.5	27.5	27.5	27.5
Connected in delta for dispatch	**M33**	ALL	22.8	22.8	22.8	22.8	27.5	27.5	27.5	27.5

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA - Aluminum Series

Special Notes

1) Evaluation with appropriate tripping unit (see Catalog LV 1) is recommended.

2) Not possible for pole-changing motors. Only one sensor (temperature sensor or PTC thermistor) can be connected. Only possibilities are voltage code 1 with voltage of 230 VΔ/400 VY and special voltage with voltage code 9 and order code L1U (400 VΔ). The following order codes cannot be used in combination with the ECOFAST plugs, order code G55: A12, C02, C18, D31, D40, G50, H15, H17, H62, H63, H64, H98, H99, K04, K15, K16, K34, K35, K40, K45, K46, K52, K54, K82, L03, L44, L45, L47, L48, L49, L51, L52

3) Not possible for pole-changing motors. Only one sensor (temperature sensor or PTC thermistor) can be connected. Only possibilities are voltage code 1 with voltage of 230 VΔ/400 VY and special voltage with voltage code 9 and order code L1U (400 VΔ). The following order codes cannot be used in combination with the ECOFAST plugs, order code G56: A12, A23, A31, C00, C18, D31, D40, G50, H15, H17, K04, K15, K16, K34, K35, K40, K45, K46, K52, K54, K82, L03, L44, L45, L47, L48, L49, L51, L52. The following order codes can only be used in combination with the ECOFAST plugs, order code G56 only with order code C01 (AC 400 V) or C02 (DC 180 V): G26, H62, H63, H64, H98, H99.

4) On-request when in combination with the PTC thermistor option or anti-condensation heating option, please inquire before ordering.

5) Not possible for pole-changing motors and/or for voltage codes 1 or 6.

6) Cannot be used for motors in UL version (order code D31). Cannot be used for motors according to CSA approval (order code D40) for motor series 1LA5 frame size 180 to 225. The grease lifetime specified in catalog part 0 “Introduction” refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease lifetime or relubrication interval is halved.

7) No derating in combination with the following order codes: L2A, L2C, L2Q, L2R, L2S, L2T, L2U, L2V, L3E and L3G.)

8) A second shaft extension is not possible. Please inquire for mounted brakes. The order codes listed cannot be combined within the various technologies nor with each other within the same technology system. This applies for:
– Modular technology
– Basic versions of “Modular technology”
– Combination of special versions “Special technology”

9) The standard brake supply voltage is 230 V AC, 50/60 Hz. Other brake supply voltages are possible with order codes C00, C01 and C02.

10) Not possible in motors in a pole-changing version.

11) Converter mounting is possible, if the MICROMASTER DA 51.3 type is specified for 230 VΔ/400 VY.

12) Not possible for type of construction IM V3.

13) Not possible in combination with rotary pulse encoder HOG 9 D 1024I (order code H72, H79) and/or brake 2LM8 (used for motors up to and including frame size 225, order code G26).

14) Not possible in combination with brake 2LM8 (used for motors up to and including frame size 225, order code G26).

15) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If condensation drainage holes are required in motors of the IM B6, IM B7 or IM B8 type of construction

16) Not necessary 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 cowl.

16) Not necessary 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 cowl.

17) When in combination with shaft mounting preparations for VSD, preacausion must be taken to assure accessories comply with ambient temperature requirements.

18) CC Certification is required for:
- 2 Piole Motors ≤ 2.2kW
- 4 Piole Motors ≤ 1.1kW
- 6 Pole Mtoors ≤ 0.75 kW
- 8 Pole Mtoors ≤ 0.55 kW

19) Execution up to maximum 600V. The nameplate indicates the voltage supply without voltage tolerance. Order codes D30 and D31 do not entitle importing status for USA and Mexico. The 1LA9 motors line with additional option code D42 is available for tha purpose.

20) For Korea, IE2 motors of type 1LA9 and 1LG6 on 2, 4 and 6 poels, between 0.75kW and 200KW have been certified.

21) The nameplate indicates the voltage supply without voltage tolerance. Order code D40 do not entitle importing status for Canada. The 1LA9 motors line with additional option code D42 is available for that purpose.

22) “Small power motors” with a rated output of up to 3 kW which are exported to Japan must bear the PSE marking.

23) Not possible in combination with space heaters codes K45 and K46, instead codes M14 and M15 should be used (see EX motor section).

24 Not possible with brake

25) Not possible for 1LA9 134-6KA…

23) Not possible in combination with space heaters codes K45 and K46, instead codes M14 and M15 should be used (see EX motor section).

24 Not possible with brake

25) Not possible for 1LA9 134-6KA…

26) Can be combined with deep-groove bearings of series 60.., 62.. and 63… Not possible in combination with parallel roller bearings (e.g. bearings for increased cantilever forces, order code K20), brake mounting or encoder mounting.

27) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the featherkey way must be specified in a sketch. It must be ensured that only featherkeys in accordance with DIN 6885, Form A are permitted to be used. The featherkey way is positioned centrally on the shaft extension. The length is defined by the manufacturer normatively. 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 featherkeys are supplied in every case. For order codes Y55 and K16:
– Dimensions D and DA ≤ internal diameter of roller bearing (see dimesnion tables under “Dimensions”)
– Dimensions E and EA ≤2 x length E (normal) of the shaft extension
For an explanation of the order codes, see catalog part 0 “Introduction

28) Because of the special requiremetns from the textile industry for a fan housing, it is possible to fit a finger between the fan housing and frame.

29) For 1LA7/1LA9 and 1LG6 motors with metal fan, variable Speed drive operation is permitted.
A Metal fan is not possible with low noise options (codes F77 or F78)

30) Not available in combination with VIK code K30, instead codes M14 and M15 should be used (see EX motor section).

31) Available for voltages 230VΔ /400VY or 400VΔ/690VY (1 or 6 in dig. # 11 of the part number). Not possible for multi-speed, self-ventilated or in combination of 8-Pole and option D34.

32) The delivery of the Test Certificate can be different of that from the motor.

Standard Motors 1LA/1LG

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

with base prices and standard delivery times

Overview

Category	2.2 — Motors in Cast Iron frame	
Series	Cast Iron series 1LG6	
	High efficiency IE2	NEMA Energy Efficiency / IE2
Cooling	Self-ventilated (IC 411)	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)	Thermal class 155 (F)
Utilization	Thermal class 130 (B)	Thermal class 130 (B)
Number of Poles	2, 4, 6, 8	2, 4, 6, 8
Frame size (F)	180 M ... 315 L	180 M ... 315 L
Rated output at 50Hz	11 ... 315 kW	11 ... 315 kW
Synchronous speed	750 ... 3600 min^{-1}	750 ... 3600 min^{-1}
Rater torque at 50Hz	71 ... 2070 Nm	71 ... 2070 Nm
efficiency	High Efficiency IE2	NEMA Energy Efficient MG1 Table 12-11 / IE2 [1]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

$P_{N, 50Hz}$	IE-Class	Frame Size	Part-Nr.	Base Price	Part-Nr.	Base Price
kW		FS	▲ Replaced by 1LE1501/1LE1601	USD	▲ Replaced by 1LE1521/1LE1621	USD
2-Pole: 3000 min-1 at 50 Hz						
22	IE2	180 M	▲ 1LG6183-2MA..	4690.–	▲ 1LG6183-2MA..-Z D42	o.R
30	IE2	200 L	▲ 1LG6206-2MA..	6080.–	▲ 1LG6206-2MA..-Z D42	o.R
37	IE2	200 L	▲ 1LG6207-2MA..	7630.–	▲ 1LG6207-2MA..-Z D42	o.R
45	IE2	225 M	▲ 1LG6223-2MA..	9110.–	▲ 1LG6223-2MA..-Z D42	o.R
55	IE2	250 M	▲ 1LG6253-2MB..	10800.–	▲ 1LG6253-2MB..-Z D42	o.R
75	IE2	280 S	▲ 1LG6280-2MB..	14800.–	▲ 1LG6280-2MB..-Z D42	o.R
90	IE2	280 M	▲ 1LG6283-2MB..	17500.–	▲ 1LG6283-2MB..-Z D42	o.R
110	IE2	315 S	▲ 1LG6310-2MB..	21000.–	▲ 1LG6310-2MB..-Z D42	o.R
132	IE2	315 M	▲ 1LG6313-2MB..	25200.–	▲ 1LG6313-2MB..-Z D42	o.R
160	IE2	315 L	▲ 1LG6316-2MB..	31300.–	▲ 1LG6316-2MB..-Z D42	o.R
200	IE2	315 L	▲ 1LG6317-2MB..	39100.–	▲ 1LG6317-2MB..-Z D42	o.R
250	IE2	315 L	▲ 1LG6318-2MB..	44000.–	▲ 1LG6318-2MB..-Z D42	o.R
315	IE2	315 L	▲ 1LG6312-2MA..	55400.–	▲ 1LG6312-2MA..-Z D42	o.R
4-Pole: 1500 min-1 at 50 Hz						
18.5	IE2	180 M	▲ 1LG6183-4MA..	3970.–	▲ 1LG6183-4MA..-Z D42	o.R
22	IE2	180 L	▲ 1LG6186-4MA..	4620.–	▲ 1LG6186-4MA..-Z D42	o.R
30	IE2	200 L	▲ 1LG6207-4MA..	5990.–	▲ 1LG6207-4MA..-Z D42	o.R
37	IE2	225 S	▲ 1LG6220-4MA..	7280.–	▲ 1LG6220-4MA..-Z D42	o.R
45	IE2	225 M	▲ 1LG6223-4MA..	8570.–	▲ 1LG6223-4MA..-Z D42	o.R
55	IE2	250 M	▲ 1LG6253-4MA..	10400.–	▲ 1LG6253-4MA..-Z D42	o.R
75	IE2	280 S	▲ 1LG6280-4MA..	14000.–	▲ 1LG6280-4MA..-Z D42	o.R
90	IE2	280 M	▲ 1LG6283-4MA..	16400.–	▲ 1LG6283-4MA..-Z D42	o.R
110	IE2	315 S	▲ 1LG6310-4MA..	20500.–	▲ 1LG6310-4MA..-Z D42	o.R
132	IE2	315 M	▲ 1LG6313-4MA..	24300.–	▲ 1LG6313-4MA..-Z D42	o.R
160	IE2	315 L	▲ 1LG6316-4MA..	29300.–	▲ 1LG6316-4MA..-Z D42	o.R
200	IE2	315 L	▲ 1LG6317-4MA..	36600.–	▲ 1LG6317-4MA..-Z D42	o.R
250	IE2	315 L	▲ 1LG6318-4MA..	41200.–	▲ 1LG6318-4MA..-Z D42	o.R
315	IE2	315 L	▲ 1LG6312-4MA..	52000.–	▲ 1LG6312-4MA..-Z D42	o.R
6-Pole: 1000 min-1 at 50 Hz						
15	IE2	180 L	1LG6186-6AA..	4930.–	▲ 1LG6186-6AA..-Z D42	o.R
18.5	IE2	200 L	1LG6206-6AA..	6030.–	▲ 1LG6206-6AA..-Z D42	o.R
22	IE2	200 L	1LG6207-6AA..	6990.–	▲ 1LG6207-6AA..-Z D42	o.R
30	IE2	225 M	1LG6223-6AA..	9370.–	▲ 1LG6223-6AA..-Z D42	o.R
37	IE2	250 M	1LG6253-6AA..	11400.–	▲ 1LG6253-6AA..-Z D42	o.R
45	IE2	280 S	1LG6280-6AA..	13900.–	▲ 1LG6280-6AA..-Z D42	o.R
55	IE2	280 M	1LG6283-6AA..	16400.–	▲ 1LG6283-6AA..-Z D42	o.R
75	IE2	315 S	1LG6310-6AA..	22300.–	▲ 1LG6310-6AA..-Z D42	o.R
90	IE2	315 M	1LG6313-6AA..	25200.–	▲ 1LG6313-6AA..-Z D42	o.R
110	IE2	315 L	1LG6316-6AA..	30300.–	▲ 1LG6316-6AA..-Z D42	o.R
132	IE2	315 L	1LG6317-6AA..	36100.–	▲ 1LG6317-6AA..-Z D42	o.R
160	IE2	315 L	1LG6318-6AA..	43800.–	▲ 1LG6318-6AA..-Z D42	o.R
200	IE2	315 L	▲ 1LG6312-6MA..	48700.–	▲ 1LG6312-6MA..-Z D42	o.R

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	2.2 — Motors in Cast Iron frame
Series	Cast Iron series 1LG6
	High efficiency IE2 / Premium efficiency IE3
Cooling	Self-ventilated (IC 411) / Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65 / IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F) / Thermal class 155 (F)
Utilization	Thermal class 130 (B) / Thermal class 130 (B)
Number of Poles	2, 4, 6, 8 / 2, 4, 6
Frame size (F)	180 M ... 315 L / 315 S ... 315 L
Rated output at 50Hz	11 ... 315 kW / 75 ... 315 kW
Synchronous speed	750 ... 3600 min^{-1} / 1000 ... 3600 min^{-1}
Rater torque at 50Hz	71 ... 2070 Nm / 352 ... 2022 Nm
efficiency	High Efficiency IE2 / Premium Efficiency IE3

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ Replaced by 1LE1501/1LE1601	Base Price USD
8-Pole: 750 min-1 at 50 Hz				
11	-	180 L	1LG6186-8AB..	5160.–
15	-	200 L	1LG6207-8AB..	6810.–
18.5	-	225 S	1LG6220-8AB..	8270.–
22	-	225 M	1LG6223-8AB..	9430.–
30	-	250 M	1LG6253-8AB..	12200.–
37	-	280 S	1LG6280-8AB..	14600.–
45	-	280 M	1LG6283-8AB..	17800.–
55	-	315 S	1LG6310-8AB..	21100.–
75	-	315 M	1LG6313-8AB..	28300.–
90	-	315 L	1LG6316-8AB..	31500.–
110	-	315 L	1LG6317-8AB..	38000.–
132	-	315 L	1LG6318-8AB..	45400.–
160	-	315 L	▲ 1LG6312-8MB..	48700.–

$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ New	Base Price USD
2-Pole: 3000 min-1 at 50 Hz				
110	IE3	315 S	1LG6310-2AB..-Z D25	23040.–
132	IE3	315 M	1LG6313-2AB..-Z D25	27690.–
160	IE3	315 L	1LG6316-2AB..-Z D25	34370.–
200	IE3	315 L	1LG6317-2AB..-Z D25	42960.–
250	IE3	315 L	▲ 1LG6318-2MB..-Z D25	48340.–
315	IE3	315 L	▲ 1LG6312-2MA..-Z D25	60860.–
4-Pole: 1500 min-1 at 50 Hz				
110	IE3	315 S	1LG6310-4AA..-Z D25	22540.–
132	IE3	315 M	1LG6313-4AA..-Z D25	26690.–
160	IE3	315 L	1LG6316-4AA..-Z D25	32250.–
200	IE3	315 L	1LG6317-4AA..-Z D25	40230.–
250	IE3	315 L	▲ 1LG6318-4MA..-Z D25	45260.–
315	IE3	315 L	▲ 1LG6312-4MA..-Z D25	57130.–
6-Pole: 1000 min-1 at 50 Hz				
75	IE3	315 S	1LG6310-6AA..-Z D25	24460.–
90	IE3	315 M	1LG6313-6AA..-Z D25	27690.–
110	IE3	315 L	1LG6316-6AA..-Z D25	33250.–
132	IE3	315 L	1LG6317-6AA..-Z D25	39620.–
160	IE3	315 L	1LG6318-6AA..-Z D25	48110.–
200	IE3	315 L	▲ 1LG6312-6MA..-Z D25	53510.–

Selection and ordering data
with base prices and standard delivery times

12 Working Weeks | 14 Working Weeks | 16 Working Weeks

Overview

Category	2.3 — Motors with higher power output
Series	Cast Iron series 1LG6
	High efficiency IE2
Cooling	Self-ventilated (IC 411)
Degree of protection IP55	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Utilization	Thermal class 130 (B)
Number of Poles	2, 4, 6
Frame size (F)	200 L ... 280 M
Rated output at 50Hz	45 ... 110 kW
Synchronous speed	1000 ... 3600 min^{-1}
Rater torque at 50Hz	71 ... 2070 Nm
efficiency	NEMA Energy Efficient MG1 Table 12-11 / IE2 [1)]

Range of motors with Order No., delivery time and base price for type of construction IM B3 and connection box on top (for delivery times refer to colored background of the relevant price)

$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ Replaced by 1LE1501/1LE1601	Base Price USD	$P_{N, 50Hz}$ kW	IE-Class	Frame Size FS	Part-Nr. ▲ Replaced by 1LE1501/1LE1601	Base Price USD
2-Pole: 3000 min-1 at 50 Hz									
45	**IE2**	**200 L**	**1LG6208-2AA..**	**9110.–**					
55	**IE2**	**225 M**	**1LG6228-2AA..**	**10800.–**					
75	**IE2**	**250 M**	**1LG6258-2AA..**	**14800.–**					
110	**IE2**	**280 M**	**1LG6288-2AA..**	**21000.–**					
4-Pole: 1500 min-1 at 50 Hz									
55	**IE2**	**225 M**	**1LG6228-4AA..**	**10400.–**					
75	**IE2**	**250 M**	**1LG6258-4AA..**	**14000.–**					
110	**IE2**	**280 M**	**1LG6288-4AA..**	**20500.–**					
6-Pole: 1000 min-1 at 50 Hz									
37	**IE2**	**225 M**	**1LG6228-6AA..**	**11400.–**					
45	**IE2**	**250 M**	**1LG6258-6AA..**	**13900.–**					
75	**IE2**	**280 M**	**1LG6288-6AA..**	**22300.–**					

Standard motors 1LA / 1LG - Cast Iron Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium efficiency / IE3	1	1LG 6 . . - . . . . . - Z +D42
NEMA Energy efficiency / IE2	2	1LG 6 . . - . . . . . - Z +D42
Premium efficiency IE3	3	1LG 6
Energy efficient / IE2	4	1LG 6
Standard Efficiency / IE1	5	1LA6

Digit #	11	Code
1L(_) . . . -		- Z _ _ _

VOLTAGE SELECTION				Frame Size 100	112	132	160	180	200	225	250	280	315 S/M	315 L
Dual Frequency														
50 Hz 230 VΔ/400 VY, 60 Hz 460 VY	1	-	All											
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ	6	-	3, 4, & 5											
50 Hz 400 VΔ, 60 Hz 460 VΔ [1]	6	-	1 & 2											
50Hz Voltage Supply														
500 VY	3	-	All	○	○	○	○	○	○	○	○	○	○	○
500 VΔ	5	-	All	-	-	-	-	○	○	○	○	○	○	○
220 VΔ/380 VY (440 VY bei 60 Hz)	9	L1R	All	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	-
230 VΔ	9	L1E	3, 4, & 5	○	○	○	○	○	○	○	○	○	○	-
380 VΔ/660 VY (440 VΔ bei 60 Hz) [1]	9	L1L	3, 4, & 5	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
380 VΔ (440 VΔ bei 60 Hz) [1]	9	L1L	1 & 2	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
415 VY		L1C	All	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	-
415 VΔ	9	L1D	All	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
400 VY	9	L1A	All	○	○	○	○	○	○	○	○	○	○	-
400 VΔ	10	L1B	All	○	○	○	○	○	○	○	○	○	○	○
400 VΔ (460 VΔ bei 60 Hz)	11	L1U	All	○	○	○	○	○	○	○	○	○	○	○

1) Voltages 600V or higher are not stamped on the nameplate of 1LA9 NEMA Energy efficient motors (code D42)

2) Not allowed in combination with order code D42 (NEMA Energy Efficient)

3) For 1LA7 motors FS 63-90 with brake (option code G26), only 6 terminals are available for the motor.

4) Voltages between 200 & 690V, clear text must be specified (Frequency, Voltage, Power, altitude and Ambient Temp.)

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required		

Standard motors 1LA / 1LG - Cast Iron Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium efficiency / IE3	1	1LG 6 . . - . . . . . - Z +D42
NEMA Energy efficiency / IE2	2	1LG 6 . . - . . . . . - Z +D42
Premium efficiency IE3	3	1LG 6
Energy efficient / IE2	4	1LG 6
Standard Efficiency / IE1	5	1LA6

Digit #	11	Code
1L(_) . . . -		- Z _ _ _

VOLTAGE SELECTION				Frame Size 100	112	132	160	180	200	225	250	280	315 S/M	315 L
60Hz Voltage Supply, Output 50Hz														
220 VΔ/380 VY; 50-Hz-Output	9	L2A	All											
380 VΔ/660 VY;50-Hz-Output [1]	9	L2C	All											
440 VY; 50-Hz-Output	9	L2Q	All											
440 VΔ; 50-Hz-Output	9	L2R	All											
460 VY; 50-Hz-Output	9	L2S	All	○	○	○	○	○	○	○	○	○	○	○
460 VΔ; 50-Hz-Output	9	L2T	All	-	-	-	-	○	○	○	○	○	○	○
575 VY; 50-Hz-Output	9	L2U	All	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	-
60Hz Voltage Supply, Maximum Output 60Hz														
220 VΔ/380 VY; 60-Hz-Output [2]	9	L2B	3, 4, & 5	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
380 VΔ/660 VY; 60-Hz-Output [2]	9	L2D	3, 4, & 5	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	-
440 VY; 60-Hz-Output [2]	9	L2W	3, 4, & 5	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
440 VΔ; 60-Hz-Output [2]	9	L2X	3, 4, & 5	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
460 VY; 60-Hz-Output [2]	9	L2E	3, 4, & 5	○	○	○	○	○	○	○	○	○	○	○
460 VΔ; 60-Hz-Output [2]	9	L2F	3, 4, & 5	○	○	○	○	○	○	○	○	○	○	○
575 VY; 60-Hz-Output [2]	9	L2L	3, 4, & 5	51.4	62.1	79.7	97.8	132.–	132.–	205.–	234.–	302.–	392.–	392.–
575 VΔ; 60-Hz-Output [2]	9	L2M	3, 4, & 5	○	○	○	○	○	○	○	○	○	○	○
Non-Stanadard voltage or frequency														
Non Standard widning	9	L1Y •	All	103.–	125.–	159.–	198.–	255.–	311.–	460.–	580.–	742.–	964.–	964

1) Voltages 600V or higher are not stamped on the nameplate of 1LA9 NEMA Energy efficient motors (code D42)

2) Not allowed in combination with order code D42 (NEMA Energy Efficient)

3) For 1LA7 motors FS 63-90 with brake (option code G26), only 6 terminals are available for the motor.

4) Voltages between 200 & 690V, clear text must be specified (Frequency, Voltage, Power, altitude and Ambient Temp.)

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA / 1LG - Cast Iron Series

Selection, Pricing and delivery guide

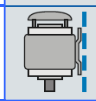
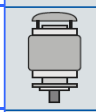
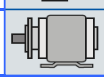
Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium efficiency / IE3 (D41)	1	1LG 6
NEMA Energy efficiency / IE2 (D42)	2	1LG 6
Premium efficiency IE3	3	1LG 6
Energy efficient / IE2	4	1LG 6
Standard Efficiency / IE1	5	1LA6

Digit # 12 Code

1LG . . . - . . . . - Z

Mounting					100	112	132	160	180	200	225	250	280	S/M	2P	4-8P	2
Foot Mounted																	
IMB3 [1)]		0	-	1, 3, 4 & 5													
IMB6 [1,2)]		0	-	1, 3, 4 & 5													
IMB7 [1,2)]		0	-	1, 3, 4 & 5													
IMB8 [1),2]		0	-	1, 3, 4 & 5													
IMV6 [1,2)]		0	-	1, 3, 4 & 5											-	-	-
		9	M1E		-	-	-	-	-	-	-	-	-	-	438.–		o.R
IMV5 [1,2,4)] (No canopy)		0	-	1, 3, 4 & 5											-	-	-
		9	M1D		-	-	-	-	-	-	-	-	-	-	439.–		o.R
IMV5 [1,2,3,4)] (With canopy)		9	M1F	1, 3, 4 & 5	78.4	78.4	137.–	137.–	183.–	275.–	364.–	455.–	546.–	729.–	1170.–	729.–	o.R
Footless with B5 Flange					A250	A250	A300	A350	A350	A400	A450	A550	A550	A660	A660	A660	A800
IMB5		1	-	All	77.4	96.1	125.–	162.–	256.–	311.–	402.–	483.–	703.–	1000.–	-	-	-
IMV1 (No canopy)		1	-	All	77.4	96.1	125.–	162.–	256.–	311.–	402.–	483.–	703.–	1000.–	-	-	-
		8	-	All	-	-	-	-	-	-	-	-	-	-	1400.–	1000.–	1400* 1830**
IMV1 [2)] (with canopy)		4	-	All	156.–	175.–	262.–	303.–	437.0	584.–	768.–	947.–	1250.–	1740.–	2160.–	1740.–	2160* 2890**
IMV3		1	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
		9	M1G	All	-	-	-	-	256.–	311.–	402.–	483.–	703.–	1000.–	-	-	-
IMB35 [1)]		6	-	1, 3, 4 & 5	96.1	126.–	158.–	228.–	346	455	672	9154.0	1190.–	1570.–	1570.–	1570.–	1570* 2290**

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required [4)]		

Standard motors 1LA / 1LG - Cast Iron Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium efficiency / IE3 (D41)	1	1LG 6
NEMA Energy efficiency / IE2 (D42)	2	1LG 6
Premium efficiency IE3	3	1LG 6
Energy efficient / IE2	4	1LG 6
Standard Efficiency / IE1	5	1LA6

Digit # 12	Code
1LG . . . - . . . . -	Z _ _ _
1LA . . . - . . . . -	

Mounting					Frame Size 100	112	132	160	180	200	225	250	280	315 S/M	315L 2P	315L 4-8P	315L 2
Footless with Standard B14 Flang					C160	C160	C200	C250									
IMB14 [2,8)]		2	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
IMV19 [2)]		2	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
IMV18 [2)] (No Canopy)		2	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
IMV18 [2)] (with Canopy)		9	M2A	All	156.–	175.–	262.–	303.–	-	-	-	-	-	-	-	-	-
IMB34 [1)]		7	-	1, 3, 4 & 5	96.1	126.–	158.–	228.–	-	-	-	-	-	-	-	-	-
Footless with Special B14 Flange					C200	C200	C250	C300									
IMB14 [2,8)]		2	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
IMV19 [2)]		2	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
IMV18 [2)] (No Canopy)		2	-	All	77.4	96.1	125.–	162.–	-	-	-	-	-	-	-	-	-
IMV18 [2)] (with Canopy)		9	M2A	All	156.–	175.–	262.–	303.–	-	-	-	-	-	-	-	-	-
IMB34 [1)]		7	-	1, 3, 4 & 5	96.1	126.–	158.–	228.–	-	-	-	-	-	-	-	-	-

1) NEMA Energy Efficient (1LE1021) foot mounted motors (2,4,6 Poles) ≤ 200HP are not available due to efficiency regulations in NAFTA.

2) If athe motor, with frame size 180M to 315L, is to be monted on a wall, it is recommended to support the feet.

3) Option second shaft extension (order code K16) not possible.

4) For 2 pole motors, FS 315L 60Hz applications only on request

5) Motors with frame size 225S to 315M are supplied with wo screw-in eyebolts in accordanc with mounting IMB5, whereby on can be rotated in accordance with IMV1 or IMV3. It is important to note that stress must not be applied perpendicular to the ring plane.

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required *)		

Standard motors 1LA / 1LG - Cast Iron Series

Selection, Pricing and delivery guide

Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium efficiency / IE3 (D41)	1										1LG 6	
NEMA Energy efficiency / IE2 (D42)	2					1LG 6						
Premium efficiency IE3	3									1LG 6		
Energy efficient / IE2	4					1LG 6						
Standard Efficiency / IE1	5	1LA6										

Code

1L(_) . . . - . . . . **- Z _ _ _**

			Frame Size										
												315	
VOLTAGE SELECTION			**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**S/M**	**L**
Motor protection													
3 x PTC embedded temperature sensors for tripping [1]	**A11**	**All**	114.–	114.–	171.–	171.–	227.–	227.–	310.–	310.–	386.–	386.–	386.–
6 x PTC embeded temperature sensors for tripping and alarm [1]	**A12**	**All**	195.–	195.–	261.–	261.–	401.–	401.–	521.–	521.–	647.–	647.–	647.–
1x embedded temp. sensor KTY 84-130 [1]	**A23**	**All**	114.–	114.–	171.–	171.–	322.–	322.–	441.–	572.–	572.–	843.–	843.–
2x embedded tem. sensor KTY 84-130 [1]	**A25**	**All**	229.–	229.–	342.–	342.–	523.–	523.–	719.–	974.–	974.–	1430.–	1430.–
Temperature detectors for tripping [1]	**A31**	**All**	127.–	127.–	186.–	186.–	257.–	257.–	348.–	348.–	431.–	431.–	431.–
3 x PT 100 resistance thermometers [1]	**A60**	**All**	1440.–	1440.–	1440.–	1440.–	1440.–	1440.–	1440.–	1590.–	1590.–	1590.–	1590.–
6 x PT 100 resistance thermometers in stator winding [1]	**A61**	**All**	–	–	–	–	2350.–	2350.–	2350.–	2350.–	2350.–	2350.–	2350.–
2 x PT 100 screw-in resistance thermometers (basic circuit) for rolling-contact bearings [1,2,3]	**A72**	**All**	–	–	–	–	4100.–	4100.–	4100.–	4100.–	4100.–	4100.–	4100.–
2 x PT100 screw-in resistance thermometers (3-wire circuit) for rolling-contact bearings [1,3]	**A78**	**All**	–	–	–	–	4500.–	4500.–	4500.–	4500.–	4500.–	4500.–	4500.–
2 x PT 100 double screw-in resistance thermometers (3-wire circuit) for rolling-contact bearings [1,3]	**A80**	**All**	–	–	–	–	5400.–	5400.–	5400.–	5400.–	5400.–	5400.–	5400.–
Motor connection and connection box													
Two-part plate on connection box	**K06**	**All**	–	–	–	–	–	529.–	529.–	1000.–	1000.–	1270.–	1270.–
Undrilled entry plate	**L01**	**All**	–	–	–	–	○	○	○	○	○	○	○
Connection box on RHS	**K09**	**All**	116.–	125.–	136.–	199.–	353.–	416.–	492.–	731.–	821.–	946.–	946.–
Connection box on LHS	**K10**	**All**	116.–	125.–	136.–	199.–	353.–	416.–	492.–	731.–	821.–	946.–	946.–
Connection box on top, feet screwed on	**K11**	**All**	–	–	–	–	353.–	416.–	492.–	731.–	821.–	946.–	946.–
Connection box in cast-iron version	**K15**	**All**					375.–	497.–	731.–				
One cable gland, metal	**K54**	**All**	107.–	107.–	107.–	136.–	136.–	157.–	157.–	224.–	224.–	224.–	224.–
Cable gland, maximum configuration	**K55**	**All**	151.–	151.–	151.–	199.–	199.–	229.–	229.–	397.–	397.–	397.–	397.–
Terminal box rotation 90°, entry from DE	**K83**	**All**	22.2	22.2	22.2	22.2	42.9	55.6	68.6	82.4	98.4	118.–	118.–
Terminal box rotation 90°, entry from NDE	**K84**	**All**	22.2	22.2	22.2	22.2	42.9	55.6	68.6	82.4	98.4	118.–	118.–
Rotation of connection box through 180°	**K85**	**All**	22.2	22.2	22.2	22.2	42.9	55.6	68.6	82.4	98.4	118.–	118.–

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required		

Standard motors 1LA / 1LG - Cast Iron Series

Delivery Time

Selection, Pricing and delivery guide

		12 Working Weeks	14 Working Weeks	16 Working Weeks
NEMA Premium efficiency / IE3 (D41)	1			1LG 6
NEMA Energy efficiency / IE2 (D42)	2		1LG 6	
Premium efficiency IE3	3			1LG 6
Energy efficient / IE2	4		1LG 6	
Standard Efficiency / IE1	5	1LA6		

	Code		Frame Size										
1L(_) . . . -	- Z _ _ _											315	
VOLTAGE SELECTION			100	112	132	160	180	200	225	250	280	S/M	L
Motor connection and connection box (continue..)													
Next larger connection box	L00	All	–	–	–	–	1220.–	1220.–	1580.–	1810.–	1810.–	2130.–	2130.–
External earthing	L13	All	27.5	27.5	27.5	27.5							
6 cables protruding, 1.5 m long[4)]	L48	All	–	–	–	–	980.–	1350.–	1840.–	o.R	o.R	o.R	o.R
6 cables protruding, 3 m long[4)]	L49	All	–	–	–	–	1570.–	2160.–	2940.–	o.R	o.R	o.R	o.R
Protruding cable ends – right side[5,6)]	L51	All	–	–	–	–	o.R	o.R	o.R	o.R	o.R	o.R	o.R
Protruding cable ends – left side[5,6)]	L52	All	–	–	–	–	o.R	o.R	o.R	o.R	o.R	o.R	o.R
Auxiliary connection box 1XB3 020	L97	All	–	–	–	–	211.–	211.–	511.–	511.–	511.–	511.–	511.–
Stud terminal for cable connection, accessories pack (3 items)	M46	All	–	–	–	–	–	–	–	143.–	143.–	180.–	180.–
Saddle terminal for connection without cable lug, accessories pack (6 items)	M47	All	–	–	–	–	–	–	–	502.–	502.–	592.–	592.–
Windings and insulation													
Temp. class 155 (F)/155 (F), with service factor	C11	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–	104.–
Temp. class 155 (F)/155(F), increased output	C12	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–	104.–
Temp. class 155(F)/155(F), higher coolant Temp.	C13	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–	104.–
Tem. class 180 (H) at rated output, max. CT 60 °C[7,8,9)]	C18	1, 2, 3 & 4	201.–	257.–	325.–	404.–	499.–	643.–	751.–	858.–	1010.–	1380.–	–
Increased air humidity/Temp. with 30 to 60 g water per m3 of air	C19	All	141.–	141.–	141.–	214.–	944.–	1200.–	1460.–	1790.–	2180.–	2670.–	2670.–
Temp. class 155 (F)/130 (B), coolant Temp. 45 °C, derating approx. 4 %	C22	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–	104.–
Tem. class 155 (F)/130 (B), coolant Temp. 50 °C, derating approx. 8 %	C23	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–	104.–
Temp. class 155 (F)/130 (B), coolant Temp. 55 °C, derating approx. 13 %	C24	All	103.–	125.–	159.–	198.–	255.–	311.–	460.–	580.–	742.–	964.–	964.–
Temp. class 155 (F)/130 (B), coolant Temp. 60 °C, derating approx. 18 %	C25	All	103.–	125.–	159.–	198.–	255.–	311.–	460.–	580.–	742.–	964.–	964.–
Increased air humidity/Temp. with 60 to 100 g water pe m3 of air	C26	All	275.–	309.–	334.–	444.–	4300.–	4690.–	5450.–	7190.–	8280.–	11800.–	11800.–
Temp. class 155 (F)/130 (B), with higher coolant Temp. and/or site altitude	Y50	All	154.–	186.–	240.–	295.–	382.–	469.–	690.–	868.–	1110.–	1440.–	1440.–
Temp. class 155 (F)/155 (F), other requirements[8)]	Y52	All	46.–	46.–	61.2	61.2	78.–	78.–	88.6	88.6	104.–	104.–	104.–

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required		

Standard motors 1LA / 1LG - Cast Iron Series

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Delivery Time

12 Working Weeks	14 Working Weeks	16 Working Weeks

NEMA Premium efficiency / IE3 (D41)	1	1LG 6
NEMA Energy efficiency / IE2 (D42)	2	1LG 6
Premium efficiency IE3	3	1LG 6
Energy efficient / IE2	4	1LG 6
Standard Efficiency / IE1	5	1LA6

Code

1L(_) . . . - . . . . **- Z _ _ _**

VOLTAGE SELECTION	Code		Frame Size 100	112	132	160	180	200	225	250	280	315 S/M	315 L
Colors and paint finish													
Standard finish in RAL 7030 stone gray		All	–	–	–	–							
Standard finish in other standard RAL colors:	Y53 •	All	–	–	–	–	79.3	79.3	79.3	90.3	121.–	194.–	194.–
Special finish in RAL 7030 stone gray[10]	K26	All					180.–	225.–	334.–	404.–	497.–	638.–	638.–
Special finish in other standard RAL colors	Y54 •	All	98.3	98.3	129.–	129.–	180.–	225.–	334.–	404.–	497.–	638.–	638.–
Special finish in special RAL colors	Y51 •	All	745.–	745.–	745.–	745.–	787.–	787.–	787.–	848.–	848.–	848.–	848.–
Offshore special finish	M91	All	o.R	o.R	o.R	o.R	2510.–	2640.–	3050.–	3970.–	4970.–	7680.–	7680.–
Sea air resistant special finish	M94	All	658.–	658.–	703.–	703.–	771.–	771.–	771.–	851.–	851.–	851.–	851.–
Unpainted (only cast iron parts primed)	K23	All	○	○	○	○	○	○	○	○	○	○	○
Unpainted, only primed	K24	All	26.5	26.5	42.2	42.2	79.3	79.3	79.3	79.3	79.3	79.3	79.3
Modular technology – Basic versions [11]													
Mounting of separately driven fan[12]	G17	All	699.–	832.–	959.–	1110.–	1330.–	2070.–	2850.–	3500.–	4150.–	4650.–	–
Mounting of brake[12,13]	G26	All	–	–	–	–	4380.–	6120.–	7780.–	24900.–	30700.–	36800.–	–
Mounting of 1XP8 001-1 (HTL) rotary pulse encoder	H57	All	638.–	638.–	638.–	638.–	638.–	638.–	1460.–	1460.–	1460.–	1460.–	1460.–
Mounting of 1XP8 001-2 (TTL) rotary pulse encoder	H58	All	915.–	915.–	915.–	915.–	915.–	915.–	2000.–	2000.–	2000.–	2000.–	2000.–
Modular technology – Combinations of basic versions [11]													
Mounting of separately driven fan and 1XP8 001-1 rotary pulse encoder	H61	All	1330.–	1490.–	1600.–	1750.–	1990.–	2720.–	4300.–	4970.–	5620.–	6110.–	–
Mounting of brake and 1XP8 001-1 rotary pulse encoder[13]	H62	All	–	–	–	–	5030.–	6770.–	10200.–	26500.–	32200.–	38200.–	–
Mounting of brake and separately driven fan[12,13]	H63	All	–	–	–	–	5720.–	8220.–	11700.–	29100.–	33600.–	39700.–	–
Mounting of brake, separately driven fan and 1XP8 001-1 rotary pulse encoder[13]	H64	All	–	–	–	–	6370.–	8830.–	13200.–	30300.–	35000.–	41100.–	–
Mounting of separately driven fan and 1XP8 001-2 rotary pulse encoder	H97	All	1620.–	1750.–	1870.–	2030.–	2260.–	3000.–	4830.–	5500.–	6130.–	6630.–	–
Mounting of brake and 1XP8 001-2 rotary pulse encoder[13]	H98	All	–	–	–	–	5300.–	7030.–	10700.–	27000.–	33000.–	38700.–	–
Mounting of brake, separately driven fan and 1XP8 001-2 rotary pulse encoder[13]	H99	All	–	–	–	–	6620.–	9120.–	13600.–	30900.–	35500.–	41800.–	–
Modular technology – Additional versions													
Brake supply voltage 24 V DC	C00	All	–	–	–	–	68.6	68.6	68.6	68.6	68.6	68.6	–
Brake supply voltage 400 V AC	C01	All	–	–	–	–	68.6	68.6	68.6	68.6	68.6	68.6	–
Mechanical manual brake release with lever (no locking)	K82	All	–	–	–	–	602.–	702.–	892.–	1020.–	1120.–	1430.–	–

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA / 1LG - Cast Iron Series

Delivery Time

Selection, Pricing and delivery guide

		12 Working Weeks	14 Working Weeks	16 Working Weeks
NEMA Premium efficiency / IE3 (D41)	1			1LG 6
NEMA Energy efficiency / IE2 (D42)	2		1LG 6	
Premium efficiency IE3	3			1LG 6
Energy efficient / IE2	4		1LG 6	
Standard Efficiency / IE1	5	1LA6		

Code

1L(_) . . . - . . . .- Z _ _ _

			Frame Size									315	
			100	112	132	160	180	200	225	250	280	S/M	L
Special technology [11]													
Mounting of LL 861 900 220 rotary pulse encoder	H70	All	2910.–	2910.–	2910.–	2910.–	2910.–	2910.–	4730.–	4730.–	4730.–	4730.–	4730.–
Mounting of HOG 9 D 1024 I rotary pulse encoder	H72	All	3300.–	3300.–	3300.–	3300.–	3660.–	3660.–	4810.–	4810.–	4810.–	4810.–	4810.–
Mounting of HOG 10 D 1024 I rotary pulse encoder	H73	All	4290.–	4290.–	4290.–	4290.–	4370.–	4370.–	5710.–	5710.–	5710.–	5710.–	5710.–
Prepared for mounting LL 861 900 220	H78	All	581.–	581.–	581.–	581.–	671.–	671.–	671.–	671.–	671.–	671.–	671.–
Prepared for mounting HOG 9 D 1024 I	H79	All	581.–	581.–	581.–	581.–	671.–	671.–	671.–	671.–	671.–	671.–	671.–
Prepared for mounting HOG 10 D 1024 I	H80	All	581.–	581.–	581.–	581.–	671.–	671.–	671.–	671.–	671.–	671.–	671.–
Mounting of explosion-proof encoder HOG 10 DN 1024 I, connection box protection against moisture	J15	All	5310.–	5360.–	5390.–	5420.–	5460.–	5490.–	5520.–	5560.–	5610.–	5650.–	5650.–
Mounting of explosion-proof encoder HOG 10 DN 1024 I, connection box protection against dust	J16	All	5310.–	5360.–	5390.–	5420.–	5460.–	5490.–	5520.–	5560.–	5610.–	5650.–	5650.–
Mounting of encoder HOG 10 DN 1024 I + FSL, (speed..rpm), connection box protection against moisture	Y74 •	All	–	–	–	–	8390.–	8410.–	8450.–	8480.–	8530.–	8580.–	8580.–
Mounting of encoder HOG 10 DN 1024 I + FSL, (speed .... rpm), connection box protection against dust	Y76 •	All	–	–	–	–	8390.–	8410.–	8450.–	8480.–	8530.–	8580.–	8580.–
Mounting of rotary pulse encoder HOG 10 DN 1024 I + ESL 93, (speed …. rpm), connection box protection against dust	Y79 •	All	–	–	–	–	14300.–	14400.–	14600.–	14800.–	14900.–	15000.–	15000.–
Mechanical design and degrees of protection													
Drive-end seal for flange-mounting motors with an oil tightness of up to 0.1 bar Not possible for IM V3 type of construction [14]	K17	All	54.8	59.9	73.1	107.–	138.–	171.–	227.–	302.–	379.–	455.–	455.–
Low-noise version for 2-pole motors with clockwise direction of rotation [15]	K37	5,	–	–	595.–	595.–	794.–	794.–	1270.–	1460.–	1740.–	2280.–	–
Low-noise version for 2-pole motors with counter-clockwise direction of rotation [15]	K38	5,	–	–	595.–	595.–	794.–	794.–	1270.–	1460.–	1740.–	2280.–	–
IP65 degree of protection [16]	K50	All	143.–	143.–	143.–	214.–	287.–	356.–	430.–	502.–	572.–	644.–	644.–
IP56 degree of protection (non-heavy-sea) [17]	K52	All	158.–	158.–	158.–	235.–	313.–	393.–	473.–	551.–	631.–	707.–	707.–
Vibration-proof version	L03	All	180.–	199.–	216.–	234.–	–	–	–	–	–	–	–
Condensation drainage holes [18]	L12	All	78.7	85.9	93.1	100.–							
Non-rusting screws (externally)	M27	All	78.7	78.7	93.1	93.1	107.–	121.–	162.–	193.–	201.–	267.–	267.–
Earth brushes for converter-fed operation	M44	All	–	–	–	–	–	–	–	–	o.R	o.R	o.R
Mechanical protection for encoder [19]	M68	All	557.–	557.–	644.–	644.–	202.–	202.–	202.–	202.–	202.–	202.–	202.–

	Standard	-	Not available
○	No additional price	O.R	On Request
•	Additional text is required		

Standard motors 1LA / 1LG - Cast Iron Series

Delivery Time

Selection, Pricing and delivery guide

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NEMA Energy efficiency / IE2 (D42)	2		1LG 6	
Premium efficiency IE3	3			1LG 6
Energy efficient / IE2	4		1LG 6	
Standard Efficiency / IE1	5	1LA6		

	Code		Frame Size									315	
1L(_) . . . -	- Z _ _ _		100	112	132	160	180	200	225	250	280	S/M	L
Coolant temperature and site altitude													
Coolant temperature –50 to +40 °C [20,21)]	D02	All	–	–	–	–	2470.–	2640.–	3810.–	4240.–	5140.–	6090.–	6090.–
Coolant temperature –40 to +40 °C [20)]	D03	All	367.–	465.–	539.–	618.–	686.–	796.–	1020.–	1260.–	1800.–	2320.–	2320.–
Coolant temperature –30 to +40 °C [20)]	D04	All	67.4	67.4	80.9	80.9	108.–	135.–	135.–	1260.–	1800.–	2320.–	2320.–
Designs in accordance with standards and specifications													
IE1-Motor without CE-marking for Export outside EU (640/2009)	D22 *New!*	5,	○	○	○	○	○	○	○	○	○	○	○
Premium efficiency IE3	D25	3,	–	–	–	–	–	–	–	–	–	+10%	+10%
Electrical according to NEMA MG1-12 [22)]	D30	3, 4 & 5	38.6	38.6	38.6	38.6	66.–	66.–	66.–	82.4	82.4	98.9	98.9
Design acc. to UL with "Recognition Mark" [9,22)]	D31	3, 4 & 5	96.1	114.–	146.–	178.–	285.–	391.–	492.–	581.–	719.–	939.–	–
For Korean certificate according to KS C4202 [9,23)]	D33	1, 2, 3 & 4	–	–	–	–	39.1	39.1	39.1	39.1	39.1	39.1	–
China Energy Efficiency Label [9)]	D34 *New!*	1, 2, 3 & 4	–	–	–	–	○	○	○	○	○	○	○
Canadian regulations (CSA) [9,24)]	D40	3, 4 & 5	96.1	114.–	146.–	178.–	241.–	321.–	402.–	483.–	643.–	797.–	–
NEMA Premium Efficient, NAFTA regulations NEMA MG1, Table 12-12, inkl. UL und CSA	D41 *New!*	1,	–	–	–	–	–	–	–	–	–	–	13%
NEMA Energy Efficient, NAFTA regulations NEMA MG1, Table 12-11, inkl. UL und CSA	D42 *New!*	2,	–	–	–	–	o.R	o.R	o.R	o.R	o.R	o.R	920.–
PSE Mark Japan [25)]	D46	5,	38.6	38.6	38.6	–	–	–	–	–	–	–	–
VIK version (includes Zone 2 for mains-fed operation, without Ex nA II on rating plate) [23)]	K30	1, 2, 3 & 4	208.–	241.–	308.–	389.–	556.–	698.–	841.–	1080.–	1460.–	1940.–	1940.–
Ex nA II nameplate -for VIK-requirements- [9)]	C27	2, 3 & 4	38.6	38.6	38.6	38.6	66.–	66.–	66.–	82.4	82.4	98.9	–
Bearings and lubrication													
Measuring nipple for SPM shock pulse measurement for bearing inspection	G50	All	245.–	274.–	302.–	333.–	359.–	388.–	417.–	446.–	474.–	503.–	503.–
Bearing design for increased cantilever forces [26)]	K20	All	95.9	112.–	126.–	167.–	265.–	307.–	346.–	400.–	448.–	500.–	500.–
Special bearing for DE and NDE, bearing size [27)]	K36	All	–	–	–	–	446.–	549.–	780.–	1080.–	1930.–	1930.–	1930.–
Regreasing device	K40	All	302.–	310.–	319.–	346.–	364.–	410.–	455.–	546.–			
Located bearing DE	K94	All	69.3	82.1	101.–	138.–	291.–	404.–	568.–	731.–	946.–	973.–	973.–
Located bearing NDE	L04	All	42.–	44.3	46.9								
Insulated bearing cartridge [28)]	L27	All	–	–	–	–	–	–	1680.–	1800.–	1860.–	1950.–	1950.–

	Standard	-	Not available
○	No additional price	O.R	On Request
●	Additional text is required		