Data sheets - Siemens SIMOTICS GP motors

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0102 (IE1)

1LE0102-3AA53-4AA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE0102-3AA53-4AA4

GENERAL DATA

Series / efficiency class	**1LE0102 / IE1**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**960 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**513 Nm**
Rated current	**265 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**93.8 | 93.6 | 92.5 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.6 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

Catalog 1	**Brochure 07/2014 (14050629), table 1LE0102, p. 20 (PDF 20)**

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60 Hz speed/efficiency are not listed in the catalogs (see Siemens DT Configurator).

Data sheet

SIMOTICS GP low-voltage motor - series 1LE0102 (IE1)

1LE0102-3AA53-4FA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B5 | Article No. 1LE0102-3AA53-4FA4

GENERAL DATA

Series / efficiency class	**1LE0102 / IE1**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**960 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**513 Nm**
Rated current	**265 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**93.8 | 93.6 | 92.5 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.6 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0102 (IE1)

1LE0102-3AA54-1AA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE0102-3AA54-1AA4

GENERAL DATA

Series / efficiency class	**1LE0102 / IE1**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**525 V D**
Net weight (IM B3)	**960 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**513 Nm**
Rated current	**205 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**93.8 | 93.6 | 92.5 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.6 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

Catalog 1	**Brochure 07/2014 (14050629), table 1LE0102, p. 26 (PDF 26)**

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0102 (IE1)

1LE0102-3AA54-1FA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B5 | Article No. 1LE0102-3AA54-1FA4

GENERAL DATA

Series / efficiency class	**1LE0102 / IE1**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**525 V D**
Net weight (IM B3)	**960 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**513 Nm**
Rated current	**205 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**93.8 | 93.6 | 92.5 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.6 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0101 (IE2)

1LE0101-3AA53-4AB4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE0101-3AA53-4AB4

GENERAL DATA

Series / efficiency class	**1LE0101 / IE2**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**970 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**512 Nm**
Rated current	**265 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**94.8 | 95.1 | 94.1 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.5 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

Catalog 1	**Brochure 07/2014 (14050629), table 1LE0101, p. 23 (PDF 23)**

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0101 (IE2)

1LE0101-3AA53-4FB4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B5 | Article No. 1LE0101-3AA53-4FB4

GENERAL DATA

Series / efficiency class	**1LE0101 / IE2**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**970 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**512 Nm**
Rated current	**265 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**94.8 | 95.1 | 94.1 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.5 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

Catalog 1	**Brochure 07/2014 (14050629), table 1LE0101, p. 23 (PDF 23)**

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0101 (IE2)

1LE0101-3AA54-1AB4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE0101-3AA54-1AB4

GENERAL DATA

Series / efficiency class	**1LE0101 / IE2**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**525 V D**
Net weight (IM B3)	**970 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**512 Nm**
Rated current	**205 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**94.8 | 95.1 | 94.1 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.5 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

Catalog 1	**Brochure 07/2014 (14050629), table 1LE0101, p. 28 (PDF 28)**

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE0101 (IE2)

1LE0101-3AA54-1FB4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B5 | Article No. 1LE0101-3AA54-1FB4

GENERAL DATA

Series / efficiency class	**1LE0101 / IE2**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**525 V D**
Net weight (IM B3)	**970 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**512 Nm**
Rated current	**205 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**94.8 | 95.1 | 94.1 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.5 | 2.5 | 2.8**
Moment of inertia J	**1.9 kgm2**

SOURCE OF DATA

Catalog 1	**Brochure 07/2014 (14050629), table 1LE0101, p. 28 (PDF 28)**

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Data sheet

SIMOTICS GP low-voltage motor - series 1LE1501 (IE2)

1LE1501-3AA43-4AA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE1501-3AA43-4AA4

GENERAL DATA

Series / efficiency class	**1LE1501 / IE2**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**930 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**512 Nm**
Rated current	**265 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**94.8 | 94.9 | 94.3 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7 | 2.3 | 3.1**
Moment of inertia J	**1.8 kgm2**
Sound pressure / power LpfA | LWA	**80 | 95 dB(A)**

SOURCE OF DATA

Catalog 1	**Catalog D 81.1 (05/2018), table 1LE1501, p. 2/32 (PDF 150)**

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60 Hz speed/efficiency are not listed in the catalogs (see Siemens DT Configurator).

Data sheet

SIMOTICS GP low-voltage motor - series 1LE1503 (IE3)

1LE1503-3AA43-4AA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE1503-3AA43-4AA4

GENERAL DATA

Series / efficiency class	**1LE1503 / IE3**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**980 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2982 rpm**
Rated torque	**512 Nm**
Rated current	**265 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**95.6 | 95.7 | 95.2 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**7.8 | 2.8 | 3.3**
Moment of inertia J	**1.9 kgm2**
Sound pressure / power LpfA | LWA	**77 | 91 dB(A)**

SOURCE OF DATA

Catalog 1	**Catalog D 81.1 (05/2018), table 1LE1503, p. 2/17 (PDF 135)**

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60 Hz speed/efficiency are not listed in the catalogs (see Siemens DT Configurator).

Data sheet

SIMOTICS GP low-voltage motor - series 1LE1543 (IE3)

1LE1543-3AA43-4AA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE1543-3AA43-4AA4

GENERAL DATA

Series / efficiency class	**1LE1543 / IE3**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**980 kg**

ELECTRICAL DATA - CATALOG VALUES AT 60 HZ (APAC LINE)

Rated power (P50 rating)	**160 kW (about 220 HP)**
Rated power (P60 rating)	**180 kW**
Rated speed (60 Hz)	**3588 rpm**
Rated torque (60 Hz)	**426 Nm**
Rated current (460 V, 60 Hz)	**230 A**
Power factor (60 Hz)	**0.91**
Efficiency 4/4 | 3/4 | 2/4 (60 Hz)	**95.4 | 95.1 | 93.9 %**
I_LR/I_N | T_LR/T_N | T_B/T_N (60 Hz)	**8.8 | 3.2 | 3.5**
Moment of inertia J	**1.9 kgm2**
Sound pressure / power LpfA | LWA (60 Hz)	**82 | 96 dB(A)**

SOURCE OF DATA

Catalog 1	**Catalog D 81.1 (05/2018), table 1LE1543, p. 2/57 (PDF 175)**

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APAC Line: the catalog lists operating values at 60 Hz only; 50 Hz speed/efficiency are not listed (see Siemens DT Configurator).

Data sheet

SIMOTICS GP low-voltage motor - series 1LE1504 (IE4)

1LE1504-3AA43-4AA4

160 kW / 3000 rpm

Frame 315 L | 2 poles | IM B3 | Article No. 1LE1504-3AA43-4AA4

GENERAL DATA

Series / efficiency class	**1LE1504 / IE4**
Housing	**Cast iron**
Frame size	**315 L**
Poles	**2**
Degree of protection	**IP55**
Duty type	**S1**
Insulation	**Thermal class 155 (F), utilized to 130 (B)**
Voltage	**400 D / 690 Y V (50 Hz)**
Net weight (IM B3)	**1060 kg**

ELECTRICAL DATA

Rated power 50 Hz	**160 kW (about 220 HP)**
Rated power 60 Hz	**180 kW**
Rated speed (50 Hz)	**2988 rpm**
Rated torque	**511 Nm**
Rated current	**260 A**
Power factor	**0.92**
Efficiency 4/4 | 3/4 | 2/4	**96.3 | 96.3 | 95.8 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**10.3 | 3.2 | 3.9**
Moment of inertia J	**2.1 kgm2**
Sound pressure / power LpfA | LWA	**78 | 91 dB(A)**

SOURCE OF DATA

Catalog 1	**Catalog D 81.1 (05/2018), table 1LE1504, p. 2/9 (PDF 127)**

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