Data sheets - Siemens SIMOTICS GP motors

45 kW / 750 rpm - 4 article numbers in this file

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Data sheet

1LE1502-2DD23-4AA4

SIMOTICS GP low-voltage motor - cast-iron series 1LE1502 Basic Line (IE1)

45 kW / 750 rpm

Frame size 280 M | Article No. 1LE1502-2DD23-4AA4 | mounting IM B3

GENERAL DATA

Motor series	**1LE1502 Basic Line (cast iron)**
Article No.	**1LE1502-2DD23-4AA4**
Frame size	**280 M**
Number of poles	**8**
Housing material	**Cast iron**
Degree of protection	**IP55**
Cooling	**Self-ventilated (IC 411)**
Insulation / utilization	**Thermal class 155 (F) / utilized to 130 (B)**
Duty type	**S1 (continuous duty)**
Rotor	**Squirrel-cage**
Efficiency class (IEC 60034-30)	**IE1**
Voltage / connection	**400 V Δ / 690 V Y (50 Hz), 460 V Δ (60 Hz)**
Type of construction	**IM B3 (basic type, without flange)**
Net weight (IM B3)	**500 kg**

ELECTRICAL DATA - 400 V, 50 HZ

Rated power, 50 Hz	**45 kW (60 HP)**
Rated speed, 50 Hz	**735 rpm (synchronous 750 rpm)**
Rated torque	**585 Nm**
Rated current at 400 V	**90 A**
Power factor cos φ	**0.81**
Efficiency at 4/4 | 3/4 | 2/4 load	**89.2 | 90.3 | 90.4 %**
Locked-rotor current ratio (I_LR/I_N)	**5.3**
Locked-rotor torque ratio (T_LR/T_N)	**2.1**
Breakdown torque ratio (T_B/T_N)	**2.1**
Moment of inertia J	**1.42 kgm²**
Sound pressure level LpfA (50 Hz)	**58 dB(A)**
Sound power level LWA (50 Hz)	**71 dB(A)**

60 HZ OPERATION

Rated power at 60 Hz (460 V)	**54 kW**
Synchronous speed at 60 Hz	**900 rpm**
Speed / efficiency / current at 60 Hz	**not listed in the catalog (DT Configurator)**

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Source: Siemens Catalog D 81.1 (05/2018), p. 2/51. Dimensions: see the same catalog.
Compiled from the manufacturer's catalog data for reference. It is not an official Siemens document - verify against the current Siemens data sheet before ordering.
Data at rated power, 400 V / 50 Hz, ambient 40 °C, altitude up to 1000 m.

Data sheet

1LE1502-2DD23-4FA4

SIMOTICS GP low-voltage motor - cast-iron series 1LE1502 Basic Line (IE1)

45 kW / 750 rpm

Frame size 280 M | Article No. 1LE1502-2DD23-4FA4 | mounting IM B5

GENERAL DATA

Motor series	**1LE1502 Basic Line (cast iron)**
Article No.	**1LE1502-2DD23-4FA4**
Frame size	**280 M**
Number of poles	**8**
Housing material	**Cast iron**
Degree of protection	**IP55**
Cooling	**Self-ventilated (IC 411)**
Insulation / utilization	**Thermal class 155 (F) / utilized to 130 (B)**
Duty type	**S1 (continuous duty)**
Rotor	**Squirrel-cage**
Efficiency class (IEC 60034-30)	**IE1**
Voltage / connection	**400 V Δ / 690 V Y (50 Hz), 460 V Δ (60 Hz)**
Type of construction	**IM B5 (flange)**
Net weight (IM B3)	**500 kg**

ELECTRICAL DATA - 400 V, 50 HZ

Rated power, 50 Hz	**45 kW (60 HP)**
Rated speed, 50 Hz	**735 rpm (synchronous 750 rpm)**
Rated torque	**585 Nm**
Rated current at 400 V	**90 A**
Power factor cos φ	**0.81**
Efficiency at 4/4 | 3/4 | 2/4 load	**89.2 | 90.3 | 90.4 %**
Locked-rotor current ratio (I_LR/I_N)	**5.3**
Locked-rotor torque ratio (T_LR/T_N)	**2.1**
Breakdown torque ratio (T_B/T_N)	**2.1**
Moment of inertia J	**1.42 kgm²**
Sound pressure level LpfA (50 Hz)	**58 dB(A)**
Sound power level LWA (50 Hz)	**71 dB(A)**

60 HZ OPERATION

Rated power at 60 Hz (460 V)	**54 kW**
Synchronous speed at 60 Hz	**900 rpm**
Speed / efficiency / current at 60 Hz	**not listed in the catalog (DT Configurator)**

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Data at rated power, 400 V / 50 Hz, ambient 40 °C, altitude up to 1000 m.

Data sheet

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

1LE1501-2DD23-4AA4

45 kW / 750 rpm

Frame 280 M | 8 poles | IM B3 | Article No. 1LE1501-2DD23-4AA4

GENERAL DATA

Series / efficiency class	**1LE1501 / IE2**
Housing	**Cast iron**
Frame size	**280 M**
Poles	**8**
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)	**510 kg**

ELECTRICAL DATA

Rated power 50 Hz	**45 kW (about 60 HP)**
Rated power 60 Hz	**54 kW**
Rated speed (50 Hz)	**738 rpm**
Rated torque	**582 Nm**
Rated current	**89 A**
Power factor	**0.79**
Efficiency 4/4 | 3/4 | 2/4	**92.4 | 92.8 | 92.4 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**5.7 | 2.5 | 2.5**
Moment of inertia J	**1.4 kgm2**
Sound pressure / power LpfA | LWA	**66 | 80 dB(A)**

SOURCE OF DATA

Catalog 1	**Catalog D 81.1 (05/2018), table 1LE1501, p. 2/35 (PDF 153)**

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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 1LE1501 (IE2)

1LE1501-2DD23-4FA4

45 kW / 750 rpm

Frame 280 M | 8 poles | IM B5 | Article No. 1LE1501-2DD23-4FA4

GENERAL DATA

Series / efficiency class	**1LE1501 / IE2**
Housing	**Cast iron**
Frame size	**280 M**
Poles	**8**
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)	**510 kg**

ELECTRICAL DATA

Rated power 50 Hz	**45 kW (about 60 HP)**
Rated power 60 Hz	**54 kW**
Rated speed (50 Hz)	**738 rpm**
Rated torque	**582 Nm**
Rated current	**89 A**
Power factor	**0.79**
Efficiency 4/4 | 3/4 | 2/4	**92.4 | 92.8 | 92.4 %**
I_LR/I_N | T_LR/T_N | T_B/T_N	**5.7 | 2.5 | 2.5**
Moment of inertia J	**1.4 kgm2**
Sound pressure / power LpfA | LWA	**66 | 80 dB(A)**

SOURCE OF DATA

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