

Datasheet for SIMOGEAR Geared Motors



19.42

MLFB-Ordering data : **2KJ3110-1JU23-9AA1-Z**
D01+K01+K06+L02+L75+M17+M55+N2A+Q43+Q95

Client order no. :

Order no. :

Offer no. :

Item no. :

Consignment no. :

Project :

Attention: With functionally safe encoder only a holding brake is possible. If the Siemens AG provides support when defining or selecting safety-relevant components, Siemens AG is not responsible for their definition or selection and the corresponding implementation of these safety-relevant components.

Motor data

U	D/Y	f _N	P _N	P _N	I _N	n _N	T _N	IE-CL	Operating mode	n ₂	T ₂	f _B	η _{4/4 load}	η _{3/4 load}	cos φ	I _A /I _N	T _A /T _N	T _K /T _N	T _H /T _N
[V]		[Hz]	[kW]	[hp]	[A]	[rpm]	[Nm]			[rpm]	[Nm]		[%]	[%]					
230	D	50	15.000	20.11	49.60	1,475	97.11	IE3	S1	331.460	432.18	4.97	92.1	92.3	0.82	8.50	2.50	3.80	2.80
400	Y	50	15.000	20.11	28.50	1,475	97.11	IE3	S1	331.460	432.18	4.97	92.1	92.3	0.82	8.50	2.50	3.80	2.80
460	Y	60	17.300	23.19	28.00	1,775	93.07	IE3	S1	398.876	414.20	5.19	93.6	93.7	0.83	8.50	2.50	3.70	2.80

Motor type 1LE motor with Premium Efficiency LE160ZLL4P

Number of poles 4-pole

Degree of protection (K01) IP55

Thermal class 155 (F)

Moment of inertia J_{mot} 0.08500 kgm²

Terminal box position (M55) 1A

Electrical connection at terminal box Cable gland metric

Ventilation Standard fan

Geared motor

Type designation SIMOGEAR Z109-LE160ZLL4P-IN-SI04

Gearbox Helical gearbox Z109

Mounting type gearbox Foot-mounted design

Output shaft V60 x 120 mm (Solid shaft with feather key)

Mounting position (D01) M1

Transmission ratio 4.45 (1,023 / 230)

Nominal torque 2,150.00 Nm

Gear oil (K06) Mineral oil CLP VG220

Oil charge 3.0 l

Specification CE (Europe / other countries)

Environment temperature -15 ... +40 °C

Weight without oil 205.1 kg

Housing material first gearbox Cast iron

Encoder options

Encoder Incremental encoder SIL3/PLc (Up 5V+-5% DC)

Degree of protection IP65

Mechanical variant 1m cable and connector socket

Mechanical protection (Q95) encoder underneath cover

Encoder type (Q43) 8.5834FS3

General options

Surface treatments Painted

Coating (L02) Coating for normal environmental stress C1

RAL Color (L75) 7016 anthracite gray

Coating on flange -

Packing Standard packing

Gearbox options

Output shaft bearing Standard bearing

Output shaft sealing Standard sealing

Gearbox breather Pressure breather valve

Oil level control Oil level screw

Oil drain Oil drain plug

Motor options

Motor protection (M17) Resistance thermometer Pt1000

Further information

General product information [SIMOGEAR](#)

Configurator [2KJ.....](#)

Operating instructions

Gearbox [BA 2030](#)

Motor [BA 2330](#)

Encoders for safety-related applications [BA 2730](#)

Catalog [MD 50.1](#) Geared motors

Legend

U = Voltage
D / Y = Circuit
f = Frequency
P_N = Rated motor power

I_N = Rated current
n_N = Rated motor speed
T_N = Rated motor torque
IE-CL = Efficiency class

n₂ = Geared motor output speed
T₂ = Geared motor output torque
f_B = Service factor
η = Efficiency
*) On request

cos φ = Power factor
I_A/I_N = Relative starting current
T_A/T_N = Relative starting torque
T_K/T_N = Relative breakdown torque
T_H/T_N = Relative average acceleration torque