

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1501-1ED22-2AD1-Z
D11+K07



Figure similar

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Gearbox data

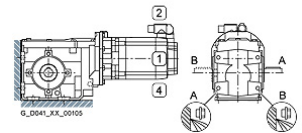
Gear box type	B29
Gearbox basic type	Bevel geared B / K
Gearbox size	29
Transmission stages	2
Transmission (ratio)	5.07
Gear number relation	345/68
Output moment maximum (short-time)	50 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	888 rpm
Emergency off output moment (1000 cycles)	125 Nm
Radial force maximum	2,900 N
Max. permissible radial force with Mmax	2,660 N
Moment of inertia	0.60 kgcm ²
Torsional stiffness	10 Nm/°
Efficiency	0.95
Mounting position	M1-A
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard
Output shaft dimension	V20 x 40 mm
Gearbox flange diameter	-/-
Output shaft bearing	No
Figure 2 torque support	-

General tech. specifications

Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	10.36 kg
1 m-sound pressure level L _{pA} (Tol.+3dB(A))	65
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing

Gear oil	Polyglycol oil CLP ISO PG VG220
Output shaft sealing	Standard
Oil charge	0.25 l



Motor data

Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	48 mm
Cooling	Natural cooling
Rated speed	2,000 rpm
Rated torque (100K)	2.50 Nm
Rated power	0.52 kW
Rated current (100K)	1.45 A
Static torque	2.85 Nm
Static current	1.55 A
Moment of inertia	2.90 kgcm ²
Efficiency η	89 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface

Limiting data

Maximum speed (short-time)	9,000 rpm
Maximum torque	10.50 Nm
Motor current short term	5.6 A

Optimum operating point

Optimum speed	2,000 rpm
Optimum power	0.53 kW

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1501-1ED22-2AD1-Z
D11+K07

Recommended Motor Module

Rated inverter current	3.0 A
Maximum inverter current	9.0 A
Maximum torque	10.5 Nm

Standards

Compliance with standards	CE / UL / CSA / EAC / cRUus
CE marking	EN 60034

Options

D11	M1-A for bevel and worm gearboxes
K07	Polyglycol oil CLP ISO PG VG220

Info servo geared motor

Outside the standard temperature range of -10 to +40 °C, further selectable options must be observed, in addition to the lubricant selection.

Further, you have to check the suitability of the components and options used for the requested temperature range.