

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1501-1RE03-2FA1-Z
D11+G23+K07

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

Item no. :
Consignment no. :
Project :

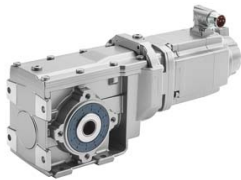
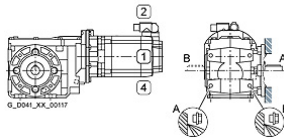


Figure similar

Gearbox data	
Gear box type	B29
Gearbox basic type	Bevel geared B / K
Gearbox size	29
Transmission stages	2
Transmission (ratio)	3.65
Gear number relation	621/170
Output moment maximum (short-time)	62 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	1,233 rpm
Emergency off output moment (1000 cycles)	124 Nm
Radial force maximum	2,540 N
Max. permissible radial force with Mmax	2,380 N
Moment of inertia	1.10 kgcm²
Torsional stiffness	10 Nm/°
Efficiency	0.95
Mounting position	M1-A
Mounting type	Flange version (A type)
Output shaft version	Solid shaft standard
Output shaft dimension	V20 x 40 mm
Gearbox flange diameter	120 mm
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	13.42 kg
1m-sound pressure level LpA (Tol.+3dB(A))	70
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing	
Gear oil	Synthetic oil CLP PG VG220
Output shaft sealing	Seal longer service life
Oil charge	0.25 l



Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	63 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	3.95 Nm
Rated power	1.24 kW
Rated current (100K)	3.25 A
Static torque	5.30 Nm
Static current	4.05 A
Moment of inertia	7.70 kgcm²
Efficiency η	91 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)

Limiting data	
Maximum speed (short-time)	7,200 rpm
Maximum torque	18.00 Nm
Motor current short term	15.0 A

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	1.25 kW

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Recommended Motor Module	
Rated inverter current	5.0 A
Maximum inverter current	15.0 A
Maximum torque	18.0 Nm

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

Options	
D11	M1-A for bevel and worm gearboxes
G23	Seal longer service life
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.