

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1105-2PF03-2AK1-Z
D01+K06+N23

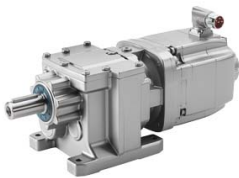


Figure similar

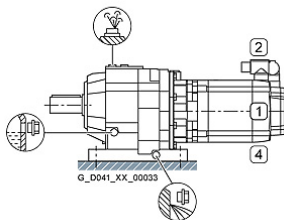
Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Gearbox data	
Gear box type	Z59
Gearbox basic type	Helical geared Z / D
Gearbox size	59
Transmission stages	2
Transmission (ratio)	13.09
Gear number relation	2303/176
Output moment maximum (short-time)	310 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	344 rpm
Emergency off output moment (1000 cycles)	765 Nm
Radial force maximum	4,300 N
Max. permissible radial force with Mmax	4,260 N
Moment of inertia	1.90 kgcm²
Torsional stiffness	25 Nm/°
Efficiency	0.96
Mounting position	M1
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard II
Output shaft dimension	V30 x 60 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	32.67 kg
1m-sound pressure level LpA (Tol.+3dB(A))	75
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing	
Gear oil	Mineral oil CLP ISO VG220
Output shaft sealing	Standard
Oil charge	0.65 l



Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	80 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	5.60 Nm
Rated power	1.76 kW
Rated current (100K)	3.70 A
Static torque	7.00 Nm
Static current	4.30 A
Moment of inertia	17.50000 kgcm²
Efficiency η	92 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole)

Limiting data	
Maximum speed (short-time)	6,000 rpm
Maximum torque	25.00 Nm
Motor current short term	18.0 A

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	1.76 kW

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Recommended Motor Module	
Rated inverter current	5.0 A
Maximum inverter current	15.0 A
Maximum torque	22.1 Nm

Holding brake	
Holding brake	with holding brake
Holding brake version	Permanent-magnet brake
Power supply voltage	DC 24 V ± 10 %
Dynamic braking torque M _{1Br}	11.00 Nm
Holding torque M _{4Br}	22.00 Nm
Opening time	200.0 ms
Closing time	60.0 ms
Maximum switching energy per braking action	1,400.0 J

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

Options	
D01	M1 for helical and parallel shaft gearboxes
K06	Mineral oil CLP ISO VG220
N23	Standard holding brake (permanent magnet brake)

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.