

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1510-5RF33-2AM1-Z
D11+G24+K06+N32

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

Item no. :
Consignment no. :
Project :

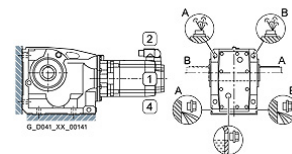


Figure similar

Gearbox data	
Gear box type	K89
Gearbox basic type	Bevel geared B / K
Gearbox size	89
Transmission stages	3
Transmission (ratio)	24.86
Gear number relation	2387/96
Output moment maximum (short-time)	1,180 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	181 rpm
Emergency off output moment (1000 cycles)	2,720 Nm
Radial force maximum	18,100 N
Max. permissible radial force with Mmax	18,100 N
Moment of inertia	3.80 kgcm ²
Torsional stiffness	143 Nm/°
Efficiency	0.95
Mounting position	M1-A
Mounting type	Foot-mounted
Output shaft version	Hollow shaft standard
Output shaft dimension	H50 mm
Gearbox flange diameter	-/-
Figure 2 torque support	-

General tech. specifications	
Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	72.76 kg
1m-sound pressure level L _{pA} (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	Seal increased environmental load
Oil charge	1.90 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)	9.40 Nm
Rated power	2.95 kW
Rated current (100K)	6.50 A
Static torque	15.50 Nm
Static current	9.90 A
Moment of inertia	28.32280 kgcm ²
Efficiency η	93 %
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)	6,000 rpm
Maximum torque	50.00 Nm
Motor current short term	37.0 A

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	2.95 kW

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Recommended Motor Module	
Rated inverter current	9.0 A
Maximum inverter current	27.0 A
Maximum torque	40.0 Nm

Holding brake	
Holding brake	spring-loaded brake (shaft height 80 - 100)
Holding brake version	Spring-type brake
Power supply voltage	DC 24 V ± 10 %
Dynamic braking torque M _{1Br}	13.00 Nm
Braking torque M _{2Br}	22.00 Nm
Holding torque M _{4Br}	15.00 Nm
Opening time	250.0 ms
Closing time	160.0 ms
Maximum switching energy per braking action	2,800.0 J

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

Options	
D11	M1-A for bevel and worm gearboxes
G24	Seal increased environmental load
K06	Mineral oil CLP ISO VG220
N32	Spring-loaded 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.