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Data sheet for SIMOTICS S-1FG1

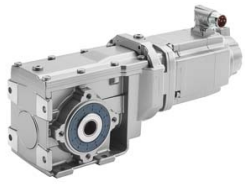


Figure similar

Article No. : 1FG1511-9RG53-2AH1-Z
D11+H5A+K07+N23

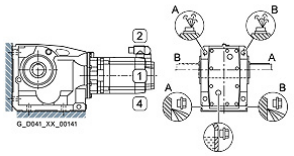
Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Gearbox data	
Gear box type	K109
Gearbox basic type	Bevel geared B / K
Gearbox size	109
Transmission stages	3
Transmission (ratio)	15.06
Gear number relation	98728/6555
Output moment maximum (short-time)	2,160 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	299 rpm
Emergency off output moment (1000 cycles)	3,920 Nm
Radial force maximum	16,400 N
Max. permissible radial force with Mmax	16,400 N
Moment of inertia	25.00 kgcm²
Torsional stiffness	260 Nm/'
Efficiency	0.96
Mounting position	M1-A
Mounting type	Foot-mounted
Output shaft version	Solid shaft, both ends with feather key
Output shaft dimension	VD60 x 120 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	149.38 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	Synthetic oil CLP PG VG220
Output shaft sealing	Standard
Oil charge	3.00 l



Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	100 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	23.50 Nm
Rated power	7.38 kW
Rated current (100K)	16.00 A
Static torque	45.00 Nm
Static current	29.00 A
Moment of inertia	162.00000 kgcm²
Efficiency η	94 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1.5
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)	5,000 rpm
Maximum torque	150.00 Nm
Motor current short term	109.0 A

Optimum operating point	
Optimum speed	2,640 rpm
Optimum power	7.60 kW

Subject to change. Calculated values may differ from nameplate ratings. © Copyright Siemens

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Article No. : **1FG1511-9RG53-2AH1-Z**
D11+H5A+K07+N23

Recommended Motor Module	
Rated inverter current	30.0 A
Maximum inverter current	56.0 A
Maximum torque	87.0 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}	25.00 Nm
Holding torque M_{4Br}	43.00 Nm
Rated current	1.0 A
Opening time	300.0 ms
Closing time	70.0 ms
Maximum switching energy per braking action	3,380.0 J

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

Options	
D11	M1-A for bevel and worm gearboxes
H5A	Solid shaft, both ends with feather key
K07	Polyglycol oil CLP ISO PG 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.