

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1510-1QG52-2AD2-Z
D14+K06+N23

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

Item no. :
Consignment no. :
Project :

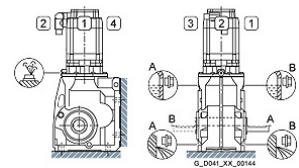


Figure similar

Gearbox data	
Gear box type	K89
Gearbox basic type	Bevel geared B / K
Gearbox size	89
Transmission stages	3
Transmission (ratio)	129.96
Gear number relation	17155/132
Output moment maximum (short-time)	1,610 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	35 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	1.40 kgcm ²
Torsional stiffness	164 Nm/°
Efficiency	0.93
Mounting position	M4-A
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard
Output shaft dimension	V50 x 100 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	104.98 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	Standard
Oil charge	6.30 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	2,000 rpm
Rated torque (100K)	34.00 Nm
Rated power	7.12 kW
Rated current (100K)	14.80 A
Static torque	45.00 Nm
Static current	19.00 A
Moment of inertia	162.00000 kgcm ²
Efficiency η	93 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1.5
Degree of protection	IP65
Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits

Limiting data	
Maximum speed (short-time)	5,000 rpm
Maximum torque	150.00 Nm
Motor current short term	71.0 A

Optimum operating point	
Optimum speed	2,000 rpm
Optimum power	7.10 kW

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1510-1QG52-2AD2-Z
D14+K06+N23

Recommended Motor Module

Rated inverter current	30.0 A
Maximum inverter current	56.0 A
Maximum torque	126.0 Nm

Holding brake

Holding brake	with holding brake
Holding brake version	Permanent-magnet brake
Power supply voltage	DC 24 V $\pm$ 10 %
Dynamic braking torque M_{1Br}	25.00 Nm
Holding torque M_{4Br}	43.00 Nm
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

D14	M4-A for bevel and worm 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.