

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1504-6RF34-2FX1-Z
D12+G23+K07+N23

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

Item no. :
Consignment no. :
Project :

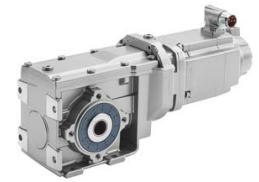
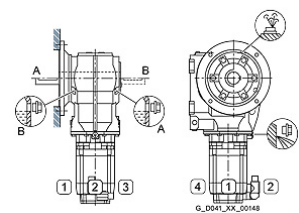


Figure similar

Gearbox data	
Gear box type	K39
Gearbox basic type	Bevel geared
Gearbox size	39
Transmission stages	3
Transmission (ratio)	55.25
Gear number relation	3591/65
Output moment maximum (short-time)	220 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	81 rpm
Emergency off output moment (1000 cycles)	370 Nm
Radial force maximum	6,080 N
Max. permissible radial force with Mmax	6,080 N
Moment of inertia	0.21 kgcm ²
Torsional stiffness	24 Nm/°
Efficiency	0.91
Mounting position	M2-A
Mounting type	Flange version (A type)
Output shaft version	Hollow shaft standard II
Output shaft dimension	H25 mm
Gearbox flange diameter	160 mm
Output shaft bearing	No
Figure 2 torque support	-

General tech. specifications	
Degree of protection	IP65
Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	32.01 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	Polyglycol oil CLP ISO PG VG220
Output shaft sealing	Seal longer service life
Oil charge	0.85 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	4,500 rpm
Rated torque (100K)	0.10 Nm
Rated power	0.05 kW
Rated current (100K)	0.71 A
Static torque	15.50 Nm
Static current	14.80 A
Moment of inertia	29.50000 kgcm ²
Efficiency η	82 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
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	55.0 A

Optimum operating point	
Optimum speed	2,880 rpm
Optimum power	2.95 kW

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Recommended Motor Module

Rated inverter current	18.0 A
Maximum inverter current	54.0 A
Maximum torque	49.3 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}	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

D12	M2-A for bevel and worm gearboxes
G23	Seal longer service life
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.