

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1104-1RE33-2AN1-Z
D01+K07+N16+N23+Y84

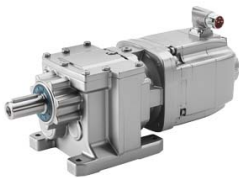


Figure similar

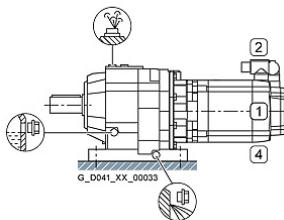
Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Gearbox data	
Gear box type	Z49
Gearbox basic type	Helical geared Z / D
Gearbox size	49
Transmission stages	2
Transmission (ratio)	16.42
Gear number relation	2365/144
Output moment maximum (short-time)	340 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	274 rpm
Emergency off output moment (1000 cycles)	540 Nm
Radial force maximum	4,140 N
Max. permissible radial force with Mmax	4,060 N
Moment of inertia	1.10 kgcm²
Torsional stiffness	14 Nm/°
Efficiency	0.95
Mounting position	M1
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard
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	29.44 kg
1m-sound pressure level LpA (Tol.+3dB(A))	70
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	0.55 l



Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	63 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	6.70 Nm
Rated power	2.10 kW
Rated current (100K)	5.30 A
Static torque	10.10 Nm
Static current	7.40 A
Moment of inertia	15.70000 kgcm²
Efficiency η	91 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Encoder AM20DQI with nickel-plated M17 round connector: 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)	7,200 rpm
Maximum torque	35.00 Nm
Motor current short term	28.0 A

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	2.10 kW

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Recommended Motor Module	
Rated inverter current	9.0 A
Maximum inverter current	27.0 A
Maximum torque	34.0 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}	8.50 Nm
Holding torque M _{4Br}	13.00 Nm
Opening time	100.0 ms
Closing time	50.0 ms
Maximum switching energy per braking action	380.0 J

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

Options	
D01	M1 for helical and parallel shaft gearboxes
K07	Polyglycol oil CLP ISO PG VG220
N16	Nickel plated connectors and paint varnish for increased chemical resistance
N23	Standard holding brake (permanent magnet brake)
Y84	Additional data on the rating plate and on the packing label :

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.