

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1501-6RD06-2DB2-Z
D11+G23+K11

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

Item no. :
Consignment no. :
Project :



Figure similar

Gearbox data	
Gear box type	B29
Gearbox basic type	Bevel geared B / K
Gearbox size	29
Transmission stages	2
Transmission (ratio)	46.85
Gear number relation	1265/27
Output moment maximum (short-time)	112 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	96 rpm
Emergency off output moment (1000 cycles)	187 Nm
Radial force maximum	4,130 N
Max. permissible radial force with Mmax	4,120 N
Moment of inertia	0.04 kgcm ²
Torsional stiffness	13 Nm/°
Efficiency	0.92
Mounting position	M1-A
Mounting type	Torque plate
Output shaft version	Hollow shaft standard II
Output shaft dimension	H25 mm
Gearbox flange diameter	-/-
Output shaft bearing	No
Figure 2 torque support	1

General tech. specifications	
Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	8.62 kg
1m-sound pressure level L _{pA} (Tol.+3dB(A))	65
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing	
Gear oil	Synthetic oil CLPH1 VG460
Output shaft sealing	Seal longer service life
Oil charge	0.25 l

Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	48 mm
Cooling	Natural cooling
Rated speed	6,000 rpm
Rated torque (100K)	0.96 Nm
Rated power	0.60 kW
Rated current (100K)	1.63 A
Static torque	1.47 Nm
Static current	2.25 A
Moment of inertia	1.60 kgcm ²
Efficiency η	87 %
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)	9,000 rpm
Maximum torque	5.10 Nm
Motor current short term	7.7 A

Optimum operating point	
Optimum speed	6,000 rpm
Optimum power	0.60 kW



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Recommended Motor Module	
Rated inverter current	3.0 A
Maximum inverter current	9.0 A
Maximum torque	5.1 Nm

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

Options	
D11	M1-A for bevel and worm gearboxes
G23	Seal longer service life
K11	Food-grade oil CLP ISO H1 VG460

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.