

Data sheet for SIMOTICS S-1FG1

Article No.: 1FG1501-9UC23-1AV1-Z D11+G23+G99+H3A+K11

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

Gearbox data		
Gear box type	B29	
Gearbox basic type	Bevel geared B / K	
Gearbox size	29	
Transmission stages	2	
Transmission (ratio)	28.11	
Gear number relation	253/9	
Output moment maximum (short-time)	114 Nm	
max. input speed (briefly)	4,500 rpm	
Output speed short-time	160 rpm	
Emergency off output moment (1000 cycles)	187 Nm	
Radial force maximum	4,130 N	
Max. permissible radial force with Mmax	4,110 N	
Moment of inertia	0.09 kgcm²	
Torsional stiffness	13 Nm/'	
Torsional backlash	11.21'	
Efficiency	0.92	
Mounting position	M1-A	
Mounting type	Foot-mounted	
Output shaft version	Hollow shaft S disk standard I	
Output shaft dimension	HS20 mm	
Gearbox flange diameter	- -	
Output shaft bearing	No	
Figure 2 torque support	-	

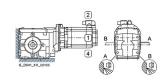
General tech. specifications		
Color of the housing	Standard painting (Anthracite RAL 7016)	
Specification	CE / UL / CSA / EAC / cRUus	
Net weight	7.98 kg	
1m-sound pressure level L_{pA} (Tol.+3dB(A))	65	
Plug position	top (default) (2)	
Adapter flange position	top (default) (2)	



Figure similar

Item no. : Consignment no. : Project :

Lubrication and sealing	
Gear oil	Food-grade oil CLP ISO H1 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.	270300V
Shaft height	36 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	0.87 Nm
Rated power	0.28 kW
Rated current (100K)	1.37 A
Static torque	1.01 Nm
Static current	1.50 A
Moment of inertia	0.65 kgcm²
Efficiency η	86 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Resolver R15DQ: resolver 15 bits (resolution 32768, internal multi-pole)

Limiting data		
Maximum speed (short-time)	10,000 rpm	
Maximum torque	4.50 Nm	
Motor current short term	7.0 A	

Optimum operating point		
Optimum speed	3,000 rpm	
Optimum power	0.28 kW	



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Recommended Motor Module		
Rated inverter current		2.3 A
Maximum inverter current		4.6 A
Maximum torque		3.0 Nm
Standards		
Compliance with standards CE / UL / CSA / EAC / cRUus		CE / UL / CSA / EAC / cRUus
CE marking		EN 60034
Options		
D11	M1-A for bevel and worm gearboxes	
G23	Seal longer service life	
G99	Version with reduced backlash	
НЗА	H3A Hollow shaft S disk standard I	
K11	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. $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1$