

Data sheet for SIMOTICS S-1FG1

Article No. : **1FG1102-1RC46-2AU1-Z**
D06+E23+K06

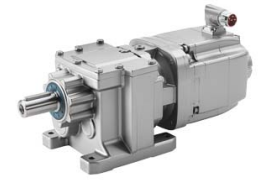


Figure similar

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

Item no. :
 Consignment no. :
 Project :

Gearbox data	
Gear box type	Z29
Gearbox basic type	Helical geared
Gearbox size	29
Transmission stages	2
Transmission (ratio)	24.84
Gear number relation	621/25
Output moment maximum (short-time)	146 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	181 rpm
Emergency off output moment (1000 cycles)	235 Nm
Radial force maximum	2,780 N
Max. permissible radial force with Mmax	2,620 N
Moment of inertia	0.09 kgcm ²
Torsional stiffness	9 Nm/°
Efficiency	0.93
Mounting position	M6 Rotation angle 15° X axis
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard
Output shaft dimension	V25 x 50 mm
Gearbox flange diameter	-/-
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	7.91 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	Mineral oil CLP ISO VG220
Output shaft sealing	Standard
Oil charge	0.35 l

Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	36 mm
Cooling	Natural cooling
Rated speed	6,000 rpm
Rated torque (100K)	0.77 Nm
Rated power	0.49 kW
Rated current (100K)	1.08 A
Static torque	1.40 Nm
Static current	1.69 A
Moment of inertia	0.90 kgcm ²
Efficiency η	87 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Encoder system	Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 SJR) + 12 bits multi-turn (traversing range 4096 revolutions)

Limiting data	
Maximum speed (short-time)	10,000 rpm
Maximum torque	6.50 Nm
Motor current short term	8.0 A

Optimum operating point	
Optimum speed	6,000 rpm
Optimum power	0.48 kW

Recommended Motor Module	
Rated inverter current	3.0 A
Maximum inverter current	9.0 A
Maximum torque	6.5 Nm

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

Options	
D06	M6 for helical and parallel shaft gearboxes
E23	Rotation angle 15° - X axis
K06	Mineral oil CLP ISO VG220

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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.