

Data sheet for SIMOTICS S-1FG1

Article No. : **1FG1602-6UF14-2AA1-Z**
D21+G23+K11



Figure similar

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

Item no. :
 Consignment no. :
 Project :

Gearbox data

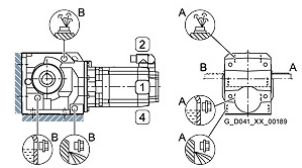
Gear box type	C39A
Gearbox basic type	Helical worm geared C
Gearbox size	39
Transmission (ratio)	6.48
Gear number relation	162/25
Output moment maximum (short-time)	165 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	694 rpm
Emergency off output moment (1000 cycles)	270 Nm
Radial force maximum	2,720 N
Max. permissible radial force with Mmax	2,600 N
Moment of inertia	1.08 kgcm ²
Torsional stiffness	-/-
Efficiency	0.91
Mounting position	M1-B
Mounting type	Foot-mounted
Output shaft version	Hollow shaft standard II
Output shaft dimension	H30 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	20.10 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	Synthetic oil CLPH1 VG460
Output shaft sealing	Seal longer service life
Oil charge	0.15 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)	3.55 Nm
Rated power	1.67 kW
Rated current (100K)	4.65 A
Static torque	11.00 Nm
Static current	12.20 A
Moment of inertia	20.00 kgcm ²
Efficiency η	88 %
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)	6,000 rpm
Maximum torque	37.00 Nm
Motor current short term	45.0 A

Optimum operating point

Optimum speed	3,240 rpm
Optimum power	2.35 kW

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Recommended Motor Module

Rated inverter current	18.0 A
Maximum inverter current	54.0 A
Maximum torque	37.0 Nm

Standards

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

Options

D21	M1-B 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.