

Article No. : **1FG1602-1RE32-2AR1-Z**
D21+K07



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)	33.73
Gear number relation	506/15
Output moment maximum (short-time)	250 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	133 rpm
Emergency off output moment (1000 cycles)	250 Nm
Radial force maximum	5,690 N
Max. permissible radial force with Mmax	5,170 N
Moment of inertia	0.11 kgcm ²
Torsional stiffness	-/-
Efficiency	0.89
Mounting position	M1-B
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

Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	18.31 kg
1m-sound pressure level L _{pA} (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	0.15 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	2,000 rpm
Rated torque (100K)	8.00 Nm
Rated power	1.68 kW
Rated current (100K)	4.10 A
Static torque	10.10 Nm
Static current	4.90 A
Moment of inertia	14.70 kgcm ²
Efficiency η	91 %
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)	7,200 rpm
Maximum torque	35.00 Nm
Motor current short term	18.5 A

Optimum operating point

Optimum speed	2,000 rpm
Optimum power	1.67 kW

Data sheet for SIMOTICS S-1FG1

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Recommended Motor Module

Rated inverter current	5.0 A
Maximum inverter current	15.0 A
Maximum torque	29.5 Nm

Standards

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

Options

D21	M1-B for bevel and worm gearboxes
K07	Polyglycol oil CLP ISO PG VG220

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.