

Article No. : 1FK7063-5AF71-1TG5-Z
J02

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



Figure similar

Item no. :
Consignment no. :
Project :

Engineering data	
Rated speed (100 K)	3,000 rpm
Number of poles	8
Rated torque (100 K)	7.3 Nm
Rated current	5.6 A
Static torque (60 K)	9.10 Nm
Static torque (100 K)	11.00 Nm
Stall current (60 K)	6.60 A
Stall current (100 K)	8.00 A
Moment of inertia	18.140 kgcm ²

Physical constants	
Torque constant	1.37 Nm/A
Voltage constant at 20° C	87.5 V/1000*min ⁻¹
Winding resistance at 20° C	0.65 Ω
Rotating field inductance	7.7 mH
Electrical time constant	11.80 ms
Mechanical time constant	1.56 ms
Thermal time constant	40 min
Shaft torsional stiffness	35,000 Nm/rad
Net weight of the motor	19.2 kg

Recommended Motor Module	
Rated inverter current	9 A
Maximum inverter current	18 A
Maximum torque	24.50 Nm

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	63
Cooling	Natural cooling
Radial runout tolerance	0.040 mm
Concentricity tolerance	0.10 mm
Axial runout tolerance	0.10 mm
Vibration severity grade	Grade A
Connector size	1
Degree of protection	IP65 and DE flange IP67
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	KTY84 temperature sensor in the stator winding
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	Standard (Anthracite RAL 7016)
Holding brake	without holding brake
Shaft end	Plain shaft
Encoder system	Resolver 2-pole

Gearbox data	
Gearbox type	Planetary gearbox SP+
Designation	SP 100S-MF1
Gearbox shaft end	With feather key
Gear ratio + steps	4 (1-step)
Motor speed S3-60 %	5,500 rpm
Motor speed S1	2,500 rpm
Output torque S1	171 Nm
Rated output torque at duty type S3-60 %	378 Nm
Moment of inertia of gearbox	3.040 kgcm ²
Radial output shaft loading, max.	6,600 N
Axial output shaft load, max.	5,650 N
Efficiency of gearbox	0.97
Torsional backlash	3 ´
Gearbox weight	7.70 kg

Limiting data	
Max. permissible speed (mech.)	7,200 rpm
Max. permissible speed (inverter)	6,600 rpm
Maximum torque	35.0 Nm
Maximum current	28.0 A

Special design	
J02	Mounting of SP+ planetary gearbox

Data sheet for SIMOTICS S-1FK7 servo geared motor

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