



Figure similar

MLFB-Ordering data

1FK7022-5AK71-1DH5-Z
J23

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data	
Rated speed (100 K)	6000 rpm
Number of poles	6
Rated torque (100 K)	0.6 Nm
Rated current	1.4 A
Static torque (60 K)	0.70 Nm
Static torque (100 K)	0.8 Nm
Stall current (60 K)	1.50 A
Stall current (100 K)	1.80 A
Moment of inertia	0.470 kgcm ²

Physical constants	
Torque constant	0.46 Nm/A
Voltage constant at 20° C	29.0 V/1000*min ⁻¹
Winding resistance at 20° C	4.20 Ω
Rotating field inductance	9.1 mH
Electrical time constant	2.20 ms
Mechanical time constant	1.70 ms
Thermal time constant	18 min
Shaft torsional stiffness	3000 Nm/rad
Net weight of the motor	3.9 kg

Recommended Motor Module	
Rated inverter current	3 A
Maximum inverter current	6 A
Maximum torque	2.65 Nm

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	28
Cooling	Natural cooling
Radial runout tolerance	0.035 mm
Concentricity tolerance	0.08 mm
Axial runout tolerance	0.08 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	Pt1000 temperature sensor
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	Standard (Anthracite RAL 7016)
Holding brake	with holding brake
Shaft extension	Plain shaft
Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits



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Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	0.120 kgcm ²
Designation	SP 060S-MF1	Radial output shaft loading, max.	2700 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	2400 N
Gear ratio + steps	5 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	6000 rpm	Torsional backlash	4 '
Motor speed S1	3300 rpm	Gearbox weight	1.90 kg
Output torque S1	26 Nm		
Rated output torque at duty type S3-60 %	40 Nm		

Special design

J23 Mounting of SP+ planetary gearbox

Limiting data

Max. permissible speed (mech.)	10000 rpm
Max. permissible speed (inverter)	10000 rpm
Maximum torque	3.4 Nm
Maximum current	8.0 A

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	1.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.3 A
Opening time	30 ms
Closing time	20 ms
Highest braking work	8 J