



Figure similar

MLFB-Ordering data

1FK7022-5AK71-1LH5-Z
J05

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	6	Motor type	Compact
Rated torque (100 K)	0.6 Nm	Shaft height	28
Rated current	1.4 A	Cooling	Natural cooling
Static torque (60 K)	0.70 Nm	Radial runout tolerance	0.035 mm
Static torque (100 K)	0.8 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	1.50 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	1.80 A	Vibration severity grade	Grade A
Moment of inertia	0.450 kgcm ²	Connector size	1
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	0.46 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	29.0 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
Winding resistance at 20° C	4.20 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	9.1 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	2.20 ms	Holding brake	with holding brake
Mechanical time constant	1.70 ms	Shaft end	Plain shaft
Thermal time constant	18 min	Encoder system	Encoder AM20DQ: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
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		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	0.100 kgcm²
Designation	SP 060S-MF1	Radial output shaft loading, max.	2800 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	2400 N
Gear ratio + steps	7 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	7500 rpm	Torsional backlash	4 '
Motor speed S1	4000 rpm	Gearbox weight	1.90 kg
Output torque S1	26 Nm		
Rated output torque at duty type S3-60 %	50 Nm		

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

Special design	
J05	Mounting of SP+ planetary gearbox