



Figure similar

MLFB-Ordering data

1FK7022-5AK71-1VG5-Z
J09

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	0.370 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	without holding brake
		Mechanical time constant	1.70 ms	Shaft extension	Plain shaft
		Thermal time constant	18 min	Encoder system	Encoder AM15DQ: absolute encoder 15 bits (resolution 32768, encoder-internal 16 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
		Shaft torsional stiffness	3000 Nm/rad		
		Net weight of the motor	3.7 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	0.090 kgcm ²
Designation	SP 060S-MF1	Radial output shaft loading, max.	2700 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	2400 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	6000 rpm	Torsional backlash	4 '
Motor speed S1	4000 rpm	Gearbox weight	1.90 kg
Output torque S1	17 Nm		
Rated output torque at duty type S3-60 %	32 Nm		

Special design

J09 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