



Figure similar

MLFB-Ordering data

1FK7033-7AF21-1DG5-Z  
J13

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data			
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor		
Number of poles	6	Motor type	High Dynamic		
Rated torque (100 K)	1.2 Nm	Shaft height	36		
Rated current	2.0 A	Cooling	Natural cooling		
Static torque (60 K)	1.00 Nm	Radial runout tolerance	0.035 mm		
Static torque (100 K)	1.3 Nm	Concentricity tolerance	0.08 mm		
Stall current (60 K)	1.70 A	Axial runout tolerance	0.08 mm		
Stall current (100 K)	2.20 A	Vibration severity grade	Grade A		
Moment of inertia	0.430 kgcm <sup>2</sup>	Connector size	1		
<b>Physical constants</b>		Degree of protection	IP65 and DE flange IP67		
		Torque constant	0.60 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	40.0 V/1000*min <sup>-1</sup>	Temperature monitoring	KTY84 temperature sensor in the stator winding
		Winding resistance at 20° C	3.70 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	18.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	4.90 ms	Holding brake	without holding brake
		Mechanical time constant	0.83 ms	Shaft extension	Plain shaft
		Thermal time constant	25 min	Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits
		Shaft torsional stiffness	8000 Nm/rad		
		Net weight of the motor	5.1 kg		
<b>Recommended Motor Module</b>					
		Rated inverter current	2 A		
		Maximum inverter current	5 A		
Maximum torque	2.70 Nm				



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### Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	0.160 kgcm <sup>2</sup>
Designation	SP 060S-MF2	Radial output shaft loading, max.	2700 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	2400 N
Gear ratio + steps	20 (2-step)	Efficiency of gearbox	0.94
Motor speed S3-60 %	6000 rpm	Torsional backlash	6 '
Motor speed S1	4400 rpm	Gearbox weight	2.00 kg
Output torque S1	26 Nm		
Rated output torque at duty type S3-60 %	40 Nm		

### Special design

J13 Mounting of SP+ planetary gearbox

### Limiting data

Max. permissible speed (mech.)	10000 rpm
Max. permissible speed (inverter)	7240 rpm
Maximum torque	4.3 Nm
Maximum current	7.2 A