



Figure similar

MLFB-Ordering data

1FK7042-2AF71-1CH1-Z  
J37

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	8	Motor type	Compact		
Rated torque (100 K)	2.6 Nm	Shaft height	48		
Rated current	2.0 A	Cooling	Natural cooling		
Static torque (60 K)	2.50 Nm	Radial runout tolerance	0.040 mm		
Static torque (100 K)	3.0 Nm	Concentricity tolerance	0.08 mm		
Stall current (60 K)	1.80 A	Axial runout tolerance	0.08 mm		
Stall current (100 K)	2.20 A	Vibration severity grade	Grade A		
Moment of inertia	3.740 kgcm <sup>2</sup>	Connector size	1		
<b>Physical constants</b>		Degree of protection	IP65		
		Torque constant	1.38 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	90.0 V/1000*min <sup>-1</sup>	Temperature monitoring	Pt1000 temperature sensor
		Winding resistance at 20° C	4.67 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	35.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	7.50 ms	Holding brake	with holding brake
		Mechanical time constant	2.15 ms	Shaft end	Plain shaft
		Thermal time constant	30 min	Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
		Shaft torsional stiffness	11400 Nm/rad		
		Net weight of the motor	13.2 kg		
<b>Recommended Motor Module</b>					
		Rated inverter current	3 A		
		Maximum inverter current	9 A		
Maximum torque	10.50 Nm				



Figure similar

## MLFB-Ordering data

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### Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	0.540 kgcm <sup>2</sup>
Designation	SP 100S-MF2	Radial output shaft loading, max.	6600 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	5650 N
Gear ratio + steps	50 (2-step)	Efficiency of gearbox	0.94
Motor speed S3-60 %	6500 rpm	Torsional backlash	5 '
Motor speed S1	3500 rpm	Gearbox weight	7.90 kg
Output torque S1	277 Nm		
Rated output torque at duty type S3-60 %	347 Nm		

### Special design

J37 Mounting of SP+ planetary gearbox

### Limiting data

Max. permissible speed (mech.)	9000 rpm
Max. permissible speed (inverter)	6400 rpm
Maximum torque	10.5 Nm
Maximum current	7.6 A

### Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	4.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.5 A
Opening time	70 ms
Closing time	30 ms
Highest braking work	150 J