



Figure similar

MLFB-Ordering data

1FK7063-2AF71-1RH1-Z
J02

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)	7.3 Nm	Shaft height	63																				
Rated current	5.6 A	Cooling	Natural cooling																				
Static torque (60 K)	9.10 Nm	Radial runout tolerance	0.040 mm																				
Static torque (100 K)	11.0 Nm	Concentricity tolerance	0.10 mm																				
Stall current (60 K)	6.50 A	Axial runout tolerance	0.10 mm																				
Stall current (100 K)	8.00 A	Vibration severity grade	Grade A																				
Moment of inertia	18.740 kgcm ²	Connector size	1																				
<table border="1"> <thead> <tr> <th colspan="2">Physical constants</th> </tr> </thead> <tbody> <tr> <td>Torque constant</td> <td>1.37 Nm/A</td> </tr> <tr> <td>Voltage constant at 20° C</td> <td>90.5 V/1000*min⁻¹</td> </tr> <tr> <td>Winding resistance at 20° C</td> <td>0.64 Ω</td> </tr> <tr> <td>Rotating field inductance</td> <td>8.5 mH</td> </tr> <tr> <td>Electrical time constant</td> <td>13.40 ms</td> </tr> <tr> <td>Mechanical time constant</td> <td>1.48 ms</td> </tr> <tr> <td>Thermal time constant</td> <td>40 min</td> </tr> <tr> <td>Shaft torsional stiffness</td> <td>25000 Nm/rad</td> </tr> <tr> <td>Net weight of the motor</td> <td>20.2 kg</td> </tr> </tbody> </table>		Physical constants		Torque constant	1.37 Nm/A	Voltage constant at 20° C	90.5 V/1000*min ⁻¹	Winding resistance at 20° C	0.64 Ω	Rotating field inductance	8.5 mH	Electrical time constant	13.40 ms	Mechanical time constant	1.48 ms	Thermal time constant	40 min	Shaft torsional stiffness	25000 Nm/rad	Net weight of the motor	20.2 kg	Degree of protection	IP65
		Physical constants																					
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Net weight of the motor	20.2 kg																						
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 AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)																						



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Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	3.040 kgcm ²
Designation	SP 100S-MF1	Radial output shaft loading, max.	6300 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	5650 N
Gear ratio + steps	4 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4500 rpm	Torsional backlash	3 '
Motor speed S1	2500 rpm	Gearbox weight	7.70 kg
Output torque S1	180 Nm		
Rated output torque at duty type S3-60 %	300 Nm		

Special design

J02 Mounting of SP+ planetary gearbox

Limiting data

Max. permissible speed (mech.)	7200 rpm
Max. permissible speed (inverter)	6400 rpm
Maximum torque	35.0 Nm
Maximum current	28.0 A

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	13.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.8 A
Opening time	100 ms
Closing time	50 ms
Highest braking work	380 J