



Figure similar

MLFB-Ordering data

1FK7063-2AF71-1CG1-Z
J03

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	17.310 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>34000 Nm/rad</td> </tr> <tr> <td>Net weight of the motor</td> <td>18.8 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	34000 Nm/rad	Net weight of the motor	18.8 kg	Degree of protection	IP65
		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	34000 Nm/rad																				
Net weight of the motor	18.8 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	without holding brake	Shaft extension	Plain shaft																				
Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)																						



Figure similar

MLFB-Ordering data

1FK7063-2AF71-1CG1-Z
J03

Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	2.610 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	5 (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	175 Nm		
Rated output torque at duty type S3-60 %	300 Nm		

Special design

J03 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