



Figure similar

MLFB-Ordering data

1FK7080-2AF74-1SA1

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)	6.8 Nm	Shaft height	80																				
Rated current	4.4 A	Cooling	Natural cooling																				
Static torque (60 K)	6.60 Nm	Radial runout tolerance	0.050 mm																				
Static torque (100 K)	8.00 Nm	Concentricity tolerance	0.10 mm																				
Stall current (60 K)	4.00 A	Axial runout tolerance	0.10 mm																				
Stall current (100 K)	4.90 A	Vibration severity grade	Grade A																				
Moment of inertia	14.200 kgcm <sup>2</sup>	Connector size	1																				
Efficiency	92.0 %	Degree of protection	IP65																				
<table border="1"> <thead> <tr> <th colspan="2">Physical constants</th> </tr> </thead> <tbody> <tr> <td>Torque constant</td> <td>1.61 Nm/A</td> </tr> <tr> <td>Voltage constant at 20° C</td> <td>105.0 V/1000*min<sup>-1</sup></td> </tr> <tr> <td>Winding resistance at 20° C</td> <td>0.98 Ω</td> </tr> <tr> <td>Rotating field inductance</td> <td>17.2 mH</td> </tr> <tr> <td>Electrical time constant</td> <td>17.50 ms</td> </tr> <tr> <td>Mechanical time constant</td> <td>1.52 ms</td> </tr> <tr> <td>Thermal time constant</td> <td>40 min</td> </tr> <tr> <td>Shaft torsional stiffness</td> <td>120000 Nm/rad</td> </tr> <tr> <td>Net weight of the motor</td> <td>10.3 kg</td> </tr> </tbody> </table>		Physical constants		Torque constant	1.61 Nm/A	Voltage constant at 20° C	105.0 V/1000*min <sup>-1</sup>	Winding resistance at 20° C	0.98 Ω	Rotating field inductance	17.2 mH	Electrical time constant	17.50 ms	Mechanical time constant	1.52 ms	Thermal time constant	40 min	Shaft torsional stiffness	120000 Nm/rad	Net weight of the motor	10.3 kg	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Physical constants																					
		Torque constant	1.61 Nm/A																				
		Voltage constant at 20° C	105.0 V/1000*min <sup>-1</sup>																				
		Winding resistance at 20° C	0.98 Ω																				
		Rotating field inductance	17.2 mH																				
		Electrical time constant	17.50 ms																				
		Mechanical time constant	1.52 ms																				
		Thermal time constant	40 min																				
		Shaft torsional stiffness	120000 Nm/rad																				
Net weight of the motor	10.3 kg																						
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 end	Feather key	Encoder system	Multi-pole resolver (number of pole pairs corresponds to number of pole pairs of the motor)																				



Figure similar

MLFB-Ordering data

1FK7080-2AF74-1SA1

Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	2.1 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	22.10 Nm
Max. permissible speed (mech.)	6000 rpm		
Max. permissible speed (inverter)	5500 rpm		
Maximum torque	25.0 Nm		
Maximum current	18.0 A		