



Figure similar

MLFB-Ordering data

1FK7011-5AK71-1JA3

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	0.1 Nm	Shaft height	20
Rated current	0.8 A	Cooling	Natural cooling
Static torque (60 K)	0.15 Nm	Radial runout tolerance	-/-
Static torque (100 K)	0.18 Nm	Concentricity tolerance	-/-
Stall current (60 K)	1.20 A	Axial runout tolerance	-/-
Stall current (100 K)	1.50 A	Vibration severity grade	Grade A
Moment of inertia	0.064 kgcm ²	Connector size	0.5
Efficiency	62.0 %	Degree of protection	IP54
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
		Temperature monitoring	KTY84 temperature sensor in the stator winding
Torque constant	0.12 Nm/A	Electrical connectors	Connectors for signals and power rotatable
Voltage constant at 20° C	8.0 V/1000*min ⁻¹	Color of the housing	Standard (Anthracite RAL 7016)
Winding resistance at 20° C	3.00 Ω	Holding brake	without holding brake
Rotating field inductance	4.2 mH	Shaft end	Feather key
Electrical time constant	1.40 ms	Encoder system	Encoder AM16S/R: absolute encoder 16 S/R, 4096 revolutions multi-turn, with EnDat interface
Mechanical time constant	4.00 ms		
Thermal time constant	14 min		
Shaft torsional stiffness	1400 Nm/rad		
Net weight of the motor	0.9 kg		



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Optimum operating point		Recommended Motor Module	
Optimum speed	5000 rpm	Rated inverter current	3 A
Optimum power	0.1 kW	Maximum inverter current	6 A
Limiting data		Maximum torque	0.50 Nm
Max. permissible speed (mech.)	8000 rpm		
Max. permissible speed (inverter)	8000 rpm		
Maximum torque	0.5 Nm		
Maximum current	4.2 A		