



MLFB-Ordering data1FK7080-5AF71-1FG2

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)	8.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	4.00 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.80 A	Vibration severity grade	Grade A
Moment of inertia	15.000 kgcm²	Connector size	1
Efficiency	92.0 %	Degree of protection	IP65 and DE flange IP67
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.61 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	102.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	1.04 Ω	Color of the housing	without
Rotating field inductance	14.0 mH	Holding brake	without holding brake
Electrical time constant	13.50 ms	Shaft end	Plain shaft
Mechanical time constant	1.78 ms	Encoder system	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Thermal time constant	40 min		
Shaft torsional stiffness	126000 Nm/rad		
Net weight of the motor	10.0 kg		

No image available for this configuration.

Figure similar

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Optimum operating point	
Optimum speed	3000 rpm
Optimum power	2.1 kW
Limiting data	
Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	5600 rpm
Maximum torque	25.0 Nm
Maximum current	18.0 A

Recommended Motor Module	
Rated inverter current	5 A
Maximum inverter current	10 A
Maximum torque	16.60 Nm