



Figure similar

MLFB-Ordering data

1FK7042-2AK71-1QG1

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated speed (100 K) 6000 rpm

Number of poles 8

Rated torque (100 K) 1.5 Nm

Rated current 2.5 A

Static torque (60 K) 2.50 Nm

Static torque (100 K) 3.0 Nm

Stall current (60 K) 3.55 A

Stall current (100 K) 4.40 A

Moment of inertia 2.900 kgcm²

Efficiency 89.0 %

Physical constants

Torque constant 0.68 Nm/A

Voltage constant at 20° C 44.5 V/1000*min⁻¹

Winding resistance at 20° C 1.15 Ω

Rotating field inductance 8.6 mH

Electrical time constant 7.50 ms

Mechanical time constant 2.15 ms

Thermal time constant 30 min

Shaft torsional stiffness 15500 Nm/rad

Net weight of the motor 4.6 kg

Mechanical data

Motor type Permanent-magnet synchronous motor

Motor type Compact

Shaft height 48

Cooling Natural cooling

Radial runout tolerance 0.040 mm

Concentricity tolerance 0.08 mm

Axial runout tolerance 0.08 mm

Vibration severity grade Grade A

Connector size 1

Degree of protection IP65

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 AS20DQI: absolute encoder single-turn 20 bits



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Optimum operating point		Recommended Motor Module	
Optimum speed	5000 rpm	Rated inverter current	5 A
Optimum power	1.0 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	10.30 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	9000 rpm		
Maximum torque	10.5 Nm		
Maximum current	15.3 A		