

MLFB-Ordering data

1FK7064-7AF71-1DB2

Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated speed (100 K) 3000 rpm

Number of poles 6

Rated torque (100 K) 8.0 Nm

Rated current 7.5 A

Static torque (60 K) 9.00 Nm

Static torque (100 K) 12.0 Nm

Stall current (60 K) 8.50 A

Stall current (100 K) 11.00 A

Moment of inertia 6.840 kgcm²

Efficiency 93.0 %

Physical constants

Torque constant 1.03 Nm/A

Voltage constant at 20° C 68.0 V/1000*min⁻¹

Winding resistance at 20° C 0.35 Ω

Rotating field inductance 10.7 mH

Electrical time constant 30.50 ms

Mechanical time constant 0.64 ms

Thermal time constant 55 min

Shaft torsional stiffness 30000 Nm/rad

Net weight of the motor 16.8 kg

Mechanical data

Motor type Permanent-magnet synchronous motor

Motor type High Dynamic

Shaft height 63

Cooling Natural cooling

Radial runout tolerance 0.040 mm

Concentricity tolerance 0.10 mm

Axial runout tolerance 0.10 mm

Vibration severity grade Grade A

Connector size 1

Degree of protection IP65 and DE flange IP67

Design acc. to Code I IM B5 (IM V1, IM V3)

Temperature monitoring KTY84 temperature sensor in the stator winding

Electrical connectors Connectors for signals and power rotatable

Color of the housing without

Holding brake with holding brake

Shaft end Feather key

Encoder system Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits

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Optimum operating point

Optimum speed 3000 rpm

Optimum power 2.5 kW

Limiting data

Max. permissible speed (mech.) 6000 rpm

Max. permissible speed (inverter) 8500 rpm

Maximum torque 32.0 Nm

Maximum current 31.0 A

Holding brake

Holding brake version Permanent-magnet brake

Holding torque 13.0 Nm

Power supply voltage DC 24 V ± 10 %

Coil current 0.8 A

Opening time 100 ms

Closing time 50 ms

Highest braking work 380 J

Recommended Motor Module

Rated inverter current 18 A

Maximum inverter current 36 A

Maximum torque 32.00 Nm