



Figure similar

MLFB-Ordering data

1FK7042-2AF71-1DA0

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated speed (100 K) 3000 rpm

Number of poles 8

Rated torque (100 K) 2.6 Nm

Rated current 2.0 A

Static torque (60 K) 2.50 Nm

Static torque (100 K) 3.00 Nm

Stall current (60 K) 1.80 A

Stall current (100 K) 2.20 A

Moment of inertia 2.900 kgcm²

Efficiency 89.0 %

Physical constants

Torque constant 1.38 Nm/A

Voltage constant at 20° C 90.0 V/1000*min⁻¹

Winding resistance at 20° C 4.67 Ω

Rotating field inductance 35.0 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 IP64

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 end Feather key

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



Figure similar

MLFB-Ordering data

1FK7042-2AF71-1DA0

Optimum operating point

Optimum speed 3000 rpm

Optimum power 0.8 kW

Limiting data

Max. permissible speed (mech.) 9000 rpm

Max. permissible speed (inverter) 6400 rpm

Maximum torque 10.5 Nm

Maximum current 7.6 A

Recommended Motor Module

Rated inverter current 3 A

Maximum inverter current 9 A

Maximum torque 10.50 Nm