



Figure similar

Article No. : 1FK7015-5AK74-1JB3

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Engineering data

| | |
|-----------------------|-------------------------|
| Rated speed (100 K) | 6,000 rpm |
| Number of poles | 8 |
| Rated torque (100 K) | 0.2 Nm |
| Rated current | 0.8 A |
| Static torque (60 K) | 0.29 Nm |
| Static torque (100 K) | 0.35 Nm |
| Stall current (60 K) | 1.20 A |
| Stall current (100 K) | 1.50 A |
| Moment of inertia | 0.102 kgcm ² |
| Efficiency | 68.0 % |

Physical constants

| | |
|-----------------------------|-------------------------------|
| Torque constant | 0.24 Nm/A |
| Voltage constant at 20° C | 16.0 V/1000*min ⁻¹ |
| Winding resistance at 20° C | 4.30 Ω |
| Rotating field inductance | 8.4 mH |
| Electrical time constant | 2.00 ms |
| Mechanical time constant | 1.90 ms |
| Thermal time constant | 16 min |
| Shaft torsional stiffness | 1,300 Nm/rad |
| Net weight of the motor | 1.2 kg |

Mechanical data

| | |
|--------------------------|---|
| Motor type | Permanent-magnet synchronous motor |
| Motor type | Compact |
| Shaft height | 20 |
| Cooling | Natural cooling |
| Radial runout tolerance | 0.000 mm |
| Concentricity tolerance | 0.00 mm |
| Axial runout tolerance | 0.00 mm |
| Vibration severity grade | Grade A |
| Connector size | 0.5 |
| Degree of protection | IP54 |
| 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 | with holding brake |
| Shaft end | Feather key |
| Encoder system | Encoder AM16S/R: absolute encoder 16 S/R, 4096 revolutions multi-turn, with EnDat interface |

Optimum operating point

| | |
|---------------|-----------|
| Optimum speed | 5,000 rpm |
| Optimum power | 0.1 kW |

Limiting data

| | |
|-----------------------------------|-----------|
| Max. permissible speed (mech.) | 8,000 rpm |
| Max. permissible speed (inverter) | 8,000 rpm |
| Maximum torque | 1.0 Nm |
| Maximum current | 4.2 A |

Holding brake

| | |
|-----------------------|------------------------|
| Holding brake version | Permanent-magnet brake |
| Holding torque | 0.4 Nm |
| Power supply voltage | DC 24 V ± 10 % |
| Coil current | 0.3 A |
| Opening time | 30 ms |
| Closing time | 20 ms |
| Highest braking work | 2 J |

Recommended Motor Module

| | |
|--------------------------|---------|
| Rated inverter current | 3 A |
| Maximum inverter current | 6 A |
| Maximum torque | 1.00 Nm |