



Figure similar

MLFB-Ordering data

1FK7040-5AK71-1EA0

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) | 1.1 Nm |
| Rated current | 1.7 A |
| Static torque (60 K) | 1.30 Nm |
| Static torque (100 K) | 1.6 Nm |
| Stall current (60 K) | 1.80 A |
| Stall current (100 K) | 2.25 A |
| Moment of inertia | 1.690 kgcm ² |
| Efficiency | 88.0 % |

| Physical constants | |
|-----------------------------|-------------------------------|
| Torque constant | 0.68 Nm/A |
| Voltage constant at 20° C | 43.0 V/1000*min ⁻¹ |
| Winding resistance at 20° C | 3.30 Ω |
| Rotating field inductance | 17.0 mH |
| Electrical time constant | 5.15 ms |
| Mechanical time constant | 3.62 ms |
| Thermal time constant | 25 min |
| Shaft torsional stiffness | 19000 Nm/rad |
| Net weight of the motor | 3.5 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 | KTY84 temperature sensor in the stator winding |
| Electrical connectors | Connectors for signals and power rotatable |
| Color of the housing | without |
| Holding brake | without holding brake |
| Shaft extension | Feather key |
| Encoder system | Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface |

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| Optimum operating point | | Recommended Motor Module | |
|-----------------------------------|----------|--------------------------|---------|
| Optimum speed | 6000 rpm | Rated inverter current | 3 A |
| Optimum power | 0.7 kW | Maximum inverter current | 6 A |
| Limiting data | | Maximum torque | 4.10 Nm |
| Max. permissible speed (mech.) | 9000 rpm | | |
| Max. permissible speed (inverter) | 9990 rpm | | |
| Maximum torque | 5.1 Nm | | |
| Maximum current | 7.7 A | | |