



Figure similar

MLFB-Ordering data

1FK7034-2AF24-1AG0

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Engineering data | | Mechanical data | |
|-----------------------------|-------------------------------|--------------------------|--|
| Rated speed (100 K) | 3000 rpm | Motor type | Permanent-magnet synchronous motor |
| Number of poles | 6 | Motor type | Compact |
| Rated torque (100 K) | 1.4 Nm | Shaft height | 36 |
| Rated current | 1.8 A | Cooling | Natural cooling |
| Static torque (60 K) | 1.35 Nm | Radial runout tolerance | 0.035 mm |
| Static torque (100 K) | 1.60 Nm | Concentricity tolerance | 0.08 mm |
| Stall current (60 K) | 1.55 A | Axial runout tolerance | 0.08 mm |
| Stall current (100 K) | 1.90 A | Vibration severity grade | Grade A |
| Moment of inertia | 0.900 kgcm ² | Connector size | 1 |
| Efficiency | 85.0 % | Degree of protection | IP64 |
| Physical constants | | Design acc. to Code I | IM B5 (IM V1, IM V3) |
| | | Temperature monitoring | Pt1000 temperature sensor |
| Torque constant | 0.84 Nm/A | Electrical connectors | Connectors for signals and power rotatable |
| Voltage constant at 20° C | 55.0 V/1000*min ⁻¹ | Color of the housing | Standard (Anthracite RAL 7016) |
| Winding resistance at 20° C | 4.46 Ω | Holding brake | without holding brake |
| Rotating field inductance | 17.2 mH | Shaft end | Plain shaft |
| Electrical time constant | 3.85 ms | Encoder system | Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track |
| Mechanical time constant | 1.71 ms | | |
| Thermal time constant | 30 min | | |
| Shaft torsional stiffness | 5300 Nm/rad | | |
| Net weight of the motor | 3.5 kg | | |



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| Optimum operating point | | Recommended Motor Module | |
|-----------------------------------|-----------|--------------------------|---------|
| Optimum speed | 3000 rpm | Rated inverter current | 2 A |
| Optimum power | 0.5 kW | Maximum inverter current | 5 A |
| Limiting data | | Maximum torque | 3.90 Nm |
| Max. permissible speed (mech.) | 10000 rpm | | |
| Max. permissible speed (inverter) | 5200 rpm | | |
| Maximum torque | 6.5 Nm | | |
| Maximum current | 8.0 A | | |