

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7062-2AH71-1RA0

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Engineering data | | Mechanical data | |
|-----------------------------|-------------------------------|--------------------------|---|
| Rated speed (100 K) | 4500 rpm | Motor type | Permanent-magnet synchronous motor |
| Number of poles | 8 | Motor type | Compact |
| Rated torque (100 K) | 3.0 Nm | Shaft height | 63 |
| Rated current | 3.3 A | Cooling | Natural cooling |
| Static torque (60 K) | 7.10 Nm | Radial runout tolerance | 0.040 mm |
| Static torque (100 K) | 8.5 Nm | Concentricity tolerance | 0.10 mm |
| Stall current (60 K) | 6.50 A | Axial runout tolerance | 0.10 mm |
| Stall current (100 K) | 8.00 A | Vibration severity grade | Grade A |
| Moment of inertia | 11.200 kgcm ² | Connector size | 1 |
| Efficiency | 91.0 % | Degree of protection | IP64 |
| Physical constants | | Design acc. to Code I | IM B5 (IM V1, IM V3) |
| Torque constant | 1.06 Nm/A | Temperature monitoring | Pt1000 temperature sensor |
| Voltage constant at 20° C | 67.5 V/1000*min ⁻¹ | Electrical connectors | Connectors for signals and power rotatable |
| Winding resistance at 20° C | 0.48 Ω | Color of the housing | Standard (Anthracite RAL 7016) |
| Rotating field inductance | 6.4 mH | Holding brake | without holding brake |
| Electrical time constant | 13.20 ms | Shaft extension | Feather key |
| Mechanical time constant | 1.44 ms | Encoder system | Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions) |
| Thermal time constant | 35 min | | |
| Shaft torsional stiffness | 37000 Nm/rad | | |
| Net weight of the motor | 9.1 kg | | |



Figure similar

MLFB-Ordering data

1FK7062-2AH71-1RA0

| Optimum operating point | | Recommended Motor Module | |
|-----------------------------------|----------|--------------------------|----------|
| Optimum speed | 3500 rpm | Rated inverter current | 9 A |
| Optimum power | 1.9 kW | Maximum inverter current | 27 A |
| Limiting data | | Maximum torque | 24.80 Nm |
| Max. permissible speed (mech.) | 7200 rpm | | |
| Max. permissible speed (inverter) | 7200 rpm | | |
| Maximum torque | 26.0 Nm | | |
| Maximum current | 29.0 A | | |