

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data

1FK7064-4CC71-1TG0



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

| | |
|-----------------------|-------------------------|
| Rated speed (100 K) | 2000 rpm |
| Number of poles | 6 |
| Rated torque (100 K) | 10.0 Nm |
| Rated current | 7.1 A |
| Static torque (60 K) | 10.00 Nm |
| Static torque (100 K) | 12.0 Nm |
| Stall current (60 K) | 6.60 A |
| Stall current (100 K) | 8.10 A |
| Moment of inertia | 7.500 kgcm ² |
| Efficiency | 93.0 % |

Physical constants

| | |
|-----------------------------|-------------------------------|
| Torque constant | 1.48 Nm/A |
| Voltage constant at 20° C | 94.0 V/1000*min ⁻¹ |
| Winding resistance at 20° C | 0.58 Ω |
| Rotating field inductance | 21.5 mH |
| Electrical time constant | 37.00 ms |
| Mechanical time constant | 0.60 ms |
| Thermal time constant | 55 min |
| Shaft torsional stiffness | 29500 Nm/rad |
| Net weight of the motor | 15.4 kg |

Mechanical data

| | |
|--------------------------|--|
| Motor type | Permanent-magnet synchronous motor |
| Motor type | High Dynamic |
| Shaft height | 63 |
| Cooling | Natural cooling |
| Radial runout tolerance | 0.040 mm |
| Concentricity tolerance | 0.10 mm |
| Axial runout tolerance | 0.10 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 | Standard (Anthracite RAL 7016) |
| Holding brake | without holding brake |
| Shaft extension | Plain shaft |
| Encoder system | Resolver 2-pole |



Figure similar

MLFB-Ordering data

1FK7064-4CC71-1TG0

| Optimum operating point | | Recommended Motor Module | |
|-----------------------------------|----------|--------------------------|----------|
| Optimum speed | 2000 rpm | Rated inverter current | 9 A |
| Optimum power | 2.1 kW | Maximum inverter current | 27 A |
| Limiting data | | Maximum torque | 32.00 Nm |
| Max. permissible speed (mech.) | 7500 rpm | | |
| Max. permissible speed (inverter) | 6150 rpm | | |
| Maximum torque | 32.0 Nm | | |
| Maximum current | 25.0 A | | |