

Data sheet for SIMOTICS S-1FT7



Figure similar

MLFB-Ordering data

1FT7064-5AF71-1FH2

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

Item no. :
Consignment no. :
Project :

| Engineering data | | Mechanical data | |
|-----------------------------|--------------------------------|--------------------------|---|
| Rated speed | 3000 rpm | Motor type | Permanent-magnet synchronous motor |
| Number of poles | 10 | Design of the motor type | Compact |
| Rated torque (100 K) | 7.6 Nm | Shaft height | 63 mm |
| Rated current | 5.2 A | Cooling | Natural cooling |
| Static torque (60 K) | 7.70 Nm | Radial runout tolerance | N |
| Static torque (100 K) | 9.0 Nm | Vibration severity grade | Grade A |
| Stall current (60 K) | 4.9 A | Degree of protection | IP67 |
| Stall current (100 K) | 5.7 A | Design acc. to Code I | IM B5 (compatible with 1FT6) |
| Rotor moment of inertia | 0.0014700 kgm ² | Temperature monitoring | Pt1000 temperature sensor |
| Efficiency | 93.0 % | Color of the housing | Standard (pearl dark gray similar to RAL 9023) |
| Physical constants | | Holding brake version | Permanent-magnet brake |
| Torque constant | 1.57 Nm/A | Shaft end type | Plain shaft |
| Voltage constant at 20° C | 100.0 V/1000*min ⁻¹ | Sensor design | Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions) |
| Winding resistance at 20° C | 0.92 Ω | Electrical connectors | Connector turnable |
| Rotating field inductance | 10.0 mH | Connector size | 1 |
| Electrical time constant | 11.00 ms | | |
| Mechanical time constant | 1.30 ms | | |
| Thermal time constant | 30 min | | |
| Shaft torsional stiffness | 26000 Nm/rad | | |
| Net weight of the motor | 11.4 kg | | |

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| Optimum operating point | | Recommended Motor Module | |
|-----------------------------------|----------|--------------------------|----------|
| Optimum speed | 3000 rpm | Rated inverter current | 9 A |
| Optimum power | 2.4 kW | Maximum inverter current | 27 A |
| Limiting data | | Maximum torque | 34.70 Nm |
| Max. permissible speed (mech.) | 9000 rpm | | |
| Max. permissible speed (inverter) | 5700 rpm | | |
| Maximum torque | 36.0 Nm | | |
| Maximum current | 29.0 A | | |