

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data

1FK7063-5AF71-1TA3

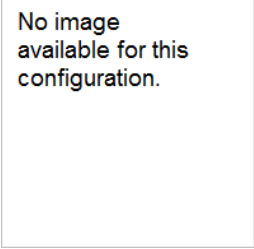


Figure similar

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

Item no. :
 Consignment no. :
 Project :

Engineering data

| | |
|-----------------------|--------------------------|
| Rated speed (100 K) | 3000 rpm |
| Number of poles | 8 |
| Rated torque (100 K) | 7.3 Nm |
| Rated current | 5.6 A |
| Static torque (60 K) | 9.10 Nm |
| Static torque (100 K) | 11.00 Nm |
| Stall current (60 K) | 6.60 A |
| Stall current (100 K) | 8.00 A |
| Moment of inertia | 15.100 kgcm ² |
| Efficiency | 91.0 % |

Physical constants

| | |
|-----------------------------|-------------------------------|
| Torque constant | 1.37 Nm/A |
| Voltage constant at 20° C | 87.5 V/1000*min ⁻¹ |
| Winding resistance at 20° C | 0.65 Ω |
| Rotating field inductance | 7.7 mH |
| Electrical time constant | 11.80 ms |
| Mechanical time constant | 1.56 ms |
| Thermal time constant | 40 min |
| Shaft torsional stiffness | 35000 Nm/rad |
| Net weight of the motor | 11.5 kg |

Mechanical data

| | |
|--------------------------|--|
| Motor type | Permanent-magnet synchronous motor |
| Motor type | Compact |
| 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 end | Feather key |
| Encoder system | Resolver 2-pole |

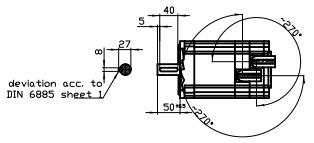
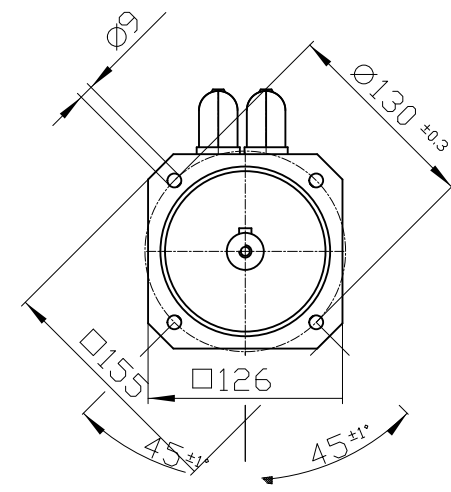
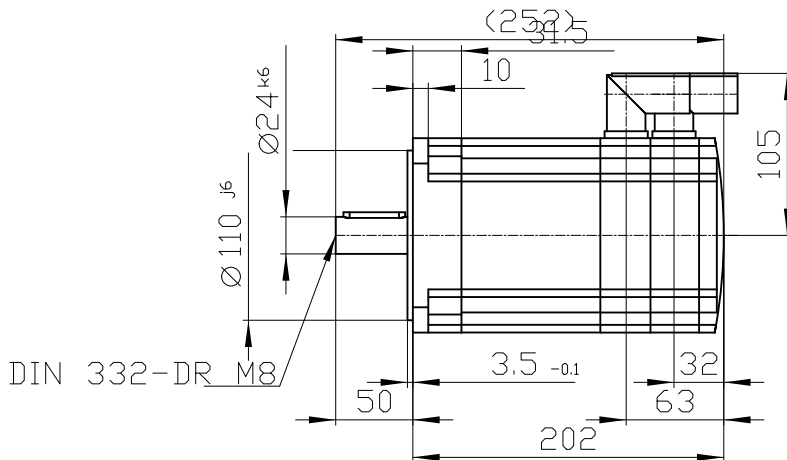
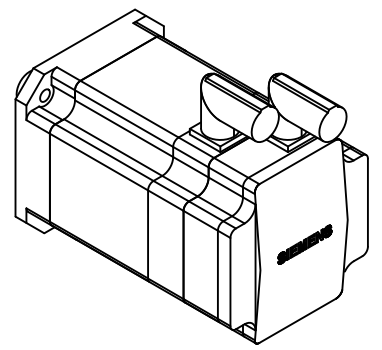
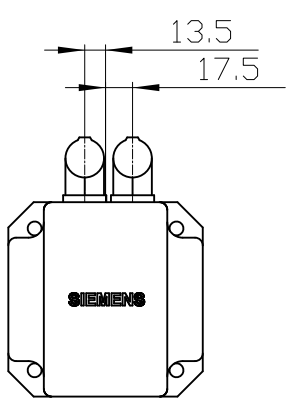
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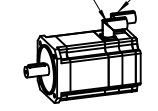
Figure similar

| Optimum operating point | | Recommended Motor Module | |
|-----------------------------------|----------|--------------------------|----------|
| Optimum speed | 3000 rpm | Rated inverter current | 9 A |
| Optimum power | 2.3 kW | Maximum inverter current | 18 A |
| Limiting data | | Maximum torque | 24.50 Nm |
| Max. permissible speed (mech.) | 7200 rpm | | |
| Max. permissible speed (inverter) | 6600 rpm | | |
| Maximum torque | 35.0 Nm | | |
| Maximum current | 28.0 A | | |

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Connector size 1 = M23;
 6-pole for power and brake
 Connector size M23, 12-pole



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|------------|---------|--------------------|
| | | - |
| Unit | mm (in) | 1FK7063-5AF71-1TA3 |
| Date | 5/11/23 | |
| SIEMENS AG | | - |
| | | DT |