

Data sheet for SIMOTICS S-1FK2

Article No. : 1FK2104-4AK10-0MB0



Figure similar

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

Item no. :
Consignment no. :
Project :

Basic motor data

| | |
|-------------------------|---|
| Motor type | Permanent-magnet synchronous motor, Natural cooling, IP64 |
| Motor type | High Dynamic |
| Static torque | 1.27 Nm |
| Static current | 2.4 A |
| Maximum torque | 3.85 Nm |
| Maximum current | 8.7 A |
| Maximum speed | 8,000 rpm |
| Rotor moment of inertia | 0.4300 kgcm ² |
| Weight | 2.9 kg |

Rated data

SINAMICS S120, BLM/SLM 3AC 400V

| | |
|---------------|-----------|
| Rated speed | 6,000 rpm |
| Rated torque | 0.95 Nm |
| Rated current | 1.9 A |
| Rated power | 0.60 kW |

Encoder system

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|----------------|---|
| Encoder system | Encoder AM22DQC: Absolute encoder 22 bit + 12 bit multiturn |
|----------------|---|

Motor connection

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|---------------------------------|----------------------------------|
| Connection type | Double cable connection for S120 |
| Connector size power connector | M17 |
| Connector size signal connector | M17 |

Mechanical data

| | |
|-------------------------------|--|
| Design acc. to Code I | IM B5 (IM V1, IM V3) |
| Vibration severity grade | Grade A |
| Shaft height | 40 |
| Flange size (AB) | 80 mm |
| Centering ring (N) | 70 mm |
| Hole circle (M) | 90 mm |
| Screw-on hole (S) | 6.5 mm |
| Overall length (LB) | 142 mm |
| Diameter of shaft (D) | 19 mm |
| Length of shaft (E) | 40 mm |
| Length of flange diagonal (P) | 105 mm |
| Shaft end | Plain shaft |
| Color of the housing | Standard (Anthracite, similar to RAL 7016) |



Holding brake

| | |
|---|----------|
| Holding torque | 3.30 Nm |
| Average dynamic torque | 3.30 Nm |
| Opening time | 110 ms |
| Closing time | 40 ms |
| Maximum single switching energy ¹⁾ | 270 J |
| Service life, operating energy | 35,000 J |
| Rated current ²⁾ | 0.5 A |

¹⁾Up to three consecutive emergency stops and up to 25% of all emergency stops as a Wmax high energy stop possible.

²⁾Typical value for 20°C ambient temperature. At -15°C the break-induced currents can be increased by up to 30%.