SIEMENS

Data sheet for SIMOTICS S-1FK2

Article No. :

1FK2104-5AK10-1MA0



Figure similar

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

Rated current

Rated power

Encoder system

Connection type

Connector size

| Basic motor data | | |
|-------------------------|---|--|
| Motor type | Permanent-magnet synchronous motor, Natural cooling, IP64 | |
| Motor type | High Dynamic | |
| Static torque | 2.40 Nm | |
| Static current | 4.4 A | |
| Maximum torque | 7.60 Nm | |
| Maximum current | 16.0 A | |
| Maximum speed | 8,000 rpm | |
| Rotor moment of inertia | 0.6500 kgcm² | |
| Weight | 3.7 kg | |
| Rated data | | |
| SINAMICS S210, 3AC 400V | | |
| Rated speed | 6,000 rpm | |
| Rated torque | 1.70 Nm | |

3.2 A

Encoder system

Motor connection

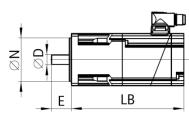
M17

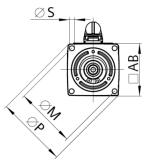
1.07 kW

OCC for S210

Encoder AM22DQC: Absolute encoder 22 bit + 12 bit multiturn ltem no. : Consignment no. : Project :

| 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) | 170 mm |
| Diameter of shaft (D) | 19 mm |
| Length of shaft (E) | 40 mm |
| Length of flange diagonal (P) | 105 mm |
| Shaft end | Fitted key |
| 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 | 50 ms | |
| Closing time | 40 ms | |
| Maximum single switching energy 1) | 270 J | |
| Service life, operating energy | 120,000 J | |
| Holding current ²⁾ | 0.2 A | |
| Break-induced current for 500 ms ²⁾ | 1.2 A | |

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

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