

## **Data sheet for SIMOTICS S-1FK2**

Article No.: 1FK2306-2AC11-0MB0

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

| Basic motor data        |   |  |  |  |
|-------------------------|---|--|--|--|
| Motor type              | Permanent-magnet synchronous<br>motor, Natural cooling,<br>IP65 |  |  |  |
| Motor type              | High Inertia  |  |  |  |
| Static torque           | 6.00 Nm   |  |  |  |
| Static current          | 2.8 A   |  |  |  |
| Maximum torque          | 18.00 Nm  |  |  |  |
| Maximum current         | 10.3 A  |  |  |  |
| Maximum speed           | 4,250 rpm   |  |  |  |
| Rotor moment of inertia | 13.4000 kgcm²   |  |  |  |
| Weight                  | 9.0 kg  |  |  |  |

|   | Rated                          | l data    |
|---|--------------------------------|-----------|
| S | INAMICS S120, BLM/SLM 3AC 400V |           |
|   | Rated speed                    | 2,000 rpm |
|   | Rated torque                   | 5.50 Nm   |
|   | Rated current                  | 2.8 A     |
|   | Rated power                    | 1.15 kW   |
|   |                                |           |

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

**Encoder system** 

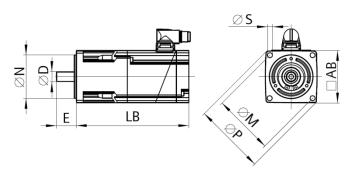
| Motor connection |                                  |  |  |  |
|------------------|----------------------------------|--|--|--|
| Connection type  | Double cable connection for S120 |  |  |  |
| Connector size   | M23                              |  |  |  |



Item no. : Consignment no. : Project :

|  |  | e |  |  |  |  |
|--|--|---|--|--|--|--|

| Mechanical data               |  |  |  |  |
|-------------------------------|--|--|--|--|
| Design acc. to Code I         | IM B5 (IM V1, IM V3)                       |  |  |  |
| Vibration severity grade      | Grade A                                    |  |  |  |
| Shaft height                  | 63   |  |  |  |
| Flange size (AB)              | 125 mm                                     |  |  |  |
| Centering ring (N)            | 110 mm                                     |  |  |  |
| Hole circle (M)               | 130 mm                                     |  |  |  |
| Screw-on hole (S)             | 9.0 mm                                     |  |  |  |
| Overall length (LB)           | 242 mm                                     |  |  |  |
| Diameter of shaft (D)         | 24 mm                                      |  |  |  |
| Length of shaft (E)           | 50 mm                                      |  |  |  |
| Length of flange diagonal (P) | 158 mm                                     |  |  |  |
| Shaft end                     | Plain shaft                                |  |  |  |
| Color of the housing          | Standard (Anthracite, similar to RAL 7016) |  |  |  |



| Holding brake                      |           |  |  |
|------------------------------------|-----------|--|--|
| Holding torque                     | 13.00 Nm  |  |  |
| Average dynamic torque             | 6.50 Nm   |  |  |
| Opening time                       | 100 ms    |  |  |
| Closing time                       | 50 ms     |  |  |
| Maximum single switching energy 1) | 1,550 J   |  |  |
| Service life, operating energy     | 774,000 J |  |  |
| Rated current <sup>2)</sup>        | 0.7 A     |  |  |

 $<sup>^{1)}\</sup>mbox{Up}$  to three consecutive emergency stops and up to 25% of all emergency stops as a Wmax high energy stop possible.

<sup>&</sup>lt;sup>2)</sup>Typcial value for 20°C ambient temperature. At -15°C the break-induced currents can be increased by up to 30%.