## **SIEMENS**

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

Article No.: 1FK2208-5AC10-1MB0

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

| Basic motor data        |   |  |  |
|-------------------------|---|--|--|
| Motor type              | Permanent-magnet synchronous<br>motor, Natural cooling,<br>IP64 |  |  |
| Motor type              | Compact   |  |  |
| Static torque           | 27.00 Nm  |  |  |
| Static current          | 14.6 A  |  |  |
| Maximum torque          | 80.00 Nm  |  |  |
| Maximum current         | 51.5 A  |  |  |
| Maximum speed           | 4,700 rpm   |  |  |
| Rotor moment of inertia | 53.6000 kgcm²   |  |  |
| Weight                  | 19.3 kg   |  |  |

|   | Rated data                      |           |  |  |  |
|---|---------------------------------|-----------|--|--|--|
| S | SINAMICS S120, BLM/SLM 3AC 400V |           |  |  |  |
|   | Rated speed                     | 2,000 rpm |  |  |  |
|   | Rated torque                    | 19.10 Nm  |  |  |  |
|   | Rated current                   | 10.8 A    |  |  |  |
|   | Rated power                     | 4.00 kW   |  |  |  |
|   |                                 |           |  |  |  |

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

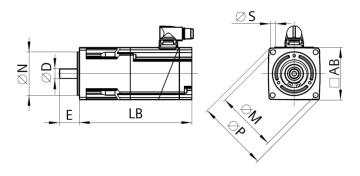
| Motor connection |                                  |
|------------------|----------------------------------|
| Connection type  | Double cable connection for S120 |
| Connector size   | M23                              |



no.:

Item no. : Consignment no. : Project :

| Mechanical data               |  |  |  |
|-------------------------------|--|--|--|
| Design acc. to Code I         | IM B5 (IM V1, IM V3)                       |  |  |
| Vibration severity grade      | Grade A                                    |  |  |
| Shaft height                  | 80   |  |  |
| Flange size (AB)              | 155 mm                                     |  |  |
| Centering ring (N)            | 130 mm                                     |  |  |
| Hole circle (M)               | 165 mm                                     |  |  |
| Screw-on hole (S)             | 11.0 mm                                    |  |  |
| Overall length (LB)           | 276 mm                                     |  |  |
| Diameter of shaft (D)         | 32 mm                                      |  |  |
| Length of shaft (E)           | 58 mm                                      |  |  |
| Length of flange diagonal (P) | 202 mm                                     |  |  |
| Shaft end                     | Fitted key                                 |  |  |
| Color of the housing          | Standard (Anthracite, similar to RAL 7016) |  |  |



| Holding brake                      |             |  |
|------------------------------------|-------------|--|
| Holding torque                     | 32.00 Nm    |  |
| Average dynamic torque             | 17.00 Nm    |  |
| Opening time                       | 200 ms      |  |
| Closing time                       | 60 ms       |  |
| Maximum single switching energy 1) | 4,800 J     |  |
| Service life, operating energy     | 2,400,000 J |  |
| Rated current <sup>2)</sup>        | 0.9 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%.