## **SIEMENS**

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

Article No.: 1FK2203-4AG10-2SA0

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           | 1.27 Nm   |  |  |  |
| Static current          | 2.5 A   |  |  |  |
| Maximum torque          | 3.75 Nm   |  |  |  |
| Maximum current         | 7.8 A   |  |  |  |
| Maximum speed           | 7,800 rpm   |  |  |  |
| Rotor moment of inertia | 0.3700 kgcm²  |  |  |  |
| Weight                  | 2.0 kg  |  |  |  |

|   | Rated data             |           |  |  |
|---|------------------------|-----------|--|--|
| S | INAMICS S210, 1AC 230V |           |  |  |
|   | Rated speed            | 3,000 rpm |  |  |
|   | Rated torque           | 1.27 Nm   |  |  |
|   | Rated current          | 2.5 A     |  |  |
|   | Rated power            | 0.40 kW   |  |  |
|   |                        | 0.40 kW   |  |  |

| Encoder system |  |  |  |  |
|----------------|--|--|--|--|
| Encoder system | Encoder AS22DQC: Absolute encoder single turn 22 bit |  |  |  |

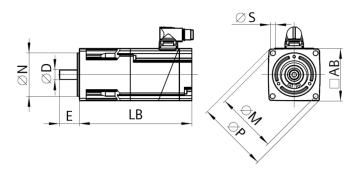
| Motor connection |            |              |  |  |
|------------------|------------|--------------|--|--|
| Connec           | ction type | OCC for S210 |  |  |
| Connec           | tor size   | M12          |  |  |



Item no. : Consignment no. : Project :

|  |  | r | e         | c |  |  |  |
|--|--|---|-----------|---|--|--|--|
|  |  |   | $\subset$ | 2 |  |  |  |

| Mechanical data               |  |  |  |  |
|-------------------------------|--|--|--|--|
| Design acc. to Code I         | IM B5 (IM V1, IM V3)                       |  |  |  |
| Vibration severity grade      | Grade A                                    |  |  |  |
| Shaft height                  | 30   |  |  |  |
| Flange size (AB)              | 60 mm                                      |  |  |  |
| Centering ring (N)            | 50 mm                                      |  |  |  |
| Hole circle (M)               | 70 mm                                      |  |  |  |
| Screw-on hole (S)             | 5.5 mm                                     |  |  |  |
| Overall length (LB)           | 155 mm                                     |  |  |  |
| Diameter of shaft (D)         | 11 mm                                      |  |  |  |
| Length of shaft (E)           | 23 mm                                      |  |  |  |
| Length of flange diagonal (P) | 81 mm                                      |  |  |  |
| Shaft end                     | Plain shaft                                |  |  |  |
| Color of the housing          | Standard (Anthracite, similar to RAL 7016) |  |  |  |



| Holding brake                                  |          |  |  |  |
|--|----------|--|--|--|
| Holding torque                                 | 1.30 Nm  |  |  |  |
| Average dynamic torque                         | 1.30 Nm  |  |  |  |
| Opening time                                   | 40 ms    |  |  |  |
| Closing time                                   | 30 ms    |  |  |  |
| Maximum single switching energy 1)             | 62 J     |  |  |  |
| Service life, operating energy                 | 17,500 J |  |  |  |
| Holding current <sup>2)</sup>                  | 0.15 A   |  |  |  |
| Break-induced current for 500 ms <sup>2)</sup> | 0.8 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.

 $<sup>^{2)}</sup> Typcial value for 20 ^{\circ} C$  ambient temperature. At -15  $^{\circ} C$  the break-induced currents can be increased by up to 30%.