## **SIEMENS**

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

Article No.: 1FK2102-0AG11-1SA0

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

Basic motor data		
Motor type	Permanent-magnet synchronous motor, Natural cooling, IP65	
Motor type	High Dynamic	
Static torque	0.16 Nm	
Static current	0.8 A	
Maximum torque	0.56 Nm	
Maximum current	3.1 A	
Maximum speed	8,000 rpm	
Rotor moment of inertia	0.0285 kgcm²	
Weight	0.7 kg	

Rated data		
SINAMICS S210, 1AC 230V		
	Rated speed	3,000 rpm
	Rated torque	0.16 Nm
	Rated current	0.8 A
	Rated power	0.05 kW

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

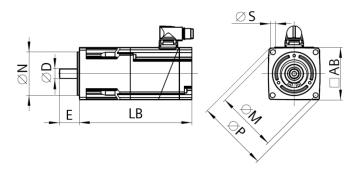
Motor connection		
Connection type	OCC for S210	
Connector size	M12	



Item no. : Consignment no. : Project :

		Figure sim

Mechanical data		
Design acc. to Code I	IM B5 (IM V1, IM V3)	
Vibration severity grade	Grade A	
Shaft height	20	
Flange size (AB)	40 mm	
Centering ring (N)	30 mm	
Hole circle (M)	46 mm	
Screw-on hole (S)	4.5 mm	
Overall length (LB)	121 mm	
Diameter of shaft (D)	8 mm	
Length of shaft (E)	25 mm	
Length of flange diagonal (P)	54 mm	
Shaft end	Fitted key	
Color of the housing	Standard (Anthracite, similar to RAL 7016)	



Holding brake	
Holding torque	0.32 Nm
Average dynamic torque	0.32 Nm
Opening time	25 ms
Closing time	20 ms
Maximum single switching energy 1)	7.4 J
Service life, operating energy	1,750 J
Holding current <sup>2)</sup>	0.1 A
Break-induced current for 500 ms <sup>2)</sup>	0.6 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°C ambient temperature. At -15°C the break-induced currents can be increased by up to 30%.