## **SIEMENS**

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

Article No.: 1FK2104-5AK10-1SA0

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

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		
Rated current	3.2 A		
Rated power	1.07 kW		

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

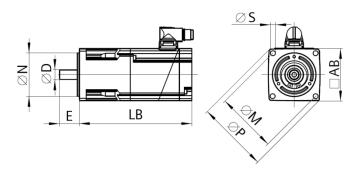
Motor connection			
Connection type	OCC for S210		
Connector size	M17		



Item no. : Consignment no. : Project :

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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 <sup>2)</sup>	0.2 A	
Break-induced current for 500 ms <sup>2)</sup>	1.2 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%.