

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

Article No.: 1FK2104-4AK10-2MA0

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	1.27 Nm			
Static current	2.4 A			
Maximum torque	3.85 Nm			
Maximum current	8.7 A			
Maximum speed	8,000 rpm			
Rotor moment of inertia	0.4300 kgcm²			
Weight	2.9 kg			

	Rated data			
SINAMICS S210, 3AC 400V				
	Rated speed	6,000 rpm		
	Rated torque	0.95 Nm		
	Rated current	1.9 A		
	Rated power	0.60 kW		

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

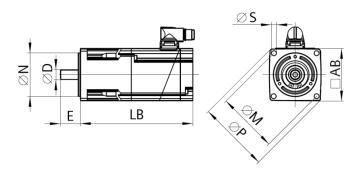
Motor connection		
Connection type	OCC for S210	
Connector size	M17	



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)	142 mm			
Diameter of shaft (D)	14 mm			
Length of shaft (E)	30 mm			
Length of flange diagonal (P)	105 mm			
Shaft end	Plain shaft			
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.

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