## **SIEMENS**

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

Article No.: 1FK2105-4AF11-0SA0

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	5.00 Nm				
Static current	4.7 A				
Maximum torque	15.00 Nm				
Maximum current	18.0 A				
Maximum speed	6,000 rpm				
Rotor moment of inertia	2.5500 kgcm²				
Weight	6.6 kg				

Rated data						
5	SINAMICS S210, 3AC 400V					
	Rated speed	3,000 rpm				
	Rated torque	4.60 Nm				
	Rated current	4.4 A				
	Rated power	1.45 kW				

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

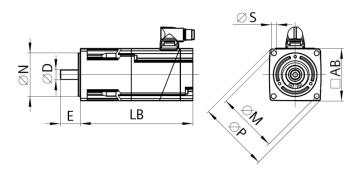
Motor connection				
Connection type	OCC for S210			
Connector size	M17			



Item no. : Consignment no. : Project :

Figure simil							
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Mechanical data					
Design acc. to Code I	IM B5 (IM V1, IM V3)				
Vibration severity grade	Grade A				
Shaft height	52				
Flange size (AB)	105 mm				
Centering ring (N)	95 mm				
Hole circle (M)	115 mm				
Screw-on hole (S)	9.0 mm				
Overall length (LB)	200 mm				
Diameter of shaft (D)	19 mm				
Length of shaft (E)	40 mm				
Length of flange diagonal (P)	135 mm				
Shaft end	Plain shaft				
Color of the housing	Standard (Anthracite, similar to RAL 7016)				



Holding brake					
Holding torque	8.00 Nm				
Average dynamic torque	5.00 Nm				
Opening time	35 ms				
Closing time	20 ms				
Maximum single switching energy 1)	570 J				
Service life, operating energy	284,000 J				
Holding current <sup>2)</sup>	0.3 A				
Break-induced current for 500 ms <sup>2)</sup>	1.1 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%.