

Data sheet for SIMOTICS S-1FK7

Article No. : **1FK7063-2AF71-1CG0-Z
X01**



Figure similar

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

Item no. :
Consignment no. :
Project :

Engineering data	
Rated speed (100 K)	3,000 rpm
Number of poles	8
Rated torque (100 K)	7.3 Nm
Rated current	5.6 A
Static torque (60 K)	9.10 Nm
Static torque (100 K)	11.00 Nm
Stall current (60 K)	6.50 A
Stall current (100 K)	8.00 A
Moment of inertia	14.700 kgcm ²
	91.0 %

Physical constants	
Torque constant	1.37 Nm/A
Voltage constant at 20° C	90.5 V/1000*min ⁻¹
Winding resistance at 20° C	0.64 Ω
	8.5 mH
Electrical time constant	13.40 ms
Mechanical time constant	1.48 ms
Thermal time constant	40 min
Shaft torsional stiffness	34,000 Nm/rad
Net weight of the motor	11.1 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
	63
Cooling	Natural cooling
	0.040 mm
Concentricity tolerance	0.10 mm
Axial runout tolerance	0.10 mm
	Grade A
Connector size	1
Degree of protection	IP64
	IM B5 (IM V1, IM V3)
Temperature monitoring	Pt1000 temperature sensor
	Connectors for signals and power rotatable
	Jet black, matt RAL 9005

Holding brake	without holding brake
Shaft end	Plain shaft
Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	2.3 kW

Limiting data	
Max. permissible speed (mech.)	7,200 rpm
Max. permissible speed (inverter)	6,400 rpm
Maximum torque	35.0 Nm
Maximum current	28.0 A

Recommended Motor Module	
Rated inverter current	9 A
Maximum inverter current	27 A
Maximum torque	34.00 Nm

Special design	
X01	Paint finish: Jet black, matt RAL 9005