

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data 1FK7060-2AC71-1AG0

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

Item no. :
Consignment no. :
Project :

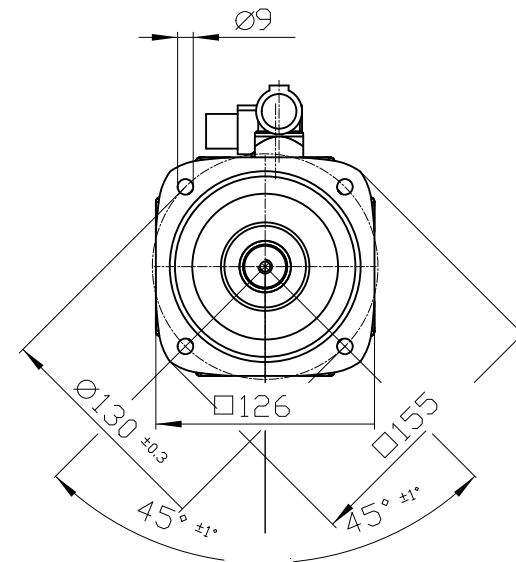
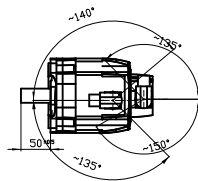
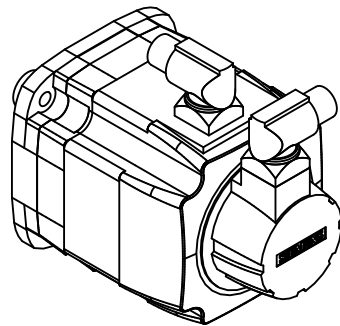
Engineering data		Mechanical data	
Rated speed (100 K)	2000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	5.3 Nm	Shaft height	63
Rated current	3.0 A	Cooling	Natural cooling
Static torque (60 K)	5.00 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	6.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	2.55 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	3.15 A	Vibration severity grade	Grade A
Moment of inertia	7.700 kgcm²	Connector size	1
Efficiency	90.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.91 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	121.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	2.75 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	30.5 mH	Holding brake	without holding brake
Electrical time constant	11.10 ms	Shaft end	Plain shaft
Mechanical time constant	1.75 ms	Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track
Thermal time constant	30 min		
Shaft torsional stiffness	40500 Nm/rad		
Net weight of the motor	7.1 kg		



Figure similar

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Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	3 A
Optimum power	1.1 kW	Maximum inverter current	9 A
Limiting data		Maximum torque	15.90 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	4750 rpm		
Maximum torque	18.0 Nm		
Maximum current	10.7 A		



Connector size M23, 17-pole

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Unit	mm [in]	1FK7060-2AC71-1AG0
Date	3/20/23	
SIEMENS AG		-
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