

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data1FK7060-5AF71-1EH3



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

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	4.7 Nm	Shaft height	63
Rated current	3.7 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)	3.70 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.50 A	Vibration severity grade	Grade A
Moment of inertia	10.200 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	1.33 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	84.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	1.44 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	14.7 mH	Holding brake	with holding brake
Electrical time constant	10.20 ms	Shaft end	Plain shaft
Mechanical time constant	1.94 ms	Encoder system	Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface
Thermal time constant	30 min		
Shaft torsional stiffness	42000 Nm/rad		
Net weight of the motor	8.0 kg		

MLFB-Ordering data 1FK7060-5AF71-1EH3

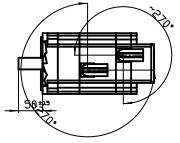
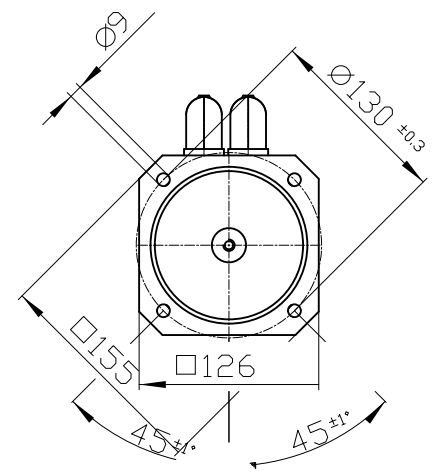
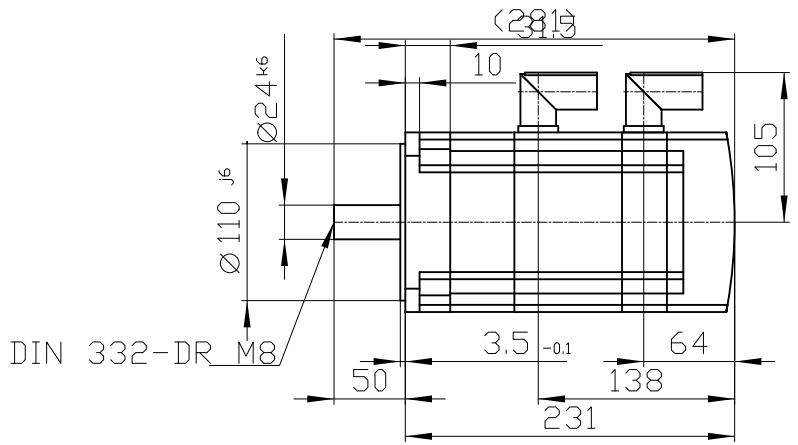
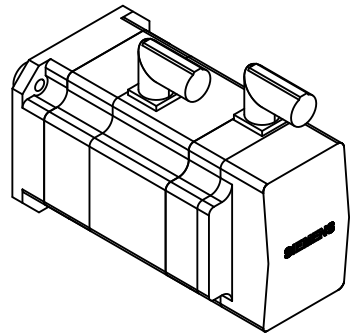
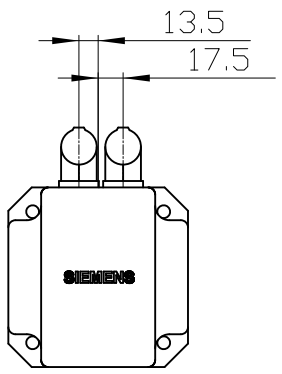
Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	1.5 kW	Maximum inverter current	10 A
Limiting data		Maximum torque	13.20 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	6800 rpm		
Maximum torque	18.0 Nm		
Maximum current	15.0 A		
Holding brake			
Holding brake version	Permanent-magnet brake		
Holding torque	13.0 Nm		
Power supply voltage	DC 24 V ± 10 %		
Coil current	0.8 A		
Opening time	100 ms		
Closing time	50 ms		
Highest braking work	380 J		

Copyright© Siemens AG 2005
Cod-drawing do not make any manual changes

The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

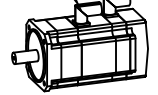
Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere fuer den Fall der Patenterteilung oder GK-Entragung.

Confine a titre de secret d'entreprise. Tous droits reserves. Confiado como secreto industrial. Nos reservamos todos los derechos Comunicado como segredo empresarial. Reservados todos os direitos



Connector size 1 = M23;
6-pole for power and brake

Connector size M23, 17-pole



Unit	mm [in]	1FK7060-5AF71-1EH3	
Date	2/9/23		
SIEMENS AG			
		DT	