

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data 1FK7063-5AF71-1TH0



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)	7.3 Nm	Shaft height	63
Rated current	5.6 A	Cooling	Natural cooling
Static torque (60 K)	9.10 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	11.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	6.60 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	8.00 A	Vibration severity grade	Grade A
Moment of inertia	17.300 kgcm²	Connector size	1
Efficiency	91.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.37 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	87.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.65 Ω	Color of the housing	without
Rotating field inductance	7.7 mH	Holding brake	with holding brake
Electrical time constant	11.80 ms	Shaft end	Plain shaft
Mechanical time constant	1.56 ms	Encoder system	Resolver 2-pole
Thermal time constant	40 min		
Shaft torsional stiffness	35000 Nm/rad		
Net weight of the motor	12.0 kg		

MLFB-Ordering data1FK7063-5AF71-1TH0

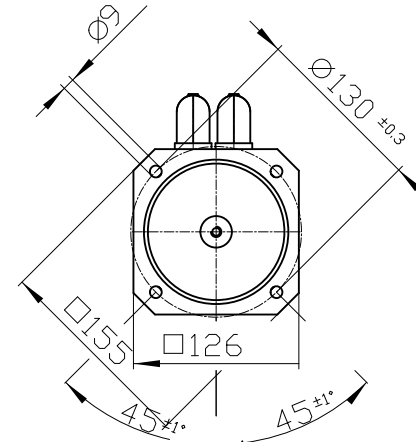
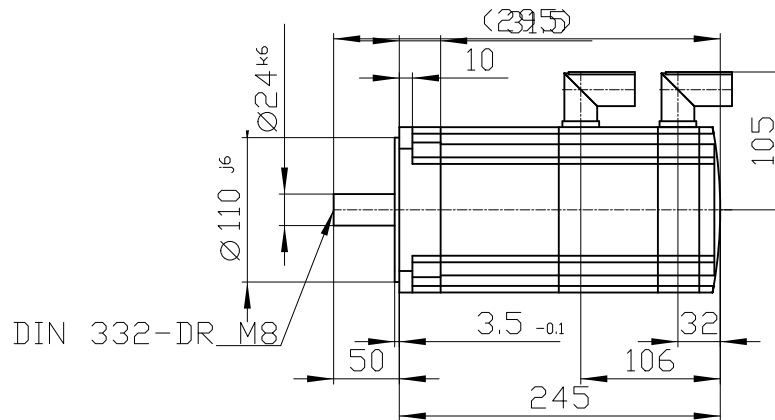
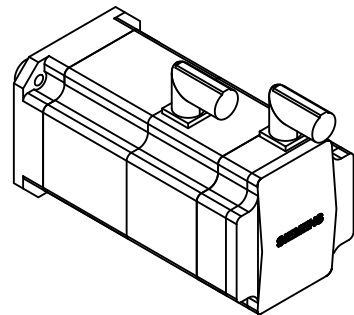
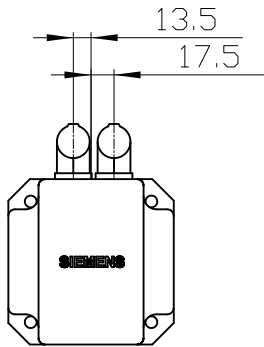
Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	9 A
Optimum power	2.3 kW	Maximum inverter current	18 A
Limiting data		Maximum torque	24.50 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	6600 rpm		
Maximum torque	35.0 Nm		
Maximum current	28.0 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		

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

Weitergabe sowie Vervielfältigung dieser Unterlage. Verwer-
tung 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.

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.

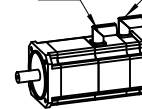
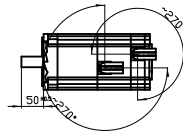
Copyright© Siemens AG 2005
Cada-drawing do not make any
manual changes



DIN 332-DR M8

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

Connector size M23, 12-pole



	-	
	-	
Unit	mm [in]	1FK7063-5AF71-1TH0
Date	5/11/23	
SIEMENS AG		-
-		DT