

Data sheet for SIMOTICS S-1FK7



MLFB-Ordering data 1FK7060-3BF71-1QG0

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	High Inertia
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)	3.60 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.45 A	Vibration severity grade	Grade A
Moment of inertia	12.500 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	Pt1000 temperature sensor
Voltage constant at 20° C	85.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	1.35 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	15.2 mH	Holding brake	without holding brake
Electrical time constant	11.30 ms	Shaft end	Plain shaft
Mechanical time constant	2.80 ms	Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits
Thermal time constant	30 min		
Shaft torsional stiffness	38500 Nm/rad		
Net weight of the motor	7.9 kg		



Figure similar

MLFB-Ordering data 1FK7060-3BF71-1QG0

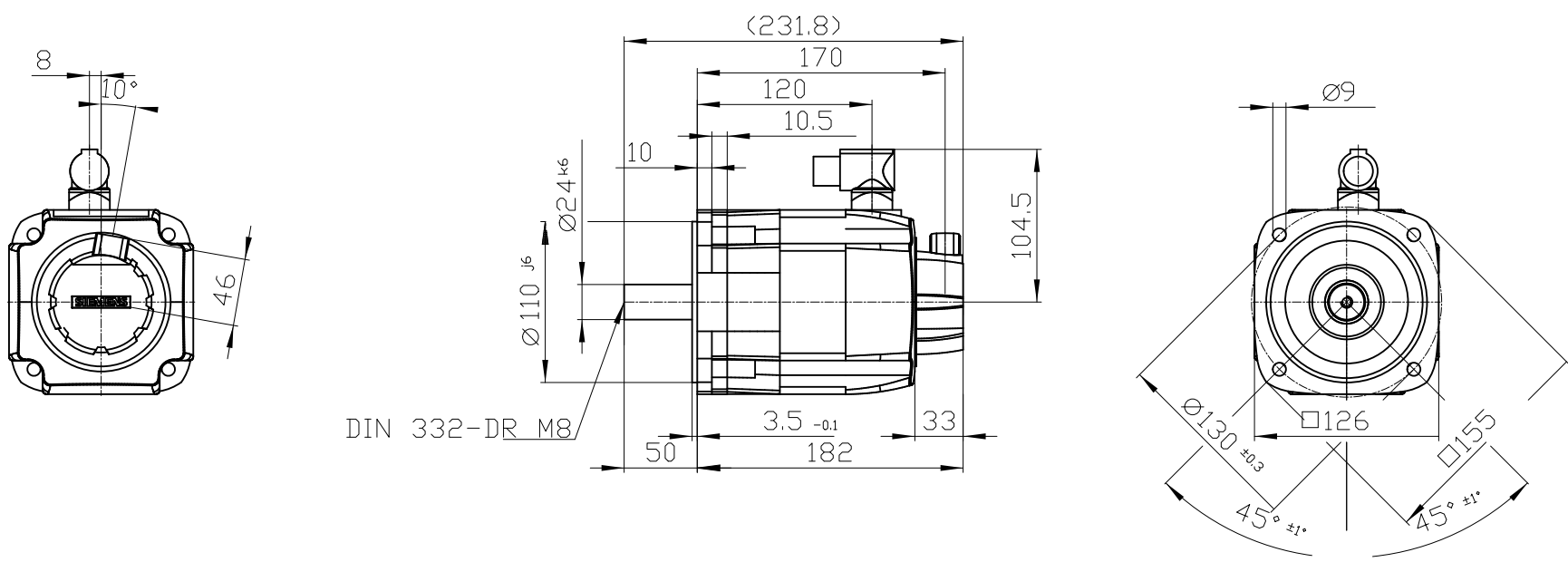
Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	1.5 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	18.00 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	6700 rpm		
Maximum torque	18.0 Nm		
Maximum current	15.0 A		

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

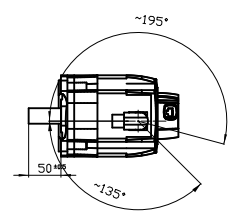
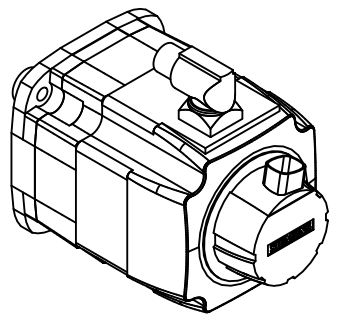
The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

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.

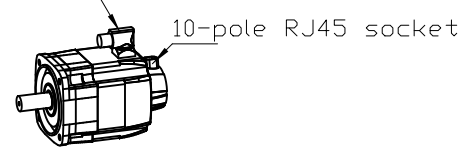
Confie a titre de secret d'entreprise. Tous droits reserves. Confido como secreto industrial. No reservados todos los derechos. Comunicado como segredo empresarial. Reservados todos os direitos.



DIN 332-DR M8



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



10-pole RJ45 socket

Unit	mm [in]	1FK7060-3BF 71-1QG0	
Date	3/15/23		
SIEMENS AG			
		DT	