

Data sheet for SIMOTICS S-1FK7



MLFB-Ordering data 1FK7062-3BF71-1RG1

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)	6.0 Nm	Shaft height	63
Rated current	4.0 A	Cooling	Natural cooling
Static torque (60 K)	7.10 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	8.50 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	4.30 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	5.30 A	Vibration severity grade	Grade A
Moment of inertia	23.500 kgcm ²	Connector size	1
Efficiency	91.0 %	Degree of protection	IP65
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.60 Nm/A	Temperature monitoring	Pt1000 temperature sensor
Voltage constant at 20° C	102.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	1.15 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	14.6 mH	Holding brake	without holding brake
Electrical time constant	12.80 ms	Shaft end	Plain shaft
Mechanical time constant	3.15 ms	Encoder system	Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Thermal time constant	35 min		
Shaft torsional stiffness	34500 Nm/rad		
Net weight of the motor	10.7 kg		



Figure similar

MLFB-Ordering data 1FK7062-3BF71-1RG1

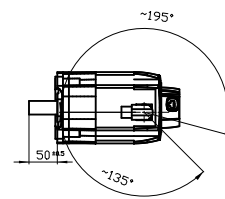
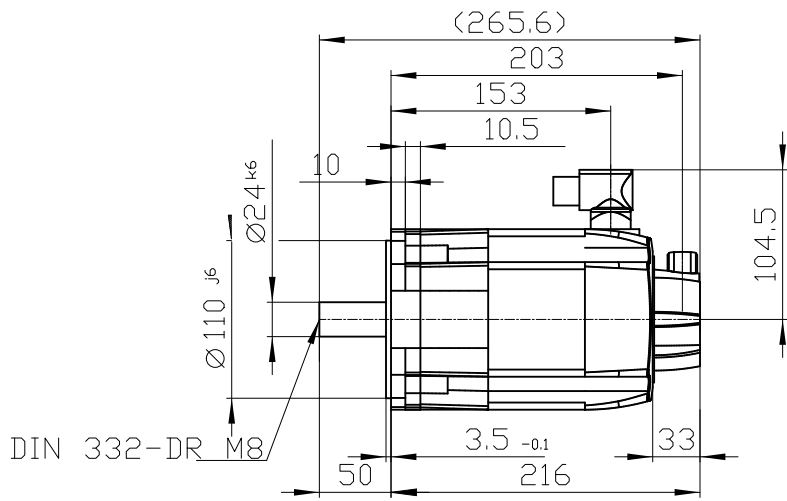
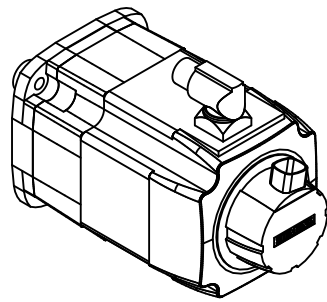
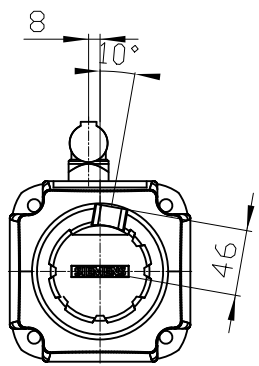
Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	1.9 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	22.10 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	5600 rpm		
Maximum torque	26.0 Nm		
Maximum current	19.2 A		

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

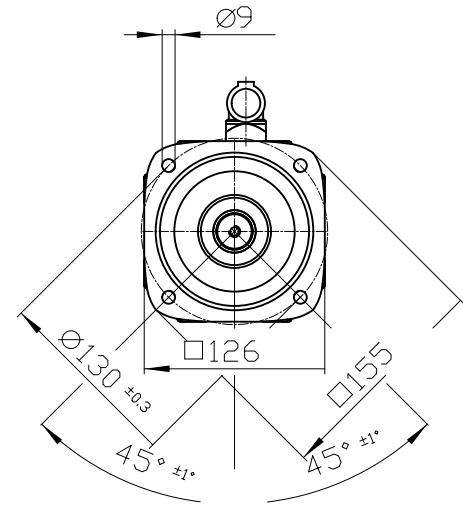
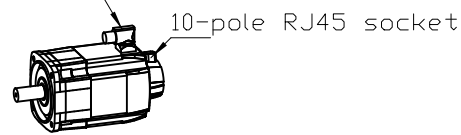
The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

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. Nos reservamos todos los derechos. Comunicado como segredo empresarial. Reservados todos os direitos.



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



	-	
	-	
Unit	mm [in]	1FK7062-3BF71-1RG1
Date	5/2/23	
SIEMENS AG		-
-		DT