

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data 1FK7042-2AC71-1QG0

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)	2.8 Nm	Shaft height	48
Rated current	1.6 A	Cooling	Natural cooling
Static torque (60 K)	2.50 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	3.00 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	1.30 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	1.61 A	Vibration severity grade	Grade A
Moment of inertia	2.900 kgcm²	Connector size	1
Efficiency	88.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.86 Nm/A	Temperature monitoring	Pt1000 temperature sensor
Voltage constant at 20° C	122.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	8.60 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	64.0 mH	Holding brake	without holding brake
Electrical time constant	7.40 ms	Shaft end	Plain shaft
Mechanical time constant	2.15 ms	Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits
Thermal time constant	30 min		
Shaft torsional stiffness	15500 Nm/rad		
Net weight of the motor	4.6 kg		



Figure similar

MLFB-Ordering data 1FK7042-2AC71-1QG0

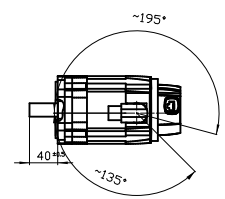
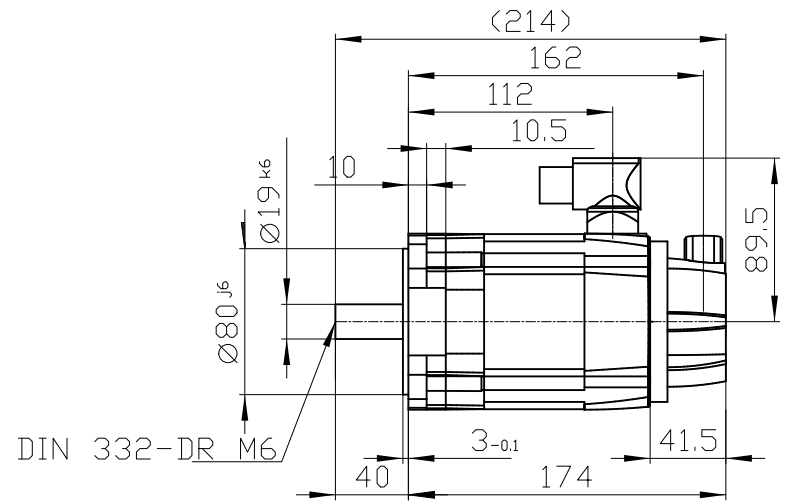
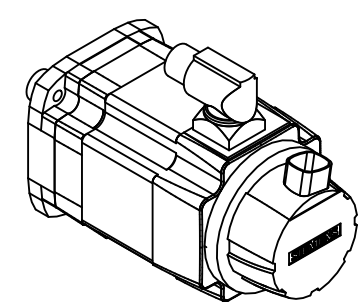
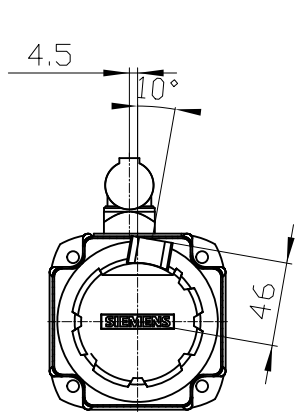
Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	3 A
Optimum power	0.6 kW	Maximum inverter current	9 A
Limiting data		Maximum torque	10.50 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	4750 rpm		
Maximum torque	10.5 Nm		
Maximum current	5.6 A		

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

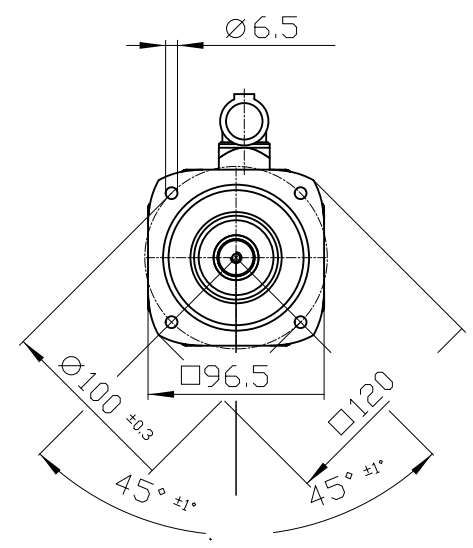
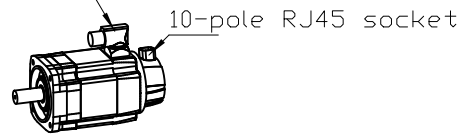
The reproduction or use of this document or its
contents is not permitted without express written authority.
Defenders will be liable for damages. All rights, including rights
created by patent grant or registration of a utility model or design,
are reserved.

Weitergabe sowie Vervielfältigung dieser Unterlage, 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.

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]	1FK7042-2AC71-1QG0	
Date	2/3/23		
SIEMENS AG			
		DT	