

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data 1FK7042-2AC71-1QH0

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	3.200 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	with 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	11400 Nm/rad		
Net weight of the motor	5.3 kg		



Figure similar

MLFB-Ordering data 1FK7042-2AC71-1QH0

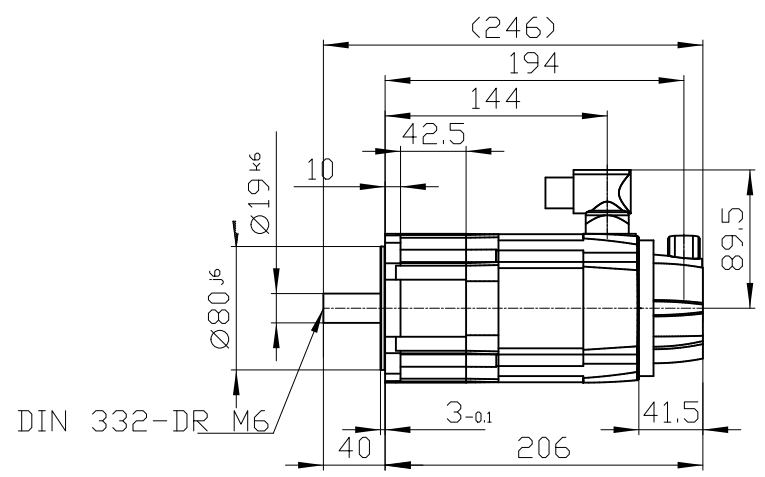
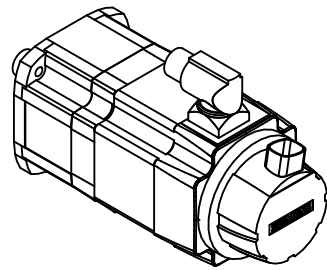
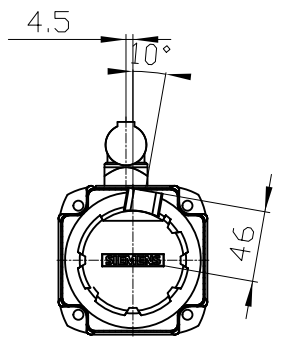
Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	3 A
Optimum power	0.6 kW	Maximum inverter current	9 A
Limiting data		Maximum torque	10.50 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	4750 rpm		
Maximum torque	10.5 Nm		
Maximum current	5.6 A		
Holding brake			
Holding brake version	Permanent-magnet brake		
Holding torque	4.0 Nm		
Power supply voltage	DC 24 V ± 10 %		
Coil current	0.5 A		
Opening time	70 ms		
Closing time	30 ms		
Highest braking work	150 J		

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

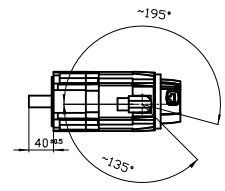
The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

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.

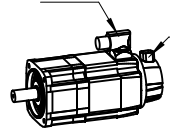
Confie a titre de secret d'entreprise. Tous droits reserves. Confido como secreto industrial. Nos reservamos todos los derechos. Comunicado como segredo empresarial. Reservados todos os direitos.



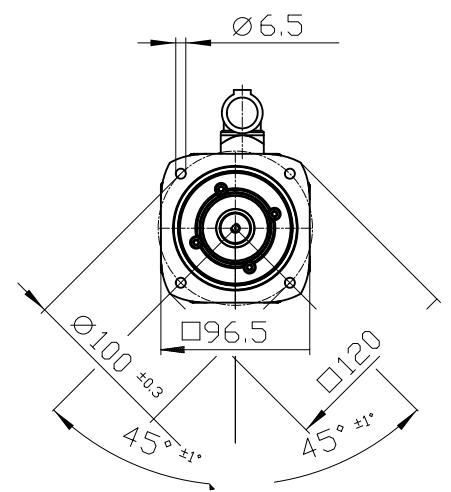
DIN 332-DR M6



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



10-pole RJ45 socket



		-
		-
Unit	mm [in]	1FK7042-2AC71-1QH0
Date	7/31/23	
SIEMENS AG		-
-		DT