

Data sheet for SIMOTICS S-1FK7



MLFB-Ordering data 1FK7043-4CK71-1RH0

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	6	Motor type	High Dynamic
Rated torque (100 K)	2.0 Nm	Shaft height	48
Rated current	3.5 A	Cooling	Natural cooling
Static torque (60 K)	2.90 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	3.50 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	4.50 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	5.60 A	Vibration severity grade	Grade A
Moment of inertia	1.360 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	0.63 Nm/A	Temperature monitoring	Pt1000 temperature sensor
Voltage constant at 20° C	39.8 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.65 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	7.4 mH	Holding brake	with holding brake
Electrical time constant	11.50 ms	Shaft end	Plain shaft
Mechanical time constant	0.49 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	40 min		
Shaft torsional stiffness	9000 Nm/rad		
Net weight of the motor	6.6 kg		



Figure similar

MLFB-Ordering data 1FK7043-4CK71-1RH0

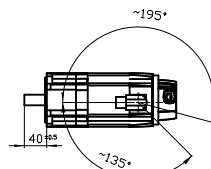
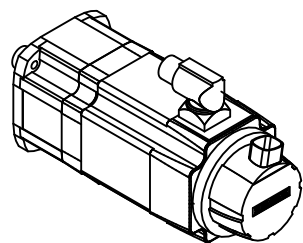
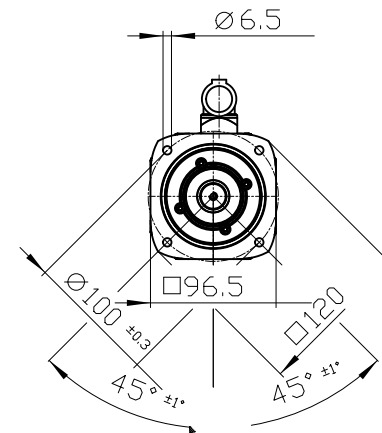
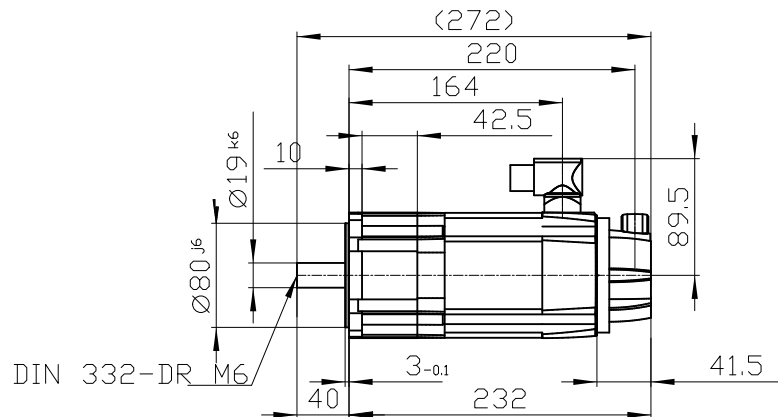
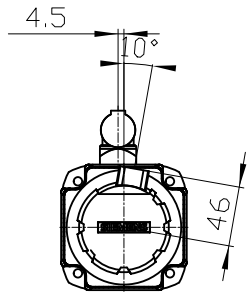
Optimum operating point		Recommended Motor Module	
Optimum speed	6000 rpm	Rated inverter current	9 A
Optimum power	1.3 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	10.00 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	9000 rpm		
Maximum torque	10.0 Nm		
Maximum current	17.0 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		

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

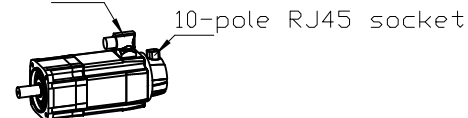
Weitergabe sowie Vervielfältigung dieser Unterlage, Verwer-
tung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht
ausdrücklich zugestanden. Zuwiderhandlungen verpflichten
zu Schadenersatz. Alle Rechte vorbehalten, insbesondere fuer
den Fall der Patenterteilung oder GK-Entragung.

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



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



	-	
	-	
Unit	mm [in]	1FK7043-4CK71-1RH0
Date	7/31/23	
SIEMENS AG		-
-		DT