

Data sheet for SIMOTICS S-1FK7



MLFB-Ordering data 1FK7105-2AC71-1RG0

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)	37.0 Nm	Shaft height	100
Rated current	16.0 A	Cooling	Natural cooling
Static torque (60 K)	40.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	48.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	16.20 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	20.00 A	Vibration severity grade	Grade A
Moment of inertia	154.000 kgcm ²	Connector size	1.5
Efficiency	93.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	2.37 Nm/A	Temperature monitoring	Pt1000 temperature sensor
Voltage constant at 20° C	157.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.17 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	4.5 mH	Holding brake	without holding brake
Electrical time constant	25.50 ms	Shaft end	Plain shaft
Mechanical time constant	1.40 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	70 min		
Shaft torsional stiffness	125000 Nm/rad		
Net weight of the motor	39.0 kg		



MLFB-Ordering data 1FK7105-2AC71-1RG0

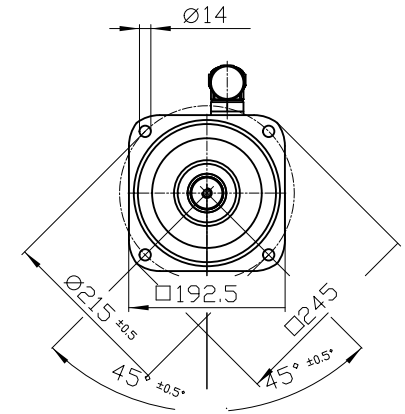
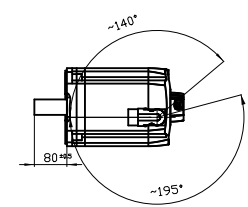
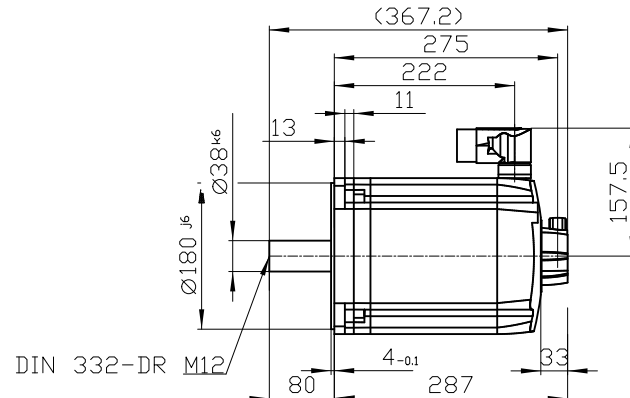
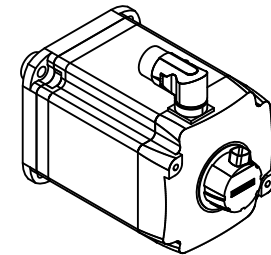
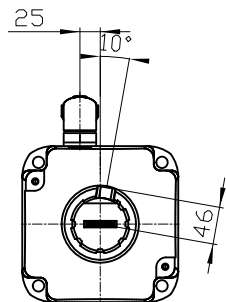
Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	30 A
Optimum power	7.7 kW	Maximum inverter current	72 A
Limiting data		Maximum torque	150.00 Nm
Max. permissible speed (mech.)	5000 rpm		
Max. permissible speed (inverter)	3650 rpm		
Maximum torque	150.0 Nm		
Maximum current	71.0 A		

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

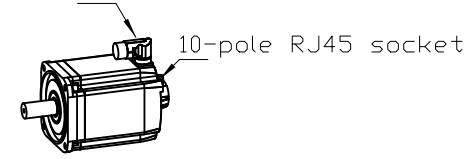
The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

Weitergabe sowie Vervielfältigung dieser Unterlage, Vervielfältigung 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 1.5 = M40;
6-pole for power and brake



		-	
Unit		mm [in]	1FK7105-2AC71-1RG0
Date		7/31/23	
SIEMENS AG		-	
-		DT	