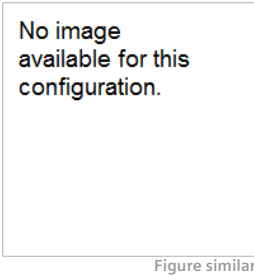


Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data1FK7105-5AF71-1EA0



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	Compact
Rated torque (100 K)	26.0 Nm	Shaft height	100
Rated current	18.0 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)	25.00 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	31.00 A	Vibration severity grade	Grade A
Moment of inertia	156.000 kgcm²	Connector size	1.5
Efficiency	94.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.57 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	100.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.07 Ω	Color of the housing	without
Rotating field inductance	1.9 mH	Holding brake	without holding brake
Electrical time constant	26.00 ms	Shaft end	Feather key
Mechanical time constant	1.40 ms	Encoder system	Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface
Thermal time constant	70 min		
Shaft torsional stiffness	125000 Nm/rad		
Net weight of the motor	39.1 kg		

MLFB-Ordering data 1FK7105-5AF71-1EA0

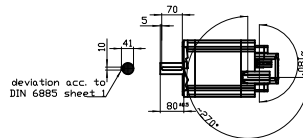
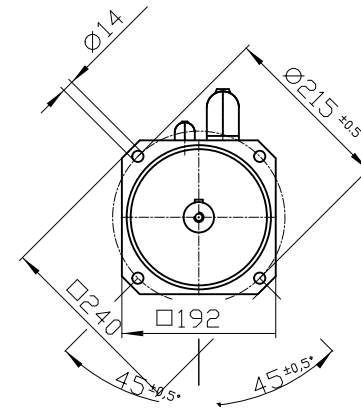
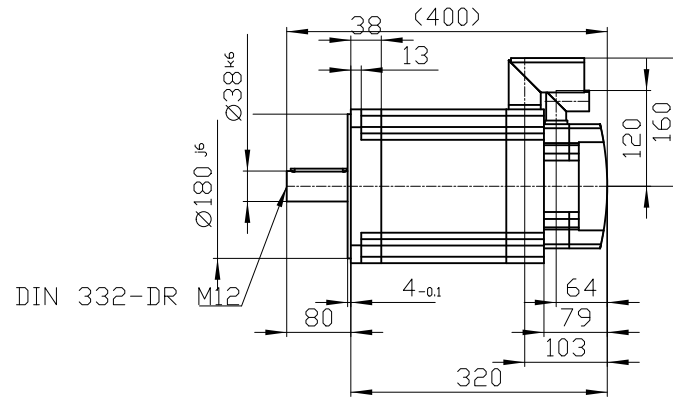
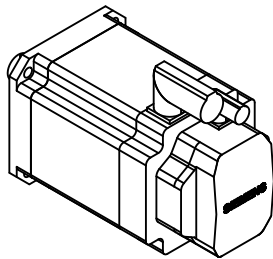
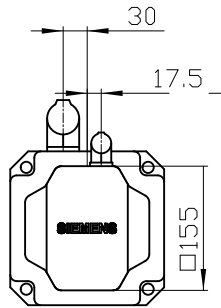
Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	30 A
Optimum power	8.2 kW	Maximum inverter current	56 A
Limiting data		Maximum torque	87.00 Nm
Max. permissible speed (mech.)	5000 rpm		
Max. permissible speed (inverter)	5700 rpm		
Maximum torque	150.0 Nm		
Maximum current	109.0 A		

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

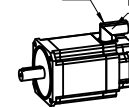
Weitergabe sowie Vervielfältigung dieser Unterlage. Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere fuer den Fall der Patenterteilung oder Gk-Entragung.

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 1.5 = M40;
6-pole for power and brake



Connector size M23, 17-pole

		-
		-
Unit	mm [in]	1FK7105-5AF 71-1EA0
Date	7/28/23	
SIEMENS AG		-
-		DT