

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data 1FK7034-5AK71-1HG0



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

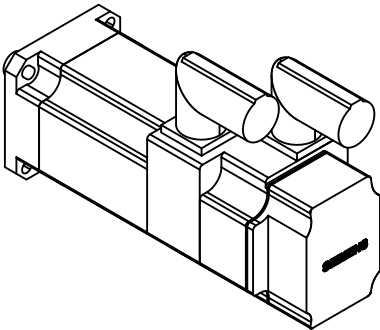
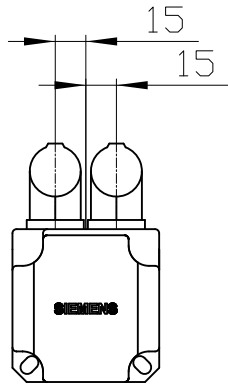
Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	6	Motor type	Compact
Rated torque (100 K)	1.0 Nm	Shaft height	36
Rated current	1.3 A	Cooling	Natural cooling
Static torque (60 K)	1.35 Nm	Radial runout tolerance	0.035 mm
Static torque (100 K)	1.60 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	1.60 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	1.90 A	Vibration severity grade	Grade A
Moment of inertia	0.900 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	0.86 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	55.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	4.50 Ω	Color of the housing	without
Rotating field inductance	16.5 mH	Holding brake	without holding brake
Electrical time constant	3.70 ms	Shaft end	Plain shaft
Mechanical time constant	1.60 ms	Encoder system	Encoder AM512S/R: absolute encoder 512 S/R, 4096 revolutions multi-turn, with EnDat interface
Thermal time constant	30 min		
Shaft torsional stiffness	5500 Nm/rad		
Net weight of the motor	3.7 kg		

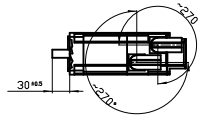
MLFB-Ordering data 1FK7034-5AK71-1HG0

Optimum operating point		Recommended Motor Module	
Optimum speed	6000 rpm	Rated inverter current	3 A
Optimum power	0.6 kW	Maximum inverter current	6 A
Limiting data		Maximum torque	4.90 Nm
Max. permissible speed (mech.)	10000 rpm		
Max. permissible speed (inverter)	10500 rpm		
Maximum torque	6.5 Nm		
Maximum current	8.0 A		

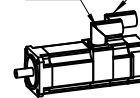
Copyright© Siemens AG 2005
Cod-drawing do not make any manual changes
The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.
Weitergabe sowie Vervielfältigung dieser Unterlage, 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.
Confide 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



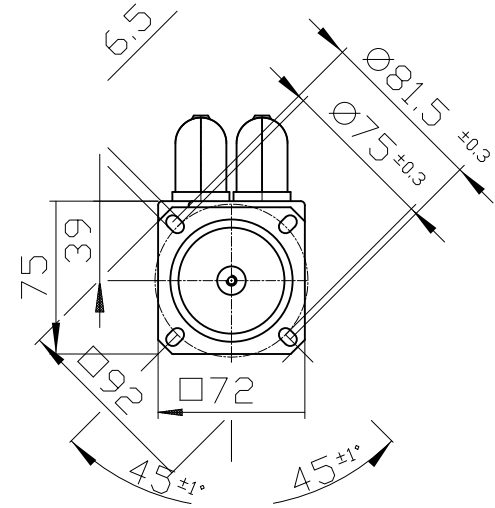
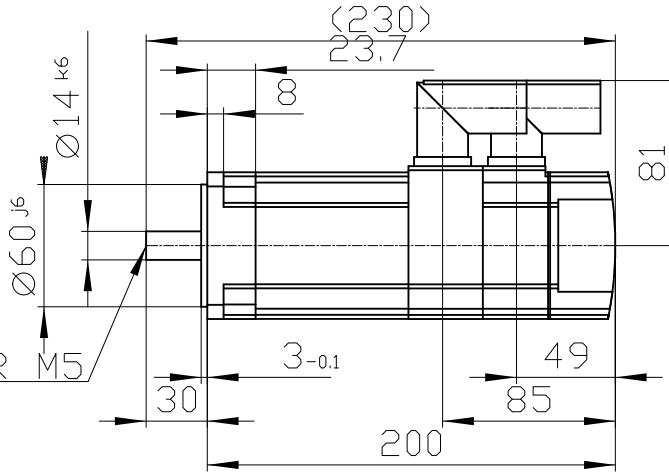
DIN 332-DR M5



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



Connector size M23, 17-pole



		-
		-
Unit	mm [in]	1FK7034-5AK71-1HG0
Date	2/23/23	
SIEMENS AG		-
-		DT