

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data 1FK7060-2AF71-1CH1

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

Item no. :
Consignment no. :
Project :

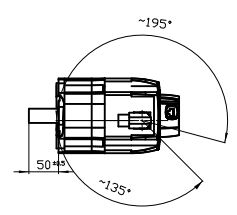
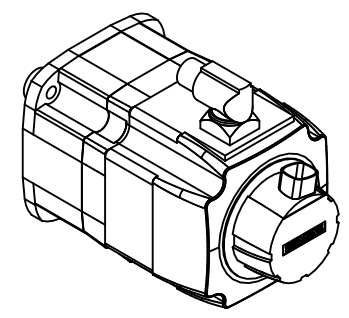
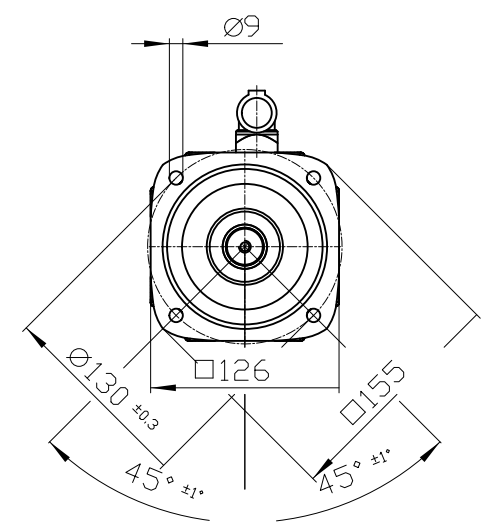
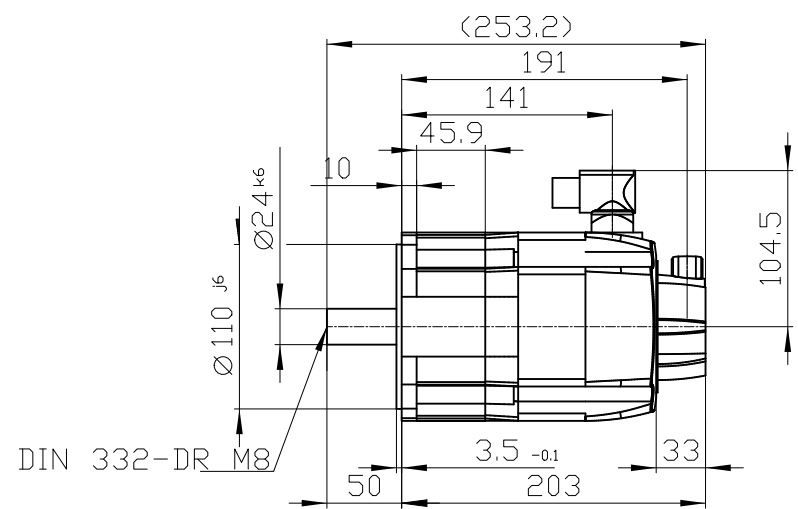
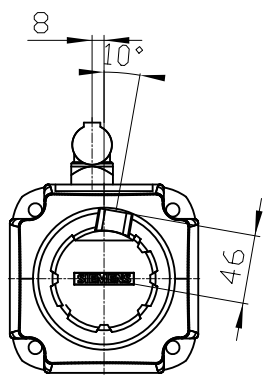
Engineering data		Mechanical data	
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	4.7 Nm	Shaft height	63
Rated current	3.7 A	Cooling	Natural cooling
Static torque (60 K)	5.00 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	6.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	3.60 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.45 A	Vibration severity grade	Grade A
Moment of inertia	8.700 kgcm²	Connector size	1
Efficiency	90.0 %	Degree of protection	IP65
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.33 Nm/A	Temperature monitoring	Pt1000 temperature sensor
Voltage constant at 20° C	85.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	1.35 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	15.2 mH	Holding brake	with holding brake
Electrical time constant	11.30 ms	Shaft end	Plain shaft
Mechanical time constant	1.71 ms	Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Thermal time constant	30 min		
Shaft torsional stiffness	28500 Nm/rad		
Net weight of the motor	8.5 kg		



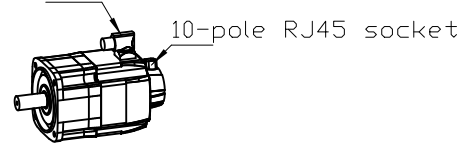
Figure similar

MLFB-Ordering data 1FK7060-2AF71-1CH1

Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	1.5 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	18.00 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	6700 rpm		
Maximum torque	18.0 Nm		
Maximum current	15.0 A		
Holding brake			
Holding brake version	Permanent-magnet brake		
Holding torque	13.0 Nm		
Power supply voltage	DC 24 V ± 10 %		
Coil current	0.8 A		
Opening time	100 ms		
Closing time	50 ms		
Highest braking work	380 J		



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



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, 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.

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

		-
		-
Unit	mm [in]	1FK7060-2AF 71-1CH1
Date	3/20/23	
SIEMENS AG		-
-		DT