

MLFB-Ordering data1FK7085-7AF71-1FH5

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	High Dynamic
Rated torque (100 K)	6.5 Nm	Shaft height	80
Rated current	7.0 A	Cooling	Natural cooling
Static torque (60 K)	17.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	22.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	16.50 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	22.50 A	Vibration severity grade	Grade A
Moment of inertia	25.000 kgcm²	Connector size	1.5
Efficiency	92.0 %	Degree of protection	IP65 and DE flange IP67
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	0.96 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	63.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.12 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	3.3 mH	Holding brake	with holding brake
Electrical time constant	27.50 ms	Shaft end	Plain shaft
Mechanical time constant	0.90 ms	Encoder system	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Thermal time constant	65 min		
Shaft torsional stiffness	83000 Nm/rad		
Net weight of the motor	25.7 kg		

MLFB-Ordering data 1FK7085-7AF71-1FH5

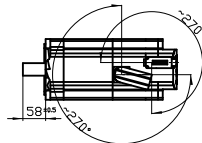
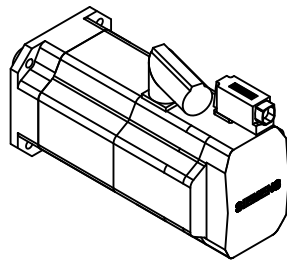
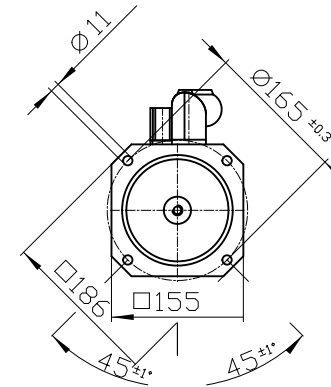
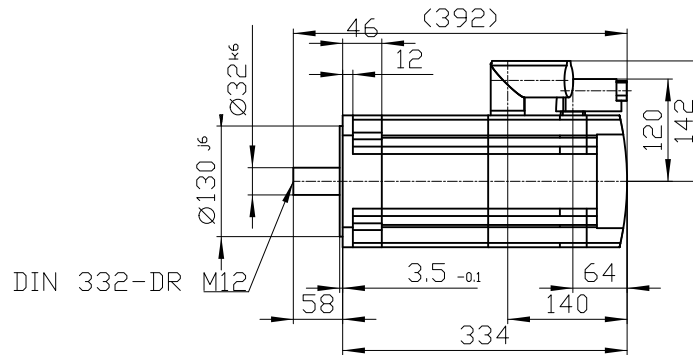
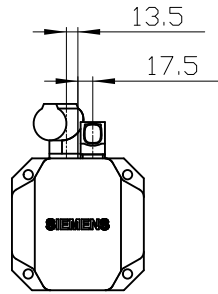
Optimum operating point		Recommended Motor Module	
Optimum speed	2500 rpm	Rated inverter current	30 A
Optimum power	3.1 kW	Maximum inverter current	56 A
Limiting data		Maximum torque	52.60 Nm
Max. permissible speed (mech.)	6000 rpm		
Max. permissible speed (inverter)	9100 rpm		
Maximum torque	65.0 Nm		
Maximum current	80.0 A		
Holding brake			
Holding brake version	Permanent-magnet brake		
Holding torque	22.0 Nm		
Power supply voltage	DC 24 V ± 10 %		
Coil current	0.9 A		
Opening time	200 ms		
Closing time	60 ms		
Highest braking work	1400 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

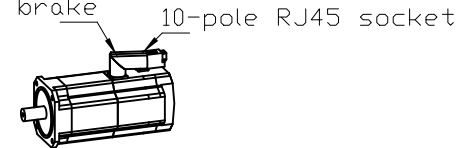
Weitergabe sowie Vervielfältigung dieser Unterlage. Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere fuer den Fall der Patenterteilung oder GK-Entragung.

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



10-pole RJ45 socket

	-	
	-	
Unit	mm [in]	1FK7085-7AF71-1FH5
Date	7/10/23	
SIEMENS AG		-
-		DT