

Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7062-1AK71-1CH1



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	10	Design of the motor type	Compact core type
Rated torque (100 K)	3.3 Nm	Shaft height	63 mm
Rated current	5.4 A	Cooling	Natural cooling
Static torque (60 K)	5.00 Nm	Radial runout tolerance	N
Static torque (100 K)	6.0 Nm	Vibration severity grade	Grade A
Stall current (60 K)	6.9 A	Degree of protection	IP65
Stall current (100 K)	8.4 A	Design acc. to Code I	IM B5 (compatible with 1FT6)
Rotor moment of inertia	0.0010200 kgm ²	Temperature monitoring	Pt1000 temperature sensor
Efficiency	90.0 %	Color of the housing	Standard (pearl dark gray similar to RAL 9023)
Physical constants		Holding brake version	Permanent-magnet brake
Torque constant	0.71 Nm/A	Shaft end type	Plain shaft
Voltage constant at 20° C	45.0 V/1000*min ⁻¹	Sensor design	Encoder AM24DQI: Absolute encoder 24 bit (resolution 16777216, encoder-internal 2048 S/R) + 12 bit Multiturn (traversing range 4096 revolutions) - with signal connection RJ45
Winding resistance at 20° C	0.34 Ω	Electrical connectors	Connector turnable
Rotating field inductance	3.4 mH	Connector size	1
Electrical time constant	10.00 ms		
Mechanical time constant	1.50 ms		
Thermal time constant	25 min		
Shaft torsional stiffness	28000 Nm/rad		
Net weight of the motor	8.8 kg		



Figure similar

Optimum operating point		Recommended Motor Module	
Optimum speed	5500 rpm	Rated inverter current	9 A
Optimum power	2.1 kW	Maximum inverter current	18 A
Limiting data			
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	8000 rpm		
Maximum torque	24.0 Nm		
Maximum current	47.0 A		