

## Data sheet for SIMOTICS S-1FT7



Figure similar

### MLFB-Ordering data

1FT7062-5AF71-1LK5-Z  
Q12+Q13

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

Item no. :  
Consignment no. :  
Project :

Engineering data		Mechanical data	
Rated speed	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	10	Design of the motor type	Compact
Rated torque (100 K)	5.4 Nm	Shaft height	63 mm
Rated current	3.9 A	Cooling	Natural cooling
Static torque (60 K)	5.00 Nm	Radial runout tolerance	R
Static torque (100 K)	6.0 Nm	Vibration severity grade	Grade R
Stall current (60 K)	3.4 A	Degree of protection	IP67
Stall current (100 K)	3.9 A	Design acc. to Code I	IM B5 (compatible with 1FT6)
Rotor moment of inertia	0.0007360 kgm <sup>2</sup>	Temperature monitoring	Pt1000 temperature sensor
Efficiency	91.0 %	Color of the housing	
<b>Physical constants</b>		Holding brake version	no value
Torque constant	1.49 Nm/A	Shaft end type	Plain shaft
Voltage constant at 20° C	94.5 V/1000*min <sup>-1</sup>	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 via M17 rotary plug
Winding resistance at 20° C	1.57 Ω	Electrical connectors	Connector turnable
Rotating field inductance	15.2 mH	Connector size	1
Electrical time constant	10.00 ms		
Mechanical time constant	1.60 ms		
Thermal time constant	25 min		
Shaft torsional stiffness	28500 Nm/rad		
Net weight of the motor	7.1 kg		

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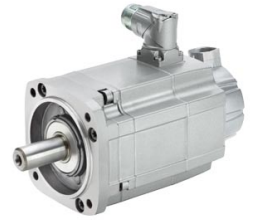


Figure similar

Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	1.7 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	18.70 Nm
Max. permissible speed (mech.)	9000 rpm	Special design	
Max. permissible speed (inverter)	6100 rpm	Q12	Sealing air connection
Maximum torque	24.0 Nm	Q13	Customized additional sealing
Maximum current	22.0 A		