

## Data sheet for SIMOTICS S-1FT7



Figure similar

### MLFB-Ordering data

**1FT7064-5AF71-1BA1-Z  
N05**

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)	7.6 Nm	Shaft height	63 mm
Rated current	5.2 A	Cooling	Natural cooling
Static torque (60 K)	7.70 Nm	Radial runout tolerance	N
Static torque (100 K)	9.0 Nm	Vibration severity grade	Grade A
Stall current (60 K)	4.9 A	Degree of protection	IP65
Stall current (100 K)	5.7 A	Design acc. to Code I	IM B5 (compatible with 1FT6)
Rotor moment of inertia	0.0011900 kgm <sup>2</sup>	Temperature monitoring	Pt1000 temperature sensor
Efficiency	93.0 %	Color of the housing	
Physical constants		Holding brake version	no value
Torque constant	1.57 Nm/A	Shaft end type	Fitted key and keyway
Voltage constant at 20° C	100.0 V/1000*min <sup>-1</sup>	Sensor design	Encoder AS24DQI: Absolut encoder Singleturn 24 bit - with signal connection RJ45
Winding resistance at 20° C	0.92 Ω	Electrical connectors	Connector turnable
Rotating field inductance	10.0 mH	Connector size	1
Electrical time constant	11.00 ms		
Mechanical time constant	1.30 ms		
Thermal time constant	30 min		
Shaft torsional stiffness	26000 Nm/rad		
Net weight of the motor	9.7 kg		

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Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	9 A
Optimum power	2.4 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	34.70 Nm
Max. permissible speed (mech.)	9000 rpm	Special design	
Max. permissible speed (inverter)	5700 rpm	N05	Non-standard shaft extension (dimensions as for 1FT5 motors)
Maximum torque	36.0 Nm		
Maximum current	29.0 A		