

## Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7108-5AF71-1FH0

No image available for this configuration.

Figure similar

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

Item no. :  
Consignment no. :  
Project :

Engineering data	
Rated speed	3000 rpm
Number of poles	10
Rated torque (100 K)	20.0 Nm
Rated current	12.0 A
Static torque (60 K)	58.00 Nm
Static torque (100 K)	70.0 Nm
Stall current (60 K)	28.0 A
Stall current (100 K)	36.0 A
Rotor moment of inertia	0.0276000 kgm <sup>2</sup>
Efficiency	93.0 %

Physical constants	
Torque constant	1.94 Nm/A
Voltage constant at 20° C	127.0 V/1000*min <sup>-1</sup>
Winding resistance at 20° C	0.07 Ω
Rotating field inductance	1.7 mH
Electrical time constant	26.00 ms
Mechanical time constant	1.30 ms
Thermal time constant	95 min
Shaft torsional stiffness	96000 Nm/rad
Net weight of the motor	65.1 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Design of the motor type	Compact
Shaft height	100 mm
Cooling	Natural cooling
Radial runout tolerance	N
Vibration severity grade	Grade A
Degree of protection	IP64
Design acc. to Code I	IM B5 (compatible with 1FT6)
Temperature monitoring	Pt1000 temperature sensor
Color of the housing	Pearl dark grey RAL 9023
Holding brake version	Permanent-magnet brake
Shaft end type	Plain shaft
Sensor design	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Electrical connectors	Connector turnable
Connector size	1.5

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Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	45 A
Optimum power	8.2 kW	Maximum inverter current	85 A
<b>Limiting data</b>		Maximum torque	150.00 Nm
Max. permissible speed (mech.)	6000 rpm		
Max. permissible speed (inverter)	4500 rpm		
Maximum torque	280.0 Nm		
Maximum current	165.0 A		