

Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7068-5AF71-1FG0

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)	10.9 Nm
Rated current	6.7 A
Static torque (60 K)	13.00 Nm
Static torque (100 K)	15.0 Nm
Stall current (60 K)	7.3 A
Stall current (100 K)	8.3 A
Rotor moment of inertia	0.0023200 kgm ²
Efficiency	92.0 %

Physical constants	
Torque constant	1.78 Nm/A
Voltage constant at 20° C	113.0 V/1000*min ⁻¹
Winding resistance at 20° C	0.54 Ω
Rotating field inductance	6.4 mH
Electrical time constant	12.00 ms
Mechanical time constant	1.20 ms
Thermal time constant	45 min
Shaft torsional stiffness	21500 Nm/rad
Net weight of the motor	16.3 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Design of the motor type	Compact
Shaft height	63 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	no value
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

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Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	9 A
Optimum power	3.4 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	46.00 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	5100 rpm		
Maximum torque	63.0 Nm		
Maximum current	43.0 A		