

Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7084-5AC70-1DE1

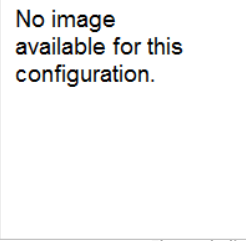


Figure similar

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

Item no. :
 Consignment no. :
 Project :

Engineering data	
Rated speed	2000 rpm
Number of poles	10
Rated torque (100 K)	16.9 Nm
Rated current	8.4 A
Static torque (60 K)	16.80 Nm
Static torque (100 K)	20.0 Nm
Stall current (60 K)	7.6 A
Stall current (100 K)	9.0 A
Rotor moment of inertia	0.0060400 kgm ²
Efficiency	93.0 %

Physical constants	
Torque constant	2.21 Nm/A
Voltage constant at 20° C	141.0 V/1000*min ⁻¹
Winding resistance at 20° C	0.53 Ω
Rotating field inductance	8.5 mH
Electrical time constant	16.00 ms
Mechanical time constant	1.50 ms
Thermal time constant	55 min
Shaft torsional stiffness	65000 Nm/rad
Net weight of the motor	25.1 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Design of the motor type	Compact
Shaft height	80 mm
Cooling	Natural cooling
Radial runout tolerance	R
Vibration severity grade	Grade A
Degree of protection	IP65
Design acc. to Code I	IM B5 (new flange design)
Temperature monitoring	Pt1000 temperature sensor
Color of the housing	Pearl dark grey RAL 9023
Holding brake version	Permanent-magnet brake
Shaft end type	Fitted key and keyway
Sensor design	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits
Electrical connectors	Connector turnable
Connector size	1

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No image available for this configuration.

Figure similar

Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	9 A
Optimum power	3.5 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	51.00 Nm
		Max. permissible speed (mech.)	8000 rpm
Max. permissible speed (inverter)	4000 rpm		
Maximum torque	81.0 Nm		
Maximum current	46.0 A		