

Data sheet for SIMOTICS S-1FT7



Figure similar

Ordering data

1FT7086-1AF71-1BH1

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

Item no. :
Consignment no. :
Project :

Engineering data		Physical constants	
Rated speed	3000 rpm	Torque constant	1.81 Nm/A
Number of poles	10	Voltage constant at 20° C	114.0 V/1000*min ⁻¹
Rated torque (100 K)	18.0 Nm	Winding resistance at 20° C	0.23 Ω
Rated current	11.0 A	Rotating field inductance	4.0 mH
Static torque (60 K)	23.00 Nm	Electrical time constant	17.40 ms
Static torque (100 K)	28.0 Nm	Mechanical time constant	1.30 ms
Stall current (60 K)	12.5 A	Thermal time constant	60 min
Stall current (100 K)	15.5 A	Shaft torsional stiffness	57000 Nm/rad
Rotor moment of inertia	0.0079000 kgm ²	Net weight of the motor	31.8 kg
Efficiency	93.0 %		

Mechanical data		Optimum operating point	
Design of the motor type	Compact core type	Optimum speed	3000 rpm
Shaft height	80 mm	Optimum power	5.7 kW
Sensor design	Encoder AS24DQ1: absolute encoder single-turn 24 bits	Recommended Motor Module	
Cooling	Natural cooling		
Holding brake version	Permanent-magnet brake	Maximum inverter current	36 A
Shaft end type	Plain shaft		
Radial runout tolerance	N		
Vibration severity grade	Grade A		
Degree of protection	IP65		
Design acc. to Code I	IM B5 (compatible with 1FT6)		
Electrical connectors	Connector turnable		
Color of the housing	Pearl dark grey RAL 9023		
Temperature monitoring	KTY84 temperature sensor in the stator winding		