

Data sheet for SIMOTICS S-1FT7

Article No. : 1FT7134-5SF71-5BG0



Figure similar

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

Item no. :
Consignment no. :
Project :

Engineering data	
Rated speed	3,000 rpm
Number of poles	8
Rated torque (100 K)	145.0 Nm
Rated current	91.00 A
Static torque (60 K)	160.0 Nm
Static torque (100 K)	190.0 Nm
Stall current (60 K)	97.00 A
Stall current (100 K)	115.00 A
Rotor moment of inertia	604.00 kgcm ²
Efficiency	96.0 %

Physical constants	
Torque constant	1.61 Nm/A
Voltage constant at 20° C	110.0 V/1000*min ⁻¹
Winding resistance at 20° C	0.03 Ω
Rotary field inductance	0.8 mH
Electrical time constant	32.00 ms
Mechanical time constant	1.70 ms
Thermal time constant	22 min
Shaft torsional stiffness	323,000 Nm/rad
Net weight of the motor	97.0 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	132
Cooling	Forced ventilation
Radial runout tolerance	0.050 mm
Concentricity tolerance	0.125 mm
Axial runout tolerance	0.125 mm
Vibration severity grade	Grade A
Degree of protection	IP64
Design acc. to Code I	IM B5 (compatible with 1FT6)
Temperature monitoring	Pt1000 temperature sensor
Shaft end type	Plain shaft
Sensor design	Encoder AS24DQI: Absolut encoder Singleturn 24 bit - with signal connection RJ45
Electrical connection	Terminal box transverse right

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	45.5 kW

Limiting data	
Max. permissible speed (mech.)	3,600 rpm
Max. permissible speed (inverter)	3,600 rpm
Maximum torque	410.0 Nm
Maximum current	295.00 A

Recommended Motor Module	
Rated inverter current	132.00 A
Maximum inverter current	210.00 A
Maximum torque	315.0 Nm