

## Data sheet for SIMOTICS S-1FT7

Article No. : 1FT7134-5SC71-7BG4



Figure similar

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

Item no. :  
Consignment no. :  
Project :

### Engineering data

Rated speed	2,000 rpm
Number of poles	8
Rated torque (100 K)	160.0 Nm
Rated current	73.00 A
Static torque (60 K)	160.0 Nm
Static torque (100 K)	190.0 Nm
Stall current (60 K)	70.00 A
Stall current (100 K)	85.00 A
Rotor moment of inertia	604.00 kgcm <sup>2</sup>
Efficiency	95.0 %

### Physical constants

Torque constant	2.25 Nm/A
Voltage constant at 20° C	154.0 V/1000*min <sup>-1</sup>
Winding resistance at 20° C	0.05 Ω
Rotary field inductance	1.6 mH
Electrical time constant	32.00 ms
Mechanical time constant	1.80 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 R
Degree of protection	IP65
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 axial NDE

### Optimum operating point

Optimum speed	2,000 rpm
Optimum power	33.5 kW

### Limiting data

Max. permissible speed (mech.)	3,600 rpm
Max. permissible speed (inverter)	3,600 rpm
Maximum torque	410.0 Nm
Maximum current	210.00 A

### Recommended Motor Module

Rated inverter current	85.00 A
Maximum inverter current	141.00 A
Maximum torque	300.0 Nm