

Data sheet for SIMOTICS S-1FT7



Figure similar

Ordering data

1FT7105-1AC71-1FH1

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

Item no. :
Consignment no. :
Project :

Engineering data		Physical constants	
Rated speed	2000 rpm	Torque constant	2.78 Nm/A
Number of poles	10	Voltage constant at 20° C	173.0 V/1000*min ⁻¹
Rated torque (100 K)	38.0 Nm	Winding resistance at 20° C	0.15 Ω
Rated current	15.0 A	Rotating field inductance	4.3 mH
Static torque (60 K)	41.00 Nm	Electrical time constant	28.70 ms
Static torque (100 K)	50.0 Nm	Mechanical time constant	1.00 ms
Stall current (60 K)	15.0 A	Thermal time constant	80 min
Stall current (100 K)	18.0 A	Shaft torsional stiffness	107000 Nm/rad
Rotor moment of inertia	0.0206000 kgm ²	Net weight of the motor	50.4 kg
Efficiency	93.0 %		

Mechanical data		Optimum operating point	
Design of the motor type	Compact core type	Optimum speed	2000 rpm
Shaft height	100 mm	Optimum power	8.0 kW
Sensor design	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)		
Cooling	Natural cooling		
Holding brake type	Permanent-magnet brake		
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		

Recommended Motor Module

Rated inverter current	18 A
Maximum inverter current	36 A