

Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7132-5AF71-1LH2

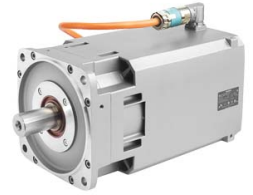


Figure similar

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

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Design of the motor type	Compact
Rated torque (100 K)	27.0 Nm	Shaft height	132 mm
Rated current	14.0 A	Cooling	Natural cooling
Static torque (60 K)	75.00 Nm	Radial runout tolerance	N
Static torque (100 K)	90.0 Nm	Vibration severity grade	Grade A
Stall current (60 K)	36.0 A	Degree of protection	IP67
Stall current (100 K)	43.5 A	Design acc. to Code I	IM B5 (compatible with 1FT6)
Rotor moment of inertia	0.0512000 kgm ²	Temperature monitoring	Pt1000 temperature sensor
Efficiency	94.0 %	Color of the housing	Standard (pearl dark gray similar to RAL 9023)
Physical constants		Holding brake version	Permanent-magnet brake
Torque constant	2.08 Nm/A	Shaft end type	Plain shaft
Voltage constant at 20° C	137.0 V/1000*min ⁻¹	Sensor design	Encoder AM24DQI: Absolute encoder 24 bit (resolution 16777216, encoder-internal 2048 S/R) + 12 bit Multiturn (traversing range 4096 revolutions) - with signal connection via M17 rotary plug
Winding resistance at 20° C	0.06 Ω	Electrical connectors	Transverse facing to right site
Rotating field inductance	2.0 mH	Connector size	3
Electrical time constant	32.00 ms		
Mechanical time constant	2.00 ms		
Thermal time constant	75 min		
Shaft torsional stiffness	231000 Nm/rad		
Net weight of the motor	88.0 kg		

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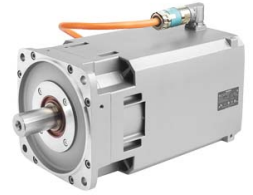


Figure similar

Optimum operating point		Recommended Motor Module	
Optimum speed	2150 rpm	Rated inverter current	45 A
Optimum power	12.0 kW	Maximum inverter current	85 A
Limiting data		Maximum torque	168.00 Nm
Max. permissible speed (mech.)	3600 rpm		
Max. permissible speed (inverter)	3600 rpm		
Maximum torque	290.0 Nm		
Maximum current	172.0 A		