

## Data sheet for SIMOTICS S-1FT7



Figure similar

MLFB-Ordering data

1FT7105-5SF71-3CG1-Z  
J05

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	10	Design of the motor type	Compact																				
Rated torque (100 K)	48.0 Nm	Shaft height	100 mm																				
Rated current	35.0 A	Cooling	Forced ventilation																				
Static torque (60 K)	51.00 Nm	Radial runout tolerance	N																				
Static torque (100 K)	65.0 Nm	Vibration severity grade	Grade A																				
Stall current (60 K)	36.0 A	Connector size	3																				
Stall current (100 K)	45.0 A	Degree of protection	IP65																				
Rotor moment of inertia	0.0200200 kgm <sup>2</sup>	Design acc. to Code I	IM B5 (compatible with 1FT6)																				
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		Physical constants																					
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Net weight of the motor	50.0 kg																						
		Electrical connectors	Axial NDE																				
		Color of the housing																					
		Holding brake version	no value																				
		Shaft end type	Plain shaft																				
		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 RJ45																				
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### Gearbox data

Gearbox type	Planetary gearbox	Moment of inertia of gearbox	0.0022200 kgm <sup>2</sup>
Designation	SP 180S-MF1	Radial output shaft loading, max.	14700 N
Gearbox ratio	7	Axial output shaft load, max.	14150 N
Motor speed S3-60 %	3500 rpm	Efficiency of gearbox	0.97
Motor speed S1	2300 rpm	Torsional backlash	3 '
Output torque S1	750 Nm	Gearbox weight	34.00 kg
Rated output torque at duty type S3-60 %	1100 Nm		

### Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	6000 rpm
Maximum torque	200.0 Nm
Maximum current	158.0 A

### Special design

J05 Mounting of SP+ planetary gearbox