

## Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7138-5AB71-1BA0

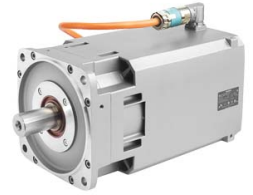


Figure similar

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

Item no. :  
Consignment no. :  
Project :

Engineering data		Mechanical data	
Rated speed	1500 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Design of the motor type	Compact
Rated torque (100 K)	108.0 Nm	Shaft height	132 mm
Rated current	28.5 A	Cooling	Natural cooling
Static torque (60 K)	140.00 Nm	Radial runout tolerance	N
Static torque (100 K)	170.0 Nm	Vibration severity grade	Grade A
Stall current (60 K)	35.5 A	Degree of protection	IP64
Stall current (100 K)	43.0 A	Design acc. to Code I	IM B5 (compatible with 1FT6)
Rotor moment of inertia	0.0896000 kgm <sup>2</sup>	Temperature monitoring	Pt1000 temperature sensor
Efficiency	94.0 %	Color of the housing	Standard (pearl dark gray similar to RAL 9023)
<b>Physical constants</b>		Holding brake version	no value
Torque constant	3.95 Nm/A	Shaft end type	Fitted key and keyway
Voltage constant at 20° C	260.0 V/1000*min <sup>-1</sup>	Sensor design	Encoder AS24DQI: Absolut encoder Singleturn 24 bit - with signal connection RJ45
Winding resistance at 20° C	0.08 Ω	Electrical connectors	Transverse facing to right site
Rotating field inductance	3.1 mH	Connector size	3
Electrical time constant	39.00 ms		
Mechanical time constant	1.40 ms		
Thermal time constant	100 min		
Shaft torsional stiffness	201000 Nm/rad		
Net weight of the motor	124.0 kg		

## Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7138-5AB71-1BA0

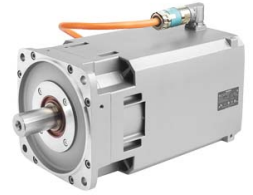


Figure similar

Optimum operating point		Recommended Motor Module	
Optimum speed	1500 rpm	Rated inverter current	45 A
Optimum power	17.0 kW	Maximum inverter current	85 A
Limiting data		Maximum torque	320.00 Nm
Max. permissible speed (mech.)	3600 rpm		
Max. permissible speed (inverter)	2200 rpm		
Maximum torque	590.0 Nm		
Maximum current	183.0 A		