

## Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data

1FK7063-2AF74-1GA0-Z  
N05

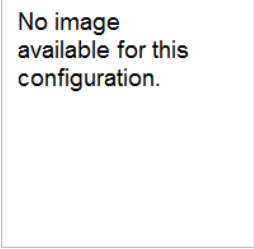


Figure similar

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

Item no. :  
Consignment no. :  
Project :

### Engineering data

Rated speed (100 K)	3000 rpm
Number of poles	8
Rated torque (100 K)	7.3 Nm
Rated current	5.6 A
Static torque (60 K)	9.10 Nm
Static torque (100 K)	11.00 Nm
Stall current (60 K)	6.50 A
Stall current (100 K)	8.00 A
Moment of inertia	14.700 kgcm <sup>2</sup>
Efficiency	91.0 %

### Physical constants

Torque constant	1.37 Nm/A
Voltage constant at 20° C	90.5 V/1000*min <sup>-1</sup>
Winding resistance at 20° C	0.64 Ω
Rotating field inductance	8.5 mH
Electrical time constant	13.40 ms
Mechanical time constant	1.48 ms
Thermal time constant	40 min
Shaft torsional stiffness	34000 Nm/rad
Net weight of the motor	11.1 kg

### Mechanical data

Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	63
Cooling	Natural cooling
Radial runout tolerance	0.040 mm
Concentricity tolerance	0.10 mm
Axial runout tolerance	0.10 mm
Vibration severity grade	Grade A
Connector size	1
Degree of protection	IP64
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	Pt1000 temperature sensor
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	Standard (Anthracite RAL 7016)
Holding brake	without holding brake
Shaft end	Feather key
Encoder system	Encoder AM32S/R: absolute encoder 32 S/R, 4096 revolutions multi-turn, with EnDat interface

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### Optimum operating point

Optimum speed 3000 rpm

Optimum power 2.3 kW

### Limiting data

Max. permissible speed (mech.) 7200 rpm

Max. permissible speed (inverter) 6400 rpm

Maximum torque 35.0 Nm

Maximum current 28.0 A

### Recommended Motor Module

Rated inverter current 9 A

Maximum inverter current 27 A

Maximum torque 34.00 Nm

### Special design

N05 Non-standard shaft end (dimensions as for 1FT5 motors)