SIEMENS

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data **1FK7063-2AC71-1CH0-Z**
M39

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

Item no. :
Consignment no. :
Project :

Engineering data

Rated speed (100 K)	2000 rpm
Number of poles	8
Rated torque (100 K)	8.9 Nm
Rated current	4.4 A
Static torque (60 K)	9.10 Nm
Static torque (100 K)	11.0 Nm
Stall current (60 K)	4.30 A
Stall current (100 K)	5.30 A
Moment of inertia	15.700 kgcm²
Efficiency	91.0 %

Physical constants

Torque constant	2.08 Nm/A
Voltage constant at 20° C	136.5 V/1000*min⁻¹
Winding resistance at 20° C	1.45 Ω
Rotating field inductance	19.4 mH
Electrical time constant	13.40 ms
Mechanical time constant	1.47 ms
Thermal time constant	40 min
Shaft torsional stiffness	25000 Nm/rad
Net weight of the motor	12.5 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	with holding brake
Shaft extension	Plain shaft
Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)

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Figure similar

Optimum operating point

Optimum speed	2000 rpm
Optimum power	1.9 kW

Limiting data

Max. permissible speed (mech.)	4200 rpm
Max. permissible speed (inverter)	4200 rpm
Maximum torque	35.0 Nm
Maximum current	18.5 A

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	13.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.8 A
Opening time	100 ms
Closing time	50 ms
Highest braking work	380 J

Recommended Motor Module

Rated inverter current	5 A
Maximum inverter current	15 A
Maximum torque	29.50 Nm

Special design

M39	Version for Zone 22 hazardous areas according to EN 50281/IEC 61241