

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7105-2AF71-1UA2-Z
N05

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)	26.0 Nm
Rated current	18.0 A
Static torque (60 K)	40.00 Nm
Static torque (100 K)	48.00 Nm
Stall current (60 K)	25.00 A
Stall current (100 K)	31.00 A
Moment of inertia	154.000 kgcm²
Efficiency	94.0 %
Physical constants	
Torque constant	1.55 Nm/A
Voltage constant at 20° C	102.0 V/1000*min ⁻¹
Winding resistance at 20° C	0.07 Ω
Rotating field inductance	1.9 mH
Electrical time constant	26.00 ms
Mechanical time constant	1.40 ms
Thermal time constant	70 min
Shaft torsional stiffness	125000 Nm/rad
Net weight of the motor	39.0 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	100
Cooling	Natural cooling
Radial runout tolerance	0.050 mm
Concentricity tolerance	0.10 mm
Axial runout tolerance	0.10 mm
Vibration severity grade	Grade A
Connector size	1.5
Degree of protection	IP65 and DE flange IP67
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	Resolver R15DQ: resolver 15 bits (resolution 32768, internal multi-pole)



Figure similar

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Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	30 A
Optimum power	8.2 kW	Maximum inverter current	90 A
Limiting data		Maximum torque	129.70 Nm
Max. permissible speed (mech.)	5000 rpm	Special design	
Max. permissible speed (inverter)	5000 rpm	N05	Non-standard shaft end (dimensions as for 1FT5 motors)
Maximum torque	150.0 Nm		
Maximum current	109.0 A		