



Figure similar

MLFB-Ordering data 1FK7040-5AK71-1AV3-Z
A13

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

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	1.1 Nm	Shaft height	48
Rated current	1.7 A	Cooling	Natural cooling
Static torque (60 K)	1.30 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	1.60 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	1.80 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	2.25 A	Vibration severity grade	Grade A
Moment of inertia	3.000 kgcm²	Connector size	1
Physical constants		Degree of protection	IP64
Torque constant	0.68 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	43.0 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	3.30 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	17.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	5.15 ms	Holding brake	with holding brake
Mechanical time constant	3.62 ms	Shaft end	Fitted key and keyway
Thermal time constant	25 min	Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track
Shaft torsional stiffness	19000 Nm/rad		
Net weight of the motor	7.6 kg		
Recommended Motor Module			
Rated inverter current	3 A		
Maximum inverter current	6 A		
Maximum torque	4.10 Nm		



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Gearbox data			
Gearbox type	DYA compact planetary gear unit	Static torque	15.0 Nm
Designation	DYA	Output torque S1	12.5 Nm
Gearbox shaft end	Fitted key and keyway	Maximum current	7.4 A
Gearbox ratio	10	Static current	2.3 A
Rated speed	340 rpm	Weight	6.60 kg
Rated power	0.45 kW		
Output speed at the gearbox shaft	600 rpm		
Acceleration torque max.	49 Nm		

Special design	
A13	1FK7-DYA, M2standstill=15Nm S1Output speed=340rpm (I=10)

Limiting data	
Max. permissible speed (mech.)	9000 rpm
Max. permissible speed (inverter)	9990 rpm
Maximum torque	5.1 Nm
Maximum current	7.7 A

Holding brake	
Holding brake version	Permanent-magnet brake
Holding torque	3.2 Nm
Power supply voltage	DC 24 V 10 %
Coil current	0.6 A
Opening time	70 ms
Closing time	30 ms
Highest braking work	74 J