



Figure similar

MLFB-Ordering data

1FK7083-2AH71-1BH1

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	4500 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	3.0 Nm	Shaft height	80
Rated current	3.6 A	Cooling	Natural cooling
Static torque (60 K)	13.30 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	16.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	12.20 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	15.00 A	Vibration severity grade	Grade A
Moment of inertia	29.500 kgcm ²	Connector size	1
Efficiency	93.0 %	Degree of protection	IP65
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
		Temperature monitoring	Pt1000 temperature sensor
Torque constant	1.06 Nm/A	Electrical connectors	Connectors for signals and power rotatable
Voltage constant at 20° C	69.0 V/1000*min ⁻¹	Color of the housing	Standard (Anthracite RAL 7016)
Winding resistance at 20° C	0.17 Ω	Holding brake	with holding brake
Rotating field inductance	3.2 mH	Shaft end	Plain shaft
Electrical time constant	19.30 ms	Encoder system	Encoder AS24DQI: absolute encoder single-turn 24 bits
Mechanical time constant	1.14 ms		
Thermal time constant	50 min		
Shaft torsional stiffness	72000 Nm/rad		
Net weight of the motor	18.6 kg		



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Optimum operating point

Optimum speed 3000 rpm

Optimum power 3.3 kW

Limiting data

Max. permissible speed (mech.) 6000 rpm

Max. permissible speed (inverter) 6000 rpm

Maximum torque 50.0 Nm

Maximum current 55.0 A

Holding brake

Holding brake version Permanent-magnet brake

Holding torque 22.0 Nm

Power supply voltage DC 24 V \pm 10 %

Coil current 0.9 A

Opening time 200 ms

Closing time 60 ms

Highest braking work 1400 J

Recommended Motor Module

Rated inverter current 18 A

Maximum inverter current 54 A

Maximum torque 49.30 Nm