



Article No. : 1FK7060-5AF71-1PA2

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

Item no. :
Consignment no. :
Project :

Figure similar

Engineering data

Rated speed (100 K)	3,000 rpm
Number of poles	8
Rated torque (100 K)	4.7 Nm
Rated current	3.7 A
Static torque (60 K)	5.00 Nm
Static torque (100 K)	6.00 Nm
Stall current (60 K)	3.70 A
Stall current (100 K)	4.50 A
Moment of inertia	7.950 kgcm ²
Efficiency	90.0 %

Physical constants

Torque constant	1.33 Nm/A
Voltage constant at 20° C	84.5 V/1000*min ⁻¹
Winding resistance at 20° C	1.44 Ω
Rotating field inductance	14.7 mH
Electrical time constant	10.20 ms
Mechanical time constant	1.94 ms
Thermal time constant	30 min
Shaft torsional stiffness	42,000 Nm/rad
Net weight of the motor	7.0 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	IP65 and DE flange IP67
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	KTY84 temperature sensor in the stator winding
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	without
Holding brake	without holding brake
Shaft end	Feather key
Encoder system	Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole)

Optimum operating point

Optimum speed	3,000 rpm
Optimum power	1.5 kW

Limiting data

Max. permissible speed (mech.)	7,200 rpm
Max. permissible speed (inverter)	6,800 rpm
Maximum torque	18.0 Nm
Maximum current	15.0 A

Recommended Motor Module

Rated inverter current	5 A
Maximum inverter current	10 A
Maximum torque	13.20 Nm