



Figure similar

Article No. : 1FK7086-4SF71-1UG0

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

Item no. :
Consignment no. :
Project :

Engineering data	
Rated speed (100 K)	3,000 rpm
Number of poles	8
Rated torque (100 K)	24.0 Nm
Rated current	20.0 A
Static torque (60 K)	31.50 Nm
Static torque (100 K)	38.00 Nm
Stall current (60 K)	23.00 A
Stall current (100 K)	29.00 A
Moment of inertia	22.000 kgcm²
Efficiency	93.0 %

Physical constants	
Torque constant	1.33 Nm/A
Voltage constant at 20° C	84.5 V/1000*min ⁻¹
Winding resistance at 20° C	0.12 Ω
Rotating field inductance	3.1 mH
Electrical time constant	27.00 ms
Mechanical time constant	0.46 ms
Thermal time constant	35 min
Shaft torsional stiffness	84,000 Nm/rad
Net weight of the motor	27.0 kg

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	High Dynamic
Shaft height	80
Cooling	Forced ventilation
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	IP54/64
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	Plain shaft
Encoder system	Resolver R15DQ: resolver 15 bits (resolution 32768, internal multi-pole)

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	7.5 kW

Limiting data	
Max. permissible speed (mech.)	6,000 rpm
Max. permissible speed (inverter)	6,000 rpm
Maximum torque	105.0 Nm
Maximum current	112.0 A

Recommended Motor Module	
Rated inverter current	30 A
Maximum inverter current	90 A
Maximum torque	92.70 Nm