



Ordering data1FK7042-3BK71-1QH0

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

Item no. :
Consignment no. :
Project :

Engineering data		Physical constants	
Rated speed	6000 1/min	Torque constant	0.68 Nm/A
Number of poles	8	Voltage constant at 20° C	44.5 V/1000*min ⁻¹
Rated torque (100 K)	1.5 Nm	Winding resistance at 20° C	1.14 Ω
Rated motor current	2.4 A	Rotating field inductance	8.6 mH
Static torque (60 K)	2.50 Nm	Electrical time constant	7.50 ms
Static torque (100 K)	3.0 Nm	Mechanical time constant	3.80 ms
Stall current (60 K)	3.6 A	Thermal time constant	30 min
Stall current (100 K)	4.4 A	Shaft torsional stiffness	14600 Nm/rad
Rotor moment of inertia	0.0005400 kgm²	Net weight of the motor	5.8 kg
Efficiency	89.0 %		

Mechanical data		Optimum operating point	
Motor type	High Inertia	Optimum speed	5000 1/min
Shaft height	48 mm	Optimum power	1.0 kW
Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits		
Cooling	Natural cooling		
Holding brake	Permanent-magnet brake instead of spring-loaded brake (only for		
Shaft extension	Plain shaft		
Radial runout tolerance	N		
Vibration severity grade	Grade A		
Connector size	1		
Degree of protection	IP64		
Design acc. to Code I	IM B5 (IM V1, IM V3)		
Electrical connectors	Connectors for signals and power rotatable		
Color of the housing	Anthracite RAL 7016		

Recommended motor module	
Rated inverter current	5 A
Maximum inverter current	10 A
Maximum torque	6.80 Nm