



Ordering data

1FK7103-5AF71-1EH0

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

Item no. :
Consignment no. :
Project :

Engineering data		Physical constants	
Rated speed	3000 1/min	Torque constant	1.35 Nm/A
Number of poles	8	Voltage constant at 20° C	86.0 V/1000*min ⁻¹
Rated torque (100 K)	14.0 Nm	Winding resistance at 20° C	0.09 Ω
Rated motor current	12.0 A	Rotating field inductance	2.0 mH
Static torque (60 K)	30.00 Nm	Electrical time constant	22.20 ms
Static torque (100 K)	36.0 Nm	Mechanical time constant	1.55 ms
Stall current (60 K)	22.8 A	Thermal time constant	65 min
Stall current (100 K)	27.5 A	Shaft torsional stiffness	149000 Nm/rad
Rotor moment of inertia	0.0118000 kgm ²	Net weight of the motor	32.0 kg
Efficiency	93.0 %		

Mechanical data		Optimum operating point									
Motor type	Compact	Optimum speed	2500 1/min								
Shaft height	100 mm	Optimum power	5.4 kW								
Encoder system	Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface	<table border="1"> <thead> <tr> <th colspan="2">Recommended motor module</th> </tr> </thead> <tbody> <tr> <td>Rated inverter current</td> <td>30 A</td> </tr> <tr> <td>Maximum inverter current</td> <td>56 A</td> </tr> <tr> <td>Maximum torque</td> <td>73.00 Nm</td> </tr> </tbody> </table>		Recommended motor module		Rated inverter current	30 A	Maximum inverter current	56 A	Maximum torque	73.00 Nm
Recommended motor module											
Rated inverter current	30 A										
Maximum inverter current	56 A										
Maximum torque	73.00 Nm										
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	1.5										
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	Unpainted										