



Figure similar

MLFB-Ordering data 1FK7103-2AF71-1BG1-Z
J09

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

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	14.0 Nm	Shaft height	100
Rated current	11.5 A	Cooling	Natural cooling
Static torque (60 K)	30.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	36.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	21.00 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	26.00 A	Vibration severity grade	Grade A
Moment of inertia	123.200 kgcm²	Connector size	1.5
Physical constants		Degree of protection	IP65
Torque constant	1.39 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	89.5 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
Winding resistance at 20° C	0.09 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	2.4 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	27.00 ms	Holding brake	without holding brake
Mechanical time constant	1.46 ms	Shaft extension	Plain shaft
Thermal time constant	65 min	Encoder system	Encoder AS24DQI: absolute encoder single-turn 24 bits
Shaft torsional stiffness	148000 Nm/rad		
Net weight of the motor	62.5 kg		
Recommended Motor Module			
Rated inverter current	30 A		
Maximum inverter current	90 A		
Maximum torque	108.00 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	19.200 kgcm²
Designation	SP 180S-MF1	Radial output shaft loading, max.	15400 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	15570 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4500 rpm	Torsional backlash	3 '
Motor speed S1	2300 rpm	Gearbox weight	34.00 kg
Output torque S1	864 Nm		
Rated output torque at duty type S3-60 %	1164 Nm		

Limiting data	
Max. permissible speed (mech.)	5000 rpm
Max. permissible speed (inverter)	5000 rpm
Maximum torque	108.0 Nm
Maximum current	84.0 A

Special design	
J09	Mounting of SP+ planetary gearbox