



Figure similar

MLFB-Ordering data

1FK7083-2AF71-1RH1-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)	10.5 Nm	Shaft height	80		
Rated current	7.2 A	Cooling	Natural cooling		
Static torque (60 K)	13.30 Nm	Radial runout tolerance	0.050 mm		
Static torque (100 K)	16.0 Nm	Concentricity tolerance	0.10 mm		
Stall current (60 K)	8.20 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	10.10 A	Vibration severity grade	Grade A		
Moment of inertia	37.940 kgcm ²	Connector size	1		
Physical constants		Degree of protection	IP65		
		Torque constant	1.58 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	102.5 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
		Winding resistance at 20° C	0.38 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	7.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	18.60 ms	Holding brake	with holding brake
		Mechanical time constant	1.18 ms	Shaft end	Plain shaft
		Thermal time constant	50 min	Encoder system	Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
		Shaft torsional stiffness	72000 Nm/rad		
		Net weight of the motor	35.8 kg		
Recommended Motor Module					
		Rated inverter current	9 A		
		Maximum inverter current	27 A		
Maximum torque	40.00 Nm				



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Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	8.440 kgcm ²
Designation	SP 140S-MF1	Radial output shaft loading, max.	9900 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	9870 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	5000 rpm	Torsional backlash	3 '
Motor speed S1	2600 rpm	Gearbox weight	17.20 kg
Output torque S1	327 Nm		
Rated output torque at duty type S3-60 %	636 Nm		

Special design

J09 Mounting of SP+ planetary gearbox

Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	5600 rpm
Maximum torque	50.0 Nm
Maximum current	37.0 A

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	22.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.9 A
Opening time	200 ms
Closing time	60 ms
Highest braking work	1400 J