



Figure similar

MLFB-Ordering data

1FK7083-5AF71-1FH5-Z
J22

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	7.4 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)	8.60 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	10.40 A	Vibration severity grade	Grade A		
Moment of inertia	46.900 kgcm ²	Connector size	1		
Physical constants		Degree of protection	IP65 and DE flange IP67		
		Torque constant	1.52 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	97.0 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
		Winding resistance at 20° C	0.40 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	6.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	15.50 ms	Holding brake	with holding brake
		Mechanical time constant	1.41 ms	Shaft extension	Plain shaft
		Thermal time constant	50 min	Encoder system	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
		Shaft torsional stiffness	105000 Nm/rad		
		Net weight of the motor	33.7 kg		
Recommended Motor Module					
		Rated inverter current	9 A		
		Maximum inverter current	18 A		
Maximum torque	27.80 Nm				



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Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	11.000 kgcm ²
Designation	SP 140S-MF1	Radial output shaft loading, max.	9450 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	9870 N
Gear ratio + steps	4 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4000 rpm	Torsional backlash	3 '
Motor speed S1	2100 rpm	Gearbox weight	17.20 kg
Output torque S1	360 Nm		
Rated output torque at duty type S3-60 %	600 Nm		

Special design

J22 Mounting of SP+ planetary gearbox

Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	5900 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