



Figure similar

MLFB-Ordering data 1FK7060-5AF71-1FG5-Z
J03

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)	4.7 Nm	Shaft height	63
Rated current	3.7 A	Cooling	Natural cooling
Static torque (60 K)	5.00 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	6.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	3.70 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.50 A	Vibration severity grade	Grade A
Moment of inertia	10.560 kgcm²	Connector size	1
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	1.33 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	84.5 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	1.44 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	14.7 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	10.20 ms	Holding brake	without holding brake
Mechanical time constant	1.94 ms	Shaft end	Plain shaft
Thermal time constant	30 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	42000 Nm/rad		
Net weight of the motor	14.7 kg		
Recommended Motor Module			
Rated inverter current	5 A		
Maximum inverter current	10 A		
Maximum torque	13.20 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	2.610 kgcm²
Designation	SP 100S-MF1	Radial output shaft loading, max.	6600 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	5650 N
Gear ratio + steps	5 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	5500 rpm	Torsional backlash	3 '
Motor speed S1	2500 rpm	Gearbox weight	7.70 kg
Output torque S1	169 Nm		

Rated output torque at duty type S3-60 % 378 Nm

Special design	
J03	Mounting of SP+ planetary gearbox

Limiting data	
Max. permissible speed (mech.)	7200 rpm
Max. permissible speed (inverter)	6800 rpm
Maximum torque	18.0 Nm
Maximum current	15.0 A