



Figure similar

MLFB-Ordering data

1FK7063-5AH71-1FG5-Z
J09

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	4500 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	3.0 Nm	Shaft height	63
Rated current	3.8 A	Cooling	Natural cooling
Static torque (60 K)	9.10 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	11.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	9.90 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	12.00 A	Vibration severity grade	Grade A
Moment of inertia	17.170 kgcm ²	Connector size	1
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	0.91 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	58.0 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	0.29 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	3.2 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	11.00 ms	Holding brake	without holding brake
Mechanical time constant	1.58 ms	Shaft extension	Plain shaft
Thermal time constant	40 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	35000 Nm/rad		
Net weight of the motor	19.2 kg		
Recommended Motor Module			
Rated inverter current	18 A		
Maximum inverter current	36 A		
Maximum torque	31.20 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	2.070 kgcm²
Designation	SP 100S-MF1	Radial output shaft loading, max.	6300 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	5650 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4500 rpm	Torsional backlash	3 '
Motor speed S1	2800 rpm	Gearbox weight	7.70 kg
Output torque S1	120 Nm		

Rated output torque at duty type S3-60 % 225 Nm

Special design

J09 Mounting of SP+ planetary gearbox

Limiting data	
Max. permissible speed (mech.)	7200 rpm
Max. permissible speed (inverter)	9900 rpm
Maximum torque	35.0 Nm
Maximum current	42.0 A