



Figure similar

MLFB-Ordering data

1FK7063-5AF71-1DH5-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)	7.3 Nm	Shaft height	63		
Rated current	5.6 A	Cooling	Natural cooling		
Static torque (60 K)	9.10 Nm	Radial runout tolerance	0.040 mm		
Static torque (100 K)	11.00 Nm	Concentricity tolerance	0.10 mm		
Stall current (60 K)	6.60 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	8.00 A	Vibration severity grade	Grade A		
Moment of inertia	19.910 kgcm <sup>2</sup>	Connector size	1		
<b>Physical constants</b>		Degree of protection	IP65 and DE flange IP67		
		Torque constant	1.37 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	87.5 V/1000*min <sup>-1</sup>	Temperature monitoring	KTY84 temperature sensor in the stator winding
		Winding resistance at 20° C	0.65 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	7.7 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	11.80 ms	Holding brake	with holding brake
		Mechanical time constant	1.56 ms	Shaft end	Plain shaft
		Thermal time constant	40 min	Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits
		Shaft torsional stiffness	35000 Nm/rad		
		Net weight of the motor	19.7 kg		
<b>Recommended Motor Module</b>					
		Rated inverter current	9 A		
		Maximum inverter current	18 A		
Maximum torque	24.50 Nm				



Figure similar

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### Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	2.610 kgcm <sup>2</sup>
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)	6600 rpm
Maximum torque	35.0 Nm
Maximum current	28.0 A

### Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	13.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.8 A
Opening time	100 ms
Closing time	50 ms
Highest braking work	380 J