



Figure similar

MLFB-Ordering data

1FK7063-2AF71-1RH1-Z  
J02

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

### Engineering data

Rated speed (100 K)	3000 rpm
Number of poles	8
Rated torque (100 K)	7.3 Nm
Rated current	5.6 A
Static torque (60 K)	9.10 Nm
Static torque (100 K)	11.0 Nm
Stall current (60 K)	6.50 A
Stall current (100 K)	8.00 A
Moment of inertia	18.740 kgcm <sup>2</sup>

### Physical constants

Torque constant	1.37 Nm/A
Voltage constant at 20° C	90.5 V/1000*min <sup>-1</sup>
Winding resistance at 20° C	0.64 Ω
Rotating field inductance	8.5 mH
Electrical time constant	13.40 ms
Mechanical time constant	1.48 ms
Thermal time constant	40 min
Shaft torsional stiffness	25000 Nm/rad
Net weight of the motor	20.2 kg

### Recommended Motor Module

Rated inverter current	9 A
Maximum inverter current	27 A
Maximum torque	34.00 Nm

### Mechanical data

Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	63
Cooling	Natural cooling
Radial runout tolerance	0.040 mm
Concentricity tolerance	0.10 mm
Axial runout tolerance	0.10 mm
Vibration severity grade	Grade A
Connector size	1
Degree of protection	IP65
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	Pt1000 temperature sensor
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	Standard (Anthracite RAL 7016)
Holding brake	with holding brake
Shaft extension	Plain shaft
Encoder system	Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)



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## MLFB-Ordering data

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### Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	3.040 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	4 (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	171 Nm		
Rated output torque at duty type S3-60 %	378 Nm		

### Special design

J02 Mounting of SP+ planetary gearbox

### Limiting data

Max. permissible speed (mech.)	7200 rpm
Max. permissible speed (inverter)	6400 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