



Figure similar

MLFB-Ordering data

1FK7064-7AH71-1PH5-Z  
J23

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

### Engineering data

Rated speed (100 K)	4500 rpm
Number of poles	6
Rated torque (100 K)	5.0 Nm
Rated current	7.0 A
Static torque (60 K)	9.00 Nm
Static torque (100 K)	12.0 Nm
Stall current (60 K)	12.00 A
Stall current (100 K)	15.00 A
Moment of inertia	9.450 kgcm <sup>2</sup>

### Physical constants

Torque constant	0.77 Nm/A
Voltage constant at 20° C	51.0 V/1000*min <sup>-1</sup>
Winding resistance at 20° C	0.18 Ω
Rotating field inductance	5.6 mH
Electrical time constant	31.10 ms
Mechanical time constant	0.59 ms
Thermal time constant	55 min
Shaft torsional stiffness	30000 Nm/rad
Net weight of the motor	24.5 kg

### Recommended Motor Module

Rated inverter current	18 A
Maximum inverter current	36 A
Maximum torque	28.20 Nm

### Mechanical data

Motor type	Permanent-magnet synchronous motor
Motor type	High Dynamic
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 and DE flange IP67
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	KTY84 temperature sensor in the stator winding
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	Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole)



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## MLFB-Ordering data

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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.	6300 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	5650 N
Gear ratio + steps	5 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4500 rpm	Torsional backlash	3 '
Motor speed S1	2500 rpm	Gearbox weight	7.70 kg
Output torque S1	175 Nm		
Rated output torque at duty type S3-60 %	300 Nm		

### Special design

J23 Mounting of SP+ planetary gearbox

### Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	11300 rpm
Maximum torque	32.0 Nm
Maximum current	42.0 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