



Figure similar

MLFB-Ordering data

1FK7083-2AF71-1DG1-Z  
J09

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)	10.5 Nm
Rated current	7.4 A
Static torque (60 K)	13.30 Nm
Static torque (100 K)	16.0 Nm
Stall current (60 K)	8.20 A
Stall current (100 K)	10.10 A
Moment of inertia	34.440 kgcm <sup>2</sup>

Physical constants	
Torque constant	1.58 Nm/A
Voltage constant at 20° C	102.5 V/1000*min <sup>-1</sup>
Winding resistance at 20° C	0.38 Ω
Rotating field inductance	7.0 mH
Electrical time constant	18.60 ms
Mechanical time constant	1.18 ms
Thermal time constant	50 min
Shaft torsional stiffness	101000 Nm/rad
Net weight of the motor	32.8 kg

Recommended Motor Module	
Rated inverter current	9 A
Maximum inverter current	27 A
Maximum torque	40.00 Nm

Mechanical data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	80
Cooling	Natural cooling
Radial runout tolerance	0.050 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	without holding brake
Shaft extension	Plain shaft
Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits



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### Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	8.440 kgcm <sup>2</sup>
Designation	SP 140S-MF1	Radial output shaft loading, max.	9450 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	9870 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4000 rpm	Torsional backlash	3 '
Motor speed S1	2600 rpm	Gearbox weight	17.20 kg
Output torque S1	220 Nm		
Rated output torque at duty type S3-60 %	480 Nm		

### Special design

J09 Mounting of SP+ planetary gearbox

### Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	5600 rpm
Maximum torque	50.0 Nm
Maximum current	37.0 A