



Figure similar

MLFB-Ordering data

1FK7083-2AF71-1CH1-Z
J29

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	7.2 A
Static torque (60 K)	13.30 Nm
Static torque (100 K)	16.00 Nm
Stall current (60 K)	8.20 A
Stall current (100 K)	10.10 A
Moment of inertia	37.940 kgcm ²

Physical constants

Torque constant	1.58 Nm/A
Voltage constant at 20° C	102.5 V/1000*min ⁻¹
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	72000 Nm/rad
Net weight of the motor	35.8 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	with holding brake
Shaft end	Plain shaft
Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)



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Gearbox data

Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	8.440 kgcm ²
Designation	SP 140S-MF1	Radial output shaft loading, max.	9900 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	9870 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	5000 rpm	Torsional backlash	3 '
Motor speed S1	2600 rpm	Gearbox weight	17.20 kg
Output torque S1	327 Nm		
Rated output torque at duty type S3-60 %	636 Nm		

Special design

J29 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

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	22.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.9 A
Opening time	200 ms
Closing time	60 ms
Highest braking work	1400 J