



Figure similar

MLFB-Ordering data

1FK7103-3BC74-1AH1-Z
J29

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	2000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	High Inertia
Rated torque (100 K)	25.0 Nm	Shaft height	100
Rated current	11.0 A	Cooling	Natural cooling
Static torque (60 K)	30.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	30.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	11.60 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	14.40 A	Vibration severity grade	Grade A
Moment of inertia	195.200 kgcm ²	Connector size	1.5
Physical constants		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 IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track
		Recommended Motor Module	
Torque constant	2.45 Nm/A	Recommended Motor Module	
Voltage constant at 20° C	162.0 V/1000*min ⁻¹		
Winding resistance at 20° C	0.29 Ω		
Rotating field inductance	7.9 mH	Recommended Motor Module	
Electrical time constant	27.50 ms		
Mechanical time constant	2.42 ms		
Thermal time constant	65 min	Recommended Motor Module	
Shaft torsional stiffness	108000 Nm/rad		
Net weight of the motor	70.6 kg		
Recommended Motor Module		Recommended Motor Module	
Rated inverter current	18 A	Recommended Motor Module	
Maximum inverter current	54 A		
Maximum torque	108.00 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	19.200 kgcm²
Designation	SP 180S-MF1	Radial output shaft loading, max.	15400 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	15570 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	4500 rpm	Torsional backlash	3 '
Motor speed S1	2300 rpm	Gearbox weight	34.00 kg
Output torque S1	864 Nm		
Rated output torque at duty type S3-60 %	1164 Nm		

Limiting data	
Max. permissible speed (mech.)	5000 rpm
Max. permissible speed (inverter)	3550 rpm
Maximum torque	108.0 Nm
Maximum current	46.5 A

Holding brake	
Holding brake version	Permanent-magnet brake
Holding torque	43.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	1.0 A
Opening time	300 ms
Closing time	70 ms
Highest braking work	3380 J

Special design	
J29	Mounting of SP+ planetary gearbox