



Figure similar

MLFB-Ordering data

1FK7044-4CF71-1UG1-Z
J15

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	6	Motor type	High Dynamic
Rated torque (100 K)	3.7 Nm	Shaft height	48
Rated current	3.5 A	Cooling	Natural cooling
Static torque (60 K)	3.75 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	4.5 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	3.20 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	4.00 A	Vibration severity grade	Grade A
Moment of inertia	1.860 kgcm ²	Connector size	1
Physical constants		Degree of protection	IP65
Torque constant	1.13 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	72.0 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
Winding resistance at 20° C	1.49 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	18.8 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	12.60 ms	Holding brake	without holding brake
Mechanical time constant	0.44 ms	Shaft extension	Plain shaft
Thermal time constant	45 min	Encoder system	Resolver R15DQ: resolver 15 bits (resolution 32768, internal multi-pole)
Shaft torsional stiffness	9800 Nm/rad		
Net weight of the motor	15.3 kg		
Recommended Motor Module			
Rated inverter current	5 A		
Maximum inverter current	15 A		
Maximum torque	13.00 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	0.600 kgcm²
Designation	SP 100S-MF2	Radial output shaft loading, max.	6600 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	5650 N
Gear ratio + steps	28 (2-step)	Efficiency of gearbox	0.94
Motor speed S3-60 %	6500 rpm	Torsional backlash	5 '
Motor speed S1	3100 rpm	Gearbox weight	7.90 kg
Output torque S1	277 Nm		

Rated output torque at duty type S3-60 % 347 Nm

Special design	
J15	Mounting of SP+ planetary gearbox

Limiting data	
Max. permissible speed (mech.)	9000 rpm
Max. permissible speed (inverter)	8050 rpm
Maximum torque	13.0 Nm
Maximum current	12.1 A