



Figure similar

MLFB-Ordering data

1FK7105-5AF71-1DH5-Z
J23

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	8	Motor type	Compact
Rated torque (100 K)	26.0 Nm	Shaft height	100
Rated current	18.0 A	Cooling	Natural cooling
Static torque (60 K)	40.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	48.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	25.00 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	31.00 A	Vibration severity grade	Grade A
Moment of inertia	196.900 kgcm ²	Connector size	1.5
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	1.57 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	100.0 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	0.07 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	1.9 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	26.00 ms	Holding brake	with holding brake
Mechanical time constant	1.40 ms	Shaft extension	Plain shaft
Thermal time constant	70 min	Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits
Shaft torsional stiffness	125000 Nm/rad		
Net weight of the motor	75.5 kg		
Recommended Motor Module			
Rated inverter current	30 A		
Maximum inverter current	56 A		
Maximum torque	87.00 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox SP+	Moment of inertia of gearbox	27.900 kgcm²
Designation	SP 180S-MF1	Radial output shaft loading, max.	14700 N
Gearbox shaft end	Without feather key	Axial output shaft load, max.	14150 N
Gear ratio + steps	5 (1-step)	Efficiency of gearbox	0.97
Motor speed S3-60 %	3500 rpm	Torsional backlash	3 '
Motor speed S1	1500 rpm	Gearbox weight	34.00 kg
Output torque S1	750 Nm		
Rated output torque at duty type S3-60 %	1100 Nm		

Limiting data	
Max. permissible speed (mech.)	5000 rpm
Max. permissible speed (inverter)	5700 rpm
Maximum torque	150.0 Nm
Maximum current	109.0 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	
J23	Mounting of SP+ planetary gearbox