



Figure similar

MLFB-Ordering data

1FK7033-4CF24-1AG0-Z
V42

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)	1.2 Nm	Shaft height	36		
Rated current	2.0 A	Cooling	Natural cooling		
Static torque (60 K)	1.08 Nm	Radial runout tolerance	0.035 mm		
Static torque (100 K)	1.30 Nm	Concentricity tolerance	0.08 mm		
Stall current (60 K)	1.70 A	Axial runout tolerance	0.08 mm		
Stall current (100 K)	2.10 A	Vibration severity grade	Grade A		
Moment of inertia	0.470 kgcm ²	Connector size	1		
Physical constants		Degree of protection	IP64		
		Torque constant	0.62 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	39.5 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
		Winding resistance at 20° C	3.51 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	22.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	6.30 ms	Holding brake	without holding brake
		Mechanical time constant	0.68 ms	Shaft end	Plain shaft
		Thermal time constant	25 min	Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track
		Shaft torsional stiffness	7300 Nm/rad		
		Net weight of the motor	4.9 kg		
Recommended Motor Module					
		Rated inverter current	2 A		
		Maximum inverter current	5 A		
Maximum torque	2.70 Nm				



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Gearbox data

Gearbox type	Planetary gearbox NP+	Moment of inertia of gearbox	0.220 kgcm ²
Designation	NP 015	Radial output shaft loading, max.	1700 N
Gearbox shaft end	With feather key	Axial output shaft load, max.	0 N
Gear ratio + steps	10 (1-step)	Efficiency of gearbox	0.97
Temporary input speed	8000 rpm	Torsional backlash	8 '
Motor speed S1	4300 rpm	Gearbox weight	1.90 kg
Output torque S1	19 Nm		
Output moment maximum (short-time)	35 Nm		

Special design

V42 Mounting of NP+ planetary gearbox

Limiting data

Max. permissible speed (mech.)	10000 rpm
Max. permissible speed (inverter)	7150 rpm
Maximum torque	4.3 Nm
Maximum current	7.6 A