



Figure similar

MLFB-Ordering data

1FK7040-2AK71-1CH0-Z
V42

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data			
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor		
Number of poles	8	Motor type	Compact		
Rated torque (100 K)	1.1 Nm	Shaft height	48		
Rated current	1.9 A	Cooling	Natural cooling		
Static torque (60 K)	1.30 Nm	Radial runout tolerance	0.040 mm		
Static torque (100 K)	1.6 Nm	Concentricity tolerance	0.08 mm		
Stall current (60 K)	1.90 A	Axial runout tolerance	0.08 mm		
Stall current (100 K)	2.35 A	Vibration severity grade	Grade A		
Moment of inertia	2.410 kgcm ²	Connector size	1		
Physical constants		Degree of protection	IP64		
		Torque constant	0.68 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	43.4 V/1000*min ⁻¹	Temperature monitoring	Pt1000 temperature sensor
		Winding resistance at 20° C	2.87 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	16.5 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	5.70 ms	Holding brake	with holding brake
		Mechanical time constant	3.00 ms	Shaft extension	Plain shaft
		Thermal time constant	25 min	Encoder system	Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
		Shaft torsional stiffness	13000 Nm/rad		
		Net weight of the motor	7.7 kg		
Recommended Motor Module					
		Rated inverter current	3 A		
		Maximum inverter current	9 A		
Maximum torque	5.10 Nm				



Figure similar

MLFB-Ordering data

1FK7040-2AK71-1CH0-Z
V42

Gearbox data

Gearbox type	Planetary gearbox NP+	Moment of inertia of gearbox	0.490 kgcm ²
Designation	NP 025	Radial output shaft loading, max.	2800 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	7000 rpm	Torsional backlash	8 '
Motor speed S1	3900 rpm	Gearbox weight	3.80 kg
Output torque S1	45 Nm		
Output moment maximum (short-time)	90 Nm		

Special design

V42 Mounting of NP+ planetary gearbox

Limiting data

Max. permissible speed (mech.)	9000 rpm
Max. permissible speed (inverter)	9000 rpm
Maximum torque	5.1 Nm
Maximum current	7.7 A

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	4.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.5 A
Opening time	70 ms
Closing time	30 ms
Highest braking work	150 J