



Figure similar

MLFB-Ordering data 1FK7060-5AF71-1EH3-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	8	Motor type	Compact
Rated torque (100 K)	4.7 Nm	Shaft height	63
Rated current	3.7 A	Cooling	Natural cooling
Static torque (60 K)	5.00 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	6.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	3.70 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.50 A	Vibration severity grade	Grade A
Moment of inertia	11.900 kgcm²	Connector size	1
Physical constants		Degree of protection	IP64
Torque constant	1.33 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	84.5 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	1.44 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	14.7 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	10.20 ms	Holding brake	with holding brake
Mechanical time constant	1.94 ms	Shaft end	Plain shaft
Thermal time constant	30 min	Encoder system	Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface
Shaft torsional stiffness	42000 Nm/rad		
Net weight of the motor	17.4 kg		
Recommended Motor Module			
Rated inverter current	5 A		
Maximum inverter current	10 A		
Maximum torque	13.20 Nm		



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Gearbox data			
Gearbox type	Planetary gearbox NP+	Moment of inertia of gearbox	1.700 kgcm²
Designation	NP 035	Radial output shaft loading, max.	5000 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	6000 rpm	Torsional backlash	8 '
Motor speed S1	3000 rpm	Gearbox weight	9.40 kg
Output torque S1	110 Nm		
Output moment maximum (short-time)	220 Nm		

Limiting data	
Max. permissible speed (mech.)	7200 rpm
Max. permissible speed (inverter)	6800 rpm
Maximum torque	18.0 Nm
Maximum current	15.0 A

Holding brake	
Holding brake version	Permanent-magnet brake
Holding torque	13.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.8 A
Opening time	100 ms
Closing time	50 ms
Highest braking work	380 J

Special design	
V42	Mounting of NP+ planetary gearbox