

MLFB-Ordering data

1FK7083-5AF71-1UU5-Z  
B34+G37+H21



Figure similar

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)	10.5 Nm	Shaft height	80		
Rated current	7.4 A	Cooling	Natural cooling		
Static torque (60 K)	13.30 Nm	Radial runout tolerance	0.050 mm		
Static torque (100 K)	16.0 Nm	Concentricity tolerance	0.10 mm		
Stall current (60 K)	8.60 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	10.40 A	Vibration severity grade	Grade A		
Moment of inertia	27.300 kgcm <sup>2</sup>	Connector size	1		
<b>Physical constants</b>		Degree of protection	IP65 and DE flange IP67		
		Torque constant	1.52 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
		Voltage constant at 20° C	97.0 V/1000*min <sup>-1</sup>	Temperature monitoring	KTY84 temperature sensor in the stator winding
		Winding resistance at 20° C	0.40 Ω	Electrical connectors	Connectors for signals and power rotatable
		Rotating field inductance	6.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
		Electrical time constant	15.50 ms	Holding brake	without holding brake
		Mechanical time constant	1.41 ms	Shaft end	Fitted key and keyway
		Thermal time constant	50 min	Encoder system	Resolver R15DQ: resolver 15 bits (resolution 32768, internal multi-pole)
		Shaft torsional stiffness	105000 Nm/rad		
		Net weight of the motor	52.2 kg		
<b>Recommended Motor Module</b>					
		Rated inverter current	9 A		
		Maximum inverter current	18 A		
Maximum torque	27.80 Nm				

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## Gearbox data

Gearbox type	Bevel geared	Overload factor	1.50
Designation	K302	Type of construction	no value
Gearbox ratio	17	Mounting position	EL 2
Output speed at the gearbox shaft	177 rpm	Connector position	Connector position on gearbox side 2, top
Rated output torque at duty type S3-60 %	173 Nm	Type	Flange (round)
Acceleration torque max.	384 Nm	Gearbox shaft end	Hollow shaft with keyway
Power at duty type S3-60%	3.20 kW	Gearbox output arrangement	Insertion side 3
Radial output shaft loading, max.	3383 N	Arrangement of shrink disk	no value
Precise ratio	559/33		

## Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	5900 rpm
Maximum torque	50.0 Nm
Maximum current	37.0 A

## Special design

B34	Bevel geared motors
G37	Flange (round), Hollow shaft with keyway (Plug-in gearbox side 3)
H21	Connector position on gearbox side 2, top