

MLFB-Ordering data

1FK7080-5AF71-1DU5-Z
D68+G31+H11+X02



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)	6.8 Nm	Shaft height	80
Rated current	4.4 A	Cooling	Natural cooling
Static torque (60 K)	6.60 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	8.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	4.00 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	4.80 A	Vibration severity grade	Grade A
Moment of inertia	15.000 kgcm ²	Connector size	1
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	1.61 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	102.5 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	1.04 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	14.0 mH	Color of the housing	Cream RAL 9001
Electrical time constant	13.50 ms	Holding brake	without holding brake
Mechanical time constant	1.78 ms	Shaft end	Fitted key and keyway
Thermal time constant	40 min	Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits
Shaft torsional stiffness	126000 Nm/rad		
Net weight of the motor	77.9 kg		
Recommended Motor Module			
Rated inverter current	5 A		
Maximum inverter current	10 A		
Maximum torque	16.60 Nm		

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Gearbox data			
Gearbox type	Helical geared	Overload factor	2.60
Designation	C612	Type of construction	IM B3 / IM B5 / IM B14 / IM B34 / IM B35
Gearbox ratio	69	Mounting position	no value
Output speed at the gearbox shaft	44 rpm	Connector position	Connector position on gearbox side 2, top
Rated output torque at duty type S3-60 %	454 Nm	Type	Flange (round)
Acceleration torque max.	1380 Nm	Gearbox shaft end	Solid shaft with fitted key
Power at duty type S3-60%	2.09 kW	Gearbox output arrangement	no value
Radial output shaft loading, max.	12344 N	Arrangement of shrink disk	no value
Precise ratio	620/9		

Limiting data	
Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	5600 rpm
Maximum torque	25.0 Nm
Maximum current	18.0 A

Special design	
D68	Helical geared motors
G31	Flange (round), Solid shaft with fitted key (Plug-in gearbox side 5 for parallel shaft gearboxes; plug-in side 4 for bevel and worm gearboxes)
H11	Connector position on gearbox side 2, top
X02	Paint finish: Cream white RAL 9001