

MLFB-Ordering data

1FK7100-5AF71-1FV5-Z
D88+G11+H11



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)	12.0 Nm	Shaft height	100
Rated current	8.0 A	Cooling	Natural cooling
Static torque (60 K)	15.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	18.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	9.20 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	11.20 A	Vibration severity grade	Grade A
Moment of inertia	63.900 kgcm ²	Connector size	1
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	1.59 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	101.0 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	0.34 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	7.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	20.50 ms	Holding brake	with holding brake
Mechanical time constant	2.23 ms	Shaft end	Fitted key and keyway
Thermal time constant	55 min	Encoder system	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Shaft torsional stiffness	184000 Nm/rad		
Net weight of the motor	191.7 kg		
Recommended Motor Module			
Rated inverter current	18 A		
Maximum inverter current	36 A		
Maximum torque	53.80 Nm		



Figure similar

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Gearbox data			
Gearbox type	Helical geared	Overload factor	3.40
Designation	C812	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 %	802 Nm	Type	Foot-mounted
Acceleration torque max.	4140 Nm	Gearbox shaft end	Solid shaft with fitted key
Power at duty type S3-60%	3.70 kW	Gearbox output arrangement	no value
Radial output shaft loading, max.	23146 N	Arrangement of shrink disk	no value
Precise ratio	620/9		

Limiting data	
Max. permissible speed (mech.)	5000 rpm

Max. permissible speed (inverter)	5700 rpm
Maximum torque	55.0 Nm
Maximum current	37.0 A

Holding brake	
Holding brake version	Permanent-magnet brake
Holding torque	22.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.9 A
Opening time	200 ms
Closing time	60 ms
Highest braking work	1400 J

Special design	
D88	Helical geared motors
G11	Foot-mounted, Solid shaft with fitted key (Gearbox side 4)
H11	Connector position on gearbox side 2, top