

210D0027 MMA80-8-BC1 Data Sheet Version 4.1

Parameter	Unit	Value	
		400 V	230 V
Power	[kW]	7.9	4
Torque (rated @ 100°C*)	[Nm]	21.5	21.5
Torque (rated @ 120°C*)	[Nm]	25	25.5
Torque (max @ 100°C*) (60 sec.) **	[Nm]	41.5	41.5
Torque (max @ 120°C*) (30 sec.) **	[Nm]	41.5	41.5
Speed (rated)	[rpm]	3000	1500
Speed (max)	[rpm]	3000	1500
Freq.	[Hz]	400	200
Pole pairs		8	8
Current (rated) @ rated torque 120°C	[A _{RMS}]	14.0	13.8
Current (max) @ max torque	[A _{RMS}]	23.8	23.3
Motor voltage (rated phase to phase)	[V _{RMS}]	400	230
DC-link voltage	[V]	>560	≥ 325
Phase:			
k _E	[V _{RMS} /krpm]	72	
R _{Ph,20}	[Ohm]	0.55	
L _d	[mH]	2.35	
L _q	[mH]	2.75	
Line to line:			
k _{E,LL}	[V _{RMS} /krpm]	125	
R _{LL,20}	[Ohm]	1.10	
L _{LL,d}	[mH]	4.7	
L _{LL,q}	[mH]	5.5	
Connection		Y	
Moment of inertia	[kgm ²]	0.0030	
Weight	[kg]	11	
Protection class		IP67	
Thermal class		H	
Thermal protection		PTC (Pt1000 on request)	
Cooling type		Water cooled ****	
Rated flowrate (motor coolant)	[l/min]	6	
Pressure drop @ rated flow rate	[bar]	0.014	
Coolant		Water/Ethylenglycol 50/50 or hydraulic oil	
Max. cooling pressure (motor coolant)	[bar]	3	
Coolant max temperature	[°C]	60	
Rotational direction***		Clockwise	



*Winding temperature

Performance data were determined with a thermally decoupled motor and a coolant temperature of 60°C at 6 l/min (water/ethylenglycol 50/50)



**Up to base speed @ max torque speed curve



In order to run the motor, a frequency inverter capable of conducting **sensorless control** for permanent magnet motors is needed, because the motor has no own position sensor or encoder.



***The rotational direction is defined according to DIN-EN60034-8 (looking on the motor shaft).



**** Technical information about oil cooling on request



