

MMA80-8-CA1 Data Sheet V1-1

Parameter	Unit	Value
		400 V
Power	[kW]	10
Torque (rated @ 120°C*)	[Nm]	32
Torque (max.) **	[Nm]	67.5
Time max. Torque starting @ 60°C*	[s]	45
Time max. Torque starting @ 120°C*	[s]	15
Speed (rated)	[rpm]	3000
Speed (max)	[rpm]	4000
Freq. (rated)	[Hz]	400
Pole pairs		8
Current (rated)	[A _{RMS}]	16.5
Current (max)	[A _{RMS}]	38
Rated DC-link voltage	[V _{DC}]	>560
Max. Motor voltage (phase to phase at rated DC-Link)	[V _{RMS}]	400
Phase:		
k _E	[V _{RMS} /krpm]	75.3
R _{Ph,20}	[Ohm]	0.419
L _d	[mH]	1.8
L _q	[mH]	2.3
Line to line:		
k _{E,LL}	[V _{RMS} /krpm]	130.4
R _{LL,20}	[Ohm]	0.838
Connection		Y
Moment of inertia	[kgm ²]	0.0042
Weight	[kg]	14
Protection class		IP67
Thermal class		H
Thermal protection		PTC (Pt1000 on request)
Cooling type		Water cooled, Oil cooled****
min flow rate (motor coolant)	[l/min]	6
rated flow rate (motor coolant)	[l/min]	6
max flow rate (motor coolant)	[l/min]	40
Pressure drop @ rated flow rate	[bar]	0.018
Coolant		Water/Ethylenglycol 50/50
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

