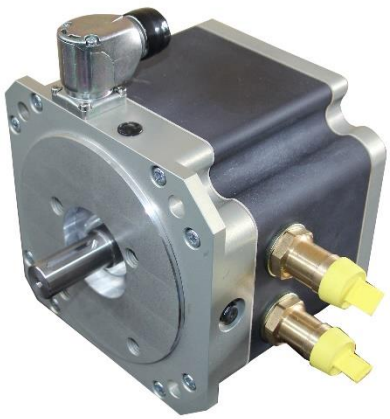
MMA80-8-CB1

230V_{AC} / 330V_{DC}

LIQUID COOLED ELECTRIC MOTORS



PRODUCT DATASHEET

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DATASHEET

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

MMA80 CB1 is specifically designed for auxiliaries and can be proposed with flange inverter emDrive H05.

Parameter	Unit	Value
		230 Vac / 330 Vdc
Power	[kW]	10
Torque (rated @ 120°C*)	[Nm]	32
Torque (max.) **	[Nm]	52.5
Time max. Torque starting @ 60°C*	[s]	90
Time max. Torque starting @ 120°C*	[s]	30
Speed (rated)	[rpm]	3000
Speed (max)	[rpm]	4000
Freq. (rated)	[Hz]	400
Pole pairs		8
Current (rated)	[A_{RMS}]	29.5
Current (max)	[A_{RMS}]	49.5
Rated DC-link voltage	[V_{DC}]	>325
Max. Motor voltage (phase to phase at rated DC-Link)	[V_{RMS}]	**230**
Phase:		
k_E	[V_{RMS}/krpm]	42.7
$R_{Ph,20}$	[Ohm]	0.136
L_d	[mH]	0.58
L_q	[mH]	0.73
Line to line:		
$k_{E,LL}$	[V_{RMS}/krpm]	73.9
$R_{LL,20}$	[Ohm]	0.272
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
**Up to base speed @ max torque speed curve
***The rotational direction is defined according to DIN-EN60034-8 (looking on the motor shaft).
****Technical information about oil cooling on request

EFFICIENCY MAP

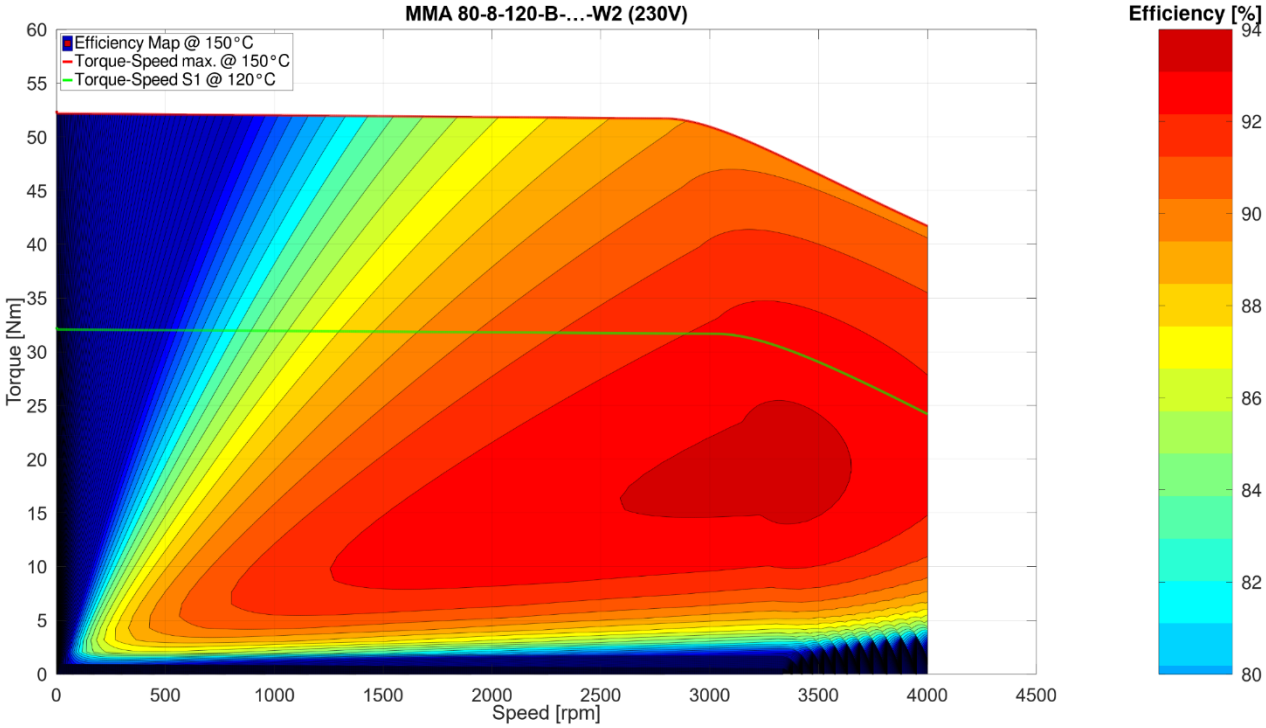

Figure 1 : efficiency map at 330V DC / 230V AC

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