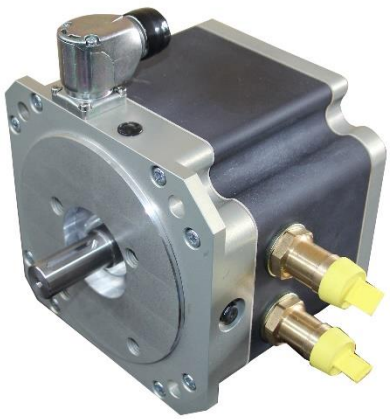
MMA80-8-AC1

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 AC1 is specifically designed for auxiliaries and can be proposed with flange inverter emDrive H05.

Parameter	Unit	Value
		230 Vac / 330Vdc
Power	[kW]	5.2
Torque (rated @ 100°C*)	[Nm]	11,5
Torque (rated @ 120°C*)	[Nm]	16.5
Torque (max @ 100°C*) (60 sec.) **	[Nm]	21.5
Torque (max @ 120°C*) (30 sec.) **	[Nm]	21.5
Speed (rated)	[rpm]	3000
Speed (max)	[rpm]	3800
Freq.	[Hz]	400
Pole pairs		8
Current (rated) @ rated torque 120°C*	[ARMS]	19.8
Current (max) @ max torque	[ARMS]	26.1
Motor voltage (rated phase to phase)	[VRMS]	**230**
DC-link voltage	[V]	≥ 325
Phase:		
k_E	[VRMS/krpm]	33.8
$R_{Ph,20}$	[Ohm]	0.21
L_d	[mH]	0.9
L_q	[mH]	0.95
Line to line:		
$k_{E,LL}$	[VRMS/krpm]	58.5
$R_{LL,20}$	[Ohm]	0.42
$L_{LL,d}$	[mH]	1.8
$L_{LL,q}$	[mH]	1.9
Connection		Y
Moment of inertia	[kgm^2]	0.0020
Weight	[kg]	8.6
Protection class		IP67
Thermal class		H
Thermal protection		PTC (Pt1000 on request)
Cooling type		Water cooled ****
rated (motor coolant)	[l/min]	6
Pressure drop @ rated flow rate	[bar]	0.015
Coolant		Water/Ethylenglycol 50/50 or hydraulic oil
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

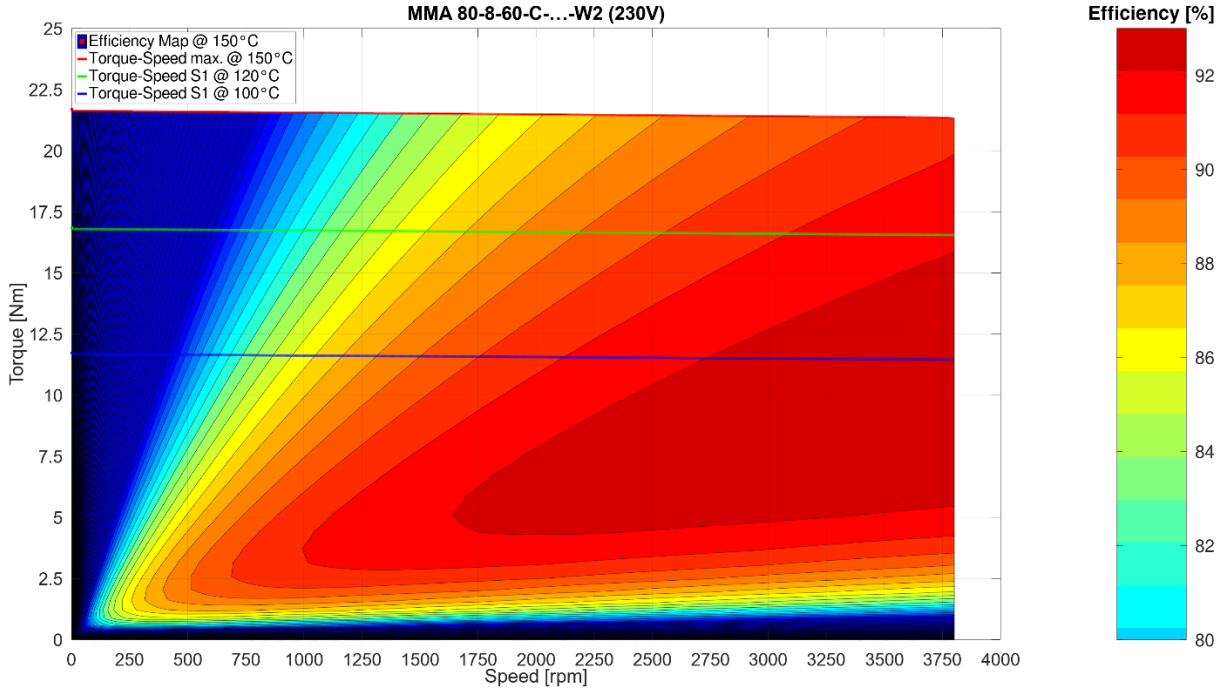

Figure 1 : efficiency map at 330V DC / 230V AC

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