MMA80-8-BD1

230V_{AC} / 330V_{DC} LIQUID COOLED ELECTRIC MOTORS



PRODUCT DATASHEET





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 BD1 is specifically designed for auxiliaries and can be proposed with flange inverter emDrive H05.

Parameter	Unit	Value
		230 Vac / 330 Vdc
Power	[kW]	7.9
Torque (rated @ 100°C*)	[Nm]	21.5
Torque (rated @ 120°C*)	[Nm]	25
Torque (max @ 100°C*) (60 sec.) **	[Nm]	41.5
Torque (max @ 120°C*) (30 sec.) **	[Nm]	41.5
Speed (rated)	[rpm]	3000
Speed (max)	[rpm]	4000
Freq. (rated)	[Hz]	400
Pole pairs		8
Current (rated) @ rated torque 120°C	[A _{RMS}]	23.9
Current (max) @ max torque	[A _{RMS}]	40
Motor voltage (rated phase to phase)	[V _{RMS}]	230
DC-link voltage	[V]	>325
Phase:		
k _E	[V _{RMS} /krpm]	42
R _{Ph,20}	[Ohm]	0.178
L _d	[mH]	0.76
Lq	[mH]	0.94
Line to line:		
k _{E,LL}	[V _{RMS} /krpm]	72
R _{LL,20}	[Ohm]	0.355
L _{LL,d}	[mH]	1.5
L_LL,q	[mH]	1.8
Connection		Y
Moment of inertia	[kgm²]	0.0030
Weight	[kg]	11.5
Protection class		IP67
Thermal class		Н
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***	[0]	Clockwise
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^{*}Winding temperature

01/04/2025 [2]

^{**}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

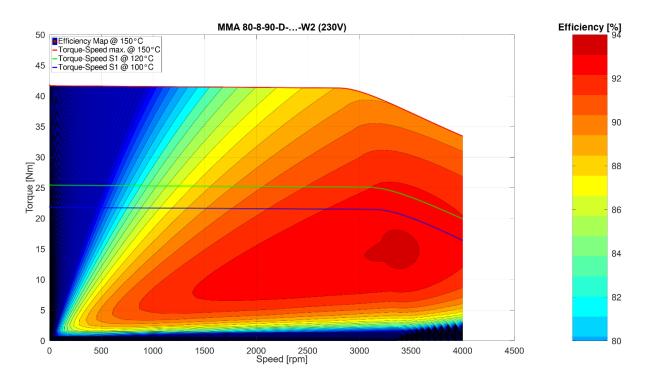


Figure 1 : efficiency map at 330V DC / 230V AC

01/04/2025 [3]





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