

## **210D0029 Motor MMA 80-8-60-C...-...-W2 V1.1**

Parameter	Unit	Value
		<b>230 V</b>
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]	<b>230</b>
DC-link voltage	[V]	≥ 325
<b>Phase:</b>		
k <sub>E</sub>	[VRMS/krpm]	33.8
R <sub>Ph,20</sub>	[Ohm]	0.21
L <sub>d</sub>	[mH]	0.9
L <sub>q</sub>	[mH]	0.95
<b>Line to line:</b>		
k <sub>E,LL</sub>	[VRMS/krpm]	58.5
R <sub>LL,20</sub>	[Ohm]	0.42
L <sub>LL,d</sub>	[mH]	1.8
L <sub>LL,q</sub>	[mH]	1.9
Connection		Y
Moment of inertia	[kgm <sup>2</sup> ]	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

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



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).