

IEC LV MOTORS

Motor data sheet

M3AA 90LB 2

Definition	Data	Unit	Remarks
Product code	3GAA091520-**K		CalcId: 3GZF021009-1012
Voltage code	D		
Type/Frame	M3AA 90LB 2		
Design	BASIC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P _N	1.5	kW	
Rated voltage U _N	400	V	± 5 % (IEC 60034-1)
Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
Rated speed n _N	2906	r/min	
Rated current I _N	2.8	A	
Starting current I _S /I _N	7.9		
Nominal torque T _N	4.9	Nm	
Locked rotor torque T _l /T _N	3		
Maximum torque T _b /T _N	3.7		
Efficiency - full load 100%	84.2	%	IEC 60034-2-1:2014
Efficiency - 75%	84.8	%	
Efficiency - 50%	84.7	%	
Power factor - full load 100%	0.89		
Bearing DE/NDE	6205-2Z/C3 6204-2Z/C3		
Sound pressure level L _{pA} dB	60	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD ² kgm ²	0.0027	kg-m ²	
Weight	17	kg	
Ambient temperature	40	°C	
Motor losses at VSD operating points	losses in efficiency %	losses in Watt	losses in relative to nom. power %
VSD Speed 90% Torque 100%	83.1	274	18.3
VSD Speed 50% Torque 100%	75.6	242	16.1
VSD Speed 25% Torque 100%	53.1	331	22.1
VSD Speed 90% Torque 50%	83.6	132	8.8
VSD Speed 50% Torque 50%	80.8	89	5.9
VSD Speed 50% Torque 25%	76.8	57	3.8
VSD Speed 25% Torque 25%	68.2	44	2.9