

Motor data sheet

M3AA 180MLA 4

Definition	Data	Unit	Remarks
Product code	3GAA182410-**K		CalcId: 3GZF021018-645
Voltage code	D		
Type/Frame	M3AA 180MLA 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P _N	18.5	kW	
Rated voltage U _N	415	V	± 5 % (IEC 60034-1)
Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
Rated speed n _N	1482	r/min	
Rated current I _N	33.8	A	
Starting current I _S /I _N	7.8		
Nominal torque T _N	119.17	Nm	
Locked rotor torque T _l /T _N	3.1		
Maximum torque T _b /T _N	3.29		
Efficiency - full load 100%	92.6	%	IEC 60034-2-1:2014
Efficiency - 75%	93.1	%	
Efficiency - 50%	92.6	%	
Power factor - full load 100%	0.82		
Bearing DE/NDE	6310-2Z/C3 6209-2Z/C3		
Sound pressure level L _{pA} dB	59.8	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD ² kgm ²	0.22	kg-m ²	
Weight	177	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%	91.8	1487	8.0
VSD Speed 50% Torque 100%	88.2	1238	6.7
VSD Speed 25% Torque 100%	79.6	1185	6.4
VSD Speed 90% Torque 50%	91.1	813	4.4
VSD Speed 50% Torque 50%	88.9	578	3.1
VSD Speed 50% Torque 25%	85.2	402	2.2
VSD Speed 25% Torque 25%	79.0	307	1.7