

IEC LV MOTORS

Motor data sheet

M3BP 315MLA 2

Definition	Data	Unit	Remarks
Product code	3GBP311410-***K		CalcId: 3GZF021031-1239
Voltage code	D		
Type/Frame	M3BP 315MLA 2		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	160	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	2984	r/min	
Rated current I_N	268	A	
Starting current I_S/I_N	7.9		
Nominal torque T_N	512	Nm	
Locked rotor torque T_l/T_N	2.4		
Maximum torque T_b/T_N	3		
Efficiency - full load 100%	95.6	%	IEC 60034-2-1:2014
Efficiency - 75%	95.5	%	
Efficiency - 50%	94.6	%	
Power factor - full load 100%	0.86		
Bearing DE/NDE	6316/C3 6316/C3		
Sound pressure level L_{pA} dB	78	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	1.6	kg-m ²	
Weight	1100	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%	95.4	6943	4.3
VSD Speed 50% Torque 100%	94.4	4746	3.0
VSD Speed 25% Torque 100%	91.1	3908	2.4
VSD Speed 90% Torque 50%	94.0	4596	2.9
VSD Speed 50% Torque 50%	94.1	2508	1.6
VSD Speed 50% Torque 25%	91.5	1858	1.2
VSD Speed 25% Torque 25%	89.4	1186	0.7