

IEC LV MOTORS

Motor data sheet

M3BP 315SMC 2

Definition	Data	Unit	Remarks
Product code	3GBP311230-**K		CalcId: 3GZF021031-1368
Voltage code	D		
Type/Frame	M3BP 315SMC 2		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	132	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	2983	r/min	
Rated current I_N	221	A	
Starting current I_S/I_N	7.3		
Nominal torque T_N	422	Nm	
Locked rotor torque T_l/T_N	1.8		
Maximum torque T_b/T_N	2.8		
Efficiency - full load 100%	95.4	%	IEC 60034-2-1:2014
Efficiency - 75%	95.5	%	
Efficiency - 50%	95.0	%	
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	1.5	kg-m ²	
Weight	980	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%	95.1	6121	4.6
VSD Speed 50% Torque 100%	93.5	4588	3.5
VSD Speed 25% Torque 100%	89.4	3913	3.0
VSD Speed 90% Torque 50%	94.0	3792	2.9
VSD Speed 50% Torque 50%	93.5	2294	1.7
VSD Speed 50% Torque 25%	90.9	1652	1.3
VSD Speed 25% Torque 25%	88.1	1114	0.8