

IEC LV MOTORS

Motor data sheet

M3BP 315SMC 4

Definition	Data	Unit	Remarks
Product code	3GBP312230-***K		CalcId: 3GZF021031-1393
Voltage code	D		
Type/Frame	M3BP 315SMC 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P _N	110	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	1490	r/min	
Rated current I _N	194	A	
Starting current I _S /I _N	7.2		
Nominal torque T _N	705	Nm	
Locked rotor torque T _l /T _N	2.2		
Maximum torque T _b /T _N	3.2		
Efficiency - full load 100%	95.4	%	IEC 60034-2-1:2014
Efficiency - 75%	95.4	%	
Efficiency - 50%	94.7	%	
Power factor - full load 100%	0.82		
Bearing DE/NDE	6319/C3 6316/C3		
Sound pressure level L _{pA} dB	71	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD ² kgm ²	2.4	kg-m ²	
Weight	950	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%	95.0	5210	4.7
VSD Speed 50% Torque 100%	93.3	3950	3.6
VSD Speed 25% Torque 100%	88.7	3503	3.2
VSD Speed 90% Torque 50%	94.0	3160	2.9
VSD Speed 50% Torque 50%	93.2	2006	1.8
VSD Speed 50% Torque 25%	90.3	1477	1.3
VSD Speed 25% Torque 25%	86.2	1101	1.0