

# Motor data sheet

IEC LV MOTORS

## M3BP 315MLB 2

Definition	Data	Unit	Remarks
Product code	3GBP311420-**K		CalcId: 3GZF021031-1237
Voltage code	D		
Type/Frame	M3BP 315MLB 2		
Design	High-output		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output $P_N$	200	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 $I_N$	333	A	
Starting current $I_S/I_N$	8.2		
Nominal torque $T_N$	640	Nm	
Locked rotor torque $T_l/T_N$	2.7		
Maximum torque $T_b/T_N$	3.3		
Efficiency - full load 100%	95.8	%	IEC 60034-2-1:2014
Efficiency - 75%	95.8	%	
Efficiency - 50%	95.2	%	
Power factor - full load 100%	0.87		
Bearing DE/NDE	6316/C3 6316/C3		
Sound pressure level $L_{pA}$ dB	81	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm <sup>2</sup>	1.9	kg-m <sup>2</sup>	
Weight	1220	kg	
Ambient temperature	40	°C	
<b>Motor losses at VSD operating points</b>	<b>losses in efficiency %</b>	<b>losses in Watt</b>	<b>losses in relative to nom. power %</b>
VSD Speed 90% Torque 100%	95.5	8482	4.2
VSD Speed 50% Torque 100%	94.4	5932	3.0
VSD Speed 25% Torque 100%	91.2	4825	2.4
VSD Speed 90% Torque 50%	94.4	5339	2.7
VSD Speed 50% Torque 50%	94.3	3022	1.5
VSD Speed 50% Torque 25%	92.0	2174	1.1
VSD Speed 25% Torque 25%	89.7	1435	0.7