

IEC LV MOTORS

Motor data sheet

M3BP 280SMD 2

Definition	Data	Unit	Remarks
Product code	3GBP281240-***K		CalcId: 3GZF021028-1373
Voltage code	D		
Type/Frame	M3BP 280SMD 2		
Design	High-output		
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	2980	r/min	
Rated current I _N	181	A	
Starting current I _S /I _N	8.5		
Nominal torque T _N	352	Nm	
Locked rotor torque T _l /T _N	2.6		
Maximum torque T _b /T _N	3.3		
Efficiency - full load 100%	95.2	%	IEC 60034-2-1:2014
Efficiency - 75%	95.2	%	
Efficiency - 50%	94.3	%	
Power factor - full load 100%	0.87		
Bearing DE/NDE	6316/C3 6316/C3		
Sound pressure level L _{pA} dB	77	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD ² kgm ²	1.1	kg-m ²	
Weight	725	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%	94.9	5320	4.8
VSD Speed 50% Torque 100%	93.7	3698	3.4
VSD Speed 25% Torque 100%	89.8	3124	2.8
VSD Speed 90% Torque 50%	93.6	3385	3.1
VSD Speed 50% Torque 50%	93.5	1912	1.7
VSD Speed 50% Torque 25%	90.7	1410	1.3
VSD Speed 25% Torque 25%	88.3	911	0.8