

IEC LV MOTORS

Motor data sheet

M3BP 280SMC 4

Definition	Data	Unit	Remarks
Product code	3GBP282230-***K		CalcId: 3GZF021028-902
Voltage code	D		
Type/Frame	M3BP 280SMC 4		
Design	CENELEC		
Efficiency class	IE3		IEC 60034-2-1:2014
Rated output P_N	90	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	1486	r/min	
Rated current I_N	155	A	
Starting current I_S/I_N	7.6		
Nominal torque T_N	578	Nm	
Locked rotor torque T_l/T_N	2.7		
Maximum torque T_b/T_N	3.1		
Efficiency - full load 100%	95.2	%	IEC 60034-2-1:2014
Efficiency - 75%	95.2	%	
Efficiency - 50%	94.6	%	
Power factor - full load 100%	0.85		
Bearing DE/NDE	6316/C3 6316/C3		
Sound pressure level L_{pA} dB	72	dB(A)	+3dB(A)
Moment of inertia $J = \frac{1}{4} GD^2$ kgm ²	1.5	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%	94.7	4533	5.0
VSD Speed 50% Torque 100%	92.7	3544	3.9
VSD Speed 25% Torque 100%	87.6	3185	3.5
VSD Speed 90% Torque 50%	93.8	2677	3.0
VSD Speed 50% Torque 50%	92.8	1746	1.9
VSD Speed 50% Torque 25%	89.8	1278	1.4
VSD Speed 25% Torque 25%	85.7	939	1.0