

ABB Motors and Generators		Technical Data Sheet		
		Project	Location	
Department/Author	Customer name	Customer ref.		Item name 4.00003
Our ref.	Rev/Changed by A	Date of issue 6/15/2019	Saving ident m2bax_ie3_2_4_6_8p_flange_b5.xls	Pages 1(3)
No.	Definition	Data	Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	3GBA 314 210-BDMIN		
3	Type/Frame	M2BAX 315SMA 8		
4	Mounting	IM3001, B5(flange)		
5	Rated output P_N	55	kW	
6	Service factor	1		
7	Type of duty	S1 100%		
8	Rated voltage U_N	415	VD	+10, -10 %
9	Rated frequency f_N	50	Hz	+5, -5 %
10	Rated speed n_N	743	r/min	
11	Rated current I_N	110	A	
12	Method of Starting	DOL		
13	Starting current I_s/I_N	7.7		
14	Nominal torque T_N	707	Nm	
15	Locked rotor torque T_s/T_N	1.7		
16	Maximum torque T_{max}/T_N	2.9		
17				
18				
	Load characteristics	Load %	Current A	Efficiency % Power factor
19	PLL determined from residual loss	100	110	92.5 0.75
20		75	86.2	92.5 0.72
21		50	101	90.5 0.42
22				
23	Thermal withstand time hot	12	s	
24	Thermal withstand time cold	22	s	
25	Insulation class / Temperature class	F / B		
26	Ambient temperature	50	°C	
27	Altitude	1000	m.a.s.l.	
28	Degree of protection	IP55		
29	Cooling system	IC411		
30	Bearing DE/NDE	6319/C3 - 6316/C3		
31	Sound pressure level (LP dB(A) 1m)	85	dB(A)	at no-load
32	Moment of inertia $J = \frac{1}{4} GD^2$	3.2	kg-m2	
33	Position of terminal box	Top		
34	Direction of rotation	Bi-directional		
35	Weight of rotor	234	kg	
36	Total weight of motor	830	kg	
37				
38				
39				
40				
41				
42				
43				
44				
45				
Ex-motors				
46				
47				
48				
Option Variant Codes / Definition				
49	Application check not made in absence of load details.			
50	Efficiency level : IE3 as per IS12615 2018.			
51				
52				
Remarks:				
Applicable standards: IS 12615 2018				

All performance values are subject to IS/IEC tolerances





