

ABB Motors and Generators		Technical Data Sheet			
		Project	Location		
Department/Author	Customer name		Customer ref.		Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident	Pages	
	A	6/15/2019	m2bax_ie3_2_4_6_8p_foot cum flar	1(3)	
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	3GBA 284 120-HDMIN			
3	Type/Frame	M2BAX 280SB 8			
4	Mounting	IM2001, B35(foot-flange)			
5	Rated output P_N	45	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	742	r/min		
11	Rated current I_N	90	A		
12	Method of Starting	DOL			
13	Starting current I_s/I_N	7.7			
14	Nominal torque T_N	579	Nm		
15	Locked rotor torque T_s/T_N	1.9			
16	Maximum torque T_{max}/T_N	3.3			
17					
18					
	Load characteristics	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	90	92.2	0.75
20		75	79.6	92.2	0.64
21		50	66.7	90.2	0.52
22					
23	Thermal withstand time hot	18	s		
24	Thermal withstand time cold	32	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	6316/C3 - 6316/C3			
31	Sound pressure level (LP dB(A) 1m)	85	dB(A)	at no-load	
32	Moment of inertia $J = \frac{1}{4} GD^2$	2.2	kg-m2		
33	Position of terminal box	Top			
34	Direction of rotation	Bi-directional			
35	Weight of rotor	182	kg		
36	Total weight of motor	646	kg		
37					
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44					
45					
Ex-motors					
46					
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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





