ABB Motors and Generators	Technical Data Sheet - DOL			
	Project		Location	
Department/Author	Customer name		Customer ref.	Item name **1.00001**
Our ref.	Rev/Changed by **A**	Date of issue **14/08/2020**	Saving ident **untitled.xls**	Pages **1(3)**

No.	Definition	Data	Unit	Remarks	
1	Product	***TEFC, 3-phase, squirrel cage induction motor***			
2	Product code	***3GBA 221 210-ADC***		Calc. ref.	3GZC021022-3
3	Type/Frame	***M2BAX 225SMA 2***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***45***	kW		
6	Service factor	***1***			
7	Type of duty	***S1(IEC) 100%***			
8	Rated voltage U_N	***400***	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f_N	***50***	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n_N	***2962***	r/min		
11	Rated current I_N	***80.6***	A		
12	No-load current	***27***	A		
13	Starting current I_s/I_N	***8.8***		Meet IEC 60034-12, N	
14	Nominal torque T_N	***145***	Nm		
15	Locked rotor torque T_S/T_N	***3.8***			
16	Maximum torque T_{max}/T_N	***3.8***			
17	Minimum torque T_{min}/T_N	***3.2***			
18	Speed at minimum torque	***1650***	r/min		
	Load characteristics (IEC 60034-2-1:2014)	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	*100*	**80.6**	**92.9 / IE2**	**0.86**
20		*75*	**63.2**	**92.8**	**0.83**
21		*50*	**46.8**	**92.1**	**0.75**
22		*Start*	**709**		**0.37**
23	Maximum starting time from hot	***15***	s		
24	Maximum starting time from cold	***27***	s		
25	Insulation class / Temperature class	***F / B***			
26	Ambient temperature	***40***	°C		
27	Altitude	***1000***	m.a.s.l.		
28	Enclosure	***IP55***			
29	Cooling system	***IC411 self ventilated***			
30	Bearing DE/NDE	***6213-2Z/C3 - 6210-2Z/C3***			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	***82***	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	***0.2264505***	kg-m2		
34	Balancing				
35	Vibration class				
36	Position of terminal box	***Top***			
37	Terminal box entries; no, dimens.				
38	Number of power terminals				
39	Direction of rotation	***CW or CCW***			
40	Weight of rotor	***63***	kg		
41	Total weight of motor	***275***	kg		
42	Dimension drawing no.				
43					
44					
45					
Ex-motors					
46					
47					
48					
Option	Variant Codes / Definition				
49					
50					
51					
52					

Remarks:

Data based on situation 28/06/2018
All data subject to tolerances in accordance with IEC
Guaranteed values on request