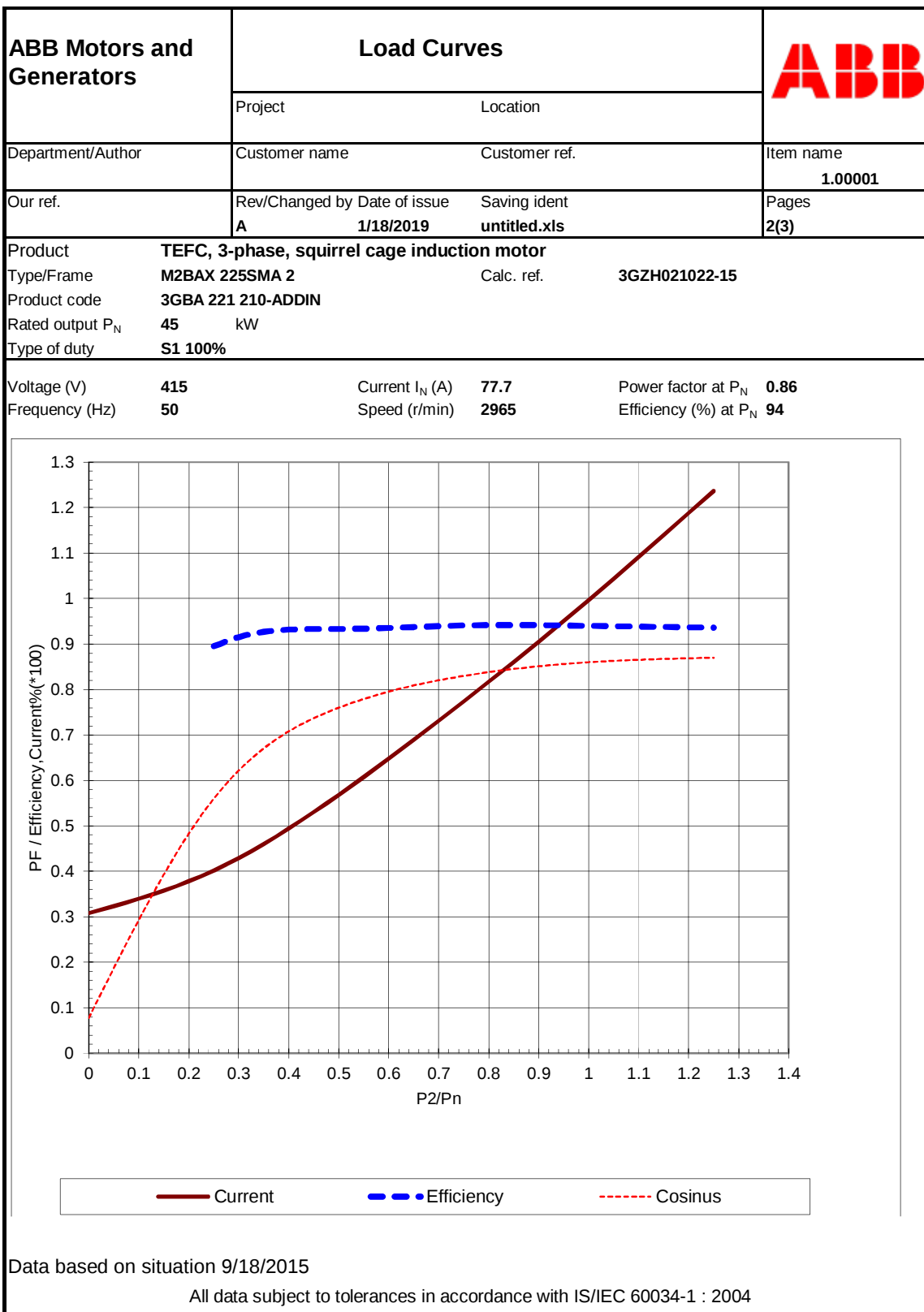
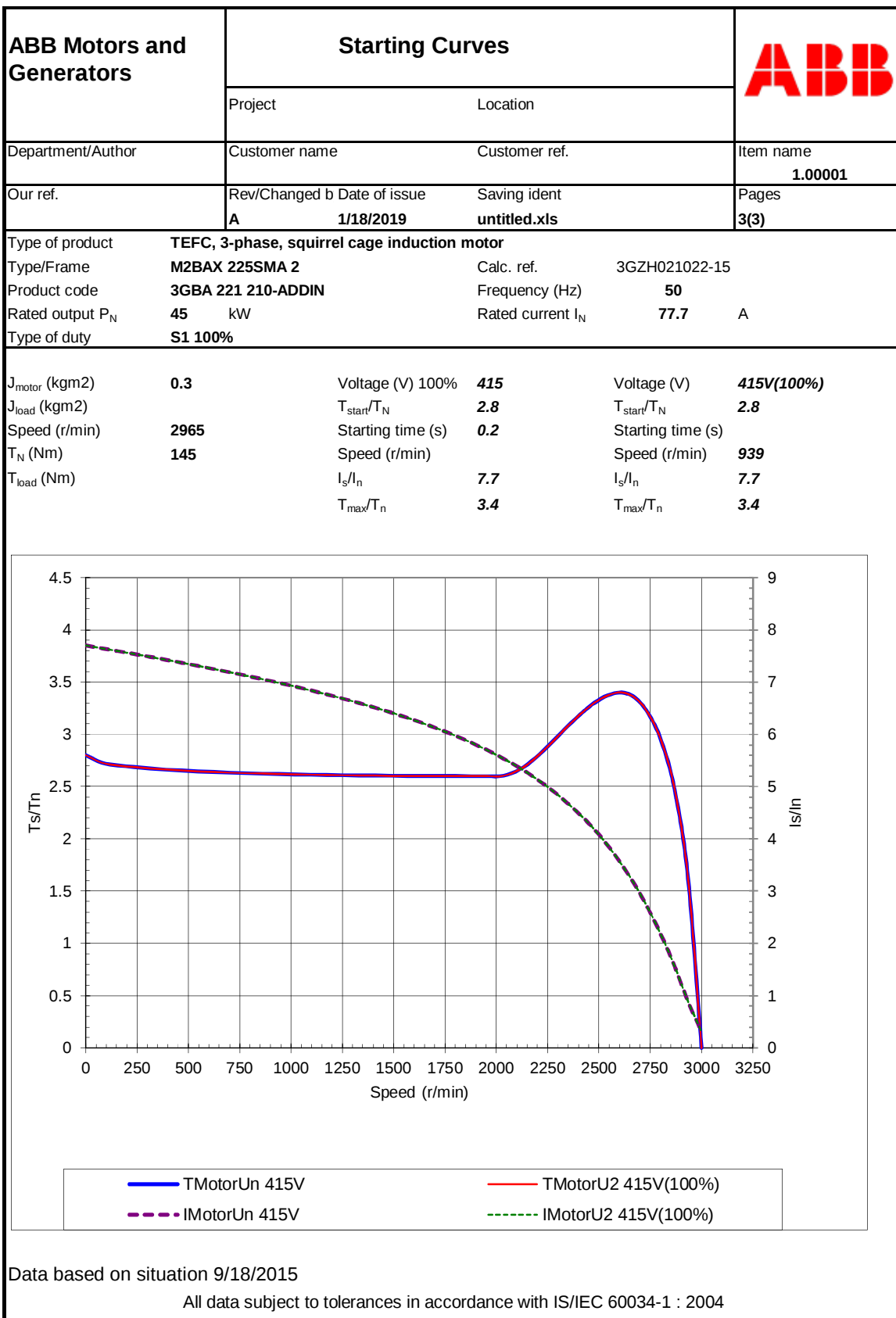
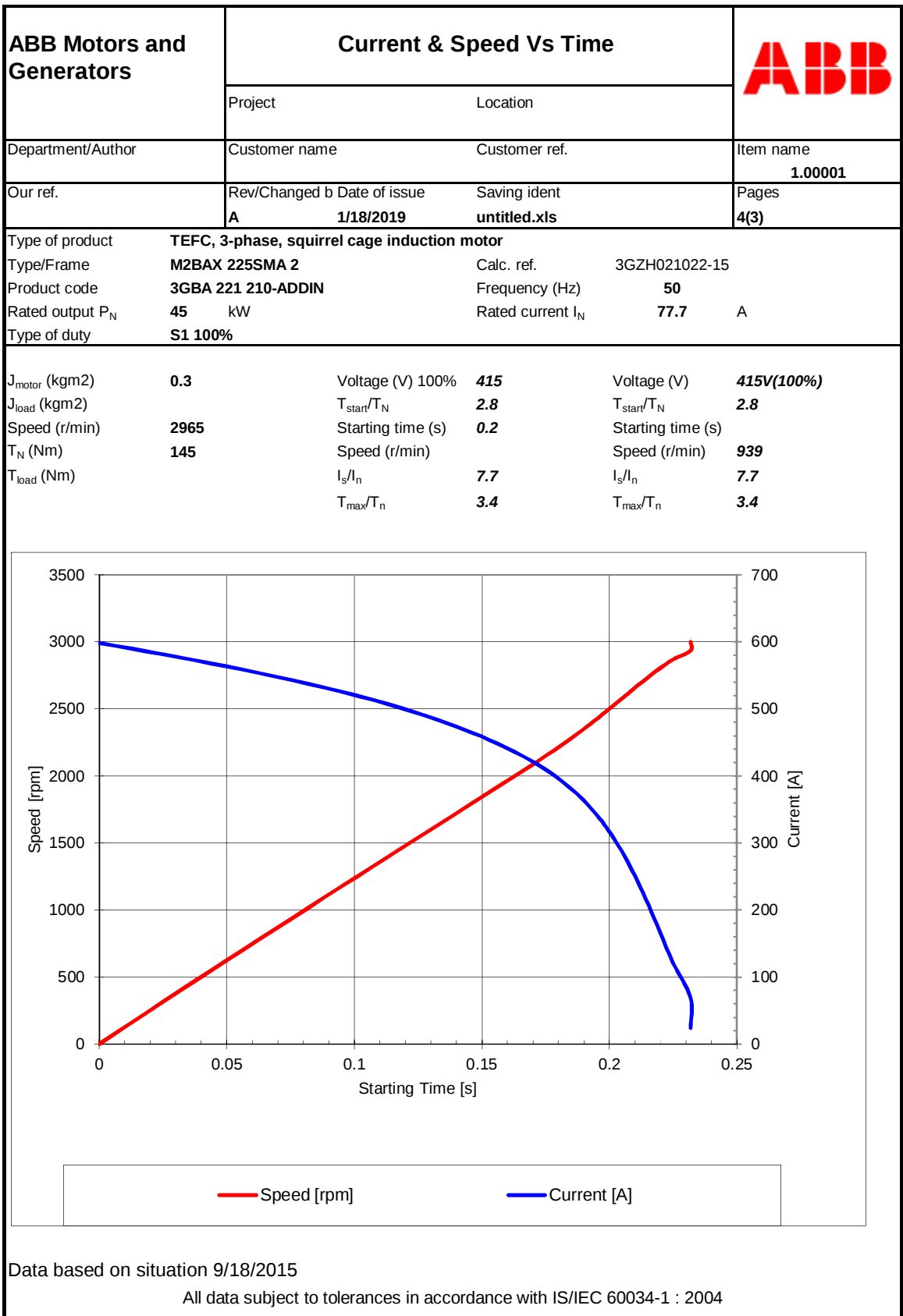


ABB Motors and Generators		Technical Data Sheet				
		Project		Location		
Department/Author		Customer name		Customer ref.		Item name 1.00001
Our ref.		Rev/Changed by A	Date of issue 1/18/2019	Saving ident untitled.xls		Pages 1(3)
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 221 210-ADDIN		Calc. ref.	3GZH021022-15	
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 100%				
8	Rated voltage U_N	415	VD	+10, -10 %		
9	Rated frequency f_N	50	Hz	+5, -5 %		
10	Rated speed n_N	2965	r/min			
11	Rated current I_N	77.7	A			
12						
13	Starting current I_s/I_N	7.7				
14	Nominal torque T_N	145	Nm			
15	Locked rotor torque T_s/T_N	2.8				
16	Maximum torque T_{max}/T_N	3.4				
17						
18						
Load characteristics		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	77.7	94.0 / IE3	0.86	
20		75	60.1	94.1	0.83	
21		50	44.1	93.3	0.76	
22						
23	Thermal withstand time hot	21	s			
24	Thermal withstand time cold	37	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 self ventilated				
30	Bearing DE/NDE	6313-2Z/C3 - 6210-2Z/C3				
31	Sound pressure level (LP dB(A) 1m)		dB(A)	at no-load		
32	Moment of inertia $J = \frac{1}{4} GD^2$	0.296	kg-m2			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Weight of rotor	68	kg			
36	Total weight of motor	287	kg			
37						
38						
39						
40						
41						
42						
43						
44						
45						
Ex-motors						
46						
47						
48						
Option Variant Codes / Definition						
49						
50						
51						
52						
Remarks:						
Data based on situation 9/18/2015						

All performance values are subject to IS/IEC tolerances







Data based on situation 9/18/2015

All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004

