



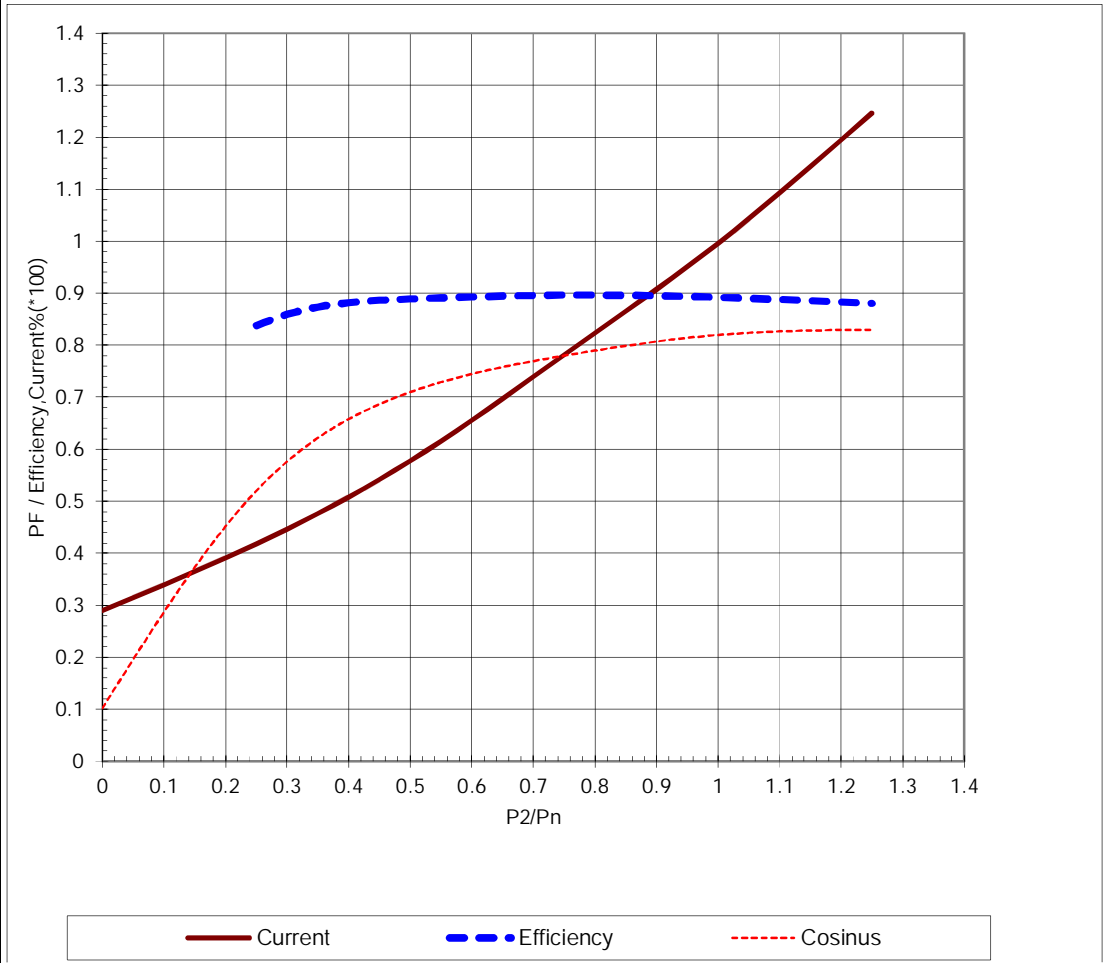
ABB Motors and Generators		Technical Data Sheet				
Project		Location				
Department/Author		Customer name		Customer ref.		
Our ref.		Rev/Changed by A		Date of issue 1/18/2019		
		Saving ident untitled.xls		Item name 1.00001		
				Pages 1(3)		
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 131 210-ADDIN				
3	Type/Frame	M2BAX 132SMA 2				
4	Mounting	IM1001, B3(foot)				
5	Rated output P _N	5.5	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	2900	r/min			
11	Rated current I _N	10.5	A			
12						
13	Starting current I _s /I _N	7				
14	Nominal torque T _N	18.1	Nm			
15	Locked rotor torque T _S /T _N	2.1				
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	10.5	89.2 / IE3	0.82	
20		75	8.2	89.6	0.78	
21		50	6.1	88.9	0.71	
22						
23	Thermal withstand time hot	9	s			
24	Thermal withstand time cold	16	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	6208-2Z/C3 - 6208-2Z/C3				
31	Sound pressure level (LP dB(A) 1m)	76	dB(A)	at no-load		
32	Moment of inertia J = ¼ GD ²	0.01625	kg·m ²			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Total weight of motor	69	kg			
36		User defined motor				
37						
38						
39						
40						
41						
42						
43						
44						
45						
Ex-motors						
46						
47						
48						
Option Variant Codes / Definition						
49						
50						
51						
52						
Remarks:						
12/23/2015 6:14:00 AM						

ABB Motors and Generators	Load Curves		
	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 2(3)

Product TEFC, 3-phase, squirrel cage induction motor
Type/Frame M2BAX 132SMA 2
Product code 3GBA 131 210-ADDIN
Rated output P_N 5.5 kW
Type of duty S1 100%

Voltage (V) 415 **Current I_N (A)** 10.5 **Power factor at P_N** 0.82
Frequency (Hz) 50 **Speed (r/min)** 2900 **Efficiency (%) at P_N** 89.2



Data based on situation 12/23/2015
 All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004


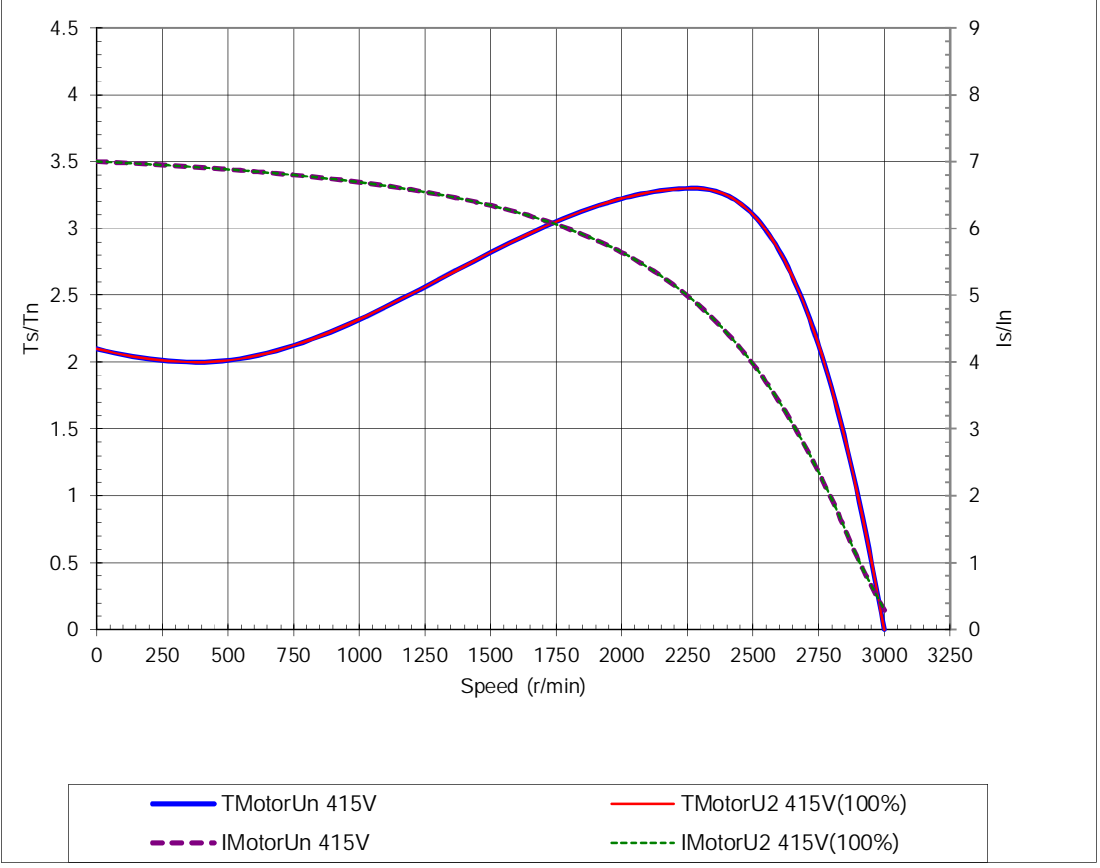
ABB Motors and Generators	Starting Curves			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed b	Date of issue	Saving ident	Pages
	A	1/18/2019	untitled.xls	3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 132SMA 2			
Product code	3GBA 131 210-ADDIN	Frequency (Hz)	50	
Rated output P _N	5.5 kW	Rated current I _N	10.5	A
Type of duty	S1 100%			
J _{motor} (kgm2)	0.0162	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm2)		T _{start} /T _N	2.1	T _{start} /T _N 2.1
Speed (r/min)	2900	Starting time (s)	0.1	Starting time (s)
T _N (Nm)	18.1	Speed (r/min)		Speed (r/min)
T _{load} (Nm)		I _s /I _N	7	I _s /I _N 7
		T _{max} /T _N	3.3	T _{max} /T _N 3.3
				
<p>Data based on situation 12/23/2015</p> <p>All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004</p>				


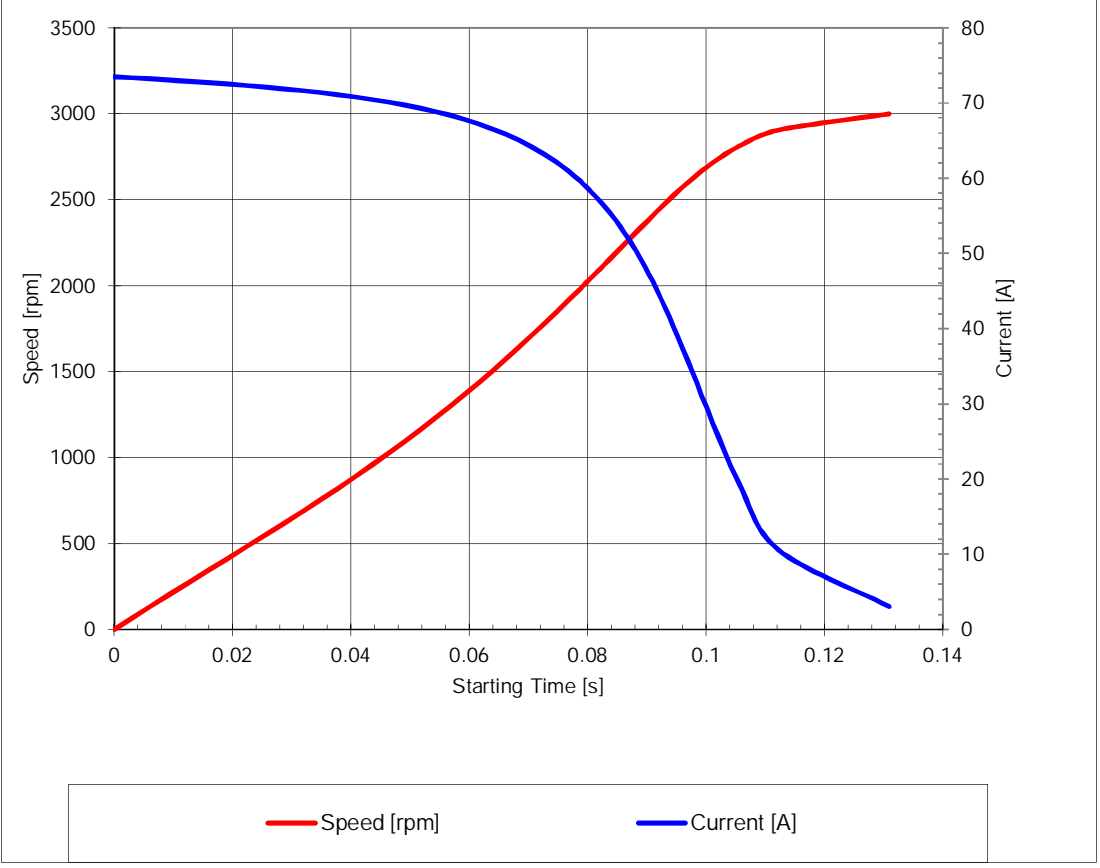

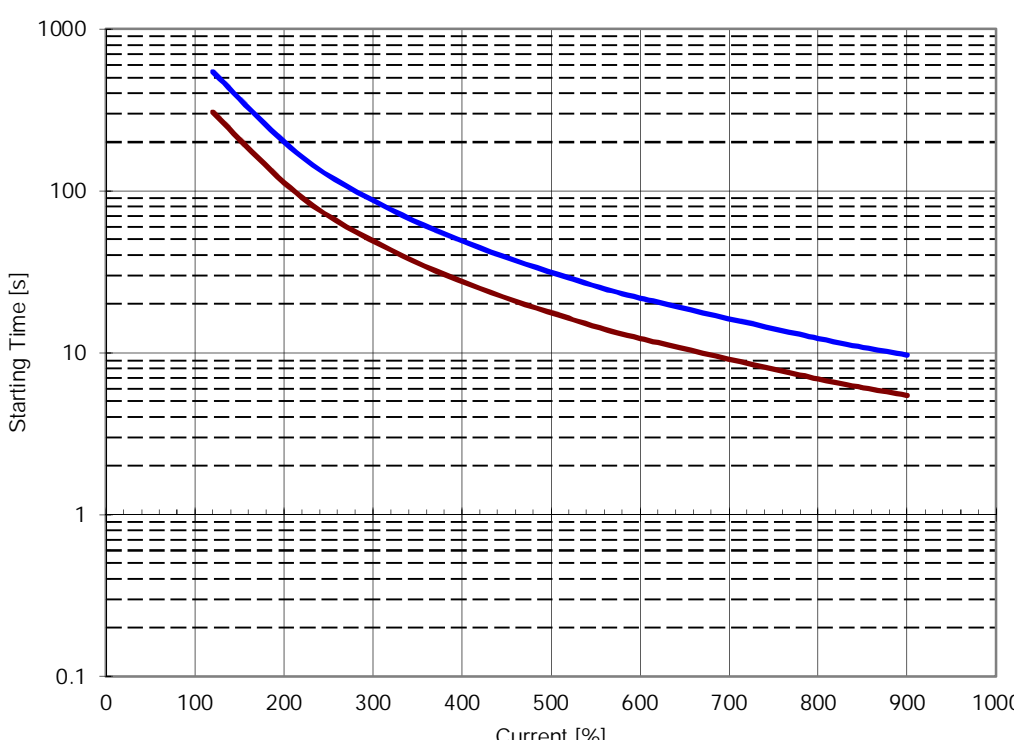
ABB Motors and Generators	Current & Speed Vs Time				
	Project	Location			
Department/Author	Customer name	Customer ref.		Item name 1.00001	
Our ref.	Rev/Changed b	Date of issue	Saving ident	Pages	
	A	1/18/2019	untitled.xls	4(3)	
Type of product	TEFC, 3-phase, squirrel cage induction motor				
Type/Frame	M2BAX 132SMA 2				
Product code	3GBA 131 210-ADDIN		Frequency (Hz)	50	
Rated output P_N	5.5	kW	Rated current I_N	10.5	A
Type of duty	S1 100%				
J_{motor} (kgm ²)	0.0162	Voltage (V) 100%	415	Voltage (V)	415V(100%)
J_{load} (kgm ²)		T_{start}/T_N	2.1	T_{start}/T_N	2.1
Speed (r/min)	2900	Starting time (s)	0.1	Starting time (s)	
T_N (Nm)	18.1	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_N	7	I_s/I_N	7
		T_{max}/T_N	3.3	T_{max}/T_N	3.3
					
<p>Data based on situation 12/23/2015</p> <p>All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004</p>					

ABB Motors and Generators	Thermal Withstand Curve			
	Project	Location		
Department/Author	Customer name	Customer ref.	Item name 1.00001	
Our ref.	Rev/Changed b Date of issue A 1/18/2019	Saving ident untitled.xls	Pages 5(3)	
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 132SMA 2			
Product code	3GBA 131 210-ADDIN	Frequency (Hz)	50	
Rated output P _N	5.5 kW	Rated current I _N	10.5	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	0.0162	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.1	T _{start} /T _N 2.1
Speed (r/min)	2900	Starting time (s)	0.1	Starting time (s)
T _N (Nm)	18.1	Speed (r/min)		Speed (r/min)
T _{load} (Nm)		I _s /I _N	7	I _s /I _N 7
		T _{max} /T _N	3.3	T _{max} /T _N 3.3



Current [%]	Starting Time [s] - Running Hot	Starting Time [s] - Running Cold
100	~300	~500
200	~100	~150
300	~50	~80
400	~30	~50
500	~20	~35
600	~15	~25
700	~11	~18
800	~8	~13
900	~6	~10

Data based on situation 12/23/2015
All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004