


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 081 340-ASDIN		Calc. ref.	3GZH021008-1	
3	Type/Frame	M2BAX 80MD 2				
4	Mounting	IM1001, B3(foot)				
5	Rated output P _N	1.1	kW			
6	Service factor	1				
7	Type of duty	S1 100%				
8	Rated voltage U _N	415	VY	+10, -10 %		
9	Rated frequency f _N	50	Hz	+5, -5 %		
10	Rated speed n _N	2865	r/min			
11	Rated current I _N	2.3	A			
12						
13	Starting current I _s /I _N	7				
14	Nominal torque T _N	3.7	Nm			
15	Locked rotor torque T _S /T _N	2.8				
16	Maximum torque T _{max} /T _N	3.6				
17						
18						
Load characteristics		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	2.3	82.7 / IE3	0.8	
20		75	1.91	83.3	0.72	
21		50	1.53	81.9	0.61	
22						
23	Thermal withstand time hot	5	s			
24	Thermal withstand time cold	8	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	6204-2Z/C3 - 6203-2Z/C3				
31	Sound pressure level (LP dB(A) 1m)	73	dB(A)	at no-load		
32	Moment of inertia J = ¼ GD ²	0.00119	kg-m ²			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Weight of rotor	3	kg			
36	Total weight of motor	17	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 12/23/2015						

All performance values are subject to IS/IEC tolerances


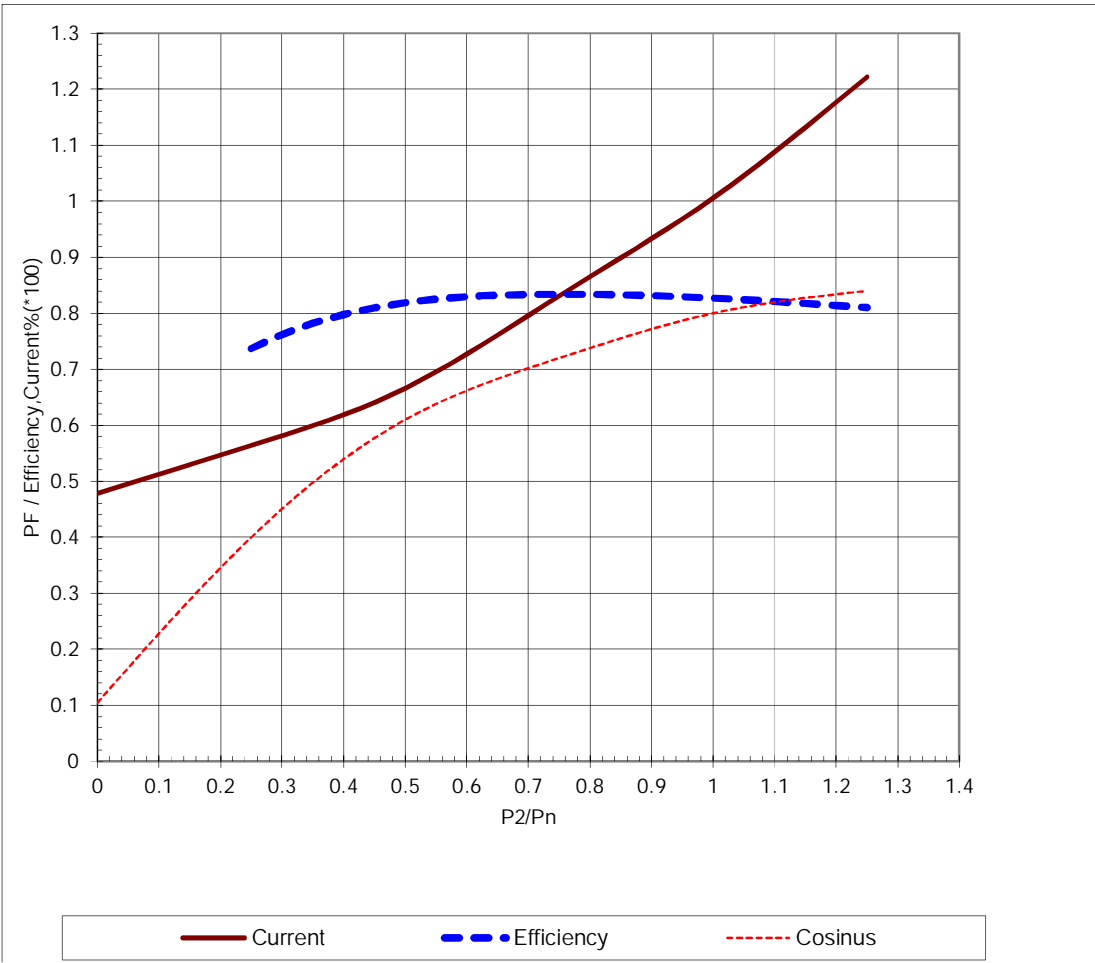
ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/18/2019	Saving ident untitled.xls
Pages 2(3)	Product TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 80MD 2	Calc. ref.	3GZH021008-1
Product code	3GBA 081 340-ASDIN		
Rated output P _N	1.1	kW	
Type of duty	S1 100%		
Voltage (V)	415	Current I _N (A)	2.3
Frequency (Hz)	50	Speed (r/min)	2865
		Power factor at P _N	0.8
		Efficiency (%) at P _N	82.7
			
<p>Data based on situation 12/23/2015</p> <p style="text-align: center;">All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004</p>			


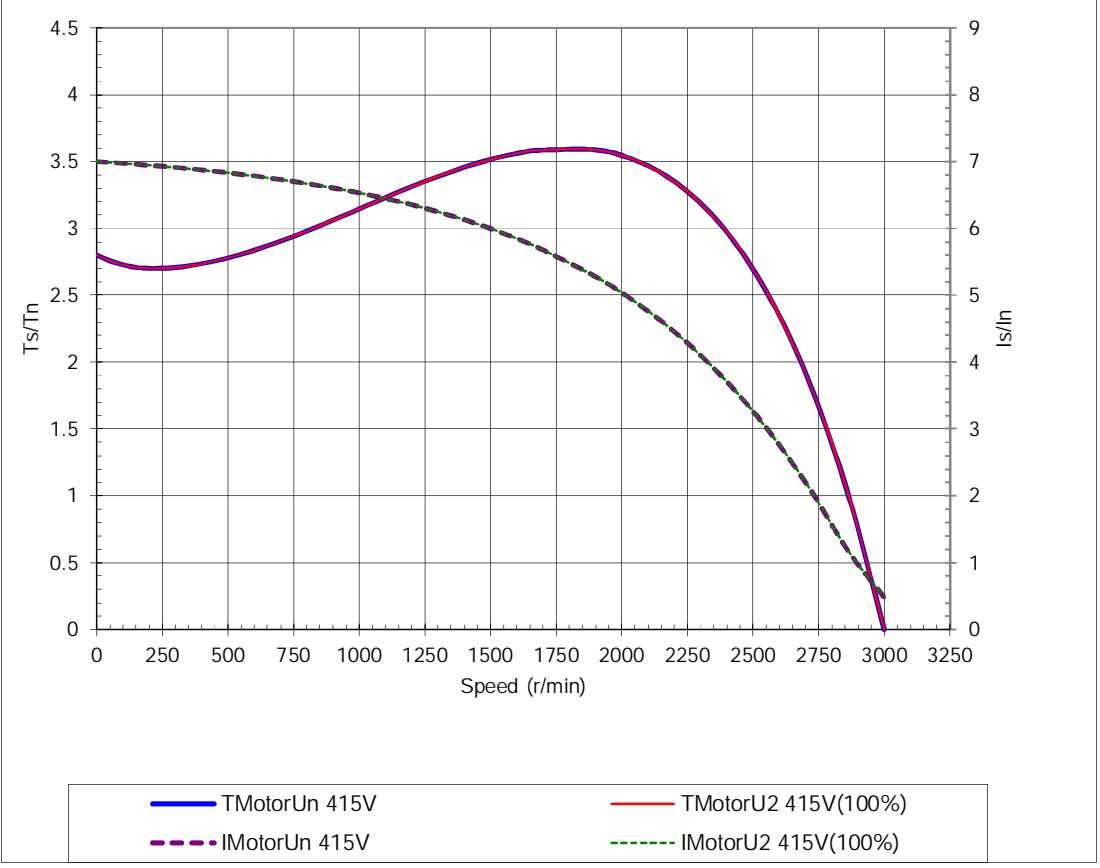
ABB Motors and Generators	Starting Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name 1.00001
Our ref.	Rev/Changed b Date of issue A 1/18/2019	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 80MD 2	Calc. ref.	3GZH021008-1
Product code	3GBA 081 340-ASDIN	Frequency (Hz)	50
Rated output P _N	1.1 kW	Rated current I _N	2.3 A
Type of duty	S1 100%		
J _{motor} (kgm ²)	0.0012	Voltage (V) 100%	415 Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.8 T _{start} /T _N 2.8
Speed (r/min)	2865	Starting time (s)	Starting time (s)
T _N (Nm)	3.7	Speed (r/min)	Speed (r/min) 939
T _{load} (Nm)		I _s /I _N	7 I _s /I _N 7
		T _{max} /T _N	3.6 T _{max} /T _N 3.6
			
Data based on situation 12/23/2015			
All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004			


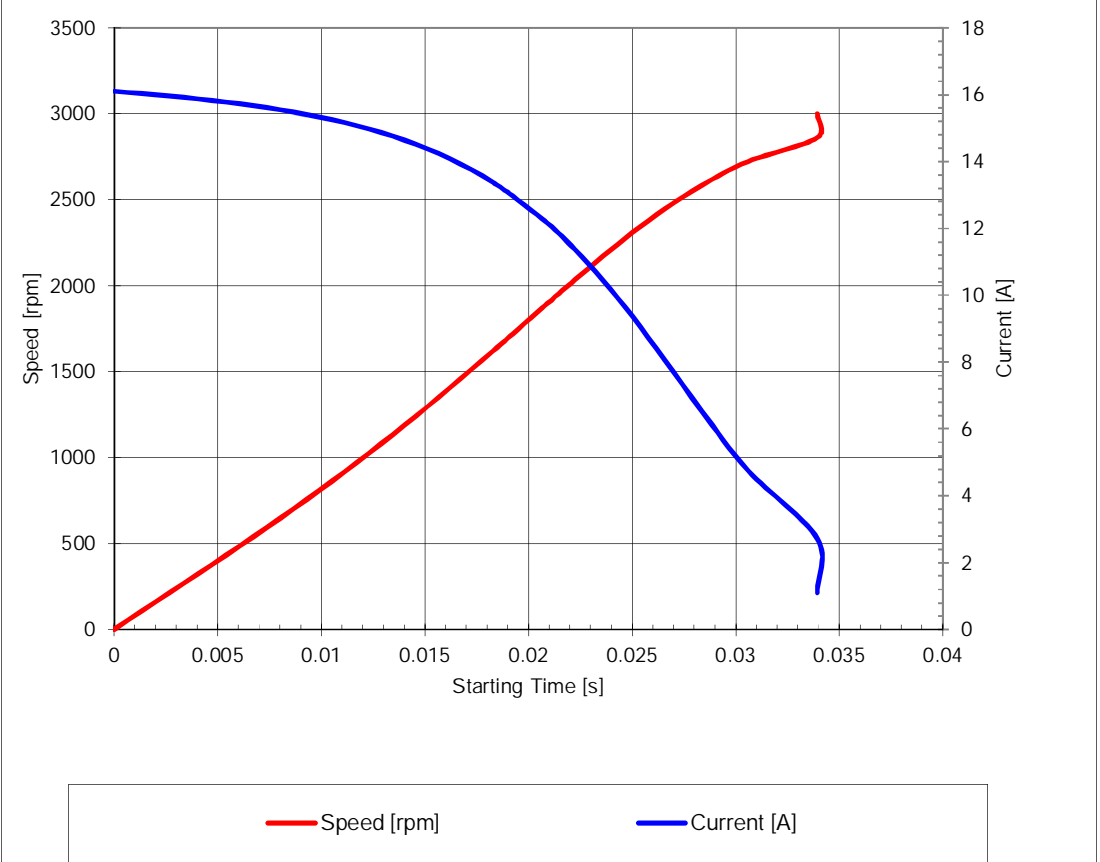

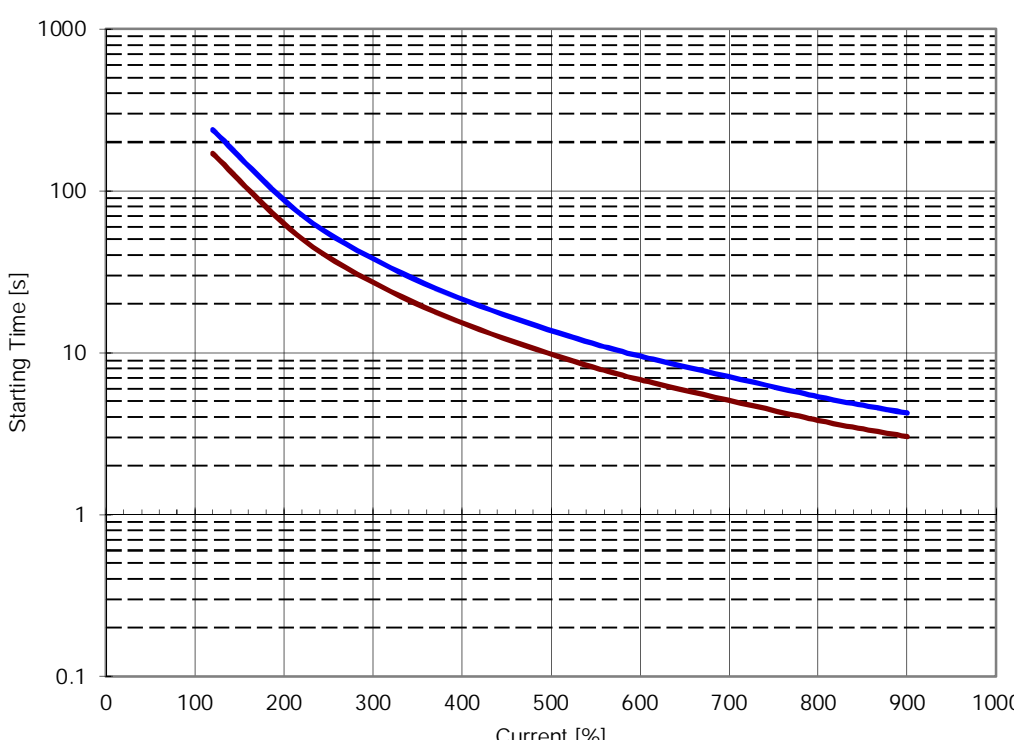
ABB Motors and Generators	Current & Speed Vs Time			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed b	Date of issue	Saving ident	Pages 4(3)
	A	1/18/2019	untitled.xls	
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 80MD 2	Calc. ref.	3GZH021008-1	
Product code	3GBA 081 340-ASDIN	Frequency (Hz)	50	
Rated output P _N	1.1 kW	Rated current I _N	2.3	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	0.0012	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.8	T _{start} /T _N 2.8
Speed (r/min)	2865	Starting time (s)		Starting time (s)
T _N (Nm)	3.7	Speed (r/min)		Speed (r/min) 939
T _{load} (Nm)		I _s /I _N	7	I _s /I _N 7
		T _{max} /T _N	3.6	T _{max} /T _N 3.6
				
<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 80MD 2	Calc. ref.	3GZH021008-1
Product code	3GBA 081 340-ASDIN	Frequency (Hz)	50
Rated output P _N	1.1 kW	Rated current I _N	2.3 A
Type of duty	S1 100%		
J _{motor} (kgm ²)	0.0012	Voltage (V) 100%	415 Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.8 T _{start} /T _N 2.8
Speed (r/min)	2865	Starting time (s)	Starting time (s)
T _N (Nm)	3.7	Speed (r/min)	Speed (r/min) 939
T _{load} (Nm)		I _s /I _N	7 I _s /I _N 7
		T _{max} /T _n	3.6 T _{max} /T _n 3.6



Current [%]	Running Hot [s]	Running Cold [s]
100	~150	~200
200	~60	~80
300	~35	~45
400	~22	~28
500	~14	~18
600	~9	~12
700	~6	~8
800	~4	~5.5
900	~3	~4

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