



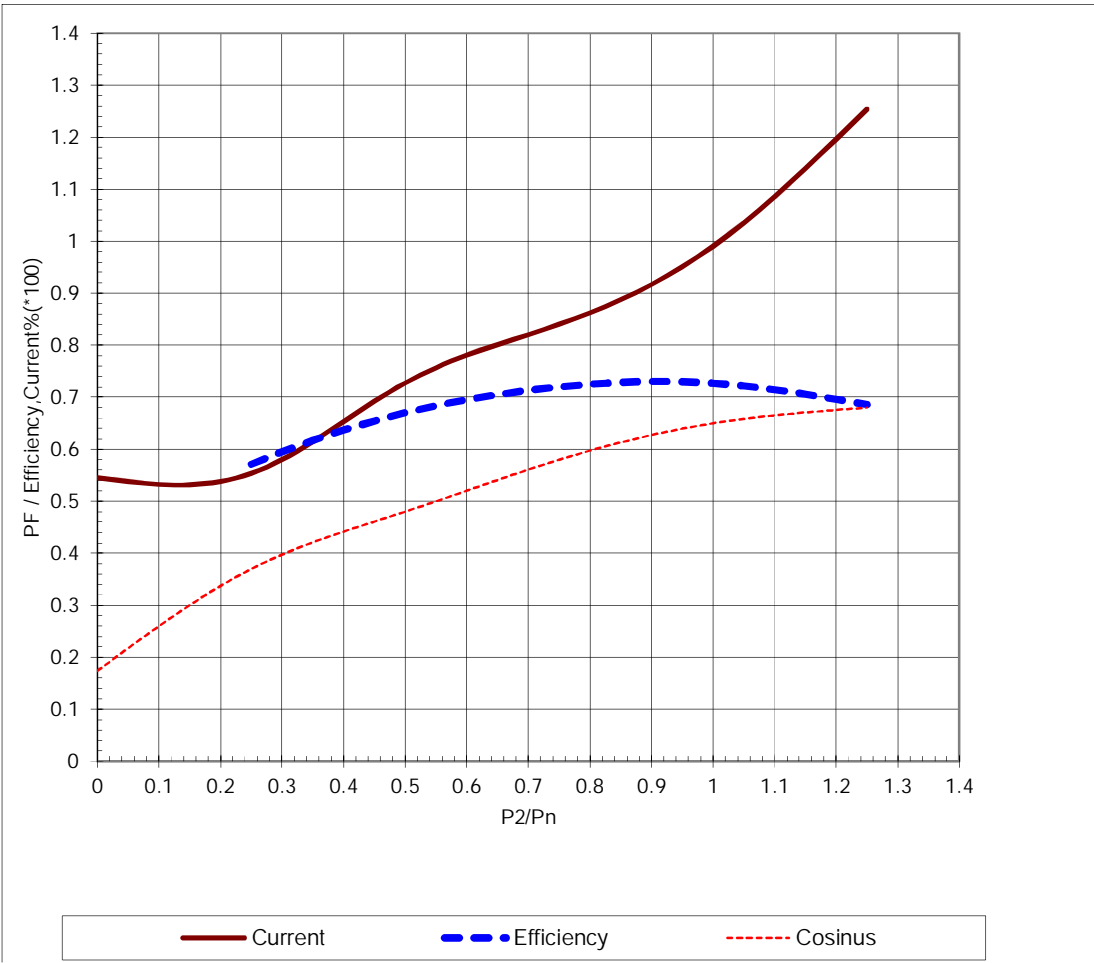
ABB Motors and Generators		Technical Data Sheet				
Project		Location				
Department/Author		Customer name		Customer ref.		
Our ref.		Rev/Changed by A		Date of issue 1/17/2019		
		Saving ident untitled.xls		Item name 1.00001		
				Pages 1(3)		
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 072320-HSCIN				
3	Type/Frame	M2BAX71MB4				
4	Mounting	IM2001, B35(foot-flange)				
5	Rated output P _N	0.37	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	1395	r/min			
11	Rated current I _N	1.1	A			
12						
13	Starting current I _s /I _N	5				
14	Nominal torque T _N	2.5	Nm			
15	Locked rotor torque T _S /T _N	1.9				
16	Maximum torque T _{max} /T _N	2.2				
17						
18						
Load characteristics		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	1.1	72.7 / IE2	0.65	
20		75	0.92	72	0.58	
21		50	0.8	67	0.48	
22						
23	Thermal withstand time hot	6	s			
24	Thermal withstand time cold	12	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	6203-2Z/C3 - 6202-2Z/C3				
31	Sound pressure level (LP dB(A) 1m)	66	dB(A)	at no-load		
32	Moment of inertia J = ¼ GD ²	0.00076	kg·m ²			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Total weight of motor	10	kg			
36		User defined motor				
37						
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42						
43						
44						
45						
Ex-motors						
46						
47						
48						
Option Variant Codes / Definition						
49						
50						
51						
52						
Remarks:						
10/2/2014						

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 1/17/2019	Saving ident untitled.xls
			Pages 2(3)

Product TEFC, 3-phase, squirrel cage induction motor
Type/Frame M2BAX71MB4
Product code 3GBA 072320-HSCIN
Rated output P_N 0.37 kW
Type of duty S1 100%

Voltage (V) 415 **Current I_N (A)** 1.1 **Power factor at P_N** 0.65
Frequency (Hz) 50 **Speed (r/min)** 1395 **Efficiency (%) at P_N** 72.7



Data based on situation 10/2/2014

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


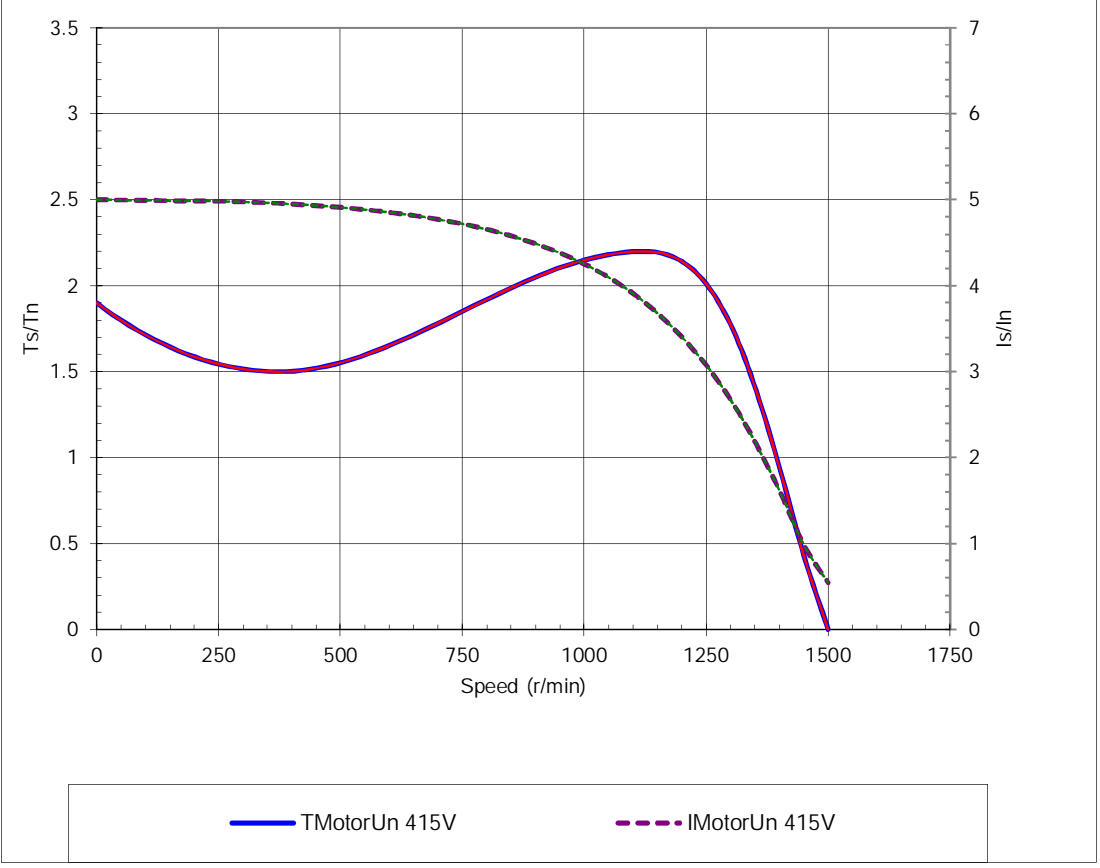

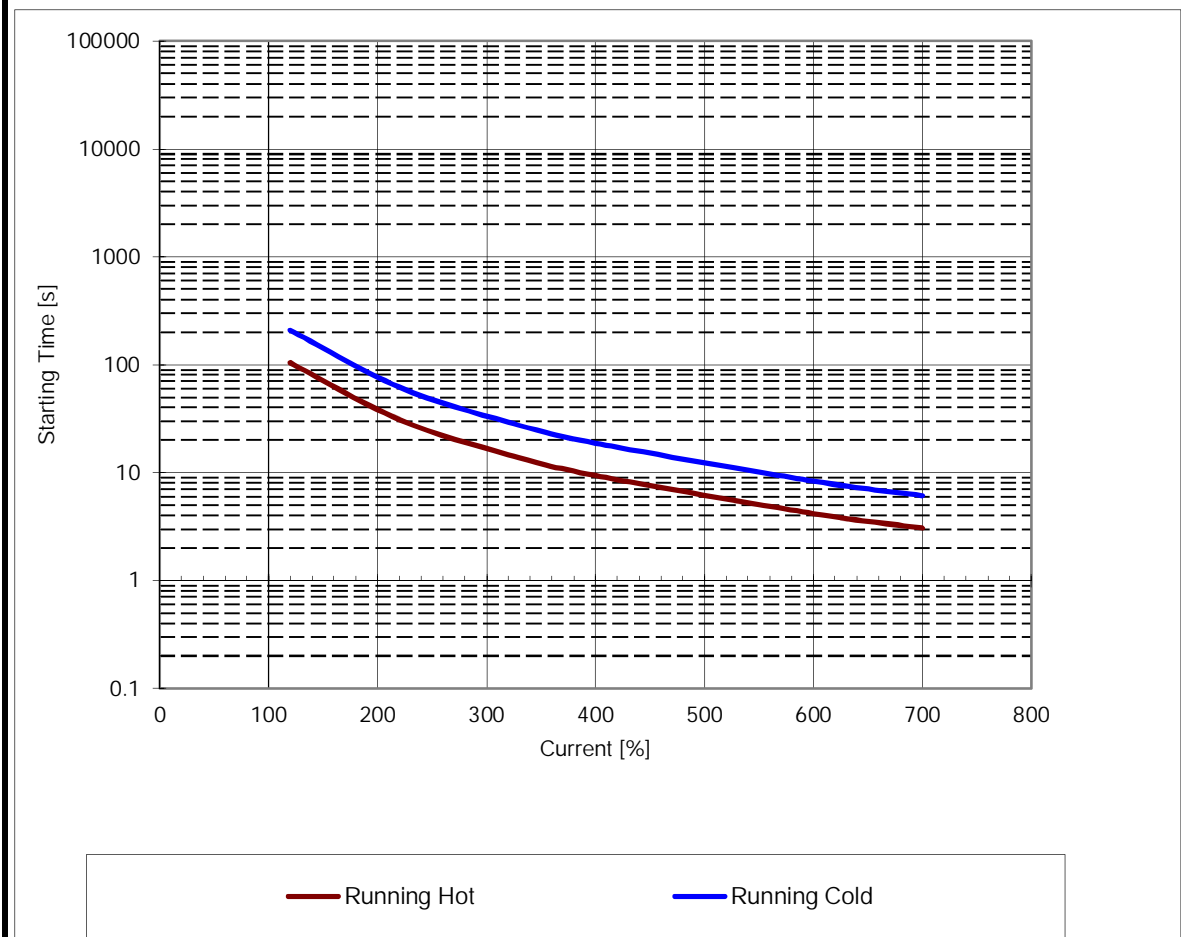
ABB Motors and Generators	Starting Curves			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/17/2019	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX71MB4			
Product code	3GBA 072320-HSCIN	Frequency (Hz)	50	
Rated output P _N	0.37 kW	Rated current I _N	1.1	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	0.0008	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	1.9	T _{start} /T _N 1.9
Speed (r/min)	1395	Starting time (s)		Starting time (s)
T _N (Nm)	2.5	Speed (r/min)		Speed (r/min)
T _{load} (Nm)	2.5	I _s /I _N	5	I _s /I _N 5
		T _{max} /T _N	2.2	T _{max} /T _N 2.2
 <p>The graph plots torque ratios (T_s/T_N and I_s/I_N) against speed (r/min) for a 415V motor. The x-axis ranges from 0 to 1750 r/min. The left y-axis (T_s/T_N) ranges from 0 to 3.5, and the right y-axis (I_s/I_N) ranges from 0 to 7. A solid blue line represents T_{MotorUn} 415V, which starts at approximately 1.9 at 0 r/min, reaches a minimum of about 1.5 at 400 r/min, and peaks at about 2.2 at 1100 r/min before dropping to 0 at 1500 r/min. A dashed purple line represents I_{MotorUn} 415V, which starts at 2.5 at 0 r/min and decreases steadily to 0 at 1500 r/min.</p>				
Data based on situation 10/2/2014				
All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004				

ABB Motors and Generators	Thermal Withstand Curve		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/17/2019	Saving ident untitled.xls
			Pages 5(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX71MB4		
Product code	3GBA 072320-HSCIN	Frequency (Hz)	50
Rated output P _N	0.37 kW	Rated current I _N	1.1 A
Type of duty	S1 100%		

J _{motor} (kgm ²)	0.0008	Voltage (V) 100%	415	Voltage (V)	415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	1.9	T _{start} /T _N	1.9
Speed (r/min)	1395	Starting time (s)		Starting time (s)	
T _N (Nm)	2.5	Speed (r/min)	1395	Speed (r/min)	1395
T _{load} (Nm)	2.5	I _s /I _n	5	I _s /I _n	5
		T _{max} /T _n	2.2	T _{max} /T _n	2.2



Data based on situation 10/2/2014

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