

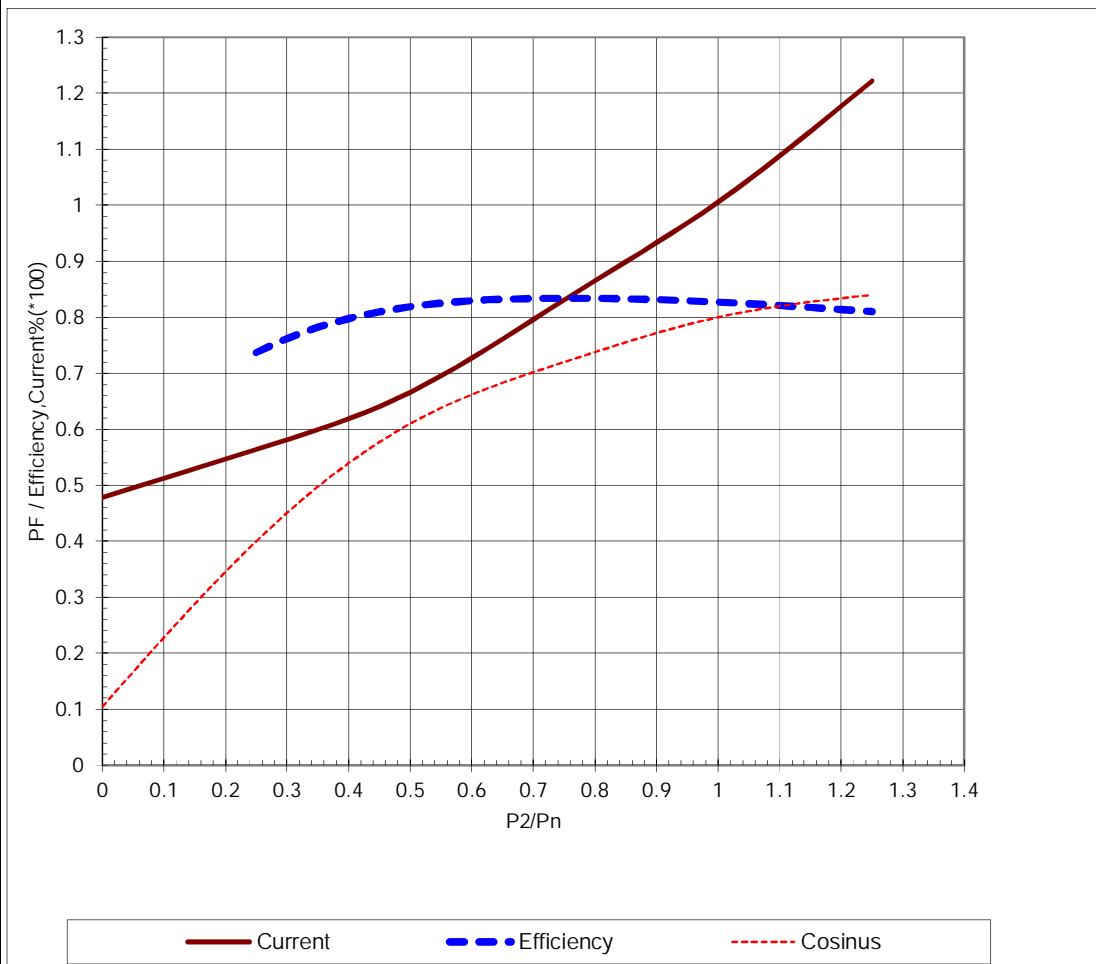


ABB Motors and Generators		Technical Data Sheet				
Department/Author		Project	Location		Item name	
Our ref.		Rev/Changed by	Date of issue	Saving ident	Pages	
		A	1/18/2019	untitled.xls	1.00001 1(3)	
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 081 340-BSDIN			Calc. ref.	3GZH021008-1
3	Type/Frame	M2BAX 80MD 2				
4	Mounting	IM3001, B5(flange)				
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-BSDIN		
Rated output P _N	1.1	kW	
Type of duty	S1 100%		

Voltage (V)	415	Current I _N (A)	2.3	Power factor at P _N	0.8
Frequency (Hz)	50	Speed (r/min)	2865	Efficiency (%) at P _N	82.7



Data based on situation 12/23/2015

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


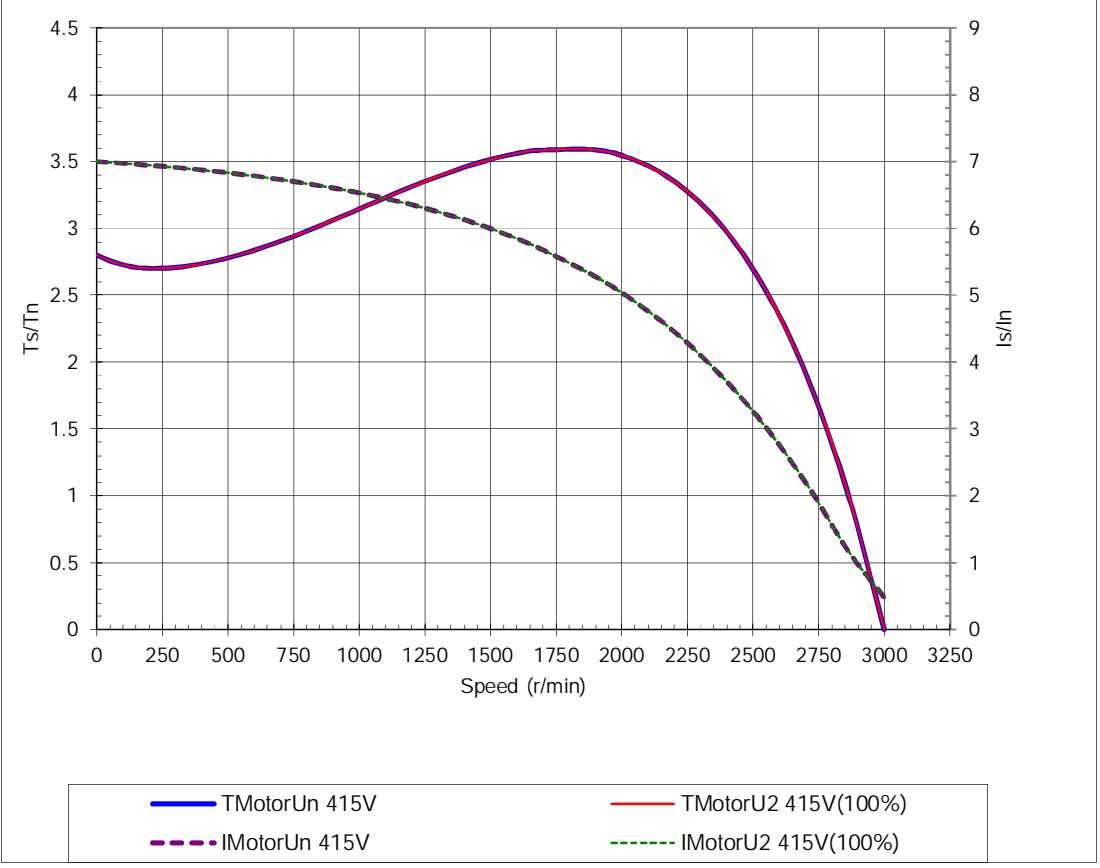

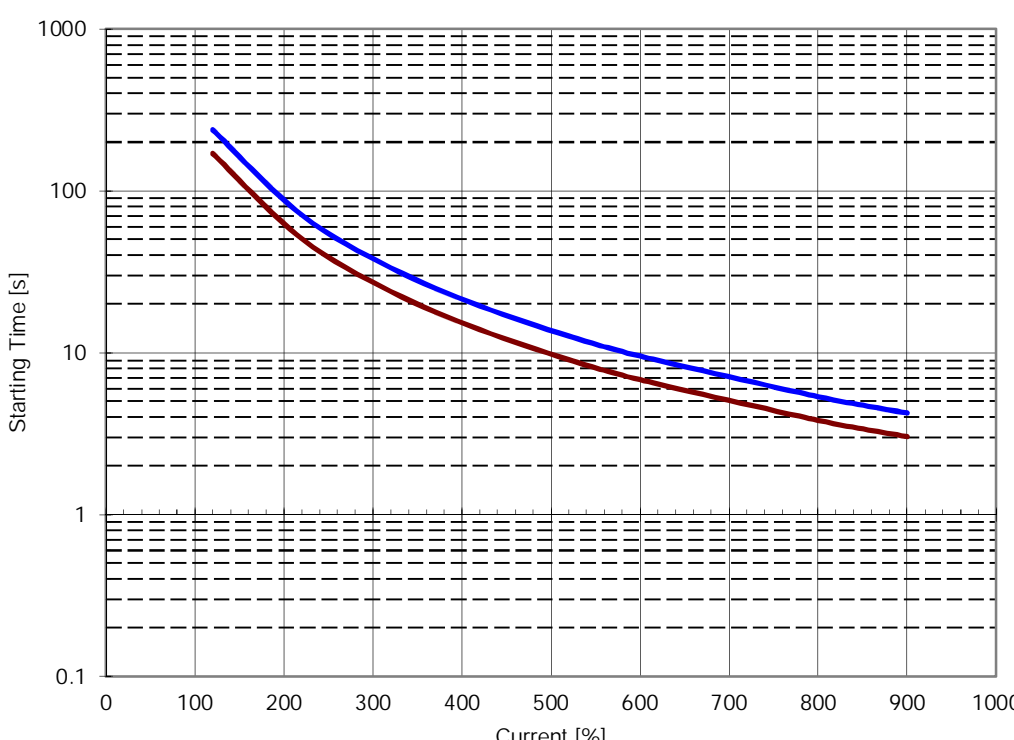
ABB Motors and Generators	Starting Curves			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/18/2019	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 80MD 2	Calc. ref.	3GZH021008-1	
Product code	3GBA 081 340-BSDIN	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	Thermal Withstand Curve			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/18/2019	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-BSDIN	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