



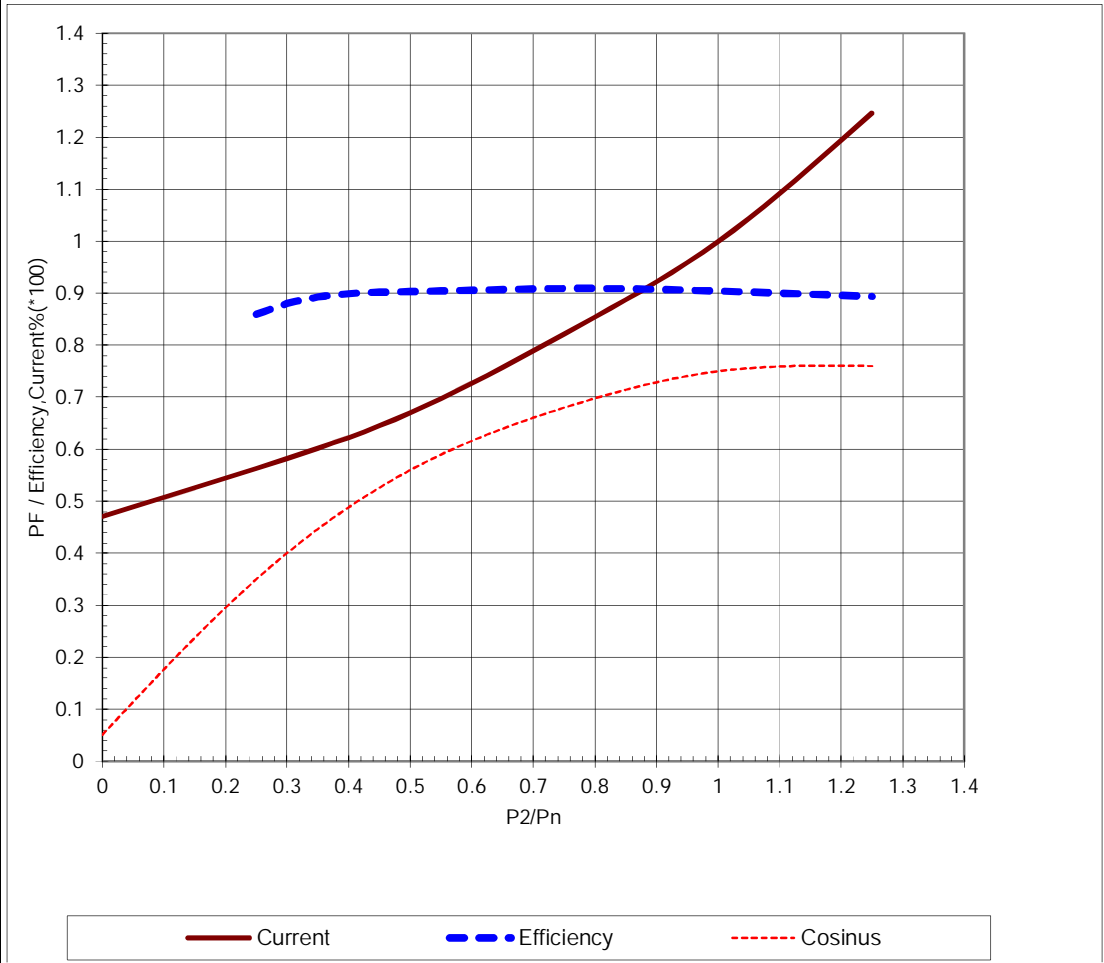
ABB Motors and Generators		Technical Data Sheet				
Project		Location				
Department/Author		Customer name		Customer ref.		
Our ref.		Rev/Changed by A		Date of issue 1/18/2019		
		Saving ident untitled.xls		Item name 1.00001		
				Pages 1(3)		
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 132 410-BDDIN				
3	Type/Frame	M2BAX 132MLA 4				
4	Mounting	IM3001, B5(flange)				
5	Rated output P _N	7.5	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	1462	r/min			
11	Rated current I _N	15.4	A			
12						
13	Starting current I _s /I _N	7				
14	Nominal torque T _N	49	Nm			
15	Locked rotor torque T _S /T _N	2.1				
16	Maximum torque T _{max} /T _N	3.2				
17						
18						
Load characteristics		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	15.4	90.4 / IE3	0.75	
20		75	12.7	90.9	0.68	
21		50	10.3	90.3	0.56	
22						
23	Thermal withstand time hot	9	s			
24	Thermal withstand time cold	15	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)	68	dB(A)	at no-load		
32	Moment of inertia J = ¼ GD ²	0.04108	kg·m ²			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Total weight of motor	84	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:						
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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 132MLA 4
Product code 3GBA 132 410-BDDIN
Rated output P_N 7.5 kW
Type of duty S1 100%

Voltage (V) 415 **Current I_N (A)** 15.4 **Power factor at P_N** 0.75
Frequency (Hz) 50 **Speed (r/min)** 1462 **Efficiency (%) at P_N** 90.4



Data based on situation 12/21/2015
 All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004


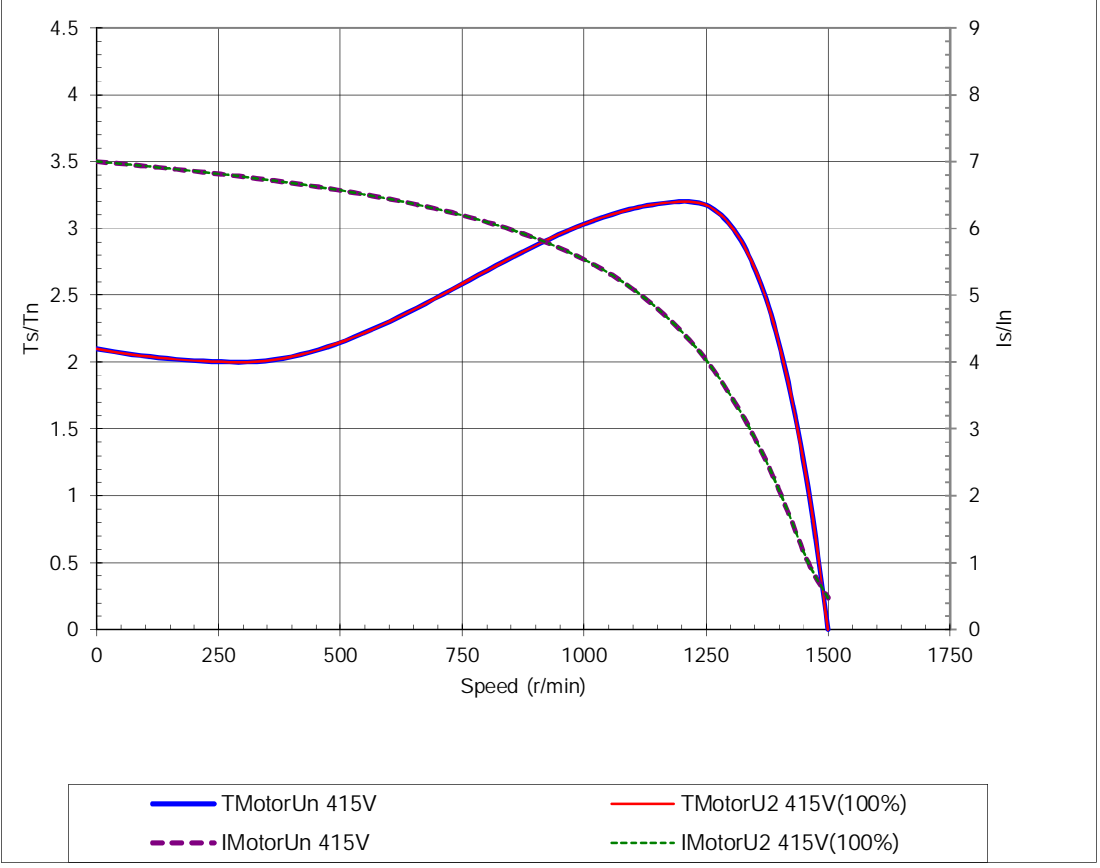

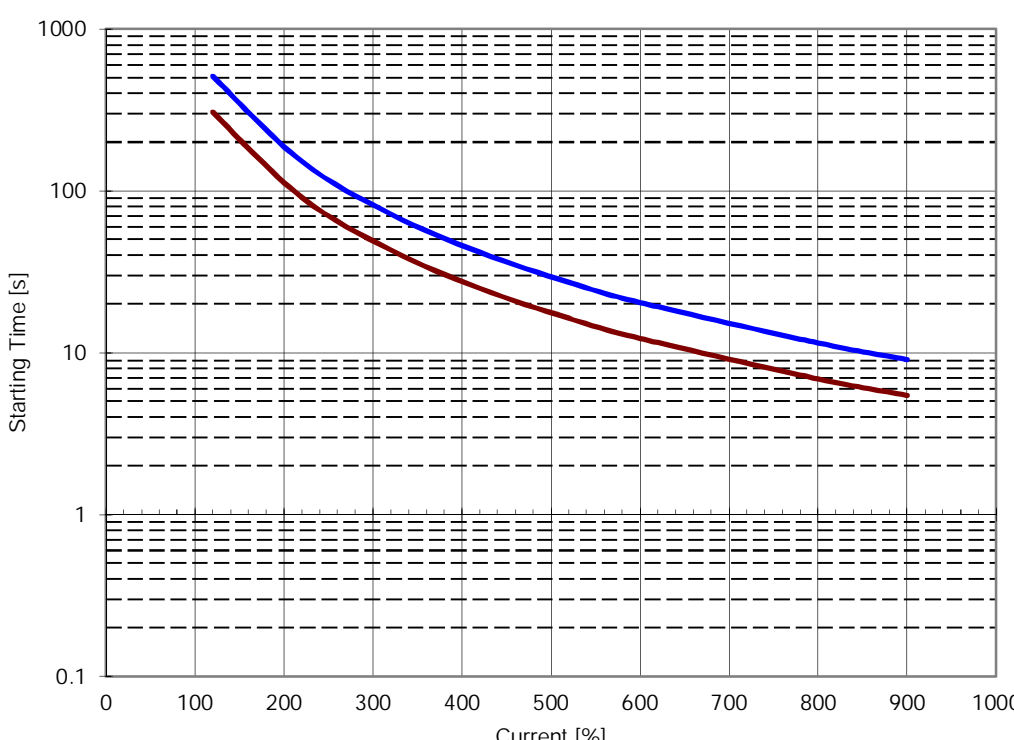
ABB Motors and Generators	Starting Curves			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/18/2019	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 132MLA 4			
Product code	3GBA 132 410-BDDIN	Frequency (Hz)	50	
Rated output P _N	7.5 kW	Rated current I _N	15.4	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	0.0411	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)	1462	Starting time (s)	0.1	Starting time (s)
T _N (Nm)	49	Speed (r/min)		Speed (r/min) 939
T _{load} (Nm)		I _s /I _N	7	I _s /I _N 7
		T _{max} /T _N	3.2	T _{max} /T _N 3.2
 <p>The graph plots torque (T_s/T_N) and current (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 4.5, and the right y-axis (I_s/I_N) ranges from 0 to 9. Four curves are shown: T_{MotorUn} 415V (solid blue), T_{MotorU2} 415V(100%) (solid red), I_{MotorUn} 415V (dashed purple), and I_{MotorU2} 415V(100%) (dashed green). The torque curves peak at approximately 1250 r/min, while the current curves peak at approximately 1000 r/min.</p>				
Data based on situation 12/21/2015				
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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 132MLA 4			
Product code	3GBA 132 410-BDDIN	Frequency (Hz)	50	
Rated output P _N	7.5 kW	Rated current I _N	15.4	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	0.0411	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)	1462	Starting time (s)	0.1	Starting time (s)
T _N (Nm)	49	Speed (r/min)		Speed (r/min) 939
T _{load} (Nm)		I _s /I _N	7	I _s /I _N 7
		T _{max} /T _N	3.2	T _{max} /T _N 3.2



Current [%]	Starting Time [s] (Running Hot)	Starting Time [s] (Running Cold)
100	~20	~40
200	~10	~20
300	~6	~13
400	~4	~9
500	~3	~7
600	~2.5	~5.5
700	~2	~4.5
800	~1.8	~4
900	~1.6	~3.5

Data based on situation 12/21/2015
All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004