

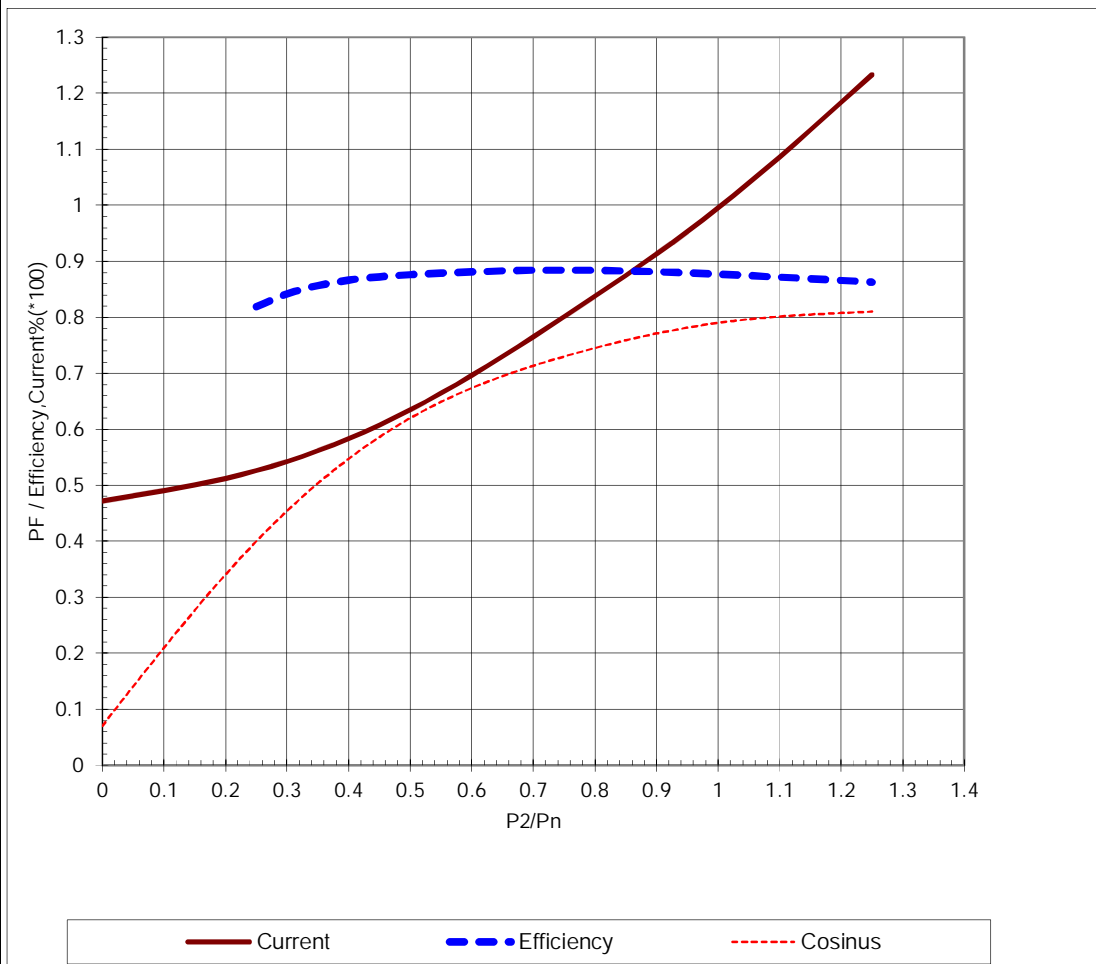


ABB Motors and Generators		Technical Data Sheet				
Department/Author		Project	Location		Item name	
Our ref.		Rev/Changed by	Date of issue	Saving ident	Pages	
		A	1/16/2019	untitled.xls	1.00001 1(3)	
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 132 110-HDCIN			Calc. ref.	3GZH021013-17
3	Type/Frame	M2BAX 132SA 4				
4	Mounting	IM2001, B35(foot-flange)				
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	1450	r/min			
11	Rated current I _N	11.1	A			
12						
13	Starting current I _s /I _N	6				
14	Nominal torque T _N	36	Nm			
15	Locked rotor torque T _S /T _N	1.7				
16	Maximum torque T _{max} /T _N	2.8				
17						
18						
Load characteristics		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	11.1	87.7 / IE2	0.79	
20		75	8.9	88.4	0.73	
21		50	7	87.6	0.62	
22						
23	Thermal withstand time hot	9	s			
24	Thermal withstand time cold	17	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)	71	dB(A)	at no-load		
32	Moment of inertia J = ¼ GD ²	0.0257	kg·m ²			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Weight of rotor	14	kg			
36	Total weight of motor	57	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 8/8/2016						

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 1/16/2019	Saving ident untitled.xls
Pages	2(3)		
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 132SA 4	Calc. ref.	3GZH021013-17
Product code	3GBA 132 110-HDCIN		
Rated output P _N	5.5 kW		
Type of duty	S1 100%		

Voltage (V)	415	Current I _N (A)	11.1	Power factor at P _N	0.79
Frequency (Hz)	50	Speed (r/min)	1450	Efficiency (%) at P _N	87.7



Data based on situation 8/8/2016

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


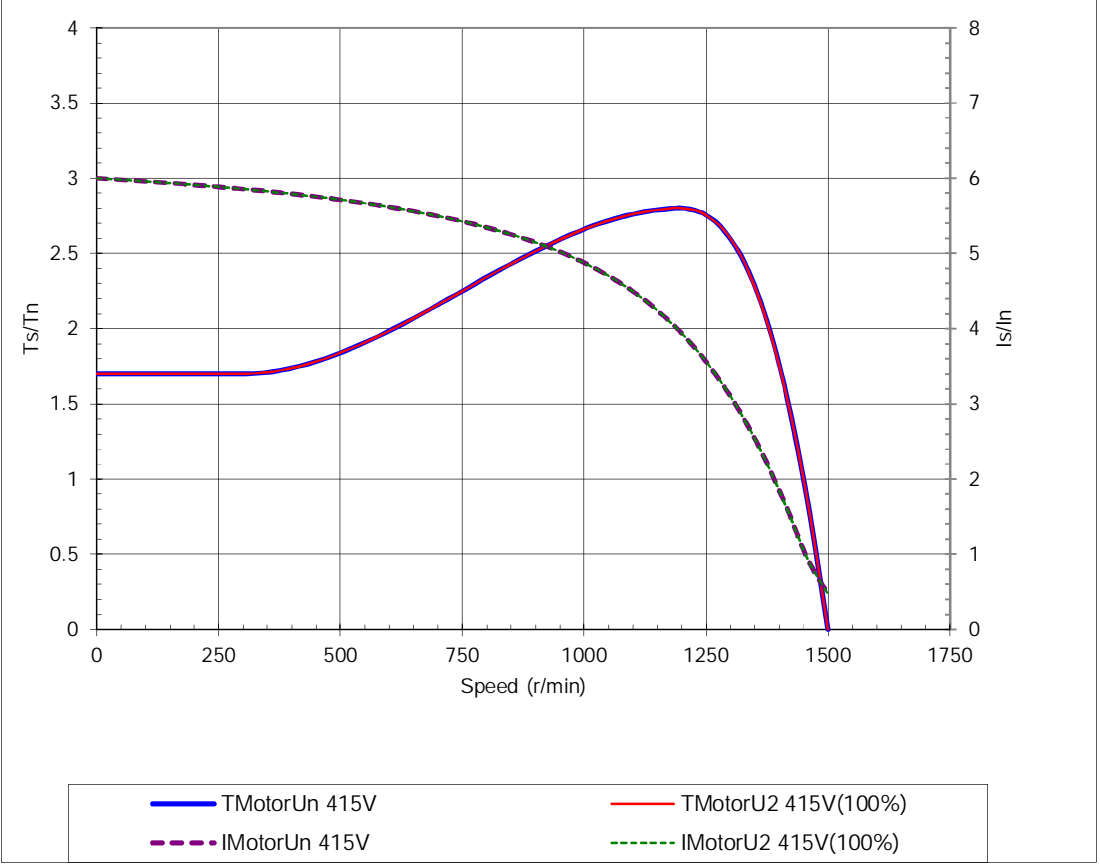

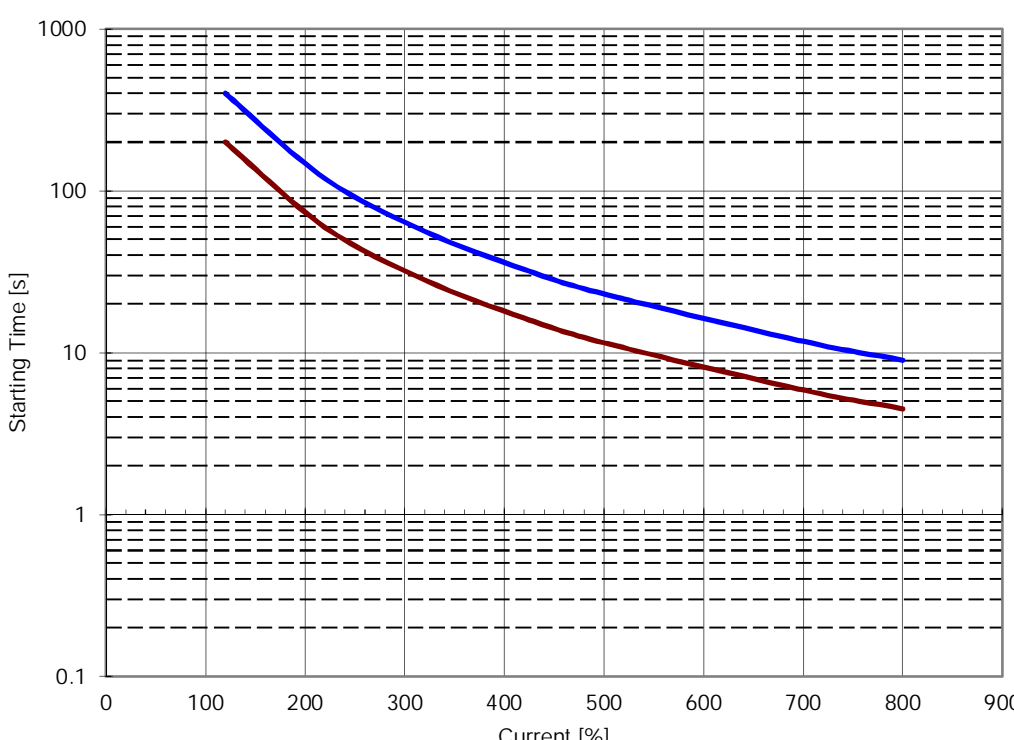
ABB Motors and Generators	Starting Curves			
	Project	Location		
Department/Author	Customer name	Customer ref.		Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 1/16/2019	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 132SA 4	Calc. ref.	3GZH021013-17	
Product code	3GBA 132 110-HDCIN	Frequency (Hz)	50	
Rated output P _N	5.5 kW	Rated current I _N	11.1	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	0.0257	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	1.7	T _{start} /T _N 1.7
Speed (r/min)	1450	Starting time (s)	0.1	Starting time (s)
T _N (Nm)	36	Speed (r/min)		Speed (r/min)
T _{load} (Nm)		I _s /I _n	6	I _s /I _n 6
		T _{max} /T _n	2.8	T _{max} /T _n 2.8
 <p>The graph plots torque (T_s/T_n) and current (I_s/I_n) against speed (r/min) for a 415V motor. The left y-axis represents T_s/T_n (0 to 4) and the right y-axis represents I_s/I_n (0 to 8). The x-axis represents Speed (r/min) (0 to 1750). A solid blue line shows T_{MotorUn} 415V, a solid red line shows T_{MotorU2} 415V(100%), a dashed purple line shows I_{MotorUn} 415V, and a dashed green line shows I_{MotorU2} 415V(100%). The torque curves peak at approximately 1200 r/min, while the current curves peak at approximately 1000 r/min.</p>				
Data based on situation 8/8/2016				
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 1/16/2019	Saving ident untitled.xls
Pages 5(3)			
Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 132SA 4	Calc. ref.	3GZH021013-17
Product code	3GBA 132 110-HDCIN	Frequency (Hz)	50
Rated output P _N	5.5 kW	Rated current I _N	11.1 A
Type of duty	S1 100%		
J _{motor} (kgm ²)	0.0257	Voltage (V) 100%	415
J _{load} (kgm ²)		Voltage (V)	415V(100%)
Speed (r/min)	1450	T _{start} /T _N	1.7
T _N (Nm)	36	Starting time (s)	0.1
T _{load} (Nm)		Speed (r/min)	6
		I _s /I _N	6
		T _{max} /T _n	2.8
		I _s /I _n	6
		T _{max} /T _n	2.8



— Running Hot	— Running Cold
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Data based on situation 8/8/2016
All data subject to tolerances in accordance with IS/IEC 60034-1 : 2004