ABB Motors and Generators	Technical Data Sheet			
	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 **1(3)**

No.	Definition	Data	Unit	Remarks	
1	Product	***TEFC, 3-phase, squirrel cage induction motor***			
2	Product code	***3GBA 162 420-BDDIN***			
3	Type/Frame	***M2BAX 160MLB 4***			
4	Mounting	***IM3001, B5(flange)***			
5	Rated output P_N	***15***	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	***1470***	r/min		
11	Rated current I_N	***28.8***	A		
12					
13	Starting current I_s/I_N	***7.5***			
14	Nominal torque T_N	***97.4***	Nm		
15	Locked rotor torque T_S/T_N	***2.6***			
16	Maximum torque T_{max}/T_N	***3.4***			
17					
18					
	Load characteristics	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	*100*	**28.8**	**92.1 / IE3**	**0.8**
20		*75*	**22.9**	**92.2**	**0.74**
21		*50*	**17.8**	**91.3**	**0.64**
22					
23	Thermal withstand time hot	***13***	s		
24	Thermal withstand time cold	***22***	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	***6209-2Z/C3 - 6209-2Z/C3***			
31	Sound pressure level (LP dB(A) 1m)	***68***	dB(A)	at no-load	
32	Moment of inertia J = ¼ GD2	***0.135***	kg-m2		
33	Position of terminal box	***Top***			
34	Direction of rotation	***Bi-directional***			
35	Total weight of motor	***159***	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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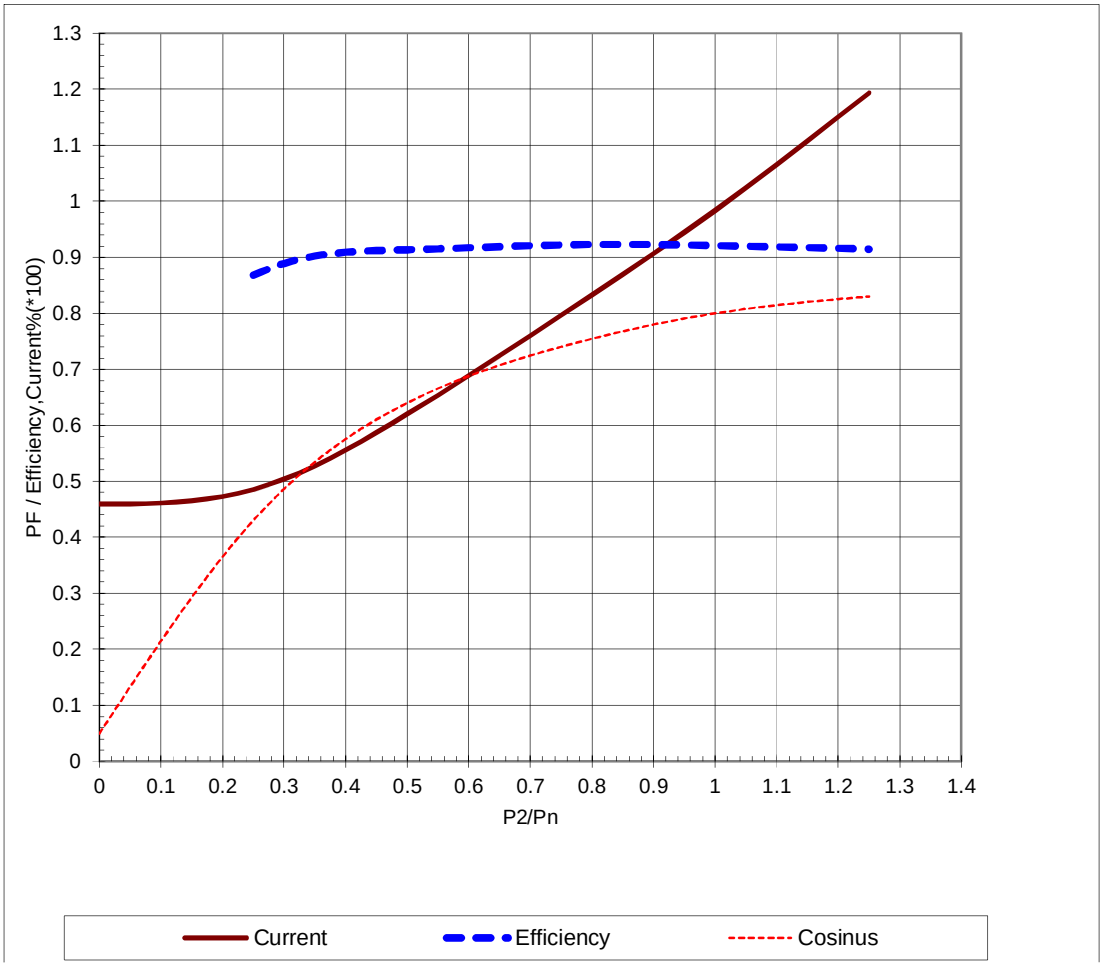
ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name **1.00001**
Our ref.	Rev/Changed by Date of issue **A** **1/18/2019**	Saving ident **untitled.xls**	Pages **2(3)**

Product	**TEFC, 3-phase, squirrel cage induction motor**				
Type/Frame	**M2BAX 160MLB 4**				
Product code	**3GBA 162 420-BDDIN**				
Rated output P_N	**15** kW				
Type of duty	**S1 100%**				
Voltage (V)	**415**	Current I_N (A)	**28.8**	Power factor at P_N	**0.8**
Frequency (Hz)	**50**	Speed (r/min)	**1470**	Efficiency (%) at P_N	**92.1**



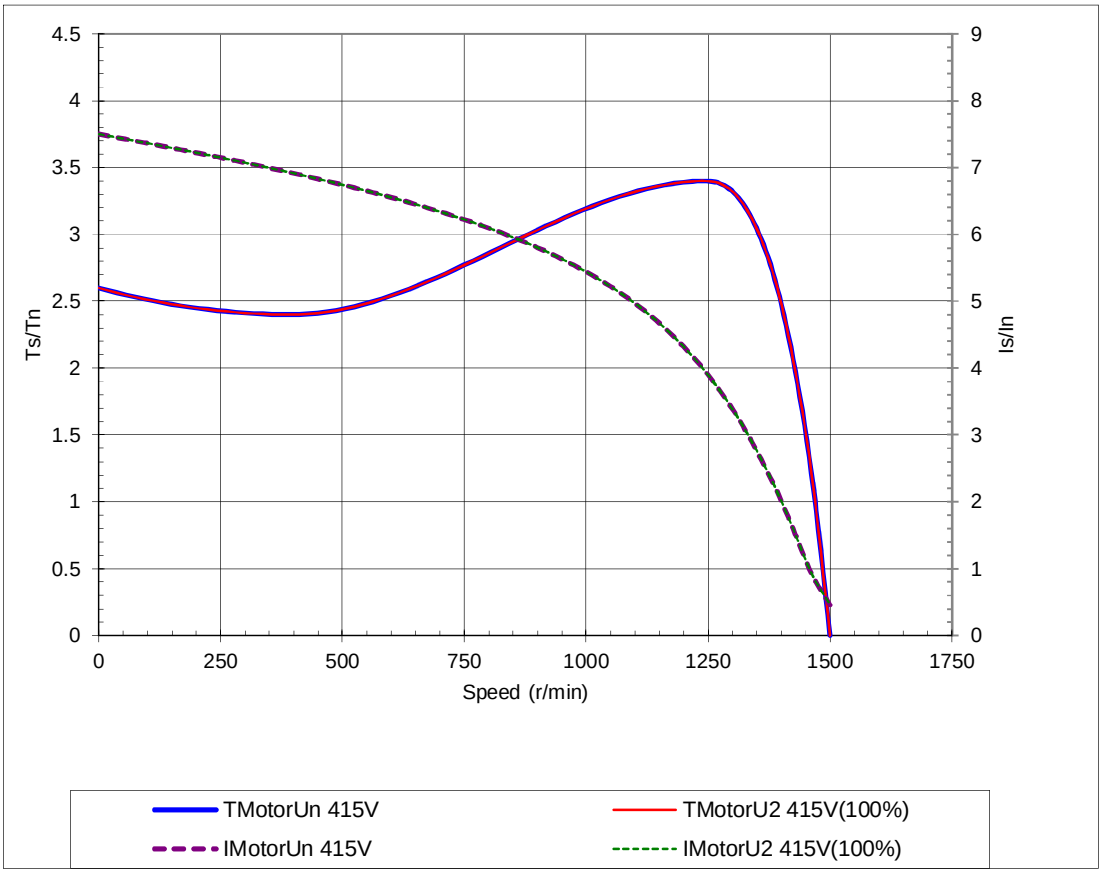
Data based on situation 6/26/2015

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	Date of issue	Saving ident	Pages
	A	**1/18/2019**	**untitled.xls**	**3(3)**

Type of product	**TEFC, 3-phase, squirrel cage induction motor**				
Type/Frame	**M2BAX 160MLB 4**				
Product code	**3GBA 162 420-BDDIN**		Frequency (Hz)	**50**	
Rated output P_N	**15**	kW	Rated current I_N	**28.8**	A
Type of duty	**S1 100%**				

J_{motor} (kgm2)	**0.14**	Voltage (V) 100%	***415***	Voltage (V)	***415V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.6***	T_{start}/T_N	***2.6***
Speed (r/min)	**1470**	Starting time (s)	***0.1***	Starting time (s)	
T_N (Nm)	**97**	Speed (r/min)		Speed (r/min)	***939***
T_{load} (Nm)		I_s/I_n	***7.5***	I_s/I_n	***7.5***
		T_{max}/T_n	***3.4***	T_{max}/T_n	***3.4***



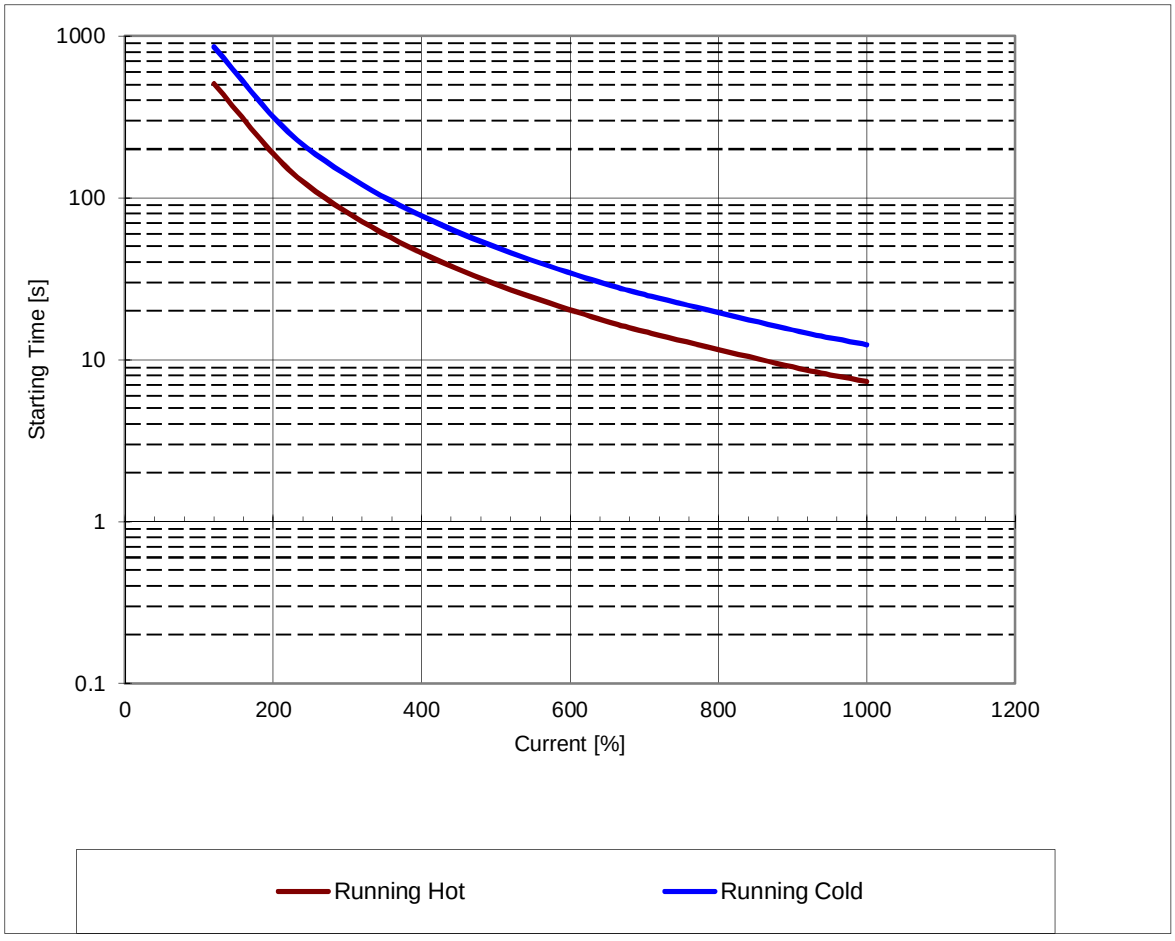
Data based on situation 6/26/2015

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 / Date of issue	Saving ident	Pages
	A **1/18/2019**	**untitled.xls**	**5(3)**

Type of product	**TEFC, 3-phase, squirrel cage induction motor**				
Type/Frame	**M2BAX 160MLB 4**				
Product code	**3GBA 162 420-BDDIN**		Frequency (Hz)	**50**	
Rated output P_N	**15**	kW	Rated current I_N	**28.8**	A
Type of duty	**S1 100%**				

J_{motor} (kgm2)	**0.14**	Voltage (V) 100%	***415***	Voltage (V)	***415V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.6***	T_{start}/T_N	***2.6***
Speed (r/min)	**1470**	Starting time (s)	***0.1***	Starting time (s)	
T_N (Nm)	**97**	Speed (r/min)		Speed (r/min)	***939***
T_{load} (Nm)		I_s/I_n	***7.5***	I_s/I_n	***7.5***
		T_{max}/T_n	***3.4***	T_{max}/T_n	***3.4***



Data based on situation 6/26/2015

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