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 091 010-BDDIN***		Calc. ref.	3GZC021009-94
3	Type/Frame	***M2BAX 90SLA 2***			
4	Mounting	***IM3001, B5(flange)***			
5	Rated output P_N	***2.2***	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	***2890***	r/min		
11	Rated current I_N	***4.4***	A		
12					
13	Starting current I_s/I_N	***7***			
14	Nominal torque T_N	***7.3***	Nm		
15	Locked rotor torque T_S/T_N	***3***			
16	Maximum torque T_{max}/T_N	***3.5***			
17					
18					
	Load characteristics	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	*100*	**4.4**	**85.9 / IE3**	**0.88**
20		*75*	**3.2**	**86.7**	**0.84**
21		*50*	**2.4**	**85.8**	**0.75**
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	***6205-2Z/C3 - 6204-2Z/C3***			
31	Sound pressure level (LP dB(A) 1m)	***74***	dB(A)	at no-load	
32	Moment of inertia J = ¼ GD2	***0.00304***	kg-m2		
33	Position of terminal box	***Top***			
34	Direction of rotation	***Bi-directional***			
35	Weight of rotor	***5***	kg		
36	Total weight of motor	***25***	kg		
37					
38					
39					
40					
41					
42					
43					
44					
45					
Ex-motors					
46					
47					
48					
Option	Variant Codes / Definition				
49					
50					
51					
52					

Remarks:

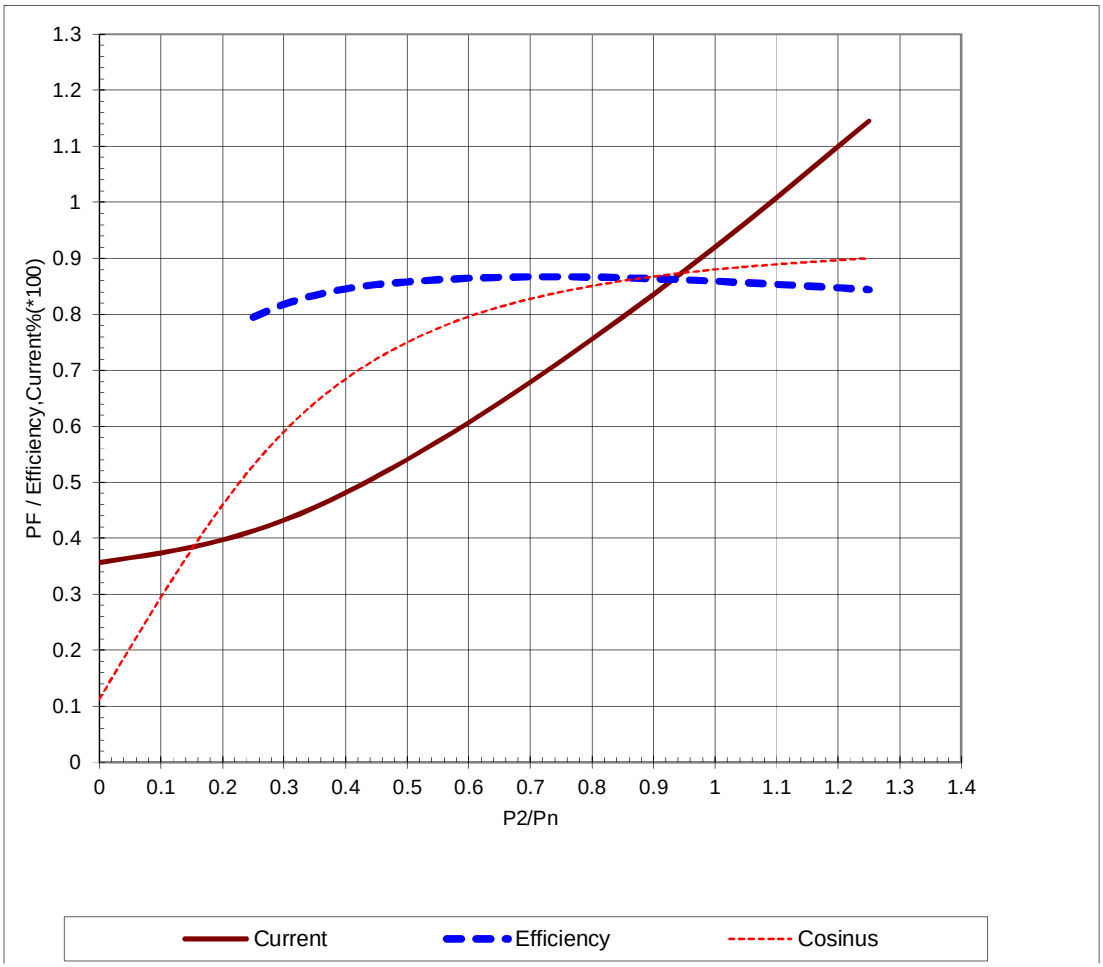
Data based on situation 12/23/2015

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 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 90SLA 2**	Calc. ref.	**3GZC021009-94**
Product code	**3GBA 091 010-BDDIN**		
Rated output P_N	**2.2** kW		
Type of duty	**S1 100%**		

Voltage (V)	**415**	Current I_N (A)	**4.4**	Power factor at P_N	**0.88**
Frequency (Hz)	**50**	Speed (r/min)	**2890**	Efficiency (%) at P_N	**85.9**



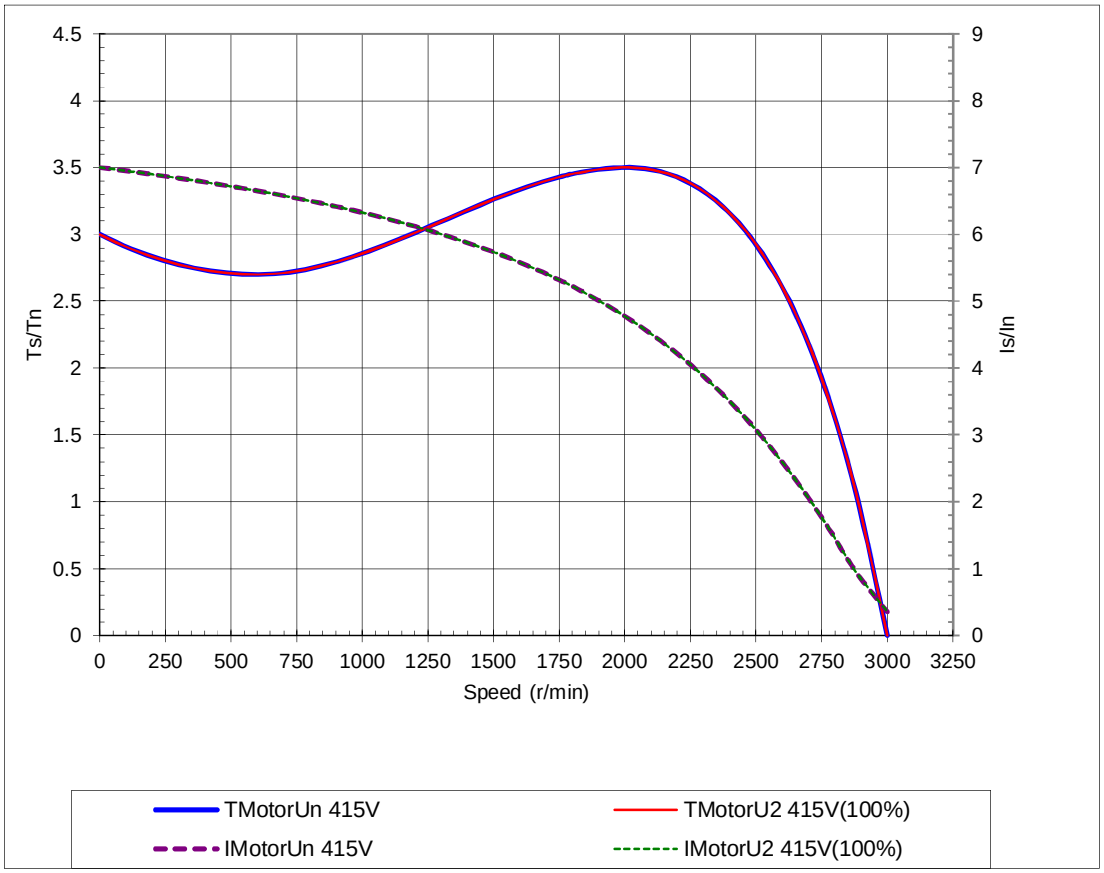
Data based on situation 12/23/2015

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 90SLA 2**	Calc. ref.	3GZC021009-94
Product code	**3GBA 091 010-BDDIN**	Frequency (Hz)	**50**
Rated output P_N	**2.2** kW	Rated current I_N	**4.4** A
Type of duty	**S1 100%**		

J_{motor} (kgm2)	**0.003**	Voltage (V) 100%	***415***	Voltage (V)	***415V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***3***	T_{start}/T_N	***3***
Speed (r/min)	**2890**	Starting time (s)	***0.1***	Starting time (s)	
T_N (Nm)	**7.3**	Speed (r/min)		Speed (r/min)	***939***
T_{load} (Nm)		I_s/I_n	***7***	I_s/I_n	***7***
		T_{max}/T_n	***3.5***	T_{max}/T_n	***3.5***



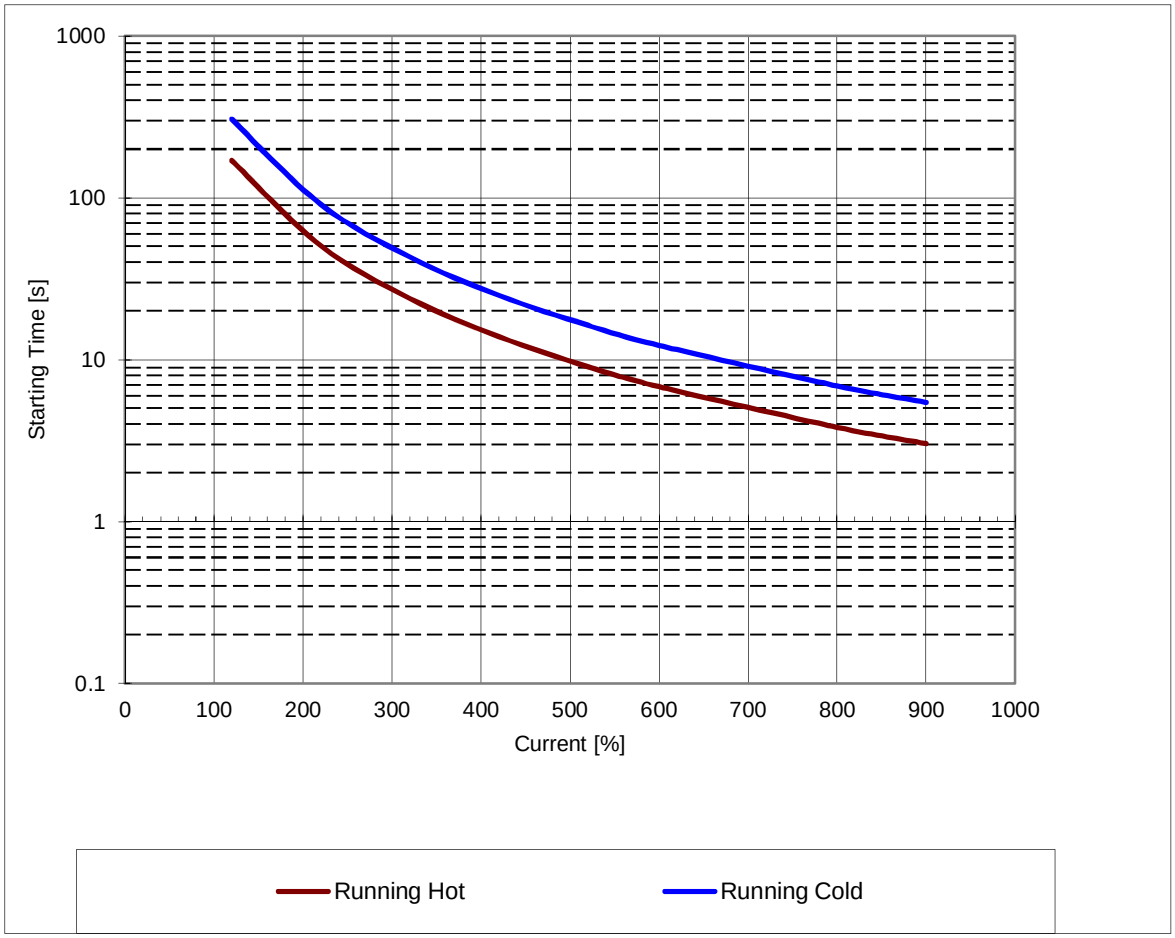
Data based on situation 12/23/2015

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 90SLA 2**	Calc. ref.	3GZC021009-94
Product code	**3GBA 091 010-BDDIN**	Frequency (Hz)	**50**
Rated output P_N	**2.2** kW	Rated current I_N	**4.4** A
Type of duty	**S1 100%**		

J_{motor} (kgm2)	**0.003**	Voltage (V) 100%	***415***	Voltage (V)	***415V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***3***	T_{start}/T_N	***3***
Speed (r/min)	**2890**	Starting time (s)	***0.1***	Starting time (s)	
T_N (Nm)	**7.3**	Speed (r/min)		Speed (r/min)	***939***
T_{load} (Nm)		I_s/I_n	***7***	I_s/I_n	***7***
		T_{max}/T_n	***3.5***	T_{max}/T_n	***3.5***



Data based on situation 12/23/2015

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