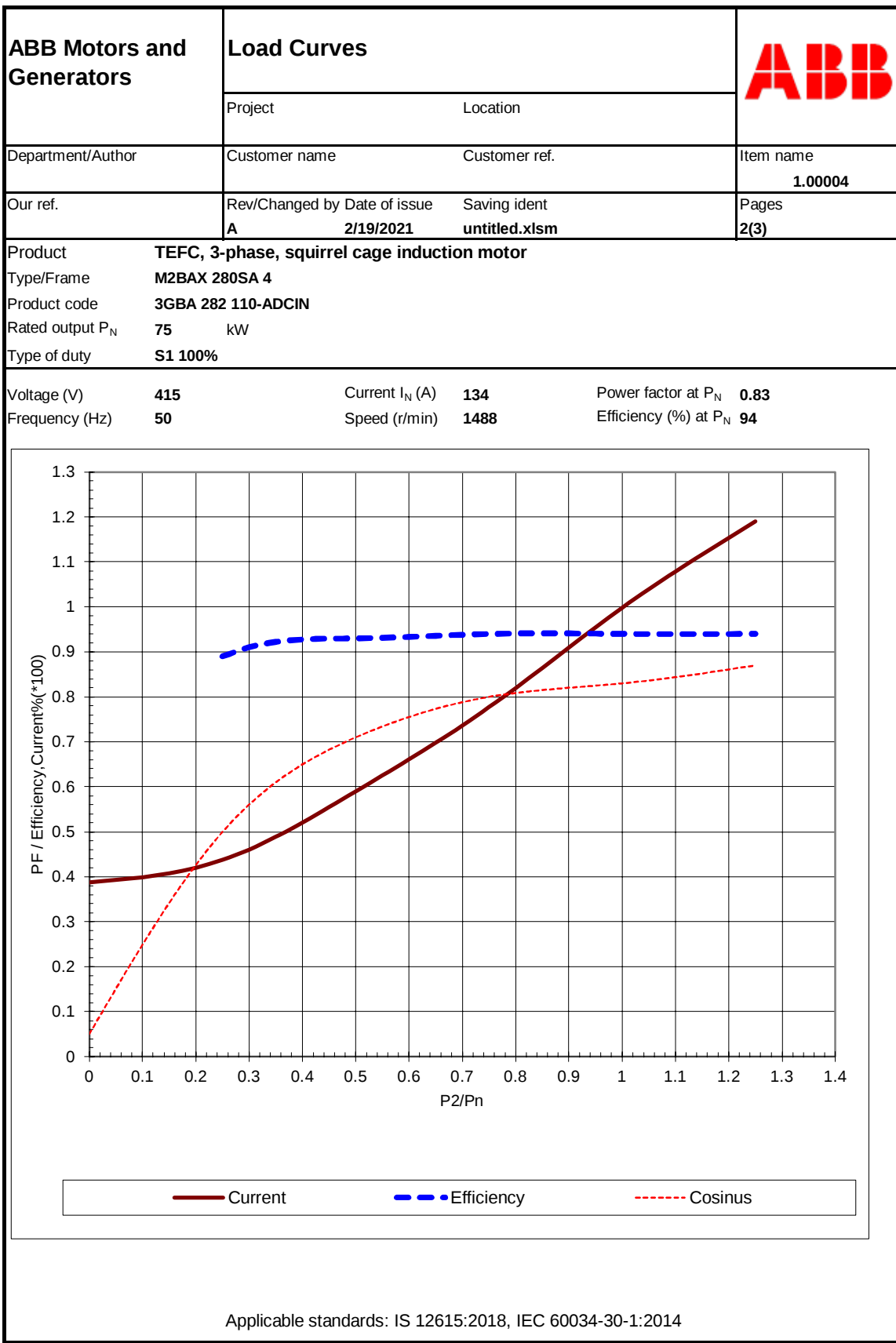


ABB Motors and Generators		Technical Data Sheet			
		Project		Location	
Department/Author		Customer name		Customer ref.	Item name 1.00004
Our ref.		Rev/Changed by A	Date of issue 2/19/2021	Saving ident untitled.xlsm	Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	3GBA 282 110-ADCIN			
3	Type/Frame	M2BAX 280SA 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	75	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	1488	r/min		
11	Rated current I _N	134	A		
12					
13	Starting current I _s /I _N	7			
14	Nominal torque T _N	481	Nm		
15	Locked rotor torque T _s /T _N	2.7			
16	Maximum torque T _{max} /T _N	3			
17					
18					
Load characteristics		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	134	94.0 / IE2	0.83
20		75	104	94	0.8
21		50	79	93	0.71
22					
23	Thermal withstand time hot	25	s		
24	Thermal withstand time cold	44	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			
30	Bearing DE/NDE	6316/C3 - 6316/C3			
31	Sound pressure level (LP dB(A) 1m)	85	dB(A)	at no-load	
32	Moment of inertia J = ¼ GD2	1.25	kg-m2		
33	Position of terminal box	Top			
34	Direction of rotation	Bi-directional			
35	Weight of rotor	132	kg		
36	Total weight of motor	554	kg		
37	Paint shade	Munsell Blue			
38	Cable size				
39	Vibration	As Per IS 12075			
40					
41					
42					
43					
44					
45					
Ex-motors					
46					
47					
48					
Option Variant Codes / Definition					
49					
50					
51					
52					
Remarks:					
Applicable standards: IS 12615:2018, IEC 60034-30-1:2014					

All performance values are subject to IS/IEC tolerances



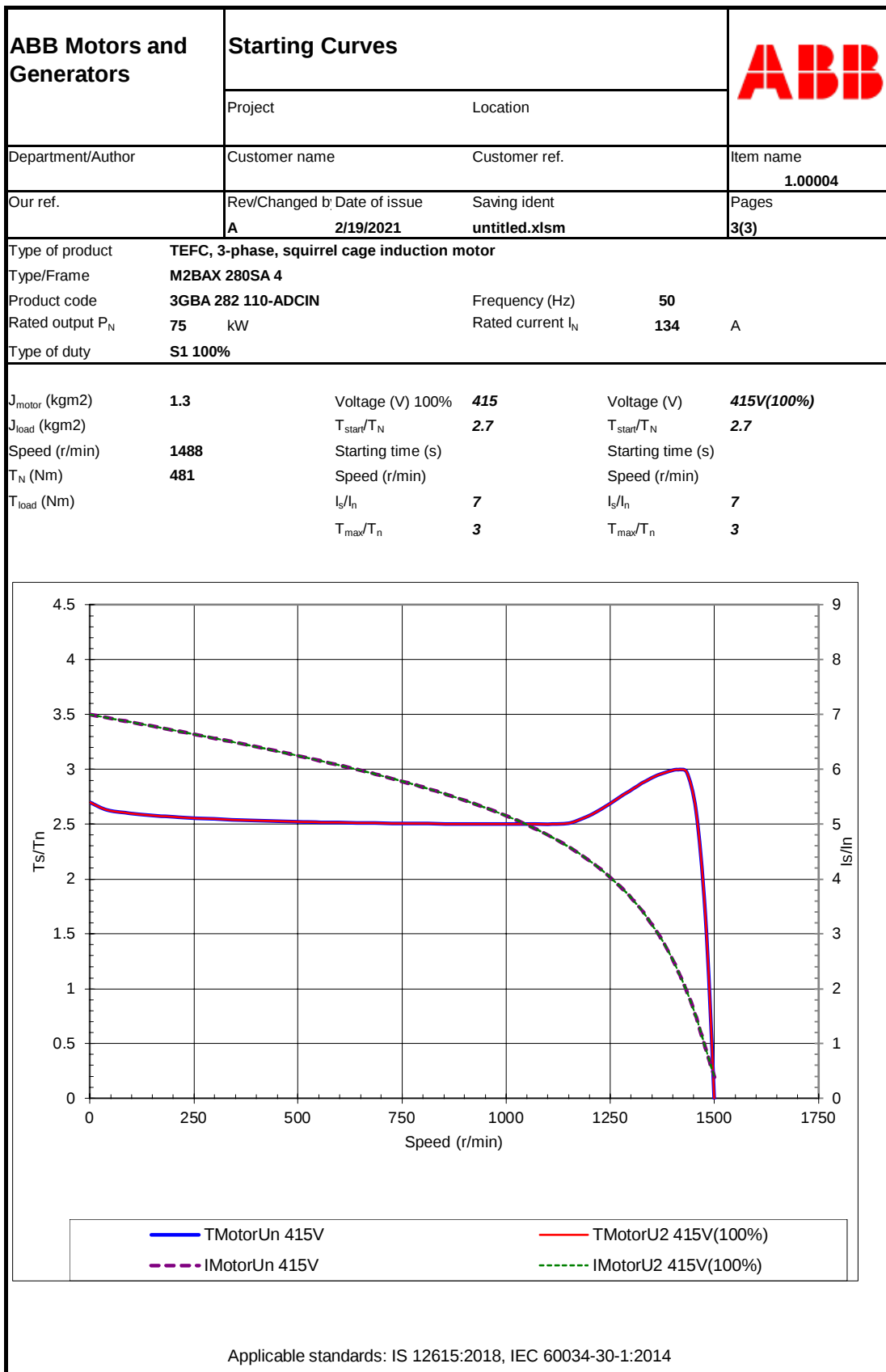
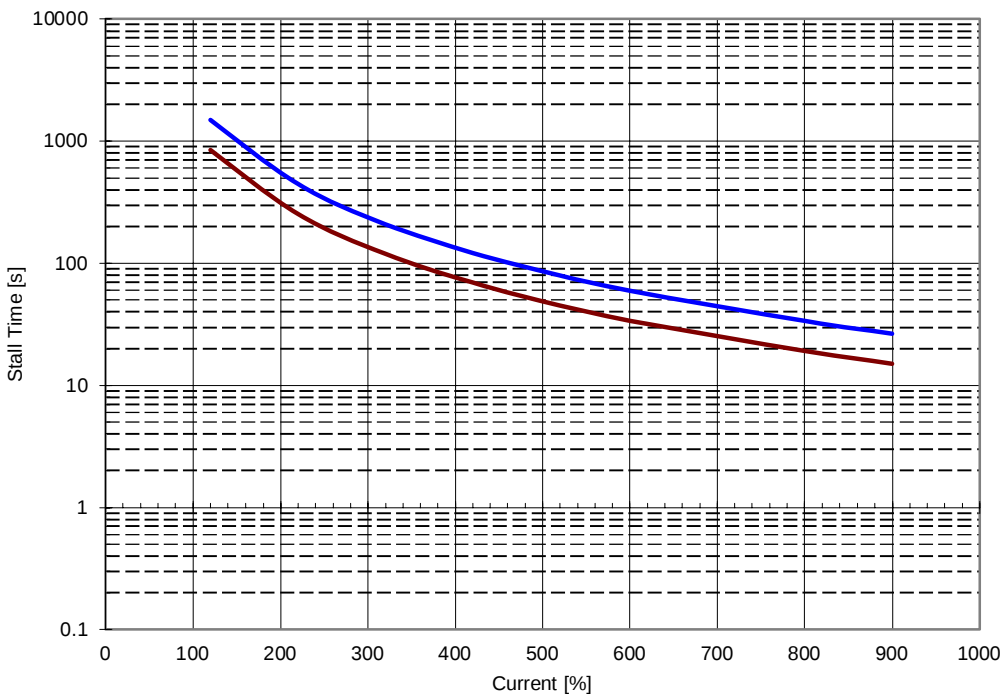


ABB Motors and Generators	Thermal Withstand Curve			
	Project	Location		
Department/Author	Customer name	Customer ref.	Item name 1.00004	
Our ref.	Rev/Changed by: Date of issue A 2/19/2021	Saving ident untitled.xlsm	Pages 5(3)	
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 280SA 4			
Product code	3GBA 282 110-ADCIN	Frequency (Hz)	50	
Rated output P_N	75 kW	Rated current I_N	134	A
Type of duty	S1 100%			
J_{motor} (kgm ²)	1.3	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J_{load} (kgm ²)		T_{start}/T_N	2.7	T_{start}/T_N 2.7
Speed (r/min)	1488	Withstand cold(s)	44	Withstand hot (s) 25
T_N (Nm)	481	Speed (r/min)		Speed (r/min)
T_{load} (Nm)		I_s/I_N	7	I_s/I_N 7
		T_{max}/T_N	3	T_{max}/T_N 3



The graph plots Stall Time [s] on a logarithmic y-axis (0.1 to 10000) against Current [%] on a linear x-axis (0 to 1000). Two curves are shown: a blue line for 'Running Cold' and a red line for 'Running Hot'. Both curves show a decreasing trend as current increases. The 'Running Cold' curve starts at approximately 1500s at 100% current and ends at approximately 30s at 900% current. The 'Running Hot' curve starts at approximately 1000s at 100% current and ends at approximately 15s at 900% current.

— Running Hot
 — Running Cold

Applicable standards: IS 12615:2018, IEC 60034-30-1:2014