


ABB Motors and Generators		Technical Data Sheet			
		Project	Location		
Department/Author	Customer name	Customer ref.		Item name	
Our ref.	Rev/Changed by	Date of issue	Saving ident	Pages	
	A	6/13/2019	untitled.xls	1(3)	
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	3GBA 352 230-ADCIN			
3	Type/Frame	M2BAX 355SMC 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	355	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	1487	r/min		
11	Rated current I _N	605	A		
12	Method of Starting	DOL			
13	Starting current I _s /I _N	7			
14	Nominal torque T _N	2280	Nm		
15	Locked rotor torque T _S /T _N	2.4			
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	605	95.1 / IE2	0.86
20		75	481	95.1	0.81
21		50	359	94.1	0.73
22					
23	Thermal withstand time hot	21	s		
24	Thermal withstand time cold	39	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	6322/C3 - 6316/C3			
31	Sound pressure level (LP dB(A) 1m)	85	dB(A)	at no-load	
32	Moment of inertia J = ¼ GD2	7.2	kg-m2		
33	Position of terminal box	Top			
34	Direction of rotation	Bi-directional			
35	Weight of rotor	469	kg		
36	Total weight of motor	1669	kg		
37					
38					
39					
40					
41					
42					
43					
44					
45					
Ex-motors					
46					
47					
48					
Option Variant Codes / Definition					
49	Application check not made in absence of load details.				
50	Efficiency level : IE2 as per IS12615 2018.				
51					
52					
Remarks:					
Applicable standards: IS 12615 2018					

All performance values are subject to IS/IEC tolerances


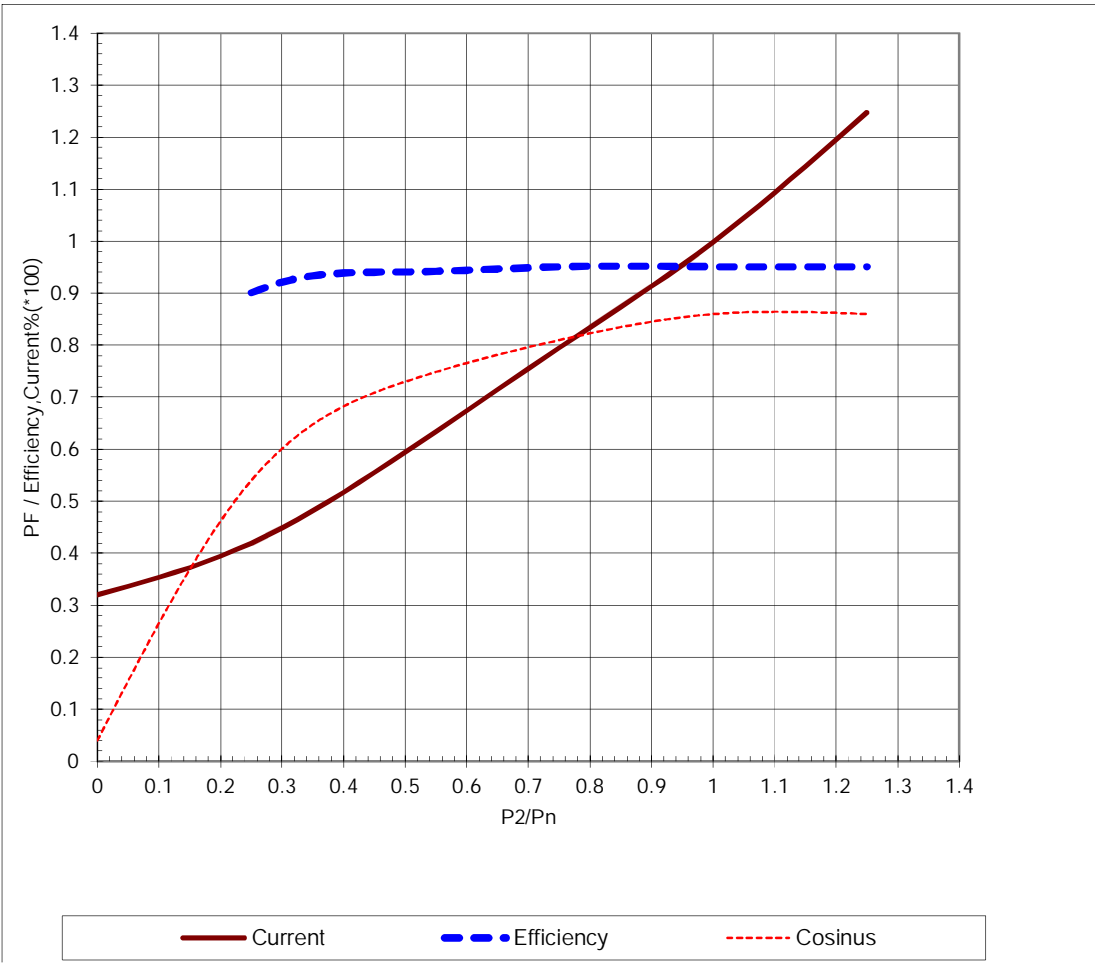
ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name 2.00008
Our ref.	Rev/Changed by A	Date of issue 6/13/2019	Saving ident untitled.xls
Pages			2(3)
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 355SMC 4		
Product code	3GBA 352 230-ADCIN		
Rated output P _N	355	kW	
Type of duty	S1 100%		
Voltage (V)	415	Current I _N (A)	605
Frequency (Hz)	50	Speed (r/min)	1487
		Power factor at P _N	0.86
		Efficiency (%) at P _N	95.1
			
<p>Applicable standards: IS 12615 2018 28.7.2015</p>			


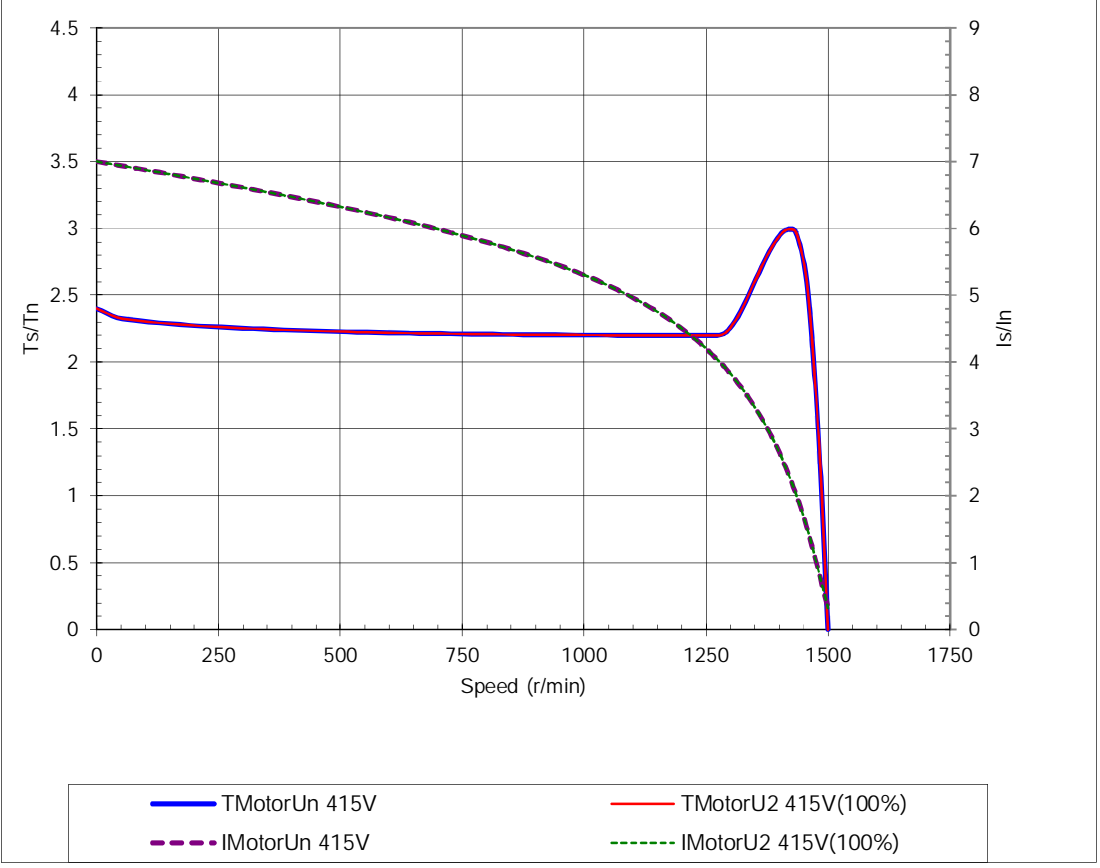

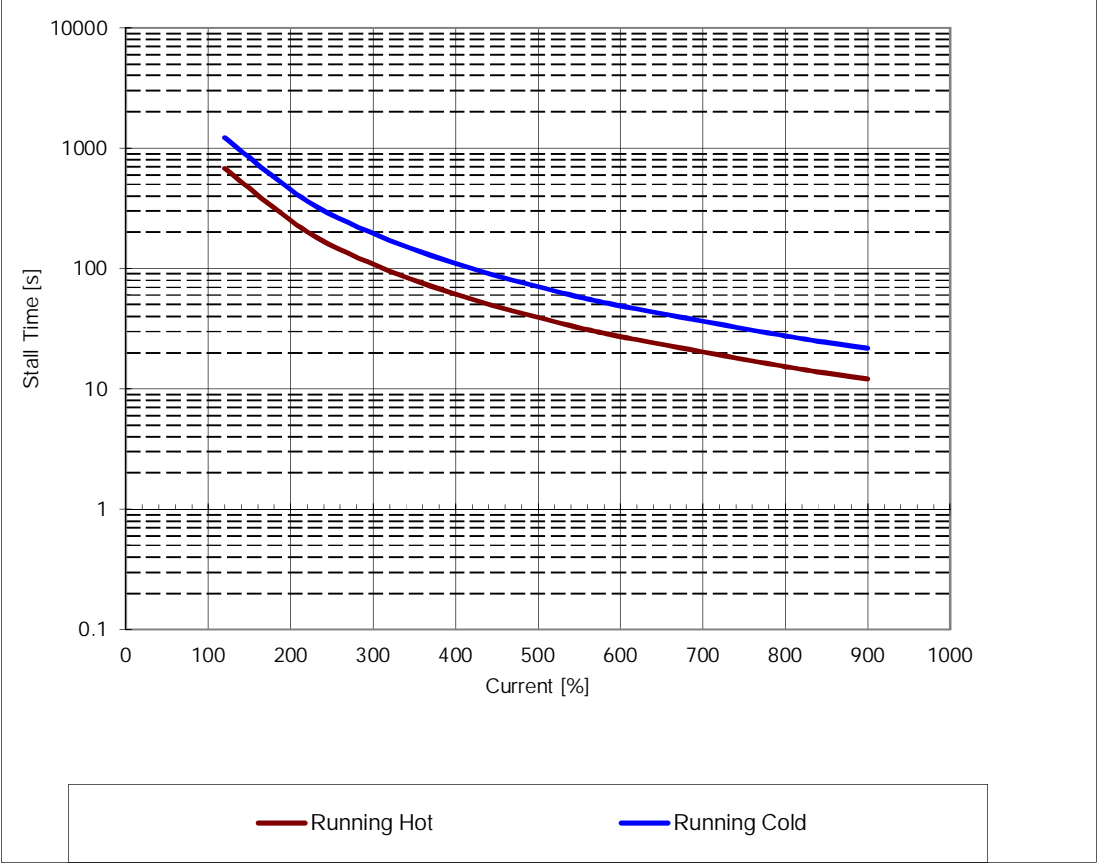
ABB Motors and Generators	Starting Curves			
	Project	Location		
Department/Author	Customer name	Customer ref.	Item name 2.00008	
Our ref.	Rev/Changed b	Date of issue	Saving ident	Pages
	A	6/13/2019	untitled.xls	3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 355SMC 4			
Product code	3GBA 352 230-ADCIN	Frequency (Hz)	50	
Rated output P _N	355 kW	Rated current I _N	605	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	7.2	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.4	T _{start} /T _N 2.4
Speed (r/min)	1487	Starting time (s)		Starting time (s)
T _N (Nm)	2280	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
				
Applicable standards: IS 12615 2018 28.7.2015				

ABB Motors and Generators	Thermal Withstand Curve			
	Project	Location		
Department/Author	Customer name	Customer ref.	Item name 2.00008	
Our ref.	Rev/Changed b Date of issue A 6/13/2019	Saving ident untitled.xls	Pages 5(3)	
Type of product	TEFC, 3-phase, squirrel cage induction motor			
Type/Frame	M2BAX 355SMC 4			
Product code	3GBA 352 230-ADCIN	Frequency (Hz)	50	
Rated output P _N	355 kW	Rated current I _N	605	A
Type of duty	S1 100%			
J _{motor} (kgm ²)	7.2	Voltage (V) 100%	415	Voltage (V) 415V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.4	T _{start} /T _N 2.4
Speed (r/min)	1487	Speed (r/min)		Speed (r/min)
T _N (Nm)	2280	I _s /I _n	7	I _s /I _n 7
T _{load} (Nm)		T _{max} /T _n	3	T _{max} /T _n 3
 <p>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 red line for 'Running Hot' and a blue line for 'Running Cold'. Both curves show a decrease in stall time as current increases. The 'Running Cold' curve starts at approximately 1200s at 100% current and drops to about 25s at 900% current. The 'Running Hot' curve starts at approximately 800s at 100% current and drops to about 12s at 900% current.</p>				
Applicable standards: IS 12615 2018 28.7.2015				