


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author		Customer name	Customer ref.		Item name 1.00017
Our ref.		Rev/Changed by A	Date of issue 21/11/2017	Saving ident wimes stock.do2.xls	Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	3GBA 221 210-ADF		Calc. ref.	3GZC021022-35
3	Type/Frame	M2BAX 225SMA 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	45	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	400	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	2962	r/min		
11	Rated current I _N	81.3	A		
12	No-load current	28	A		
13	Starting current I _s /I _N	9.3		Not within IEC 60034-12 design N,H	
14	Nominal torque T _N	145	Nm		
15	Locked rotor torque T _s /T _N	3.8			
16	Maximum torque T _{max} /T _N	4.1			
17	Minimum torque T _{min} /T _N	3.2			
18	Speed at minimum torque	1650	r/min		
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	81.3	94.0 / IE3	0.85
20		75	63.2	94	0.82
21		50	47.7	93.3	0.73
22		Start	757		0.35
23	Maximum starting time from hot	15	s		
24	Maximum starting time from cold	27	s		
25	Insulation class / Temperature class	F / B			
26	Ambient temperature	40	°C		
27	Altitude	1000	m.a.s.l.		
28	Enclosure	IP55			
29	Cooling system	IC411 self ventilated			
30	Bearing DE/NDE	6213-2Z/C3 - 6210-2Z/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	80	dB(A)	at load	
33	Moment of inertia J = ¼ GD ²	0.22286	kg-m ²		
34	Balancing				
35	Vibration class				
36	Position of terminal box	Top			
37	Terminal box entries; no, dimens.				
38	Number of power terminals				
39	Direction of rotation	CW or CCW			
40	Weight of rotor	62	kg		
41	Total weight of motor	278	kg		
42	Dimension drawing no.				
43					
44					
45					
Ex-motors					
46					
47					
48					
Option Variant Codes / Definition					
49					
50					
51					
52					
Remarks:					
Data based on situation 26/02/2016					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					

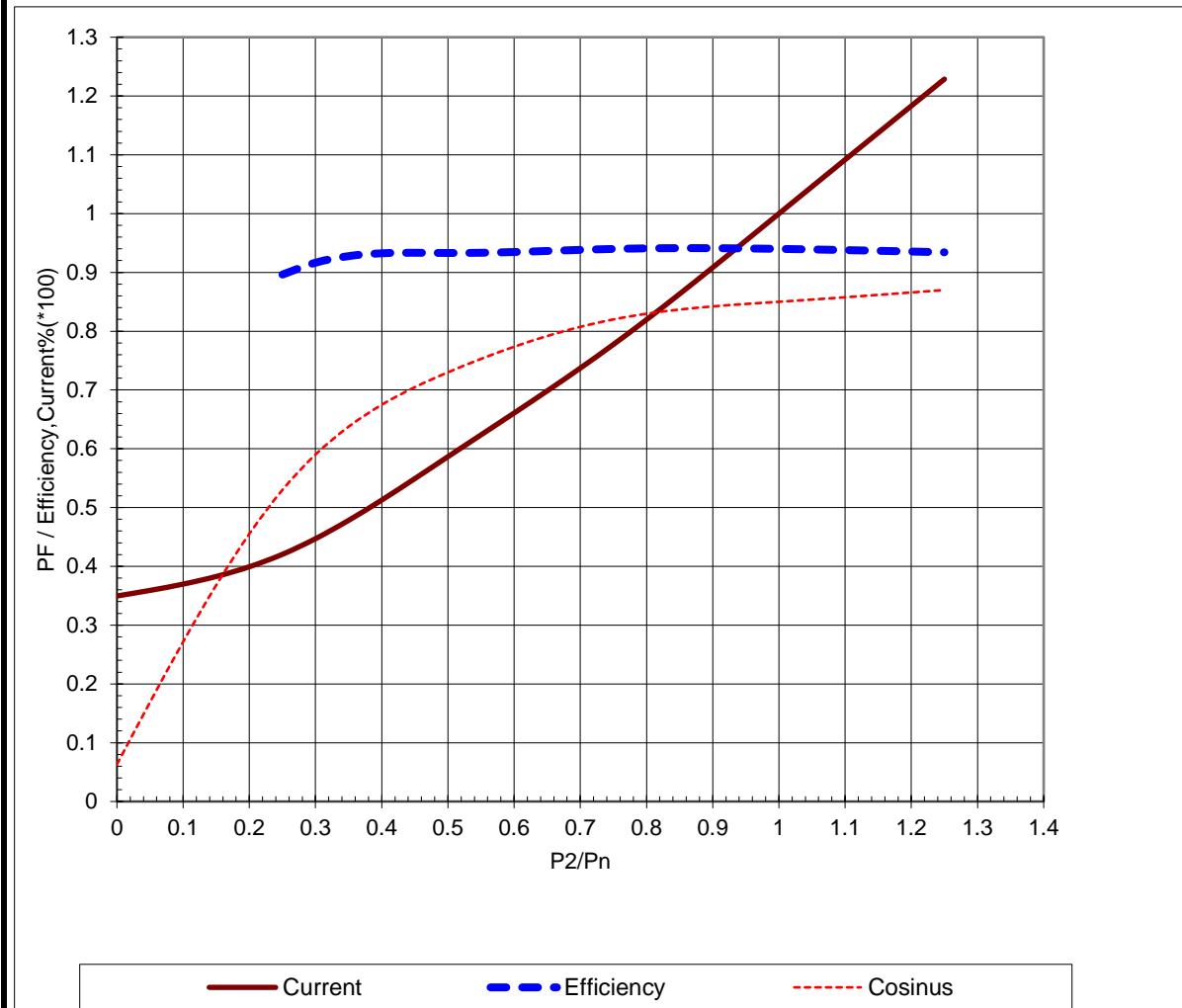
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Our ref.	Rev/Changed by	Date of issue	Saving ident	Pages
	A	21/11/2017	wimes stock.do2.xls	2(3)

Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 225SMA 2	Calc. ref.	3GZC021022-35
Product code	3GBA 221 210-ADF		
Rated output P _N	45	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	400	Current I _N (A)	81.3	Power factor at P _N	0.85
Frequency (Hz)	50	Speed (r/min)	2962	Efficiency (%) at P _N	94



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 26/02/2016

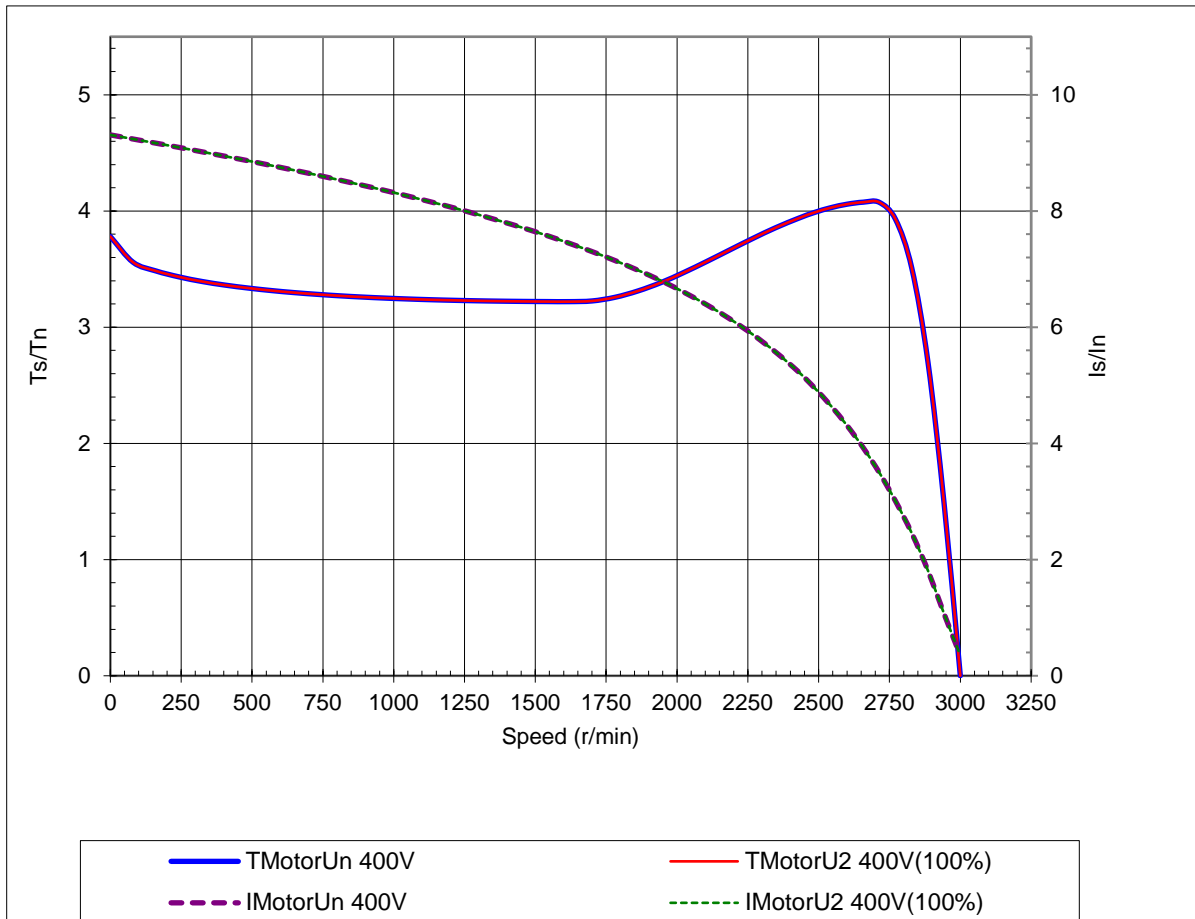
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Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 225SMA 2	Calc. ref.	3GZC021022-35
Product code	3GBA 221 210-ADF	Frequency (Hz)	50
Rated output P _N	45 kW	Rated current I _N	81.3 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.22	Voltage (V) 100%	400	Voltage (V)	400V(100%)
J _{load} (kgm ²)		T _{start} /T _N	3.8	T _{start} /T _N	3.8
Speed (r/min)	2962	Starting time (s)		Starting time (s)	
T _N (Nm)	145	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	9.3	I _s /I _n	9.3
Nbr. of Consecutive Starts at UN		T _{max} /T _n	4.1	T _{max} /T _n	4.1



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 26/02/2016

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