


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author		Customer name	Customer ref.		Item name 1.00085
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 112 410-BDD		Calc. ref.	3GZC021011-60
3	Type/Frame	M2BAX 112MLA 4			
4	Mounting	IM3001, B5(flange)			
5	Rated output P _N	4	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	1443	r/min		
11	Rated current I _N	8.1	A		
12	No-load current	3.1	A		
13	Starting current I _s /I _N	9.4		Fulfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	26.5	Nm		
15	Locked rotor torque T _s /T _N	3.6			
16	Maximum torque T _{max} /T _N	4.4			
17	Minimum torque T _{min} /T _N	3.3			
18	Speed at minimum torque	75	r/min		
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	8.1	88.6 / IE3	0.81
20		75	6.5	88.9	0.75
21		50	5.2	88.1	0.63
22		Start	76		0.49
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	6206-2Z/C3 - 6205-2Z/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	57	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	0.01519	kg-m2		
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	13	kg		
41	Total weight of motor	50	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 15/08/2016					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					

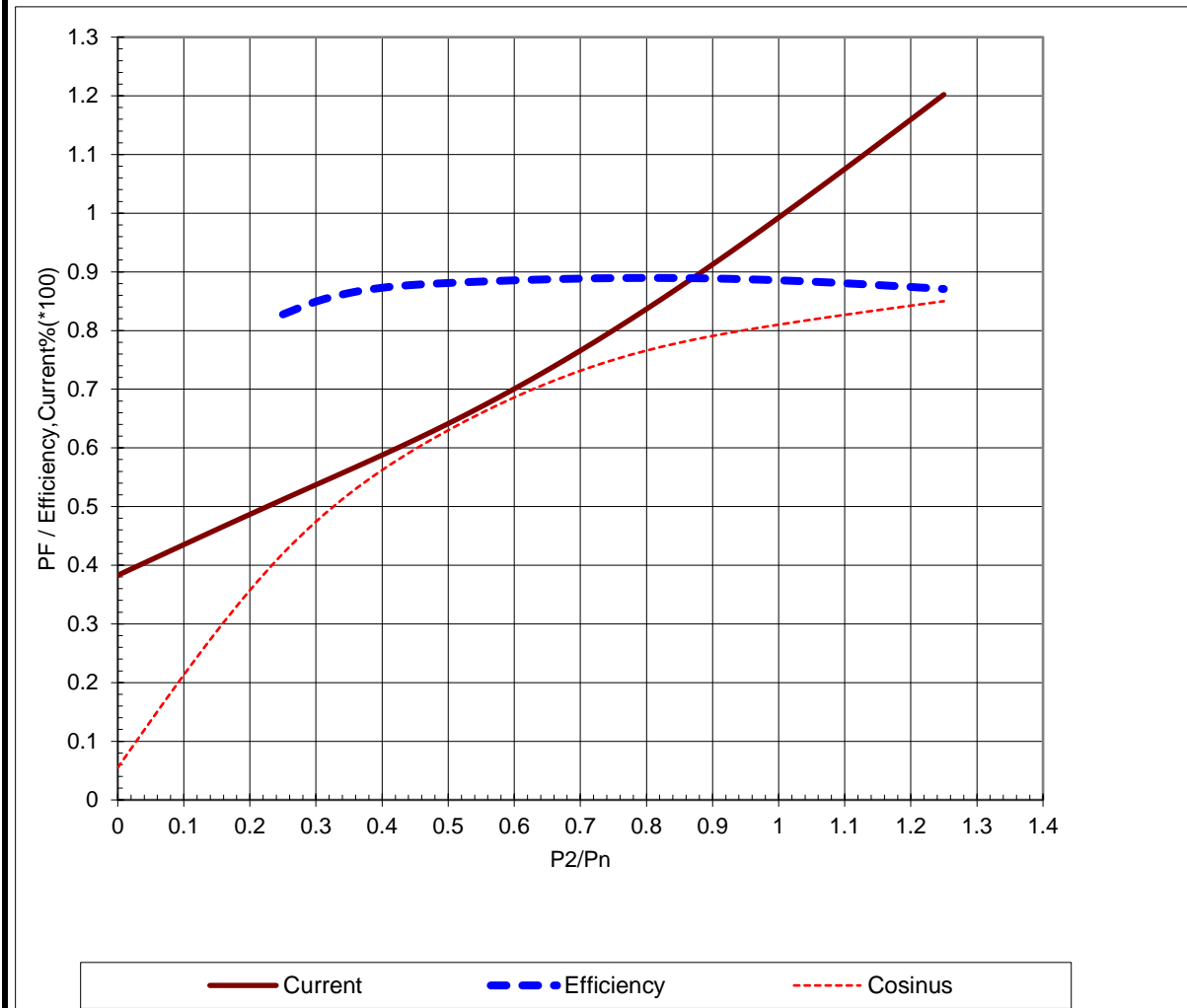
Project	Location
---------	----------

Department/Author	Customer name	Customer ref.	Item name 1.00085
-------------------	---------------	---------------	-----------------------------

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 112MLA 4	Calc. ref.	3GZC021011-60
Product code	3GBA 112 410-BDD		
Rated output P _N	4	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	400	Current I _N (A)	8.1	Power factor at P _N	0.81
Frequency (Hz)	50	Speed (r/min)	1443	Efficiency (%) at P _N	88.6



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 15/08/2016

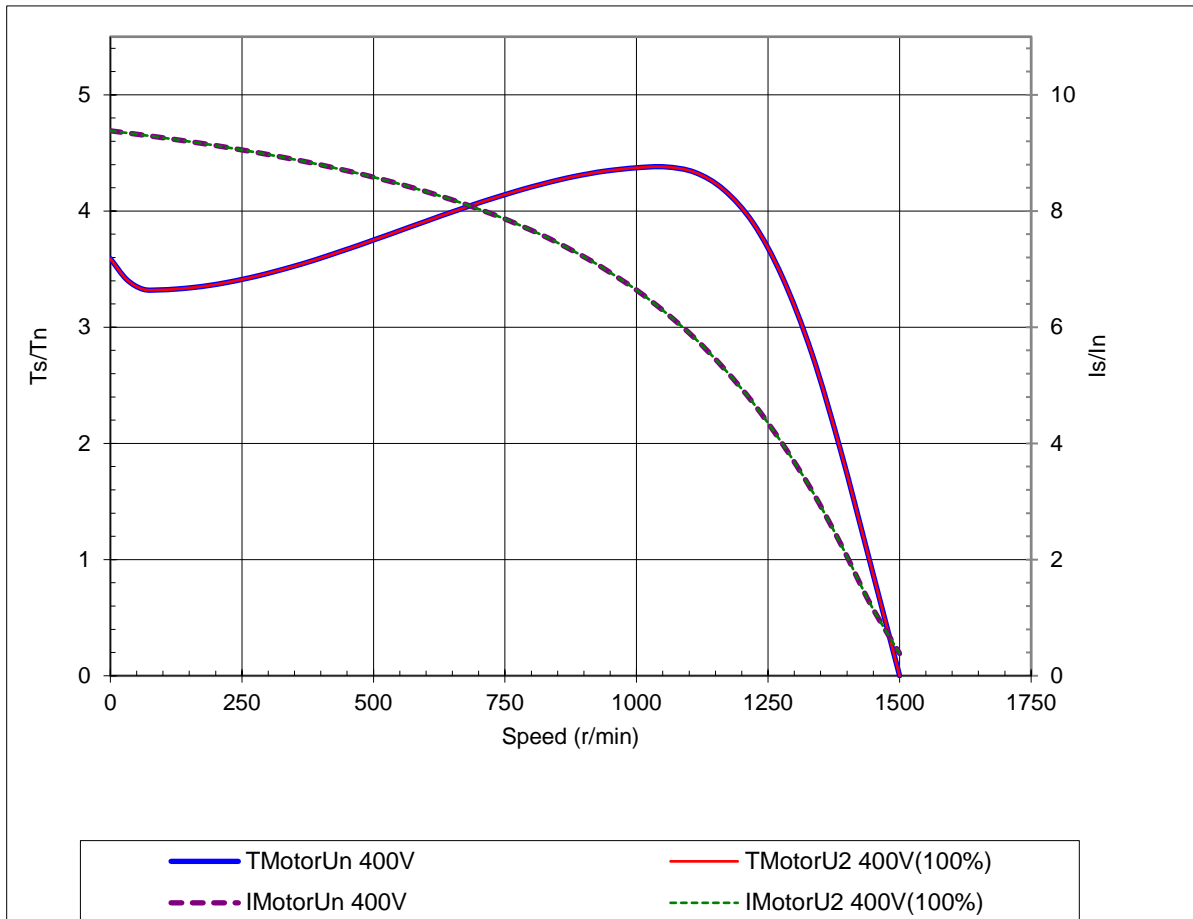
All data subject to tolerances in accordance with IEC



	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
			1.00085
Our ref.	Rev/Changed b Date of issue	Saving ident	Pages
	A 21/11/2017	wimes stock.do2.xls	3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 112MLA 4	Calc. ref.	3GZC021011-60
Product code	3GBA 112 410-BDD	Frequency (Hz)	50
Rated output P _N	4 kW	Rated current I _N	8.1 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.0152	Voltage (V) 100%	400	Voltage (V)	400V(100%)
J _{load} (kgm ²)		T _{start} /T _N	3.6	T _{start} /T _N	3.6
Speed (r/min)	1443	Starting time (s)		Starting time (s)	
T _N (Nm)	26.5	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	9.4	I _s /I _n	9.4
Nbr. of Consecutive Starts at UN		T _{max} /T _n	4.4	T _{max} /T _n	4.4



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 15/08/2016

All data subject to tolerances in accordance with IEC