


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author		Customer name	Customer ref.		Item name 1.00056
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 091 120-BSD		Calc. ref.	3GZC021009-87
3	Type/Frame	M2BAX 90SB 2			
4	Mounting	IM3001, B5(flange)			
5	Rated output P _N	1.5	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	400	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	2912	r/min		
11	Rated current I _N	3	A		
12	No-load current	1.56	A		
13	Starting current I _s /I _N	8.6		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	4.9	Nm		
15	Locked rotor torque T _s /T _N	2.8			
16	Maximum torque T _{max} /T _N	3.9			
17	Minimum torque T _{min} /T _N	2.7			
18	Speed at minimum torque	900	r/min		
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	3	84.2 / IE3	0.83
20		75	2.5	84	0.77
21		50	2.1	82.5	0.64
22		Start	26.1		0.58
23	Maximum starting time from hot	10	s		
24	Maximum starting time from cold	19	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	6205-2Z/C3 - 6204-2Z/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	54	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	0.00234	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	4	kg		
41	Total weight of motor	23	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 11/08/2016					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					

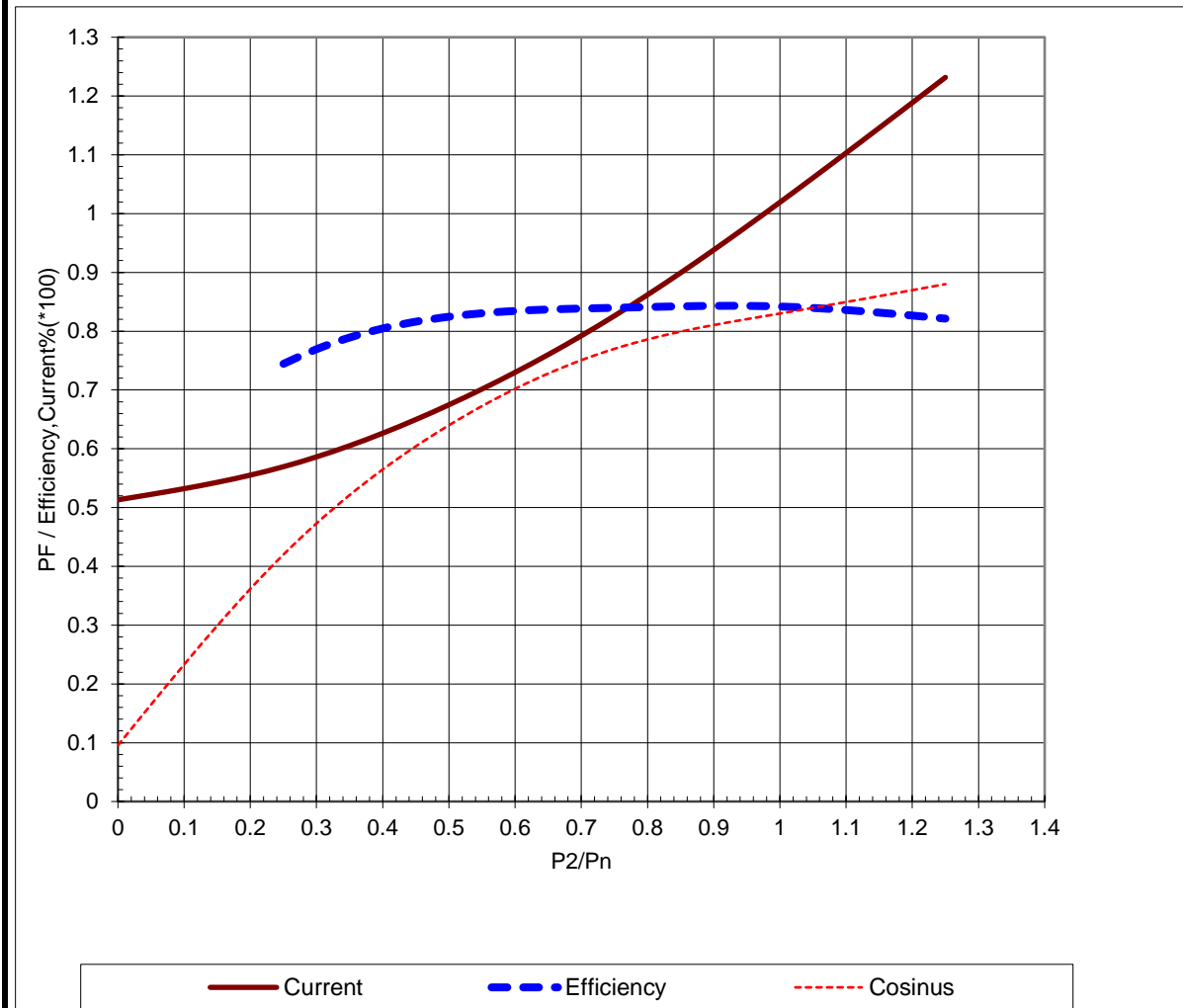
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Our ref.	Rev/Changed by	Date of issue	Saving ident	Pages
	A	21/11/2017	wimes stock.do2.xls	2(3)

Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 90SB 2	Calc. ref.	3GZC021009-87
Product code	3GBA 091 120-BSD		
Rated output P _N	1.5	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	400	Current I _N (A)	3	Power factor at P _N	0.83
Frequency (Hz)	50	Speed (r/min)	2912	Efficiency (%) at P _N	84.2



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 11/08/2016

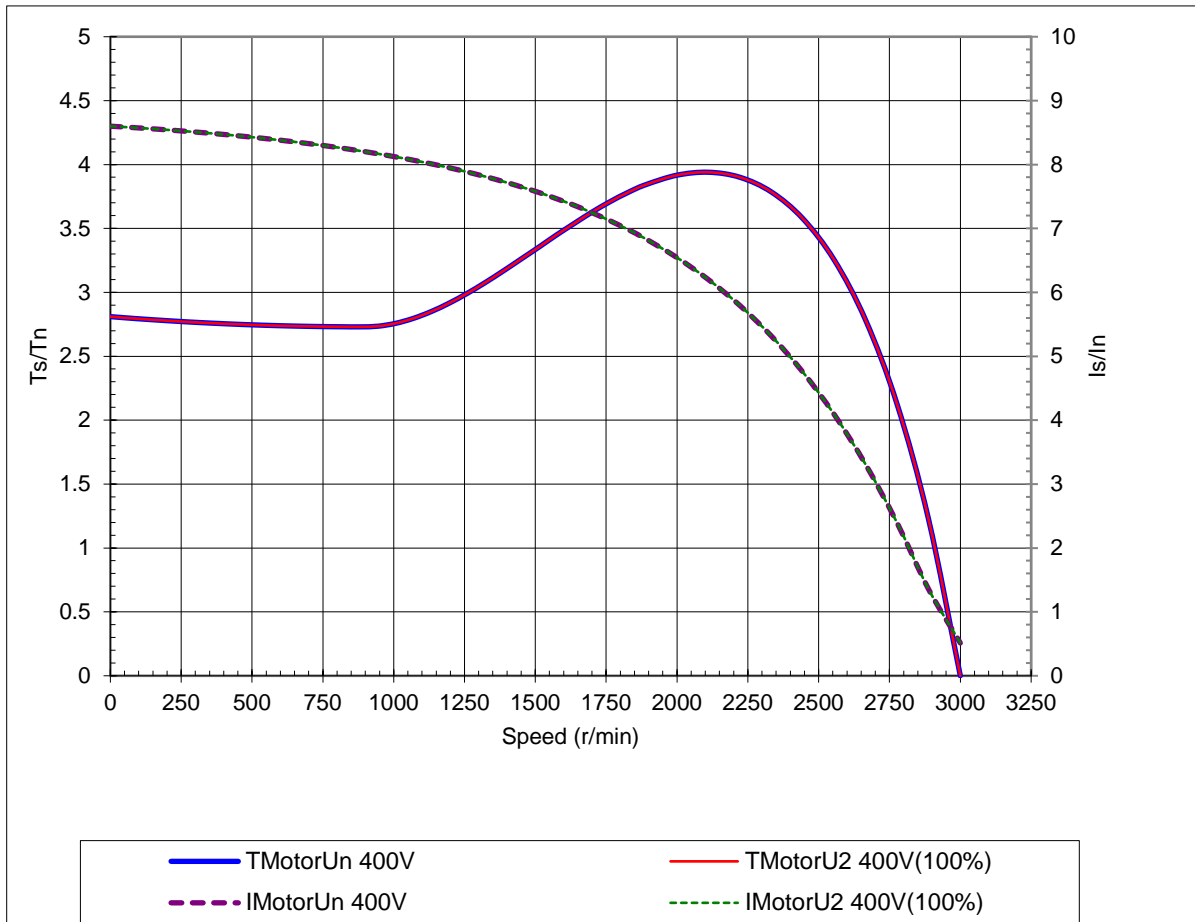
All data subject to tolerances in accordance with IEC



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

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 90SB 2	Calc. ref.	3GZC021009-87
Product code	3GBA 091 120-BSD	Frequency (Hz)	50
Rated output P _N	1.5 kW	Rated current I _N	3 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.0023	Voltage (V) 100%	400	Voltage (V)	400V(100%)
J _{load} (kgm ²)		T _{start} /T _N	2.8	T _{start} /T _N	2.8
Speed (r/min)	2912	Starting time (s)		Starting time (s)	
T _N (Nm)	4.9	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	8.6	I _s /I _n	8.6
Nbr. of Consecutive Starts at UN		T _{max} /T _n	3.9	T _{max} /T _n	3.9



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 11/08/2016

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