


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author		Customer name	Customer ref.		Item name 1.00013
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 161 430-ADF		Calc. ref.	3GF021016-135
3	Type/Frame	M2BAX 160MLC 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	18.5	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	2949	r/min		
11	Rated current I _N	32	A		
12	No-load current	9.5	A		
13	Starting current I _s /I _N	9		Fulfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	60	Nm		
15	Locked rotor torque T _s /T _N	3.3			
16	Maximum torque T _{max} /T _N	3.9			
17	Minimum torque T _{min} /T _N	3			
18	Speed at minimum torque	660	r/min		
	Load characteristics (IEC 60034-2-1:2014)	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	32	92.4 / IE3	0.9
20		75	24.8	93	0.87
21		50	18	92.6	0.8
22		Start	288		0.37
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	6209-2Z/C3 - 6209-2Z/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	73	dB(A)	at load	
33	Moment of inertia J = ¼ GD ²	0.076	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	32	kg		
41	Total weight of motor	145	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 31/05/2017					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					

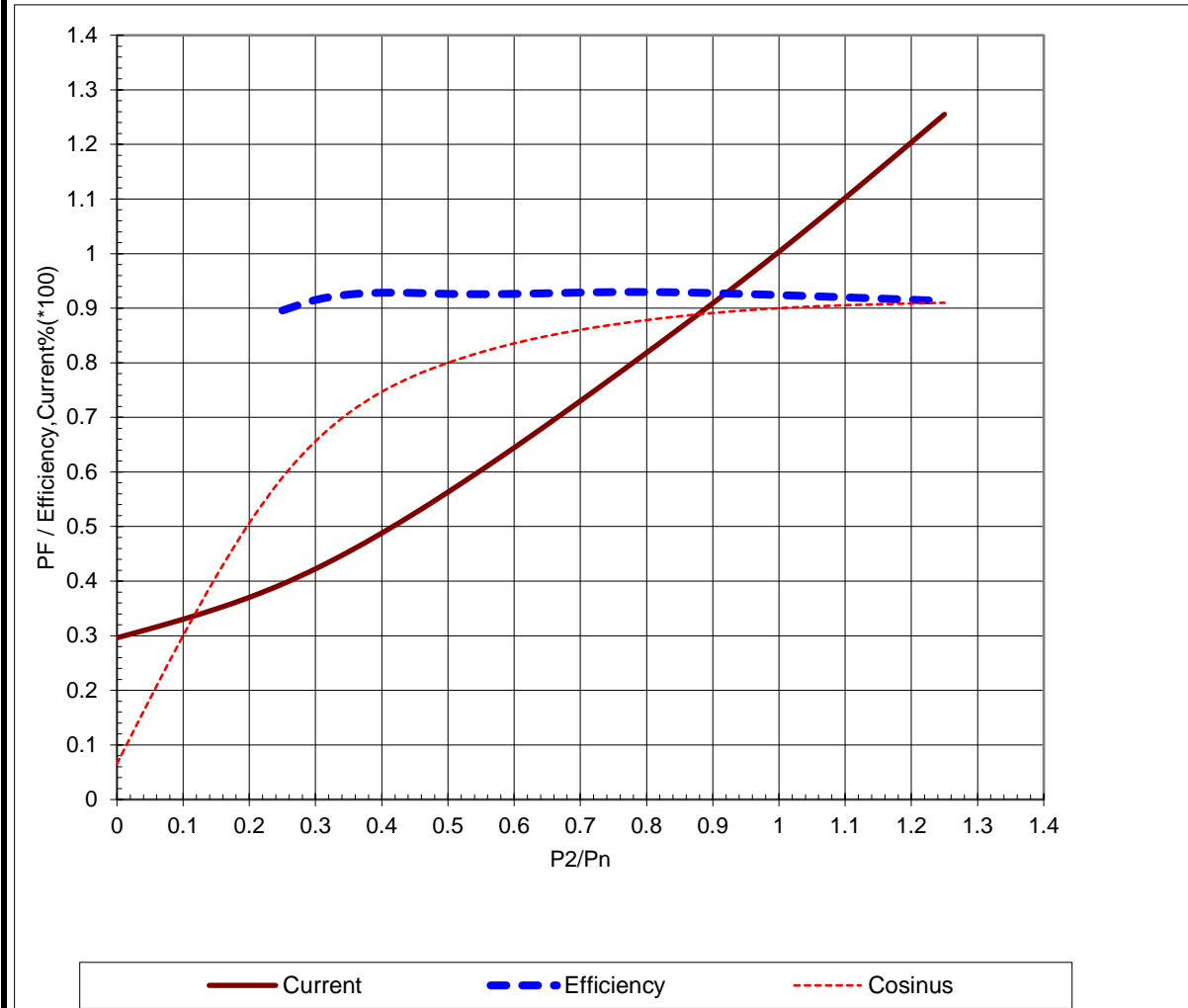
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Our ref.	Rev/Changed by	Date of issue	Saving ident	Pages
	A	21/11/2017	wimes stock.do2.xls	2(3)

Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M2BAX 160MLC 2	Calc. ref.	3GZF021016-135
Product code	3GBA 161 430-ADF		
Rated output P _N	18.5	kW	
Type of duty	S1(IEC) 100%		

Voltage (V)	400	Current I _N (A)	32	Power factor at P _N	0.9
Frequency (Hz)	50	Speed (r/min)	2949	Efficiency (%) at P _N	92.4



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 31/05/2017

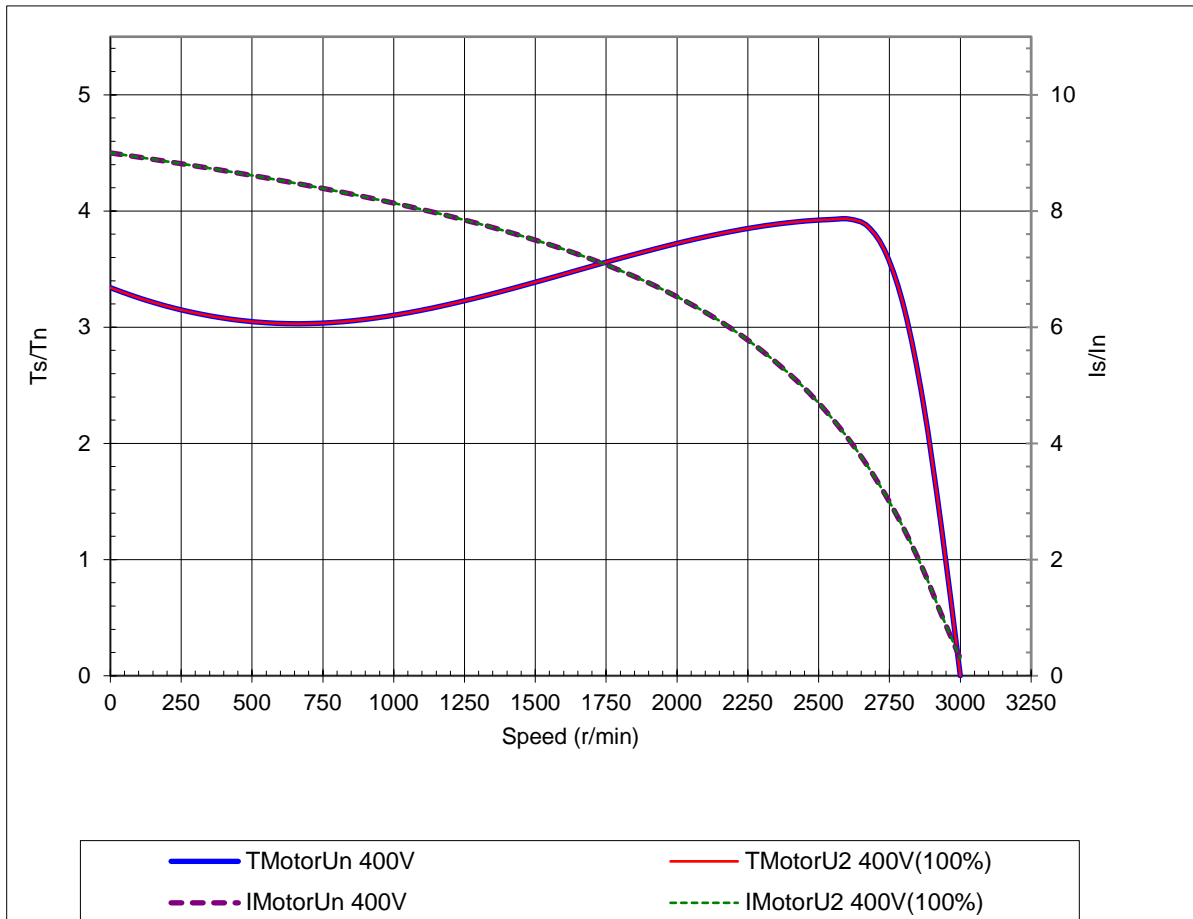
All data subject to tolerances in accordance with IEC



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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 160MLC 2	Calc. ref.	3GZF021016-135
Product code	3GBA 161 430-ADF	Frequency (Hz)	50
Rated output P _N	18.5 kW	Rated current I _N	32 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm ²)	0.076	Voltage (V) 100%	400	Voltage (V)	400V(100%)
J _{load} (kgm ²)		T _{start} /T _N	3.3	T _{start} /T _N	3.3
Speed (r/min)	2949	Starting time (s)		Starting time (s)	
T _N (Nm)	60	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	9	I _s /I _n	9
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 31/05/2017

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