


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author		Customer name	Customer ref.		Item name 1,00005
Our ref.		Rev/Changed by A	Date of issue 19/09/2019	Saving ident untitled.xls	Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	3GAA 111 320-ASJ		Calc. ref.	3GZF021011-476
3	Type/Frame	M3AA 112MB 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	4	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	440	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	60	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	3490	r/min		
11	Rated current I _N	6,5	A		
12	No-load current	2	A		
13	Starting current I _s /I _N	9,1		Meet IEC 60034-12, N	
14	Nominal torque T _N	10,9	Nm		
15	Locked rotor torque T _s /T _N	3,2			
16	Maximum torque T _{max} /T _N	4,3			
17	Minimum torque T _{min} /T _N	3,1			
18	Speed at minimum torque	612	r/min		
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	6,5	88,5 / IE3	0,9
20		75	5,1	89,1	0,87
21		50	3,7	88,3	0,8
22		Start	59		0,66
23	Maximum starting time from hot	21	s		
24	Maximum starting time from cold	37	s		
25	Insulation class / Temperature class	F / B			
26	Ambient temperature	45	°C		
27	Altitude	1000	m.a.s.l.		
28	Enclosure	IP55			
29	Cooling system	IC411 self ventilated			
30	Bearing DE/NDE	6206-2Z/C3 - 6206-2Z/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	71	dB(A)	at load	
33	Moment of inertia J = ¼ GD ²	0,0104	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	9	kg		
41	Total weight of motor	35	kg		
42	Dimension drawing no.				
43					
44					
45					
Ex-motors					
46					
47					
48					
Option Variant Codes / Definition					
49	+002 Restamping voltage, frequency and output, continuous duty				
50					
51					
52					
Remarks:					
Data based on situation 27/05/2018					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					

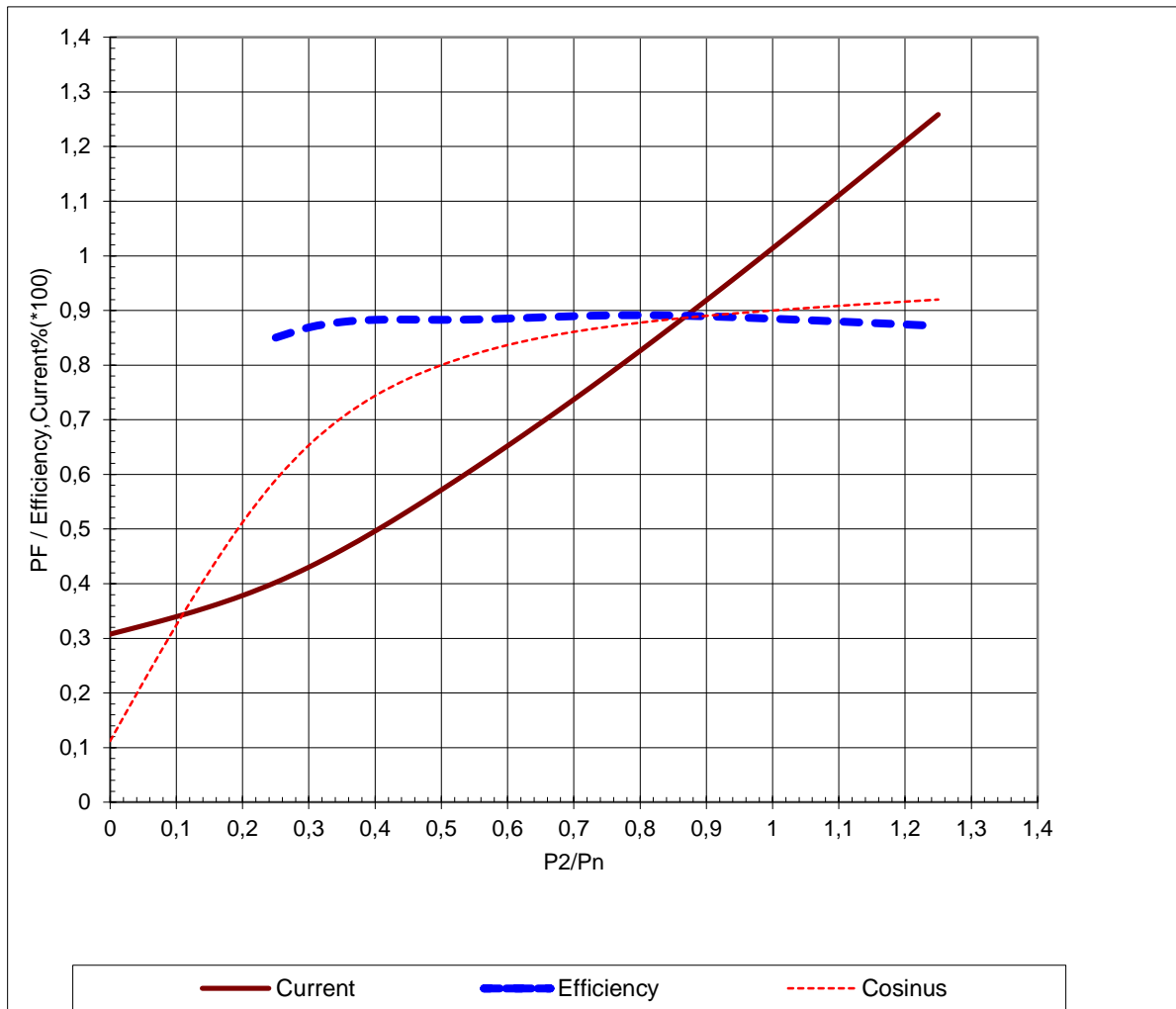
Project _____ Location _____

Department/Author _____ Customer name _____ Customer ref. _____ Item name **1,00005**

Our ref. _____ Rev/Changed by **A** Date of issue **19/09/2019** Saving ident **untitled.xls** Pages **2(3)**

Product **TEFC, 3-phase, squirrel cage induction motor**
 Type/Frame **M3AA 112MB 2** Calc. ref. **3GZF021011-476**
 Product code **3GAA 111 320-ASJ**
 Rated output P_N **4** kW
 Type of duty **S1(IEC) 100%**

Voltage (V) **440** Current I_N (A) **6,5** Power factor at P_N **0,9**
 Frequency (Hz) **60** Speed (r/min) **3490** Efficiency (%) at P_N **88,5**



Load characteristics (IEC 60034-2-1:2014)
 Data based on situation 27/05/2018

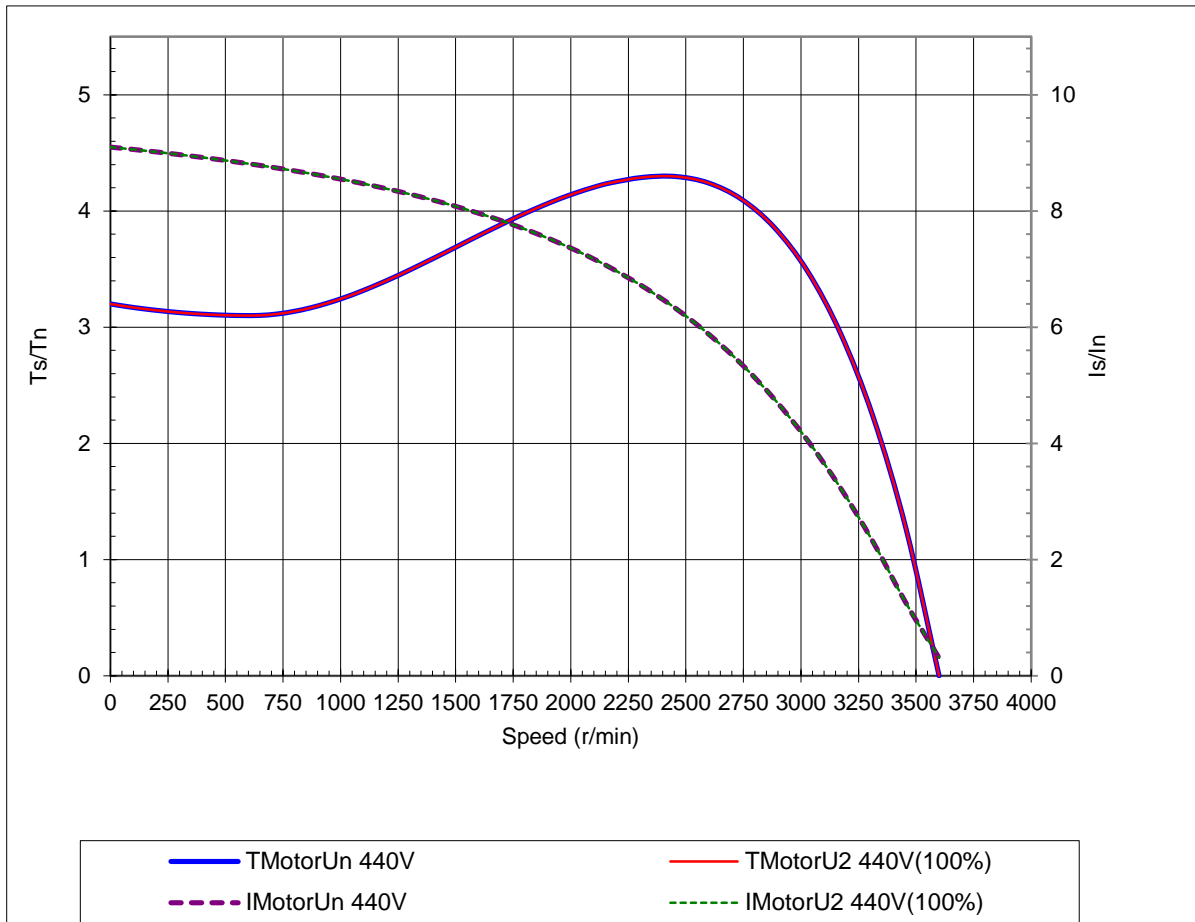
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Our ref.	Rev/Changed b Date of issue A 19/09/2019	Saving ident untitled.xls	Pages 3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3AA 112MB 2	Calc. ref.	3GZF021011-476
Product code	3GAA 111 320-ASJ	Frequency (Hz)	60
Rated output P _N	4 kW	Rated current I _N	6,5 A
Type of duty	S1(IEC) 100%		

J _{motor} (kgm2)	0,0104	Voltage (V) 100%	440	Voltage (V)	440V(100%)
J _{load} (kgm2)		T _{start} /T _N	3,2	T _{start} /T _N	3,2
Speed (r/min)	3490	Starting time (s)		Starting time (s)	
T _N (Nm)	10,9	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	9,1	I _s /I _n	9,1
Nbr. of Consecutive Starts at UN		T _{max} /T _n	4,3	T _{max} /T _n	4,3



Load characteristics (IEC 60034-2-1:2014)
Data based on situation 27/05/2018

All data subject to tolerances in accordance with IEC