


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author		Customer name	Customer ref.		Item name 1.00001
Our ref.		Rev/Changed by A	Date of issue 3/19/2018	Saving ident untitled.xls	Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	EMM08752-PP (3GBP 081 340-ACK)		Calc. ref.	3GZF021008-136
3	Type/Frame	M3BP 80MD 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	0.75	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	460	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	60	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	3484	r/min		
11	Rated current I _N	1.33	A		
12	No-load current	0.53	A		
13	Starting current I _s /I _N	7.4		Meet IEC 60034-12, N	
14	Nominal torque T _N	2.1	Nm		
15	Locked rotor torque T _s /T _N	3.3			
16	Maximum torque T _{max} /T _N	4.2			
17	Minimum torque T _{min} /T _N	3.2			
18	Speed at minimum torque	612	r/min		
Load characteristics (CSA 390-10)		Load %	Current A	Efficiency %	Power factor
19	NEMA nominal efficiency (*)	100	1.33	77.0 / IE3 / 75.5	0.86
20		75	1.15	75.8	0.81
21		50	0.92	71.3	0.72
22		Start	9.8		0.7
23	Maximum starting time from hot	17	s		
24	Maximum starting time from cold	31	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	6204-2Z/C3 - 6203-2Z/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	60	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	0.0012	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	3	kg		
41	Total weight of motor	18	kg		
42	Dimension drawing no.				
43					
44					
45					
Ex-motors					
46					
47					
48					
Option Variant Codes / Definition					
49	+509 Fulfilling EISA Subtype I efficiency requirements, CC031A				
50					
51					
52					
Remarks:					
Data based on situation 7/6/2017					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					


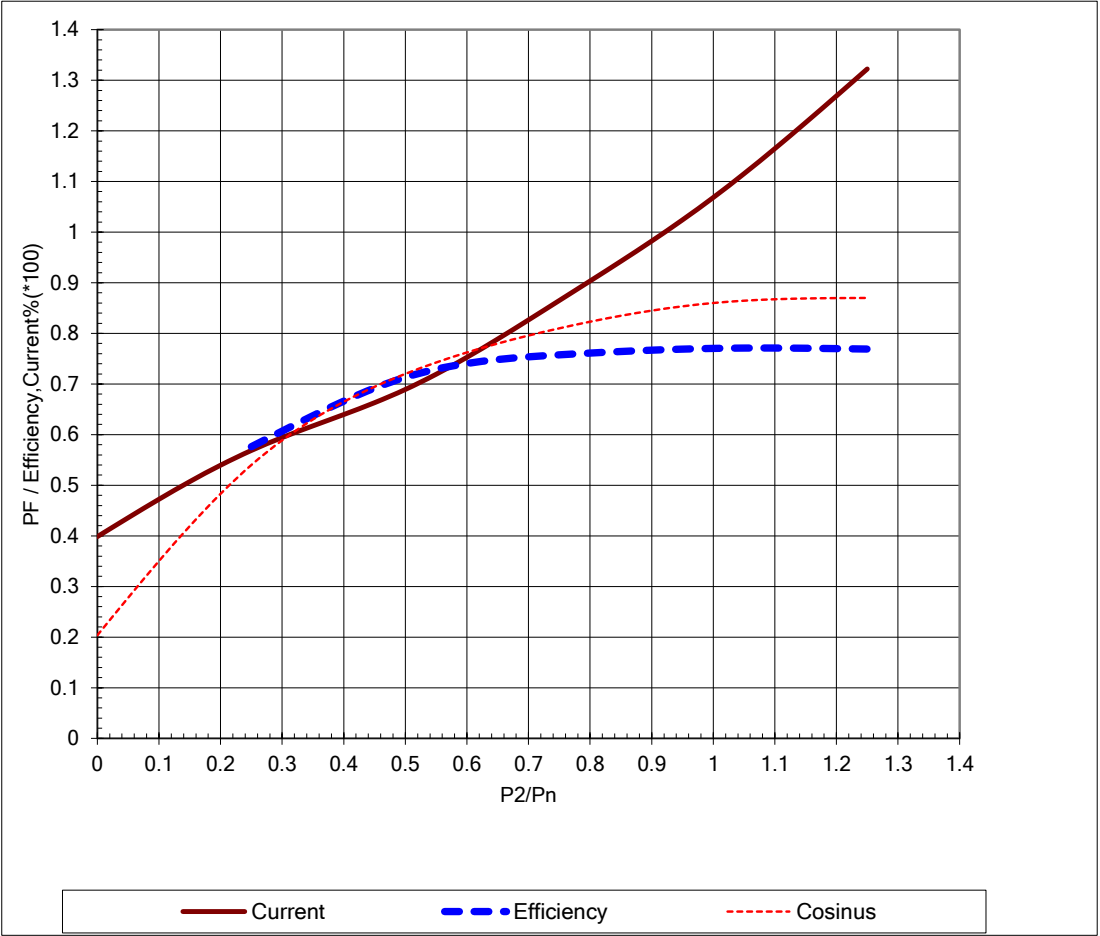

ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 3/19/2018	Saving ident untitled.xls Pages 2(3)
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 80MD 2	Calc. ref.	3GZF021008-136
Product code	EMM08752-PP		
Rated output P _N	0.75 kW		
Type of duty	S1(IEC) 100%		
Voltage (V)	460	Current I _N (A)	1.33
Frequency (Hz)	60	Speed (r/min)	3484
		Power factor at P _N	0.86
		Efficiency (%) at P _N	77
			
<p>Load characteristics (CSA 390-10) Data based on situation 7/6/2017</p> <p style="text-align: center;">All data subject to tolerances in accordance with IEC</p>			

ABB Motors and Generators		Starting Curves			
		Project	Location		
Department/Author	Customer name	Customer ref.	Item name 1.00001		
Our ref.	Rev/Changed b Date of issue A 3/19/2018	Saving ident untitled.xls	Pages 3(3)		
Type of product	TEFC, 3-phase, squirrel cage induction motor				
Type/Frame	M3BP 80MD 2	Calc. ref.	3GZF021008-136		
Product code	EMM08752-PP	Frequency (Hz)	60		
Rated output P _N	0.75 kW	Rated current I _N	1.33	A	
Type of duty	S1(IEC) 100%				
J _{motor} (kgm ²)	0.0012	Voltage (V) 100%	460	Voltage (V)	460V(100%)
J _{load} (kgm ²)		T _{start} /T _N	3.3	T _{start} /T _N	3.3
Speed (r/min)	3484	Starting time (s)		Starting time (s)	
T _N (Nm)	2.1	Speed (r/min)		Speed (r/min)	
T _{load} (Nm)		I _s /I _n	7.4	I _s /I _n	7.4
Nbr. of Consecutive Starts at UN		T _{max} /T _n	4.2	T _{max} /T _n	4.2

The graph plots torque and current ratios against speed. The torque curves (left axis) show a peak around 2500 r/min. The current curves (right axis) show a peak around 2500 r/min and then decrease as speed increases. The motor's synchronous speed is approximately 3600 r/min.

Load characteristics (CSA 390-10)
Data based on situation 7/6/2017

All data subject to tolerances in accordance with IEC