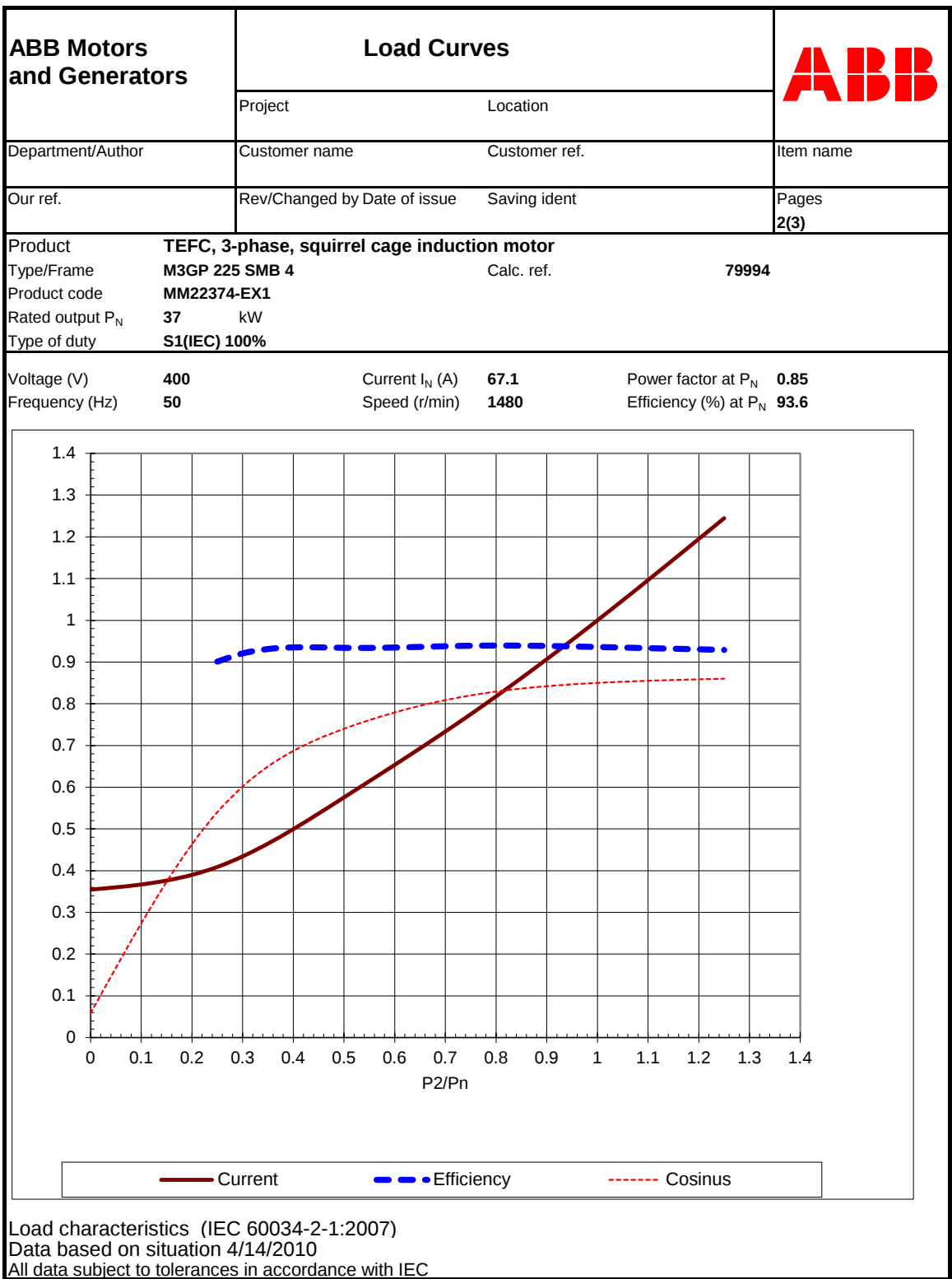


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project		Location	
Department/Author		Customer name		Customer ref.	Item name
Our ref.		Rev/Changed by	Date of issue	Saving ident	Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM22374-EX1 (3GGP222220-ADG+332)			
3	Type/Frame	M3GP 225 SMB 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	37	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	1480	r/min		
11	Rated current I _N	67.1	A		
12	No-load current	24	A		
13	Starting current I _s /I _N	7.6		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	239	Nm		
15	Locked rotor torque T _s /T _N	3.2			
16	Maximum torque T _{max} /T _N	2.9			
17	Minimum torque T _{min} /T _N	2.3			
18	Speed at minimum torque	1050	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	67.1	93.6 / IE2	0.85
21		75	52	93.9	0.82
22		50	38.6	93.4	0.74
23		Start	510		0.42
24	Maximum starting time from hot	15	s		
25	Maximum starting time from cold	27	s		
26	Insulation class / Temperature class	F / B			
27	Ambient temperature	40	°C		
28	Altitude	1000	m.a.s.l.		
29	Enclosure	IP55			
30	Cooling system	IC411 self ventilated			
31	Bearing DE/NDE	6313/C3 - 6312/C3			
32	Type of Grease	Lithium based			
33	Sound pressure level (LP dB(A) 1m)	67	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.42	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dimens.	2xM50x1.5 + 2xM20x1.5			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Weight of rotor	79	kg		
42	Total weight of motor	355	kg		
43					
Ex-motors					
44	Type of protection	*Ex nA II T3			
45					
Variant Codes / Definition					
	332 = Baldor catalog number				
Remarks:					
Data based on situation 4/14/2010					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					
* For more information on the Atex/IECEx rating, please contact your local Baldor representative.					



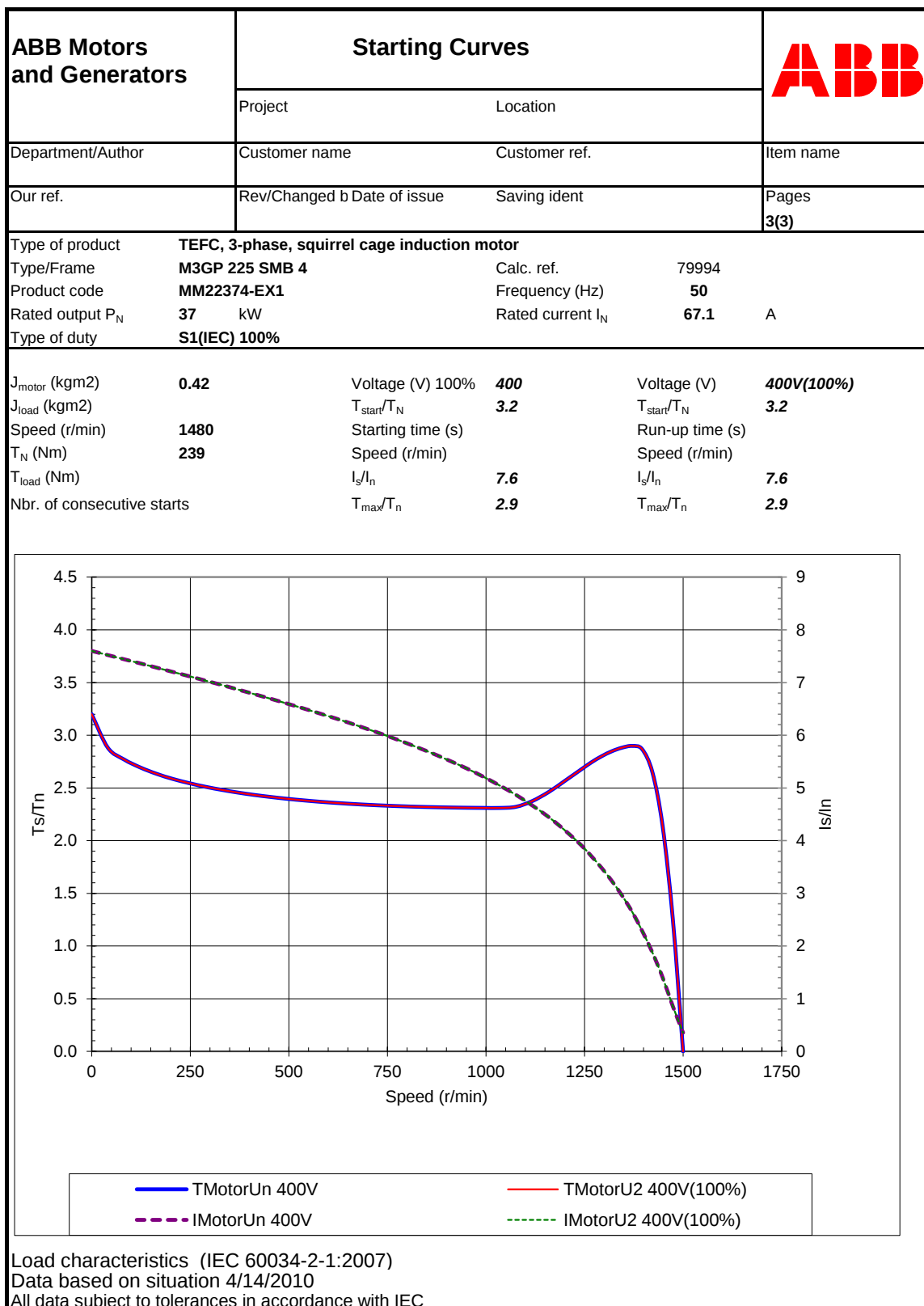
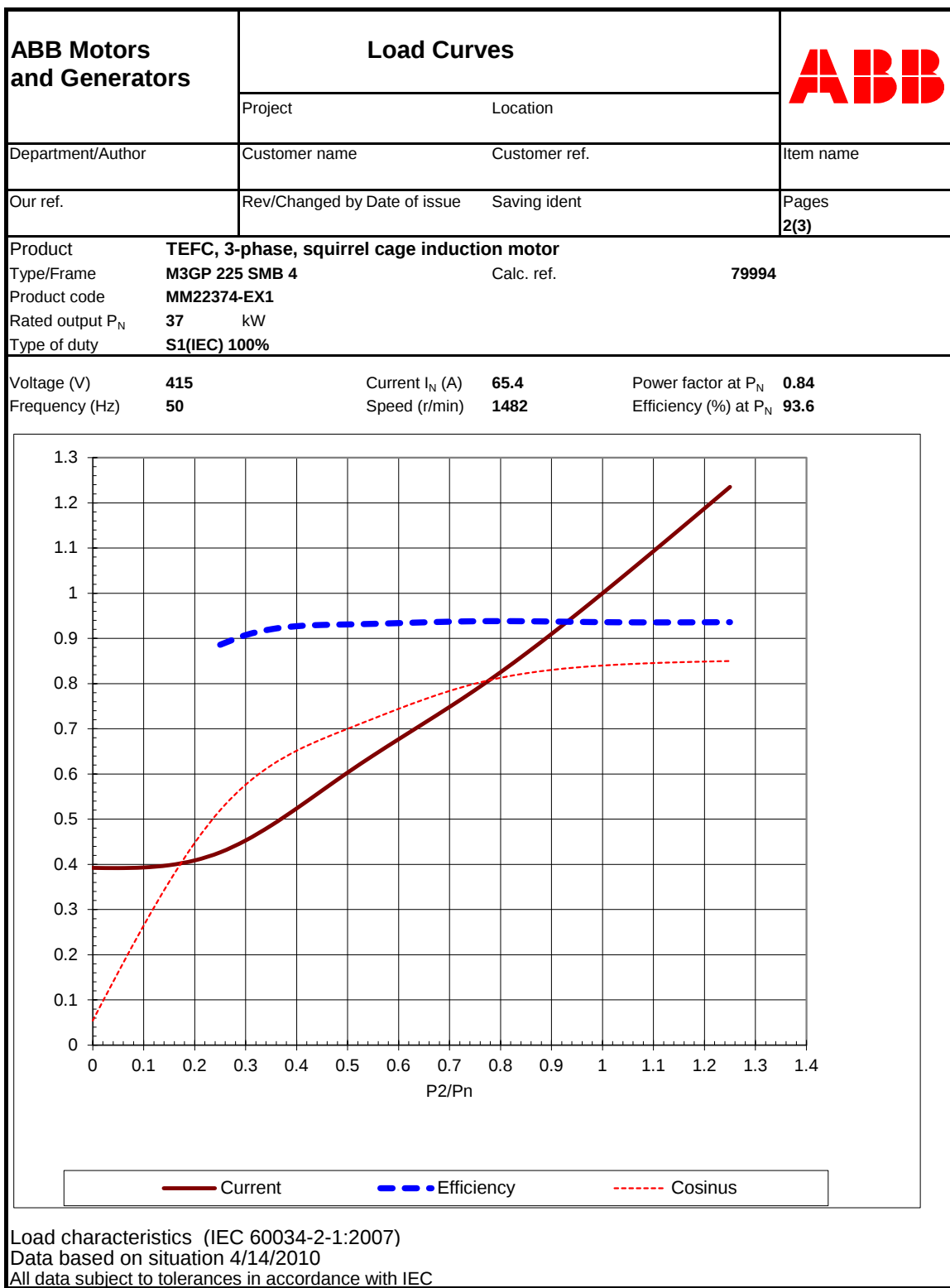


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project		Location	
Department/Author		Customer name		Customer ref.	Item name
Our ref.		Rev/Changed by	Date of issue	Saving ident	Pages 1(3)

No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM22374-EX1 (3GGP222220-ADG+332)			
3	Type/Frame	M3GP 225 SMB 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	37	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	415	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	1482	r/min		
11	Rated current I _N	65.4	A		
12	No-load current	26	A		
13	Starting current I _s /I _N	8.1		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	238	Nm		
15	Locked rotor torque T _S /T _N	3.5			
16	Maximum torque T _{max} /T _N	3.1			
17	Minimum torque T _{min} /T _N	2.5			
18	Speed at minimum torque	1050	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	65.4	93.6 / IE2	0.84
21		75	51.4	93.8	0.8
22		50	39.4	93.1	0.7
23		Start	530		0.43
24	Maximum starting time from hot	15	s		
25	Maximum starting time from cold	30	s		
26	Insulation class / Temperature class	F / B			
27	Ambient temperature	40	°C		
28	Altitude	1000	m.a.s.l.		
29	Enclosure	IP55			
30	Cooling system	IC411 self ventilated			
31	Bearing DE/NDE	6313/C3 - 6312/C3			
32	Type of Grease	Lithium based			
33	Sound pressure level (LP dB(A) 1m)	67	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.42	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dims.	2xM50x1.5 + 2xM20x1.5			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Weight of rotor	79	kg		
42	Total weight of motor	355	kg		
43					
Ex-motors					
44	Type of protection	Ex nA II T3			
45					
Variant Codes / Definition					
	332 = Baldor catalog number				
Remarks:					
Data based on situation 4/14/2010					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					
* For more information on the Atex/IECEx rating, please contact your local Baldor representative.					



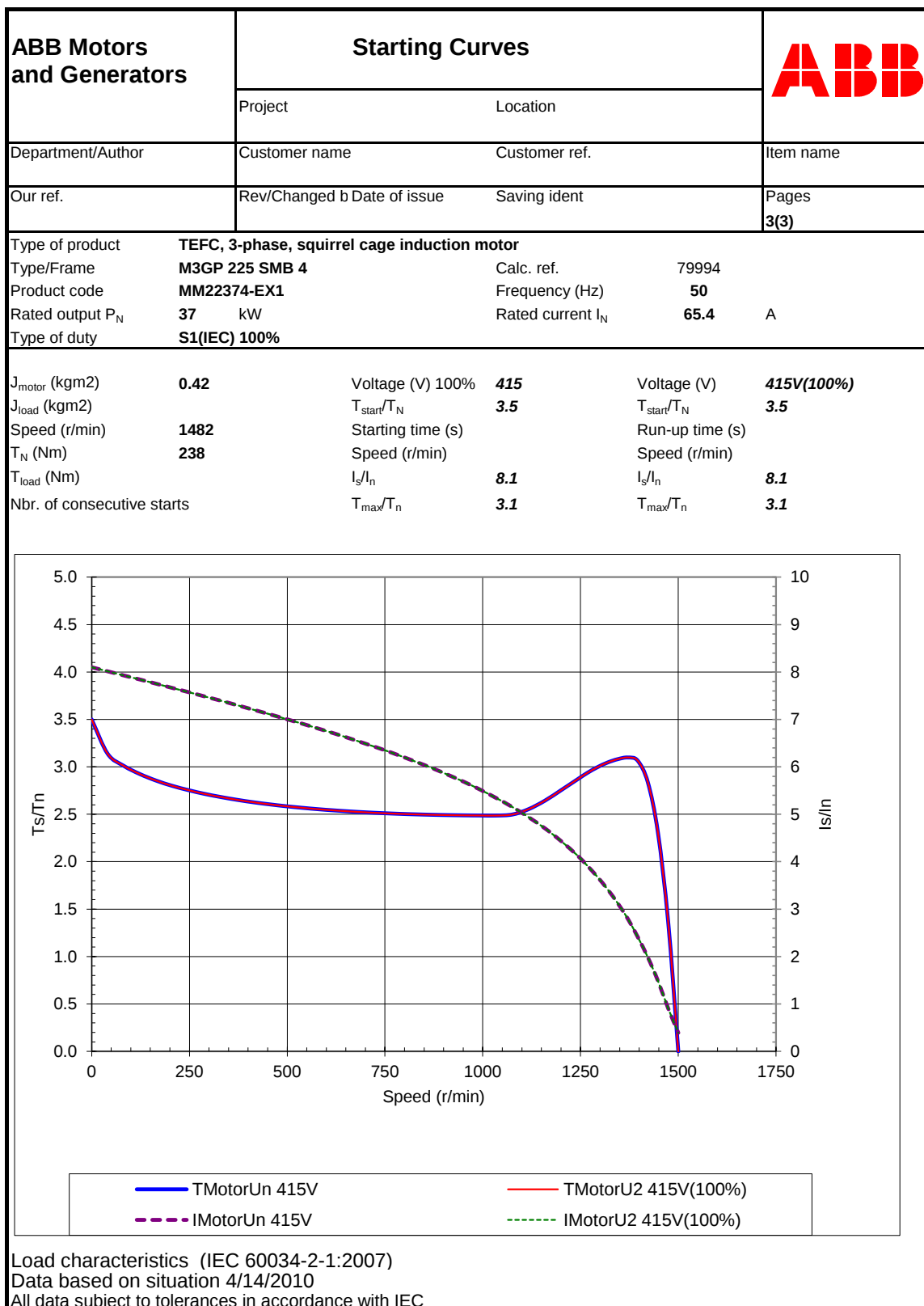


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author	Customer name		Customer ref.		Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident		Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM22374-EX1 (3GGP222220-ADG+332)			
3	Type/Frame	M3GP 225 SMB 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	37	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	690	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	1480	r/min		
11	Rated current I _N	38.9	A		
12	No-load current	13.8	A		
13	Starting current I _s /I _N	7.6		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	239	Nm		
15	Locked rotor torque T _S /T _N	3.2			
16	Maximum torque T _{max} /T _N	2.9			
17	Minimum torque T _{min} /T _N	2.3			
18	Speed at minimum torque	1050	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	38.9	93.6 / IE2	0.85
21		75	30.1	93.9	0.82
22		50	22.3	93.4	0.74
23		Start	295		0.42
24	Maximum starting time from hot	15	s		
25	Maximum starting time from cold	27	s		
26	Insulation class / Temperature class	F / B			
27	Ambient temperature	40	°C		
28	Altitude	1000	m.a.s.l.		
29	Enclosure	IP55			
30	Cooling system	IC411 self ventilated			
31	Bearing DE/NDE	6313/C3 - 6312/C3			
32	Type of Grease	Lithium based			
33	Sound pressure level (LP dB(A) 1m)	67	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.42	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dims.	2xM50x1.5 + 2xM20x1.5			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Weight of rotor	79	kg		
42	Total weight of motor	355	kg		
43					
Ex-motors					
44	Type of protection	*Ex nA II T3			
45					
Variant Codes / Definition 332 = Baldor catalog number					
Remarks:					
Data based on situation 4/14/2010					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					
* For more information on the Atex/IECEx rating, please contact your local Baldor representative.					

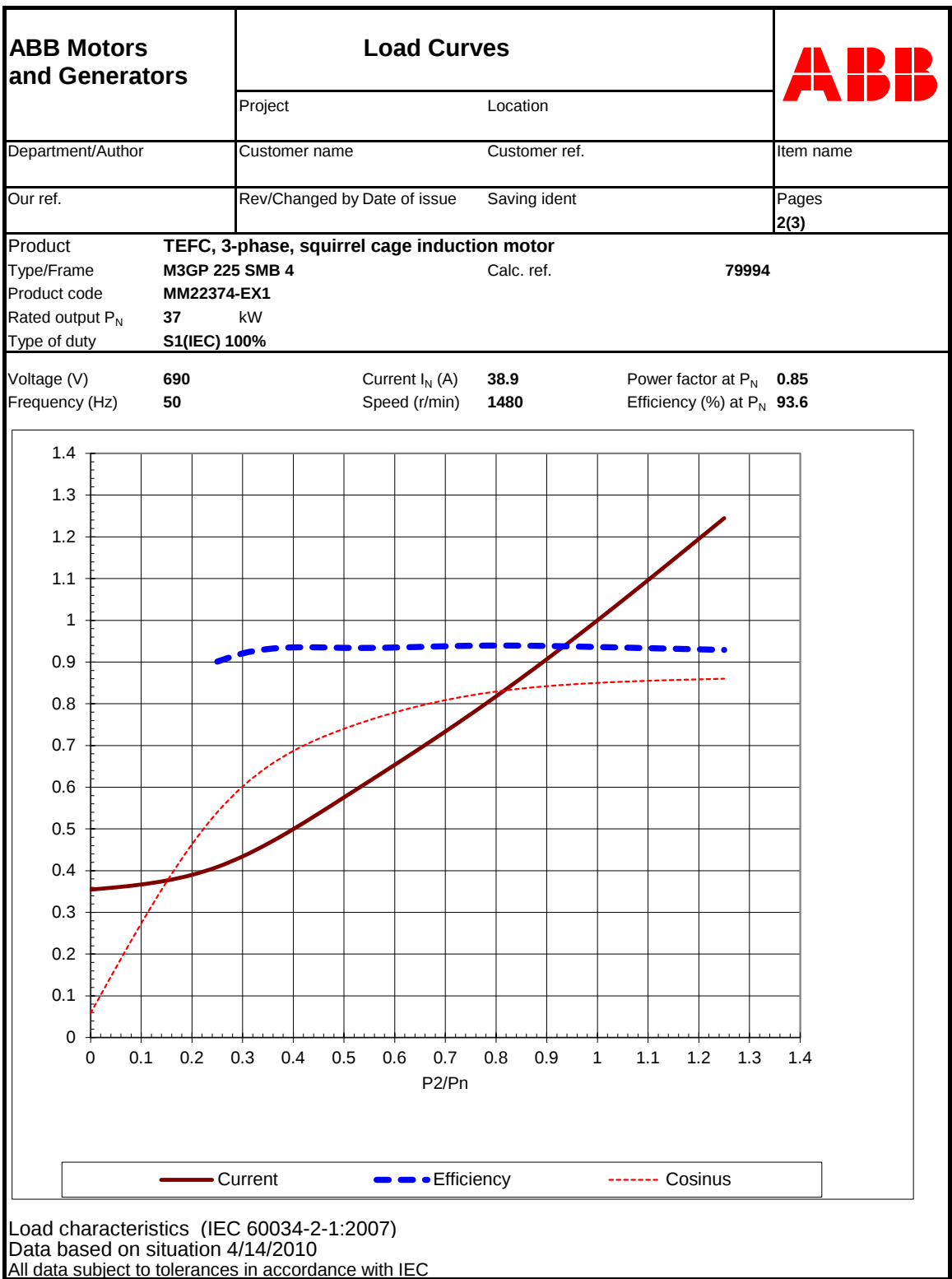
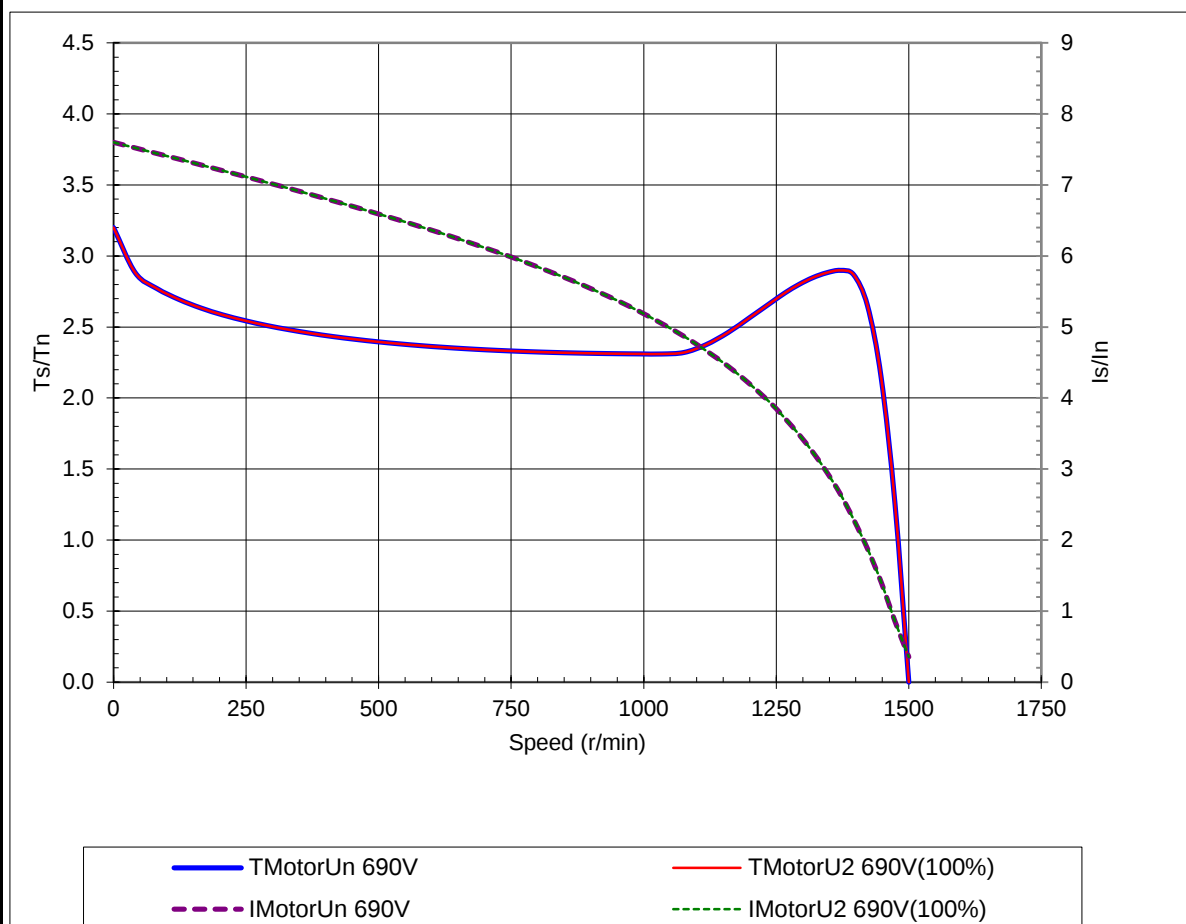


ABB Motors and Generators	Starting Curves		ABB
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed b	Date of issue	Saving ident
			Pages 3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3GP 225 SMB 4	Calc. ref.	79994
Product code	MM22374-EX1	Frequency (Hz)	50
Rated output P_N	37 kW	Rated current I_N	38.9 A
Type of duty	S1(IEC) 100%		

J_{motor} (kgm ²)	0.42	Voltage (V) 100%	690	Voltage (V)	690V(100%)
J_{load} (kgm ²)		T_{start}/T_N	3.2	T_{start}/T_N	3.2
Speed (r/min)	1480	Starting time (s)		Run-up time (s)	
T_N (Nm)	239	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_N	7.6	I_s/I_N	7.6
Nbr. of consecutive starts		T_{max}/T_N	2.9	T_{max}/T_N	2.9



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 4/14/2010
All data subject to tolerances in accordance with IEC