

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)	

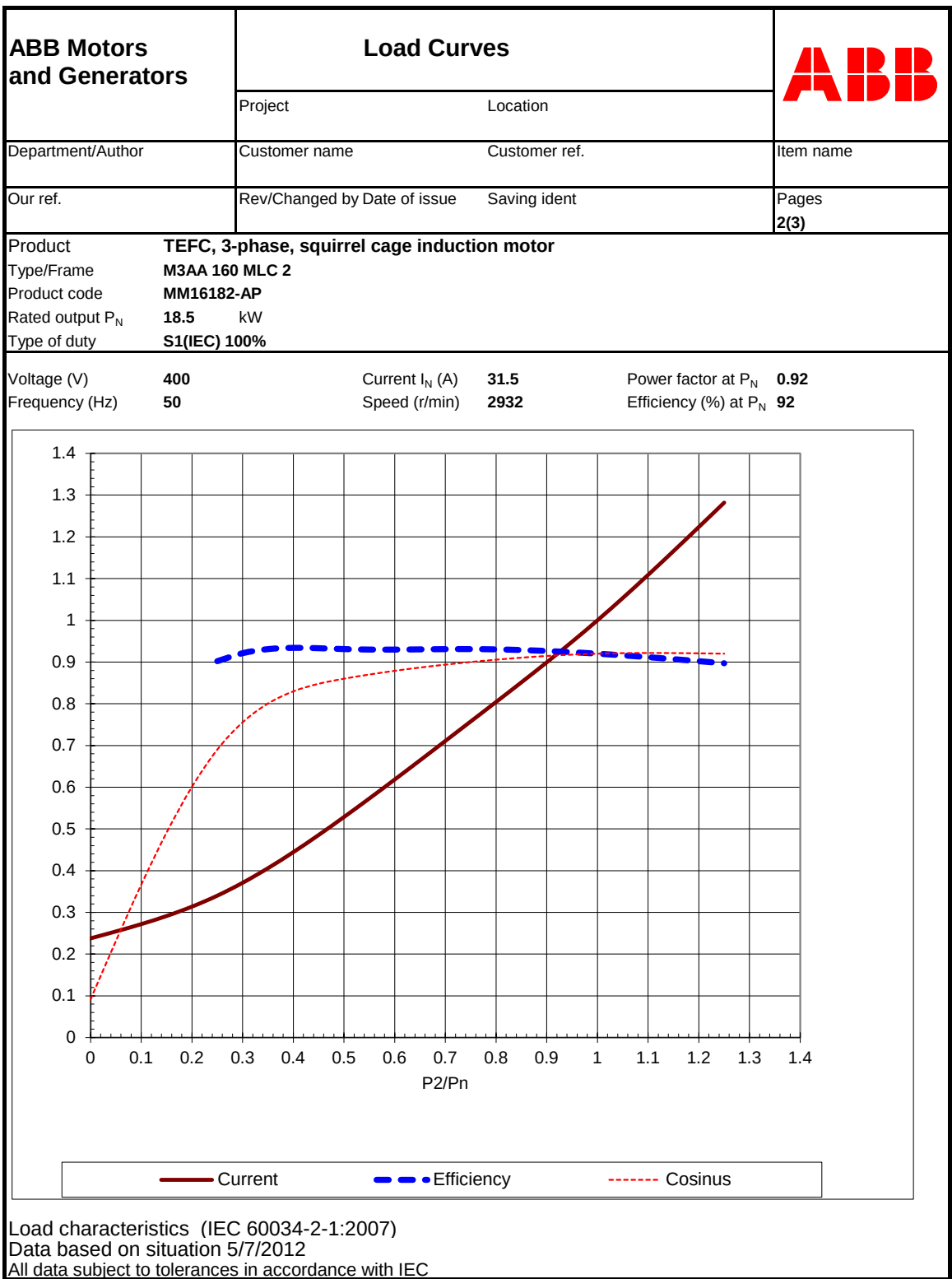
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM16182-AP (3GAA161037-ADG+332+333)			
3	Type/Frame	M3AA 160 MLC 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	18.5	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	400	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	2932	r/min		
11	Rated current I _N	31.5	A		
12	No-load current	7.5	A		
13	Starting current I _s /I _N	7.5		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	60	Nm		
15	Locked rotor torque T _S /T _N	2.9			
16	Maximum torque T _{max} /T _N	3.4			
17	Minimum torque T _{min} /T _N	2.5			
18	Speed at minimum torque	660	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	31.5	92.0 / IE2	0.92
21		75	23.9	93.1	0.9
22		50	16.6	93.1	0.86
23		Start	236		0.45
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	6309-2Z/C3 - 6209-2Z/C3			
32	Type of Grease	Greased for life			
33	Sound pressure level (LP dB(A) 1m)	69	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.063	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dimens.	2xM40 +M16			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Total weight of motor	123	kg		
42					

Variant Codes / Definition

332 = Baldor catalog number
333 = Not for use in the USA

Remarks:

Data based on situation 5/7/2012
All data subject to tolerances in accordance with IEC
Guaranteed values on request



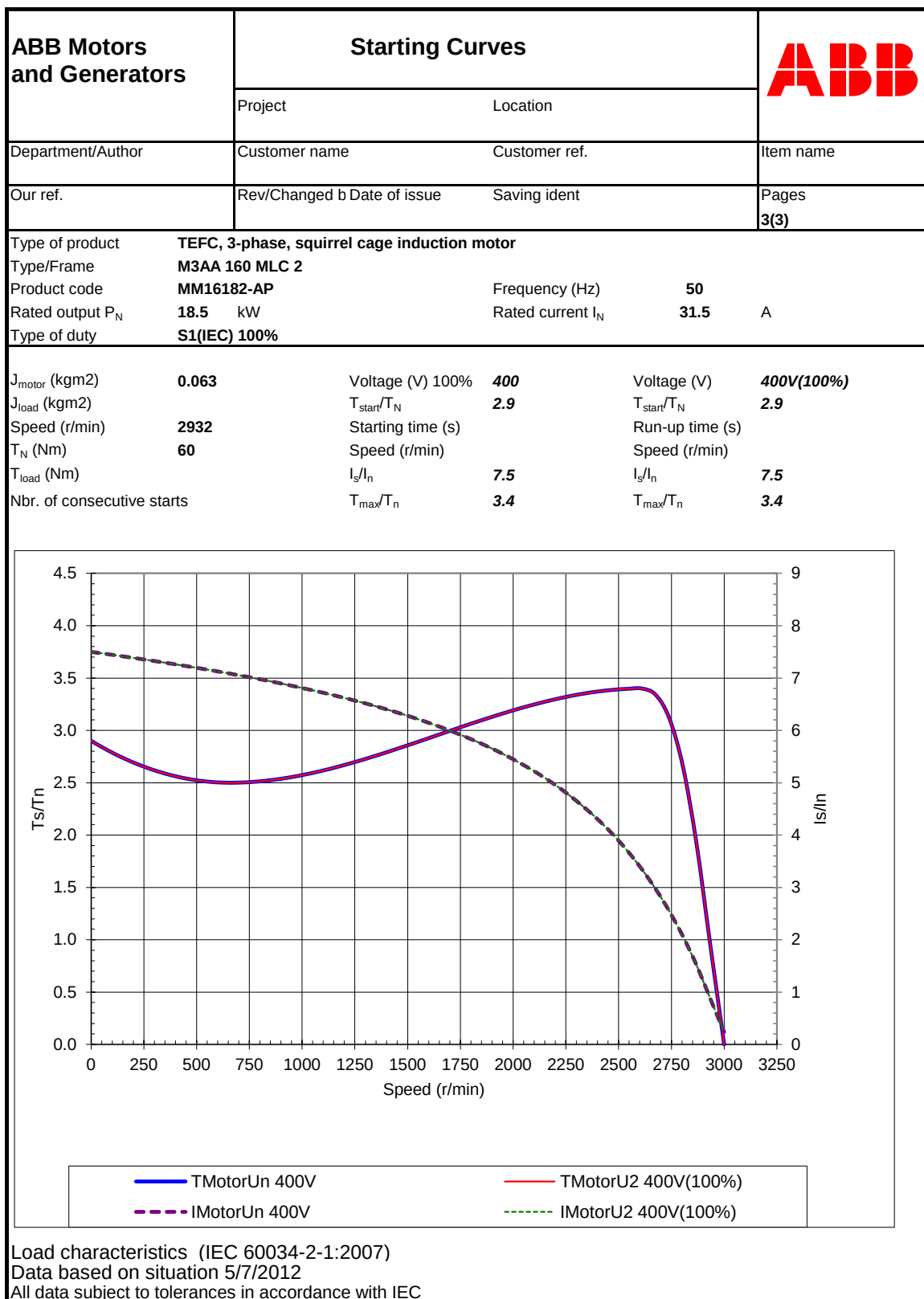


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1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM16182-AP (3GAA161037-ADG+332+333)			
3	Type/Frame	M3AA 160 MLC 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	18.5	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	415	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	2938	r/min		
11	Rated current I _N	30.7	A		
12	No-load current	8.1	A		
13	Starting current I _s /I _N	8		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	60	Nm		
15	Locked rotor torque T _S /T _N	3.1			
16	Maximum torque T _{max} /T _N	3.6			
17	Minimum torque T _{min} /T _N	2.7			
18	Speed at minimum torque	660	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	30.7	92.1 / IE2	0.91
21		75	23.3	93	0.89
22		50	16.6	92.9	0.83
23		Start	245		0.45
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	6309-2Z/C3 - 6209-2Z/C3			
32	Type of Grease	Greased for life			
33	Sound pressure level (LP dB(A) 1m)	69	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.063	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dimens.	2xM40 +M16			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Total weight of motor	123	kg		
42					

Variant Codes / Definition

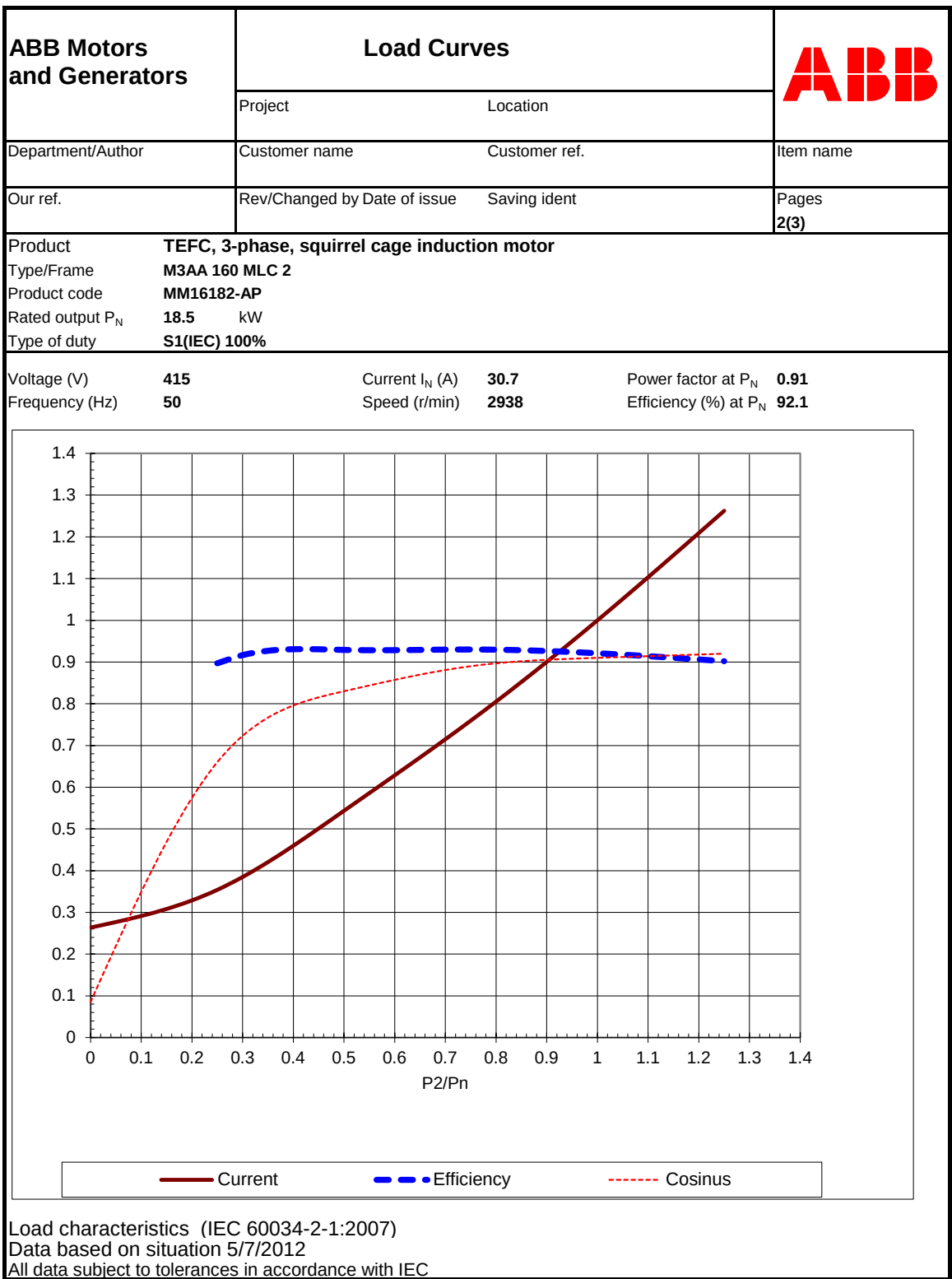
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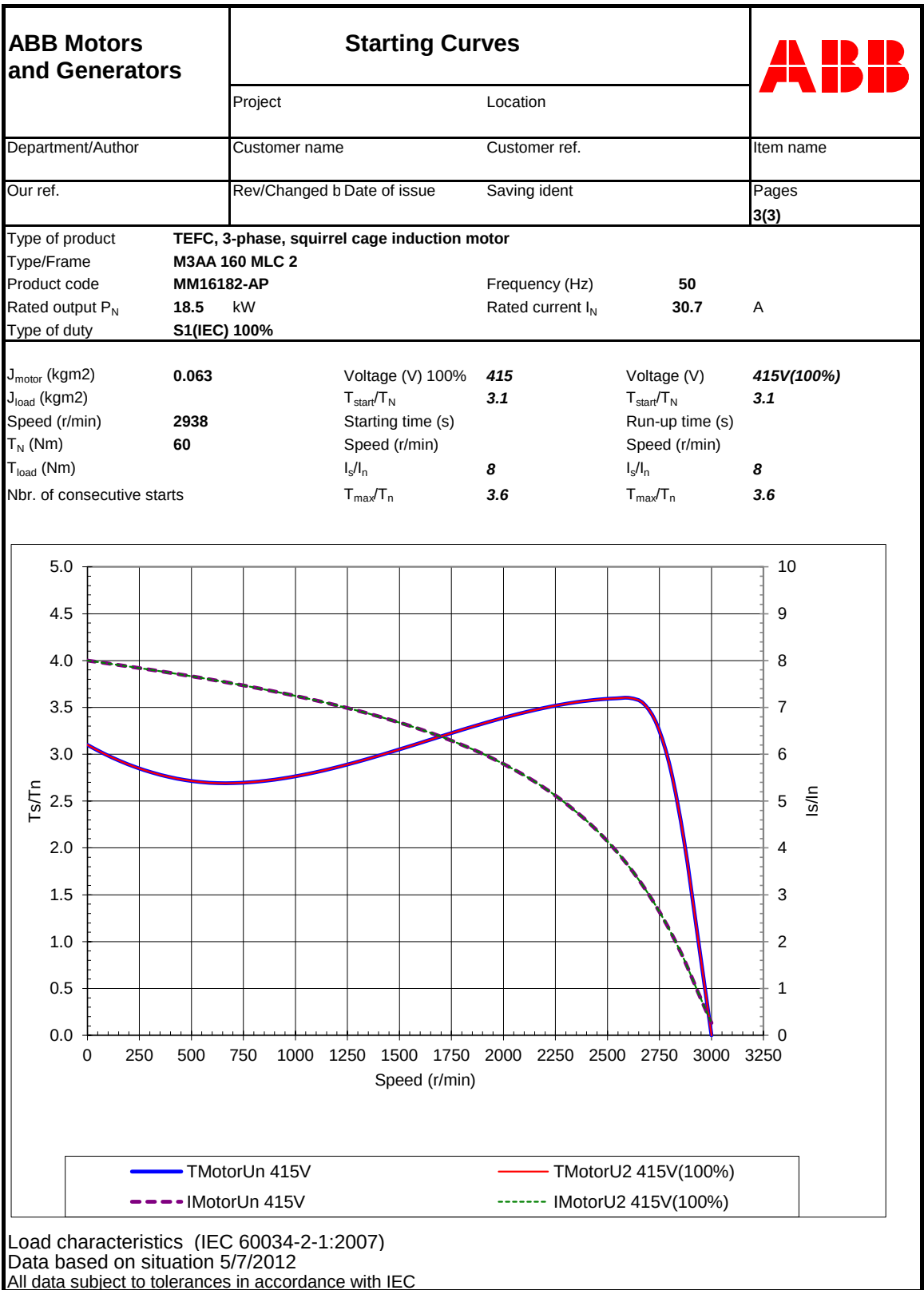


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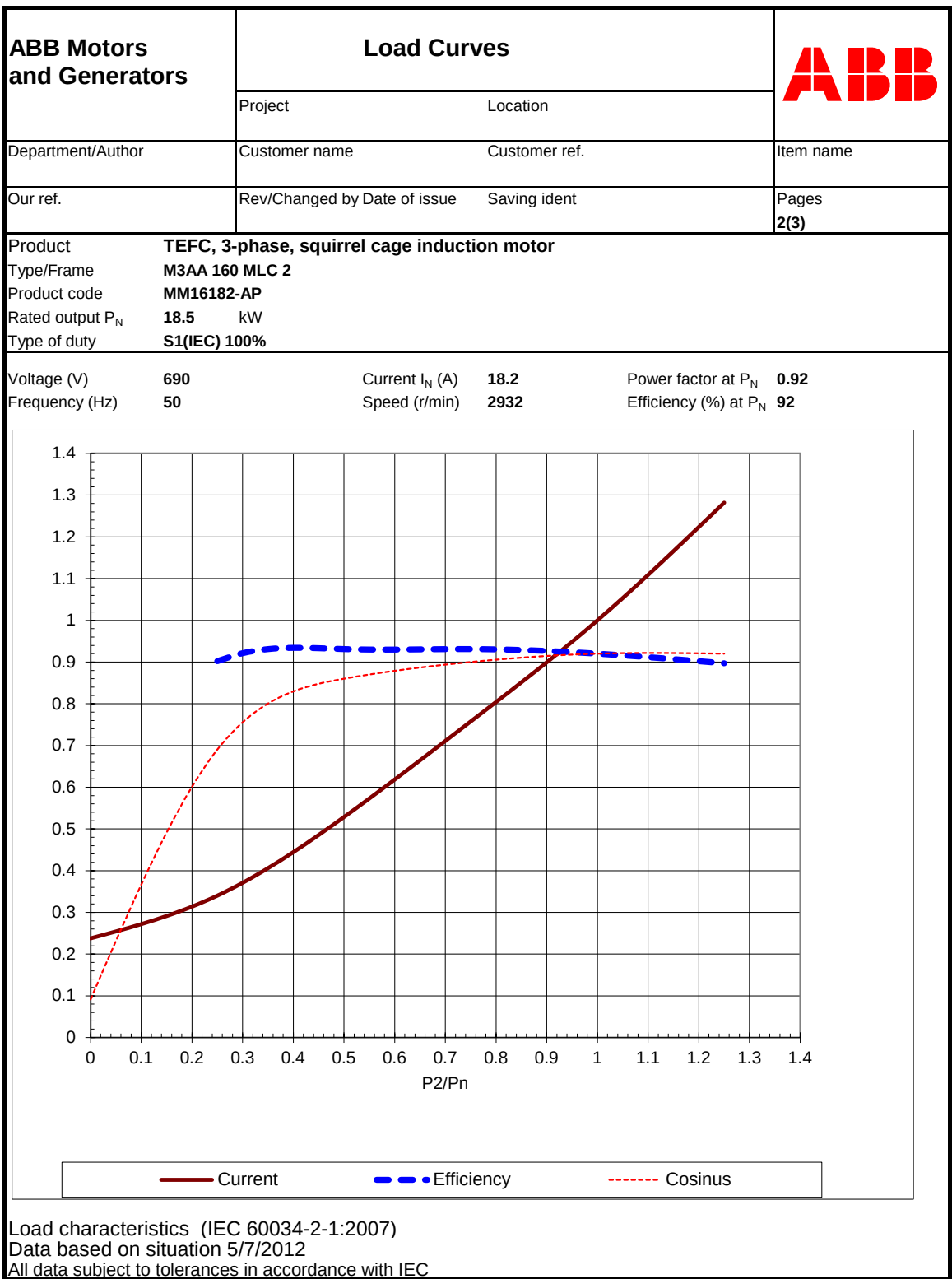
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1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	MM16182-AP (3GAA161037-ADG+332+333)		
3	Type/Frame	M3AA 160 MLC 2		
4	Mounting	IM1001, B3(foot)		
5	Rated output P _N	18.5	kW	
6	Service factor	1		
7	Type of duty	S1(IEC) 100%		
8	Rated voltage U _N	690	VY	± 5 % (IEC 60034-1)
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
10	Rated speed n _N	2932	r/min	
11	Rated current I _N	18.2	A	
12	No-load current	4.3	A	
13	Starting current I _s /I _N	7.5		Fullfilled IEC 60034-12 design N,H
14	Nominal torque T _N	60	Nm	
15	Locked rotor torque T _S /T _N	2.9		
16	Maximum torque T _{max} /T _N	3.4		
17	Minimum torque T _{min} /T _N	2.5		
18	Speed at minimum torque	660	r/min	
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %
20	PLL determined from residual loss	100	18.2	92.0 / IE2
21		75	13.8	93.1
22		50	9.6	93.1
23		Start	137	0.45
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	6309-2Z/C3 - 6209-2Z/C3		
32	Type of Grease	Greased for life		
33	Sound pressure level (LP dB(A) 1m)	69	dB(A)	at load
34	Moment of inertia J = ¼ GD2	0.063	kg-m2	
35	Balancing	Half Key		
36	Vibration class	Grade A		
37	Position of terminal box	Top		
38	Terminal box entries; no, dimens.	2xM40 +M16		
39	Number of power terminals	6		
40	Direction of rotation	CW or CCW		
41	Total weight of motor	123	kg	
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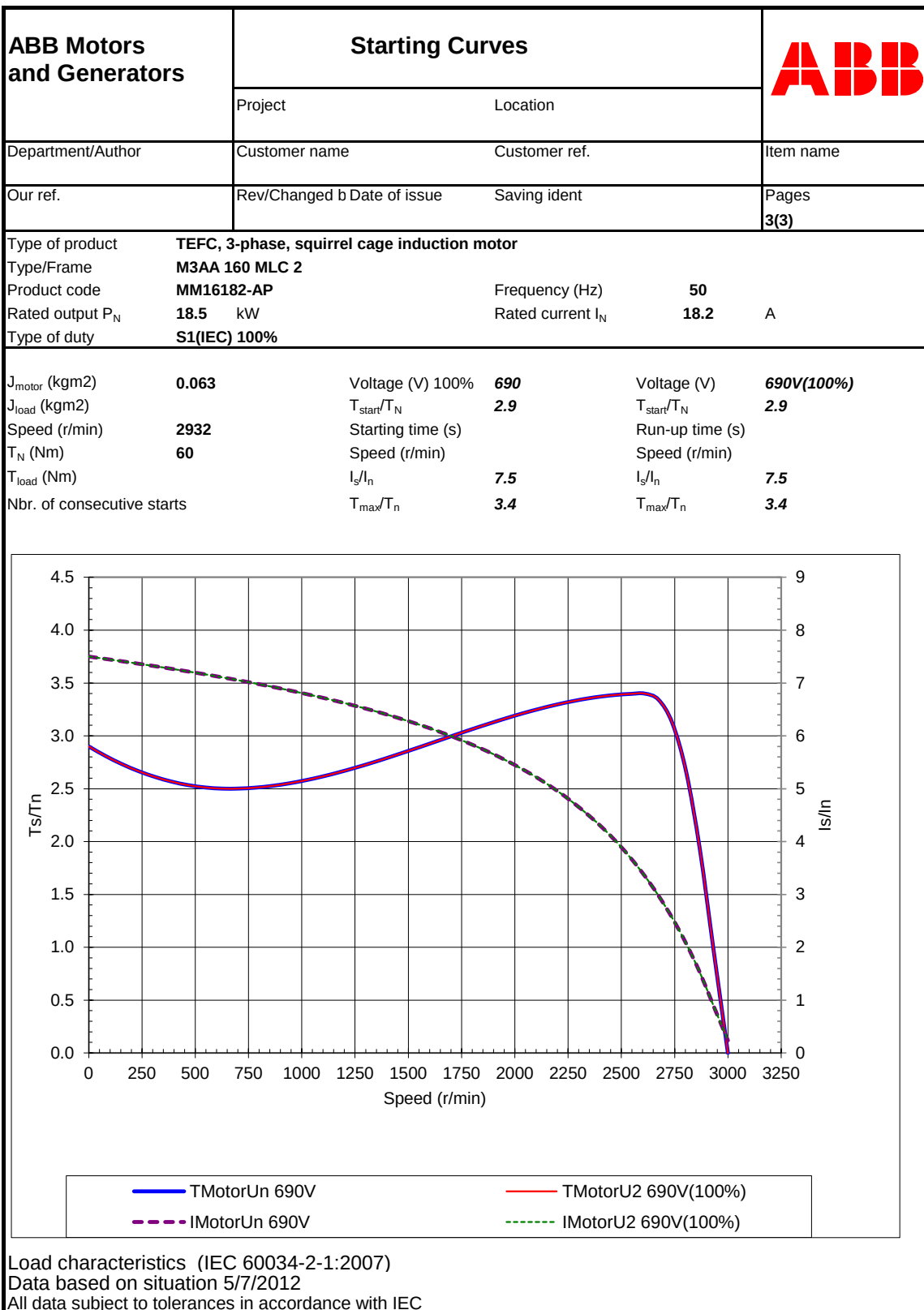


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2	Product code	MM16182-AP (3GAA161037-ADG+332+333)			
3	Type/Frame	M3AA 160 MLC 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	18.5	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	460	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	60	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	3543	r/min		
11	Rated current I _N	27.2	A		
12	No-load current	7.1	A		
13	Starting current I _s /I _N	8.7		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	50	Nm		
15	Locked rotor torque T _S /T _N	3.1			
16	Maximum torque T _{max} /T _N	3.8			
17	Minimum torque T _{min} /T _N	2.7			
18	Speed at minimum torque	792	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	27.2	92.5 / IE3	0.92
21		75	20.8	92.9	0.9
22		50	14.8	92.2	0.85
23		Start	237		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	6309-2Z/C3 - 6209-2Z/C3			
32	Type of Grease	Greased for life			
33	Sound pressure level (LP dB(A) 1m)	77	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.063	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dimens.	2xM40 +M16			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
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