

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)

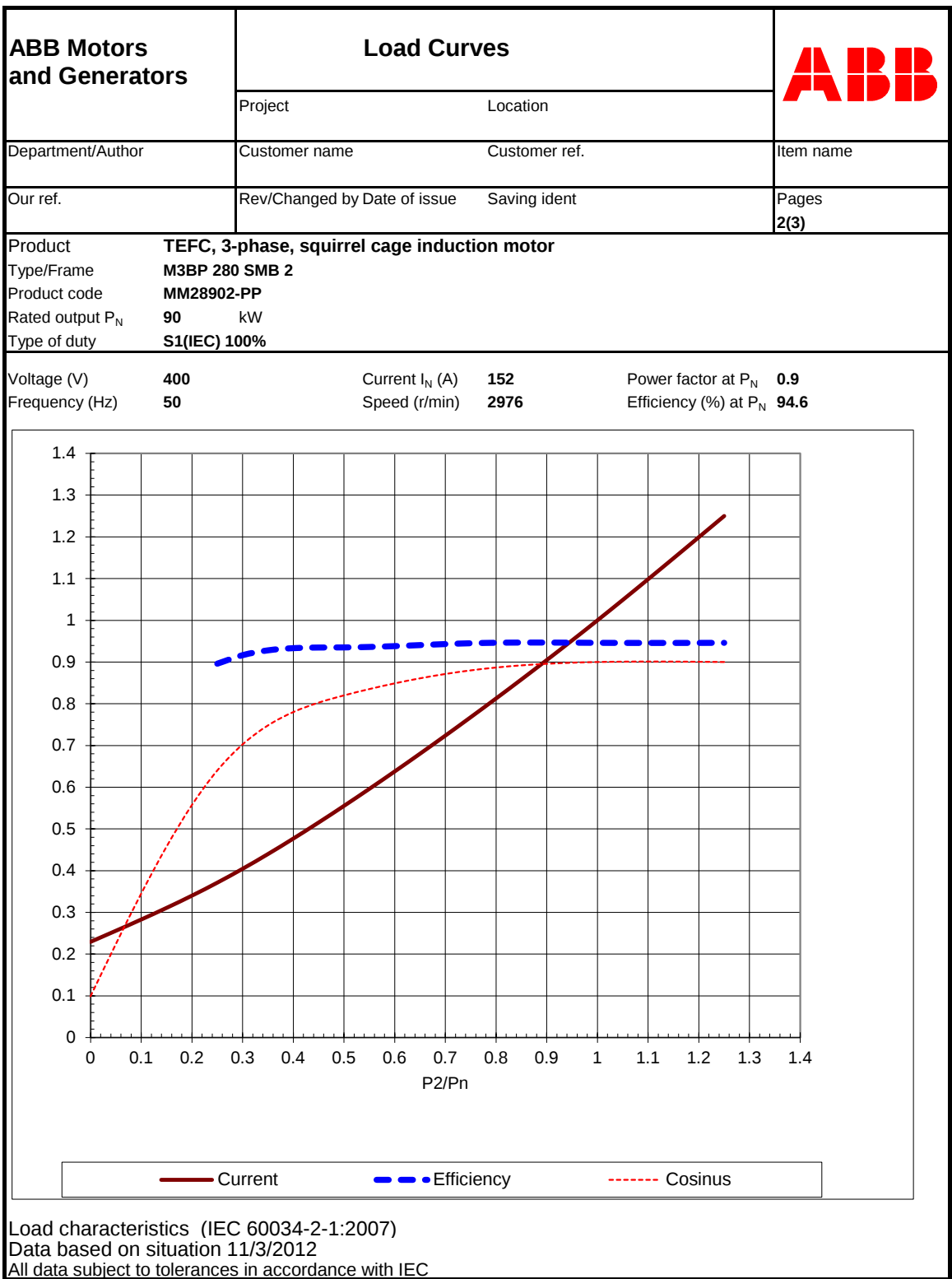
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM28902-PP (3GBP281220-ADG+332+333+531)			
3	Type/Frame	M3BP 280 SMB 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	90	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated 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	2976	r/min		
11	Rated current I _N	152	A		
12	No-load current	35	A		
13	Starting current I _s /I _N	7.4		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	289	Nm		
15	Locked rotor torque T _S /T _N	2.1			
16	Maximum torque T _{max} /T _N	2.9			
17	Minimum torque T _{min} /T _N	1.9			
18	Speed at minimum torque	2400	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	152	94.6 / IE2	0.9
21		75	117	94.5	0.88
22		50	84.7	93.5	0.82
23		Start	1129		0.32
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	6316/C3 - 6316/C3			
32	Type of Grease	Lithium based			
33	Sound pressure level (LP dB(A) 1m)	77	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.9	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dimens.	2xM63x1.5 + 2xM20x1.5			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Total weight of motor	665	kg		
42					

Variant Codes / Definition

332 = Baldor catalog number
333 = Not for use in the USA
531 = Sea freight packaging

Remarks:

Data based on situation 11/3/2012
All data subject to tolerances in accordance with IEC
Guaranteed values on request



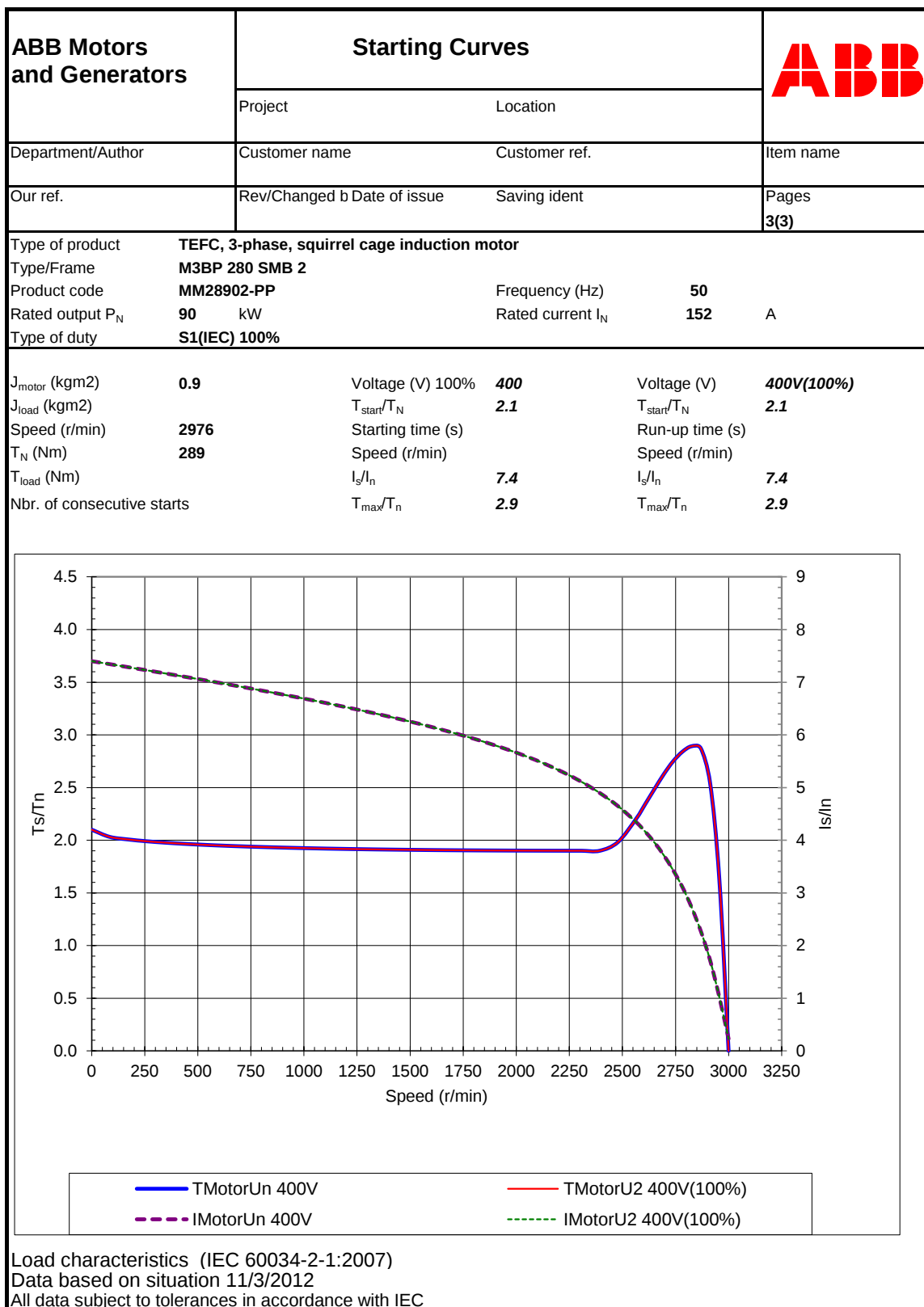


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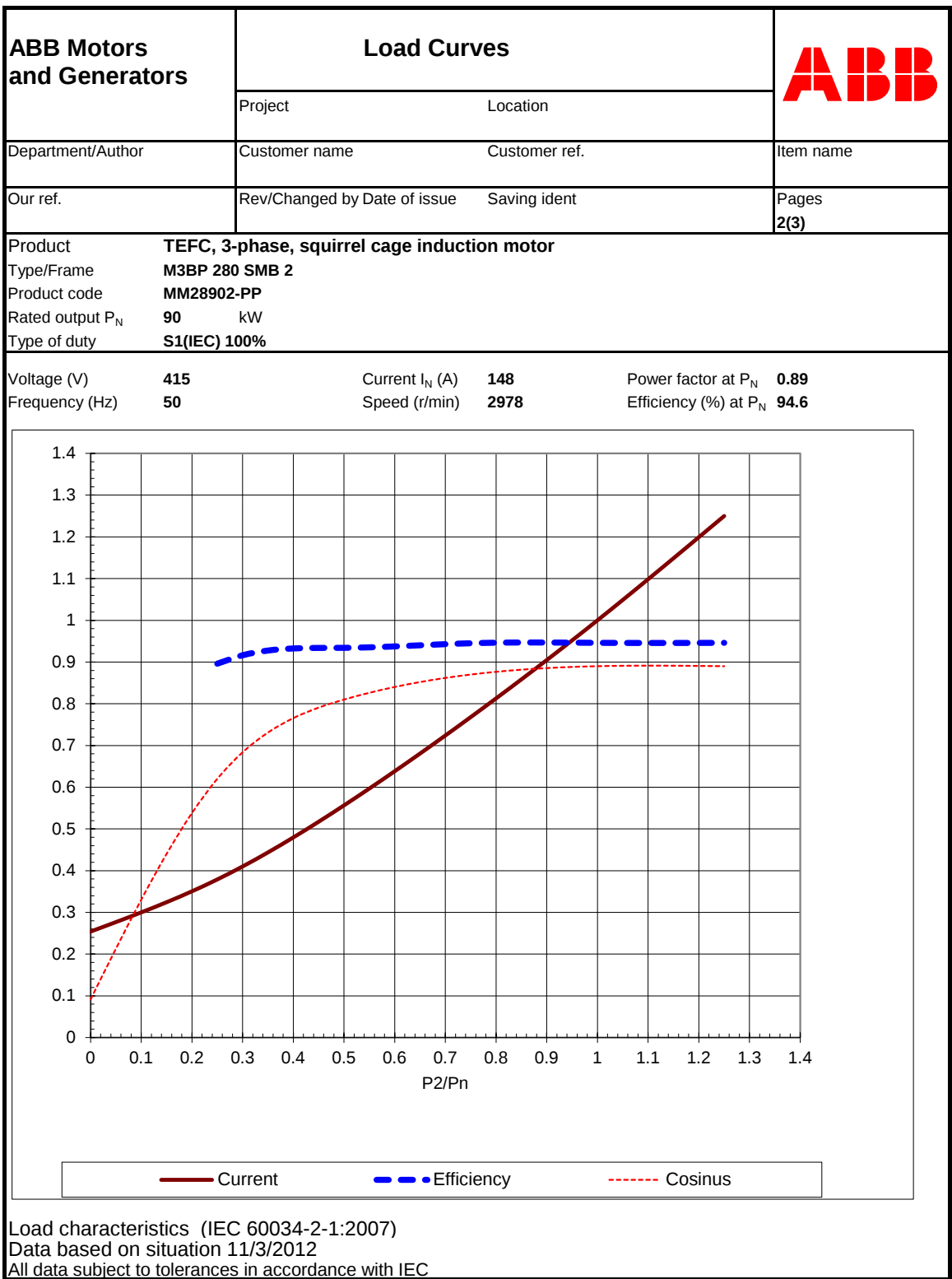
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2	Product code	MM28902-PP (3GBP281220-ADG+332+333+531)		
3	Type/Frame	M3BP 280 SMB 2		
4	Mounting	IM1001, B3(foot)		
5	Rated output P _N	90	kW	
6	Service factor	1		
7	Type of duty	S1(IEC) 100%		
8	Rated voltage U _N	415	VD	± 5 % (IEC 60034-1)
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)
10	Rated speed n _N	2978	r/min	
11	Rated current I _N	148	A	
12	No-load current	38	A	
13	Starting current I _s /I _N	7.8		Fullfilled IEC 60034-12 design N,H
14	Nominal torque T _N	289	Nm	
15	Locked rotor torque T _s /T _N	2.2		
16	Maximum torque T _{max} /T _N	3.1		
17	Minimum torque T _{min} /T _N	2		
18	Speed at minimum torque	2400	r/min	
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %
20	PLL determined from residual loss	100	148	94.6 / IE2
21		75	114	94.5
22		50	82.7	93.4
23		Start	1160	0.32
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	6316/C3 - 6316/C3		
32	Type of Grease	Lithium based		
33	Sound pressure level (LP dB(A) 1m)	77	dB(A)	at load
34	Moment of inertia J = ¼ GD2	0.9	kg-m2	
35	Balancing	Half Key		
36	Vibration class	Grade A		
37	Position of terminal box	Top		
38	Terminal box entries; no, dimens.	2xM63x1.5 + 2xM20x1.5		
39	Number of power terminals	6		
40	Direction of rotation	CW or CCW		
41	Total weight of motor	665	kg	
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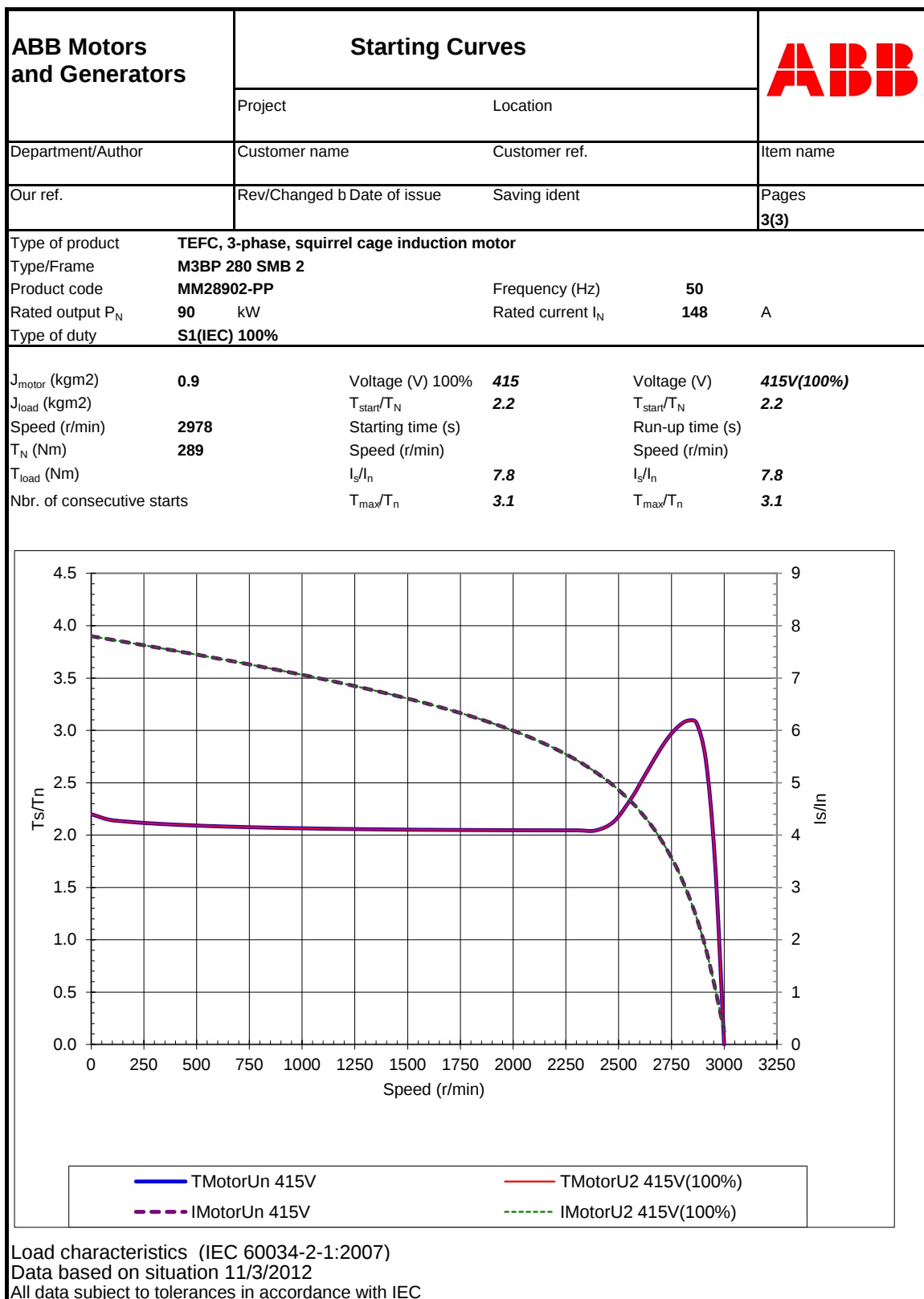


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3	Type/Frame	M3BP 280 SMB 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P_N	90	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U_N	690	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f_N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n_N	2976	r/min		
11	Rated current I_N	88.4	A		
12	No-load current	20	A		
13	Starting current I_s/I_N	7.4		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T_N	289	Nm		
15	Locked rotor torque T_s/T_N	2.1			
16	Maximum torque T_{max}/T_N	2.9			
17	Minimum torque T_{min}/T_N	1.9			
18	Speed at minimum torque	2400	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	88.4	94.6 / IE2	0.9
21		75	67.9	94.5	0.88
22		50	49.1	93.5	0.82
23		Start	654		0.32
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	6316/C3 - 6316/C3			
32	Type of Grease	Lithium based			
33	Sound pressure level (LP dB(A) 1m)	77	dB(A)	at load	
34	Moment of inertia $J = \frac{1}{4} GD^2$	0.9	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dimens.	2xM63x1.5 + 2xM20x1.5			
39	Number of power terminals	6			
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