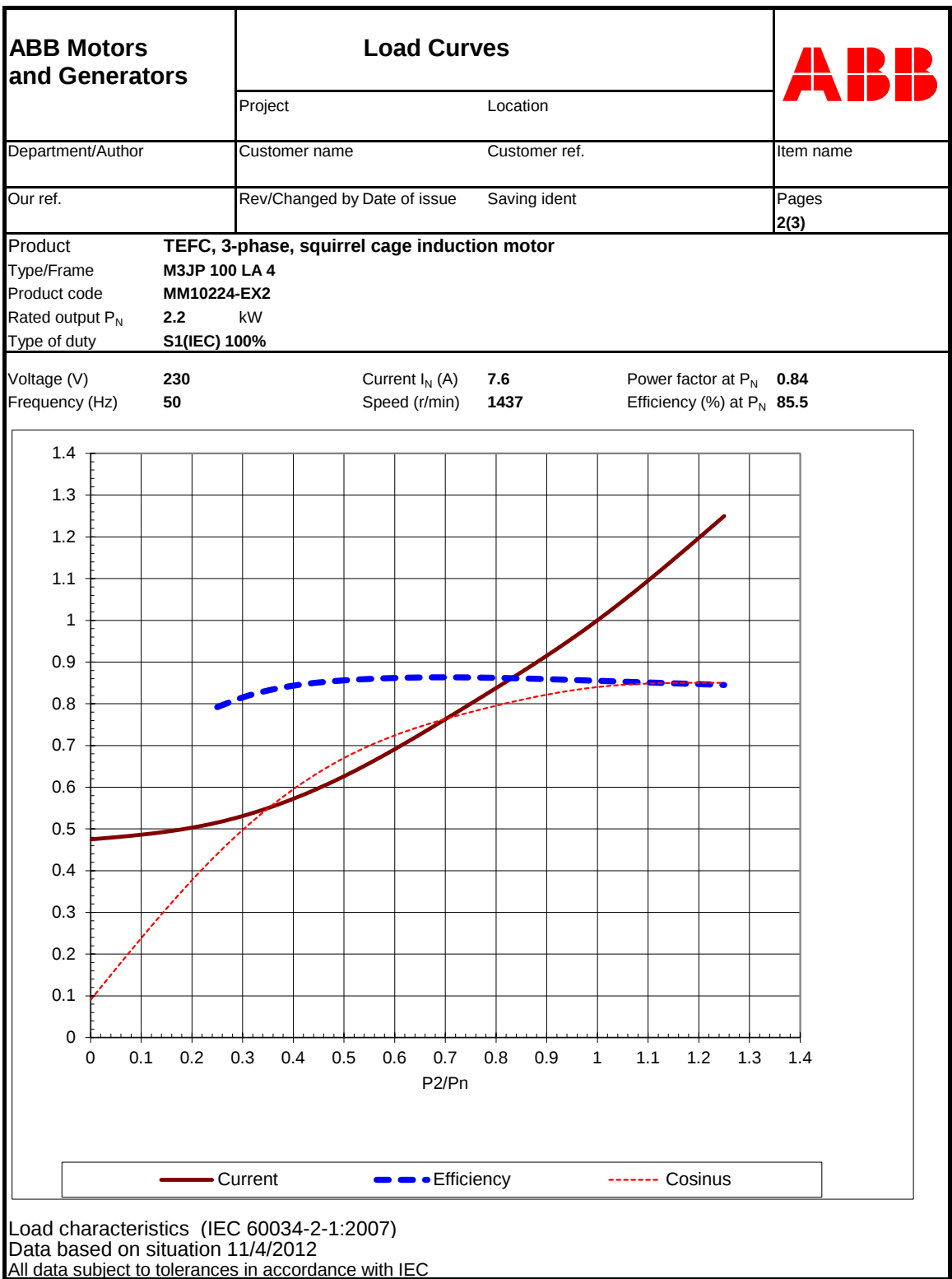


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project	Location		
Department/Author	Customer name		Customer ref.		Item name
Our ref.	Rev/Changed by	Date of issue	Saving ident		Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM10224-EX2 (3GJP102510-ASH+332+461)			
3	Type/Frame	M3JP 100 LA 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	2.2	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	230	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	1437	r/min		
11	Rated current I _N	7.6	A		
12	No-load current	3.7	A		
13	Starting current I _s /I _N	7.1		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	14.6	Nm		
15	Locked rotor torque T _S /T _N	2.7			
16	Maximum torque T _{max} /T _N	3.2			
17	Minimum torque T _{min} /T _N	2.7			
18	Speed at minimum torque	0	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	7.6	85.5 / IE2	0.84
21		75	6.1	86.3	0.78
22		50	4.8	85.6	0.67
23		Start	54		0.52
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	6206-2Z/C3 - 6206-2Z/C3			
32	Type of Grease	Greased for life			
33	Sound pressure level (LP dB(A) 1m)	52	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.0075	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dims.	2xM32x1.5 + 1xM20x1.5			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Weight of rotor	9	kg		
42	Total weight of motor	70	kg		
43					
Ex-motors					
44	Type of protection	*Ex d IIC T4			
45					
Variant Codes / Definition					
	332 = Baldor catalog number				
	461 = Exd design, group IIC				
Remarks:					
Data based on situation 11/4/2012					
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.					



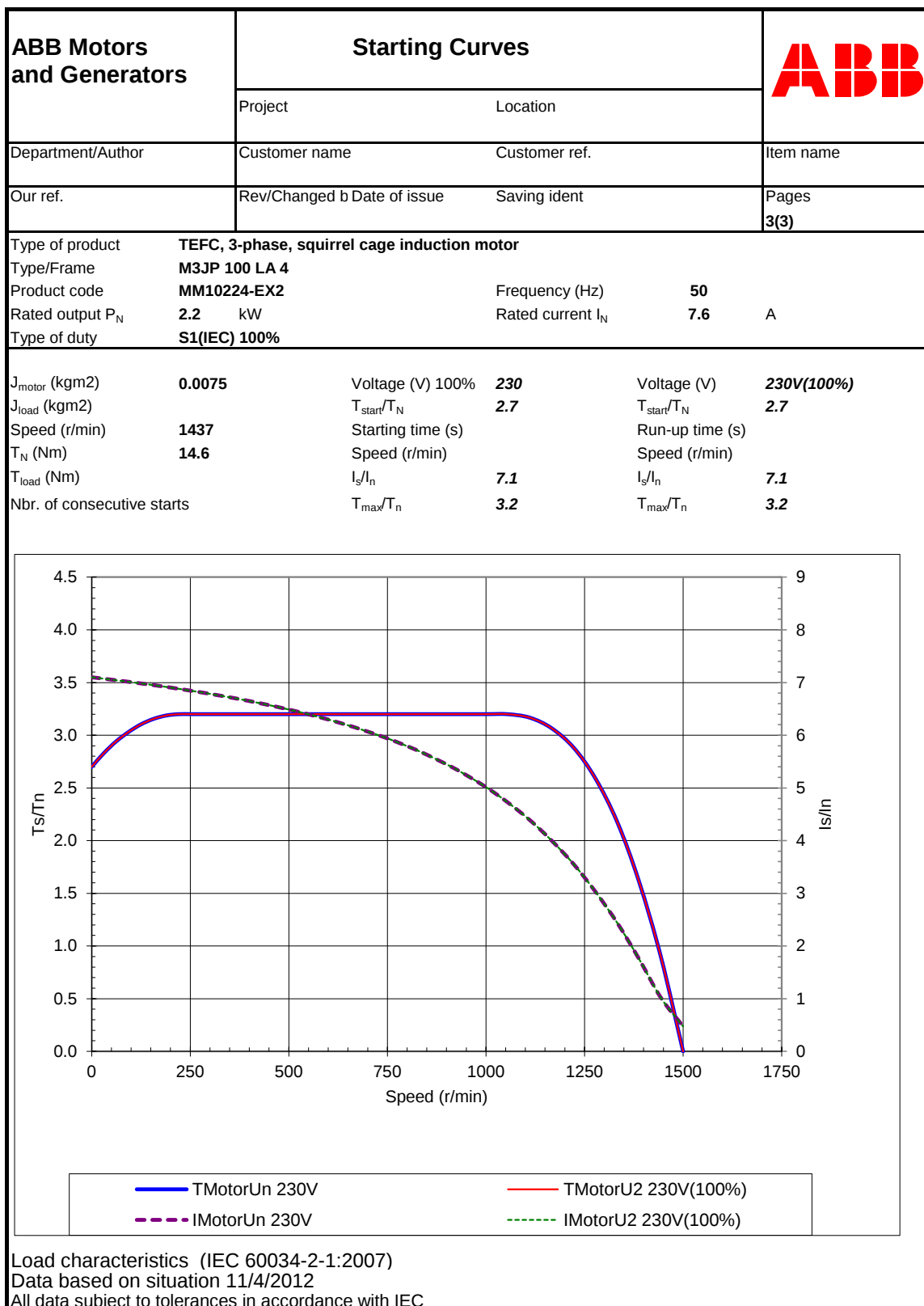
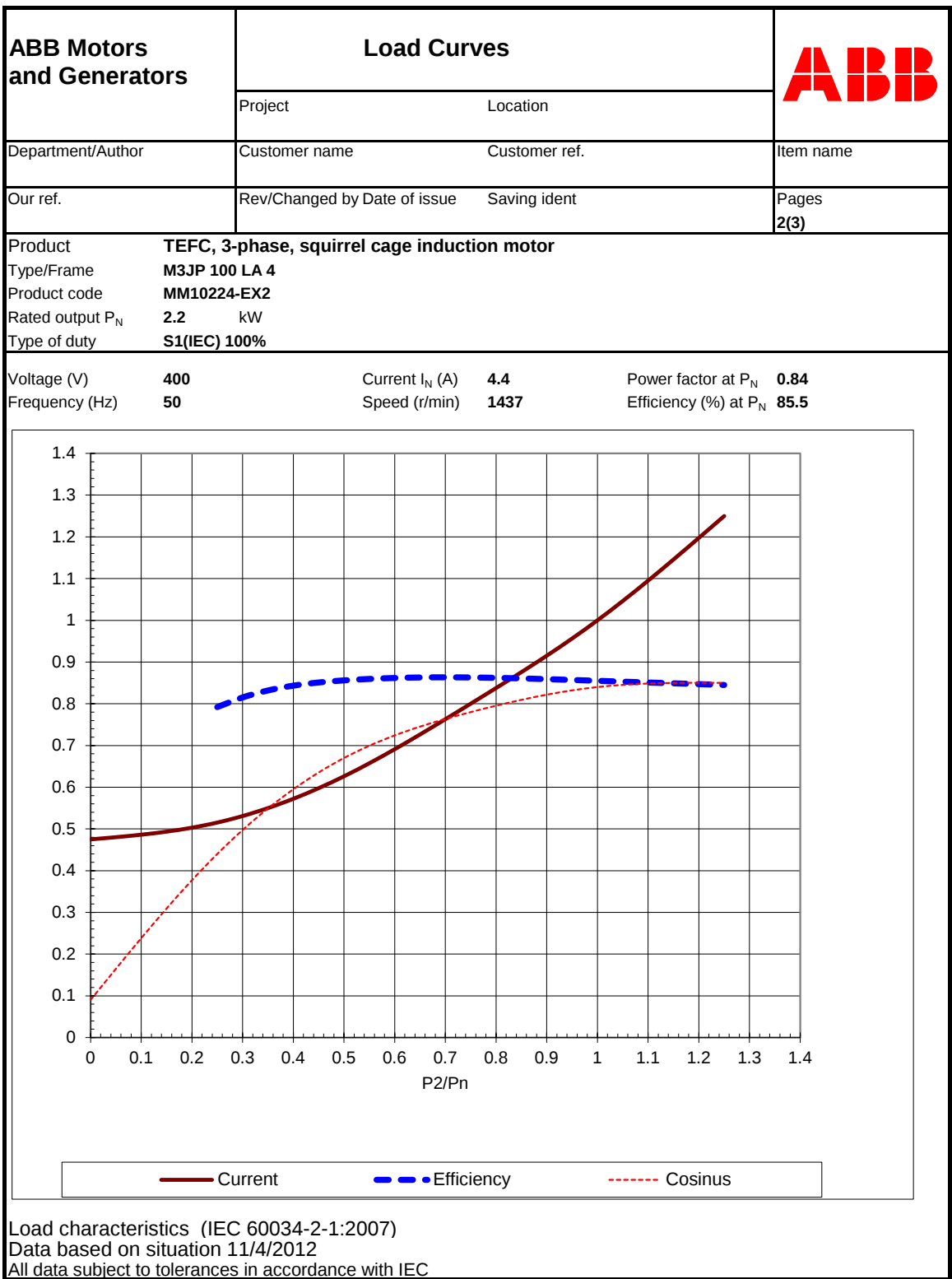


ABB Motors and Generators		Technical Data Sheet - DOL				
		Project		Location		
Department/Author		Customer name		Customer ref.		Item name
Our ref.		Rev/Changed by	Date of issue	Saving ident		Pages 1(3)

No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	MM10224-EX2 (3GJP102510-ASH+332+461)				
3	Type/Frame	M3JP 100 LA 4				
4	Mounting	IM1001, B3(foot)				
5	Rated output P _N	2.2	kW			
6	Service factor	1				
7	Type of duty	S1(IEC) 100%				
8	Rated voltage U _N	400	VY	± 5 % (IEC 60034-1)		
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)		
10	Rated speed n _N	1437	r/min			
11	Rated current I _N	4.4	A			
12	No-load current	2.1	A			
13	Starting current I _s /I _N	7.1		Fullfilled IEC 60034-12 design N,H		
14	Nominal torque T _N	14.6	Nm			
15	Locked rotor torque T _S /T _N	2.7				
16	Maximum torque T _{max} /T _N	3.2				
17	Minimum torque T _{min} /T _N	2.7				
18	Speed at minimum torque	0	r/min			
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor	
20	PLL determined from residual loss	100	4.4	85.5 / IE2	0.84	
21		75	3.5	86.3	0.78	
22		50	2.7	85.6	0.67	
23		Start	31		0.52	
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	6206-2Z/C3 - 6206-2Z/C3				
32	Type of Grease	Greased for life				
33	Sound pressure level (LP dB(A) 1m)	52	dB(A)	at load		
34	Moment of inertia J = ¼ GD2	0.0075	kg-m2			
35	Balancing	Half Key				
36	Vibration class	Grade A				
37	Position of terminal box	Top				
38	Terminal box entries; no, dims.	2xM32x1.5 + 1xM20x1.5				
39	Number of power terminals	6				
40	Direction of rotation	CW or CCW				
41	Weight of rotor	9	kg			
42	Total weight of motor	70	kg			
43						
Ex-motors						
44	Type of protection	*Ex d IIC T4				
45						
Variant Codes / Definition						
	332 = Baldor catalog number					
	461 = Exd design, group IIC					
Remarks:						
Data based on situation 11/4/2012						
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.						



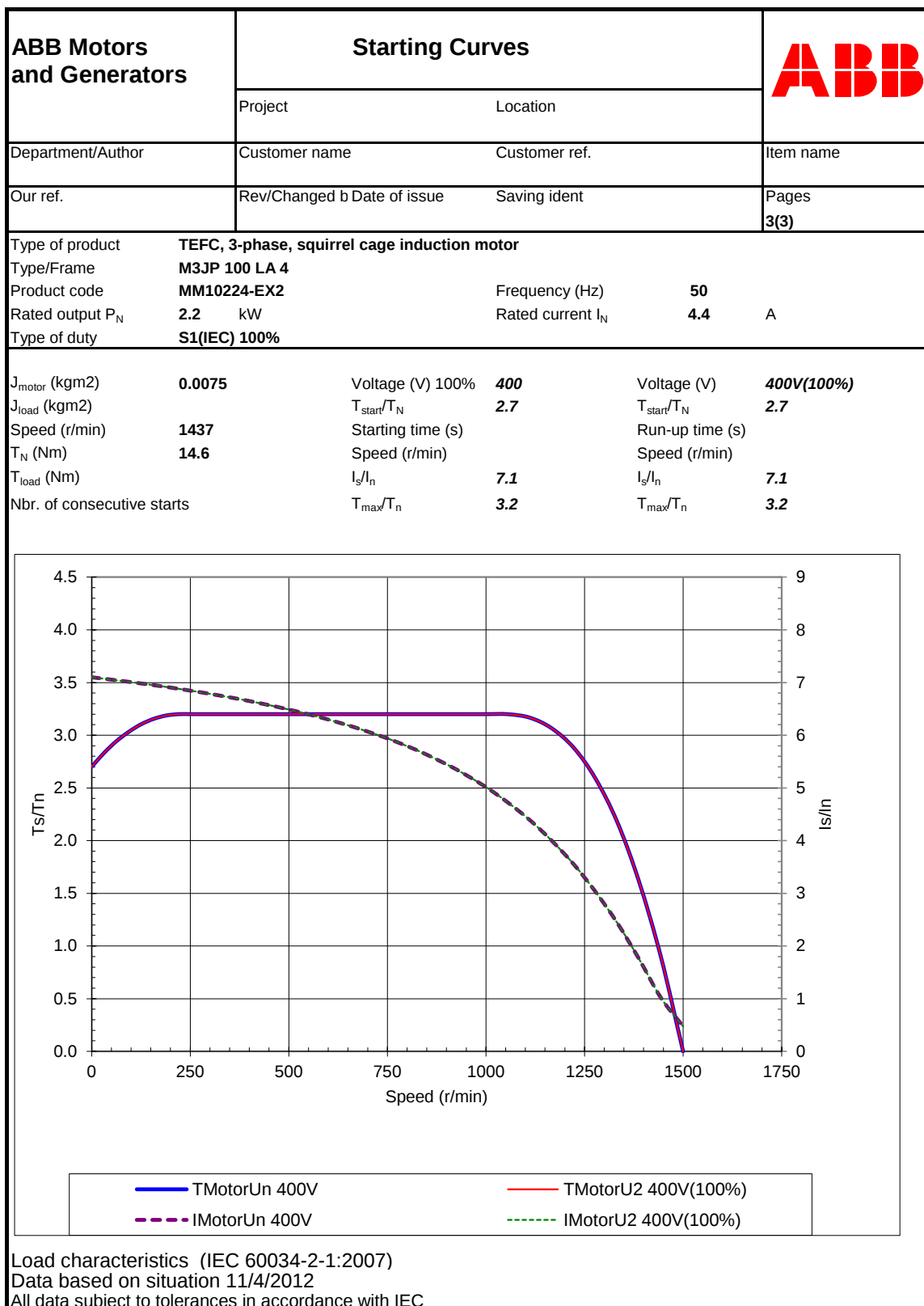


ABB Motors and Generators		Technical Data Sheet - DOL			
		Project		Location	
Department/Author		Customer name		Customer ref.	Item name
Our ref.		Rev/Changed by	Date of issue	Saving ident	Pages 1(3)

No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	MM10224-EX2 (3GJP102510-ASH+332+461)			
3	Type/Frame	M3JP 100 LA 4			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	2.2	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	415	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	1442	r/min		
11	Rated current I _N	4.3	A		
12	No-load current	2.3	A		
13	Starting current I _s /I _N	7.6		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T _N	14.6	Nm		
15	Locked rotor torque T _s /T _N	3			
16	Maximum torque T _{max} /T _N	3.6			
17	Minimum torque T _{min} /T _N	3			
18	Speed at minimum torque	0	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	100	4.3	85.3 / IE2	0.83
21		75	3.5	85.8	0.76
22		50	2.8	84.7	0.64
23		Start	32		0.53
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	6206-2Z/C3 - 6206-2Z/C3			
32	Type of Grease	Greased for life			
33	Sound pressure level (LP dB(A) 1m)	52	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	0.0075	kg-m2		
35	Balancing	Half Key			
36	Vibration class	Grade A			
37	Position of terminal box	Top			
38	Terminal box entries; no, dims.	2xM32x1.5 + 1xM20x1.5			
39	Number of power terminals	6			
40	Direction of rotation	CW or CCW			
41	Weight of rotor	9	kg		
42	Total weight of motor	70	kg		
43					
Ex-motors					
44	Type of protection	*Ex d IIC T4			
45					
Variant Codes / Definition					
	332 = Baldor catalog number				
	461 = Exd design, group IIC				
Remarks:					
Data based on situation 11/4/2012					
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.					

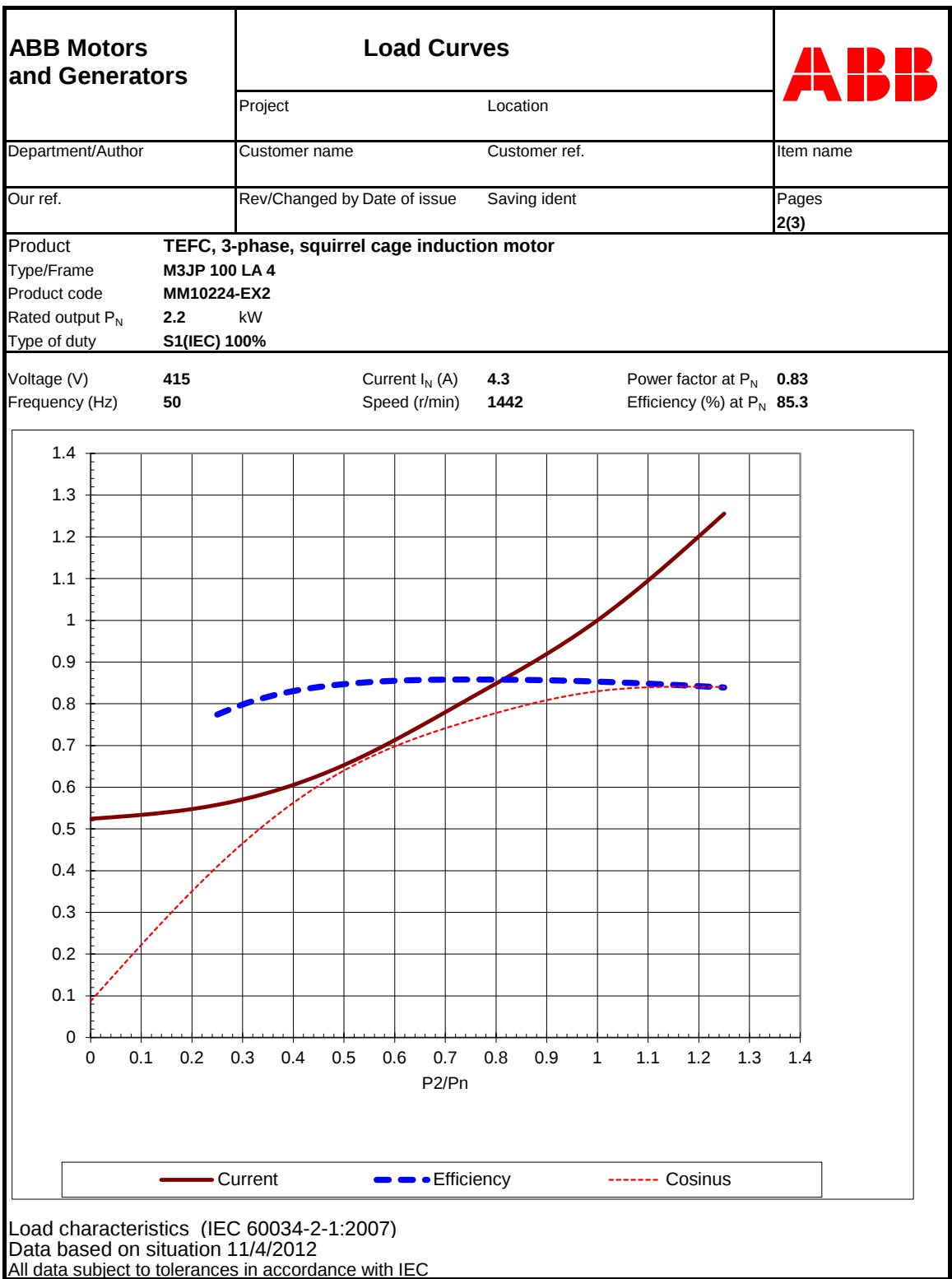
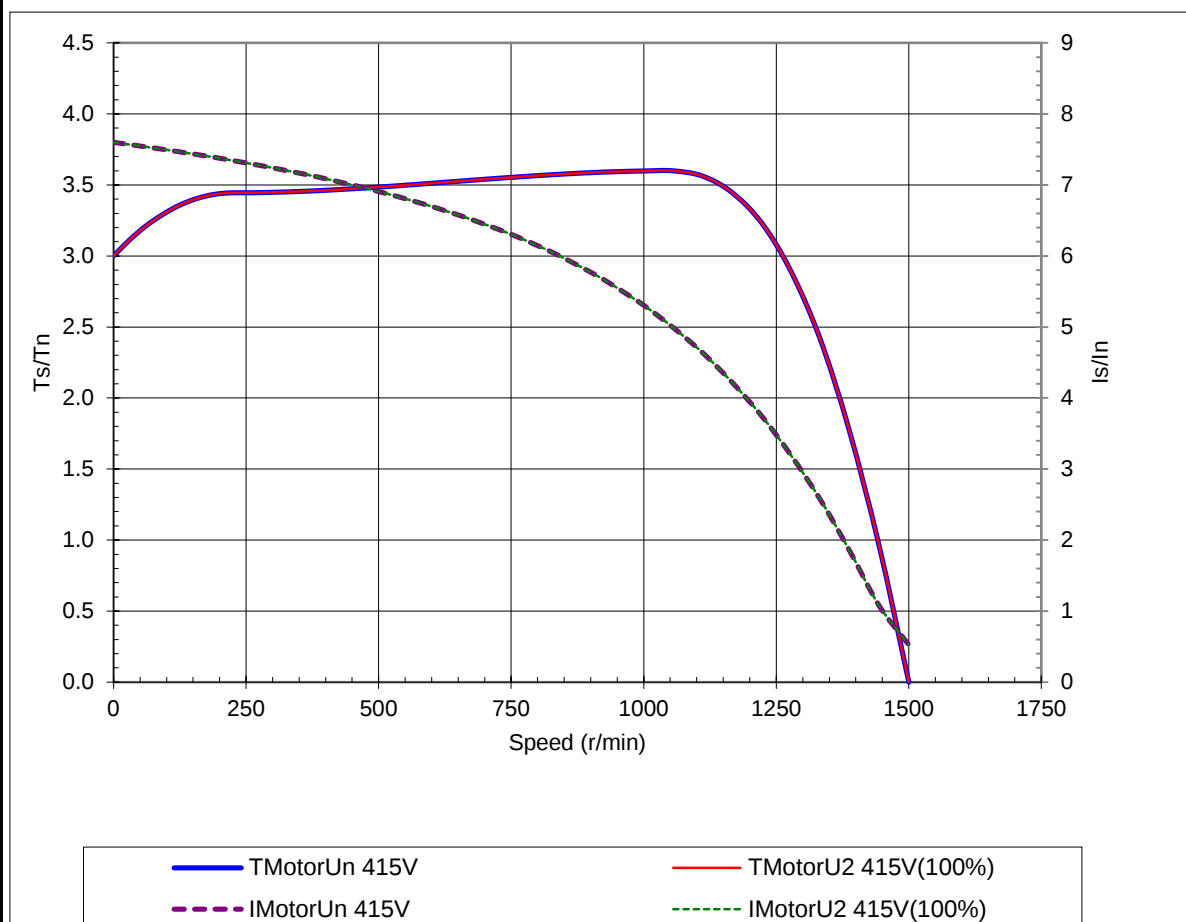


ABB Motors and Generators	Starting Curves		ABB
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed b	Date of issue	Saving ident
			Pages 3(3)

Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3JP 100 LA 4		
Product code	MM10224-EX2	Frequency (Hz)	50
Rated output P_N	2.2 kW	Rated current I_N	4.3 A
Type of duty	S1(IEC) 100%		

J_{motor} (kgm ²)	0.0075	Voltage (V) 100%	415	Voltage (V)	415V(100%)
J_{load} (kgm ²)		T_{start}/T_N	3	T_{start}/T_N	3
Speed (r/min)	1442	Starting time (s)		Run-up time (s)	
T_N (Nm)	14.6	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	3.6	T_{max}/T_N	3.6



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 11/4/2012
All data subject to tolerances in accordance with IEC