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	***MM11042-PP (3GBP111322-ASB+332+333)***			
3	Type/Frame	***M3BP 112 MB 2***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***4***	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	***2895***	r/min		
11	Rated current I_N	***13.5***	A		
12	No-load current	***4.2***	A		
13	Starting current I_s/I_N	***8.1***		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T_N	***13.2***	Nm		
15	Locked rotor torque T_S/T_N	***2.9***			
16	Maximum torque T_{max}/T_N	***3.2***			
17	Minimum torque T_{min}/T_N	***2.5***			
18	Speed at minimum torque	***480***	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	*100*	**13.5**	**86.1 / IE2**	**0.86**
21		*75*	**10.4**	**87**	**0.83**
22		*50*	**7.3**	**86.6**	**0.79**
23		*Start*	**109**		**0.64**
24	Maximum starting time from hot	***20***	s		
25	Maximum starting time from cold	***36***	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 - 6205-2Z/C3***			
32	Type of Grease	***Greased for life***			
33	Sound pressure level (LP dB(A) 1m)	***70***	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	***0.00575***	kg-m2		
35	Balancing	***Half Key***			
36	Vibration class	***Grade A***			
37	Position of terminal box	***Top***			
38	Terminal box entries; no, dimens.	***2xM32x1.5***			
39	Number of power terminals	***6***			
40	Direction of rotation	***CW or CCW***			
41	Weight of rotor	***5***	kg		
42	Total weight of motor	***37***	kg		
43					

Variant Codes / Definition

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

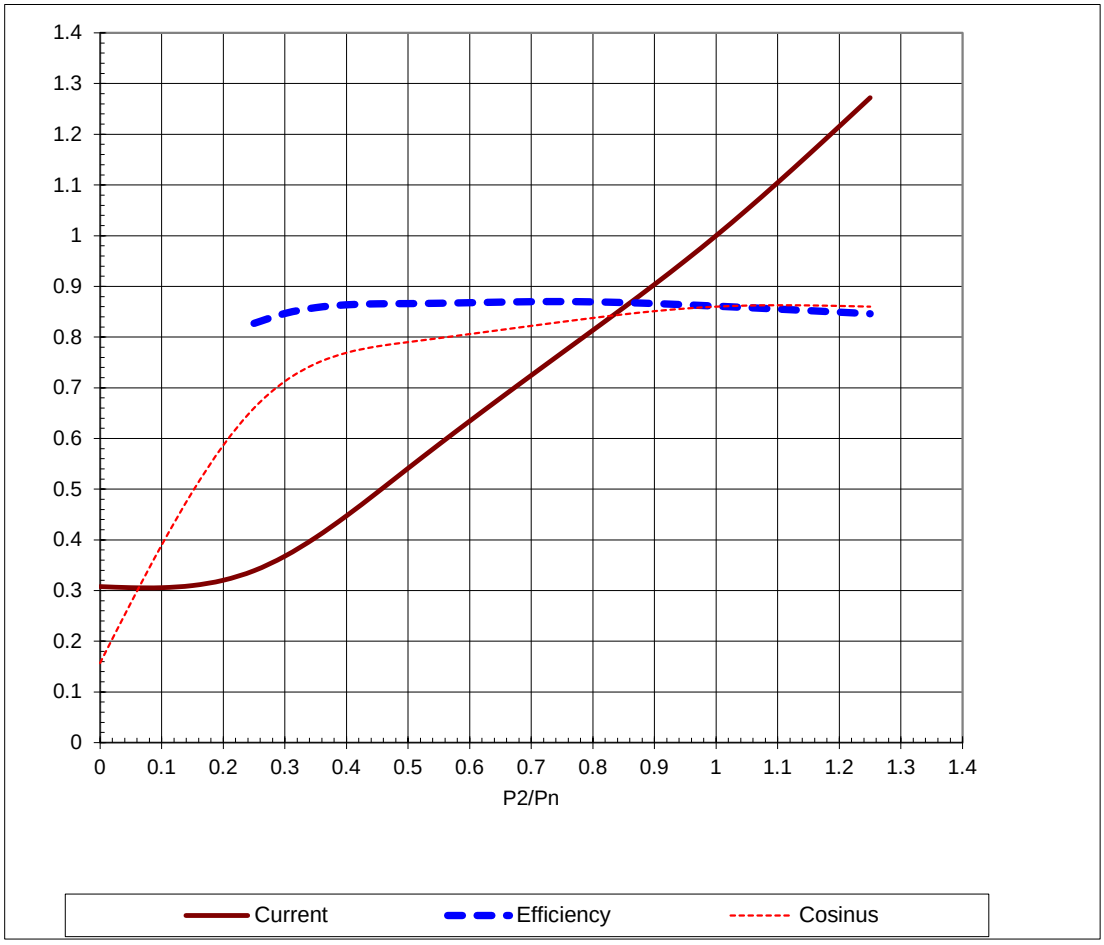
Remarks:

Data based on situation 3/14/2012
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
Our ref.	Rev/Changed by Date of issue	Saving ident	Pages **2(3)**

Product	**TEFC, 3-phase, squirrel cage induction motor**
Type/Frame	**M3BP 112 MB 2**
Product code	**MM11042-PP**
Rated output P_N	**4** kW
Type of duty	**S1(IEC) 100%**

Voltage (V)	**230**	Current I_N (A)	**13.5**	Power factor at P_N	**0.86**
Frequency (Hz)	**50**	Speed (r/min)	**2895**	Efficiency (%) at P_N	**86.1**

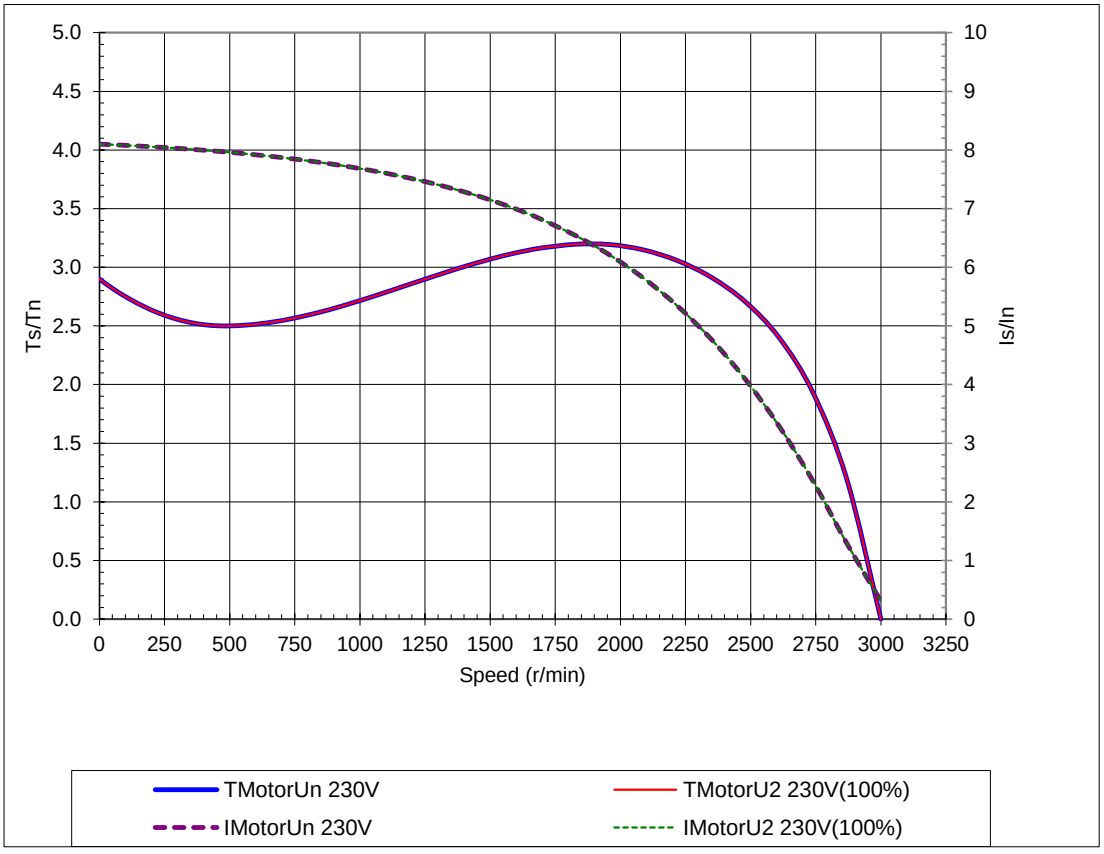


Load characteristics (IEC 60034-2-1:2007)
Data based on situation 3/14/2012
All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Starting Curves		
	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	**M3BP 112 MB 2**			
Product code	**MM11042-PP**	Frequency (Hz)	**50**	
Rated output P_N	**4** kW	Rated current I_N	**13.5**	A
Type of duty	**S1(IEC) 100%**			

J_{motor} (kgm2)	**0.0058**	Voltage (V) 100%	***230***	Voltage (V)	***230V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.9***	T_{start}/T_N	***2.9***
Speed (r/min)	**2895**	Starting time (s)		Run-up time (s)	
T_N (Nm)	**13.2**	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_n	***8.1***	I_s/I_n	***8.1***
Nbr. of consecutive starts		T_{max}/T_n	***3.2***	T_{max}/T_n	***3.2***



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 3/14/2012
All data subject to tolerances in accordance with IEC

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	***MM11042-PP (3GBP111322-ASB+332+333)***			
3	Type/Frame	***M3BP 112 MB 2***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***4***	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	***2895***	r/min		
11	Rated current I_N	***7.7***	A		
12	No-load current	***2.4***	A		
13	Starting current I_s/I_N	***8.1***		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T_N	***13.2***	Nm		
15	Locked rotor torque T_S/T_N	***2.9***			
16	Maximum torque T_{max}/T_N	***3.2***			
17	Minimum torque T_{min}/T_N	***2.5***			
18	Speed at minimum torque	***480***	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	*100*	**7.7**	**86.1 / IE2**	**0.86**
21		*75*	**5.9**	**87**	**0.83**
22		*50*	**4.2**	**86.6**	**0.79**
23		*Start*	**63**		**0.64**
24	Maximum starting time from hot	***20***	s		
25	Maximum starting time from cold	***36***	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 - 6205-2Z/C3***			
32	Type of Grease	***Greased for life***			
33	Sound pressure level (LP dB(A) 1m)	***70***	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	***0.00575***	kg-m2		
35	Balancing	***Half Key***			
36	Vibration class	***Grade A***			
37	Position of terminal box	***Top***			
38	Terminal box entries; no, dimens.	***2xM32x1.5***			
39	Number of power terminals	***6***			
40	Direction of rotation	***CW or CCW***			
41	Weight of rotor	***5***	kg		
42	Total weight of motor	***37***	kg		
43					

Variant Codes / Definition

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

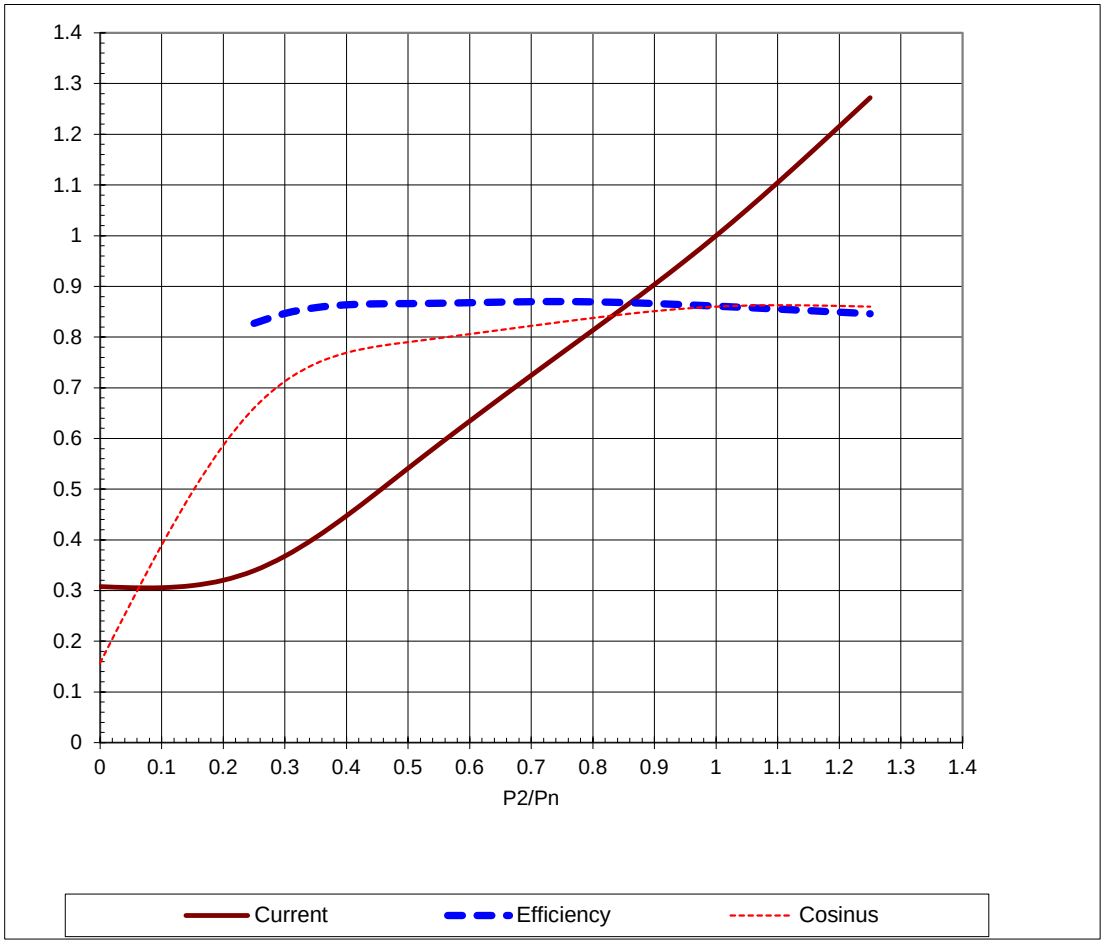
Remarks:

Data based on situation 3/14/2012
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
Our ref.	Rev/Changed by Date of issue	Saving ident	Pages **2(3)**

Product	**TEFC, 3-phase, squirrel cage induction motor**
Type/Frame	**M3BP 112 MB 2**
Product code	**MM11042-PP**
Rated output P_N	**4** kW
Type of duty	**S1(IEC) 100%**

Voltage (V)	**400**	Current I_N (A)	**7.7**	Power factor at P_N	**0.86**
Frequency (Hz)	**50**	Speed (r/min)	**2895**	Efficiency (%) at P_N	**86.1**

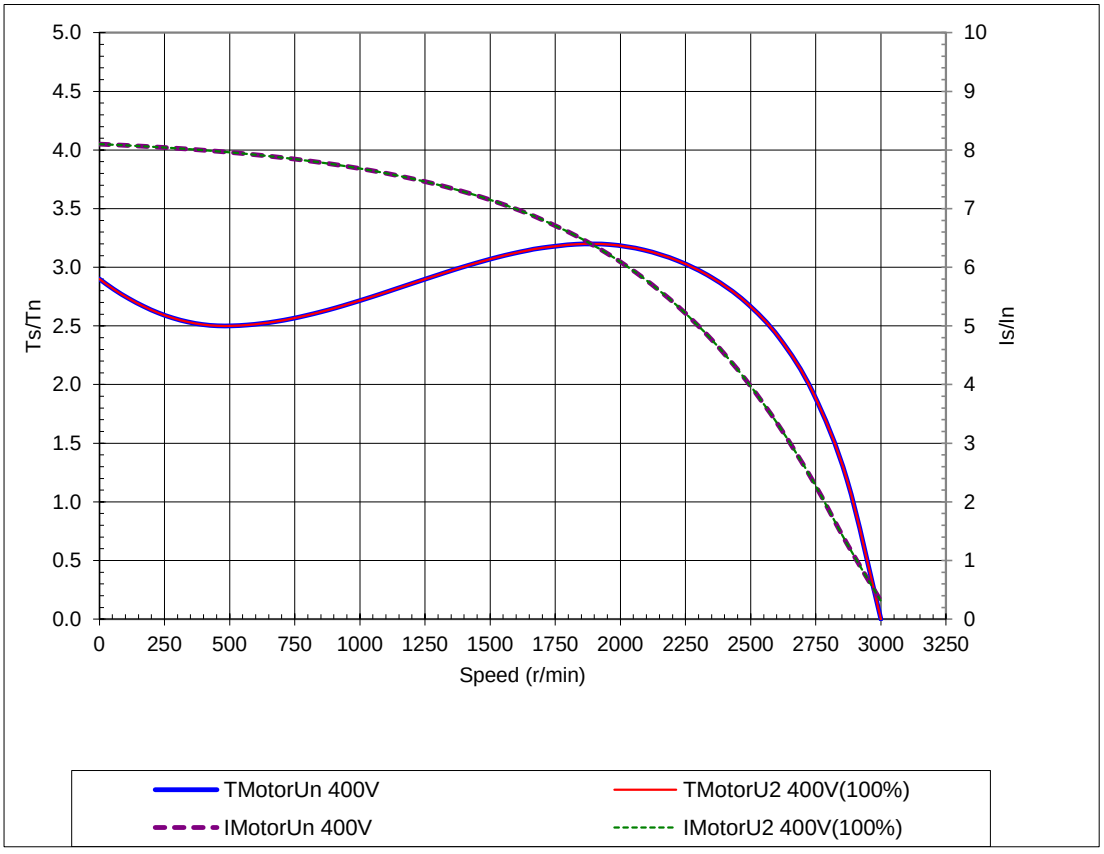


Load characteristics (IEC 60034-2-1:2007)
Data based on situation 3/14/2012
All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Starting Curves		
	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	**M3BP 112 MB 2**			
Product code	**MM11042-PP**		Frequency (Hz)	**50**
Rated output P_N	**4** kW		Rated current I_N	**7.7** A
Type of duty	**S1(IEC) 100%**			

J_{motor} (kgm2)	**0.0058**	Voltage (V) 100%	***400***	Voltage (V)	***400V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.9***	T_{start}/T_N	***2.9***
Speed (r/min)	**2895**	Starting time (s)		Run-up time (s)	
T_N (Nm)	**13.2**	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_n	***8.1***	I_s/I_n	***8.1***
Nbr. of consecutive starts		T_{max}/T_n	***3.2***	T_{max}/T_n	***3.2***



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 3/14/2012
All data subject to tolerances in accordance with IEC

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	***MM11042-PP (3GBP111322-ASB+332+333)***			
3	Type/Frame	***M3BP 112 MB 2***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***4***	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	***3510***	r/min		
11	Rated current I_N	***6.4***	A		
12	No-load current	***2***	A		
13	Starting current I_s/I_N	***10***		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T_N	***10.9***	Nm		
15	Locked rotor torque T_S/T_N	***3.1***			
16	Maximum torque T_{max}/T_N	***4***			
17	Minimum torque T_{min}/T_N	***2.7***			
18	Speed at minimum torque	***576***	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	*100*	**6.4**	**87.5 / IE2**	**0.89**
21		*75*	**5**	**87.4**	**0.86**
22		*50*	**3.7**	**85.5**	**0.79**
23		*Start*	**64**		**0.3**
24	Maximum starting time from hot	***20***	s		
25	Maximum starting time from cold	***36***	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 - 6205-2Z/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	***0.00575***	kg-m2		
35	Balancing	***Half Key***			
36	Vibration class	***Grade A***			
37	Position of terminal box	***Top***			
38	Terminal box entries; no, dimens.	***2xM32x1.5***			
39	Number of power terminals	***6***			
40	Direction of rotation	***CW or CCW***			
41	Weight of rotor	***5***	kg		
42	Total weight of motor	***37***	kg		
43					

Variant Codes / Definition

332 = Baldor catalog number

333 = Not for use in the USA

Remarks:

Data based on situation 3/14/2012

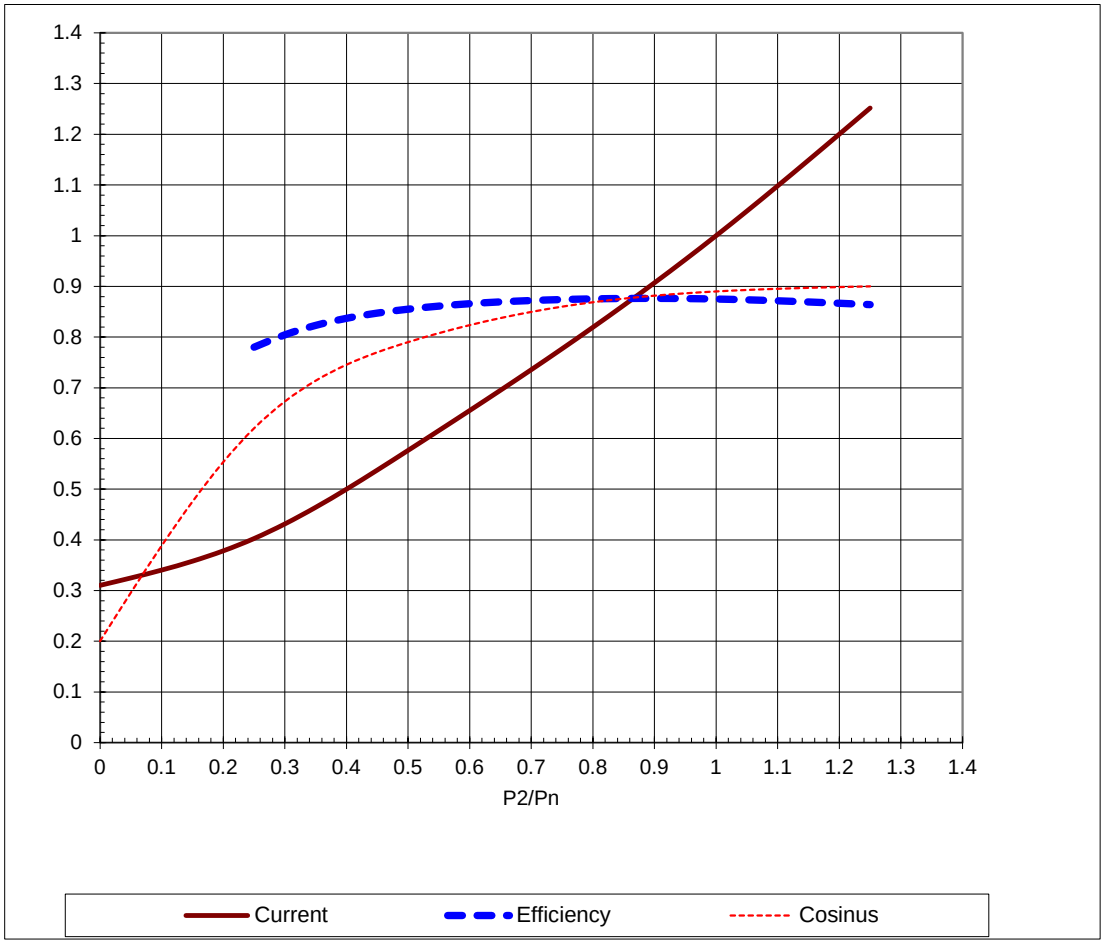
All data subject to tolerances in accordance with IEC

Guaranteed values on request

ABB Motors and Generators	Load Curves		
	Project	Location	
Department/Author	Customer name	Customer ref.	Item name
Our ref.	Rev/Changed by Date of issue	Saving ident	Pages **2(3)**

Product	**TEFC, 3-phase, squirrel cage induction motor**
Type/Frame	**M3BP 112 MB 2**
Product code	**MM11042-PP**
Rated output P_N	**4** kW
Type of duty	**S1(IEC) 100%**

Voltage (V)	**460**	Current I_N (A)	**6.4**	Power factor at P_N	**0.89**
Frequency (Hz)	**60**	Speed (r/min)	**3510**	Efficiency (%) at P_N	**87.5**

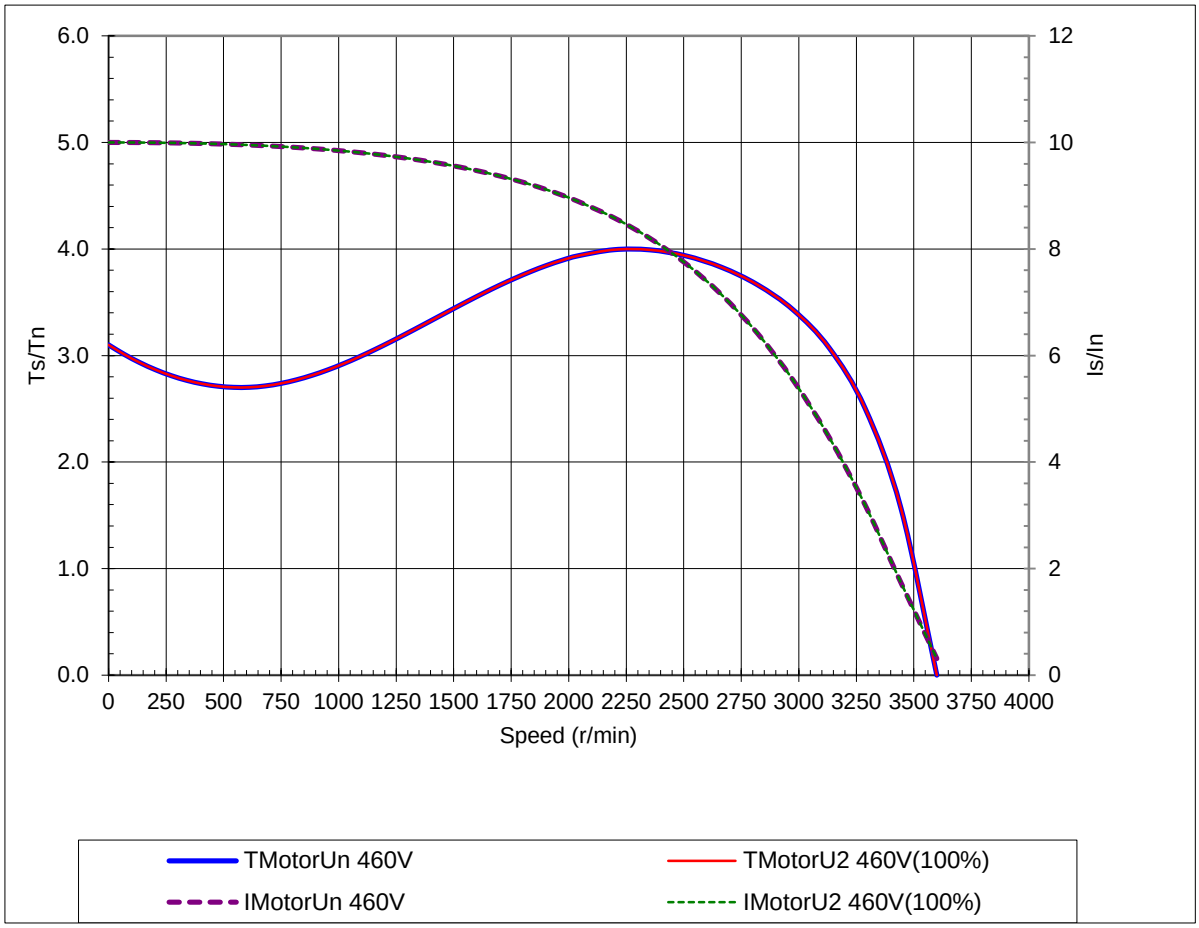


Load characteristics (IEC 60034-2-1:2007)
Data based on situation 3/14/2012
All data subject to tolerances in accordance with IEC

ABB Motors and Generators	Starting Curves		
	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	**M3BP 112 MB 2**				
Product code	**MM11042-PP**		Frequency (Hz)	**60**	
Rated output P_N	**4**	kW	Rated current I_N	**6.4**	A
Type of duty	**S1(IEC) 100%**				

J_{motor} (kgm2)	**0.0058**	Voltage (V) 100%	***460***	Voltage (V)	***460V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***3.1***	T_{start}/T_N	***3.1***
Speed (r/min)	**3510**	Starting time (s)		Run-up time (s)	
T_N (Nm)	**10.9**	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_n	***10***	I_s/I_n	***10***
Nbr. of consecutive starts		T_{max}/T_n	***4***	T_{max}/T_n	***4***



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 3/14/2012
All data subject to tolerances in accordance with IEC