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	***EMM28754-PP (3GBP282220-ADK+332+509+531)***			
3	Type/Frame	***M3BP 280 SMB 4***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***75***	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	***1486***	r/min		
11	Rated current I_N	***133***	A		
12	No-load current	***50***	A		
13	Starting current I_s/I_N	***7.4***		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T_N	***482***	Nm		
15	Locked rotor torque T_S/T_N	***2.5***			
16	Maximum torque T_{max}/T_N	***2.8***			
17	Minimum torque T_{min}/T_N	***2.3***			
18	Speed at minimum torque	***1200***	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	*100*	**133**	**95.7 / IE3**	**0.85**
21		*75*	**104**	**95.8**	**0.81**
22		*50*	**77.8**	**95.3**	**0.73**
23		*Start*	**984**		**0.45**
24	Maximum starting time from hot	***18***	s		
25	Maximum starting time from cold	***32***	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)	***72***	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	***1.5***	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 + 2xM16x1.5***			
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
509 = Fulfilling EISA Subtype I efficiency requirements, CC031A
531 = Sea freight packaging

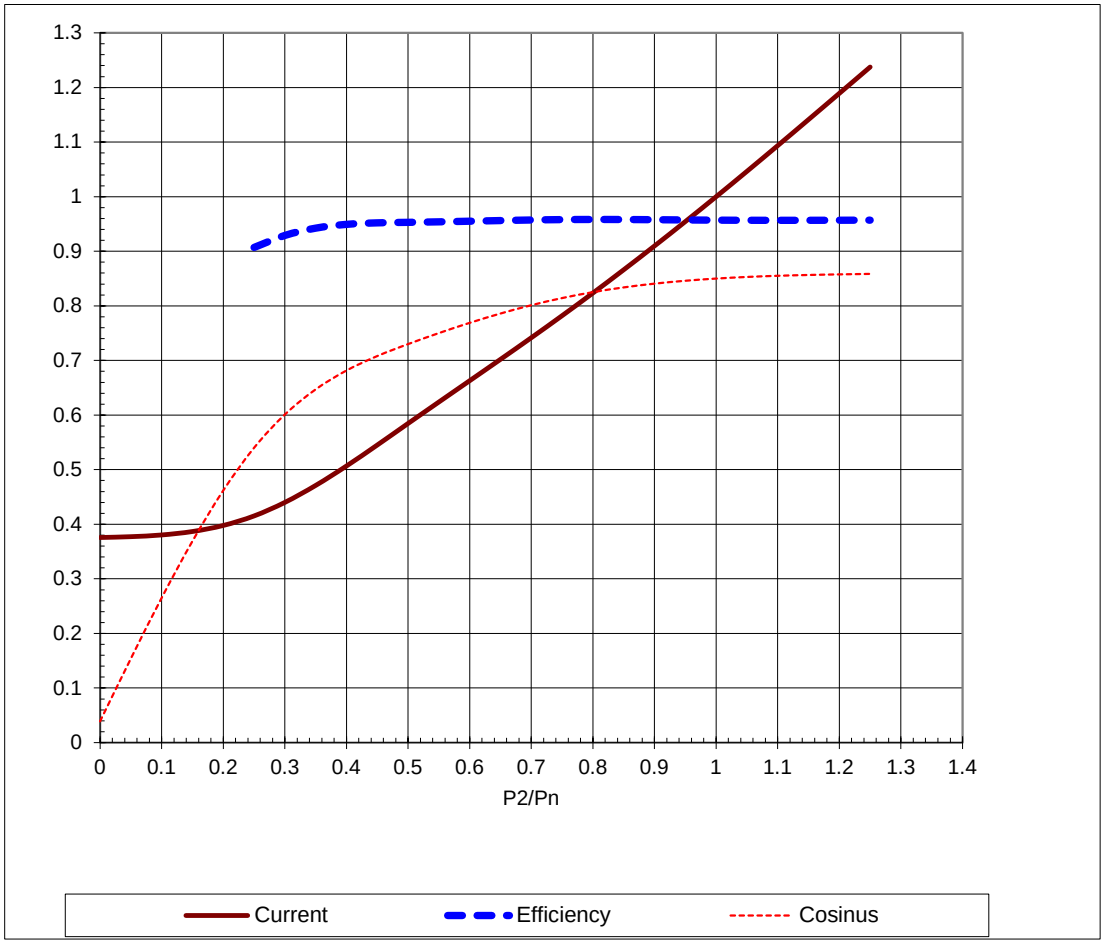
Remarks:

Data based on situation 11/4/2012
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 280 SMB 4**
Product code	**EMM28754-PP**
Rated output P_N	**75** kW
Type of duty	**S1(IEC) 100%**

Voltage (V)	**400**	Current I_N (A)	**133**	Power factor at P_N	**0.85**
Frequency (Hz)	**50**	Speed (r/min)	**1486**	Efficiency (%) at P_N	**95.7**

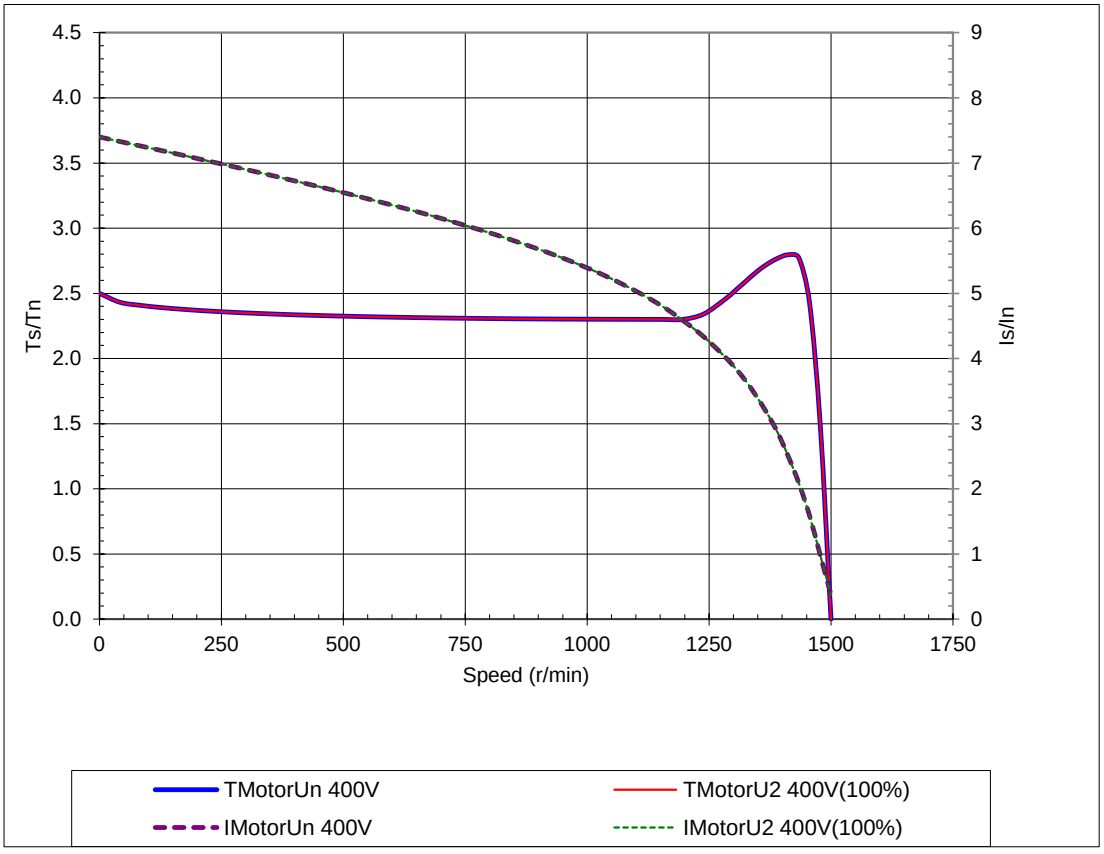


Load characteristics (IEC 60034-2-1:2007)
Data based on situation 11/4/2012
All data subject to tolerances in accordance with IEC

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 280 SMB 4**			
Product code	**EMM28754-PP**		Frequency (Hz)	**50**
Rated output P_N	**75** kW		Rated current I_N	**133** A
Type of duty	**S1(IEC) 100%**			

J_{motor} (kgm2)	**1.5**	Voltage (V) 100%	***400***	Voltage (V)	***400V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.5***	T_{start}/T_N	***2.5***
Speed (r/min)	**1486**	Starting time (s)		Run-up time (s)	
T_N (Nm)	**482**	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_n	***7.4***	I_s/I_n	***7.4***
Nbr. of consecutive starts		T_{max}/T_n	***2.8***	T_{max}/T_n	***2.8***



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 11/4/2012
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	***EMM28754-PP (3GBP282220-ADK+332+509+531)***			
3	Type/Frame	***M3BP 280 SMB 4***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***75***	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	***1486***	r/min		
11	Rated current I_N	***77.1***	A		
12	No-load current	***29***	A		
13	Starting current I_s/I_N	***7.4***		Fullfilled IEC 60034-12 design N,H	
14	Nominal torque T_N	***482***	Nm		
15	Locked rotor torque T_S/T_N	***2.5***			
16	Maximum torque T_{max}/T_N	***2.8***			
17	Minimum torque T_{min}/T_N	***2.3***			
18	Speed at minimum torque	***1200***	r/min		
19	Load characteristics (IEC 60034-2-1:2007)	Load %	Current A	Efficiency %	Power factor
20	PLL determined from residual loss	*100*	**77.1**	**95.7 / IE3**	**0.85**
21		*75*	**60.3**	**95.8**	**0.81**
22		*50*	**45.1**	**95.3**	**0.73**
23		*Start*	**570**		**0.45**
24	Maximum starting time from hot	***18***	s		
25	Maximum starting time from cold	***32***	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)	***72***	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	***1.5***	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 + 2xM16x1.5***			
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
509 = Fulfilling EISA Subtype I efficiency requirements, CC031A
531 = Sea freight packaging

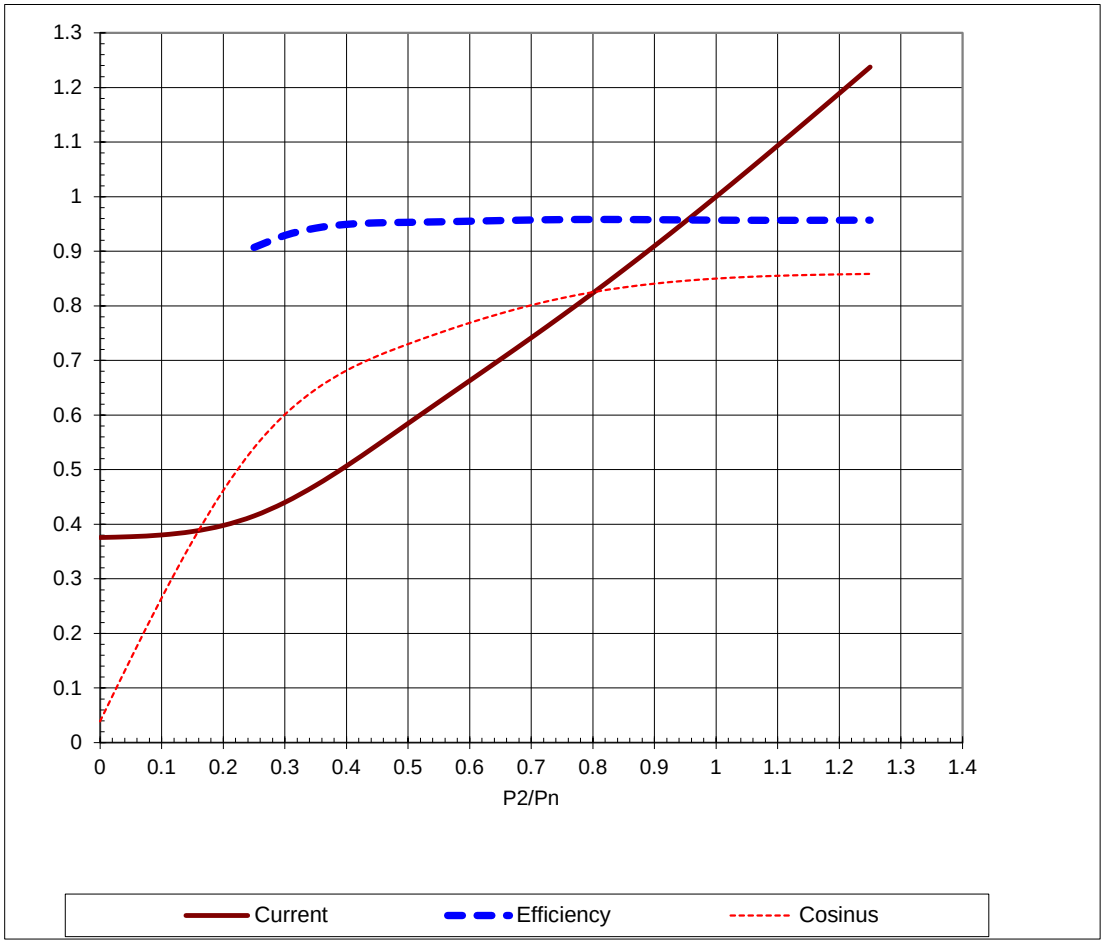
Remarks:

Data based on situation 11/4/2012
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 280 SMB 4**
Product code	**EMM28754-PP**
Rated output P_N	**75** kW
Type of duty	**S1(IEC) 100%**

Voltage (V)	**690**	Current I_N (A)	**77.1**	Power factor at P_N	**0.85**
Frequency (Hz)	**50**	Speed (r/min)	**1486**	Efficiency (%) at P_N	**95.7**

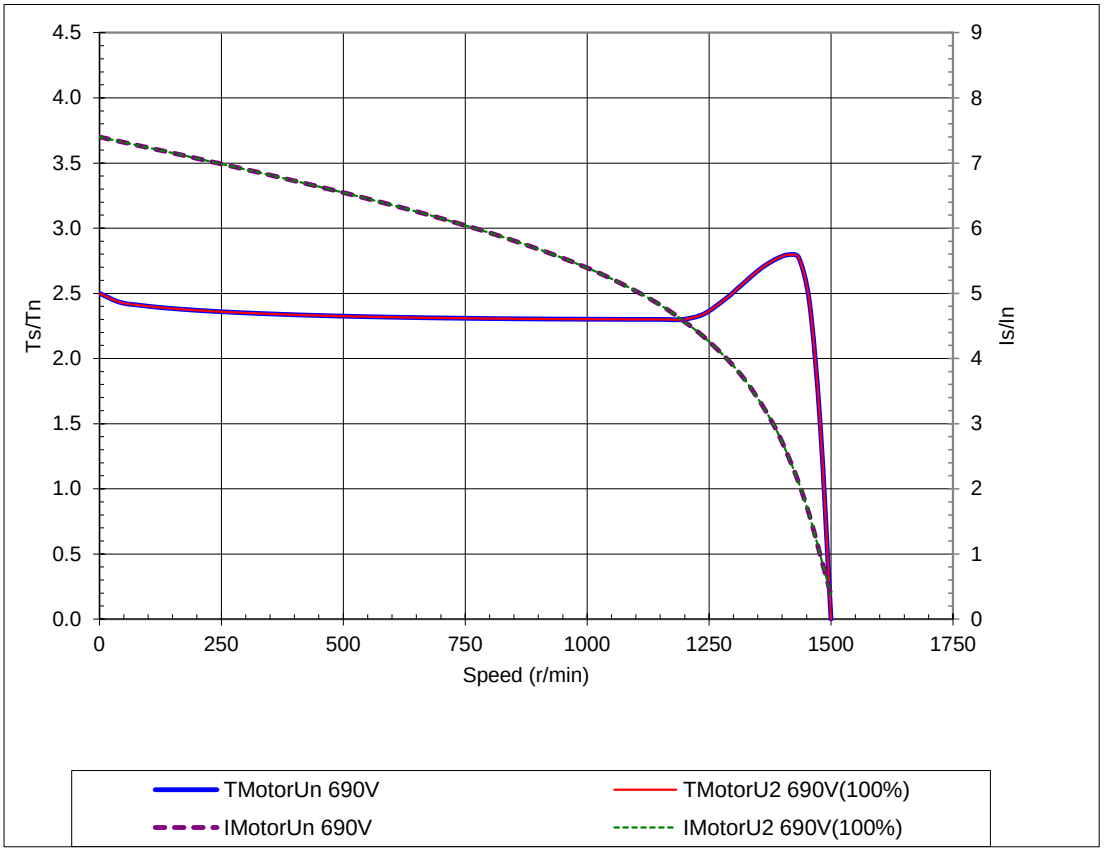


Load characteristics (IEC 60034-2-1:2007)
Data based on situation 11/4/2012
All data subject to tolerances in accordance with IEC

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 280 SMB 4**			
Product code	**EMM28754-PP**		Frequency (Hz)	**50**
Rated output P_N	**75** kW		Rated current I_N	**77.1** A
Type of duty	**S1(IEC) 100%**			

J_{motor} (kgm2)	**1.5**	Voltage (V) 100%	***690***	Voltage (V)	***690V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.5***	T_{start}/T_N	***2.5***
Speed (r/min)	**1486**	Starting time (s)		Run-up time (s)	
T_N (Nm)	**482**	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_n	***7.4***	I_s/I_n	***7.4***
Nbr. of consecutive starts		T_{max}/T_n	***2.8***	T_{max}/T_n	***2.8***



Load characteristics (IEC 60034-2-1:2007)
Data based on situation 11/4/2012
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	***EMM28754-PP (3GBP282220-ADK+332+509+531)***			
3	Type/Frame	***M3BP 280 SMB 4***			
4	Mounting	***IM1001, B3(foot)***			
5	Rated output P_N	***75***	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	***1788***	r/min		
11	Rated current I_N	***117***	A		
12	No-load current	***46***	A		
13	Starting current I_s/I_N	***8.4***		Not within IEC 60034-12 design N,H	
14	Nominal torque T_N	***401***	Nm		
15	Locked rotor torque T_S/T_N	***2.7***			
16	Maximum torque T_{max}/T_N	***3.1***			
17	Minimum torque T_{min}/T_N	***2.5***			
18	Speed at minimum torque	***1440***	r/min		
19	Load characteristics (IEEE 112 B: 2004)	Load %	Current A	Efficiency %	Power factor
20	NEMA nominal efficiency (*)	*100*	**117**	**95.5 / IE3 / 94.5**	**0.84**
21		*75*	**93.8**	**95.2**	**0.79**
22		*50*	**71.3**	**94.3**	**0.7**
23		*Start*	**985**		**0.45**
24	Maximum starting time from hot	***18***	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	***6316/C3 - 6316/C3***			
32	Type of Grease	***Lithium based***			
33	Sound pressure level (LP dB(A) 1m)	***76***	dB(A)	at load	
34	Moment of inertia J = ¼ GD2	***1.5***	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 + 2xM16x1.5***			
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
509 = Fulfilling EISA Subtype I efficiency requirements, CC031A
531 = Sea freight packaging

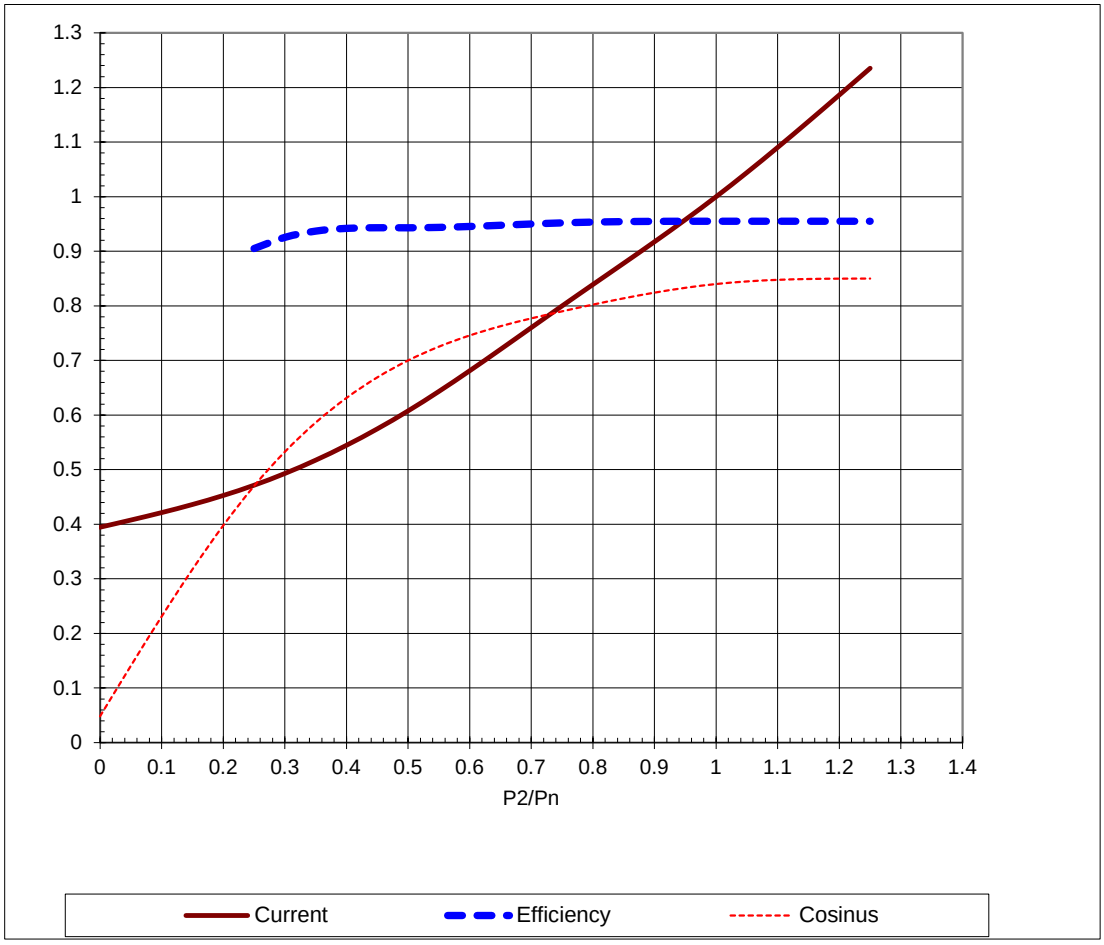
Remarks:

Data based on situation 5/15/2012
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 280 SMB 4**
Product code	**EMM28754-PP**
Rated output P_N	**75** kW
Type of duty	**S1(IEC) 100%**

Voltage (V)	**460**	Current I_N (A)	**117**	Power factor at P_N	**0.84**
Frequency (Hz)	**60**	Speed (r/min)	**1788**	Efficiency (%) at P_N	**95.5**

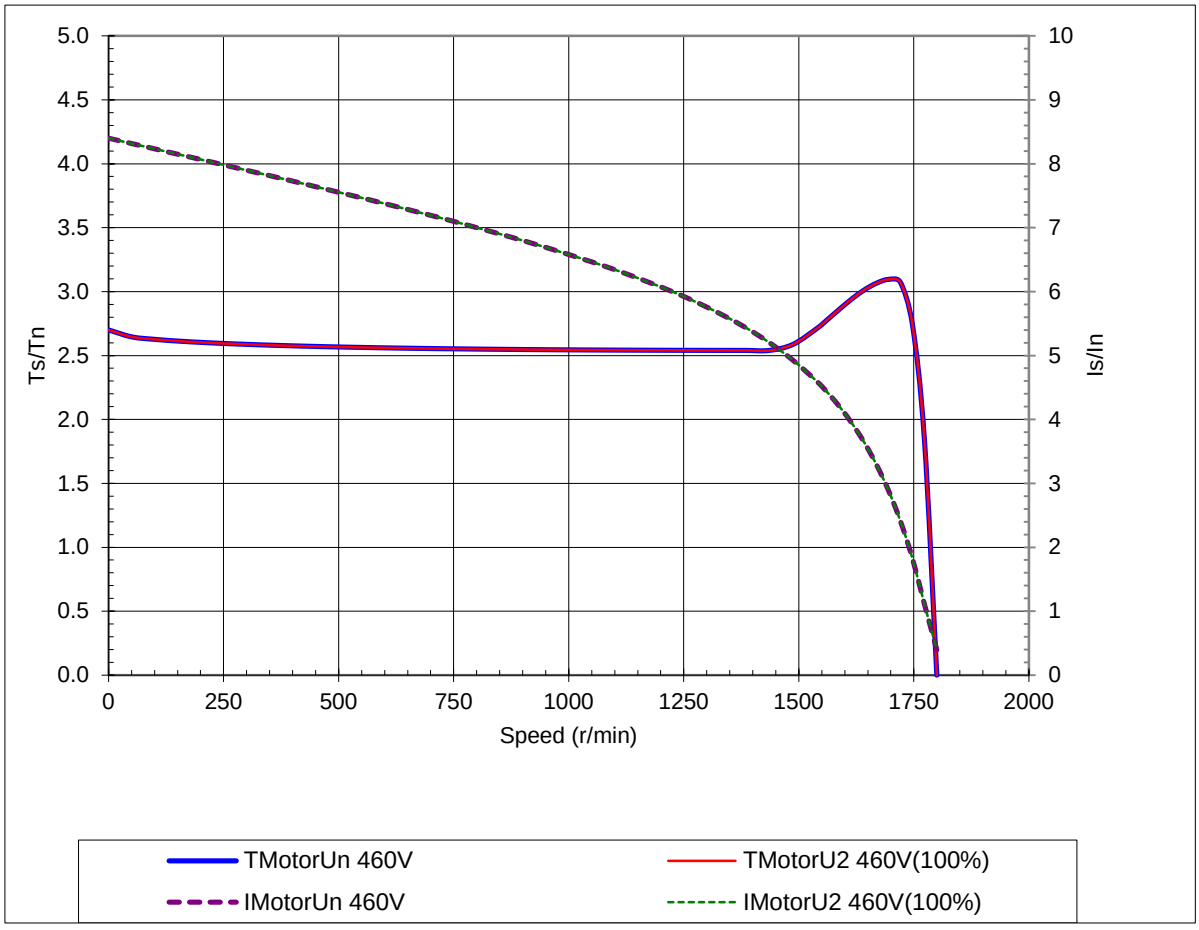


Load characteristics (IEEE 112 B: 2004)
Data based on situation 5/15/2012
All data subject to tolerances in accordance with IEC

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 280 SMB 4**			
Product code	**EMM28754-PP**	Frequency (Hz)	**60**	
Rated output P_N	**75** kW	Rated current I_N	**117**	A
Type of duty	**S1(IEC) 100%**			

J_{motor} (kgm2)	**1.5**	Voltage (V) 100%	***460***	Voltage (V)	***460V(100%)***
J_{load} (kgm2)		T_{start}/T_N	***2.7***	T_{start}/T_N	***2.7***
Speed (r/min)	**1788**	Starting time (s)		Run-up time (s)	
T_N (Nm)	**401**	Speed (r/min)		Speed (r/min)	
T_{load} (Nm)		I_s/I_n	***8.4***	I_s/I_n	***8.4***
Nbr. of consecutive starts		T_{max}/T_n	***3.1***	T_{max}/T_n	***3.1***



Load characteristics (IEEE 112 B: 2004)
Data based on situation 5/15/2012
All data subject to tolerances in accordance with IEC