

ABB Motors and Generators		Technical Data Sheet - DOL				
Project		Location				
Department/Author	Customer name	Customer ref.		Item name 1.00001		
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls	Pages 1(3)		
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	MM25552-PPN (3GBP251210-ADG+332+333) Calc. ref. 3GZF021025-134				
3	Type/Frame	M3BP 250SMA 2				
4	Mounting	IM1001, B3(foot)				
5	Rated output P_N	55	kW			
6	Service factor	1				
7	Type of duty	S1(IEC) 100%				
8	Rated voltage U_N	400	VD	$\pm 5\%$ (IEC 60034-1)		
9	Rated frequency f_N	50	Hz	$\pm 2\%$ (IEC 60034-1)		
10	Rated speed n_N	2967	r/min			
11	Rated current I_N	96.3	A			
12	No-load current	23	A			
13	Starting current I_s/I_N	6.8		Fullfilled IEC 60034-12 design N,H		
14	Nominal torque T_N	177	Nm			
15	Locked rotor torque T_s/T_N	2.2				
16	Maximum torque T_{max}/T_N	2.7				
17	Minimum torque T_{min}/T_N	1.8				
18	Speed at minimum torque	2190	r/min			
Load characteristics (IEC 60034-2-1:2007)		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	96.3	94.1 / IE2	0.88	
20		75	72	94.4	0.88	
21		50	51.1	93.8	0.83	
22		Start	655		0.35	
23	Maximum starting time from hot	15	s			
24	Maximum starting time from cold	27	s			
25	Insulation class / Temperature class	F / B				
26	Ambient temperature	40	°C			
27	Altitude	1000	m.a.s.l.			
28	Enclosure	IP55				
29	Cooling system	IC411 self ventilated				
30	Bearing DE/NDE	6315/C3 - 6213/C3				
31	Type of Grease					
32	Sound pressure level (LP dB(A) 1m)	75	dB(A)	at load		
33	Moment of inertia $J = \frac{1}{4} GD^2$	0.507	kg-m2			
34	Balancing					
35	Vibration class					
36	Position of terminal box	Top				
37	Terminal box entries; no, dimens.					
38	Number of power terminals					
39	Direction of rotation	CW or CCW				
40	Total weight of motor	405	kg			
41	Dimension drawing no.					
42						
43						
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Ex-motors						
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Option Variant Codes / Definition						
49	332 = Baldor Catalog number stamped on rating plate					
50	333 = Not for use in the USA					
51						
52						
Remarks:						
Data based on situation 9/11/2015						
All data subject to tolerances in accordance with IEC						
Guaranteed values on request						

ABB Motors and Generators Load Curves			
Department/Author	Customer name	Customer ref.	Item name 1.00001
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls Pages 2(3)
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG		
Rated output P _N	55	kW	
Type of duty	S1(IEC) 100%		
Voltage (V)	400	Current I _N (A)	96.3
Frequency (Hz)	50	Speed (r/min)	2967
		Power factor at P _N	0.88
		Efficiency (%) at P _N	94.1
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 All data subject to tolerances in accordance with IEC			

ABB Motors and Generators Starting Curves			
Department/Author	Customer name	Customer ref.	Item name 1.00001
Our ref.	Rev/Changed b Date of issue A 12/23/2015	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG	Frequency (Hz)	50
Rated output P _N	55 kW	Rated current I _N	96.3 A
Type of duty	S1(IEC) 100%		
J _{motor} (kgm ²)	0.51	Voltage (V) 100%	400
J _{load} (kgm ²)		T _{start} /T _N	2.2
Speed (r/min)	2967	Starting time (s)	
T _N (Nm)	177	Speed (r/min)	
T _{load} (Nm)		I _s /I _N	6.8
Nbr. of consecutive starts		T _{max} /T _N	2.7
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 All data subject to tolerances in accordance with IEC			

ABB Motors and Generators		Technical Data Sheet - DOL		
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Department/Author	Customer name	Customer ref.		Item name 2.00001
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls	Pages 1(3)
No.	Definition	Data	Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	MM25552-PPN (3GBP251210-ADG+332+333) Calc. ref. 3GZF021025-134		
3	Type/Frame	M3BP 250SMA 2		
4	Mounting	IM1001, B3(foot)		
5	Rated output P_N	55	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	2970	r/min	
11	Rated current I_N	93.7	A	
12	No-load current	26	A	
13	Starting current I_s/I_N	7.2		Fullfilled IEC 60034-12 design N,H
14	Nominal torque T_N	177	Nm	
15	Locked rotor torque T_s/T_N	2.4		
16	Maximum torque T_{max}/T_N	3		
17	Minimum torque T_{min}/T_N	1.8		
18	Speed at minimum torque	2190	r/min	
Load characteristics (IEC 60034-2-1:2007)		Load %	Current A	Efficiency %
19	PLL determined from residual loss	100	93.7	94.2 / IE2
20		75	70.9	94.4
21		50	51.1	93.7
22		Start	675	0.35
23	Maximum starting time from hot	15	s	
24	Maximum starting time from cold	27	s	
25	Insulation class / Temperature class	F / B		
26	Ambient temperature	40	°C	
27	Altitude	1000	m.a.s.l.	
28	Enclosure	IP55		
29	Cooling system	IC411 self ventilated		
30	Bearing DE/NDE	6315/C3 - 6213/C3		
31	Type of Grease			
32	Sound pressure level (LP dB(A) 1m)	75	dB(A)	at load
33	Moment of inertia $J = \frac{1}{4} GD^2$	0.507	kg-m2	
34	Balancing			
35	Vibration class			
36	Position of terminal box	Top		
37	Terminal box entries; no, dimens.			
38	Number of power terminals			
39	Direction of rotation	CW or CCW		
40	Total weight of motor	405	kg	
41	Dimension drawing no.			
42				
43				
44				
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Ex-motors				
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48				
Option Variant Codes / Definition				
49	332 = Baldor Catalog number stamped on rating plate			
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Remarks:				
Data based on situation 9/11/2015				
All data subject to tolerances in accordance with IEC				
Guaranteed values on request				

ABB Motors and Generators Load Curves			
Department/Author	Customer name	Customer ref.	Item name 2.00001
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls Pages 2(3)
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG		
Rated output P _N	55	kW	
Type of duty	S1(IEC) 100%		
Voltage (V)	415	Current I _N (A)	93.7
Frequency (Hz)	50	Speed (r/min)	2970
		Power factor at P _N	0.87
		Efficiency (%) at P _N	94.2
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 All data subject to tolerances in accordance with IEC			

ABB Motors and Generators Starting Curves			
Department/Author	Customer name	Customer ref.	Item name 2.00001
Our ref.	Rev/Changed b Date of issue A 12/23/2015	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG	Frequency (Hz)	50
Rated output P _N	55 kW	Rated current I _N	93.7 A
Type of duty	S1(IEC) 100%		
J _{motor} (kgm ²)	0.51	Voltage (V) 100%	415
J _{load} (kgm ²)		T _{start} /T _N	2.4
Speed (r/min)	2970	Starting time (s)	
T _N (Nm)	177	Speed (r/min)	
T _{load} (Nm)		I _s /I _N	7.2
Nbr. of consecutive starts		T _{max} /T _N	3
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 All data subject to tolerances in accordance with IEC			

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		A		12/23/2015		
		Saving ident		untitled.xls		
				Pages		
				1(3)		
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	MM25552-PPN (3GBP251210-ADG+332+333)				
3	Type/Frame	M3BP 250SMA 2				
4	Mounting	IM1001, B3(foot)				
5	Rated output P _N	55	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	2967	r/min			
11	Rated current I _N	55.8	A			
12	No-load current	13.2	A			
13	Starting current I _s /I _N	6.8		Fullfilled IEC 60034-12 design N,H		
14	Nominal torque T _N	177	Nm			
15	Locked rotor torque T _s /T _N	2.2				
16	Maximum torque T _{max} /T _N	2.7				
17	Minimum torque T _{min} /T _N	2				
18	Speed at minimum torque	2190	r/min			
Load characteristics (IEC 60034-2-1:2007)		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	55.8	94.1 / IE2	0.88	
20		75	41.8	94.4	0.88	
21		50	29.6	93.8	0.83	
22		Start	380		0.35	
23	Maximum starting time from hot	15	s			
24	Maximum starting time from cold	27	s			
25	Insulation class / Temperature class	F / B				
26	Ambient temperature	40	°C			
27	Altitude	1000	m.a.s.l.			
28	Enclosure	IP55				
29	Cooling system	IC411 self ventilated				
30	Bearing DE/NDE	6315/C3 - 6213/C3				
31	Type of Grease					
32	Sound pressure level (LP dB(A) 1m)	75	dB(A)	at load		
33	Moment of inertia J = ¼ GD2	0.507	kg-m2			
34	Balancing					
35	Vibration class					
36	Position of terminal box	Top				
37	Terminal box entries; no, dimens.					
38	Number of power terminals					
39	Direction of rotation	CW or CCW				
40	Total weight of motor	405	kg			
41	Dimension drawing no.					
42						
43						
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Ex-motors						
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Option Variant Codes / Definition						
49	332 = Baldor Catalog number stamped on rating plate					
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Remarks:						
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ABB Motors and Generators Load Curves			
Project		Location	
Department/Author	Customer name	Customer ref.	Item name 3.00001
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls Pages 2(3)
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG		
Rated output P _N	55	kW	
Type of duty	S1(IEC) 100%		
Voltage (V)	690	Current I _N (A)	55.8
Frequency (Hz)	50	Speed (r/min)	2967
		Power factor at P _N	0.88
		Efficiency (%) at P _N	94.1
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 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 3.00001
Our ref. _____	Rev/Changed b Date of issue A 12/23/2015	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG	Frequency (Hz)	50
Rated output P _N	55 kW	Rated current I _N	55.8 A
Type of duty	S1(IEC) 100%		
J _{motor} (kgm ²)	0.51	Voltage (V) 100%	690
J _{load} (kgm ²)		T _{start} /T _N	2.2
Speed (r/min)	2967	Starting time (s)	
T _N (Nm)	177	Speed (r/min)	
T _{load} (Nm)		I _s /I _N	6.8
Nbr. of consecutive starts		T _{max} /T _N	2.7
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 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 4.00001		
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls	Pages 1(3)		
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	MM25552-PPN (3GBP251210-ADG+332+333)		Calc. ref.	3GZF021025-134	
3	Type/Frame	M3BP 250SMA 2				
4	Mounting	IM1001, B3(foot)				
5	Rated output P_N	55	kW			
6	Service factor	1				
7	Type of duty	S1(IEC) 100%				
8	Rated voltage U_N	460	VD	$\pm 5\%$ (IEC 60034-1)		
9	Rated frequency f_N	60	Hz	$\pm 2\%$ (IEC 60034-1)		
10	Rated speed n_N	3571	r/min			
11	Rated current I_N	84.3	A			
12	No-load current	21	A			
13	Starting current I_s/I_N	7.7		Fullfilled IEC 60034-12 design N,H		
14	Nominal torque T_N	147	Nm			
15	Locked rotor torque T_s/T_N	2.3				
16	Maximum torque T_{max}/T_N	3				
17	Minimum torque T_{min}/T_N	2.1				
18	Speed at minimum torque	2628	r/min			
Load characteristics (IEC 60034-2-1:2007)		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	84.3	93.5 / IE2	0.88	
20		75	64.1	93.2	0.87	
21		50	46	91.7	0.82	
22		Start	649		0.32	
23	Maximum starting time from hot	15	s			
24	Maximum starting time from cold	27	s			
25	Insulation class / Temperature class	F / B				
26	Ambient temperature	40	°C			
27	Altitude	1000	m.a.s.l.			
28	Enclosure	IP55				
29	Cooling system	IC411 self ventilated				
30	Bearing DE/NDE	6315/C3 - 6213/C3				
31	Type of Grease					
32	Sound pressure level (LP dB(A) 1m)	83	dB(A)	at load		
33	Moment of inertia $J = \frac{1}{4} GD^2$	0.507	kg-m2			
34	Balancing					
35	Vibration class					
36	Position of terminal box	Top				
37	Terminal box entries; no, dimens.					
38	Number of power terminals					
39	Direction of rotation	CW or CCW				
40	Total weight of motor	405	kg			
41	Dimension drawing no.					
42						
43						
44						
45						
Ex-motors						
46						
47						
48						
Option Variant Codes / Definition						
49	332 = Baldor Catalog number stamped on rating plate					
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Remarks:						
Data based on situation 9/11/2015						
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Guaranteed values on request						

ABB Motors and Generators Load Curves			
Department/Author	Customer name	Customer ref.	Item name 4.00001
Our ref.	Rev/Changed by A	Date of issue 12/23/2015	Saving ident untitled.xls Pages 2(3)
Product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG		
Rated output P _N	55	kW	
Type of duty	S1(IEC) 100%		
Voltage (V)	460	Current I _N (A)	84.3
Frequency (Hz)	60	Speed (r/min)	3571
		Power factor at P _N	0.88
		Efficiency (%) at P _N	93.5
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 All data subject to tolerances in accordance with IEC			

ABB Motors and Generators Starting Curves			
Department/Author	Customer name	Customer ref.	Item name 4.00001
Our ref.	Rev/Changed b Date of issue A 12/23/2015	Saving ident untitled.xls	Pages 3(3)
Type of product	TEFC, 3-phase, squirrel cage induction motor		
Type/Frame	M3BP 250SMA 2	Calc. ref.	3GZF021025-134
Product code	3GBP 251 210-ADG	Frequency (Hz)	60
Rated output P _N	55 kW	Rated current I _N	84.3 A
Type of duty	S1(IEC) 100%		
J _{motor} (kgm ²)	0.51	Voltage (V) 100%	460
J _{load} (kgm ²)		T _{start} /T _N	2.3
Speed (r/min)	3571	Starting time (s)	
T _N (Nm)	147	Speed (r/min)	
T _{load} (Nm)		I _s /I _N	7.7
Nbr. of consecutive starts		T _{max} /T _N	3
Load characteristics (IEC 60034-2-1:2007) Data based on situation 9/11/2015 All data subject to tolerances in accordance with IEC			