

Data sheet for three-phase Squirrel-Cage-Motors ABB

Motor type: FS: 143T - 4p - 1 hp -

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project
Remarks		

Electrical data

Class I Division 1 Groups D

U [V]	Δ/Y	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T _A /T _N LRT [%]	T _k /T _N BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	2/4	4/4	3/4	2/4				
575	Y	60	1.00		1,755	1.10	0.90	0.80	0.60	11.0	85.5	85.4	83.4	78.2	71.5	58.4	3.0	300	383	

Frame Type: PMD_AAA726_001_000_XP1	Type of constr.: (A) Foot mounted - End shield	Motor Prot.:(A) No winding protection	NEMA Des.: B	S.F.: 1.15
Mtr. WT:82 lbs	Insulation Class.:Insulation class F	Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: M IP IP65

Mechanical data


Sound level (SPL / SWL) at 60 Hz	50.0 dB(A) / 62.0 dB(A)	Thickener	Polyurea						
Octave Band Center Frequencies Hertz		Safe Stall Time Hot	18 s						
250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	26 s	
SPL@3	37.0	40.0	49.0	45.0	37.0	31.0	dB(A)	Frame material	cast iron
Moment of inertia	0.2 Lb-ft ²	Color, paint shade							
Ext Load Inertia Capability:	6.0 Lb ft ²	Coating (paint finish)	Standard Alkyed + Epoxy (C2)						
Bearings		Ventilation Type							
Bearing DE NDE	6205 Z C3 S0	6205 Z C3 S0	Method of cooling	TEFC					
Bearing_Type	Ball Bearing	Ball Bearing	Direction of rotation	Bidirectional					
AFBMA:	25BC02JP30	25BC02JP30	Fan Material	Polypropylen ESD					
Grease		VFD	CT: 4:1	VT: 20:1					
Capacity	0.1 oz	0.1 oz	Space heaters	without					
Grease Type:	Exxon Mobile EM	Brake:	-/-						

Terminal box

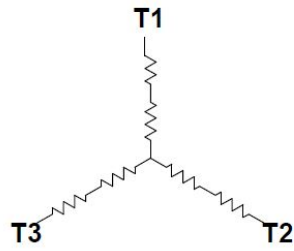
Lead Wire Connection	3 LEAD - WYE	Terminal box position	(3) Mounting - F-1			
Voltage	L1	L2	L3	Connected together	Material of terminal box	Cast Iron
----	----	----	----	----	Cable entry	-/-
----	T1	T2	T3	----		

Notes:


I_r/I_N = locked rotor current / current nominal
 M_r/M_N = locked rotor torque / torque nominal
 M_b/M_N = break down torque / nominal torque
 3) Value is valid only for DOL operation with motor design IC411
 2) at rated power / at full load

responsible dep. IN LVM	technical reference	created by SPC	approved by	<i>Technical data are subject to change! There may be discrepancies</i>			
	document type datasheet	document status released		customer			
	title 1MB2221-1AB21-3AA3	document number					
© ABB 2024	rev. 01	creation date 2024-03-05 18:04	language en	Page 1/1			

Main terminal diagram



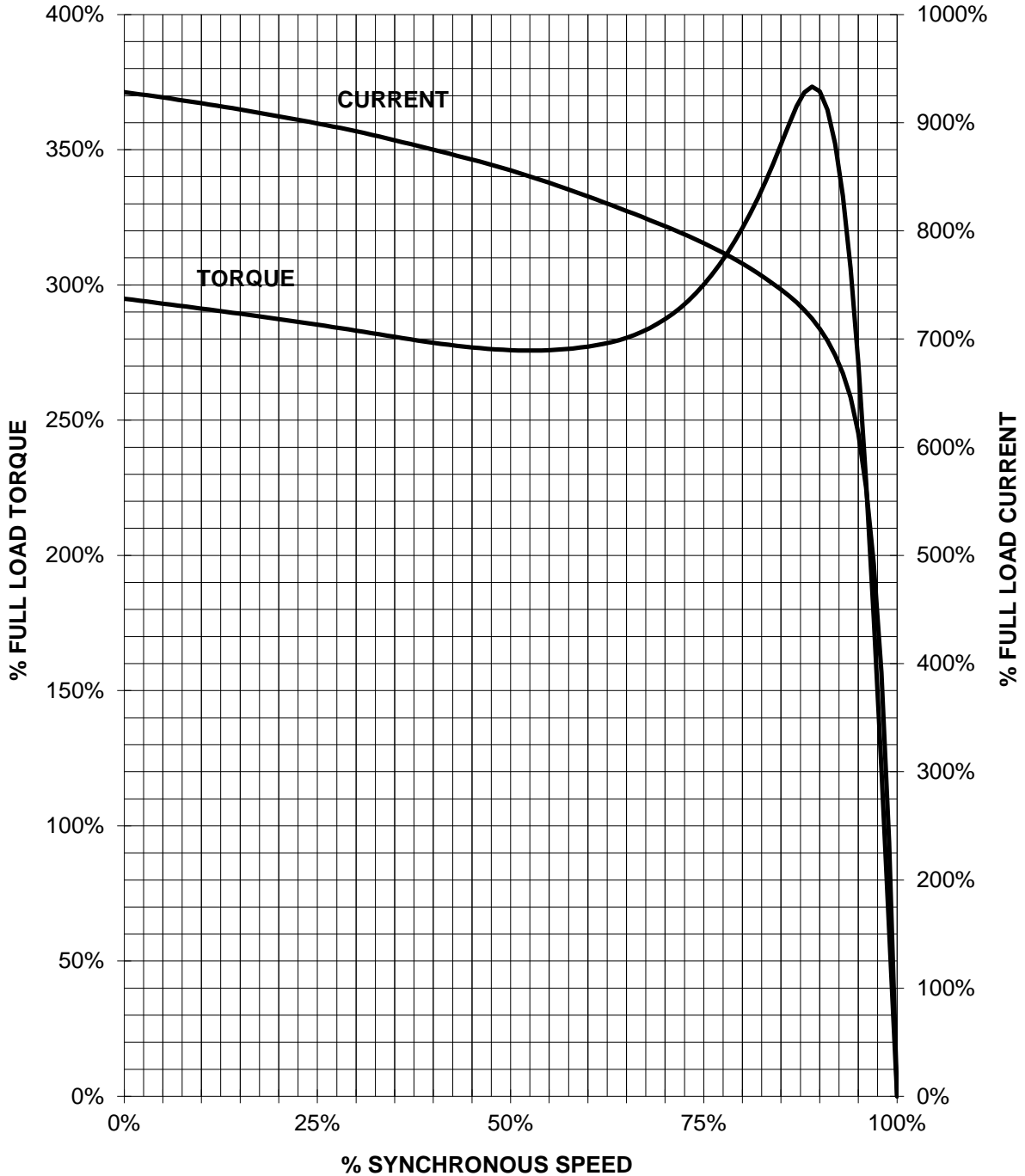
3 LEAD WYE			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	Y

responsible dep. IN LVM	technical reference	created by	approved by	Project	Link documents
SIEMENS	document type Wiring Diagram	document status free			
	title 1MB2221-1AB21-3AA3	document number			
© INNOMOTICS 2024		rev. 02	creation date 03/05/2024	language en	Page 1/1

SIEMENS INDUSTRY, INC.

HP 1 VOLTS <600 RPM 1800 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME 143T NEMA B

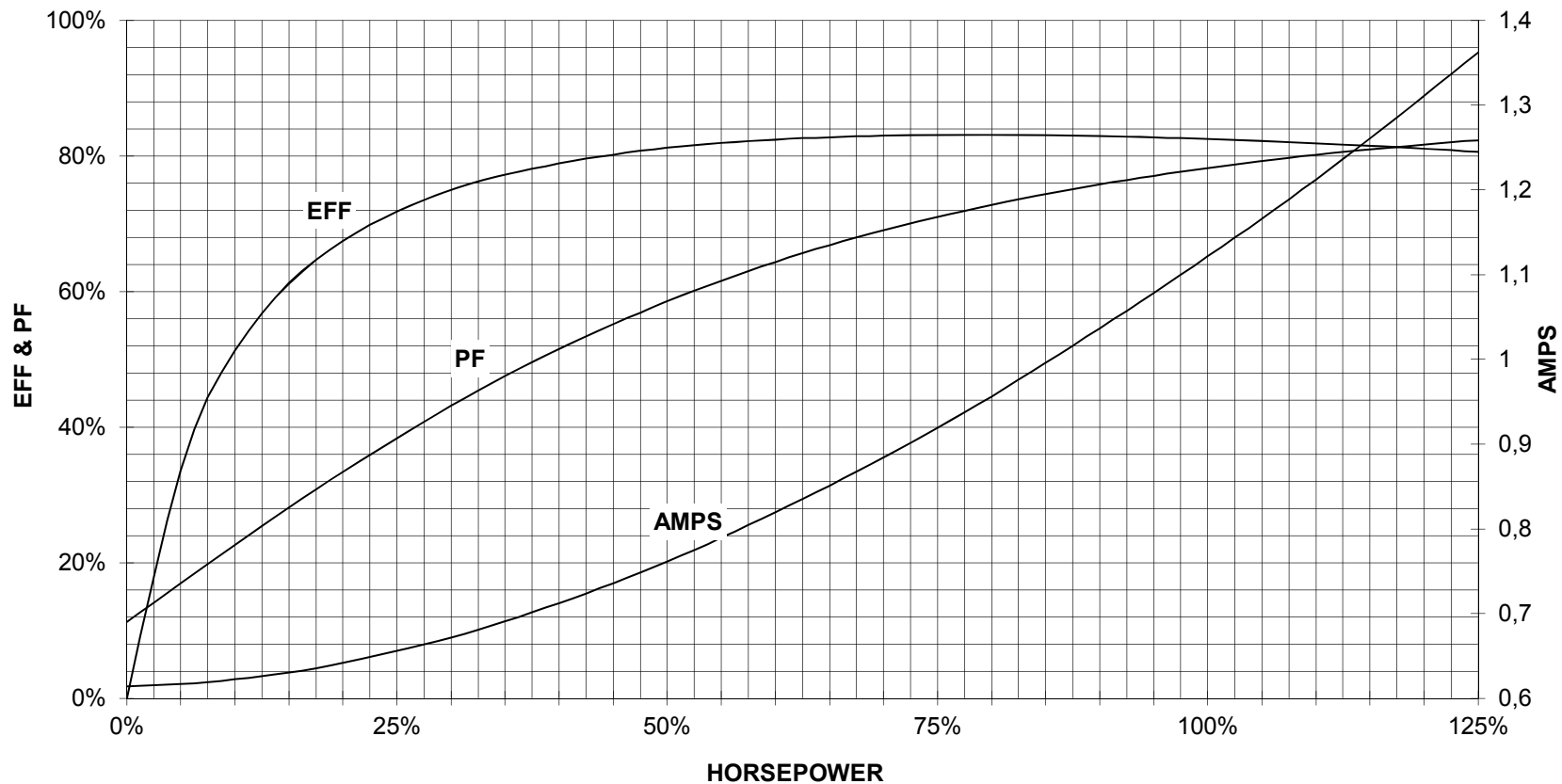
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

1 HP 1800 RPM 143T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
XP100 1D1



CUSTOMER _____ ORDER # _____ PO # _____

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1

Certificate of Verification

Certificate: 2313253 (EEV101783)

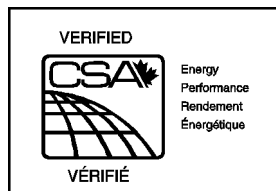
Master Contract: 153422

Project: 2313253

Date Issued: 2010-12-20

Issued to: Siemens, Sociedad Anonima de
Capital Variable Siemens SA de CV
Fabrica Guadalajara
Camino a la Tijera 1
Km 3.5 Carretera Guadalajara-Moreli
Tlajomulco de Zuniga, Jalisco 45640
Mexico
Attention: Mr. Luis Alberto Zermenio

The Motor listed below are eligible to bear the CSA EEV Mark shown



Issued by: Suhwan. Ahn

PRODUCTS

Class 8811-01 - ENERGY EFFICIENCY - MOTORS - Three Phase Induction

Class 8811-81 - ENERGY EFFICIENCY - MOTORS - Three Phase Induction – US Requirements

Energy Efficiency Verification of three phase induction motors, Premium Efficiency, Type XP100, XP100 ID1, 600V max., 60Hz, Enclosure TEFC, NEMA frame sizes 143 to 449, NEMA design A or B

Nominal efficiency values in percent at full load as follows:

Output	2 pole	4 pole	6 pole
hp	Efficiency (%)	Efficiency (%)	Efficiency (%)
1	82.5	85.5	82.5
1.5	84.0	86.5	87.5
2	85.5	86.5	88.5
3	86.5	89.5	89.5
5	88.5	89.5	89.5
7.5	89.5	91.7	91.0
10	90.2	91.7	91.0
15	91.0	92.4	91.7

Certificate: 2313253

Master Contract: 153422

Project: 2313253

Date: 2010-12-20

20	91.0	93.0	91.7
25	91.7	93.6	93.0
30	91.7	93.6	93.0
40	93.6	94.1	94.1
50	93.6	94.5	94.1
60	93.6	95.0	94.5
75	94.1	95.4	94.5
100	94.1	95.4	95.0
125	95.0	95.4	95.0
150	95.0	95.8	95.8
200	95.4	96.2	95.8
250	95.8	96.2	95.8
300	95.8	96.2	--

Energy Efficiency Verification of three phase induction motors, Energy Efficient, Type XP100, XP100 ID1, 600V max., 60Hz, Enclosure TEFC, NEMA frame sizes 143 to 449, NEMA design A or B

Nominal efficiency values in percent at full load as follows:

Output hp	8 pole Efficiency (%)
1	81.5
1.5	82.5
2	84.0
3	85.5
5	86.5
7.5	87.5
10	90.2
15	91.0
20	91.0
25	91.0
30	91.7
40	91.7
50	92.4
60	92.4
75	93.6
100	94.1
125	94.1
150	94.1
200	94.5

APPLICABLE REQUIREMENTS

- CSA Standard CAN/CSA C390-98 Energy Efficiency Test Methods for Three-Phase Induction Motors
- CSA Standard CAN/CSA C390-93 Energy Efficiency Test Methods for Three-Phase Induction Motors



CSA INTERNATIONAL

Page 3

Certificate: 2313253

Master Contract: 153422

Project: 2313253

Date: 2010-12-20

- Department of Energy - Office of Energy Efficiency - 10 CFR 431 - Energy Efficiency Program for Certain Commercial and Industrial Equipment and Test Procedures, Labeling, and Certification Requirements for Electric Motors; Final Rule.