

## NEMA Motor Data



Ordering data : **1LE2221-2BA21-4EA3**

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

Nameplate Data	Mounting and motor protection
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Type	GP100 - NEMA Premium Efficiency		
HP	20.0	Rating	Cont.
Voltage	(14) 208-230/460V,	Ins. Class	Class F (Standard)
Amps	45.0 / 22.5 A	S.F.	1.15
FL RPM	3515	Amb. Temp.	40 deg C
FL Efficiency	91.0 %	Temp. Rise	Class B
FRAME	256TC	kVA Code	G
DE AFBMA	45BC02JPP30	NEMA Des	B
ODE AFBMA	45BC02JPP30	Mtr WT	292.99
60 Hertz	3 Ph      TEFC	IP	35

Type of construction	( E ) Foot mounted - C-Face
Motor protection	(A) No winding protection
Terminal box design	(3) Mounting - F-1

Bearing Data		
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	DE	ODE
Bearing Size	6209 ZZ C3 S0	6209 ZZ C3 S0
Bearing Type	Ball Bearing	Ball Bearing
AFBMA	45BC02JPP30	45BC02JPP30

Typical Performance Data					
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Load	No Load	1/2	3/4	Full Load	LRC
Efficiency		92.1 %	91.6 %	91.0 %	
Power Factor		86.2	91.3	91.5	
Current (A)	5.2 A	11.8 A	16.8 A	45.0 / 22.5	145.0 A
Inverter Duty	VT	20:1	CT	4:1	

Mechanical Data				
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SAFE STALL TIME	HOT (s)	20	COLD (s)	45
Rtr wt (lbs)	60.92	Rtr WK2	1.35	
FLT (lb-ft)	30.000	LRT	183	BDT 230
Ext Load Inertia (WK2) Capability	105.0 lb-ft <sup>2</sup>			

Typical Noise Data									
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A-weighted Sound	Octave Band Center Frequencies Hertz (Hz)								
Pressure Level	125	250	500	1000	2000	4000	8000	SPL	83
at 3 feet	53	65	77	78	77	71	61	SPwrL	93

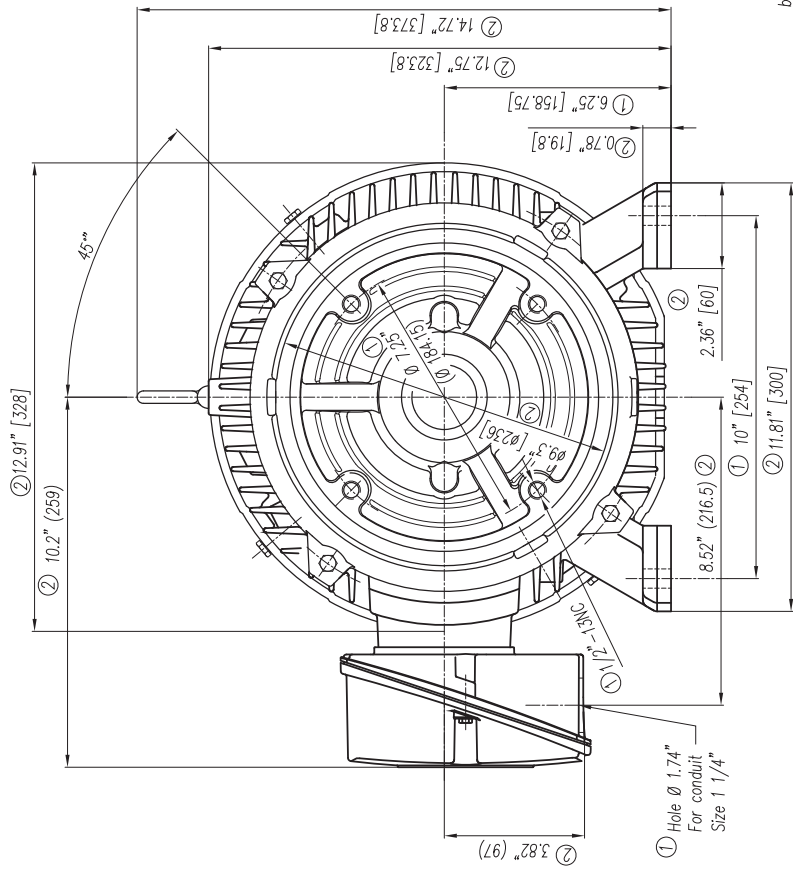
Wiring Connection Information					
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Description	3 PHASE - 9 LEAD - WYE				
Voltage	L1	L2	L3	Connected together	
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6      YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9      Y	

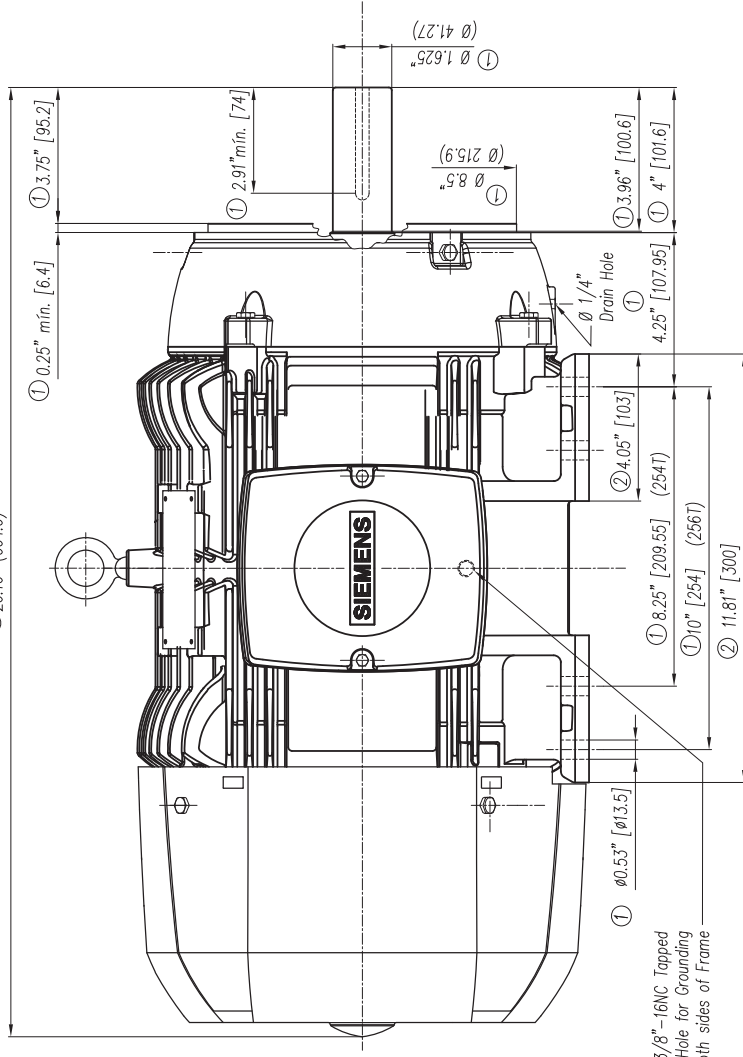
Special design :
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Lubrication Information	
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Manufacturer	Mobil Polyrex EM or equal
Type	Polyurea (standard)
DE Capacity (oz.)	0.50
ODEnd Capacity (oz.)	0.50



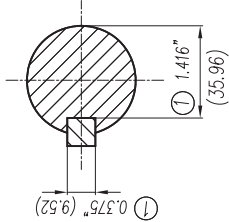
② 26.16" [664.6]



① 0.53" [13.5]  
3/8"-16NC Tapped Hole for Grounding both sides of Frame

- ① Tolerancias acorde a NEMA Std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not According to NEMA Std.

Tol. in mm. acc. to / Tol. en mm. segun DIN-1686-GTB-19	Over/desde To/hasta	± 4.5	± 4.7
---	18	± 4.5	± 4.7
---	30	± 5	± 5
---	50	± 5.5	± 5.5
---	80	± 6	± 6
---	120	± 6.5	± 6.5
---	180	± 7	± 7
---	250	± 7.5	± 7.5
---	315	± 8	± 8
---	400	± 8.5	± 8.5
---	500	± 9.5	± 9.5
---	630	± 10	± 10



Keysat detail  
Detalle Cuñero

CERTIFIED PRINT / CERTIFICACION			
CUSTOMER/CLIENTE			
PROYECTO/COMPANIA	ESP/PROYECTO/CLIENTE		
IP	MARK/DIR	TYPE/TPD	PAR/AL
REV			

②

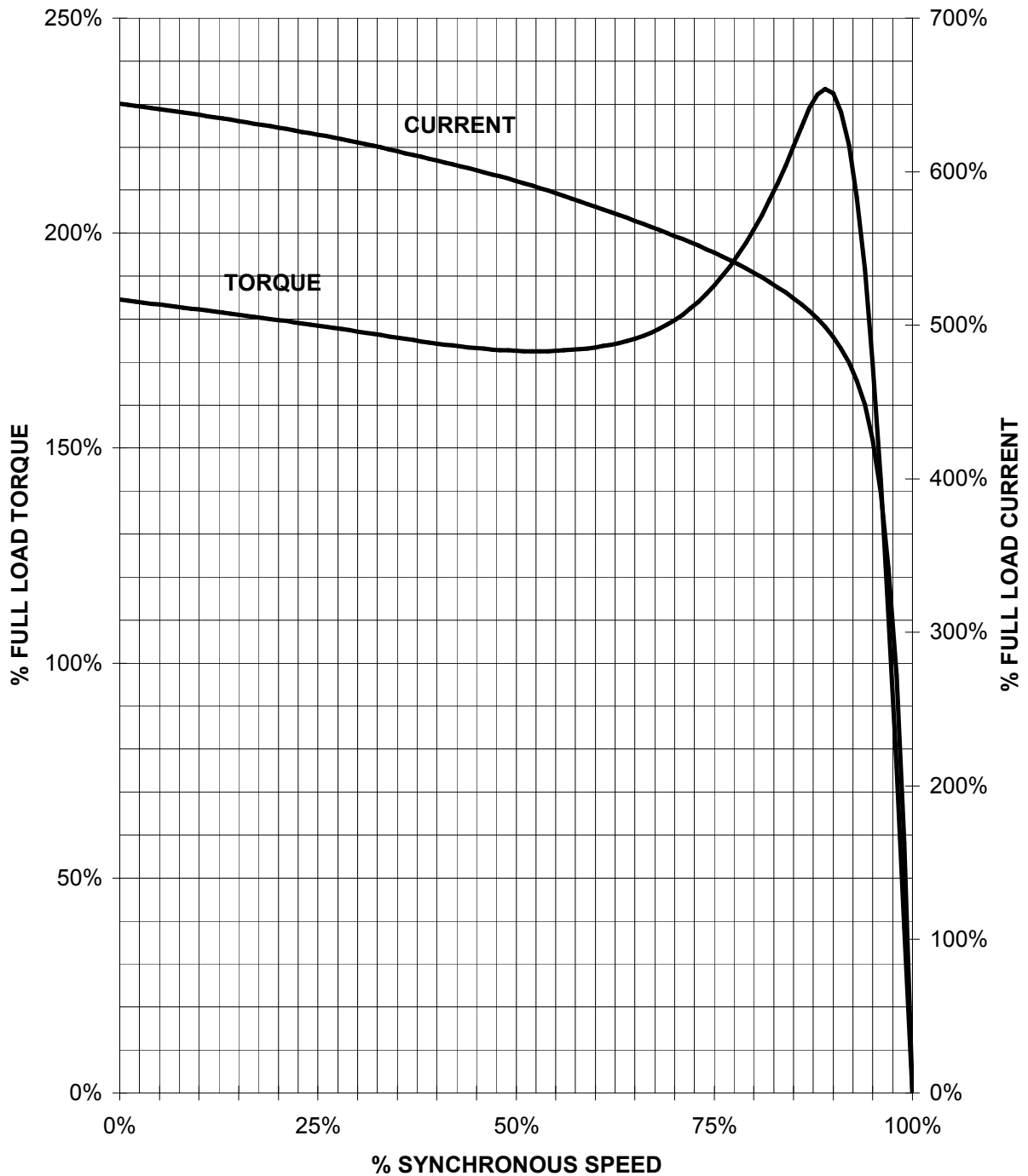
Use cambio formato a Inglés-Español y se especifica tipos en los que aplica este dibujo.  
a) Changed the format to English-Spanish and was specified in what kind of motors apply this drawing.

European Projection/ Proyeccion Europea	Modific	Date/fecha	Name/Nombre
Dim. in inches/Dim. en pulg.		05/03/08	Guzmán
Drawn/Elab.	Check/Rev.	Std/Std/Aut	Type/ Tipo: GP100
Scale/Escala Sin W/O			
Outline/Dimensiones New NEMA Motors			
254/256TC Arm.			
SIEMENS			3MSE 223 0851a
GUADALAJARA FACTORY			Ref. 3MSE 223 0851

# SIEMENS INDUSTRY, INC.

HP 20 VOLTS < 600V RPM 3600 TYPE GP100  
HZ 60 PHASE 3 FRAME 256T NEMA B

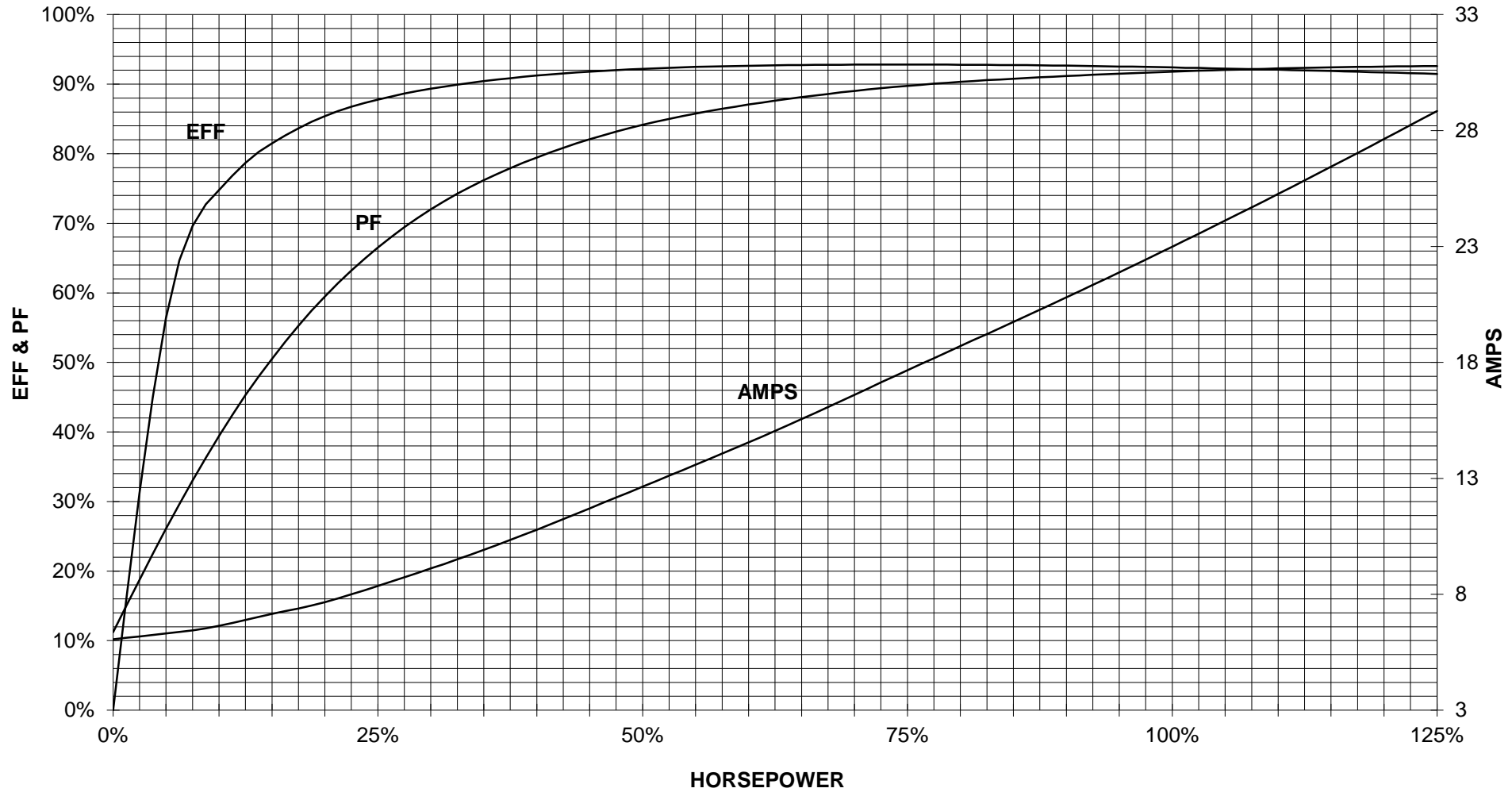
## TORQUE & CURRENT VS. SPEED



CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

20 HP 3600 RPM 256T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**GP100**



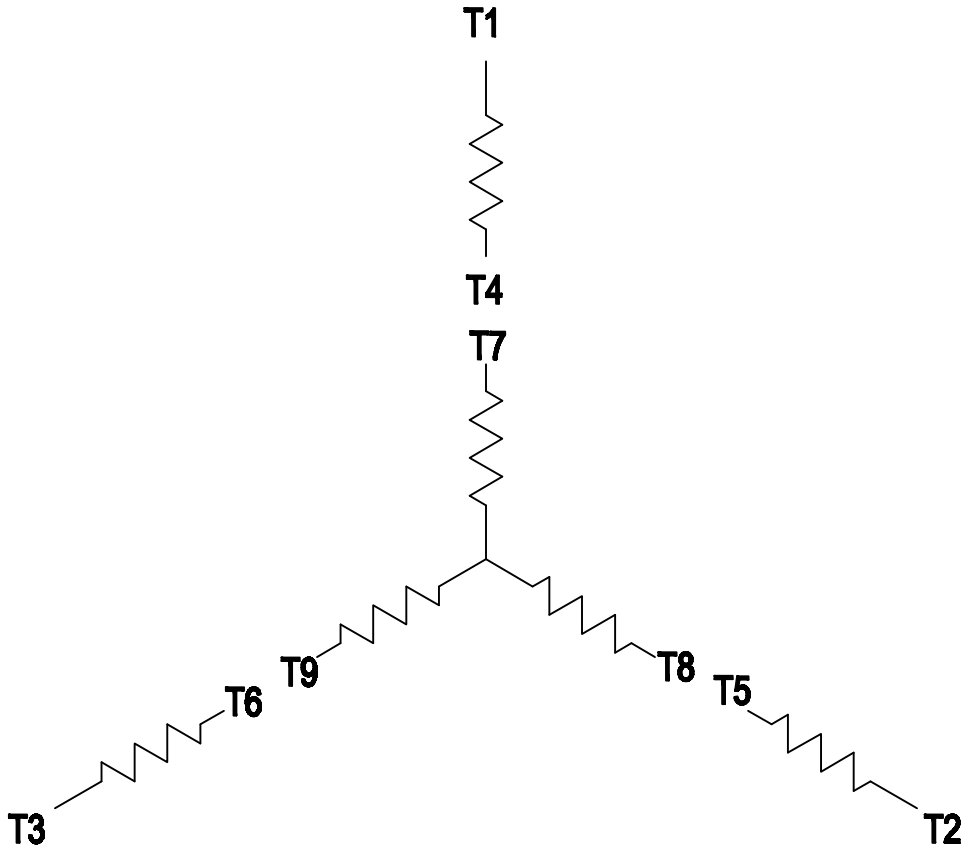
CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

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

REV. 1

### 3 PHASE - 9 LEADS - WYE

VOLTS	LINES			CONNECTED TOGETHER	CONN.
	L1	L2	L3		
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6	Y Y
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y



THIS IS A CAD DRAWING  
DO NOT MAKE MANUAL CHANGES

01 | 09-27-07

TYPE

-CONFIDENTIAL-

PROPERTY OF

Siemens Energy & Automation, Inc.  
Industrial Motor Division - Little Rock, AR

FRAME

HP

NAME

WIRING DIAGRAM

VOLTS

RPM

HZ

PH

3

Customer

PO #

SO #

DRAWN	9.24.07	DATE	JRH
CHECKED		DATE	
APP		DATE	

SHEET 1 OF 1

Sim. To

PART NO.

51-382-114-501

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