

BALDOR® • ***RELIANCE***

Product Information Packet

EM44304T-2340

300HP, 1785RPM, 3PH, 60HZ, L449T, A44200M, TEF

Part Detail							
Revision:	U	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A44WG4996	CD Diagram:	416820-004	Mfg Plant:	
Mech. Spec:		Layout:	617423-169	Poles:	04	Created Date:	10-15-2013
Base:		Eff. Date:	06-30-2017	Leads:	6#6 482406006P		

Specs			
Catalog Number:	EM44304T-2340	Feedback Device:	NO FEEDBACK
Enclosure:	TEFC	Frame Prefix:	L
Frame:	L449T	Heater Indicator:	Heater Included, 120 V
Frame Material:	Iron	Insulation Class:	F
Output @ Frequency:	300.000 HP @ 60 HZ	Inverter Code:	Not Inverter
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	KVA Code:	H
Voltage @ Frequency:	2300.0 V @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
	4000.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 6 AWG
XP Class and Group:	None	Motor Type:	A44200M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CCSA US	Power Factor:	87
	CSA EEV	Pulley End Bearing Type:	Ball
Auxillary Box:	Auxillary Box	Pulley Face Code:	Standard
Base Indicator:	Rigid	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Current @ Voltage:	39.100 A @ 4000.0 V	Shaft Slinger Indicator:	Shaft Slinger
	67.800 A @ 2300.0 V	Speed Code:	Single Speed
Design Code:	-	Motor Standards:	Other

Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
		Thermal Device - Winding:	RTD Only

Nameplate NP3132L											
SPEC NO.	P44G5954			CAT.NO.	EM44304T-2340			FRAME	L449T		
HP	300	VOLTS	2300/4000		PHASE	3	DESIGN	-	TYPE	P	
RPM	1785	AMPS	67.8/39.1		HZ	60	AMB	40	SF	1.15	
DRIVE END BEARING	110BC02J30X			DUTY	CONT		INSUL.CLASS	F			
OPP D.E. BEARING	6318/C3VL0241			ENCL	TEFC		CODE	H			
NEMA NOM/CSA QUOTED EFF				NEMA-NOM-EFFICIENCY	95						
SER.NO.											
										MOTOR WEIGHT	3676

Nameplate 000901002AAA	
EQUIPPED WITH 120V/245W AND 240V/245W SPACE HEATERS	
120V HTR= 1H1,1H2	240V HTR= 2H1,2H2

Nameplate NP2496L	
MOBIL POLYREX EM	

Parts List		
Part Number	Description	Quantity
SA271941	SA P44G5954	1.000 EA
RA258563	RA P44G5954	1.000 EA
482406006P	06 AWG,UL3499,BLACK,7.5kV,BELDEN#37506	42.000 FT
041009000BB	EXT. LEAD LUG	6.000 EA
000692000SC	N/P	5.000 EA
421948037	LABEL, MYLAR	1.000 EA
NP3132L	"BALDOR ONLY" INDUSTRIAL MOTOR, SS,	1.000 EA
000692000FF	N/P	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
000901002AAA	N/P BLANK (RELEASE QTY 1,500)	1.000 EA
004824015A	GREASE POLYREX EM	1.160 LB
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 EA
032620016LA	SOCKET SET SCREW-449	3.000 EA
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 EA
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 EA
034530064BB	P/NIP 1/4X8 PLATED	1.000 EA
034630002AB	CPLG 1/4" PLATED	1.000 EA
034690002AB	"unbulked" PPLG 1/4" PLTD.	1.000 EA
034690001AB	SQHDPLG, COND	1.000 EA
078550001H	FAN KB 120/60 360	1.000 EA
083199082A	G28 FAN COVER MACHINING SHORT VERSION	1.000 EA
089490099B	G28 BRKT 089490098WCA	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
410700004A	WSHR	1.000 EA
034690001AB	SQHDPLG, COND	2.000 EA
415072001B	CLAMP	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 EA
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 EA
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 EA
034001013AB	FLTW BAFFLE	3.000 EA
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 EA
034530064BB	P/NIP 1/4X8 PLATED	1.000 EA
034001013AB	FLTW BAFFLE	3.000 EA
034690001AB	SQHDPLG, COND	1.000 EA
034630002AB	CPLG 1/4" PLATED	1.000 EA
034690002AB	"unbulked" PPLG 1/4" PLTD.	1.000 EA
415915007K	GASK, 26" LAC	1.000 EA
089490101B	G28 BRKT 089490100WCA	1.000 EA
415045002D	SLGR - 440	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
702623011RA	G28 AIR DEFLECTOR DRIVE END	1.000 EA
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 EA
032130014DB	HSHCS1/2-13X1-3/4 PLATE	4.000 EA
034000016AB	WSHR .531ID 1.062OD .095	4.000 EA
415030115A	G28 C/BOX 415030114WCA	1.000 EA

Product Information Packet: EM44304T-2340 - 300HP,1785RPM,3PH,60HZ,L449T,A44200M,TEF

415039027A	GASKET, G28 LEAD THROAT	1.000 EA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA
702616012T	CONDUIT BOX	1.000 EA
075456039B	CBCA 075456030WCA	1.000 EA
075457025A	+CBOX CVR BLKT - 400/440	1.000 EA
415039010A	LEAD GASKET FOR AUX LEADS 250-440	1.000 EA
065564008A	GASK 250-440	1.000 EA
032018005AK	HHCS 1/4-20X5/8 PLATED	2.000 EA
415035049D	T/PLT - 320	1.000 EA
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 EA
032375004GB	SLRHMS 6-32X1/2 PLTD-440	4.000 EA
034530032EA	P/NIP 3/4X4 BLACK	1.000 EA
049455093C	T/BLK	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
406056008A	GASKET, TERBD 440	1.000 EA
406099000A	PLUG - FAN COVER 320-440	1.000 EA
047024002J	TERMINAL LUG - MAKE FROM 047024002F	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
076700036G	C/B KB - 320	1.000 EA
076701000A	C/B - 320	1.000 EA
049843019A	PLTE 320 049843048WCA	1.000 EA
415039010B	LEAD GASKET FOR AUX LEADS 360-400	1.000 EA
065776000C	TERBD 320-400	1.000 EA
067027000B	GASK 320-440	1.000 EA

Product Information Packet: EM44304T-2340 - 300HP,1785RPM,3PH,60HZ,L449T,A44200M,TEF

049455093H	TERBD	2.000 EA
415035100A	TERM BLK SPRT AUX FOR 320 AUX BOX	1.000 EA
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 EA
032018010CK	HHCS 3/8-16X1-1/4 PLTD.	4.000 EA
032375004GB	SLRHMS 6-32X1/2 PLTD-440	8.000 EA
034530040FB	1.0 X 5.00 PIPE NIPPLE	1.000 EA
034600024AA	BUSH 2 TO 1 BLACK	1.000 EA
MG1025G05	WILKOFAS, 789.227, MED. GRAY CHAR. MET.	1.000 GA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
034180054KA	KEY 7/8X7/8X6-3/4 L	1.000 EA
PK5947	CRATING PALLET L449 FRAME W/AUX BOXES	1.000 EA
000692000CL	N/P	1.000 EA
482413003Y	#3 SLEEVING (GREEN)	6.000 FT
482413004Y	#4 SLEEVING (GREEN) PER FT	30.000 FT
418199008A	N/P GRD I/D	1.000 EA
415917001A	RTD TAG	1.000 EA
NP2496L	MOTOR LUBE NAMEPLATE	1.000 EA
032510026D	CARRIAGE BOLT - 440	2.000 EA
034001014AB	FLAT WASHER 3/8"PLATED	2.000 EA
034001016AB	WSHR .562ID 1.375OD .109	2.000 EA
033300014AC	HEX NUT, SHIPPING - 400	21.000 EA
604797003C	SHIPPING BAG	1.000 EA

BALDOR-RELIANCE	FRAME	HP	TYPE	PHASE	HERTZ	RPM
SALES ORDER						
QUOTE	449	300	P	3	60	1785
VOLTS	AMPS	DUTY	AMB°C	INSUL	S.F.	NEMA DESIGN
4000	39.1	CONT	40	F	1.15	---

CODE LETTER	ENCL.	ROTOR WK ² (lb-ft ²)	STATOR RES.@25°C OHMS (BETWEEN LINES)	TYPICAL DATA
J	---	102.9	0.99072	

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	12.1	1800	5.7	0.0
1/4	75	15.6	1796	56.8	91.5
2/4	150	22.2	1793	77.0	94.5
3/4	225	30.2	1789	84.2	95.1
4/4	300	39.1	1785	87.1	95.0
5/4	375	48.5	1780	88.0	94.6
6/4	450	58.6	1776	88.0	94.0

SPEED TORQUE

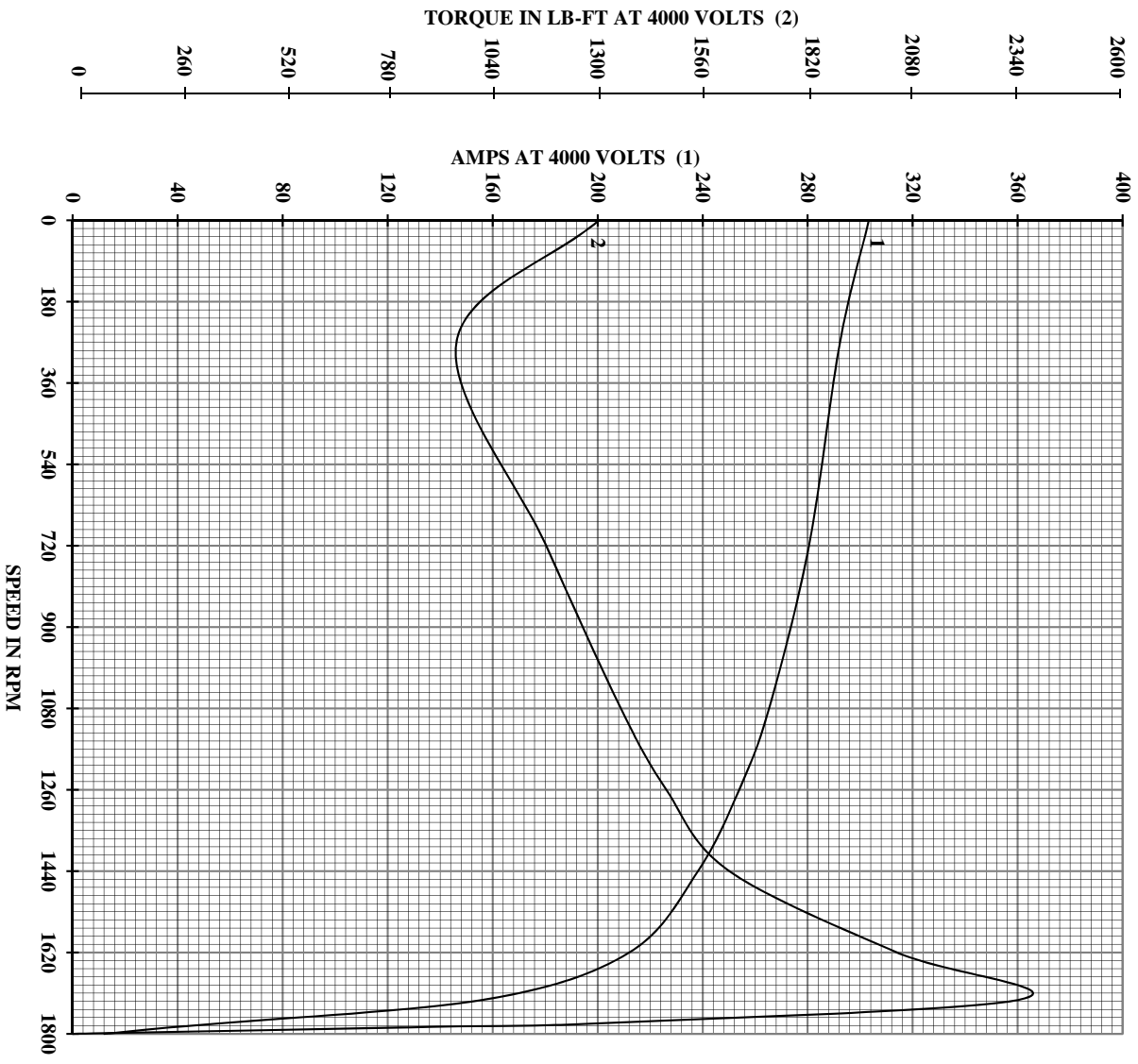
	RPM	TORQUE % FULL LOAD	TORQUE LB-FT	AMPERES
LOCKED ROTOR	0	148	1303	303.3
PULL UP	270	108	950	292.3
BREAKDOWN	1723	269	2375	158.2
FULL LOAD	1785	100	882	39.1

AMPERES SHOWN FOR **4000** VOLTS CONNECTION(S). IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE.

REVISION 0

 A MEMBER OF THE ABB GROUP	DR. BY GD	A-C MOTOR	A44WG4996-R001
	CK. BY ---	PERFORMANCE	SH 1 OF 5
	APP. BY T. Kelati		ISSUE DATE: 5/23/2014
	DATE 5/23/2014		

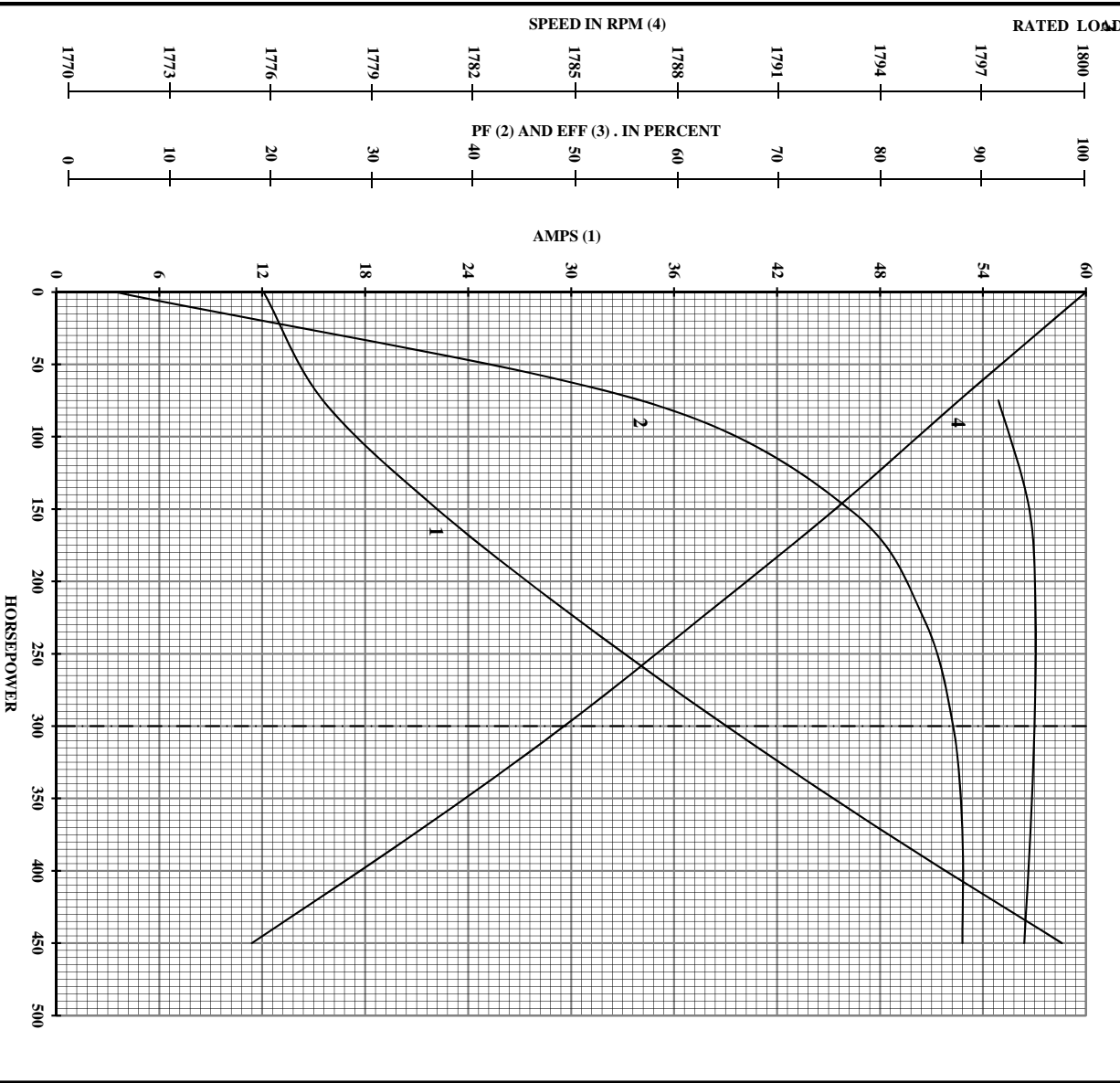
B-R.S.O.	QUOTE	HERTZ	60	AMB°C	40	CODE LETTER	J
FRAME	449	RPM	1785	INSUL	F	ENCLOSURE	---
HP	300	VOLTS	4000	S.F.	1.15	STATOR RES. @ 25°C	0.99072
TYPE	P	AMPS	39.1	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	102.9	TYPICAL DATA	



AMPERES SHOWN FOR **4000** VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE. REVISION 0

<p>BALDOR A MEMBER OF THE ABB GROUP</p>	DR. BY	GD	<p>A-C MOTOR PERFORMANCE CURVES</p> <p>A44W/G4996-R001 SH 2 OF 5 ISSUE DATE: 5/23/2014</p>
	CK. BY	---	
	APP. BY	T. Kelati	
DATE		5/23/2014	

B-R.S.O.	QUOTE	HERTZ	60	AMB°C	40	CODE LETTER	J
FRAME	449	RPM	1785	INSUL	F	ENCLOSURE	---
HP	300	VOLTS	4000	S.F.	1.15	STATOR RES. @ 25°C	0.99072
TYPE	P	AMPS	39.1	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	102.9	TYPICAL DATA	

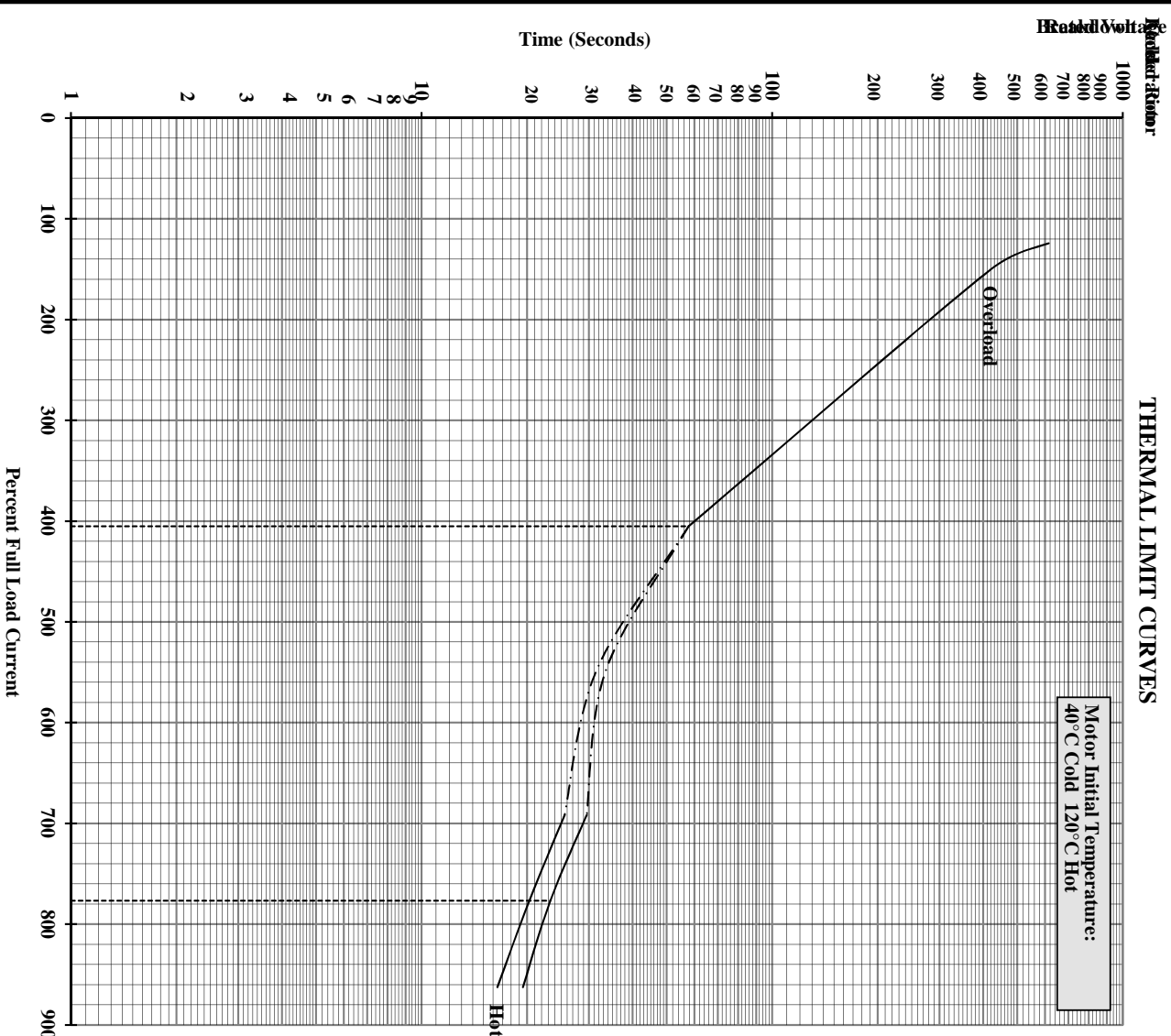


AMPERES SHOWN FOR **4000** VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE. REVISION 0

<p>BALDOR A MEMBER OF THE ABB GROUP</p>	DR. BY CD	<p>A-C MOTOR PERFORMANCE CURVES</p>	A44WG4996-
	CK. BY ---		SH 3 OF 5
	APP. BY T. Kelati		ISSUE DATE: 5/23/2014
DATE 5/23/2014			

B-R.S.O.	QUOTE	HERTZ	60	AMB°C	40	CODE LETTER	J
FRAME	449	RPM	1785	INSUL	F	ENCLOSURE	---
HP	300	VOLTS	4000	S.F.	1.15	STATOR RES. @ 25°C	0.99072
TYPE	P	AMPS	39.1	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	102.9	TYPICAL DATA	

THERMAL LIMIT CURVES



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CK. BY ---
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DATE 5/23/2014

A-C MOTOR
PERFORMANCE
CURVES

A44WG4996-
SH 4 OF 5
ISSUE DATE: 5/23/2014

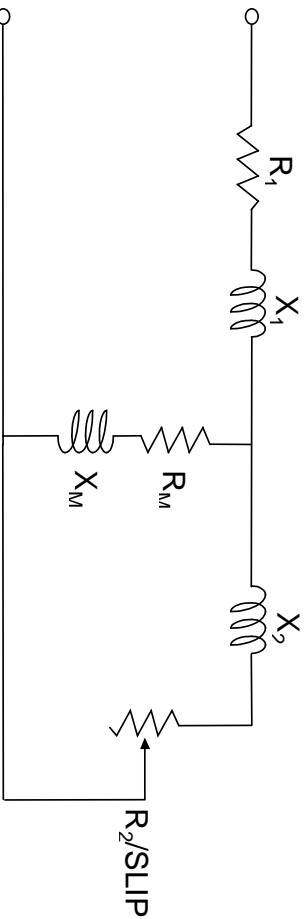
REVISION 0

B-R-S.O.	QUOTE	HERTZ	60	AMB°C	40	CODE LETTER	J
FRAME	449	RPM	1785	INSUL	F	ENCLOSURE	---
HP	300	VOLTS	4000	S.F.	1.15	STATOR RES. @25°C	0.99072
TYPE	P	AMPS	39.1	NEMA DESIGN	---	OHMS (BETWEEN LINES)	
PHASE	3	DUTY	CONT	ROTOR WK ² (lb-ft ²)	102.9	TYPICAL DATA	

EQUIVALENT CIRCUIT DATA

(Per Unit, Per Phase)

FULL LOAD		LOCKED ROTOR					
R ₁	0.00893	X ₁	0.07529	R ₁	0.00733	X ₁	0.06921
R ₂	0.00734	X ₂	0.09790	R ₂	0.01836	X ₂	0.03416
R _m	0.09348	X _m	2.60639	R _m	0.32673	X _m	2.24672
BASE OHMS			71.49200	BASE VOLTS			2309
SC Time Constant			0.037 Sec	X" = X _S			0.10337
OC Time Constant			0.977 Sec	X/R Ratio			9.65



Parallel Equivalent			
FL R _m ' pu	72.76431	LR R _m ' pu	15.77603
FL X _m ' pu	2.60974	LR X _m ' pu	2.29423

- R₁ = Stator dc resistance
- R₂ = Rotor resistance
- R_m = Core loss resistance
- SC = Short circuit
- OC = Open circuit
- X₁ = Stator leakage reactance
- X₂ = Rotor leakage reactance
- X_m = Magnetizing reactance
- FL = Full load
- LR = Locked rotor

X" = X_S = Subtransient reactance

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APP. BY T. Kelati
DATE 5/23/2014

A-C MOTOR
PERFORMANCE
CURVES

A44WG4996-
SH 5 OF 5
ISSUE DATE: 5/23/2014

617423-169

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

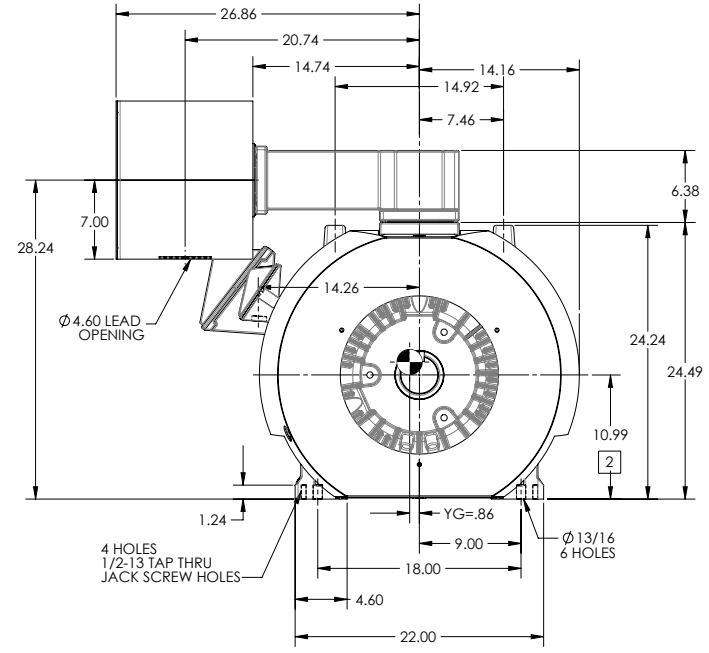
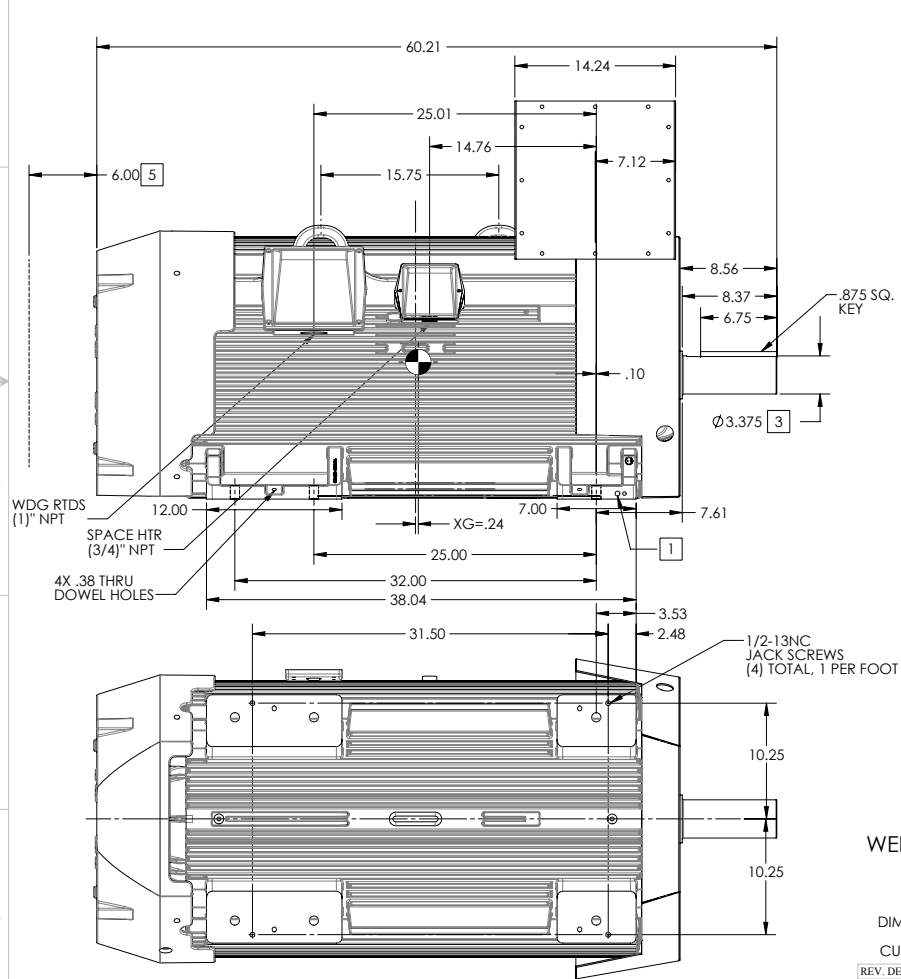
ENCLOSURE: TOTALLY ENCLOSED

FRAME GL449T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES DOWEL PIN HOLES, VERTICAL JACK SCREW HOLES, F1 AUX BOXES FOR WDG RTD & SPACE HEATERS AND 14X14X12 FABRICATED MAIN CBOX



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00, -.06
3. VARIES +.000, -.001
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY. MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

WEIGHT (LBS): 4000

DIMENSIONS ARE IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. A	VERSION: 01	REVISED: 01-40-05 08/31/2015	TDR: 00000941807
MODEL NO. 617423-169		REF:	
BY: RAGSSI		Material:	

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D/S GL449T W/ 14X14X12 CB,DOWEL JACK SCREWS,320 AUX,180 AUX

617423-169

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

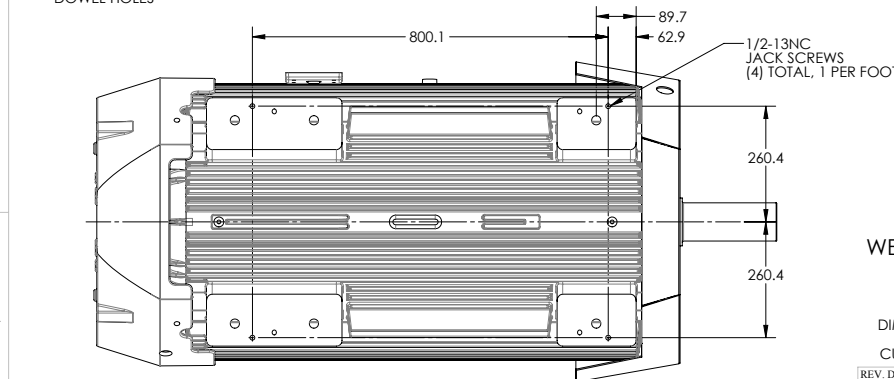
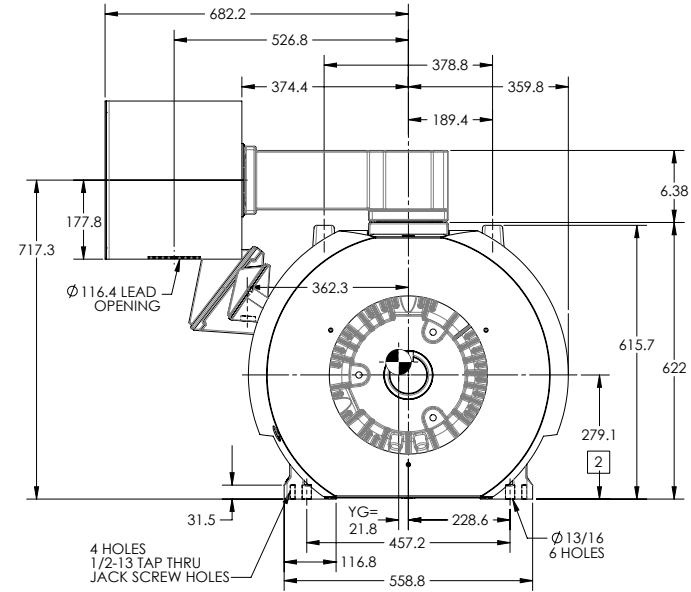
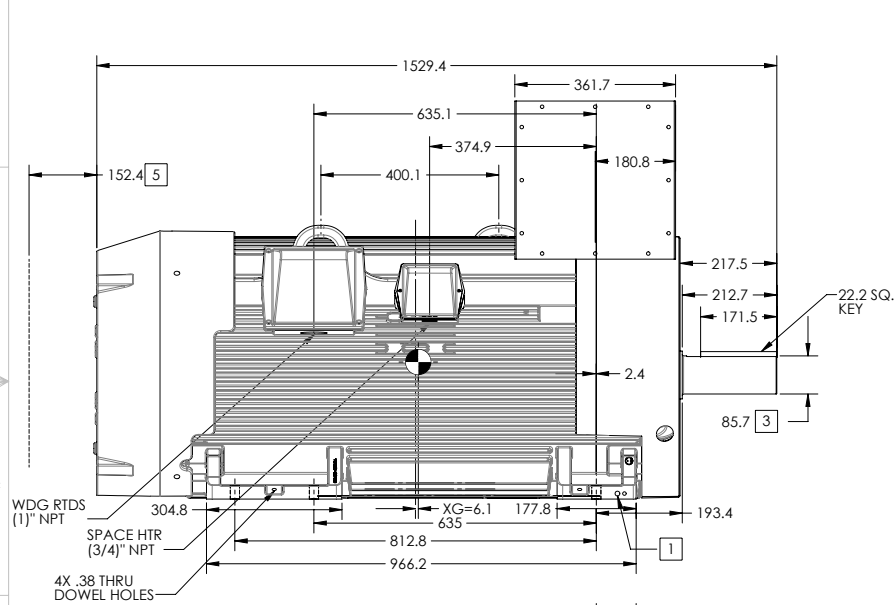
ENCLOSURE: TOTALLY ENCLOSED

FRAME GL449T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES DOWEL PIN HOLES, VERTICAL JACK SCREW HOLES, F1 AUX BOXES FOR WDG RTD & SPACE HEATERS AND 14X14X12 FABRICATED MAIN CBOX



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00-.15
3. VARIES +.000-.025
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY. MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .076MM T.I.R. TO 127MM DIA.

WEIGHT (N): 17800

DIMENSIONS ARE IN MM, SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

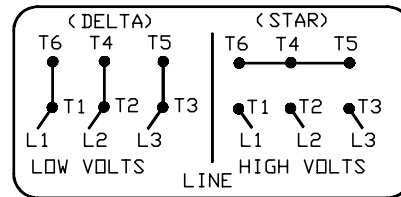
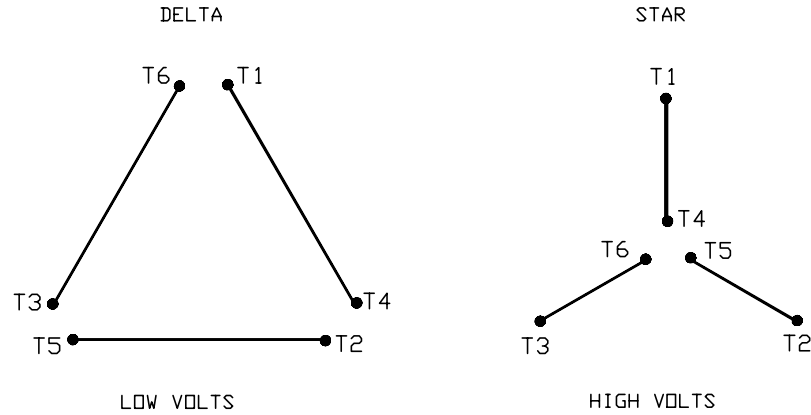
REV. DESC-ADD COG TO DRAWING			
REV: A	VERSION: 01	REVISED: 01-40-05 08/31/2015	TDR: 00000941807
MODEL NO. 617423-169		REF:	
BY: RAGSSI	Material:	C	

BALDOR

D/S GL449T W/ 14X14X12 CB,DOWEL JACK SCREWS,320 AUX,180 AUX

416820-004

A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 6 LEAD (DELTA/STAR CONNECTED)
 DUAL VOLTAGE (LOW VOLTS/HIGH VOLTS)



(N. P. 1767-CC)

416820-004

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: C	VERSION: 03	TDR: 000001009406
FILE: \RSN\00017\950	REVISED: 10:55:03 12/21/2016	BY: MGHMTT
MTL: -	Ⓢ □	

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A-C MOTOR CONNECTION DIAGRAM

SH 1 of 1

Marketing maintained PDF of MN408:

<http://www.baldor.com/support/Literature/Load.ashx/MN408?ManNumber=MN408>

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>