ABB BALDOR RELIANCE

Customer information packet

EM44304T-2340

300HP, 1785RPM, 3PH, 60HZ, L449T, A44200M, TEF
Class - None
Division - Not Applicable

7/9/2026 2:08:21 AM

Specifications

Enclosure	TEFC
Frame	L449T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	300.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	2300.0 V @ 60 HZ
	4000.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	39.100 A @ 4000.0 V
	67.800 A @ 2300.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Frame Prefix	L
Heater Indicator	Heater Included, 120 V
High Voltage Full Load Amps	39.1 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	H

Part Detail

Revision	W
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG4996
Layout	617423-169
Eff. date	05-06-2024
CD Diagram	416820-004
Poles	04
Leads	6#6 482406006P
Proprietary	False
Created date	10-15-2013

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Standards	Other
Motor Type	A44200M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	60.21 IN
Power Factor	87
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
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	

000901002AAA	
EQUIPPED WITH 120V/245W AND 24	0V/245W SPACE HEATERS
120V HTR= 1H1,1H2	240V HTR= 2H1,2H2

NP2496L
MOBIL POLYREX EM

BALDOR -RELIANCE SALES ORDER	FRAME	HP	TYPE	PHASE	HERTZ	RPM
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

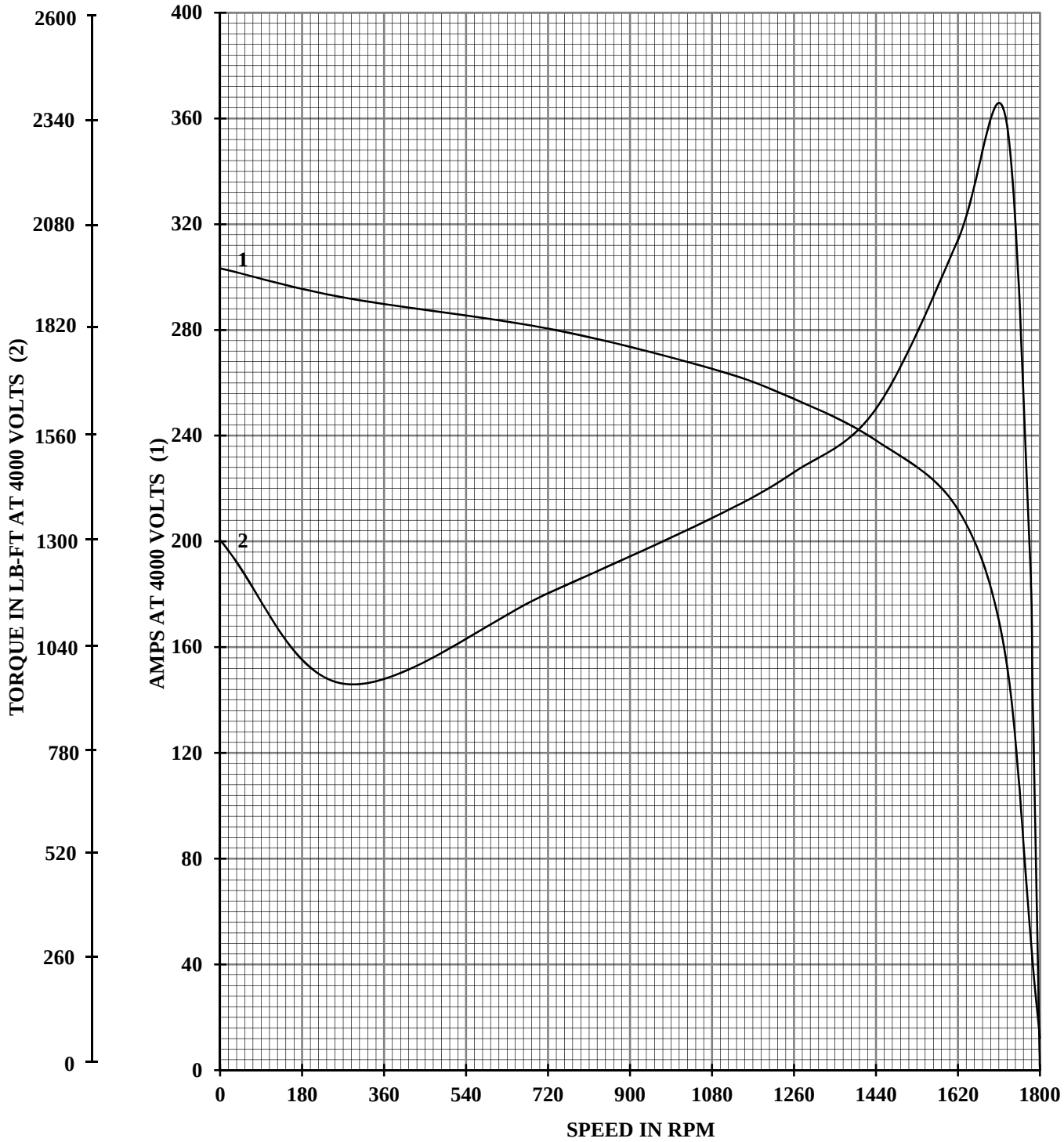
SPEED TORQUE

	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** VOLT CONNECTION(S). IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE VOLTAGE.

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	



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

REVISION 0

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY CD
CK. BY ---
APP. BY T. Kelati
DATE 5/23/2014

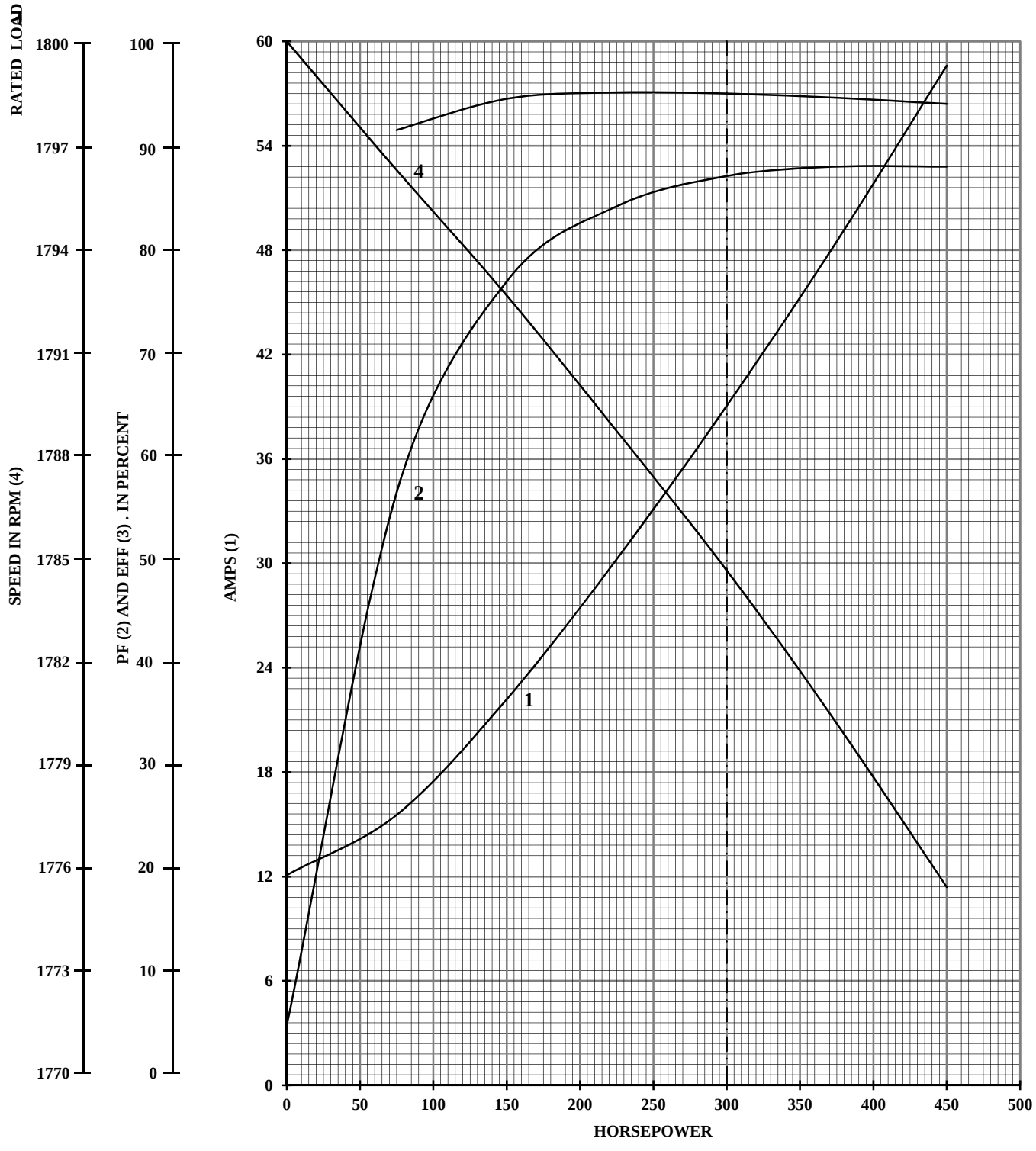
A-C MOTOR PERFORMANCE CURVES

A44WG4996-R001

SH 2 OF 5

ISSUE 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

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY CD
CK. BY ---
APP. BY T. Kelati
DATE 5/23/2014

A-C MOTOR PERFORMANCE CURVES

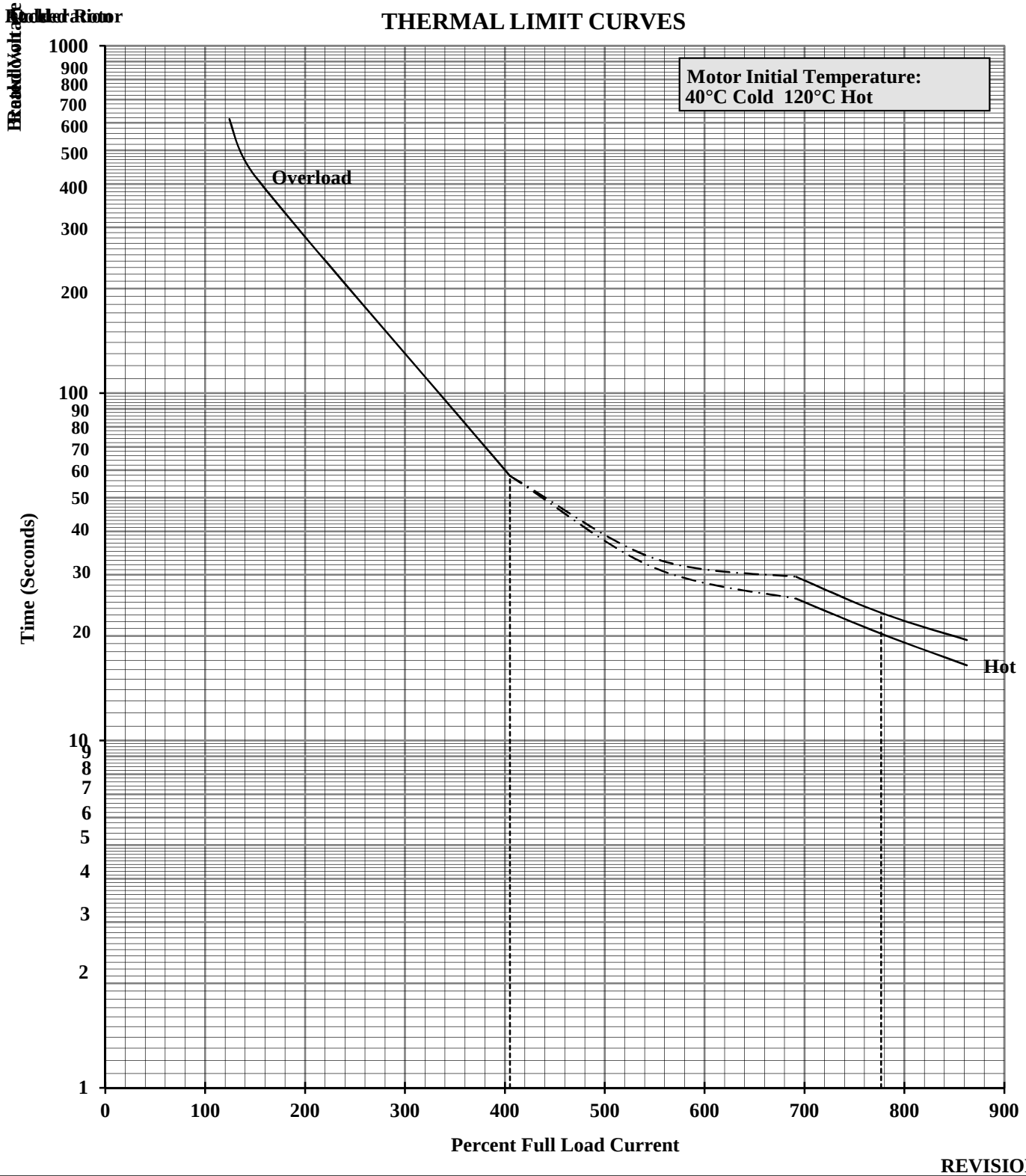
A44WG4996-

SH 3 OF 5

ISSUE 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



REVISION 0

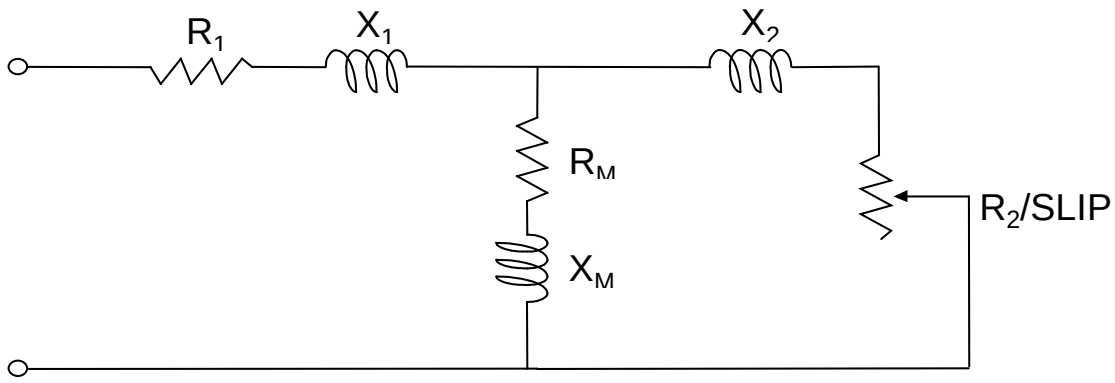
BALDOR A MEMBER OF THE ABB GROUP	DR. BY CD CK. BY --- APP. BY T. Kelati DATE 5/23/2014	A-C MOTOR PERFORMANCE CURVES	A44WG4996- SH 4 OF 5 ISSUE DATE 5/23/2014

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	

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

R_1 = Stator dc resistance
R_2 = Rotor resistance
R_M = Core loss resistance
SC = Short circuit
OC = Open circuit

X_1 = Stator leakage reactance
X_2 = Rotor leakage reactance
X_M = Magnetizing reactance
FL = Full load
LR = Locked rotor

X" = X_S = Subtransient reactance

REVISION 0

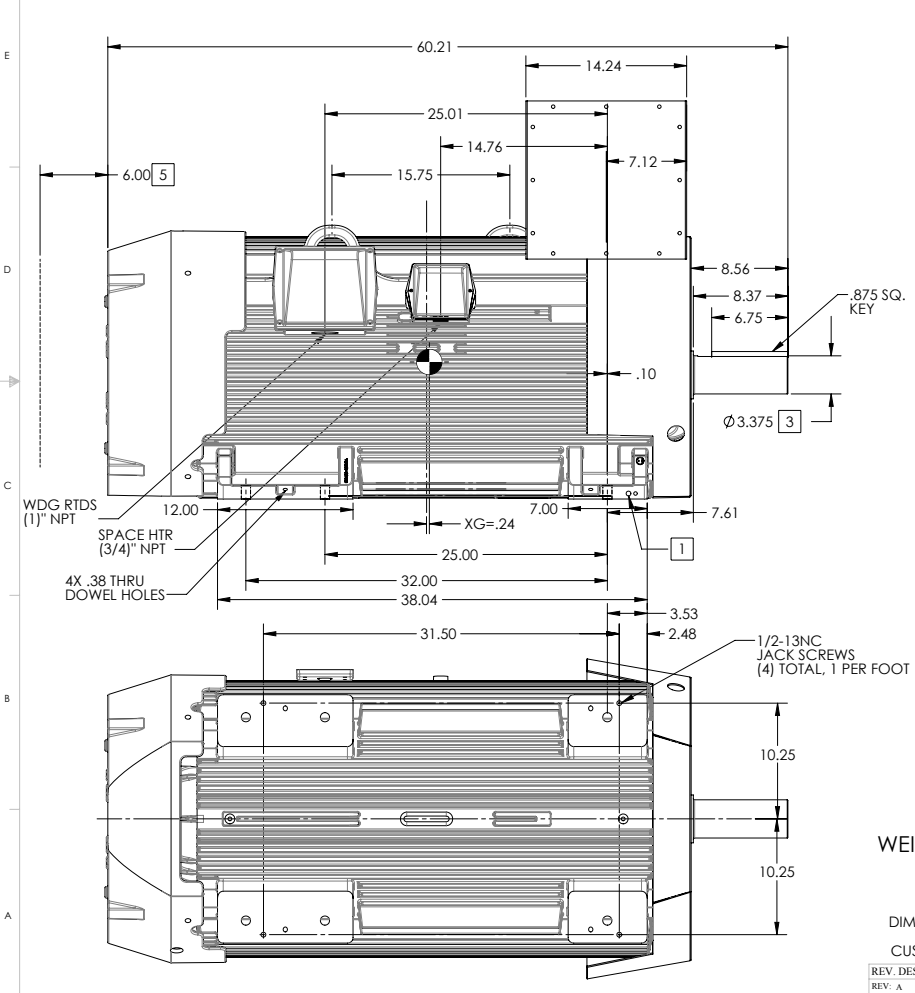
617423-169

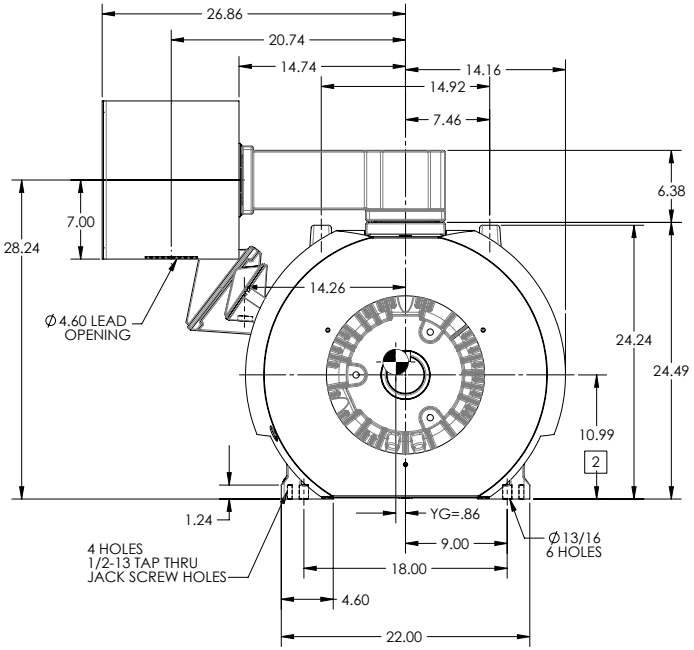
DUTY MASTER ALTERNATING CURRENT MOTORS

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 ENCROACH 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. DESC: ADD COG TO DRAWING			
REV: A	VERSION: 01	REVISED: 01:40:05 08/31/2015	TDR: 000000941807
MODEL NO. 617423-169			REF:
BY: RAGJSS1	Material:		C

BALDOR

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

617423-169

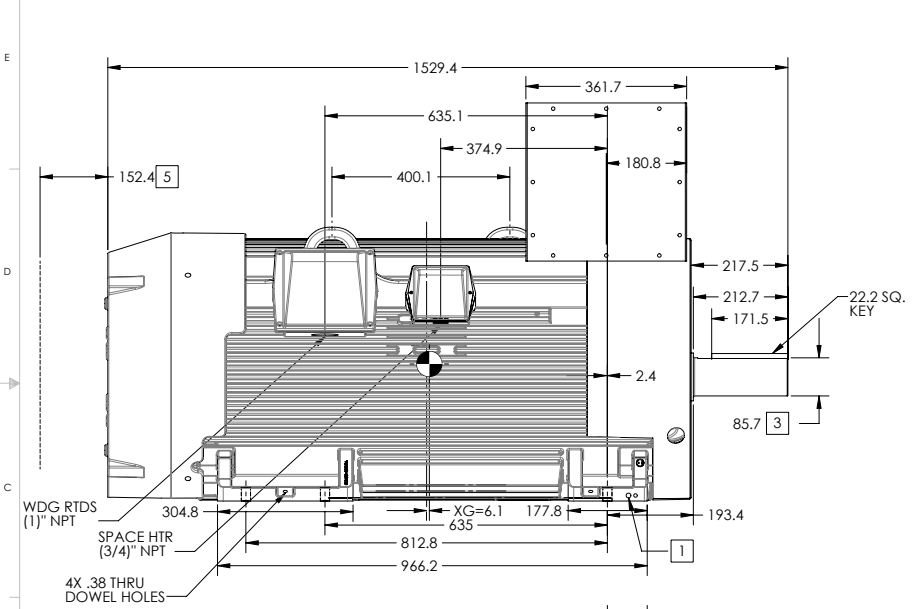
617423-169

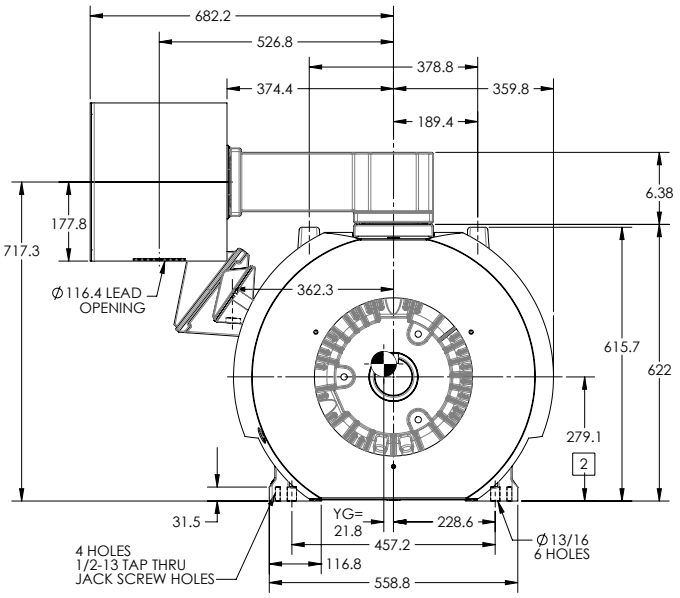
DUTY MASTER ALTERNATING CURRENT MOTORS

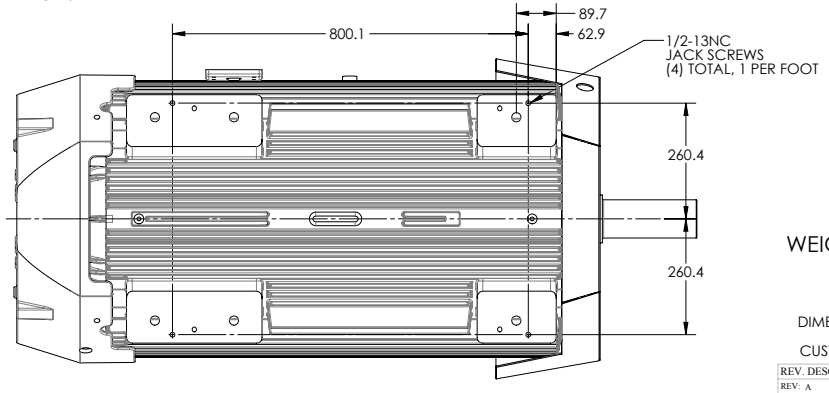
SQUIRREL-CAGE INDUCTION

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,-1.5
3. VARIES +.000,-.025
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCROACH 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.

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REV: A	VERSION: 01	REVISED: 01:40:05 08/31/2015	TDR: 000000941807
MODEL NO. 617423-169			REF:
BY: RAGJSS1	Material:		C

BALDOR

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

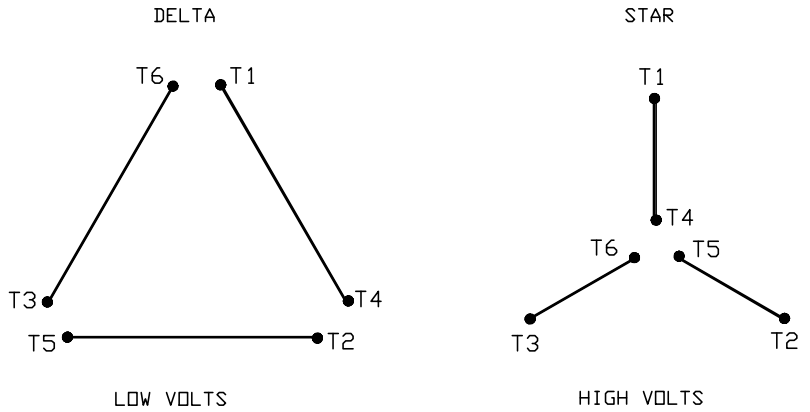
617423-169

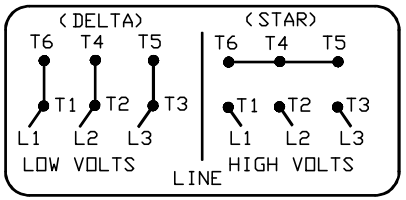
617423-169

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

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REV. LTR: C	VERSION: 03	TDR: 000001009406
FILE: \RSN\00017\950	REVISED: 10:55:03 12/21/2016	BY: MGHMTT
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BALDOR

A-C MOTOR CONNECTION DIAGRAM

SH 1 of 1