

ABB BALDOR RELIANCE III

Customer information packet

EM4416T-4

200HP, 3570RPM, 3PH, 60HZ, 447TS, A44104M, TEF

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	447TS
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	200.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US CCSAUSEEV CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	216.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	216.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 1 AWG

Part Detail

Revision	T
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3376
Layout	617427-087
Eff. date	10-06-2025
CD Diagram	416820-036
Poles	02
Leads	3#1 (02 per group)
Proprietary	False
Created date	08-14-2012

Motor Standards	NEMA
Motor Type	A44104M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	44.48 IN
Power Factor	91
Product Family	Other
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3570 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2349L														
SPEC NO.	P44G3911			CAT.NO.		EM4416T-4				FRAME		447TS		
HP	200	VOLTS		460		PHASE		3	DESIGN		B	TYPE		P
RPM	3570	AMPS		213		HZ		60	AMB		40	SF		1.15
DRIVE END BEARING	65BC03J30X			DUTY		CONT		INSUL.CLASS		F				
OPP D.E. BEARING	65BC03J30X			ENCL		TEFC		CODE		G				
SER.NO.				POWER FACTOR		91				NEMA-NOM-EFFICIENCY		95.4		
								MAX CORR KVAR		21.0		GUARANTEED EFFICIENCY		94.5
								NEMA NOM/CSA QUOTED EFF						
												MOTOR WEIGHT		

Accessories

Part number	Description	Multiplier
089490104B	BRKT,DE 089490103WCA, C-Face	P1
089490108A	D-FLANGE EP MACHINING, G28 W/6313 BRG	P1

ABB BALDOR RELIANCE III S/O							CUSTOMER INFORMATION PACKET							EM4416T-4 - 200HP, 3570RPM, 3PH, 60HZ, 447TS, A44104M, TEF																
							FRAME		HP		TYPE				PHASE/ HERTZ				RPM				VOLTS							
							447TS		200		P				3/60				3570				460							
							AMPS		DUTY		AMB °C/ INSUL				S.F.				NEMA DESIGN				CODE LETTER				ENCLOSURE			
							216		CONT		40/F				1.15				B				G				TEFC			
							E/S		ROTOR		TEST S.O.				TEST DATE				STATOR RES. @25 °C OHMS (BETWEEN LINES)											
							833199		418143006LE		---				---				.0144											
PERFORMANCE																														
LOAD				HP				AMPERES				RPM				% POWER FACTOR				% EFFICIENCY										
NO LOAD				0				46.4				3600				7.62				0										
1/4				50.0				79.5				3593				63.7				92.4										
2/4				100				119				3586				82.4				95.1										
3/4				150				166				3578				88.4				95.7										
4/4				200				216				3570				90.6				95.7										
5/4				250				269				3562				91.3				95.4										
SPEED TORQUE																														
								RPM				TORQUE % FULL LOAD				TORQUE LB.-FT.				AMPERES										
LOCKED ROTOR								0				151				444				1446										
PULL UP								1350				123				362				1331										
BREAKDOWN								3462				279				821				730										
FULL LOAD								3570				100				294				216										
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																														
TYPICAL DATA																														
								DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>J.J.HARRISON</u> APPROVED BY: <u>E.J.CHRISTIAN</u> DATE: <u>08/04/10</u>								AC MOTOR PERFORMANCE DATA				A44WG3376-R001 DATE ISSUED 06/19/19										

FRAME 447TS

RPM 3570

S.F. 1.15

ROTOR 418143006LE

HP 200

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 216

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

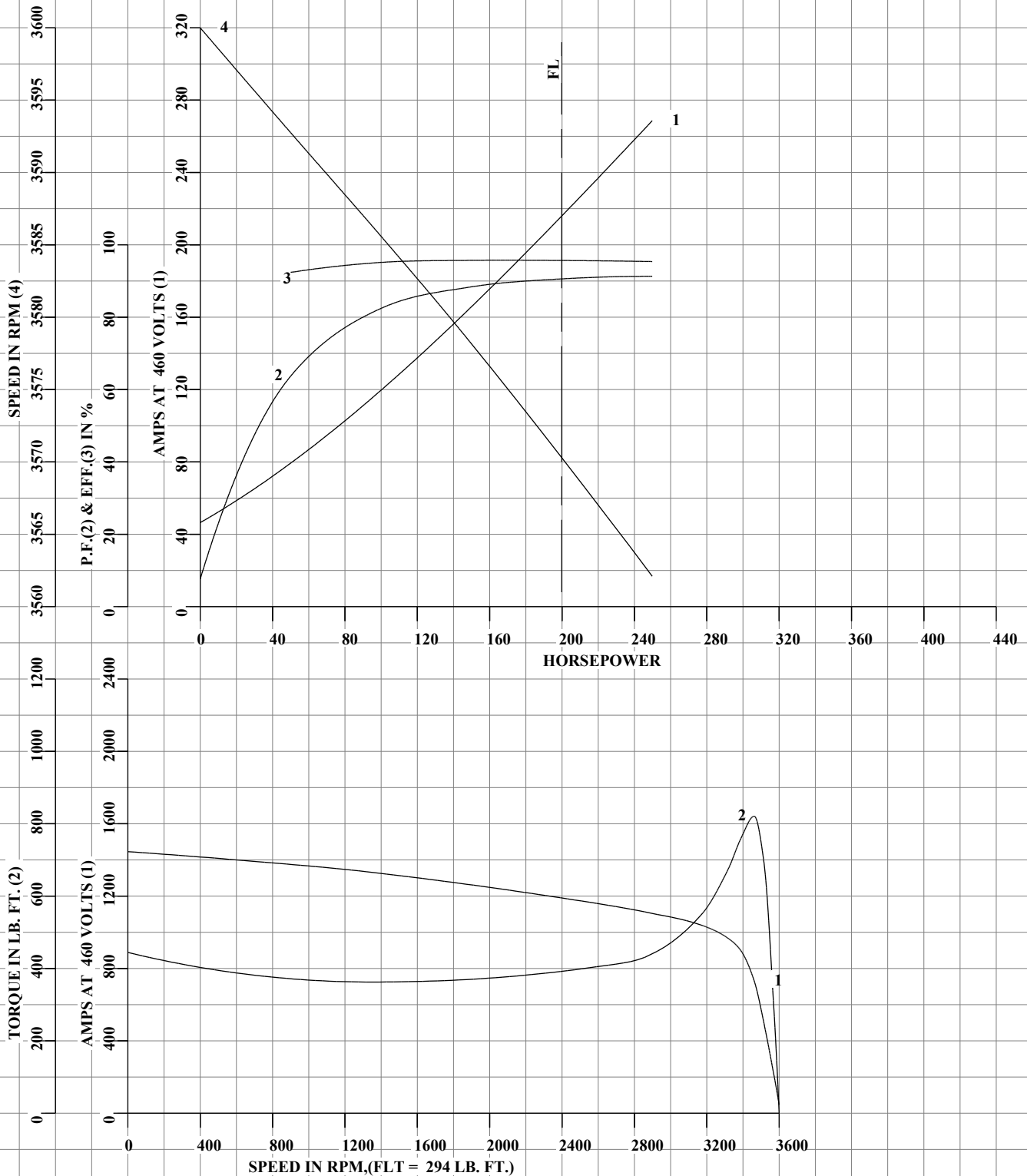
ENCLOSURE TEFC

STATOR RES. @ 25°C .0144

AMB °C / INSUL 40/F

E/S 833199

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: W. L. SMITH
 CHECKED BY: J.J. HARRISON
 APPROVED BY: E.J. CHRISTIAN
 DATE: 08/04/10

AC MOTOR
 PERFORMANCE
 DATA

A44WG3376-R001

ISSUE DATE 06/19/19

FRAME 447TS

RPM 3570

S.F. 1.15

ROTOR 418143006LE

HP 200

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 216

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

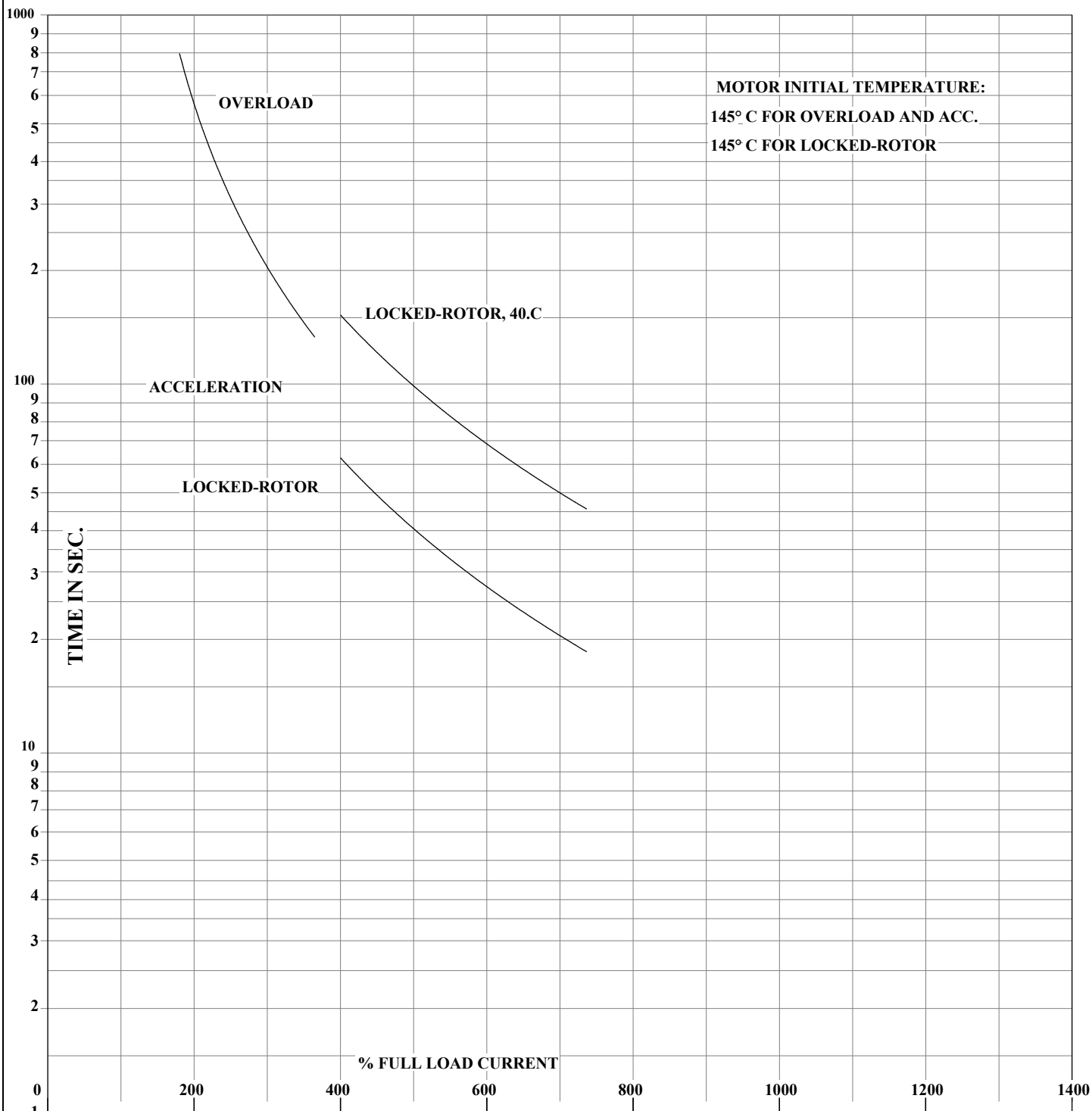
ENCLOSURE TEFC

STATOR RES. @ 25°C .0144

AMB °C / INSUL 40/F

E/S 833199

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: W. L. SMITH
CHECKED BY: J.J.HARRISON
APPROVED BY: E.J.CHRISTIAN
DATE: 08/04/10

AC MOTOR
PERFORMANCE
DATA

A44WG3376-R001

ISSUE DATE 06/19/19

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

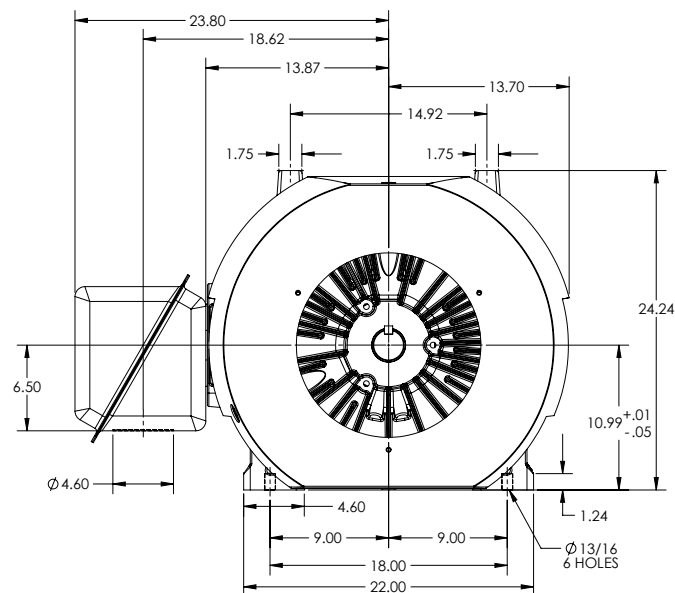
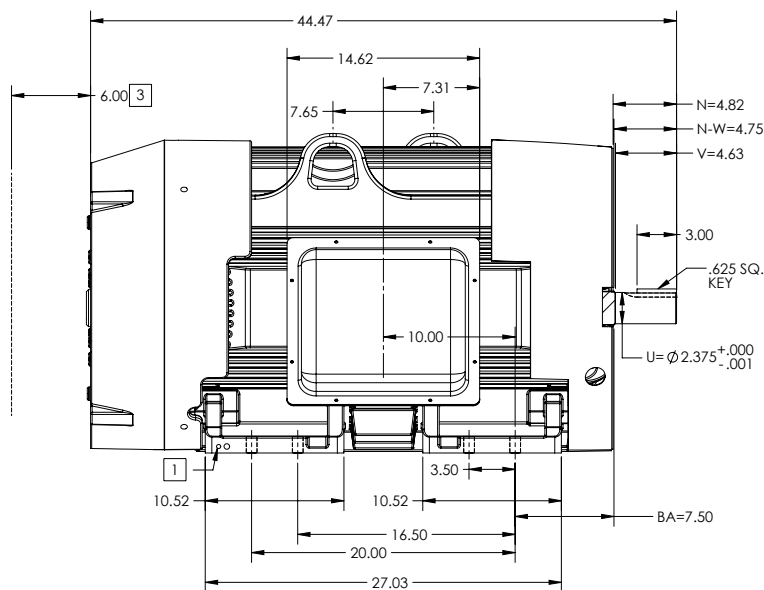
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
3. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

2 WEIGHT (LBS): 2480

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES

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

 SHEET NUMBER
1 OF 1

 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.

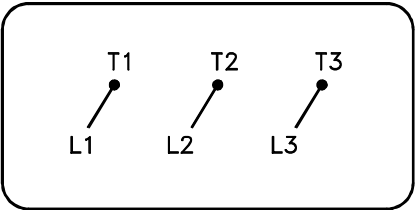
REV.	DESC: UPDATE DIMENSION ON SHAFT EXT.	VERSION:	REVISED:	TDR:
REV: B	VERSION: 02	REVISED: 08-03-29 02/19/2020	TDR: 000001133045	
MODEL NO. 617427-087			REF:	
BY: RAGRS1	Material:			

BALDOR

G447TS/445TS STD FOOTED SIDE/CENTER STEEL C/B

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1