

ABB BALDOR RELIANCE III

Customer information packet

AEM4400-4

100HP, 1785RPM, 3PH, 60HZ, 444U, A44078M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	445U
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	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	110.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.8 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	110.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 1 AWG
Motor Standards	Other
Motor Type	A44078M
Mounting Arrangement	F1

Part Detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG1566
Layout	617427-067
Eff. date	12-10-2025
CD Diagram	416820-036
Poles	04
Leads	3#1
Proprietary	False
Created date	08-23-2012

Number of Poles	4
Overall Length	44.75 IN
Product Family	Other
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2436L										
SPEC NO.	P44G4007			CAT.NO.					FRAME	445U
HP	100	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P	
RPM	1785	AMPS	110	HZ	60	AMB	40	SF	1.15	
DRIVE END BEARING	90BC03JPP30A		BLANK		DUTY	CONT	INSUL.CLASS		F	
OPP D.E. BEARING	90BC03JPP30A			ENCL	TEFC	CODE	F			
NEMA-NOM-EFF	95.8									
GUARANTEED EFFICIENCY	95.0									
SER.NO.										
MOTOR WEIGHT										

NP2496L	
MOBIL POLYREX EM	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS			
	445U	100	P	3/60	1785	460			
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.			
110	CONT	40/F	1.15	B	F	TEFC			
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)					
497581	418143-35-FE	---	---	.0459					
PERFORMANCE									
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY				
NO LOAD	0	25.3	1800	5.14	0				
1/4	25.0	35.3	1797	70.5	94.1				
2/4	50.0	55.7	1793	87.7	95.9				
3/4	74.9	80.8	1790	90.4	96.1				
4/4	100	110	1786	88.9	95.8				
5/4	125	143	1782	85.9	95.3				
SPEED TORQUE									
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES				
LOCKED ROTOR		0	139	410	681				
PULL UP		400	124	365	660				
BREAKDOWN		1730	246	723	398				
FULL LOAD		1786	100	294	110				
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA XE MOTOR-CALCULATED DATA-NEMA NOM. EFF. 95.8 PCT.									
		DR. BY J.J.HARRISON		A-C MOTOR PERFORMANCE A44WG1566-R001 DATA					
		CK. BY G.R.WEBB							
		APP. BY W.L.SMITH							
		DATE 07/24/02							
				ISSUE DATE 12/18/10					

FRAME 445U

RPM 1785
VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 110

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

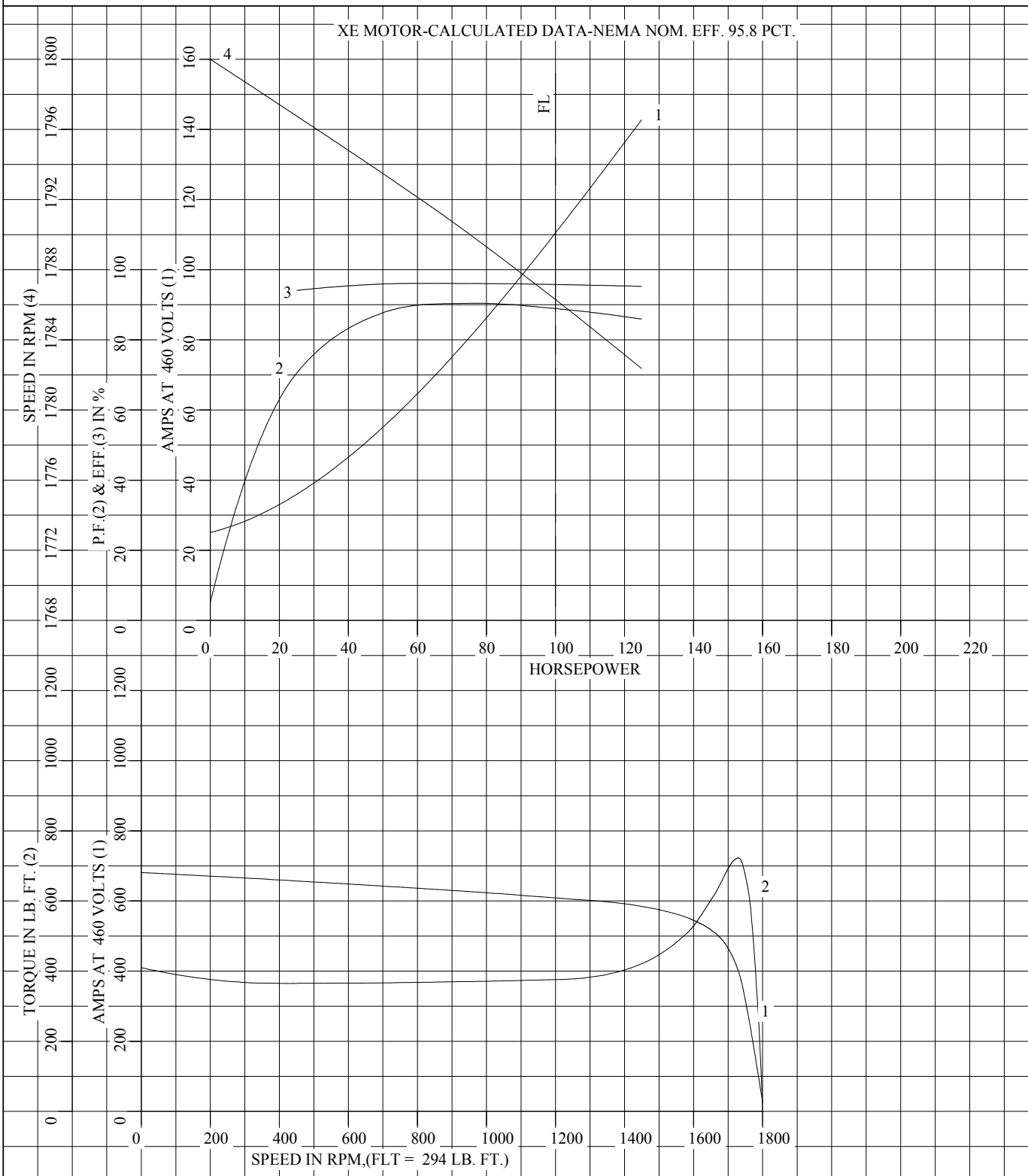
STATOR RES. @ 25 °C .0459

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 497581

OHMS (BETWEEN LINES)



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

BALDOR

DR. BY J.J.HARRISON
CK. BY G.R.WEBB
APP. BY W.L.SMITH
DATE 07/24/02

**A-C MOTOR
PERFORMANCE
CURVES** A44WG1566-R001
ISSUE DATE 12/18/10

REL. S.O.

RPM 1785

S.F. 1.15

ROTOR 418143-35-FE

FRAME 445U

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 110

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

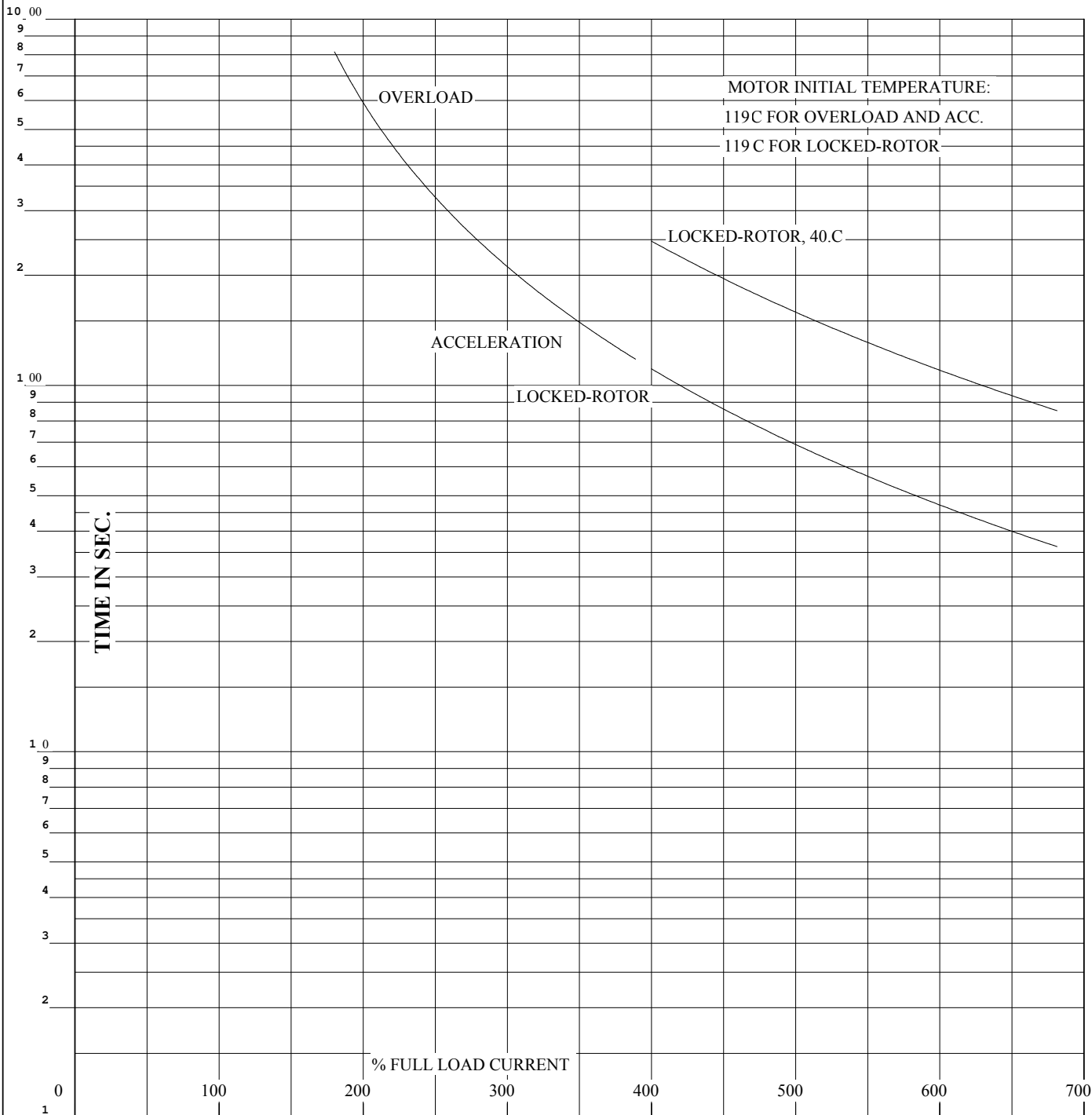
STATOR RES. @ 25 °C .0459

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 497581

OHMS (BETWEEN LINES)



THermal LIMIT CURVE

REMARKS:

XE MOTOR-CALCULATED DATA-NEMA NOM. EFF. 95.8 PCT.

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



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CK. BY G.R.WEBB
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DATE 07/24/02

**A-C MOTOR
PERFORMANCE CURVES**
A44WG1566-R001
ISSUE DATE 12/18/10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

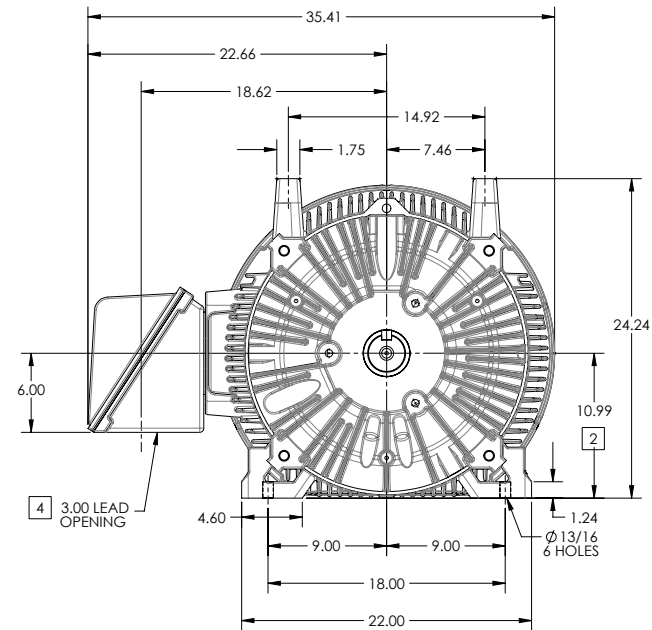
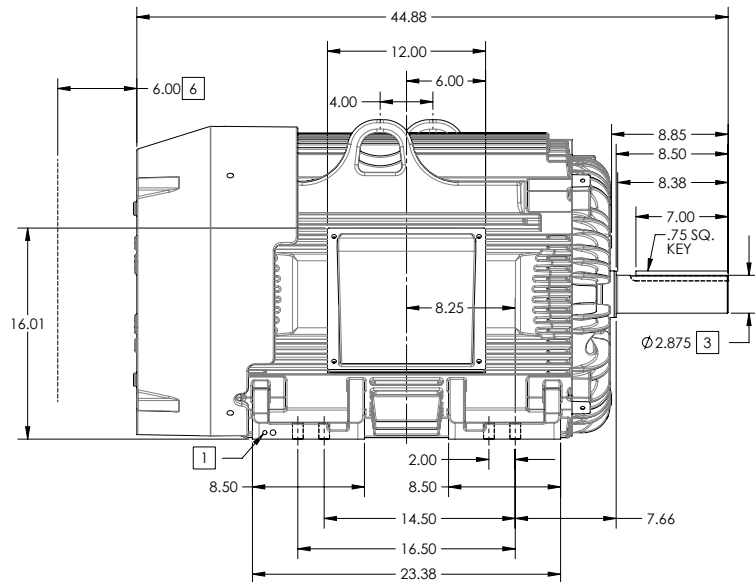
ENCLOSURE: TOTALLY ENCLOSED

FRAME G445U ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 444U FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO 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.

[5] WEIGHT (LBS): 2130

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

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

 SHEET NUMBER
1 OF 2

1907-27-119

REV. DESC: CORRECT C/BOX			
REV: B	VERSION: 02	REVISED: 12-48-26 07/29/2014	TDR: 000000864738
MODEL NO. 617427-067		REF:	
BY: RAGAH	Material:		

BALDOR

G445U/444U STD - FOOTED - SIDE/CENTER C/B

617427-067

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

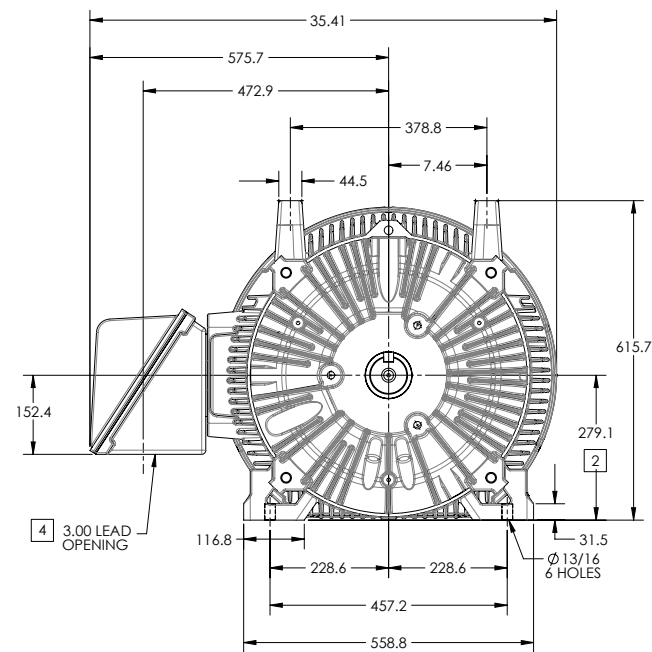
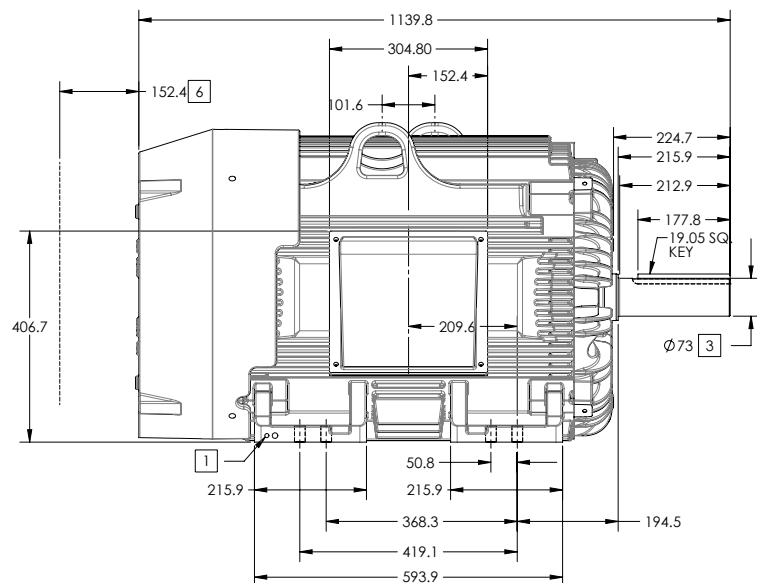
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4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

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 .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 970

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

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

 SHEET NUMBER
2 OF 2

L907-27-067

REV. DESC: CORRECT C/BOX			
REV: B	VERSION: 02	REVISED: 12-48-26 07/29/2014	TDR: 000000864738
MODEL NO. 617427-067		REF:	
BY: RAGAHJ	Material:		

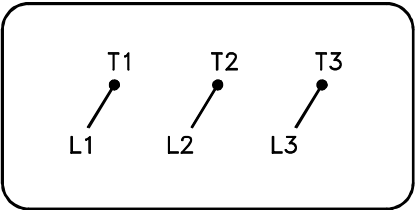
BALDOR

G445U/444U STD - FOOTED - SIDE/CENTER C/B

617427-067

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