

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							

Parts List

Part number	Description	Quantity
SA249405	SA P44G3911	1.000 ea
RA236270	RA P44G3911	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
089490097A	BRKT 089490102WCA	1.000 ea
415072001B	CLAMP	1.000 ea
083199126RA	G28 MOLDED FAN COVER W/BAFFLE ASSEMBLY	1.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
412118006A	DRAIN	2.000 ea
034530056AB	1/8 X 7 PP NIPPLE	1.000 ea
032018012BK	HHCS 5/16-16X1-1/2PLATED	4.000 ea
702675001D	FAN 250-440	1.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018028CK	HHCS 3/8-16X3-1/2 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
410700004F	WSHR	1.000 ea
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
034690005AB	PPLG 3/4 PLATED	2.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
702623012A	THERMAL BARRIER, G28	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
034000013AB	WSHR 5/16" PLATED-440	3.000 ea

089490097A	BRKT 089490102WCA	1.000 ea
415915007K	GASK, 26" LAC	1.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
415045002E	SLGR	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
702658001B	+C/BOX, PAINTED 440	1.000 ea
702658002A	+C/BOX CVR, PAINTED 440	1.000 ea
406056008A	GASKET, TERBD 440	1.000 ea
418153001A	GASK 440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.375 ga
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180024HA	KEY 5/8X5/8X3 L	1.000 ea
604797056	WOOD BASE 447 60 X 41-1/2 BLT 20 X 18	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea

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>		AC MOTOR PERFORMANCE DATA		A44WG3376-R001					
		CHECKED BY: <u>J.J.HARRISON</u>									
		APPROVED BY: <u>E.J.CHRISTIAN</u>		DATE: <u>08/04/10</u>				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

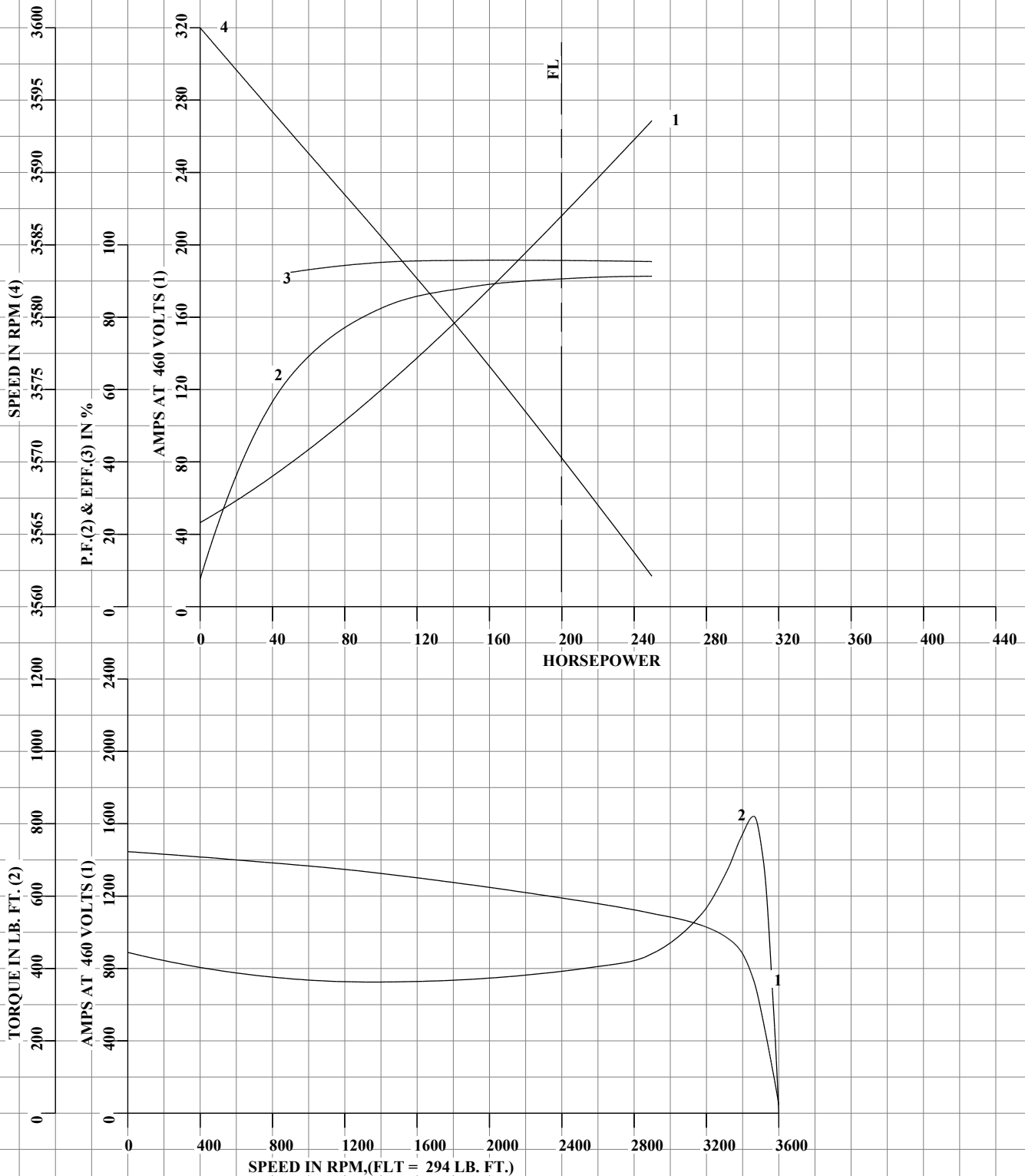
ENCLOSURE TEFC

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

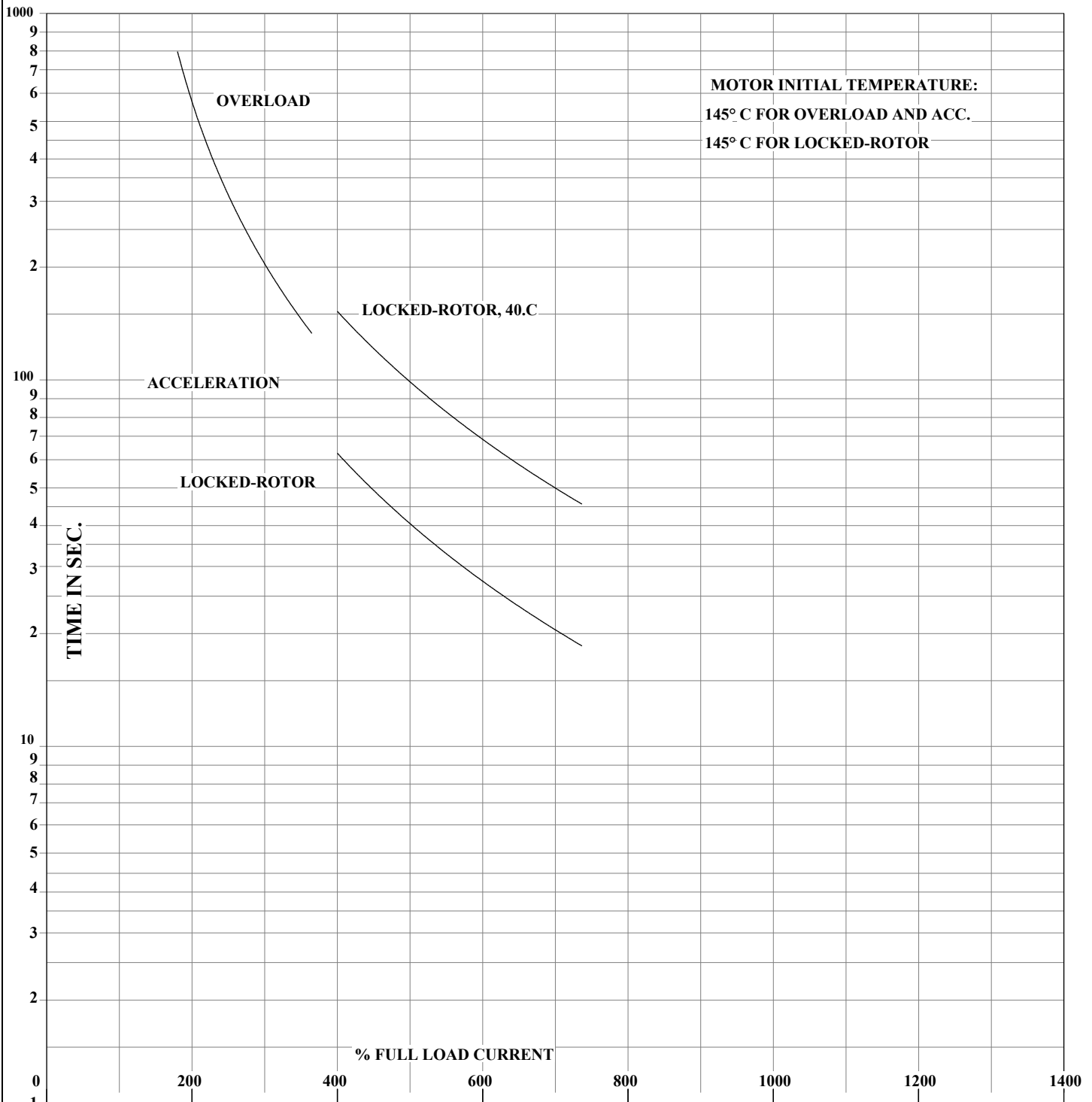
ENCLOSURE TEFC

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.



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AC MOTOR
PERFORMANCE
DATA

A44WG3376-R001

ISSUE DATE 06/19/19

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

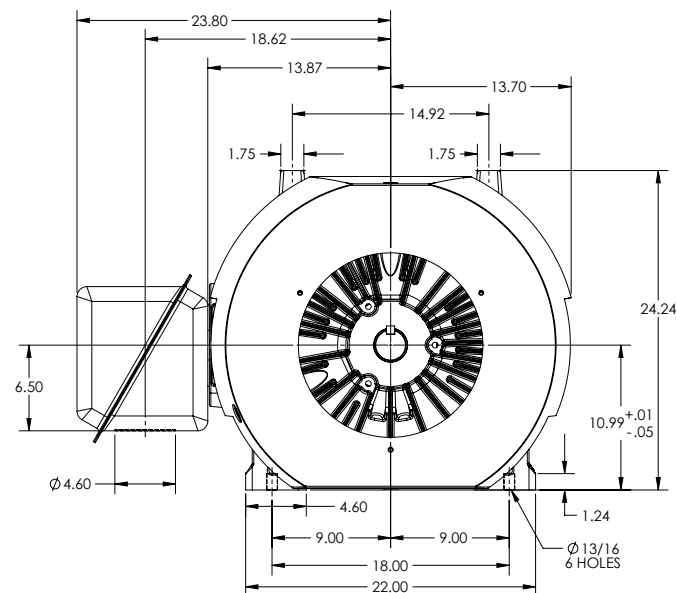
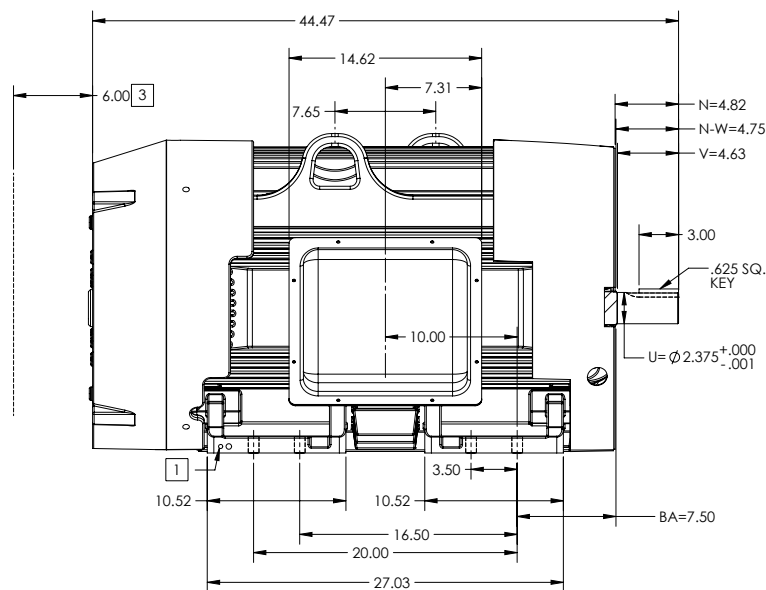
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS FRAME MOUNTING HOLES



- GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
- MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
- 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