

ABB BALDOR RELIANCE III

Customer information packet

EM4413T-4

150HP, 3570RPM, 3PH, 60HZ, 445TS, A4478M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	445TS
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	150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	164.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	164.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 2 AWG
Motor Standards	NEMA
Motor Type	A4478M

Part Detail

Revision	S
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3535
Layout	617435-049
Eff. date	02-16-2026
CD Diagram	416820-036
Poles	02
Leads	3#2 (02 per group)
Proprietary	False
Created date	08-13-2012

Mounting Arrangement	F1
Number of Poles	2
Overall Length	41.08 IN
Power Factor	90
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.	P44G3906			CAT.NO.		EM4413T-4				FRAME	445TS	
HP	150	VOLTS		460	PHASE		3	DESIGN		B	TYPE	P
RPM	3570	AMPS		164	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		90		NEMA-NOM-EFFICIENCY				95
						MAX CORR KVAR			20.0	GUARANTEED EFFICIENCY		94.1
						NEMA NOM/CSA QUOTED EFF						
						MOTOR WEIGHT						

Parts List

Part number	Description	Quantity
SA249401	SA P44G3906	1.000 ea
RA236266	RA P44G3906	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	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
412118006A	DRAIN	2.000 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
034530056AB	1/8 X 7 PP NIPPLE	1.000 ea
078546004C	FAN 440 702675001D	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
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700004F	WSHR	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
034690005AB	PPLG 3/4 PLATED	2.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
702623012A	THERMAL BARRIER, G28	1.000 ea

032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
415915007K	GASK, 26" LAC	1.000 ea
089490097A	BRKT 089490102WCA	1.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 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
702658001A	CONDUIT BOX, E440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	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	0.250 ga
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
035000001A	ALFTG 1/8" 1610-BL	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
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
PK5004A09	BASE 48 X 39-1/4 WITH STACKED 2X4 RUUNER	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							CUSTOMER INFORMATION PACKET							EM4413T-4 - 150HP, 3570RPM, 3PH, 60HZ, 445TS, A4478M, TEFC						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			445			150			P			3/60			3570			460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
164			CONT			40/F			1.15			B			G			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
0			0			---			---			.0292								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			34.7			3600			6.89			0					
1/4			37.5			59.2			3593			63.9			92.9					
2/4			75.1			90.3			3585			81.7			95.3					
3/4			113			125			3578			87.8			95.7					
4/4			150			164			3570			89.9			95.6					
5/4			187			204			3562			90.4			95.2					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			138			304			1081					
PULL UP						1350			110			242			997					
BREAKDOWN						3461			280			618			552					
FULL LOAD						3570			100			221			164					
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																				
CALCULATED DATA NEMA NOMINAL EFFICIENCY = 95.0 PCT.																				
						DRAWN BY: <u>CD</u> CHECKED BY: <u>CD</u> APPROVED BY: <u>R. MCELVEEN</u> DATE: <u>1/18/11</u>						AC MOTOR PERFORMANCE DATA			A44WG3535-R001 DATE ISSUED 03/04/20					

FRAME 445

RPM 3570

S.F. 1.15

ROTOR 0

HP 150

VOLTS 460

NEMA DESIGN B

TEST S.O. CALCULATED DATA

TYPE P

AMPS 164

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

ENCLOSURE TEFC

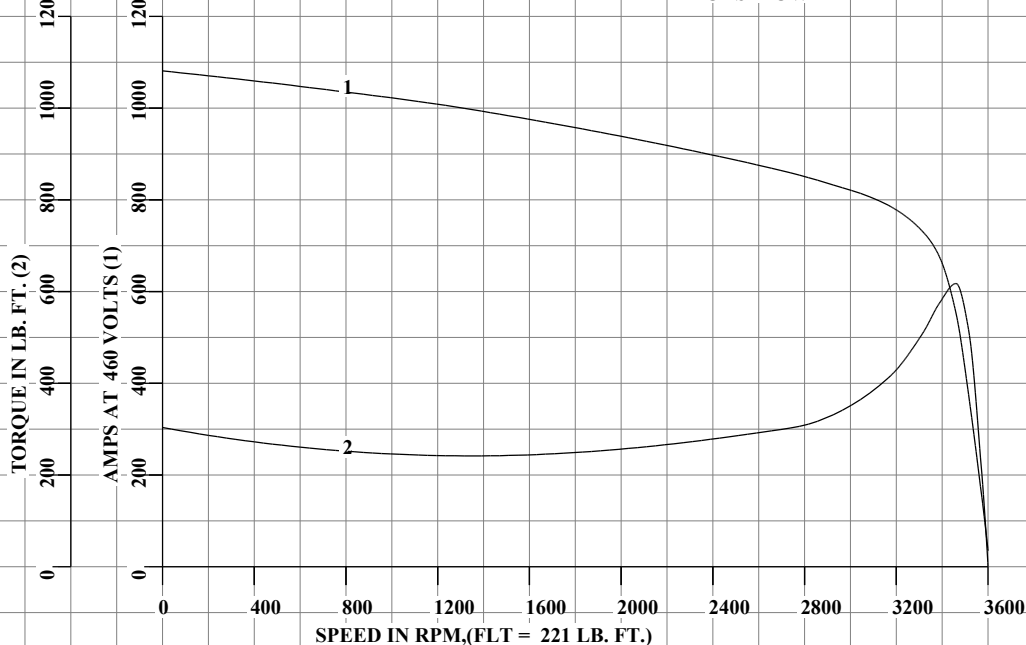
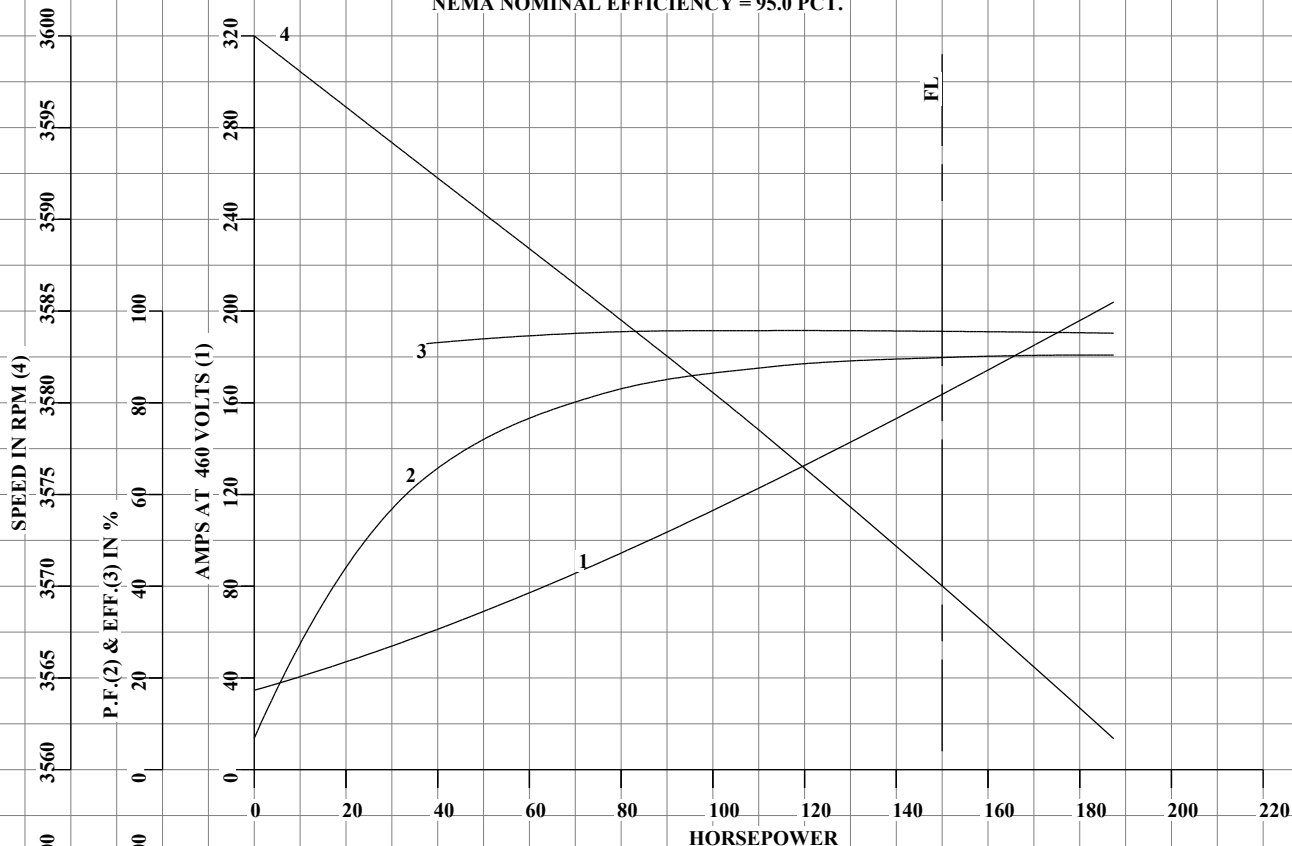
STATOR RES. @ 25°C .0292

AMB °C / INSUL 40/F

E/S 0

OHMS (BETWEEN LINES)

NEMA NOMINAL EFFICIENCY = 95.0 PCT.



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

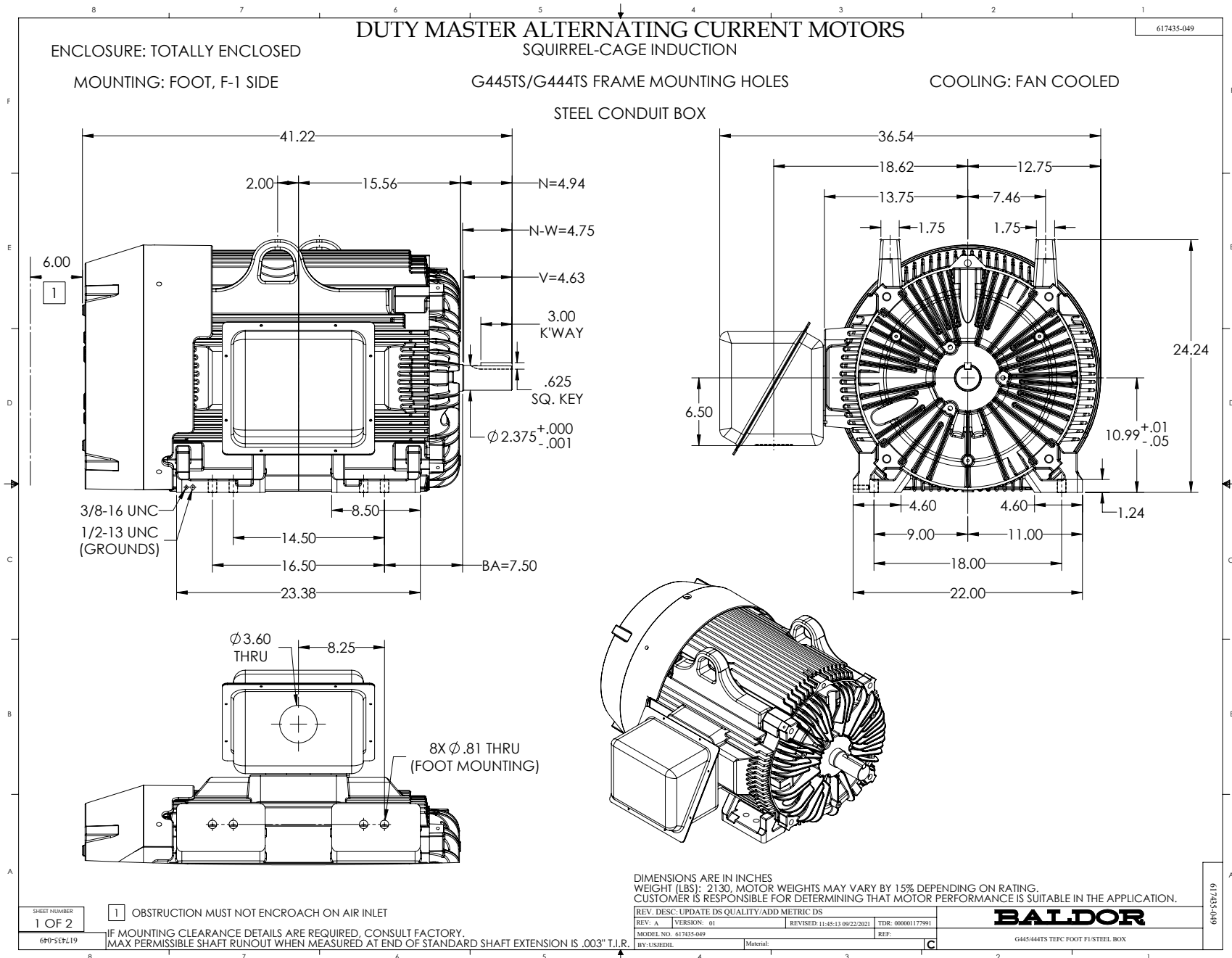


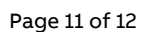
DRAWN BY: CD
CHECKED BY: CD
APPROVED BY: R. MCELVEEN
DATE: 1/18/11

AC MOTOR
PERFORMANCE
DATA

A44WG3535-R001

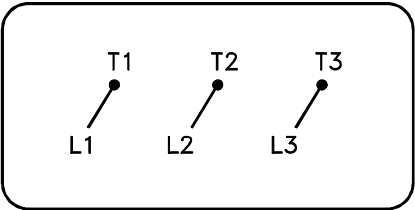
ISSUE DATE 03/04/2014





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