

ABB BALDOR RELIANCE III

Customer information packet

ECP4421T-4

125HP, 885RPM, 3PH, 60HZ, 447T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	447T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	30-60
Current @ Voltage	149.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	149.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 1/0 AWG
Motor Standards	NEMA

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2397
Layout	617427-002
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	08
Leads	3#1/0
Proprietary	False
Created date	01-09-2014

Motor Type	A44104M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	48.24 IN
Power Factor	83
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	885 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238													
CAT NO	ECP4421T-4			SPEC NO.		A44-5310-2397							
HP	125	AMPS	149	VOLTS		460	DESIGN		B				
FRAME	447T	RPM	885	HZ	60	AMB	40	SF	1.15				
D.E. BRG.DATA	6318	O.D.E. BRG.DATA			6318	PH	3	DUTY	CONT	INSUL.CLASS	F		
D.E. BRG.	90BC03J30X			TYPE	P	ENCL	TEFC	CODE	F				
O.D.E. BRG.	90BC03J30X			POWER FACTOR			83	NEMA NOM EFFICIENCY			95		
3/4 LOAD EFF.	95.4	MAX CORR KVAR			30.0	GUARANTEED EFFICIENCY			94.1				
TEMP CODE	T3	TEMP =	200										
CHP HZ	60-90	CT HZ	30-60	VT HZ	0-60								
INVERTER-TEMP-CODE	T3												
SER.NO.				MOTOR WEIGHT									

Parts List

Part number	Description	Quantity
SA274540	SA A44-5310-2397	1.000 ea
RA261125	RA A44-5310-2397	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
004824015A	GREASE POLYREX EM	1.156 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
034690005AB	PPLG 3/4 PLATED	2.000 ea
702618004T	FAN KB 182/70 (112) 440	1.000 ea
083199082A	G28 FAN COVER MACHINING SHORT VERSION	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
410700004A	WSHR	1.000 ea
415045002A	SLGR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034530044AB	P/NIP 1/8X5-1/2L GALV.	1.000 ea
034530044BB	P/NIP 1/4X5-1/2L PLT	1.000 ea

034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
415045002A	SLGR	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
415915007G	GASK, LAC	1.000 ft
418151014G	RETAIN RING	1.000 ea
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 ea
032018008BK	HHCS 5/16-18X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053014A	GASK 440	1.000 ea
076870000BA	CONDUIT BOX - 440 - 1/2-13 GROUND	1.000 ea
076871000A	+CBOX CVR BLKT - 449	1.000 ea
406056007A	GASKET, 440	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
604797056	WOOD BASE 447 60 X 41-1/2 BLT 20 X 18	1.000 ea
032510026D	CARRIAGE BOLT - 440	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
412118006A	DRAIN	2.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS			
	447T	125	P	3/60	885	460			
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.			
149	CONT	40/B	1.15	B	F	TEFC-XEX			
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)					
401871	418143-86-GE	---	---	.0388					
PERFORMANCE									
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY				
NO LOAD	0	46.0	900	4.14	0				
1/4	31.3	58.5	897	53.8	93.1				
2/4	62.6	83.1	894	74.0	95.2				
3/4	93.7	114	890	80.6	95.4				
4/4	125	149	886	82.7	95.0				
5/4	156	186	882	83.6	94.3				
SPEED TORQUE									
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES				
LOCKED ROTOR		0	157	1160	870				
PULL UP		270	148	1095	824				
BREAKDOWN		841	242	1795	472				
FULL LOAD		886	100	740	149				
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-TYPICAL DATA-NEMA NOM. EFF. 95.0 PCT. GUARANTEED MIN. EFF. 94.5 PCT.									
		DR. BY D. M. BYRD		A-C MOTOR PERFORMANCE A44WG2397-R001 DATA					
		CK. BY J. T. PARKER							
		APP. BY D. M. BYRD							
		DATE 07/30/96							
				ISSUE DATE 02/22/12					

FRAME 447T

RPM 885 VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 125

AMPS 149

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC-XEX

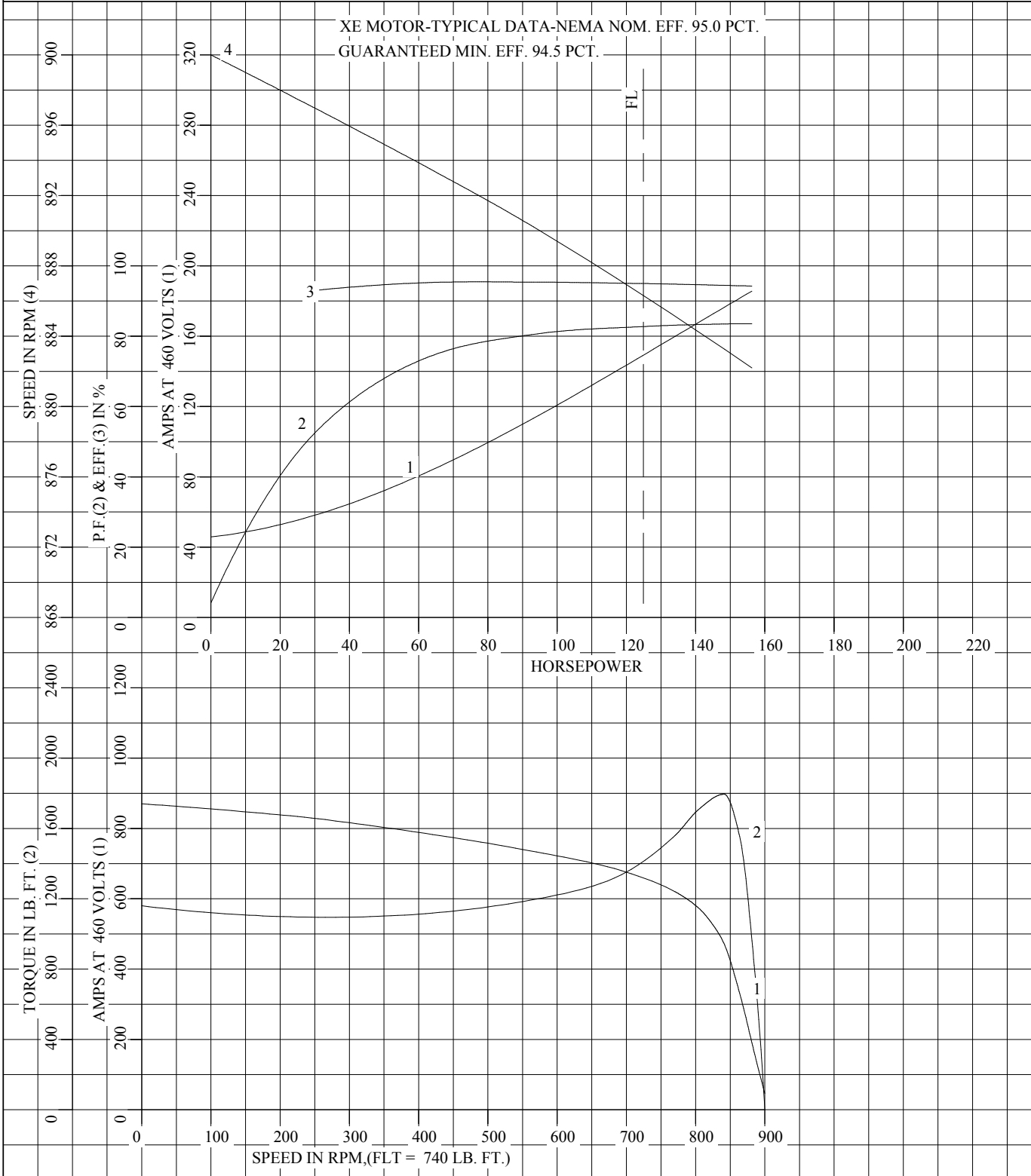
STATOR RES. @ 25 °C .0388

PHASE/HERTZ 3/60

AMB °C/INSUL 40/B

E/S 401871

OHMS (BETWEEN LINES)



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



DR. BY D. M. BYRD
CK. BY J. T. PARKER
APP. BY D. M. BYRD
DATE 07/30/96

**A-C MOTOR
PERFORMANCE CURVES** A44WG2397-R001
ISSUE DATE 02/22/12

REL. S.O.

RPM 885

S.F. 1.15

ROTOR 418143-86-GE

FRAME 447T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 125

AMPS 149

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC-XEX

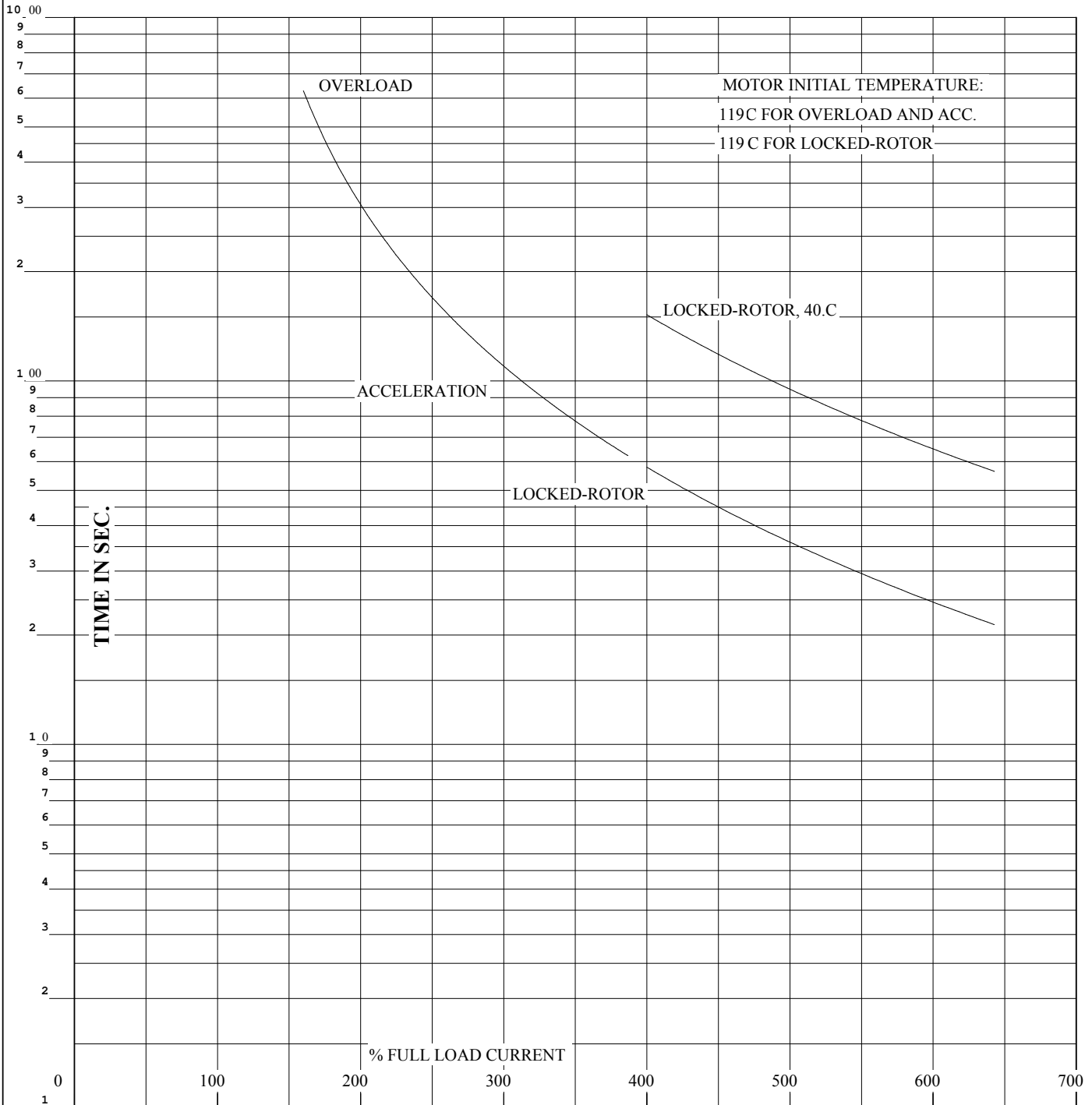
STATOR RES. @ 25 °C .0388

PHASE/HERTZ 3/60

AMB °C/INSUL 40/B

E/S 401871

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 95.0 PCT.

GUARANTEED MIN. EFF. 94.5 PCT.

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



DR. BY D. M. BYRD
CK. BY J. T. PARKER
APP. BY D. M. BYRD
DATE 07/30/96

**A-C MOTOR
PERFORMANCE A44WG2397-R001
CURVES** ISSUE DATE 02/22/12

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

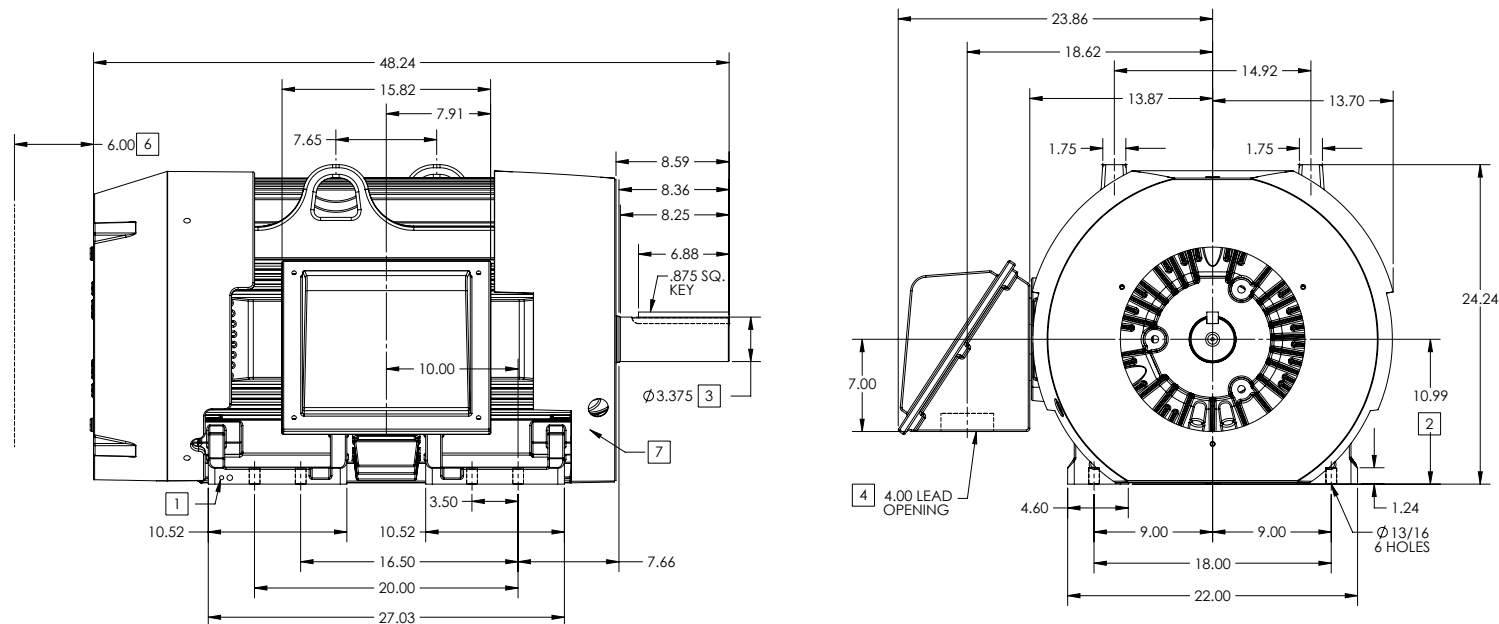
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES $\pm .00$, $-.06$
3. VARIES $\pm .000$, $-.001$
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET.
7. AIR DEFLECTOR INSTALLED WHEN REQUIRED.

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): 2515

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.

REV. A	VERSION: 01	REVISED: 08/25/13 02/15/2013	TDR: 000000786306
MODEL NO. 617427-002	BY: MGHWC	Material:	REF:

BALDOR

G447T/445T STD - FOOTED - SIDE/CENTER C/B

SHEET NUMBER
1 OF 2
0007-27-119

617427-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

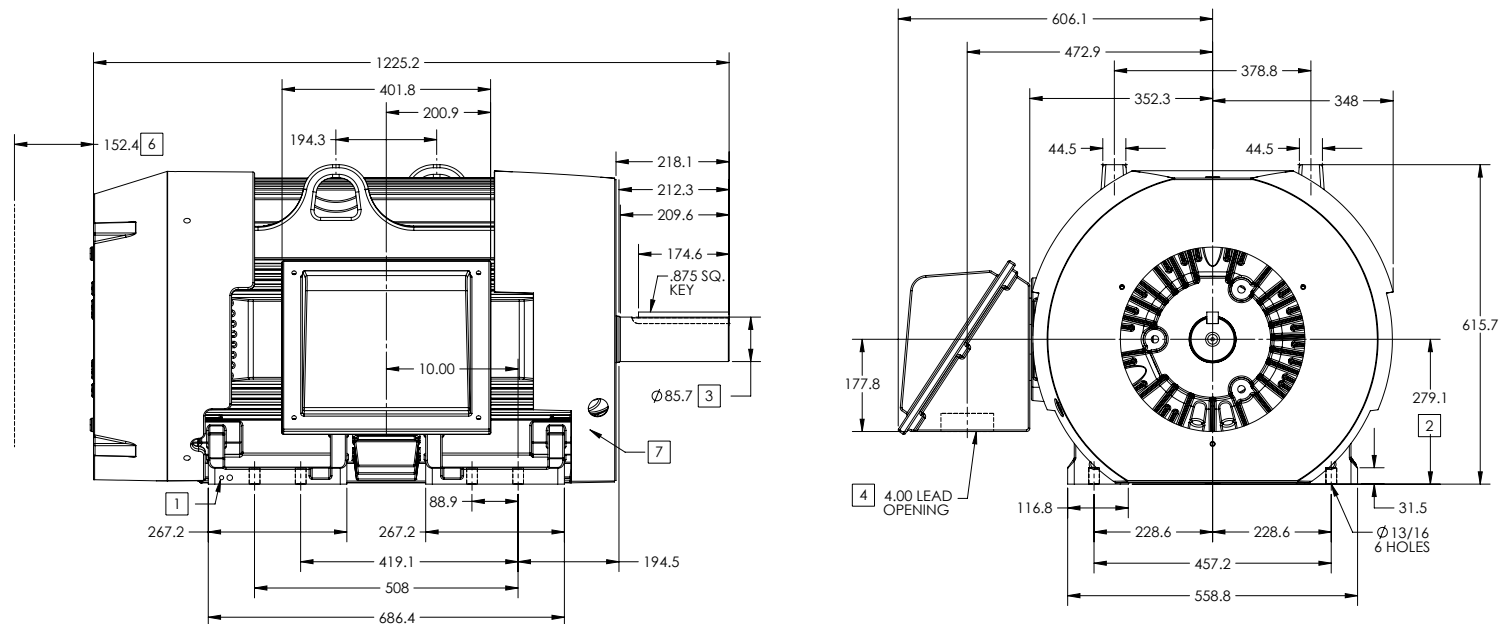
ENCLOSURE: TOTALLY ENCLOSED

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6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET.
7. AIR DEFLECTOR INSTALLED WHEN REQUIRED.

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): 1140

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.

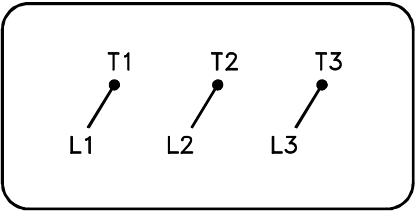
REV. A	VERSION: 01	REVISED: 08/25/13 02/15/2013	TDR: 000000786306
MODEL NO. 617427-002	BY: MGHWC	Material:	REF:

BALDOR

G447T/445T STD - FOOTED - SIDE/CENTER 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