

ABB BALDOR RELIANCE III

Customer information packet

ECP4420T-4

100HP, 885RPM, 3PH, 60HZ, 445T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	445T
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	100.000 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	15-60
Current @ Voltage	125.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	125.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2153
Layout	617427-001
Eff. date	12-10-2025
CD Diagram	416820-036
Poles	08
Leads	3#2
Proprietary	False
Created date	12-04-2013

Motor Type	A44060M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	44.75 IN
Power Factor	80
Product Family	General Industrial
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

NP2496L	
MOBIL POLYREX EM	

NP3238

CAT NO	ECP4420T-4			SPEC NO.		A44-5203-2153						
HP	100	AMPS	125	VOLTS		460		DESIGN	B			
FRAME	445T	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			80	NEMA NOM EFFICIENCY			93.6	
3/4 LOAD EFF.	94.0	MAX CORR KVAR			30.0		GUARANTEED EFFICIENCY			92.4		
TEMP CODE	T3	TEMP =		200								
CHP HZ	60-90	CT HZ	15-60		VT HZ	0-60						
INVERTER-TEMP-CODE	T3											
SER.NO.				MOTOR WEIGHT								

Parts List

Part number	Description	Quantity
SA273154	SA A44-5203-2153	1.000 ea
RA259757	RA A44-5203-2153	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
083199082A	G28 FAN COVER MACHINING SHORT VERSION	1.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
412118006A	DRAIN	2.000 ea
702618004T	FAN KB 182/70 (112) 440	1.000 ea
004824015A	GREASE POLYREX EM	1.160 lb
032018022FK	3/4-10 X 2.75 HHCS	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
415045002A	SLGR	1.000 ea
410700004A	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
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
032018022FK	3/4-10 X 2.75 HHCS	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
415045002A	SLGR	1.000 ea

034530044AB	P/NIP 1/8X5-1/2L GALV.	1.000 ea
034530044BB	P/NIP 1/4X5-1/2L PLT	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
076863000C	+CBCST BLKT - 440	1.000 ea
406056007A	GASKET, 440	1.000 ea
076864000A	*MFC MOVE* CBCST BLKT - 440	1.000 ea
067053001C	GASK 440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
032018008BK	HHCS 5/16-18X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.440 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
PK5004A09	BASE 48 X 39-1/4 WITH STACKED 2X4 RUUNER	1.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 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

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	445T	100	P	3/60	885	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
125	CONT	40/F	1.15	B	F	FCEM
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
599821	418143083GE	---	---	.0625		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	48.1	900	4.66	0	
1/4	25.1	57.0	897	45.5	90.4	
2/4	50.0	74.4	893	67.3	93.6	
3/4	75.0	97.8	890	76.4	94.0	
4/4	99.9	125	886	79.9	93.7	
5/4	125	155	881	81.1	92.9	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	146	865	655		
PULL UP	180	143	850	635		
BREAKDOWN	837	229	1360	365		
FULL LOAD	886	100	593	125		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: E-MASTER MOTOR TYPICAL DATA NEMA NOM. EFF. 93.6% GUARANTEED MIN. EFF. 93.0 %						
		DR. BY <u>C.R. THOMPSON</u> CK. BY <u>K.W. KANOUFF</u> APP. BY <u>K.W. KANOUFF</u> DATE <u>04/25/94</u>		A-C MOTOR PERFORMANCE DATA A44WG2153-R001 ISSUE DATE 04/25/94		

FRAME 445T

VOLTS 460

NEMA DESIGN B

TEST S.O. ---

HP 100

AMPS 125

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE FCEM

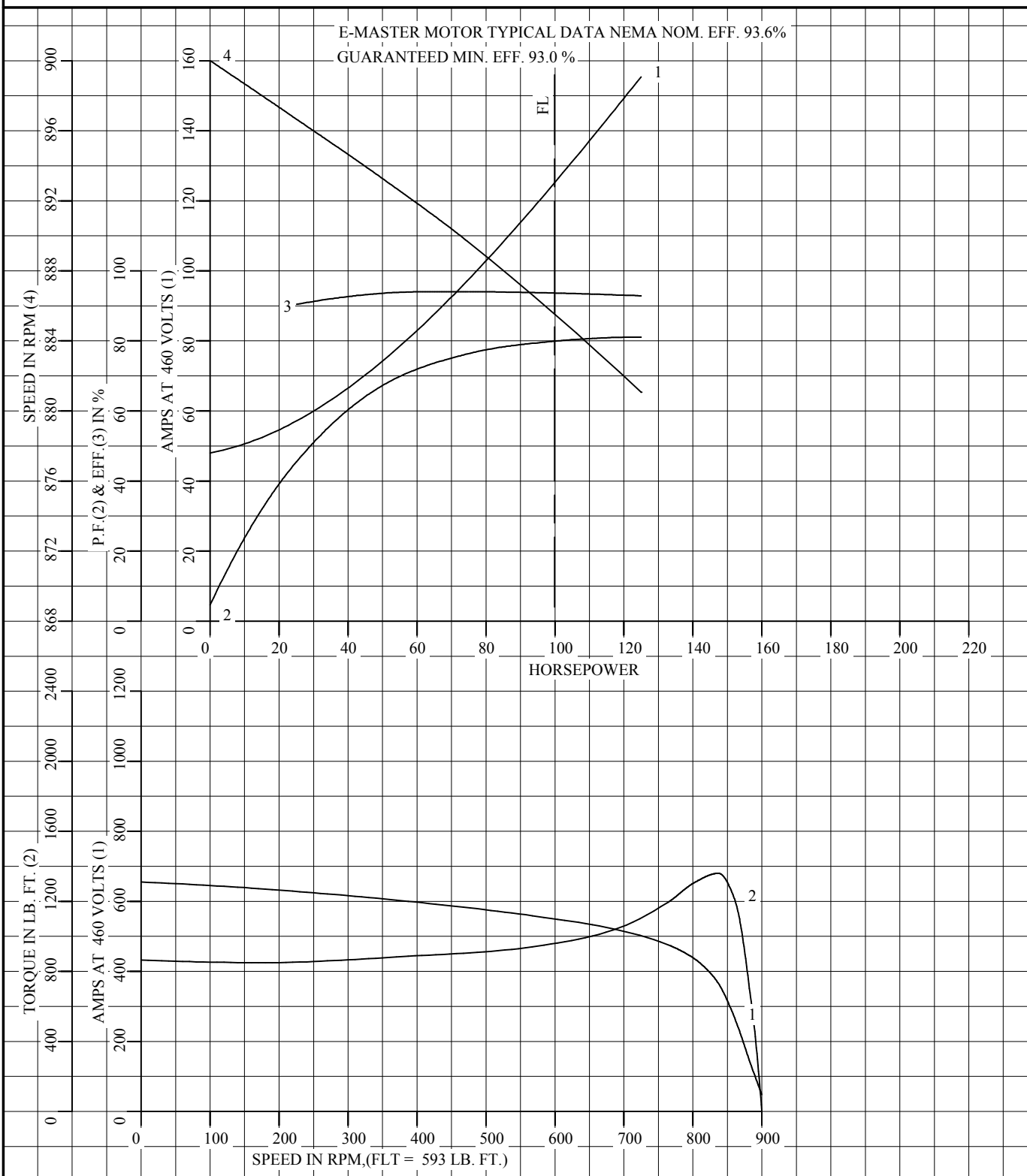
STATOR RES. @ 25 °C .0625

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 599821

OHMS (BETWEEN LINES)



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

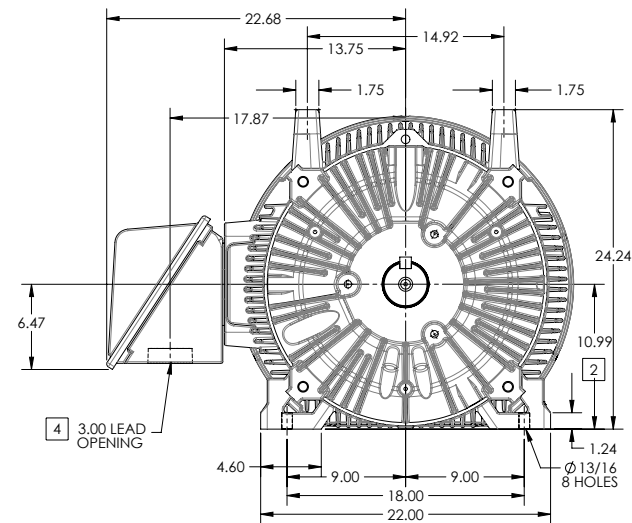
BALDOR

DR. BY C.R. THOMPSON
CK. BY K.W. KANOUFF
APP. BY K.W. KANOUFF
DATE 04/25/94

**A-C MOTOR
PERFORMANCE
CURVES** A44WG2153-R001
ISSUE DATE 04/25/94

SQUIRREL-CAGE INDUCTION

INCLUDES 444T FRAME MOUNTING HOLES



- 5 WEIGHT (LBS): 2130

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. DESC: SHEET 2 NEEDS METRIC FOOT HOLE DIMENSION			
REV: E	VERSION: 05	REVISED: 09-22-56 06/12/2014	TDR: 000000857938
MODEL NO. 617427-001			REF:
BY: RAGRA		Material:	

BALDOR®

G445T/444T STD – FOOTED – SIDE/CENTER C/B

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

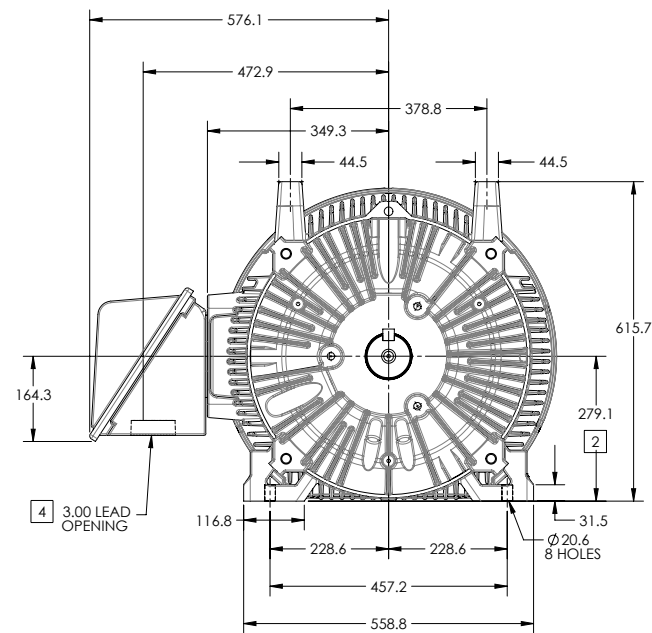
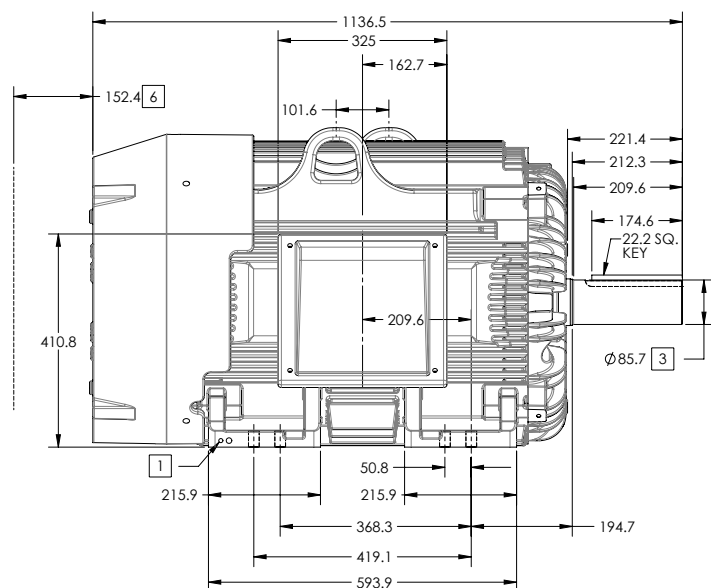
ENCLOSURE: TOTALLY ENCLOSED

FRAME G445T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 444T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +00,-.03
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 NOT 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

100-227-119

REV. DESC: SHEET 2 NEEDS METRIC FOOT HOLE DIMENSION	TDR: 00000857938
REV: E VERSION: 05	REVISED: 09-22-56 06/12/2014
MODEL NO. 617427-001	REF:
BY: RAGRA	Material:

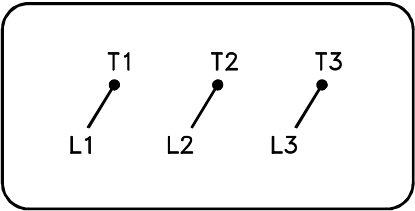
BALDOR

G445T444T STD - FOOTED - SIDE/CENTER C/B

617427-001

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

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

416820-036