



Customer information packet

EFM4316T

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365T
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	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	172.000 A @ 230.0 V 188.000 A @ 208.0 V 86.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	86.0 a
Insulation Class	F

Part detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4076
Layout	611740-001-SH1
Eff. date	02-13-2025
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6 Y
Proprietary	False
Created date	05-16-2019

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	No Lifting Lugs
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	33.44 IN
Power Factor	86
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	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3979LUA

CAT # EFM4316T													
SER				CC				010A					
SPEC				RATING				A36-3394-4076					
								40C AMB-CONT					
HZ		VOLTS		AMPS		RPM		HP		CODE		SF	
60		230/460		172/86		1780		75		G		1.15	
		-										B	
												86	
												%	
												%	
PH		3		CL		F		MAX CORR KVAR		15.8			
BRG		DE		6313		ODE		6313		ENCL		TEFC	
										FR		365T	
												IP54	
GREASE		POLYREX EM						MTR WT		908		LBS	
USABLE AT		50HZ 60HP 190/380V 168/84A						SF1.0					
INVERTER DUTY		CT		15-60		HZ		4:1		VT		3-60	
												HZ	
MAX RPM		2700										60-90	
												1.5:1	
												1.0 SF VPWM	

AC induction motor performance data

Record #71910 - Typical performance - not guaranteed values

Winding	A36WG4076
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output	75
Volts	230 / 460
Full Load Amps	172 / 86
R.P.M.	1780
Hz	60
Phase	3
KVA Code	G
S.F.	1.15
NEMA Nom. Eff.	95.4
Power Factor	86
Duty	CONT
S.F. Amps	

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	220.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	618 LB-FT
Pull-up Torque	341 LB-FT
Locked-rotor Torque	434 LB-FT
Starting Current	545 A
No-load Current	27.5
Line-line Res. @ 25°C	0.081965 Ω
Temp. Rise @ Rated Load	60°C
Temp. Rise @ S.F. Load	75°C
Locked-rotor Power Factor	31.8
Rotor inertia	0

Load Characteristics 460 V, 60 Hz, 75 HP

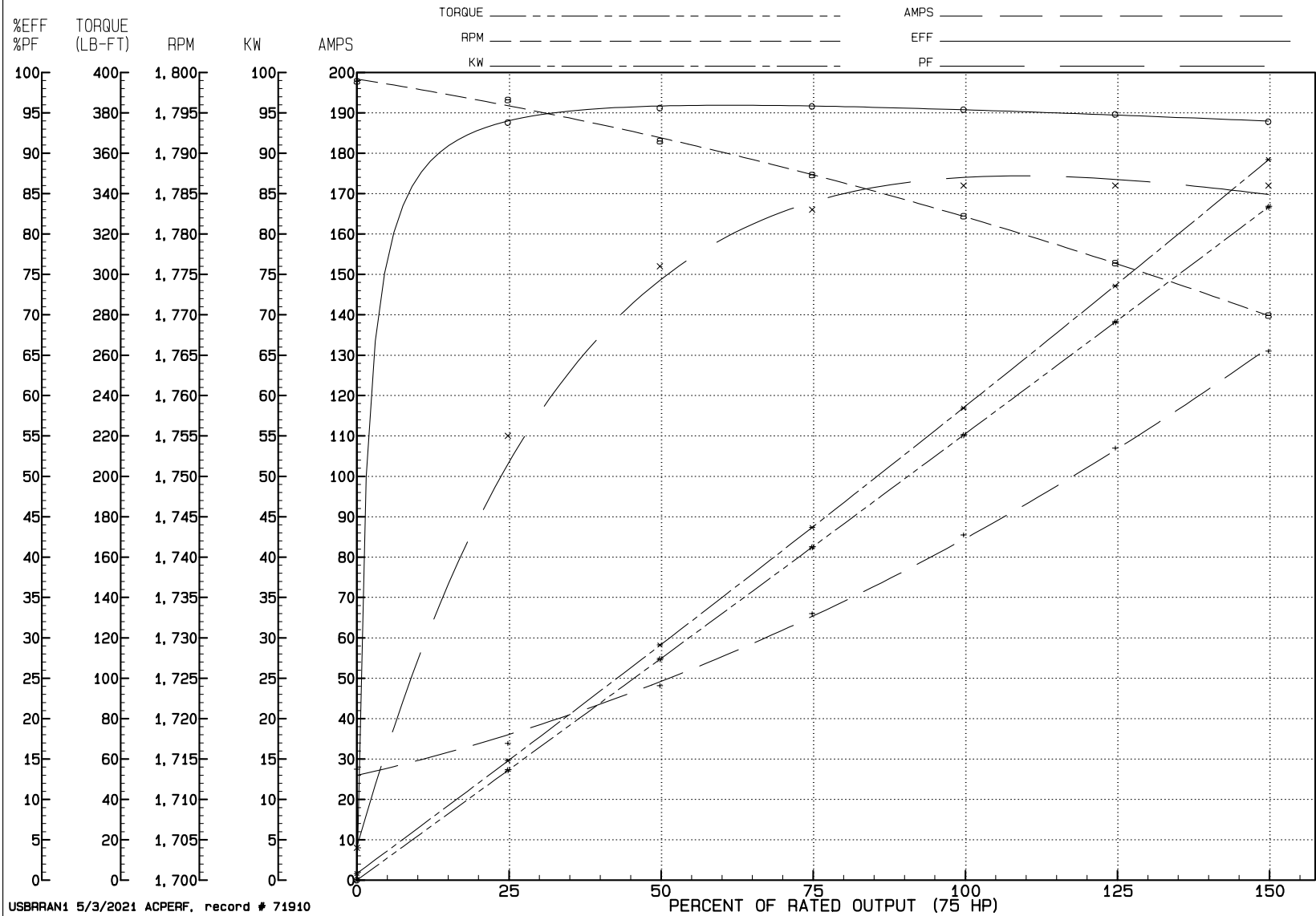
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	55	76	83	86	86	86	86
Efficiency	0	93.8	95.6	95.8	95.4	94.8	93.9	95
Speed	1798.9	1796.6	1791.5	1787.3	1782.2	1776.4	1769.9	1779
Line amperes	27.5	33.9	48.2	66	85.5	107	131	98.4

REVIEW

WINDING # A36WG4076

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

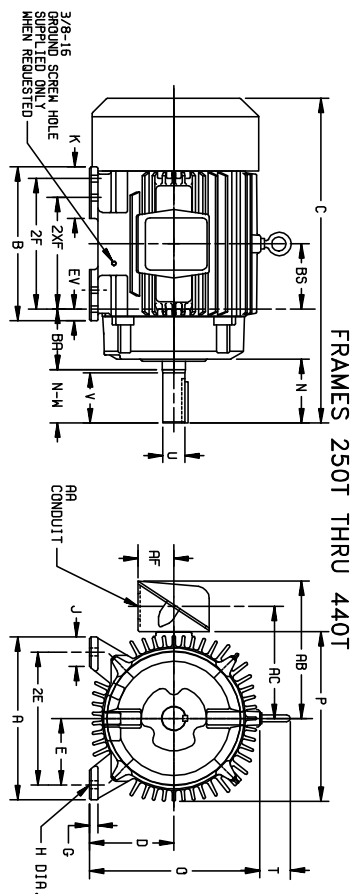
TORQUES (LB-FT): P0=618.00 PU=341.00 LR=434.00 LRA=545.00



611740-001-SH1

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTIONENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED



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

FRAME SIZE	A	D(2)	E	G	H	J	K	O	P	T	AA	AB	AC	AF	BA	EV
254T-256T	12.50	6.25	5.00	.75	.56	2.50	---	13.25	13.25	2.44	1-1/4	10.75	8.75	2.50	4.25	1.00
284T-296T	13.75	7.00	5.50	.75	.56	2.50	---	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	1.00
324T-326T	15.50	8.00	6.25	.88	.69	2.75	4.50	16.89	17.00	2.44	2	15.19	11.44	4.25	5.25	1.38
364T-365T	17.00	9.00	7.00	.88	.69	2.75	3.88	18.50	19.50	2.94	3	18.08	14.00	5.38	5.88	1.38
404T-405T	19.00	10.00	8.00	1.12	.81	3.25	4.62	21.31	22.50	2.94	3	19.31	15.25	5.38	6.62	1.13
444T-445T	21.00	11.00	9.00	1.12	.81	3.25	5.25	23.38	25.25	3.25	3	23.38	18.12	6.50	7.50	1.25

(1)	FRAME SIZE	C	BS	B	2F	(4) 2XF	N	N-W(6)	SHAFT U(3) V	AND KEY	SO.	LGTH.	WEIGHT LBS. (5)
	254T	24.56	5.00	12.00	---	8.25	4.12	4.00	1.625	3.75	3.75	2.88	305
	256T	24.56	5.00	12.00	10.00	---	4.12	4.00	1.625	3.75	3.75	2.88	315
	284T	27.44	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	5.00	3.25	435
	284T	26.06	5.50	13.00	---	9.50	3.62	3.25	1.625	3.00	3.75	1.88	435
	286T	27.44	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	5.00	3.25	450
	286T	26.06	5.50	13.00	11.00	---	3.62	3.25	1.625	3.00	3.75	1.88	450
	324T	30.44	6.00	14.75	---	10.50	5.62	5.25	2.125	5.00	5.00	3.88	540
	324T	28.94	6.00	14.75	12.00	---	4.12	3.75	1.875	3.50	5.00	2.00	540
	326T	30.44	6.00	14.75	12.00	---	4.12	3.75	1.875	3.50	5.00	2.00	580
	326T	28.94	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	6.25	4.25	800
	364T	33.44	6.12	15.00	---	11.25	4.12	3.75	1.875	3.50	5.00	2.00	794
	364T	31.31	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	6.25	4.25	840
	365T	33.44	6.12	15.00	12.25	---	4.12	3.75	1.875	3.50	5.00	2.00	834
	404T	38.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	7.50	5.62	1120
	404T	36.31	6.88	16.00	---	12.25	4.50	4.25	2.125	4.00	5.00	2.75	1111
	405T	38.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	7.50	5.62	1160
	405T	35.31	6.88	16.00	---	13.75	4.50	4.25	2.125	4.00	5.00	2.75	1151
	444T	44.62	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	1540
	444T	40.88	8.25	19.00	16.50	---	5.19	4.75	3.375	4.50	6.25	3.00	1524
	445T	44.62	8.25	19.00	16.50	---	5.19	4.75	3.375	4.50	6.25	3.00	1720
	445T	40.88	8.25	19.00	16.50	---	5.19	4.75	3.375	4.50	6.25	3.00	1714

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES — 250T - 320T +.00, -.03.
360T - 440T +.00, -.06.
- (3) "U" VARIES — UP TO 1.625 DIA. +.0000, -.0005
1.625 AND LARGER +.000, -.001.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +.00, -.25.

FRAME — TYPE — CERTIFIED FOR —
ORDER — ITEM — HP — RPM — PH — HZ — VOLTS —
RELIANCE SALES ORDER — APPROVED BY — DATE —

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE TITLE SHEET 2

REV. LTR: B

VERSION: 02

TDR: 000000498266

FILE: \RAG\00000\167

REVISED: 07: 05: 46 04/29/2009

MTL: —

BY: RAGEC

Baldor • Dodge • Reliance

DIM SHEET 250T THRU 440T

SH 1 of 1

611740-001-SH1

611740-001-SH2

DUTY MASTER ALTERNATING CURRENT MOTORS

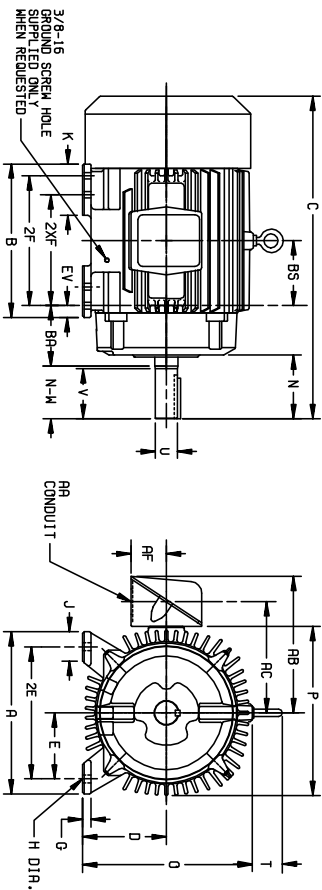
SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

MOUNTING: FOOT

FRAMES 250T THRU 440T

COOLING: FAN COOLED



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

I	STEEL TERMINAL BOX										
	FRAME	A	B	C	D	E	F	G	H	I	J
2541-2641	317.5	158.8	127.0	19.0	142	63.5	--	336.5	35.6	62.0	63.5
2541-2641	317.5	158.8	127.0	19.0	142	63.5	--	336.5	35.6	62.0	63.5
3241-3261	351.7	175.9	139.9	21.0	157	68.9	11.4	423.9	47.8	82.0	82.0
3641-3651	418.1	209.1	167.2	22.4	175	85.9	98.6	461.9	49.5	74.7	74.7
4041-4051	482.6	241.3	190.8	22.4	205	82.5	117.3	541.3	55.5	74.7	74.7
4441-4451	533.4	279.4	228.6	28.4	205	82.5	133.3	593.9	64.3	82.5	82.5

[illegible]

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES — $\begin{cases} 250T - 320T + 0, -8, \\ 360T - 440T + 0, -1.5. \end{cases}$
- (3) "U" VARIES — $\begin{cases} \text{UP TO } 41.27 \text{ DIA.} + 0.00, -0.013 \\ 41.27 \text{ AND LARGER} + 0.0, -0.03 \end{cases}$
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +0, -6.4.
- (7) DIMENSIONS ARE IN INCHES.

FRAME _____ TYPE _____ CERTIFIED FOR _____
 ORDER _____ ITEM _____ HP _____ PH _____ HZ _____ VOLTS _____
 RELIANCE SALES ORDER _____ APPROVED BY _____ DATE _____

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE TITLE		
REV. LTR: B	VERSION: 02	TDR: 000000498266
FILE: \RAG\00000\168		REVISED: 14: 03: 30 04/28/2009
MTL: -		BY: RAGEC

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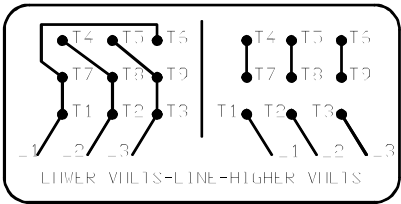
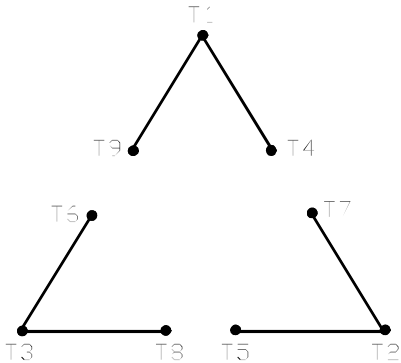
DIM SHEET 250T THRU 440T METRIC

SH 1 of 1

611740-001-SH2

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —		

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002