

BALDOR • RELIANCE

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
Auxillary 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	A36-3394-4076		RATING	40C AMB-CONT									
HZ	VOLTS		AMPS	RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF			
60	230/460		172/86	1780	75	G	1.15	B	86 %	95.4 %			
	-								%	%			
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	20:1	CHP	60-90	HZ	1.5:1	1.0 SF VPWM
MAX RPM	2700												

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

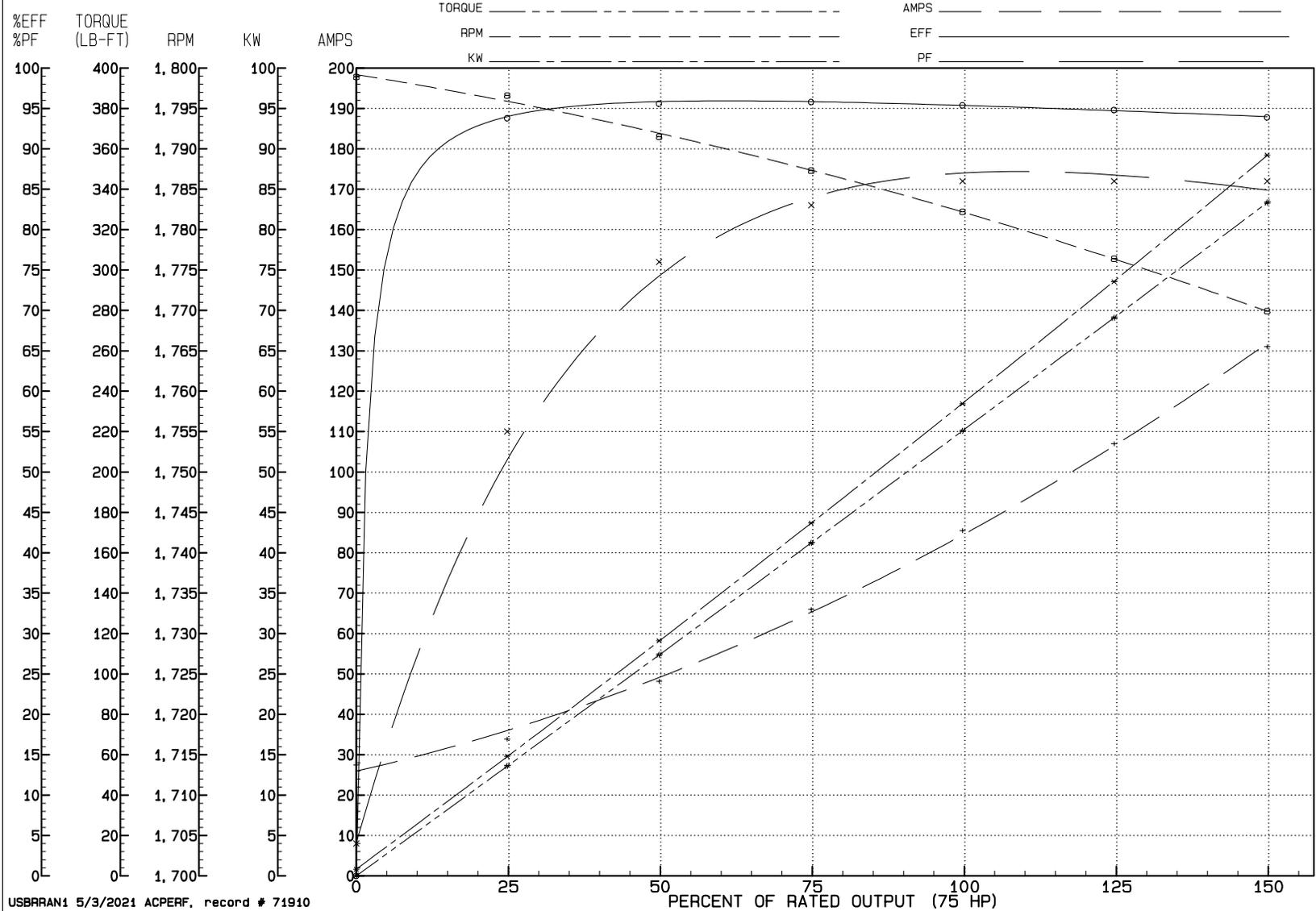
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	55	76	83	86	86	86	86
Efficiency	0	93.8	95.6	95.8	95.4	94.8	93.9	95
Speed	1798.9	1796.6	1791.5	1787.3	1782.2	1776.4	1769.9	1779
Line amperes	27.5	33.9	48.2	66	85.5	107	131	98.4

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



USBRRAN1 5/3/2021 ACPERF, record # 71910

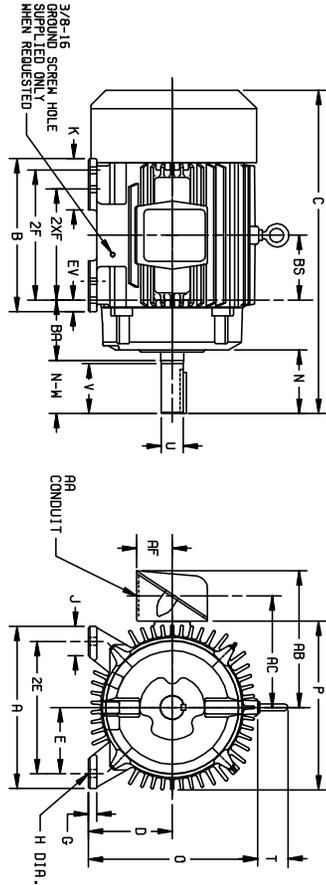
611740-001-SH1

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES 250T THRU 440T



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	7.5	56	2.50	---	13.25	13.25	2.44	1-1/4	10.75	8.75	2.50	4.25	1.00
284T-296T5	13.75	7.00	5.50	7.5	56	2.50	---	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	1.00
324T-326T5	15.50	8.00	6.25	8.8	69	2.75	4.50	16.89	17.00	2.44	2	15.19	11.44	4.25	5.25	1.58
364T-365T5	17.00	9.00	7.00	8.8	69	2.75	3.88	18.50	19.50	2.94	3	18.08	14.00	5.38	5.88	1.58
404T-405T5	19.00	10.00	8.00	11.2	81	3.25	4.62	21.51	22.50	2.94	3	19.51	15.25	5.38	6.62	1.13
444T-445T5	21.00	11.00	9.00	11.2	81	3.25	5.25	23.38	25.25	3.25	3	23.38	18.12	6.50	7.50	1.25

FRAME SIZE	C	BS	B	2F	N	SHAFT AND KEY		WEIGHT LBS. (5)				
						N-W(6) U(3)	V					
254T	24.56	5.00	12.00	---	8.25	4.12	4.00	1.625	3.75	3.75	2.88	3.05
256T	24.56	5.00	12.00	10.00	---	4.12	4.00	1.625	3.75	3.75	2.88	3.15
284T	27.44	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	5.00	3.25	4.35
284T5	26.06	5.50	13.00	---	9.50	3.82	3.25	1.625	3.00	3.75	1.98	4.35
296T	27.44	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	5.00	3.25	4.50
296T5	26.06	5.50	13.00	11.00	---	3.82	3.25	1.625	3.00	3.75	1.98	4.50
324T	30.44	6.00	14.75	---	10.50	5.62	5.25	2.125	5.00	5.00	3.88	5.40
324T5	28.94	6.00	14.75	12.00	---	4.12	3.75	1.875	3.50	5.00	3.88	5.40
326T	28.94	6.00	14.75	12.00	---	4.12	3.75	1.875	3.50	5.00	2.00	5.80
326T5	28.94	6.00	14.75	12.00	---	4.12	3.75	1.875	3.50	5.00	2.00	5.80
364T	33.44	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	6.25	4.25	6.00
364T5	31.31	6.12	15.00	---	11.25	4.12	3.75	1.875	3.50	5.00	2.00	7.94
365T	33.44	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	6.25	4.25	6.40
365T5	31.31	6.12	15.00	12.25	---	4.12	3.75	1.875	3.50	5.00	2.00	8.34
404T	38.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	7.50	5.62	11.20
404T5	35.31	6.88	16.00	---	12.25	4.50	4.25	2.125	4.00	5.00	2.75	11.11
405T	38.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	7.50	5.62	11.60
405T5	35.31	6.88	16.00	13.75	---	4.50	4.25	2.125	4.00	5.00	2.75	11.51
444T	44.62	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	15.40
444T5	40.88	8.25	19.00	---	14.50	5.19	4.75	2.375	4.50	6.25	3.00	15.24
445T	44.62	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	8.75	6.88	17.20
445T5	40.88	8.25	19.00	16.50	---	5.19	4.75	2.375	4.50	6.25	3.00	17.14

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

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1, W-4-M-SH-7, OR C-1 MOUNTING IS SPECIFIED.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .002 T.I.R. UP TO AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 DIA. TO 5 INCH DIA.

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

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

REV. DESC: UPDATE TITLE SHEET 2	VERSION: 02	TDR: 00000498266
REV. LTR: B	FILE: \RAG\00000\167	REVISED: 07: 05: 46 04/29/2009
MTL: -		BY: RAGEC

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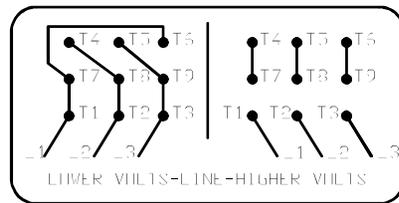
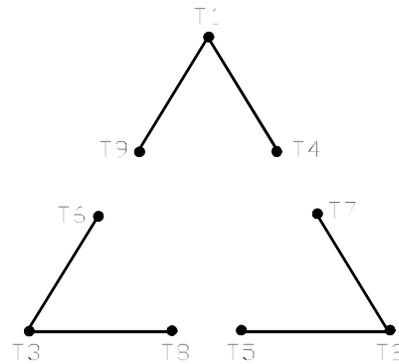
DIM SHEET 250T THRU 440T

SH 1 of 1

611740-001-SH1

416820-002

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



(N.P. 1575-B)

416820-002

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: -		© □

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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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