

ABB BALDOR RELIANCE III

Customer information packet

ECP4316TR-4

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

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	365T
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	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO) UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Mobil SHC 220 (Athens Only)
Current @ Voltage	86.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	86.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG3963
Layout	611740-501-SH1
Eff. date	06-16-2025
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	06-13-2025

Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.44 IN
Power Factor	86
Product Family	General Industrial
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.374 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

NP4033LUA													
CAT #	ECP4316TR-4					SER				CC	010A		
SPEC	A36-5051-3963					RATING	40C AMB-CONT						
HZ	VOLTS			AMPS			RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF
60	460			86			1780	75	G	1.15	B	86 %	95.4 %
												%	%
PH	3	CL	F	MAX RPM	2700	MAX CORR KVAR			15.8				
BRG	DE	NU313		ODE	6313	ENCL	TEFC	FR	365T	IP	55		
GREASE	MOBIL SHC 220								MTR WT	965	LBS		
CL I DIV 2 GRPS A,B,C,D				CL I ZONE 2 GRPS				IIA,IIB,IIC			TEMP T	200	C
INV READY	CT	15-60		HZ	4:1	VT	3-60	HZ	20:1	CHP	60-90	HZ	1.5:1
INV TEMP CL	200	C	USABLE AT		50HZ 60HP 380V 83.5A SF1.00								

AC Induction Motor performance data

Record #71698 - Typical performance - not guaranteed values

Winding	A36WG3963
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output			75
Volts			460
Full Load Amps			86
R.P.M.			1780
Hz	60	Phase	3
KVA Code			F
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	86
Duty			CONT
S.F. Amps			

460 V. 60 Hz:

Single Voltage Motor

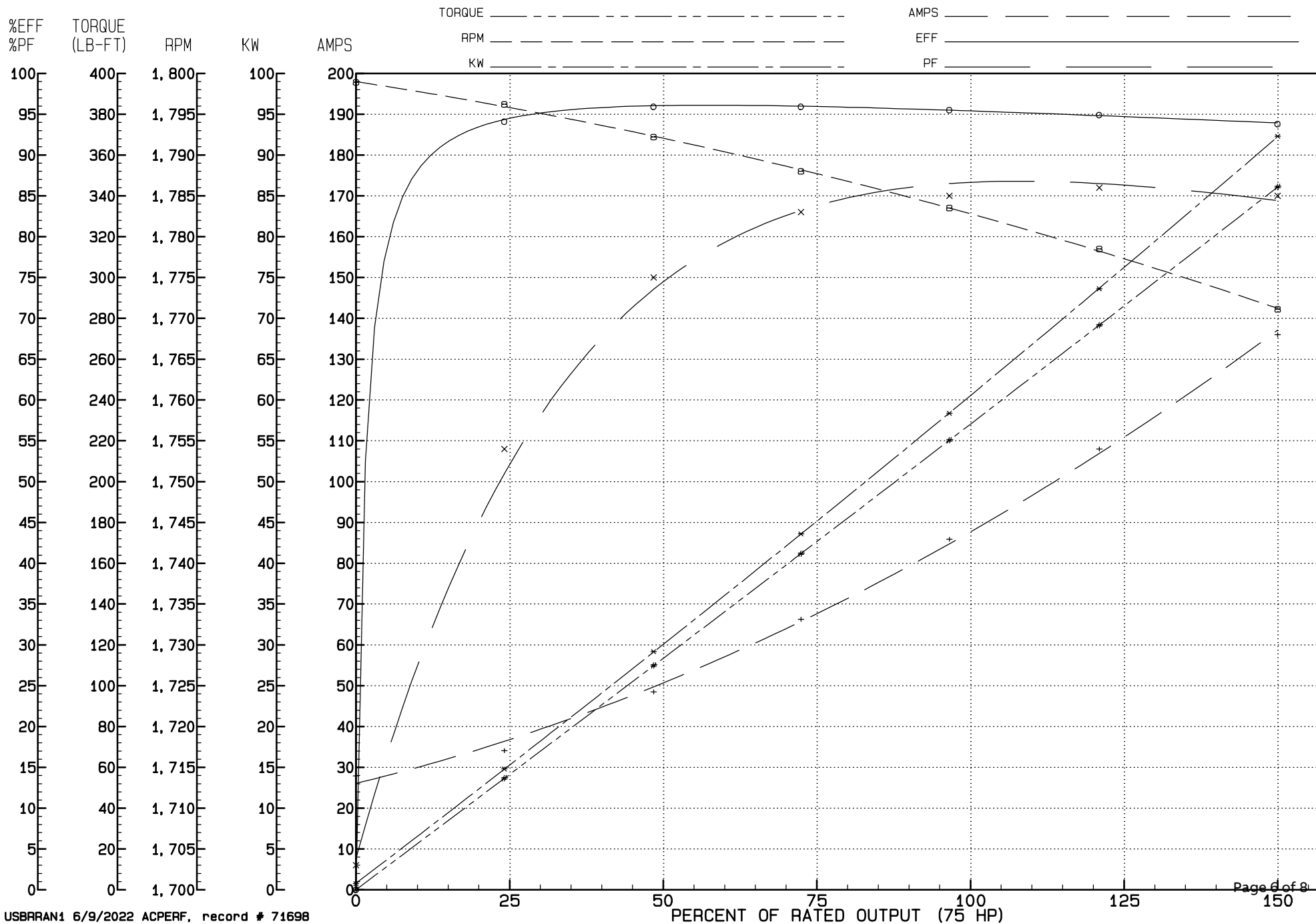
Full Load Torque	220.2 LB-FT
Start Configuration	direct on line
Breakdown Torque	542 LB-FT
Pull-up Torque	372 LB-FT
Locked-rotor Torque	445 LB-FT
Starting Current	541 A
No-load Current	27.9
Line-line Res. @ 25°C	0.082276 Ω
Temp. Rise @ Rated Load	55°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	31.8
Rotor inertia	16.2 lb-ft ²

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	3	54	75	83	85	86	85	86
Efficiency	0	94.1	95.9	95.9	95.5	94.9	93.8	95.1
Speed	1798.9	1796.2	1792.2	1788	1783.5	1778.5	1771.1	1780
Line amperes	27.9	34.1	48.5	66.3	85.9	108	136	99.2

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

TORQUES (LB-FT): PO=542.00 PU=372.00 LR=445.00 LRA=541.00



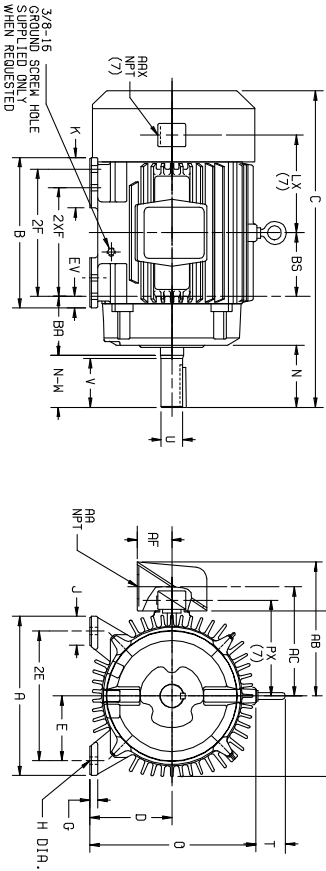
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIREL-CAGE INDUCTION
CAST IRON CONSTRUCTION

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES 250T THRU 440T



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

FRAME	A	D/2	E	G	H	J	K	O	P	T	AA	AB	AC	AF	AA X LX (7)	PX (7)	BA	EV	
254T-266T	12.50	6.25	5.00	.75	.56	2.50	---	13.25	13.25	2.44	1-1/4	10.81	8.81	2.50	3/4	6.31	9.31	4.25	1.00
284T-286T	13.75	7.00	5.50	.75	.56	2.50	---	14.75	14.88	2.44	1-1/2	12.62	10.19	3.00	3/4	6.88	10.50	4.75	1.38
324T-326T	15.50	8.00	6.25	.88	.69	2.75	4.50	16.69	17.00	2.44	2	15.44	11.69	3.62	3/4	8.00	10.50	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	18.00	13.81	4.12	3/4	8.38	11.62	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	19.25	15.06	4.12	3/4	9.62	14.44	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	22.19	17.44	6.00	3/4	11.12	15.25	7.50	1.25

FRAME	SIZE	C	BS	B	ZF	(4)	N	N-W/6	U/3	V	SQ.	LGTH.	WEIGHT
254T	24.56	5.00	12.00	---	8.25	4.12	4.00	1.625	3.75	3.75	2.88	3.35	3.35
266T	24.56	5.00	12.00	10.00	---	4.12	4.00	1.625	3.75	3.75	2.88	3.35	3.35
284T	27.44	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	5.00	3.25	4.75	4.75
286T	27.44	5.50	13.00	---	9.50	5.00	4.62	1.875	4.38	5.00	3.25	4.75	4.75
286T	27.44	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	5.00	3.25	4.90	4.90
286T	26.06	5.50	13.00	11.00	---	5.00	4.62	1.875	4.38	5.00	3.25	4.90	4.90
324T	30.44	6.00	14.75	---	10.50	5.62	5.25	2.125	5.00	5.00	2.00	5.90	5.90
324T	28.94	6.00	14.75	---	10.50	5.62	5.25	2.125	5.00	5.00	2.00	5.90	5.90
326T	30.44	6.00	14.75	12.00	---	5.62	5.25	2.125	5.00	5.00	2.00	6.30	6.30
326T	28.94	6.00	14.75	12.00	---	5.62	5.25	2.125	5.00	5.00	2.00	6.30	6.30
364T	33.44	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	6.25	2.25	8.65	8.65
364T	31.31	6.12	15.00	---	11.25	6.25	5.88	2.375	5.62	6.25	2.25	8.65	8.65
365T	33.44	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	6.25	2.25	8.90	8.90
365T	31.31	6.12	15.00	12.25	---	6.25	5.88	2.375	5.62	6.25	2.25	8.90	8.90
404T	38.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	7.50	5.62	12.20	12.20
404T	35.31	6.88	16.00	---	12.25	7.50	7.25	2.875	7.00	7.50	5.62	12.20	12.20
405T	38.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	7.50	5.62	12.60	12.60
405T	35.31	6.88	16.00	13.75	---	7.50	7.25	2.875	7.00	7.50	5.62	12.60	12.60
444T	44.62	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	16.70	16.70
444T	40.88	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	16.70	16.70
445T	44.62	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	8.75	6.88	16.80	16.80
445T	40.88	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	8.75	6.88	16.80	16.80

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES --- 250T - 320T +.00, -.03.
--- 360T - 440T +.00, -.06.
- (3) "U" VARIES --- 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.
- (7) AUXILIARY CONDUIT BOX SUPPLIED WHEN SPECIFIED
CONDUIT BOXES LOCATED ON OPPOSITE SIDE WHEN F-2-W-1,
W-4-W-5-W-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 --- PH --- HZ --- VOLTS ---
SALES ORDER --- APPROVED BY --- DATE ---

LHS-105-074/L19

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

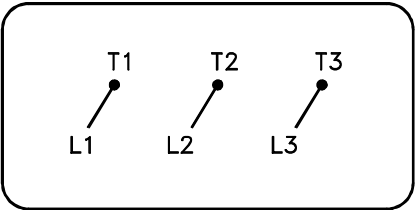
REV. DESC: REMOVING TITLEBLOCK		
REV. LTR: A	VERSION: 01	TDR: 000000448517
FILE: \RAG\00004\525	REVISED: 14:06:59 11/07/2007	BY: CONBPM
MTL: -		

BALDOR • DODGE • RELIANCE

DIM SHT 250T-440T TEFC FT MTG STD T & TS SGL EXT XT

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