ABB BALDOR RELIANCE

Customer information packet

ECP84316T-5

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC
Class - CLI GP A,B,C,D
Division - Division II

7/8/2026 3:02:45 PM

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	575.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
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	69.000 A @ 575.0 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	69.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4078
Layout	617428-603
Eff. date	08-26-2024
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	04-26-2021

Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	None
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.49 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	Phase Seq-Std Rot (CCWODE)
Shaft Slinger Indicator	No Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4388																			
CAT #	ECP84316T-5					**FR**	365T			IP56									
SPEC	A36-6000-4078					**ENCL**	TEFC			**DES**	B								
HZ	60	**PH**	3	**CL**	F	**HP**	75	**SF**	1.15	**PF**	86	**%**	**CODE**	G					
VOLTS	575					**AMPS**	69												
RPM	1780			**MAX RPM**		2700		**SER**											
NEMA NOM. EFF	95.4	**%**		**RATING**		40C AMB-CONT													
GUAR MIN. EFF	94.5	**%**		**BRG DE**		6313		**BRG ODE**	6313										
CL I DIV 2 GRPS A,B,C,D				**CL I ZONE 2 GRPS**				**IIA,IIB,IIC**		**TEMP T**		3-200	**C**						
CT HZ	15-60			**VT HZ**		0-60													
CHP HZ	60-90					**INV TEMP CL**	200	**C**											
	SFA 80							**MTR WT**	985	**LBS**									

NP4333					
CAT #	ECP84316T-5	**ROTOR BARS**	47		
SPEC	A36-6000-4078	**STATOR SLOTS**	60		
SER		**MAX CORR KVAR**	16		
GREASE	POLYREX EM				
ABMA DE BRG	65BC03J30X	**ODE**	65BC03J30X		
	SFA 80				
SPACE HEATER LEADS H1-H2:	**TIE LIKE NUMBERS**		**TOGETHER**		
MAX. SPACE HEATER TEMP.	**C**	**V**	**A**	**W**	

AC induction motor performance data

Record #71925 - Typical performance - not guaranteed values

Winding	A36WG4078
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output			75
Volts			575
Full Load Amps			69
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			

575 V, 60 Hz:
Single Voltage Motor

Full Load Torque	220 LB-FT
Start Configuration	direct on line
Breakdown Torque	619 LB-FT
Pull-up Torque	339 LB-FT
Locked-rotor Torque	431 LB-FT
Starting Current	437 A
No-load Current	22.31
Line-line Res. @ 25°C	0.14 Ω
Temp. Rise @ Rated Load	61°C
Temp. Rise @ S.F. Load	77°C
Locked-rotor Power Factor	32.1
Rotor inertia	16.2 lb-ft²

Load Characteristics 575 V, 60 Hz, 75 HP

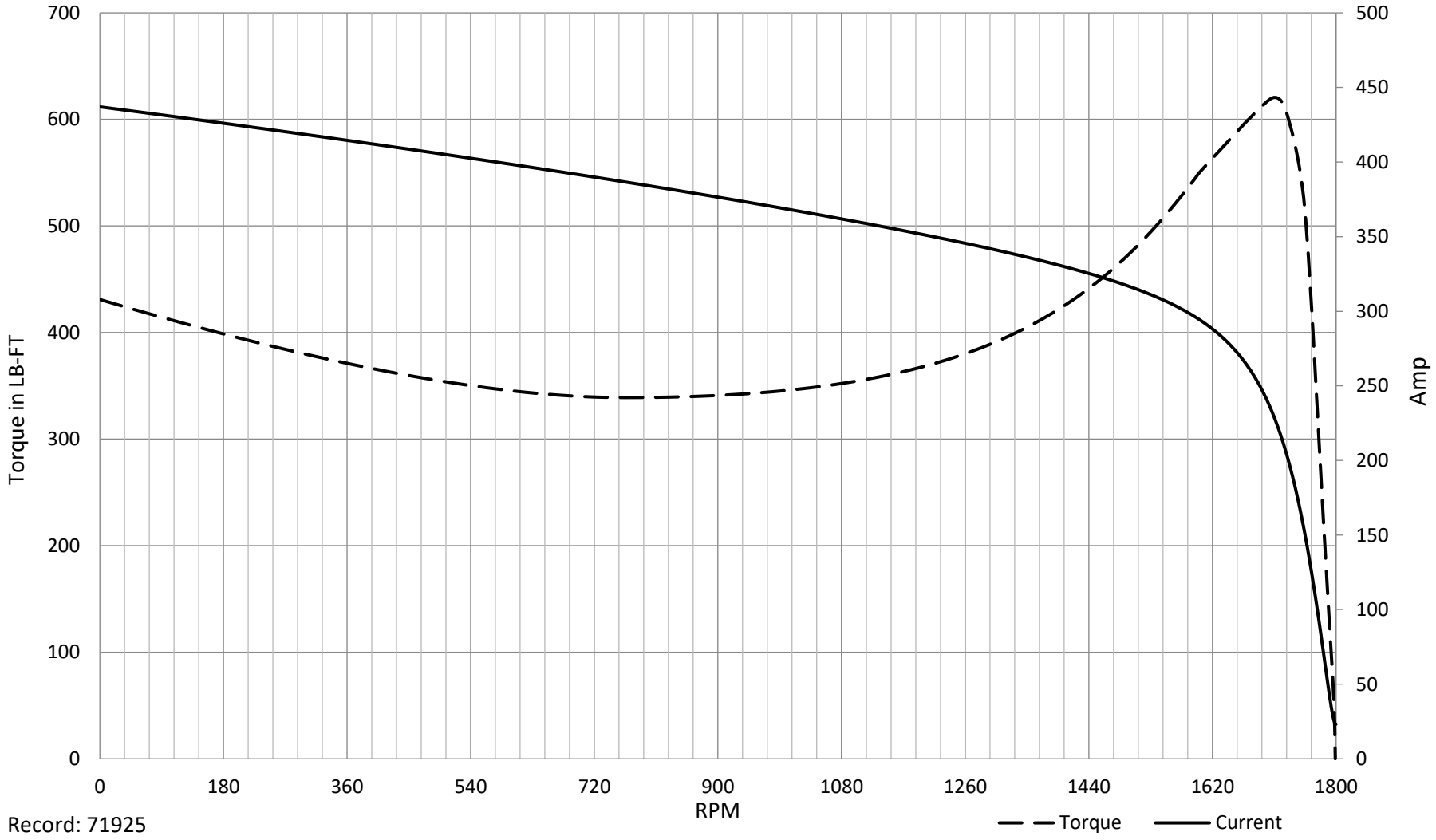
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	85	86
Efficiency	0	93.7	95.9	95.7	95.4	94.6	93.7	94.8
Speed	1799	1797	1792	1787	1782	1777	1770	1779
Line amperes	22.31	27.39	38.79	53.01	68.52	85.75	105	78.9

SPEED TORQUE / SPEED CURRENT CURVES

BALDOR • RELIANCE

A36WG4078

75HP 575V 60HZ



Record: 71925

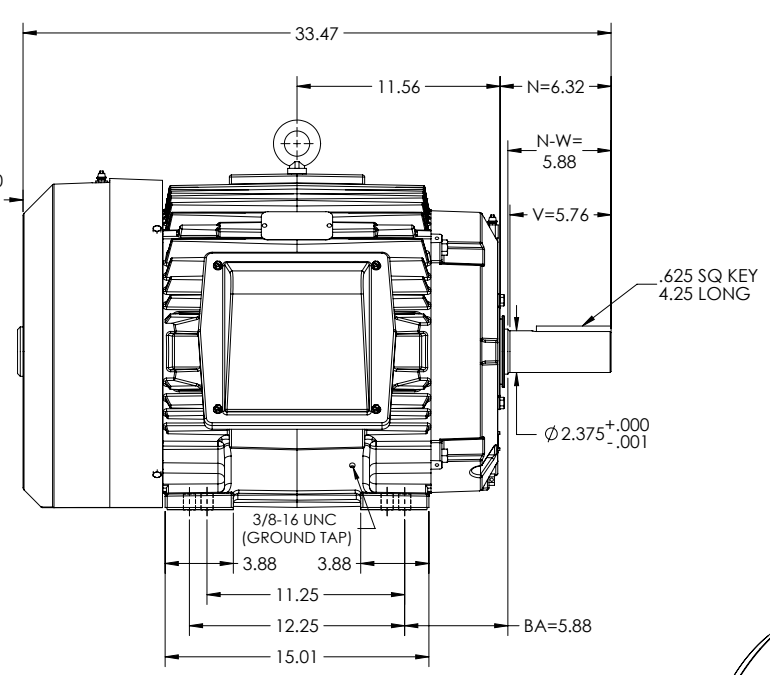
SHEET NUMBER 1 OF 2

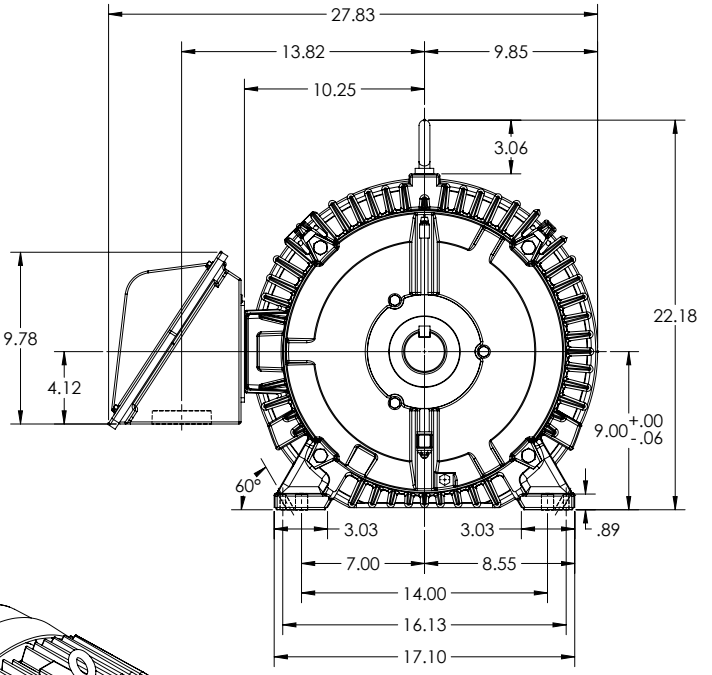
DUTY MASTER ALTERNATING CURRENT MOTORS

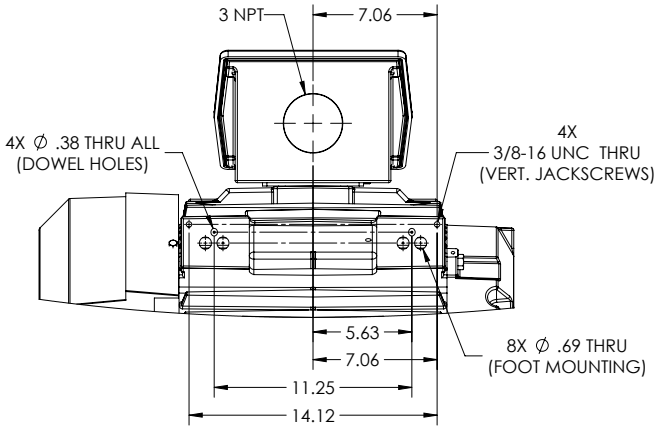
617428-603

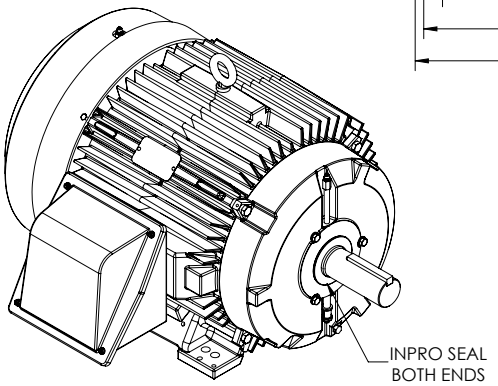
ENCLOSURE: TOTALLY ENCLOSED | SQUIRREL-CAGE INDUCTION | COOLING: FAN COOLED

MOUNTING: FOOT, F-1 | E364T/ E365T FRAME MOUNTING HOLES | ENCLOSURE ENAHNCEMENT: 841-XL









1 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.
WEIGHT (LBS) 846, WEIGHT MAY VARY BY 15% DEPENDING ON RATING
DIMENSIONS ARE IN INCHES.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAX PERMISSIBLE SHAFT RUNOUT WHEN FOR BALL BEARING IS .0015 & ROLLER BEARING IS .002 T.I.R.

REV. DESC: UPDATE MODEL TO ADD EXTERNAL HARDWARE PER PROD MGM			
REV: C	VERSION: 03	REVISED: 02-09-45 10/03/2022	TDR: 000001196512
MODEL NO. 617428-603			
BY: ENFRAJ0			C

BALDOR

E364/365T TEFC F1 FOOT/CI BOX/GRND TAP/841-XL

617428-603

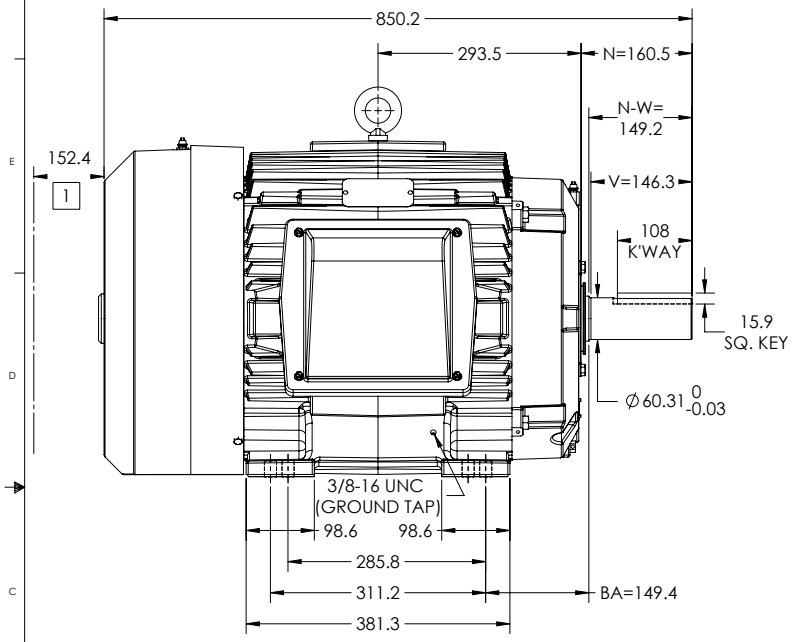
SHEET NUMBER 2 OF 2

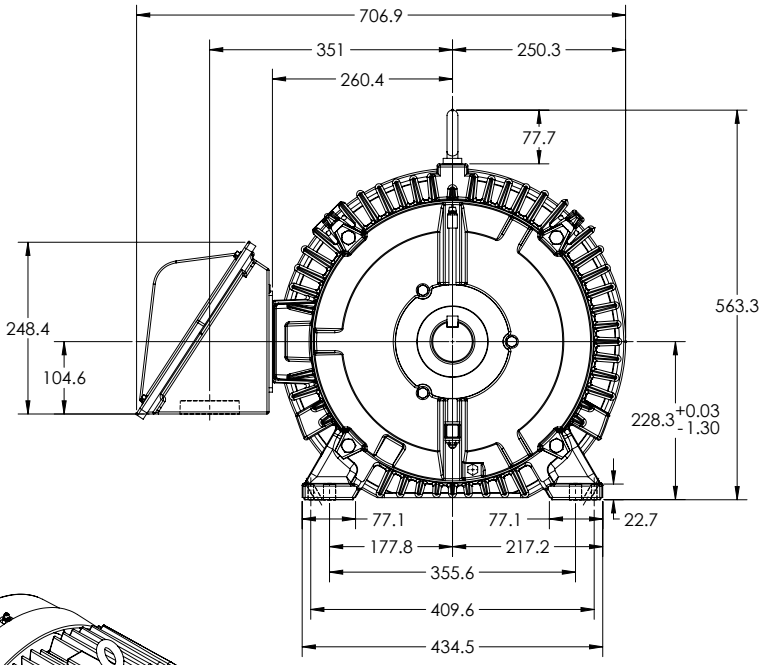
DUTY MASTER ALTERNATING CURRENT MOTORS

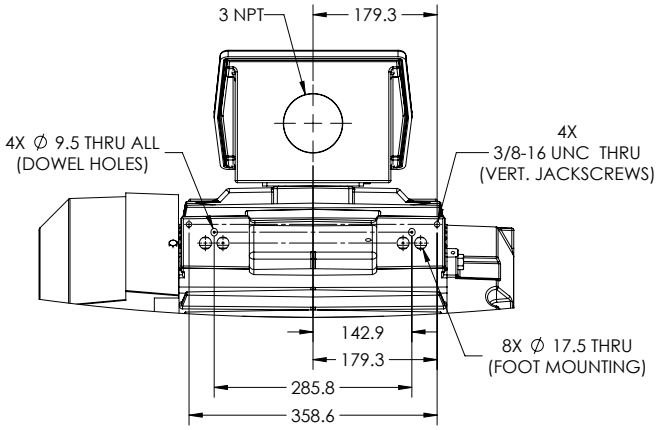
617428-603

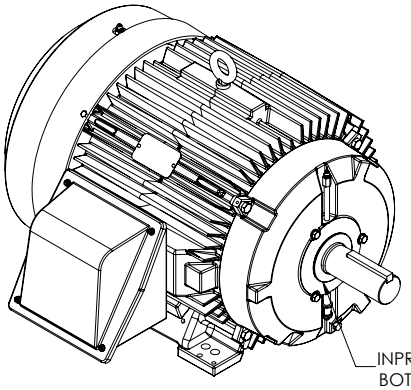
ENCLOSURE: TOTALLY ENCLOSED | SQUIRREL-CAGE INDUCTION | COOLING: FAN COOLED

MOUNTING: FOOT, F-1 | E364T/ E365T FRAME MOUNTING HOLES | ENCLOSURE ENAHNCEMENT: 841-XL









1 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.
WEIGHT (KG) 383.7, WEIGHT MAY VARY BY 15% DEPENDING ON RATING
DIMENSIONS ARE IN MILLIMETERS.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAX PERMISSIBLE SHAFT RUNOUT WHEN FOR BALL BEARING IS .04 & ROLLER BEARING IS .05T.I.R.

REV. DESC: UPDATE MODEL TO ADD EXTERNAL HARDWARE PER PROD MGM			
REV: C	VERSION: 03	REVISED: 02-09-45 10/03/2022	TDR: 000001196512
MODEL NO. 617428-603			
BY: ENFRAJ0		C	

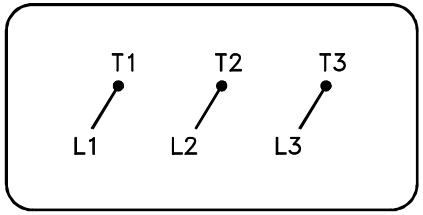
BALDOR

E364/365T TEFC F1 FOOT/CI BOX/GRND TAP/841-XL

617428-603

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			BALDOR
REV. LTR: –	VERSION: 00	TDR: 000000538207	
FILE: \MGA\00000\682		REVISED: 11:54:06 04/30/2010	CONN DIAG – STANDARD 3 LEAD
MTL: –		BY: RAGRA	SH 1 of 1