ABB BALDOR RELIANCE

Customer information packet

ECP84312T-4

50HP, 1185RPM, 3PH, 60HZ, 365T, A3668M, TEFC, F
Class - CLI GP A,B,C,D
Division - Division II

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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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	6-60
Current @ Voltage	62.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	62.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4275
Layout	617428-603
Eff. date	08-26-2024
CD Diagram	416820-036
Poles	06
Leads	3#4
Proprietary	False
Created date	05-30-2023

Lifting Lugs	No Lifting Lugs
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A3668M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	33.49 IN
Power Factor	81
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	1185 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4388																			
CAT #	ECP84312T-4					**FR**	365T			IP56									
SPEC	A36-9121-4275					**ENCL**	TEFC			**DES**	B								
HZ	60	**PH**	3	**CL**	F	**HP**	50	**SF**	1.15	**PF**	81	**%**	**CODE**	G					
VOLTS	460					**AMPS**	62												
RPM	1185			**MAX RPM**	1800	**SER**													
NEMA NOM. EFF	94.1	**%**		**RATING**	40C AMB-CONT														
GUAR MIN. EFF	93	**%**		**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	6-60			**VT HZ**	0-60														
CHP HZ	60-90					**INV TEMP CL**	200	**C**											
	SFA 71							**MTR WT**	973	**LBS**									

NP4333			
CAT #	ECP84312T-4	**ROTOR BARS**	55
SPEC	A36-9121-4275	**STATOR SLOTS**	72
SER		**MAX CORR KVAR**	15.8
GREASE	POLYREX EM		
ABMA DE BRG	65BC03J30X **ODE**	65BC03J30X	
	SFA 71		

SPACE HEATER LEADS H1-H2: **TIE LIKE NUMBERS TOGETHER**

MAX. SPACE HEATER TEMP. **C** **V** **A** **W**

S/O	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	365T	50	P	3/60	1185	460

AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
62.0	CONT	40/F	1.15	B	G	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
-	418141089AE	---	---	.111

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	24.0	1200	5.62	0
1/4	12.5	28.5	1197	46.2	89.0
2/4	25.0	37.2	1194	67.5	93.1
3/4	37.5	48.7	1191	76.6	94.1
4/4	50.0	62.0	1188	80.3	94.1
5/4	62.5	76.5	1184	81.7	93.7

SPEED TORQUE

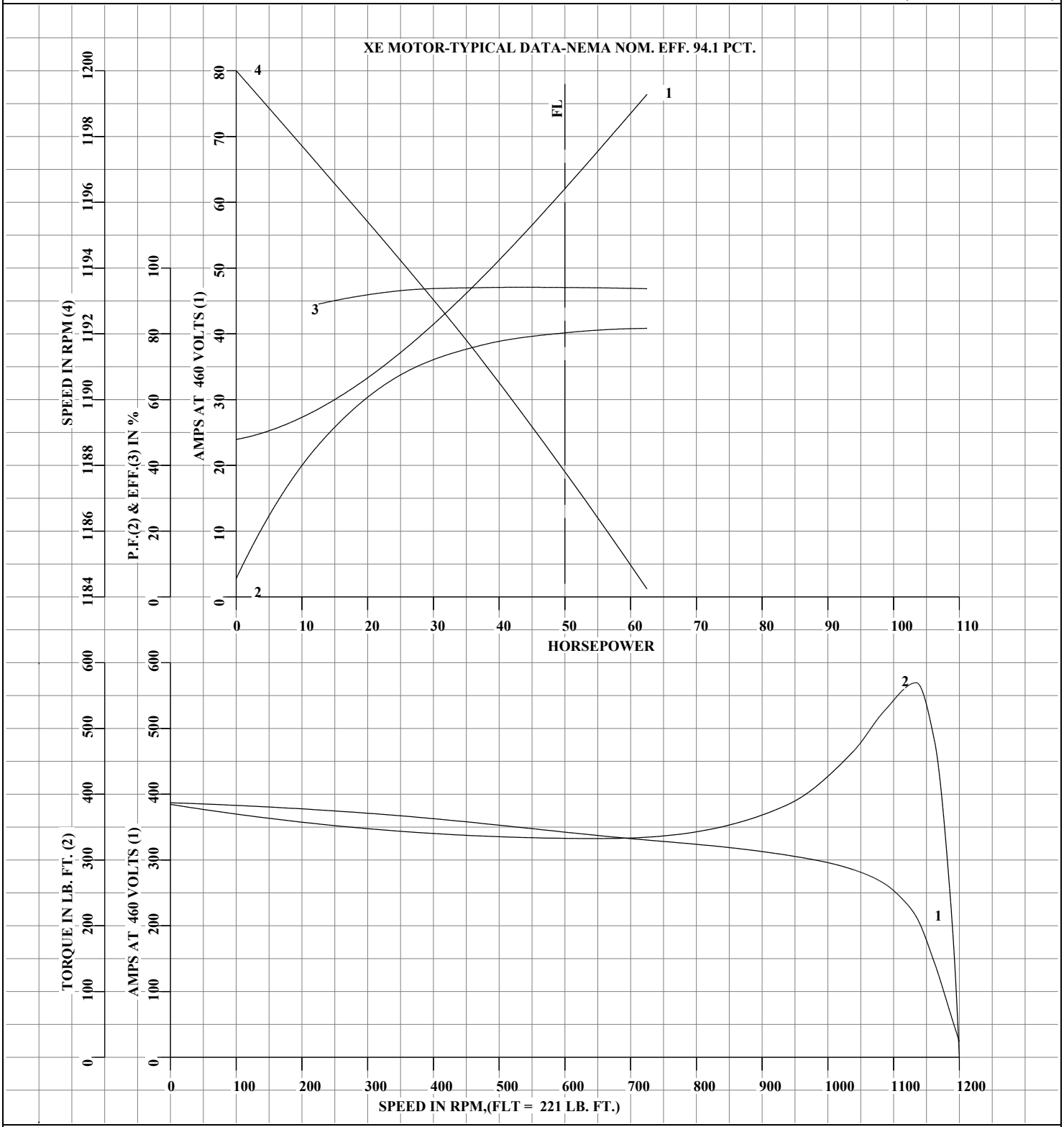
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	174	385	387
PULL UP	650	150	333	337
BREAKDOWN	1135	258	570	213
FULL LOAD	1188	100	221	62.0

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

TYPICAL DATA
XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.1 PCT.

ABB	DRAWN BY: C.B. ATANGANE CHECKED BY: W.L. SMITH APPROVED BY: C.E. JAMISON DATE: 04/15/25	AC MOTOR PERFORMANCE DATA	A36WG4275-R001 DATE ISSUED 04/05/25

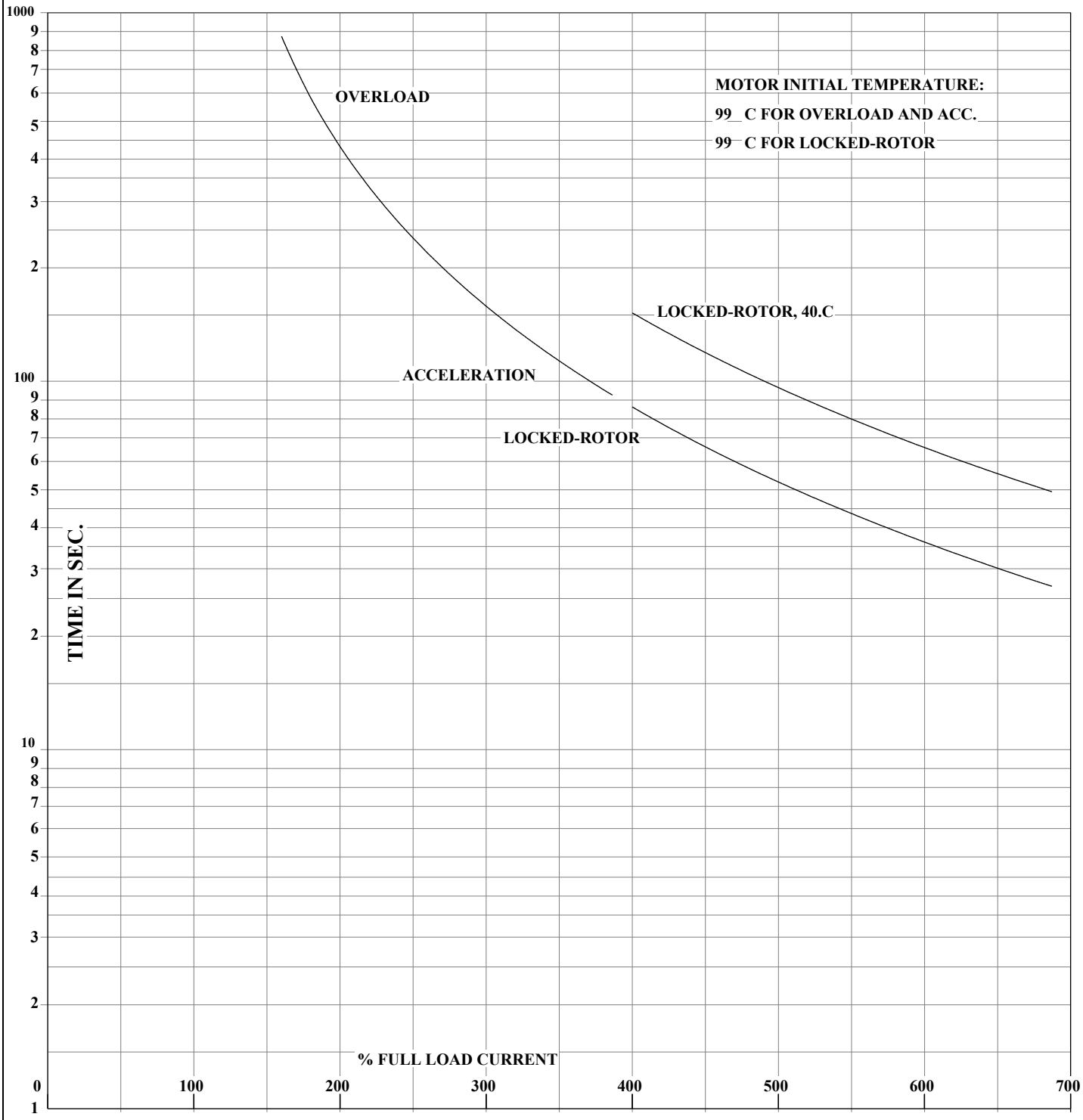
FRAME 365T	RPM 1185	S.F. 1.15	ROTOR 418141089AE
HP 50	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 62.0	CODE LETTER G	TEST DATE ---
PHASE / HERTZ 3/60	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25°C .111
	AMB °C / INSUL 40/F	E/S -	OHMS (BETWEEN LINES)



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

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FRAME 365T	RPM 1185	S.F. 1.15	ROTOR 418141089AE
HP 50	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 62.0	CODE LETTER G	TEST DATE ---
PHASE / HERTZ 3/60	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25°C .111
	AMB °C / INSUL 40/F	E/S -	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.1 PCT.

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

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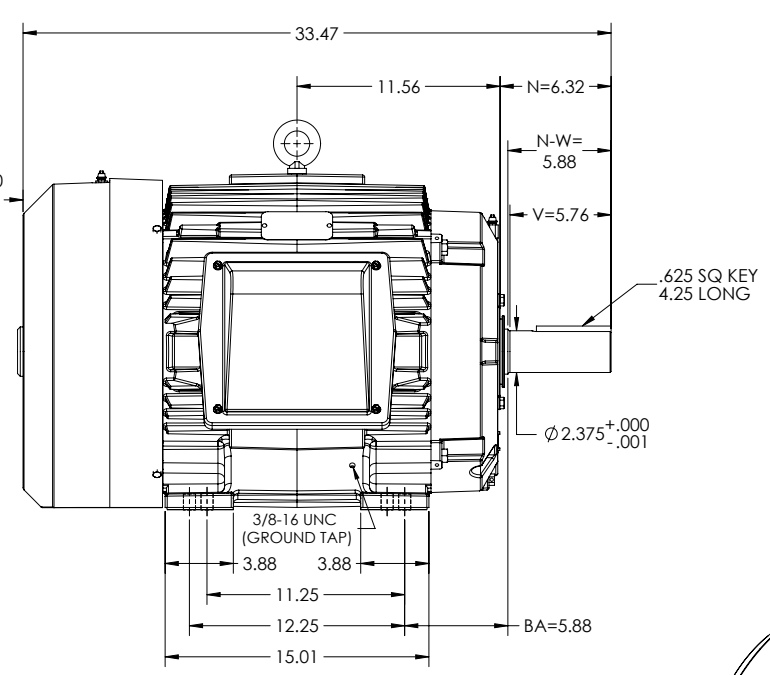
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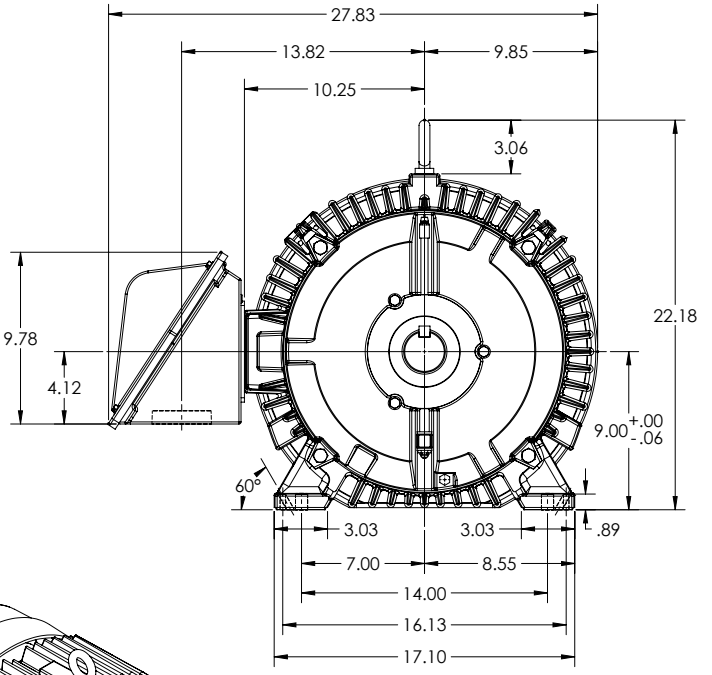
DUTY MASTER ALTERNATING CURRENT MOTORS

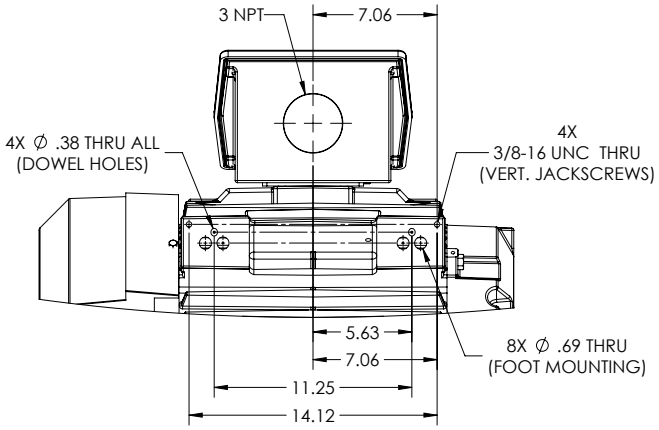
617428-603

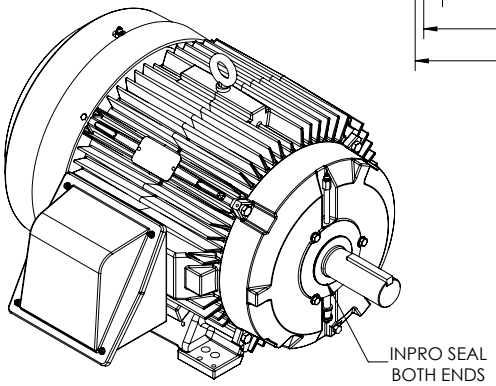
ENCLOSURE: TOTALLY ENCLOSED | SQUIRREL-CAGE INDUCTION | COOLING: FAN COOLED

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.

617428-603

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

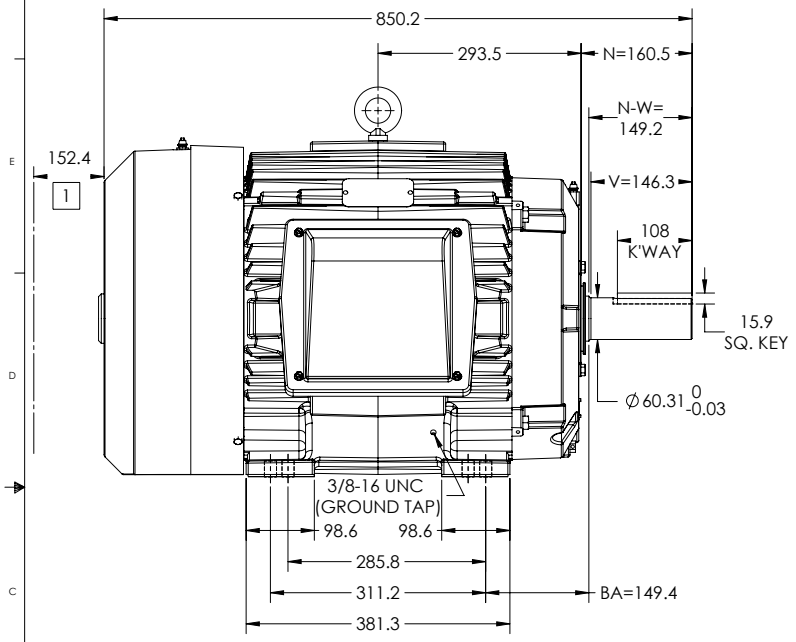
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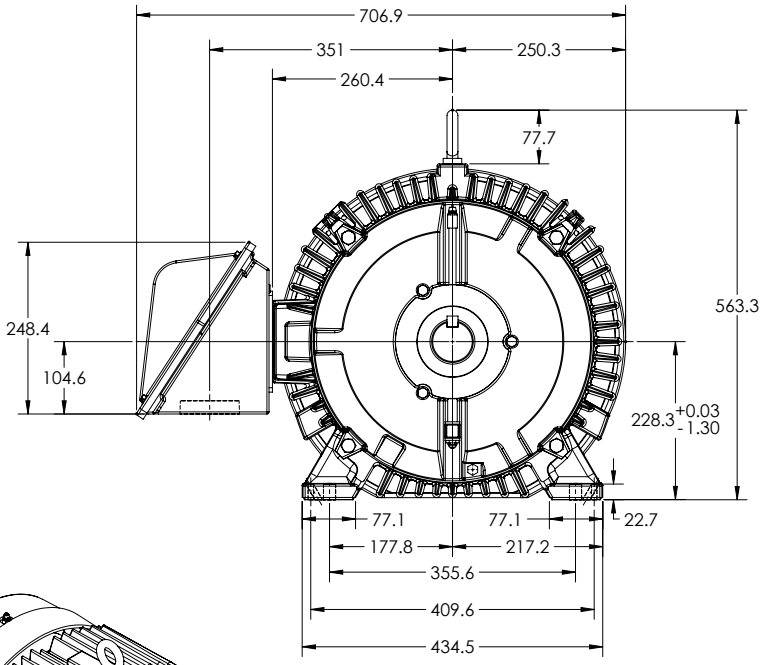
DUTY MASTER ALTERNATING CURRENT MOTORS

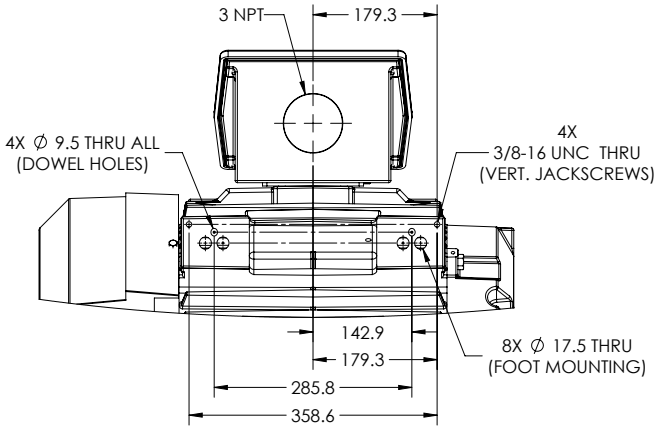
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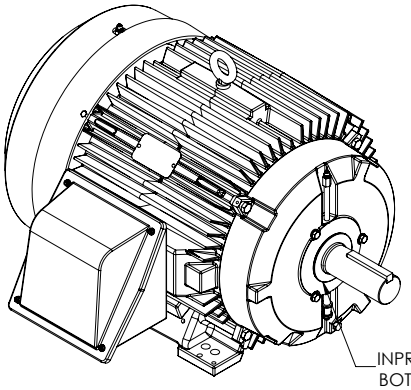
ENCLOSURE: TOTALLY ENCLOSED | SQUIRREL-CAGE INDUCTION | COOLING: FAN COOLED

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	

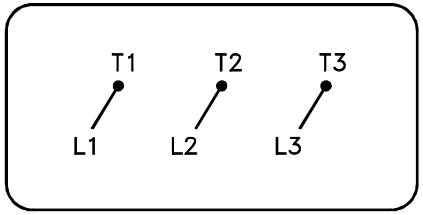
BALDOR

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