

# **ABB BALDOR RELIANCE III**

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## **Customer information packet**

ECP84402T-4

100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	405TS
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	CLI GP A,B,C,D
<b>Haz Area Division</b>	Division II
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	100.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	3600 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	C UR US CCSA US CCSAUSEEV CURUS
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Constant Torque Speed Range</b>	10-60
<b>Current @ Voltage</b>	110.000 A @ 460.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	94.1 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Haz Area Temp Code</b>	T3
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	110.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G

**Part Detail**

<b>Revision</b>	-
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A40WG1242
<b>Layout</b>	617429-791
<b>Eff. date</b>	06-19-2025
<b>CD Diagram</b>	416820-036
<b>Poles</b>	02
<b>Leads</b>	3#2
<b>Proprietary</b>	False
<b>Created date</b>	05-14-2025

<b>Lifting Lugs</b>	<b>Standard Lifting Lugs</b>
<b>Motor Lead Quantity/Wire Size</b>	3 @ 2 AWG
<b>Motor Standards</b>	None
<b>Motor Type</b>	A40066M
<b>Mounting Arrangement</b>	F1
<b>No Load Current</b>	26.3 a
<b>Number of Poles</b>	2
<b>Overall Length</b>	35.19 IN
<b>Power Factor</b>	90
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.125 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3565 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

**NP4566**

<b>CAT NO</b>	ECP84402T-4	<b>SPEC NO.</b>	A40-0005-1242						
<b>HP</b>	100	<b>AMPS</b>	110	<b>VOLTS</b>	460	<b>DESIGN</b>	B		
<b>FRAME SIZE</b>	405TS	<b>RPM</b>	3565	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.DATA</b>	6313	<b>O.D.E. BRG.DATA</b>	6313	<b>PH</b>	3	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F
<b>D.E. BRG.</b>	65BC03J30X	<b>TYPE</b>	ENCL	<b>TEFC</b>	CODE	G			
<b>O.D.E. BRG.</b>	65BC03J30X	<b>POWER FACTOR</b>	90	<b>NEMA-NOM-EFFICIENCY</b>	94.1				
<b>3/4 LOAD EFF.</b>	94.7	<b>IP</b>	56	<b>MAX CORR KVAR</b>	12	<b>GUARANTEED EFFICIENCY</b>	93		
<b>TEMP CODE</b>	T3	<b>TEMP =</b>	200						
<b>CHP HZ</b>	60-70	<b>CT HZ</b>	10-60	<b>VT HZ</b>	0-60				
<b>INVERTER-TEMP-CODE</b>	T3								
<b>SER.NO.</b>		<b>MOTOR WEIGHT</b>							

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**000613007EX**

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<b>CAT NO</b>	ECP84402T-4	<b>SPEC NO.</b>	A40-0005-1242	
<b>NO. ROTOR BARS</b>	38	<b>GREASE TYPE</b>	POLYREX EM	
<b>NO. SLOTS</b>	48	<b>NL AMPS AT RATED VOLTAGE</b>	26.3	
<b>5 YEAR WARRANTY</b>		<b>WINDING RES @25 C</b>	.0511	<b>OHMS</b>
<b>MFG. DATE</b>		<b>SER.NO</b>		

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CUSTOMER INFORMATION PACKET ECP84402T-4 - 100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF						
FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS	
405TSC	100	P	3/60	3565	460	

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

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)	
---	418142005XE	---	---	.0511	

**PERFORMANCE**


LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	26.3	3600	8.33	0
1/4	25.0	37.4	3591	69.0	90.8
2/4	50.0	58.1	3583	85.7	94.0
3/4	75.0	83.0	3574	89.3	94.7
4/4	99.9	110	3565	90.1	94.6
5/4	125	137	3555	90.6	94.2

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	213	314	725
PULL UP	2385	181	267	650
BREAKDOWN	3396	272	401	416
FULL LOAD	3565	100	147	110

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

TYPICAL DATA  
NEMA NOM. EFF. 94.1%

	DRAWN BY: <u>C.E. JAMISON</u>	<b>AC MOTOR PERFORMANCE DATA</b>	<b>A40WG1242-R007</b>
	CHECKED BY: <u>W.L. SMITH</u> APPROVED BY: <u>E.J. CHRISTIAN</u> DATE: <u>07/24/18</u>		

FRAME 405TSC

RPM 3565

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

VOLTS 460

AMPS 110

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

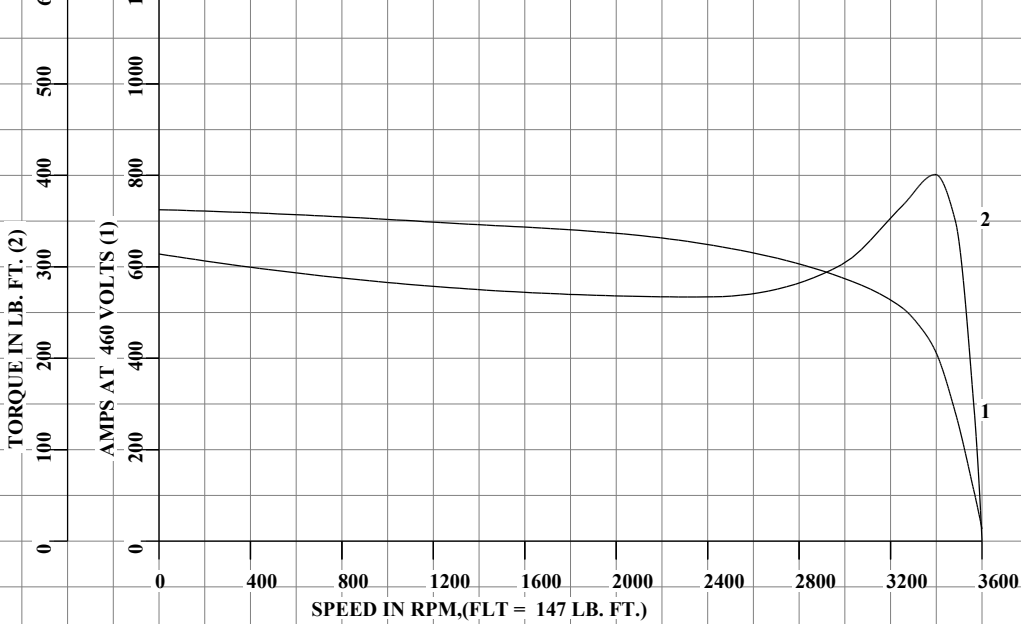
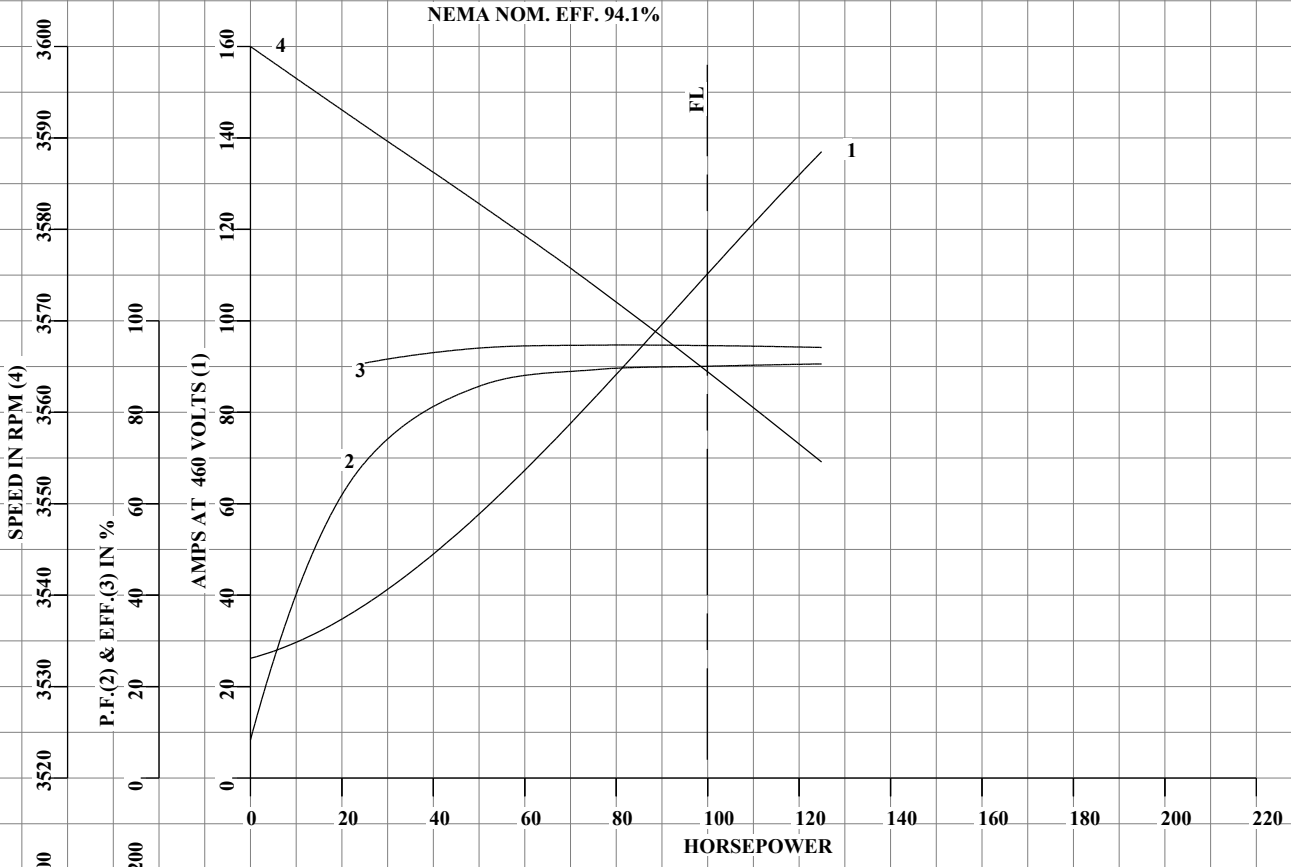
STATOR RES. @ 25°C .0511

PHASE / HERTZ 3/60

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.



DRAWN BY: C.E. JAMISON  
 CHECKED BY: W. L. SMITH  
 APPROVED BY: E.J. CHRISTIAN  
 DATE: 07/24/18

AC MOTOR  
 PERFORMANCE  
 DATA

**A40WG1242-R007**

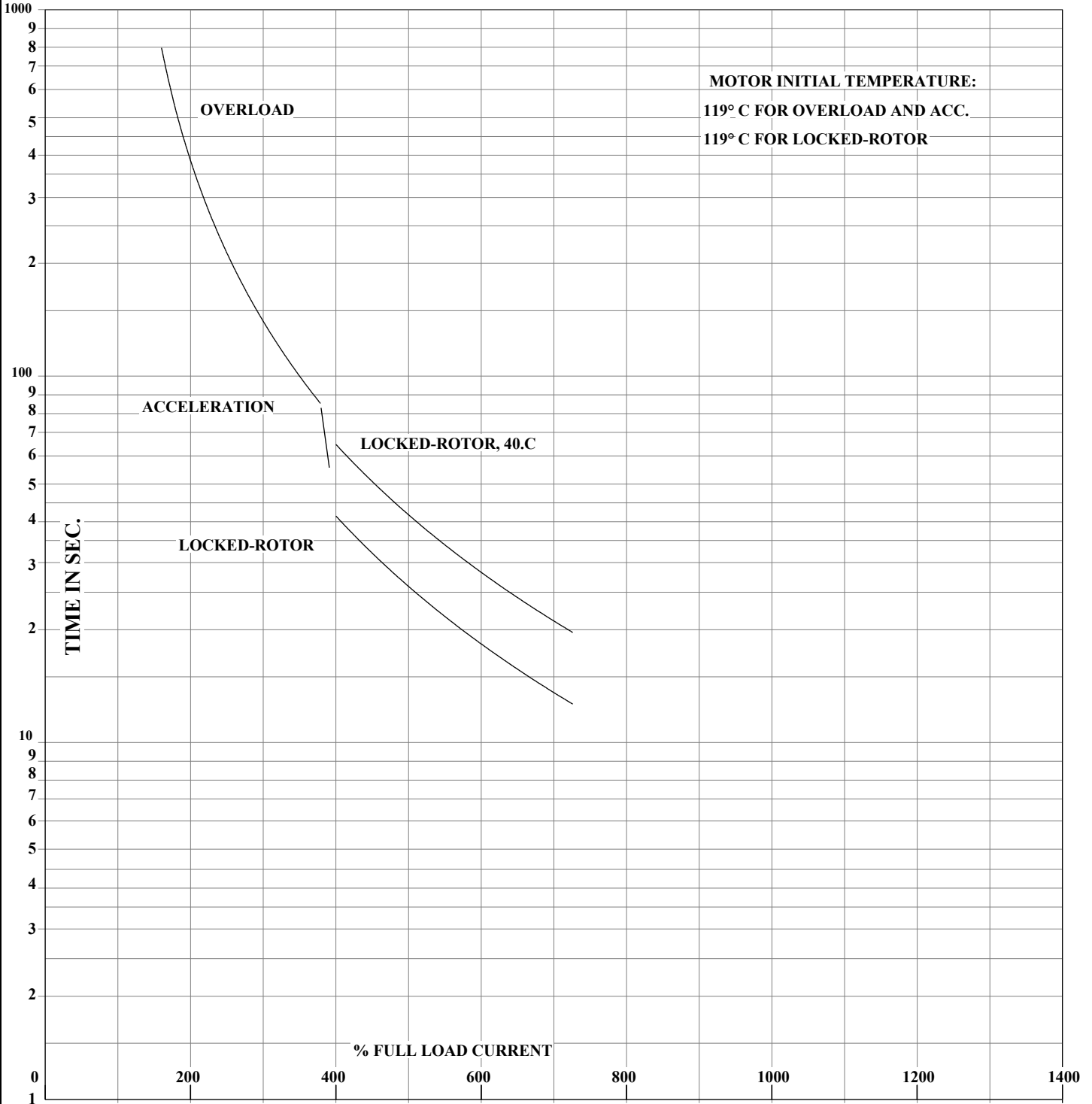
ISSUE DATE 02/25/26

FRAME 405TSC  
HP 100  
TYPE P  
PHASE / HERTZ 3/60

RPM 3565  
VOLTS 460  
AMPS 110  
DUTY CONT  
AMB °C / INSUL 40/F

S.F. 1.15  
NEMA DESIGN B  
CODE LETTER G  
ENCLOSURE TEFC  
E/S ---

TEST S.O. TYPICAL DATA  
TEST DATE ---  
STATOR RES. @ 25°C .0511  
OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE  
NEMA NOM. EFF. 94.1%

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



DRAWN BY: C.E. JAMISON  
CHECKED BY: W.L. SMITH  
APPROVED BY: E.J. CHRISTIAN  
DATE: 07/24/18

AC MOTOR  
PERFORMANCE  
DATA

**A40WG1242-R007**

ISSUE DATE 02/25/26

617429-791

ENCLOSURE: TOTALLY ENCLOSED  
MOUNTING: FOOT, F-1 SIDE

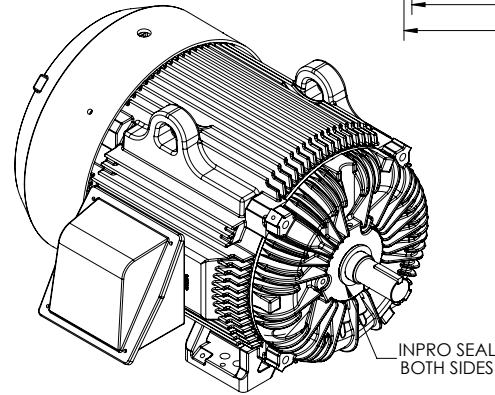
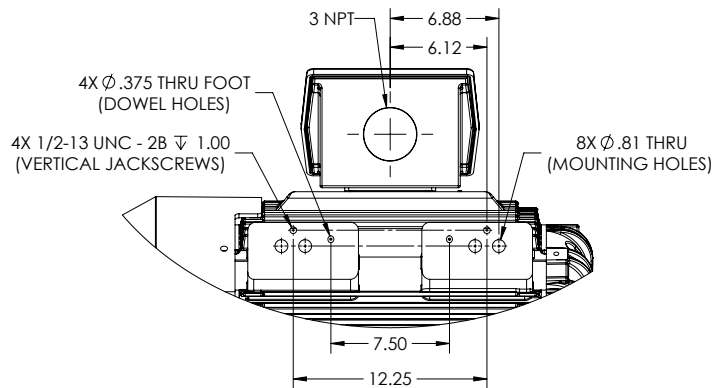
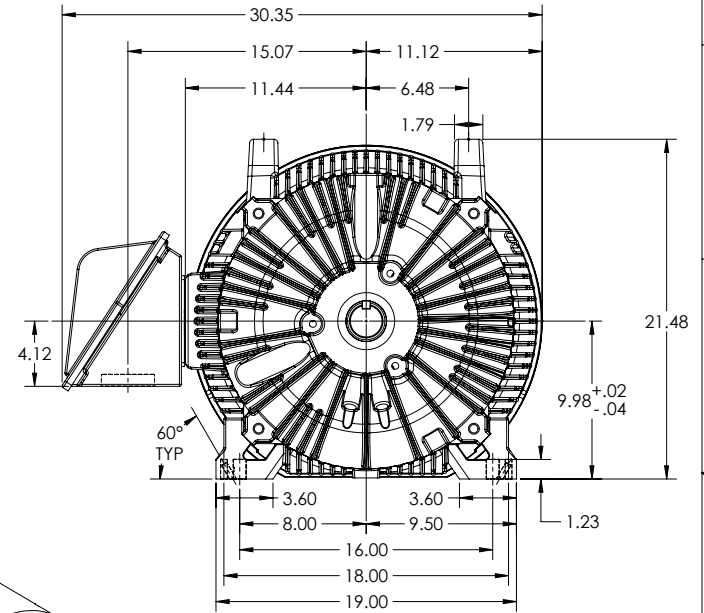
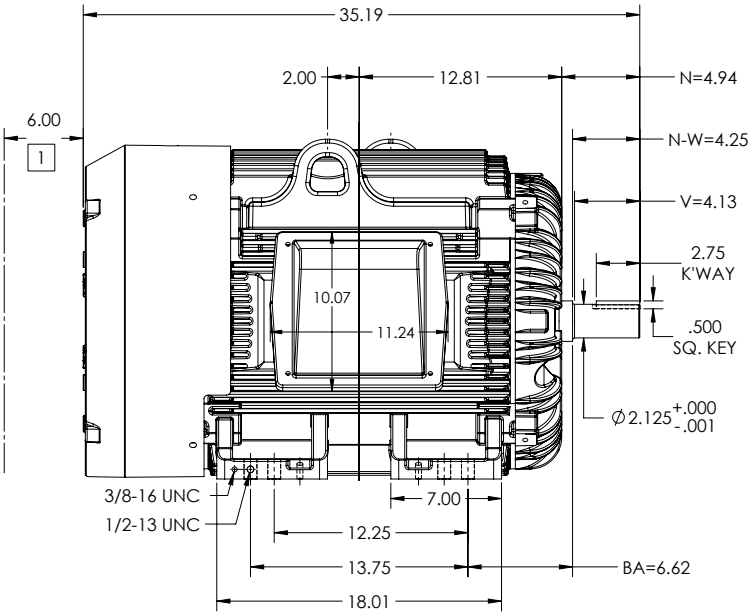
**DUTY MASTER ALTERNATING CURRENT MOTORS**  
SQUIRREL-CAGE INDUCTION

COOLING: FAN COOLED

G405TS/G404TS FRAME MOUNTING HOLES

841-XL ENCLOSURE ENHANCEMENT

DOWEL HOLES & JACKSCREWS



DIMENSIONS ARE IN INCHES.  
WEIGHT (LBS): 1370 MAY VARY BY 1.5% DEPENDING ON RATING.  
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER  
1 OF 1

1 OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .0015" T.I.R.

REV. A	DESC: DS QUALITY	VERSION: 01	REVISED: 01-21-23 12/04/2018	TDR: 00001092776
MODEL NO. 617429-791		BY: USJEDIL		Material:

**BALDOR**

G405/404TS TEF F1 FOOT CT BOX/INPRO/JACKSCREWS/DOWEL HOLES

617429-791

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