

ABB BALDOR RELIANCE III

Customer information packet

ECP84400T-4

100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405T
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	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	C UR US CCSA US CCSAUSEEV CURUS
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	115.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	115.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5476
Layout	617429-818
Eff. date	06-19-2025
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	05-12-2025

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	None
Motor Type	A40072M
Mounting Arrangement	F1
No Load Current	36.1 a
Number of Poles	4
Overall Length	38.19 IN
Power Factor	85
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4566

CAT NO	ECP84400T-4	SPEC NO.	A40-0024-5476						
HP	100	AMPS	115	VOLTS	460	DESIGN	B		
FRAME SIZE	405T	RPM	1785	HZ	60	AMB	40	SF	1.15
D.E. BRG.DATA	6316	O.D.E. BRG.DATA	6316	PH	3	DUTY	CONT	INSUL.CLASS	F
D.E. BRG.	80BC03J30X	TYPE	ENCL	TEFC	CODE	G			
O.D.E. BRG.	80BC03J30X	POWER FACTOR	85	NEMA-NOM-EFFICIENCY	95.4				
3/4 LOAD EFF.	95.7	IP	56	MAX CORR KVAR	22	GUARANTEED EFFICIENCY	94.5		
TEMP CODE	T3	TEMP =	200						
CHP HZ	60-90	CT HZ	15-60	VT HZ	0-60				
INVERTER-TEMP-CODE	T3								
SER.NO.		MOTOR WEIGHT							

000613007EX

CAT NO	ECP84400T-4	SPEC NO.	A40-0024-5476	
NO. ROTOR BARS	47	GREASE TYPE	POLYREX EM	
NO. SLOTS	60	NL AMPS AT RATED VOLTAGE	36.1	
5 YEAR WARRANTY		WINDING RES @25 C	.0482	OHMS
MFG. DATE		SER.NO		

CUSTOMER INFORMATION PACKET		ECP84400T-4 - 100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC				
FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS	
405T	100	P	3/60	1785	460	

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

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)	
-	418142037CE	---	---	.0482	

PERFORMANCE


LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	36.1	1800	4.27	0
1/4	25.0	48.4	1796	52.0	93.0
2/4	50.0	66.6	1792	73.7	95.4
3/4	75.0	89.4	1788	82.0	95.7
4/4	100	115	1783	85.3	95.5
5/4	125	143	1778	86.4	95.0

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	169	498	725
PULL UP	270	145	427	674
BREAKDOWN	1719	255	751	382
FULL LOAD	1783	100	295	115

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

TYPICAL DATA
95.4 PCT NOMINAL EFFICIENCY

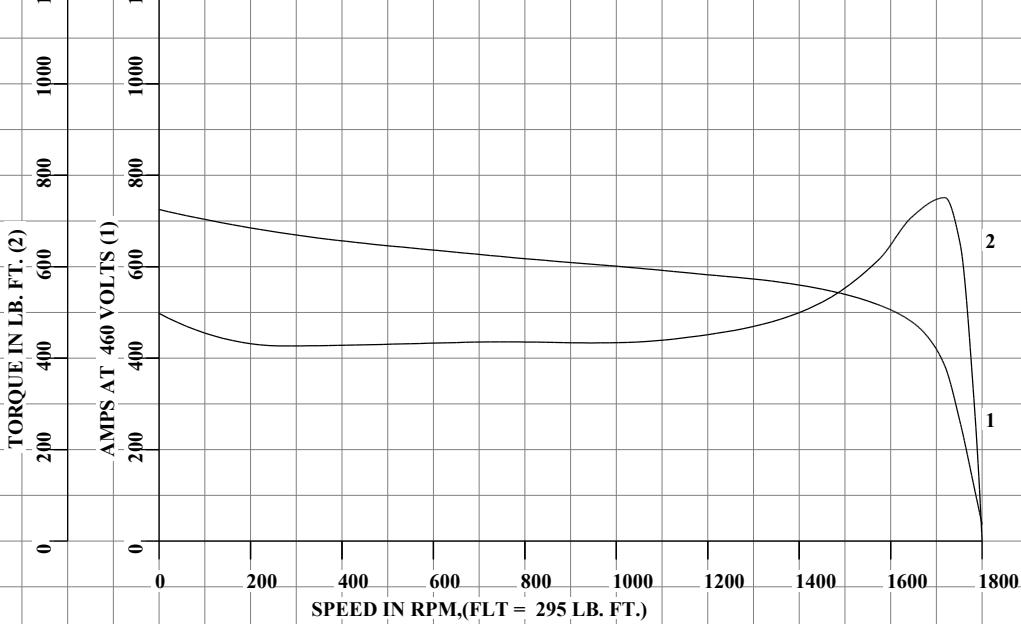
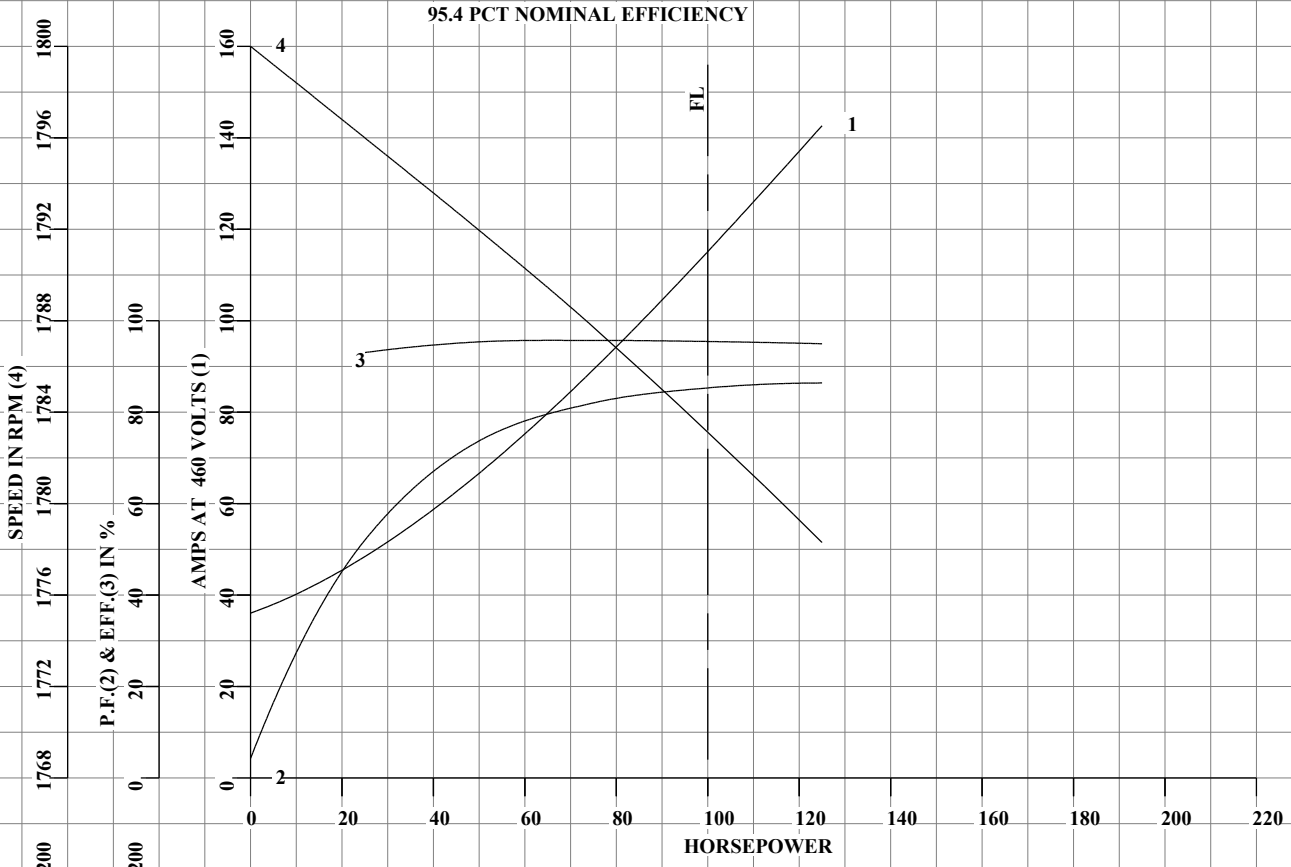
	DRAWN BY: <u>W. L. SMITH</u>	AC MOTOR PERFORMANCE DATA	A40WG5476-R002
	CHECKED BY: <u>J. P. TSAO</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>02/28/20</u>		

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

RPM 1785
VOLTS 460
AMPS 115
DUTY CONT
AMB °C / INSUL 40/F

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

ROTOR 418142037CE
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .0482
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: W. L. SMITH
CHECKED BY: J. P. TSAO
APPROVED BY: W. L. SMITH
DATE: 02/28/20

AC MOTOR
PERFORMANCE
DATA

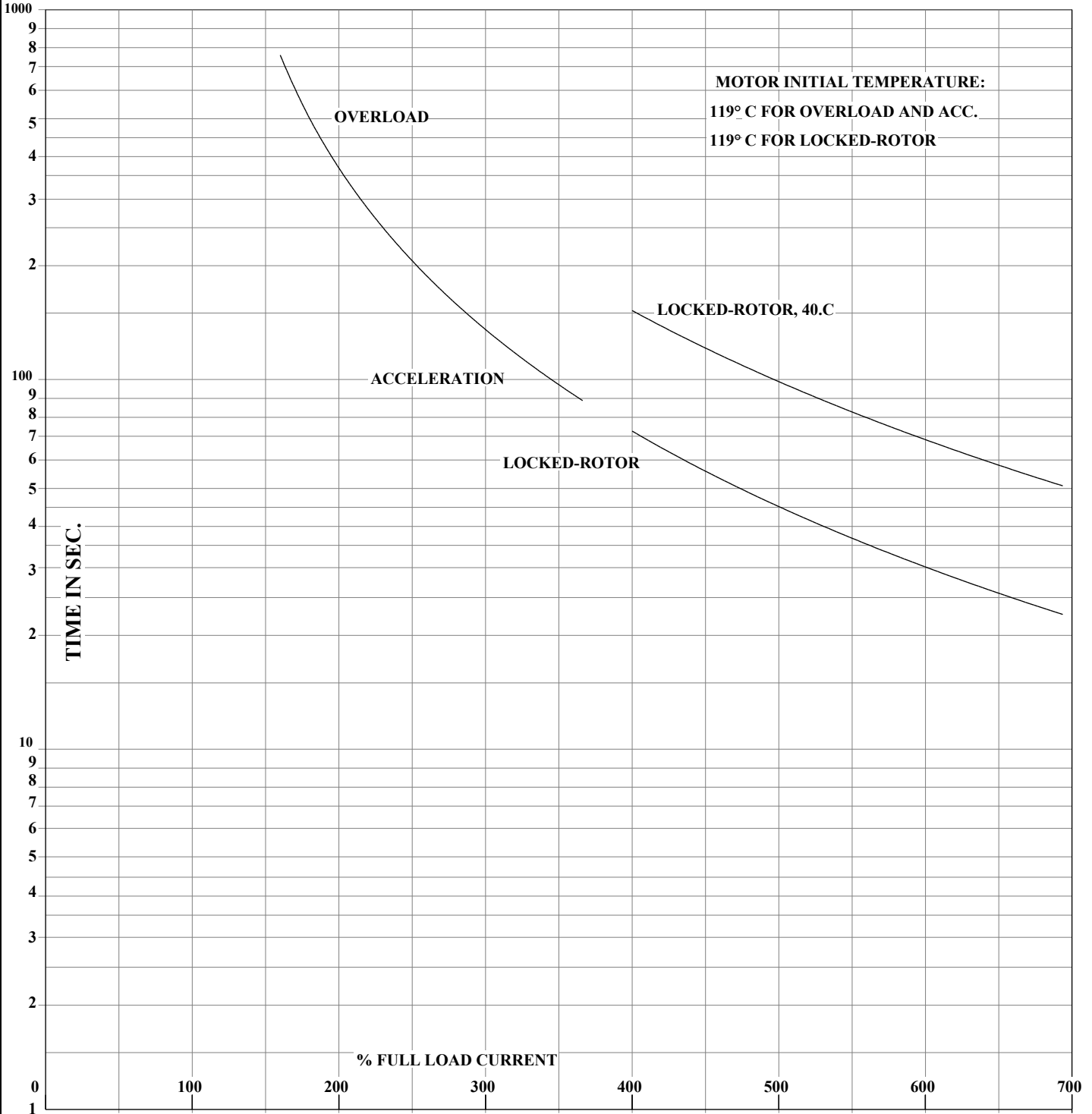
A40WG5476-R002
ISSUE DATE 08/28/23

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

RPM 1785
VOLTS 460
AMPS 115
DUTY CONT
AMB °C / INSUL 40/F

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

ROTOR 418142037CE
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .0482
OHMS (BETWEEN LINES)



**THERMAL LIMIT CURVE
95.4 PCT NOMINAL EFFICIENCY**

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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**AC MOTOR
PERFORMANCE
DATA**

A40WG5476-R002

ISSUE DATE 08/28/23

617429-818

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

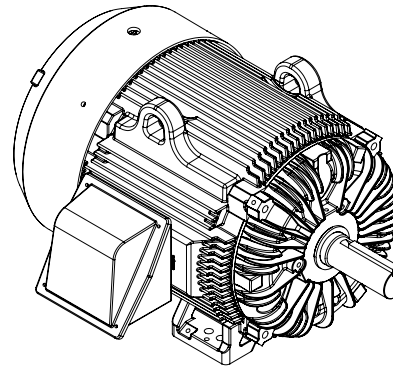
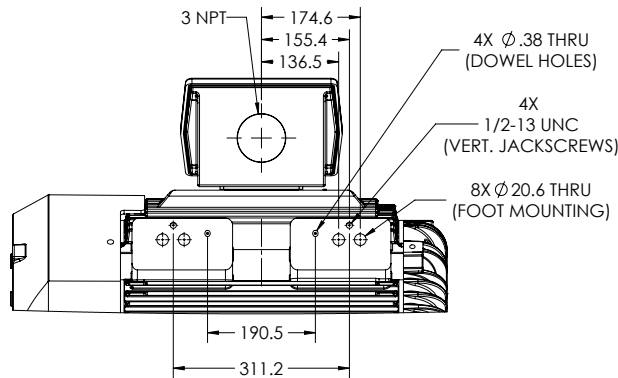
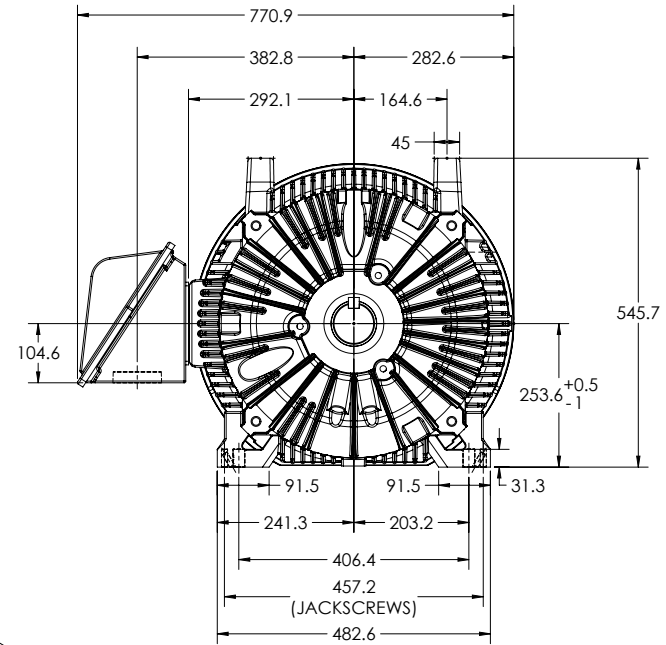
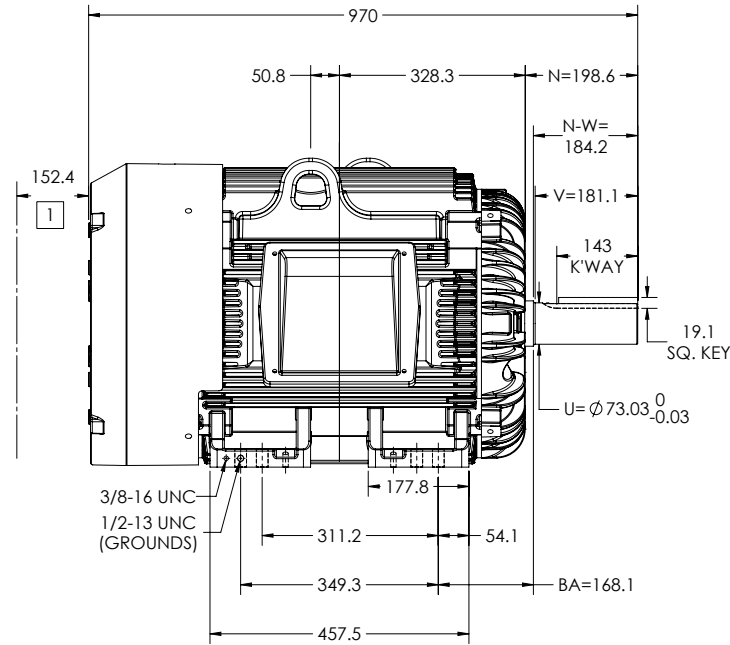
ENCLOSURE: TOTALLY ENCLOSED

COOLING: FAN COOLED

MOUNTING: FOOT, F-1

G405T/G404T FRAME MOUNTING HOLES

ENCLOSURE ENHANCEMENT: 841-XL



DIMENSIONS ARE IN MILLIMETERS.
MOTOR WEIGHT (KG) = 612 ± 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
2 OF 2
818-627-119

1 OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET.

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

REV. DESC: CORRECT WEIGHT ON DS 2			
REV: E	VERSION: 05	REVISED: 11-12-45 03/21/2022	TDR: 00001187880
MODEL NO. 617429-818		REF:	
BY: USJEDIL	Material:	C	

BALDOR

G405-404T TEFC F1 FOOT CAST IRON BOX 841-XL

617429-818

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

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

416820-036