

ABB BALDOR RELIANCE III

Customer information packet

CXT31004T-4

100HP, 1785RPM, 3PH, 60HZ, 405TC, A40072M, TEF

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405TC
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	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	10-60
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	T2D
Heater Indicator	No Heater
High Voltage Full Load Amps	115.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5476
Layout	617429-739
Eff. date	07-08-2024
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	08-18-2020

KVA Code	G
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A40072M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.19 IN
Power Factor	85
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4152LUA															
CAT #		CXT31004T-4				SER					CC		010A		
SPEC		A40-6005-5476				RATING		40C AMB-CONT							
HZ		VOLTS		AMPS		RPM		HP	CODE	SF	DES	PF	NEMA NOM. EFF		
60		460		115		1785		100	G	1.15	B	85	%	95.4	%
												%		%	
PH	3	CL	F	MAX RPM	2700	MAX CORR KVAR		22							
BRG		DE	6316	ODE	6316	ENCL	TEFC	FR	405TC		IP	54			
GREASE		POLYREX EM							MTR WT			LBS			
CL I DIV 2 GRPS A,B,C,D				CL I ZONE 2 GRPS				IIA,IIB,IIC				TEMP T	215	C	
INV READY		CT	10-60	HZ	6:1	VT	0-60	HZ	1000:1		CHP	60-90	HZ	1:1.5	
INV TEMP CL		T2D	C	USABLE AT		50HZ 75HP 380V 105A						1.0SF			

Parts List

Part number	Description	Quantity
SA385088	SA A40-6005-5476	1.000 ea
RA375327	RA A40-6005-5476	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP4152LUA	SS CP XT CLI DIV2 UR CSA-C US-EEV NEMA P	1.000 ea
412118006A	DRAIN	2.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
415072001B	CLAMP	1.000 ea
083198127A	G400 MOLDED FAN COVER	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
078548001R	FAN KB 234/150 (84) 400	1.000 ea
004824015A	GREASE POLYREX EM	0.880 lb
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018026CK	HHCS 3/8-16X3-1/4 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
415045002B	SLGR	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	4.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034530056AB	1/8 X 7 PP NIPPLE	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
089412504A	G400 STD C-FACE BRKT 089416507WCA	1.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018032CK	HHCS 3/8-16X4 PLATED	3.000 ea
415045002B	SLGR	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea

077176000L	C/BOX, PAINTED 440	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea
043292000AJ	GASK 320-400	1.000 ea
402731001A	GASK 360-440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/OAWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025L14	WILKOFAS, 776.14, GRUNDFOS BLACK	0.380 ga
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							CXT31004T-4 - 100HP, 1785RPM, 3PH, 60HZ, 405TC, A40072M, TEF						
S/O			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> CHECKED BY: <u>J. P. TSAO</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>02/28/20</u>						AC MOTOR PERFORMANCE DATA			A40WG5476-R002 DATE ISSUED 08/28/23					

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418142037CE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 115

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

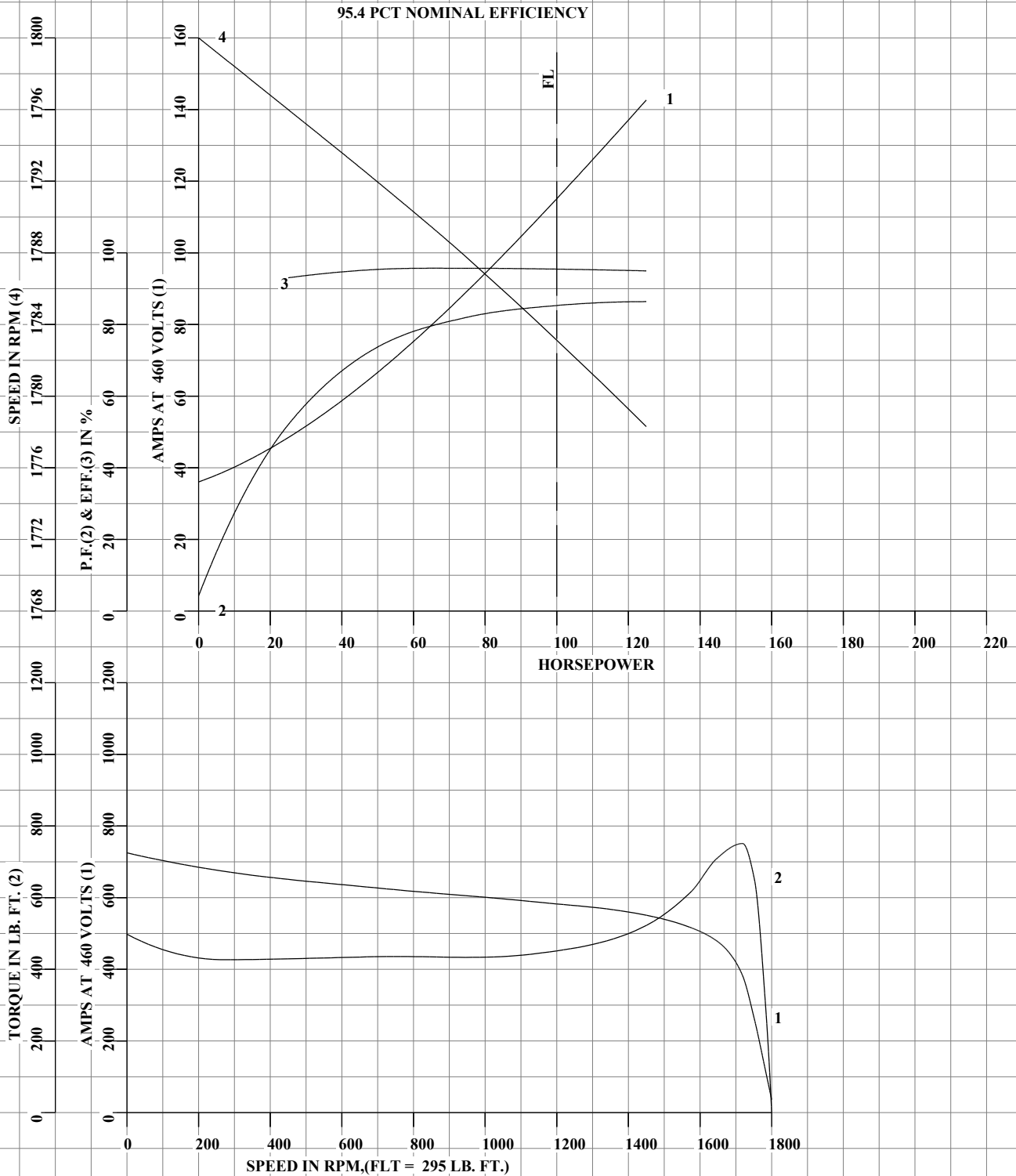
ENCLOSURE TEFC

STATOR RES. @ 25°C .0482

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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DATE: 02/28/20

AC MOTOR
PERFORMANCE
DATA

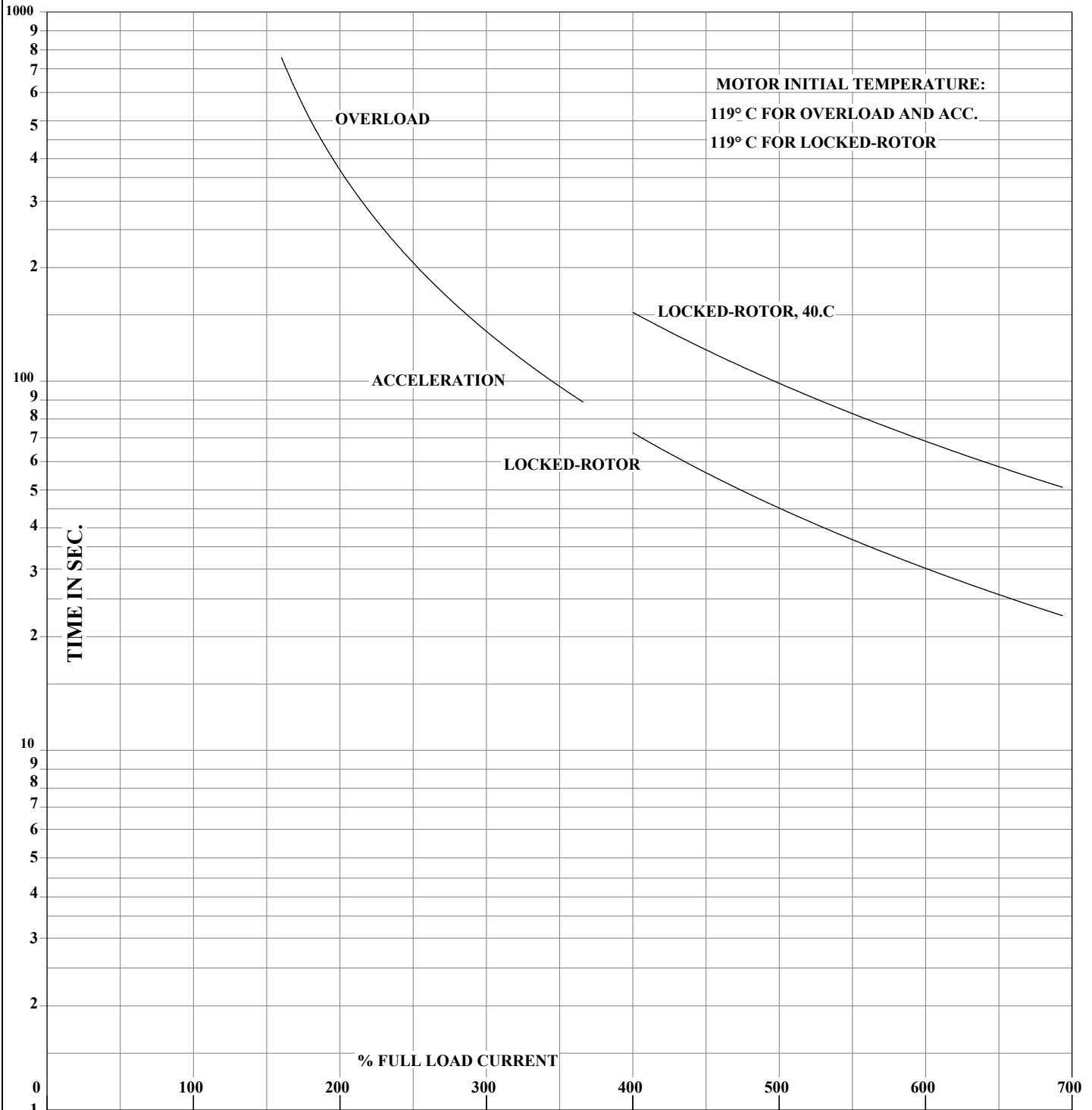
A40WG5476-R002

ISSUE DATE 08/28/23

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

CXT3100AT-4 110HP, 1785RPM, 3PH, 60HZ, 460VTC A40WG5476-REF
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**

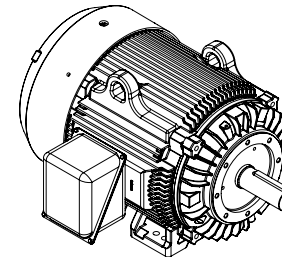
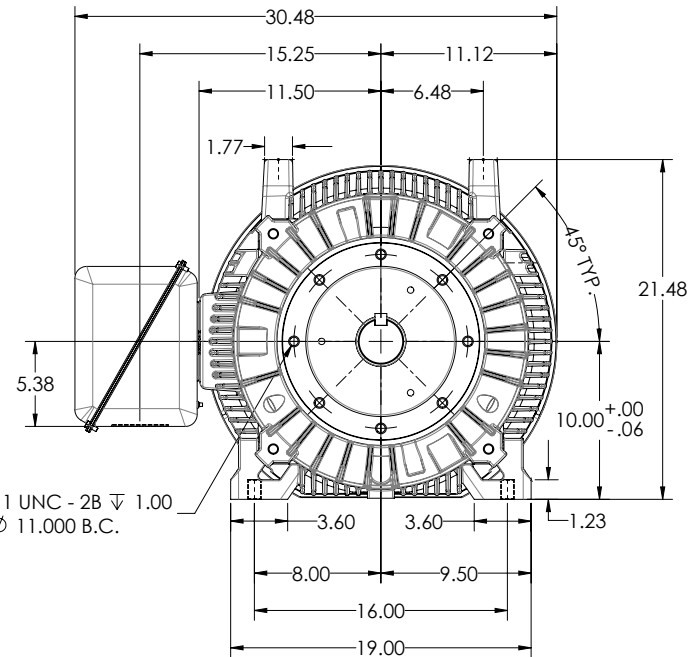
A40WG5476-R002

ISSUE DATE 08/28/23

617429-739

COOLING: FAN COOLED

G405TC/G404TC FRAME MOUNTING HOLES



DIMENSIONS ARE IN INCHES.
WEIGHT (LBS): 1350. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

BALDOR®

G405TC/404TC TEFC F1 FOOTED SIDE/CENTER STEEL C/BOX

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