

ABB BALDOR RELIANCE III

Customer information packet

CEM4400T-G

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	113.000 A @ 460.0 V 226.000 A @ 230.0 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	113.0 a
Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5518
Layout	617429-003
Eff. date	03-08-2023
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	09-03-2019

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.19 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.15
Shaft Ground Indicator	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

NP2496L	
MOBIL POLYREX EM	

NP2381L

SPEC NO.	A40-0001-5518	CAT.NO.	CEM4400T-G				FRAME	405TC
HP	100	PHASE	3	DESIGN	B	TYPE	P	
RPM	1785	HZ	60	AMB	40	SF	1.15	
VOLTS	230/460	DUTY	CONT	INSUL.CLASS	H			
AMPS	226/113	ENCL	TEFC	CODE	G			
DRIVE END BEARING	80BC03J30X	NEMA-NOM-EFFICIENCY	95.4					
OPP D.E. BEARING	6316/C3VL0241							
SER.NO.								
	VPWM INV DUTY 10:1 CT AT 1.0SF				MOTOR WEIGHT			

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							CEM4400T-G - 100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			405T			100			P			3/60			1785			230/460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
226/113			CONT			40/H			1.15			B			G			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
-			418142-34-VE			---			---			.0134/.0536								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			30.9			1800			5.35			0					
1/4			25.0			41.1			1796			61.5			92.7					
2/4			50.0			60.9			1792			80.7			95.2					
3/4			75.0			85.7			1788			85.7			95.6					
4/4			100			113			1783			86.8			95.4					
5/4			125			142			1778			87.0			94.9					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			153			450			724					
PULL UP						360			140			413			711					
BREAKDOWN						1720			252			742			387					
FULL LOAD						1783			100			295			113					
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																				
TYPICAL DATA XE MOTOR																				
						DRAWN BY: <u>C.E. JAMISON</u>						AC MOTOR PERFORMANCE DATA			A40WG5518-R001 DATE ISSUED 08/26/19					
						CHECKED BY: <u>W.L.SMITH</u>														
						APPROVED BY: <u>E.J.CHRISTIAN</u>														
						DATE: <u>08/26/19</u>														

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418F42-34-VE

HP 100

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 226/113

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

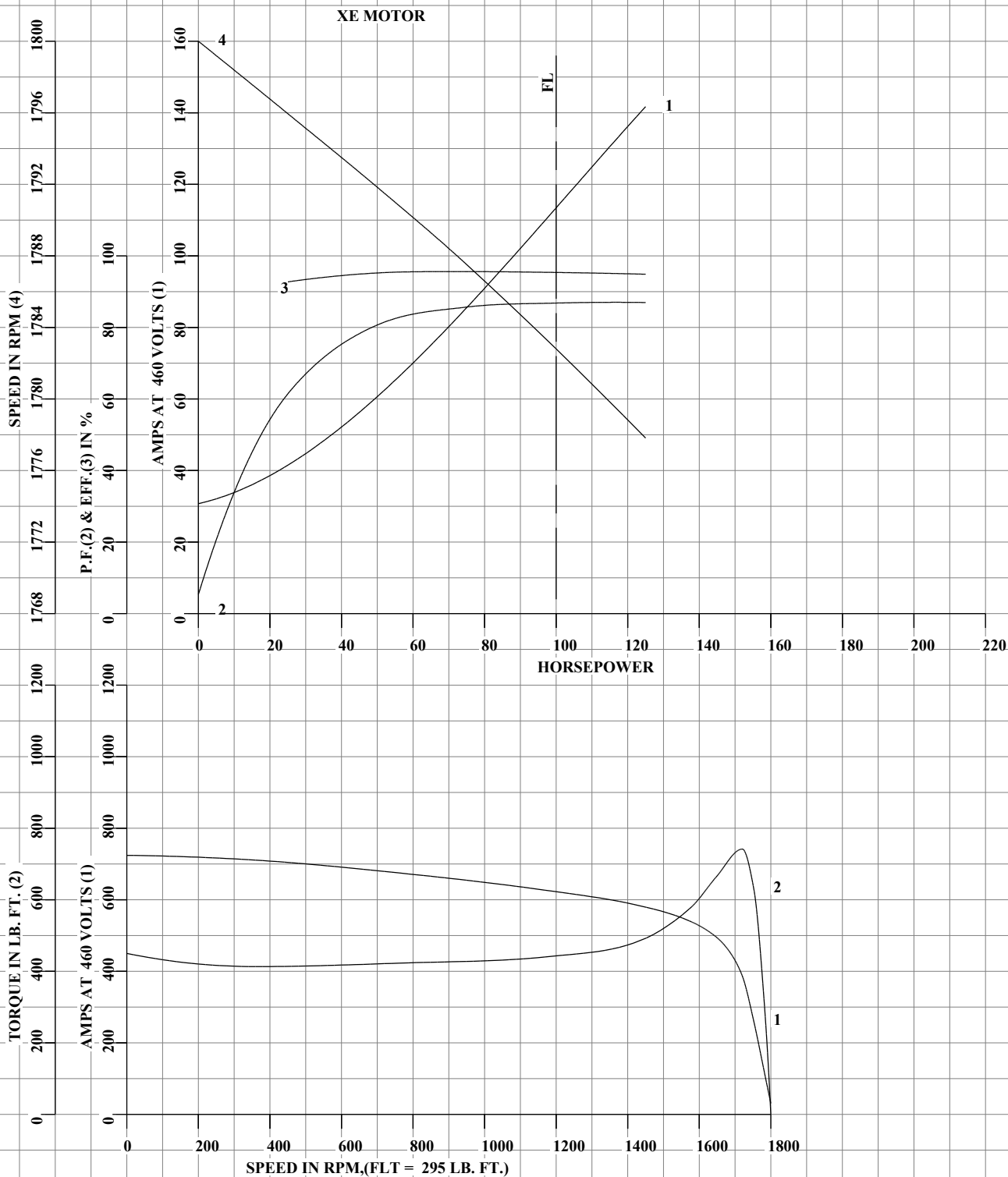
ENCLOSURE TEFC

STATOR RES. @ 25°C .0134/.0536

AMB °C / INSUL 40/H

E/S -

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 230/460 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: 08/26/19

AC MOTOR
PERFORMANCE
DATA

A40WG5518-R001

ISSUE DATE 08/26/19

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

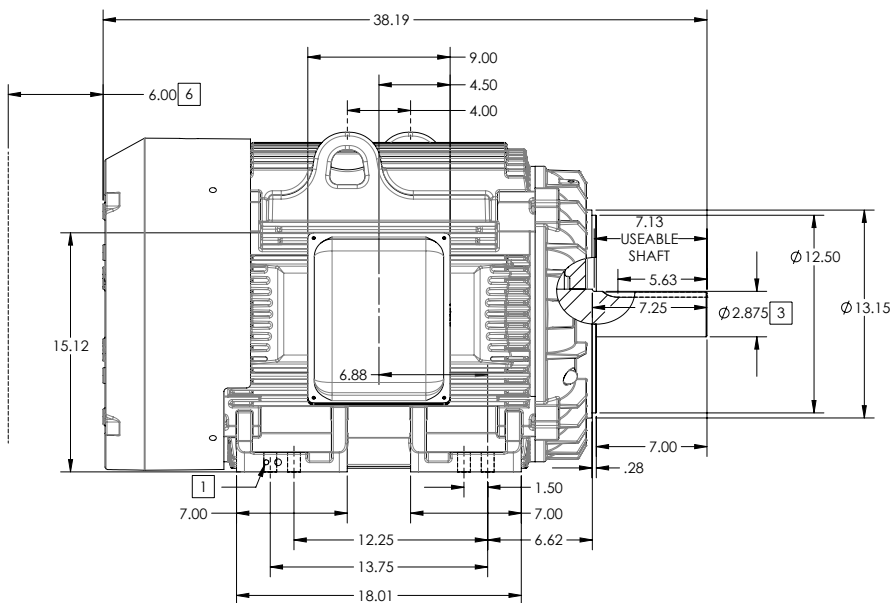
FRAME G405TC ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

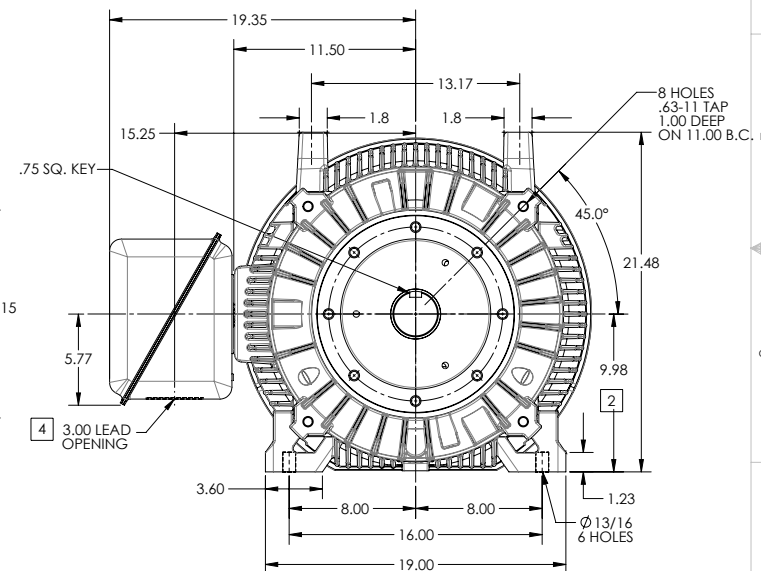
INCLUDES 404TC FRAME MOUNTING HOLES

STANDARD INDUSTRIAL ENCLOSURE



- GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
- VARIES +.00, -.06
- VARIES +.000, -.001
- ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
- MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
- OBSTRUCTION MUST NOT ENCROACH ON AIR INLET
- MAX FACE RUNOUT AND FIT ECCENTRICITY = 0.007 T.I.R.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.



[5] WEIGHT (LBS): 1350

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
1 OF 2

500-6742119

REV. DESC: REMOVE .01 FROM D.E. EXT.	TDR: 000000867674
REV: B VERSION: 02	REVISED: 11/32/25 08/27/2014
MODEL NO. 617429-003	REF:
BY: RAGGDM	Material:

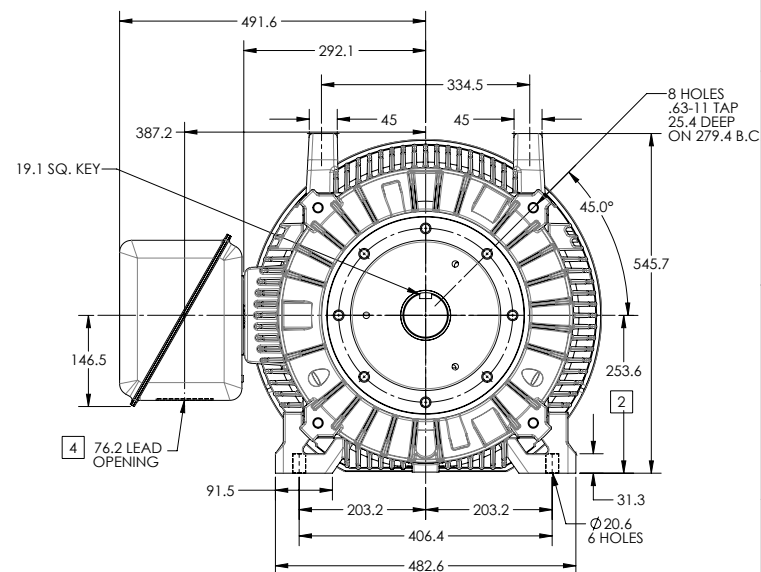
BALDOR

G405TC/404TC STD - FOOTED - STANDARD ENCLOSURE

617429-003

SQUIRREL-CAGE INDUCTION

STANDARD INDUSTRIAL ENCLOSURE



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +00,-03
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET
7. MAX FACE RUNOUT AND FIT ECCENTRICITY = 0.178 T.I.R.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

5 WEIGHT (KGS): 620

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

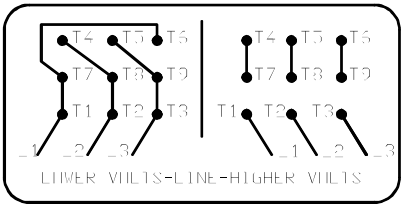
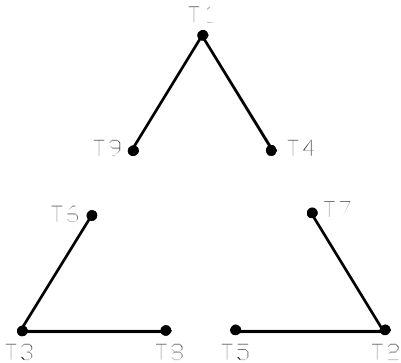
REV. DESC: REMOVE .01 FROM D.E. EXT.			
REV: B	VERSION: 02	REVISED: 11-32-25 08/27/2014	TDR: 000000867674
MODEL NO. 617429-003			REF:
BY: RAGGDM		Material:	

BALDOR®

G405TC/404TC STD - FOOTED - STANDARD ENCLOSURE

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —		

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002