ABB BALDOR RELIANCE

Customer information packet

CEM4400T-G

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1
Class - None
Division - Not Applicable

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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**		

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

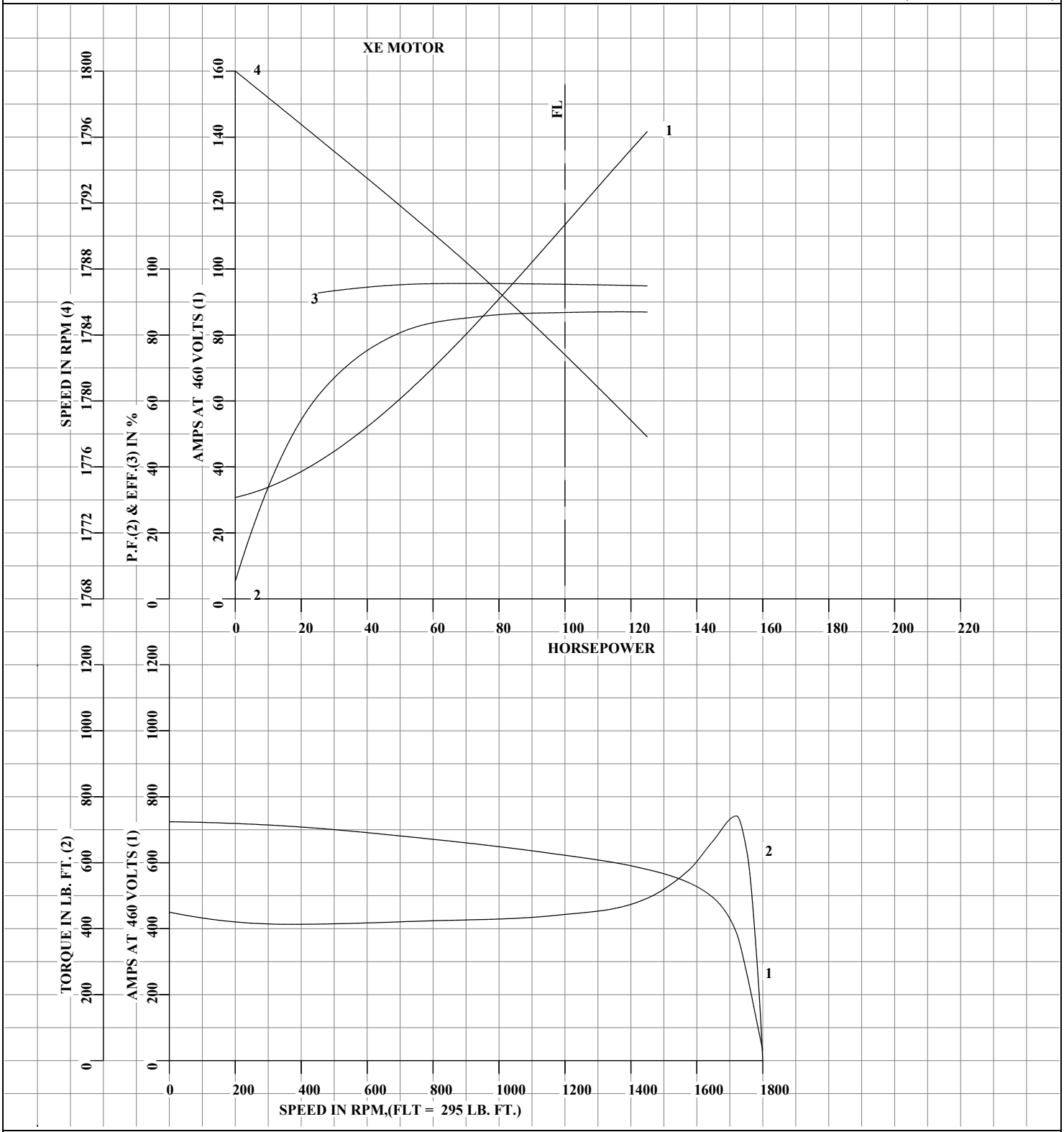
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	153	450	724
PULL UP	360	140	413	711
BREAKDOWN	1720	252	742	387
FULL LOAD	1783	100	295	113

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

TYPICAL DATA
XE MOTOR

ABB	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 DATE ISSUED 08/26/19

FRAME 405T	RPM 1785	S.F. 1.15	ROTOR 418142-34-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.

ABB	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

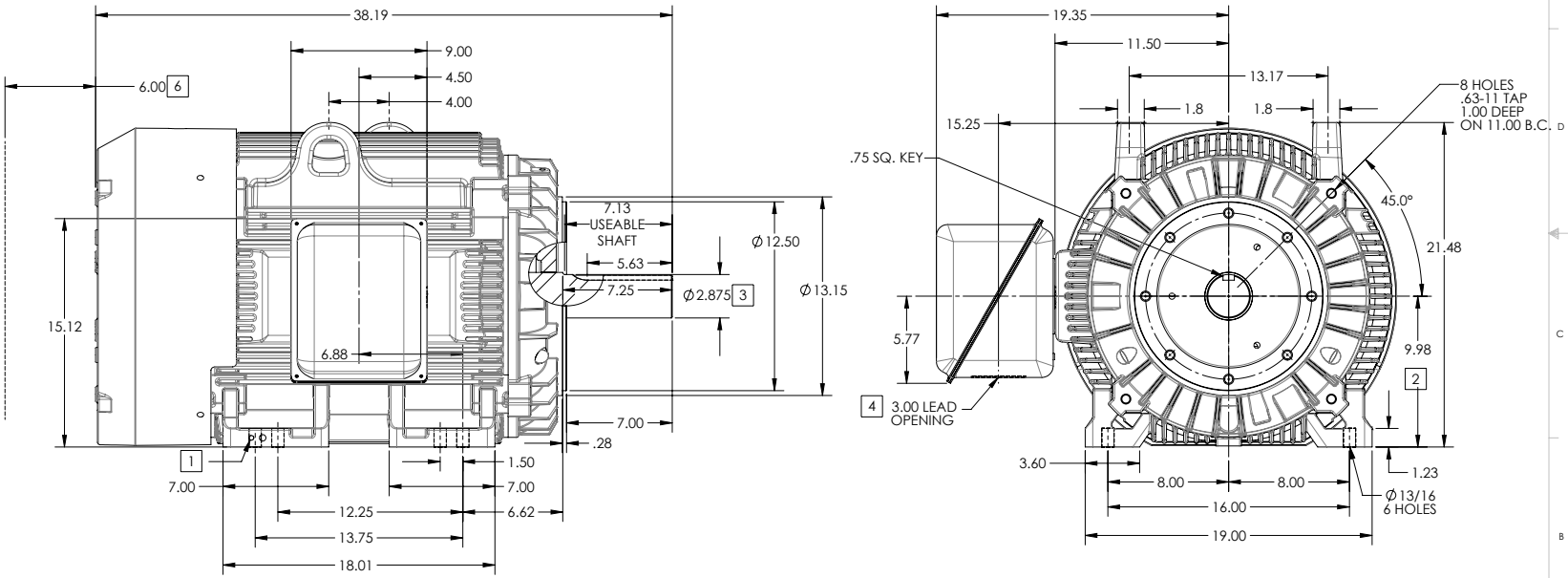
617429-003

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



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.000,-.001
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 = 0.007 T.I.R.

5 WEIGHT (LBS): 1350

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.

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

617429-003

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MODEL NO. 617429-003			REF:
BY: RAGGDM	Material:	C	

BALDOR

G405TC/404TC STD – FOOTED – STANDARD ENCLOSURE

617429-003

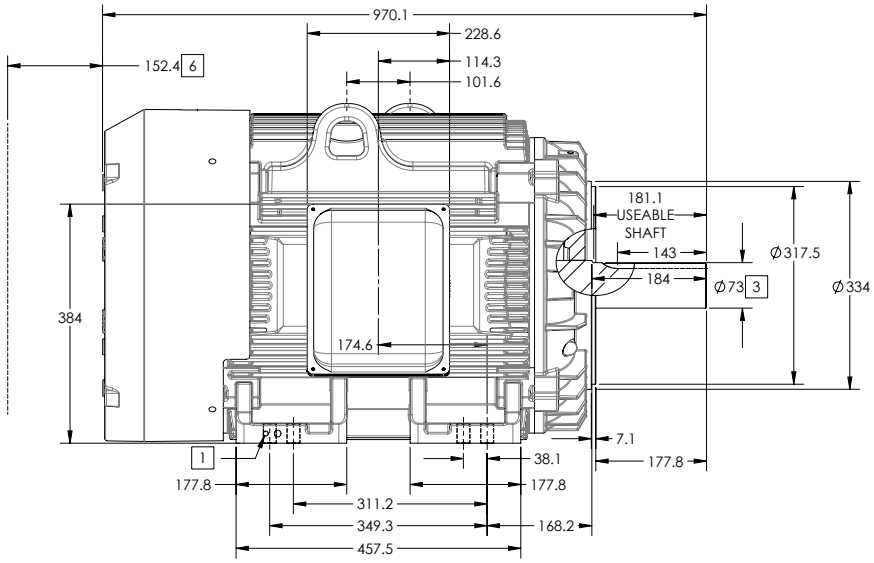
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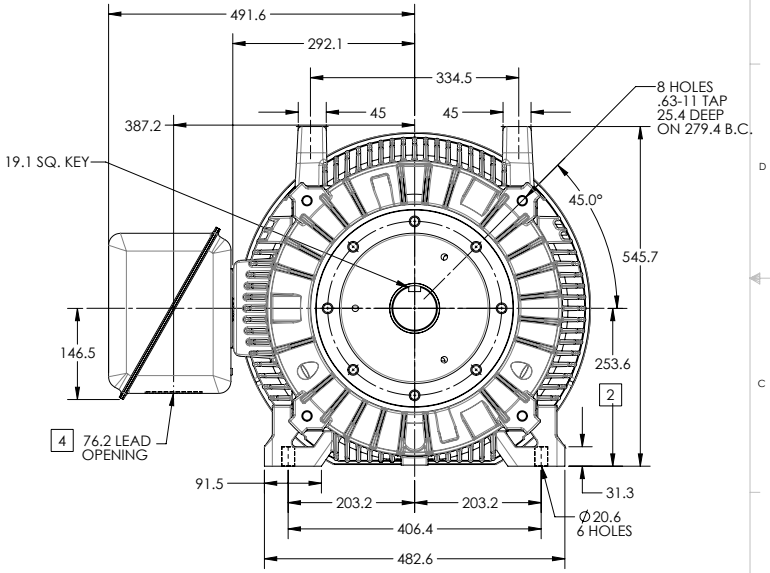
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED | FRAME G405TC ABOVE NEMA RATINGS | COOLING: FAN COOLED

MOUNTING: FOOT | INCLUDES 404TC FRAME MOUNTING HOLES | STANDARD INDUSTRIAL ENCLOSURE





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.

SHEET NUMBER 2 OF 2

617429-003

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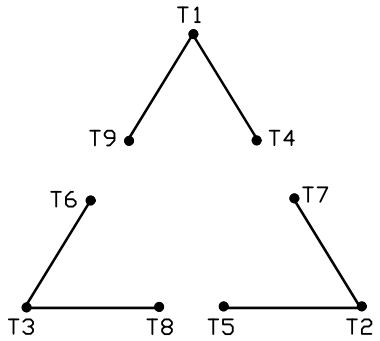
BALDOR

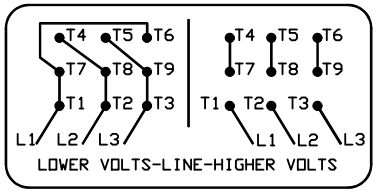
G405TC/404TC STD – FOOTED – STANDARD ENCLOSURE

617429-003

416820-002

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





(N. P. 1575-B)

416820-002

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: –		

ABB

CONN DIAG – STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1