

**BALDOR • RELIANCE**

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# Customer information packet

## EM4400T

100HP, 1785RPM, 3PH, 60HZ, 405T, A40064M, TEFC

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	405T
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	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	112.000 A @ 460.0 V 224.000 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	112.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

## Part detail

Revision	T
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0251
Layout	617429-001
Eff. date	09-04-2024
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	07-16-2013

<b>Motor Type</b>	A40064M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	38.04 IN
<b>Power Factor</b>	87
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1785 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**

**NP2349L**

<b>SPEC NO.</b>	P40G3923	<b>CAT.NO.</b>	EM4400T	<b>FRAME</b>	405T
<b>HP</b>	100	<b>VOLTS</b>	230/460	<b>PHASE</b>	3
<b>RPM</b>	1785	<b>AMPS</b>	224/112	<b>HZ</b>	60
<b>DRIVE END BEARING</b>	80BC03J30X	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F
<b>OPP D.E. BEARING</b>	80BC03J30X	<b>ENCL</b>	TEFC	<b>CODE</b>	G
<b>SER.NO.</b>		<b>POWER FACTOR</b>	87	<b>NEMA-NOM-EFFICIENCY</b>	95.4
				<b>MAX CORR KVAR</b>	18
				<b>GUARANTEED EFFICIENCY</b>	94.5
				<b>NEMA NOM/CSA QUOTED EFF</b>	
				<b>MOTOR WEIGHT</b>	

REL. 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	ENCL.
224/112	CONT	40/F	1.15	B	G	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (BETWEEN LINES)
596956	418142-33-RE	---	---	.0123/.0492

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	28.6	1800	5.49	0
1/4	25.0	39.2	1796	64.3	93.0
2/4	50.0	59.5	1792	82.5	95.4
3/4	75.0	84.6	1788	86.7	95.7
4/4	100	112	1783	87.4	95.4
5/4	125	141	1778	87.3	94.9

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	151	445	725
PULL UP	360	136	400	706
BREAKDOWN	1721	250	735	382
FULL LOAD	1783	100	295	112

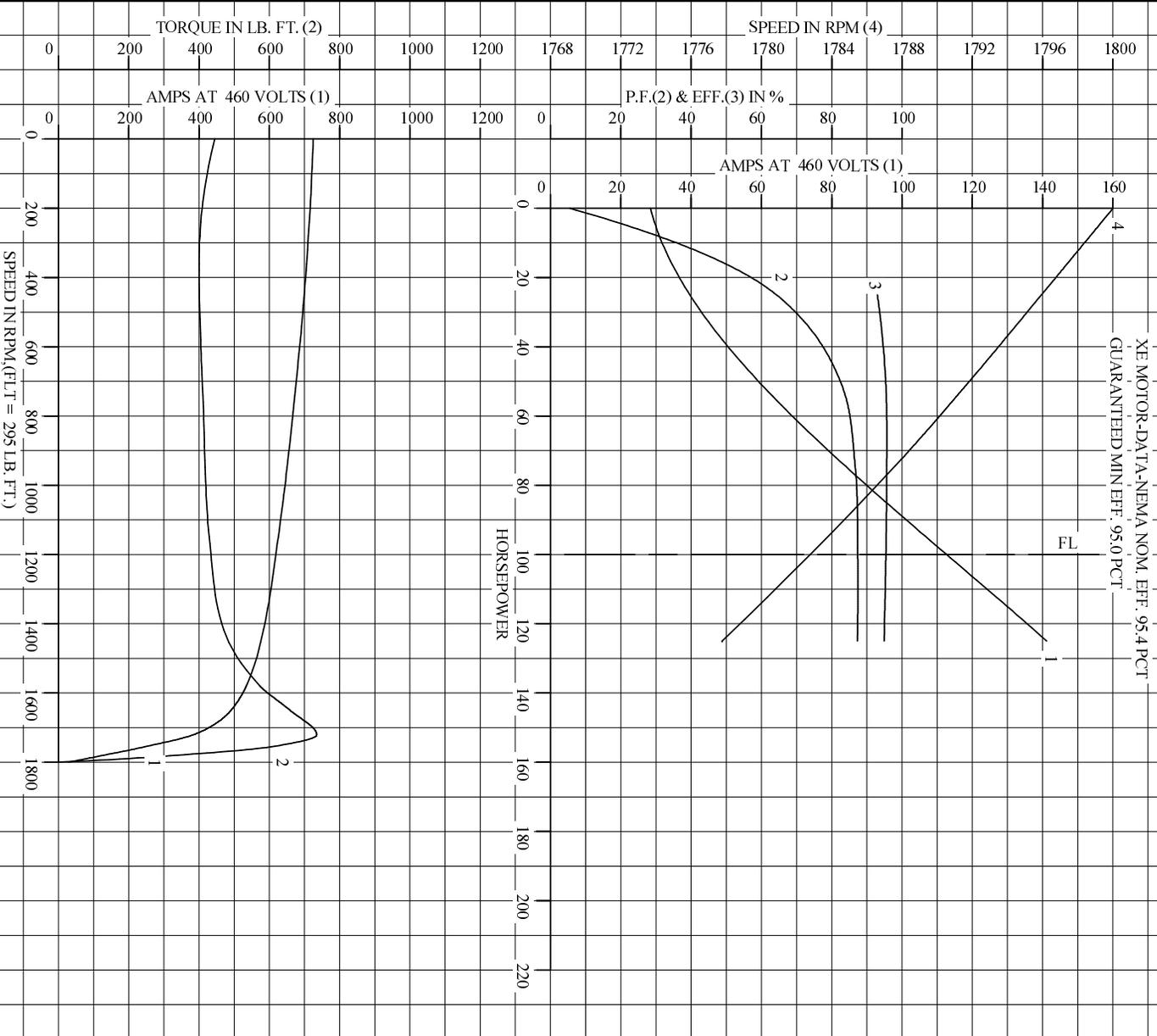
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

**REMARKS: TYPICAL DATA**

XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT  
GUARANTEED MIN EFF. 95.0 PCT

<b>BALDOR</b>	DR. BY J.J. HARRISON	<b>A-C MOTOR PERFORMANCE DATA</b>
	CR. BY W.L. SMITH	
	APP. BY W.L. SMITH	
DATE 07/26/04	ISSUE DATE 12/15/10	

REL S.O. 405T RPM 1785 S.F. 1.15 ROTOR 418142-33-RE  
 FRAME 405T VOLTS 230/460 NEMA DESIGN B TEST S.O. TYPICAL DATA  
 HP 100 AMPS 224/112 CODE LETTER G TEST DATE ---  
 TYPE P DUTY CONT ENCLOSURE TEFC STATOR RES. @ 25 °C .0123/.0492  
 PHASE/HERTZ 3/60 AMP °/INSUL 40/F E/S 596956 OHMS (BETWEEN LINES)



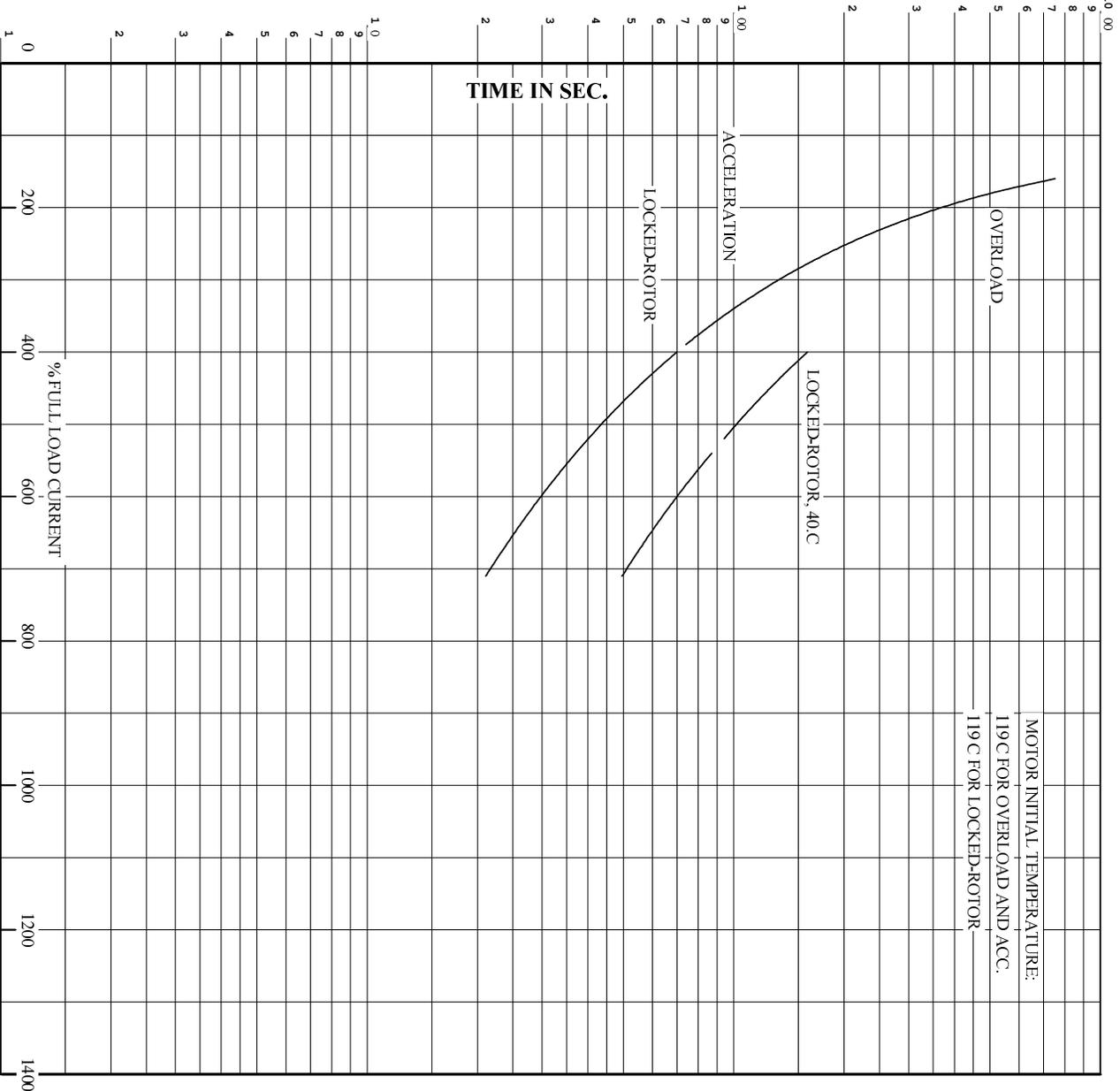
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DR. BY J.HARRISON  
 CK. BY W.L.SMITH  
 APP. BY W.L.SMITH  
 DATE 07/26/04

**A-C MOTOR**  
**PERFORMANCE** A40WG0251-R001  
**CURVES** ISSUE DATE 12/15/10

REL. S.O.	FRAME 405T	RPM 1785	S.F. 1.15	ROTOR 418142-33-RE
HP 100	TYPE P	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
PHASE/HERTZ 3/60		AMPS 224/112	CODE LETTER G	TEST DATE ---
		DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C: 0.123/.0492
		AMB °C/INSUL 40/F	E/S 596956	OHMS (BETWEEN LINES)



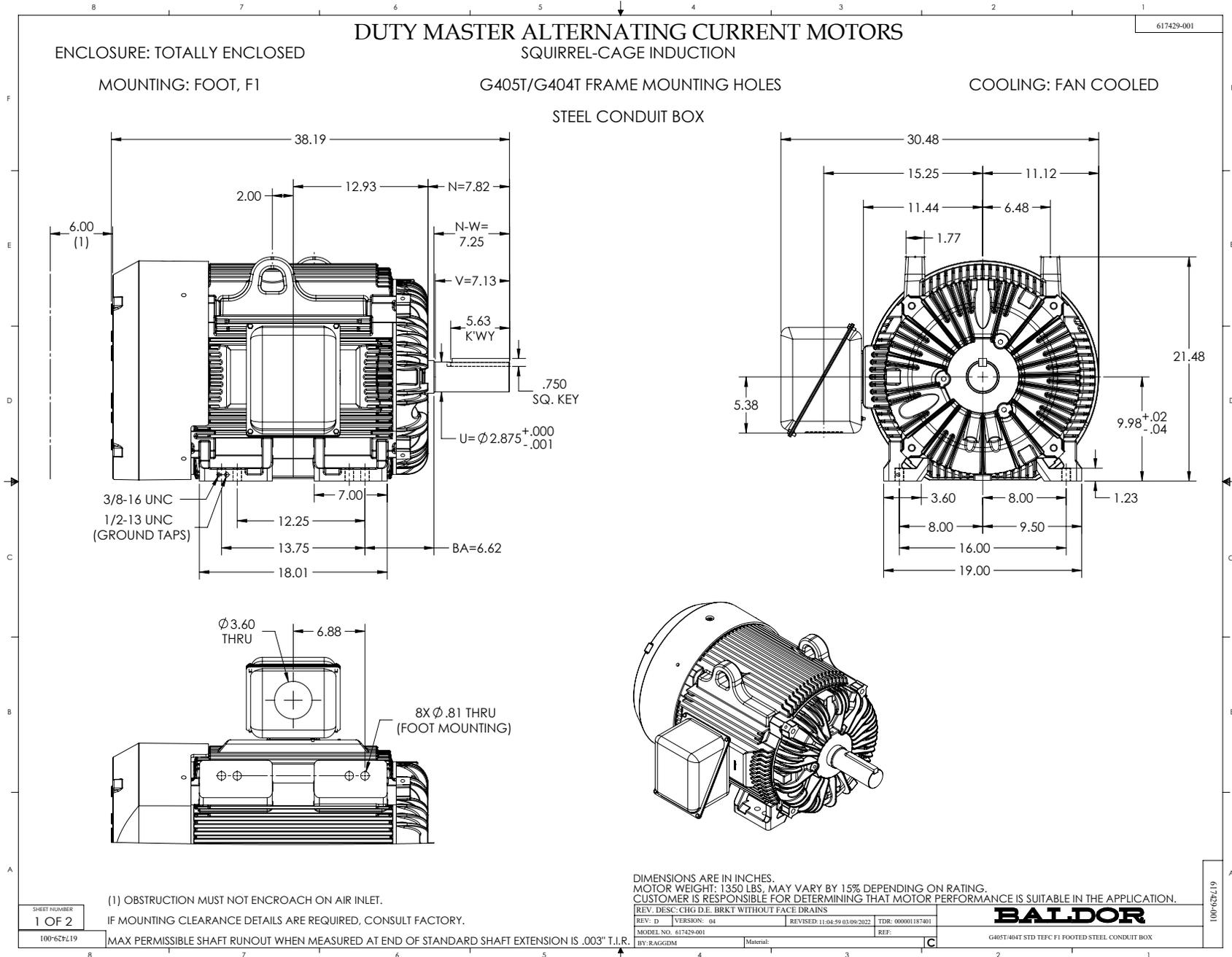
REMARKS: THERMAL LIMIT CURVE  
 XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT  
 GUARANTEED MIN EFF. 95.0 PCT

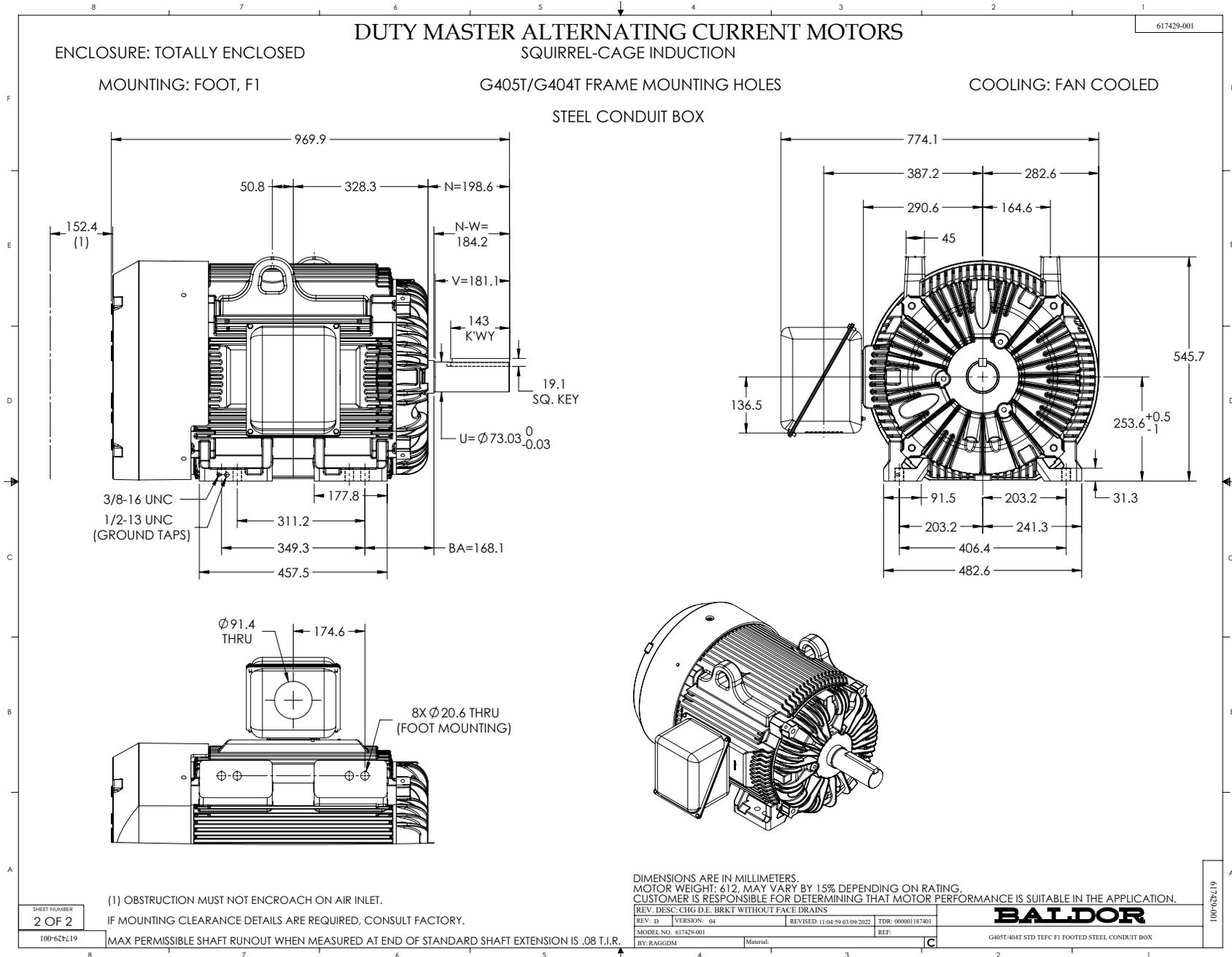
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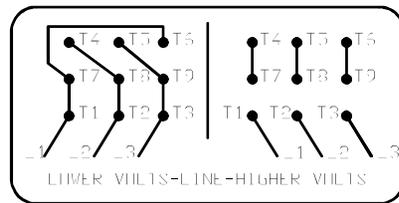
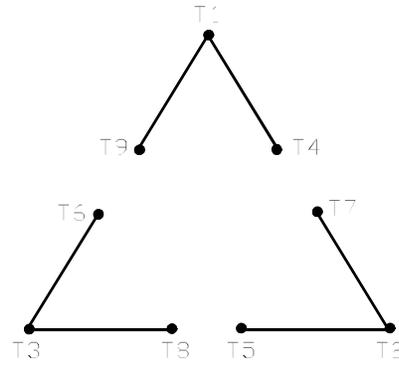
**A-C MOTOR PERFORMANCE CURVES**  
**A40WG0251-R001**  
 ISSUE DATE 12/15/10





416820-002

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



(N.P. 1575-B)

416820-002

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
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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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