

ABB BALDOR RELIANCE III

Customer information packet

EM44256T-4

250HP, 1189RPM, 3PH, 60HZ, 449T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	449T
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	250.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	285.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.8 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	285.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Motor Lead Quantity/Wire Size	6 @ 1/0 AWG
Motor Standards	NEMA
Motor Type	A44160M
Mounting Arrangement	F1

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG4238
Layout	617427-209
Eff. date	09-25-2025
CD Diagram	416820-008
Poles	06
Leads	6#1/0
Proprietary	False
Created date	04-09-2015

Number of Poles	6
Overall Length	53.21 IN
Power Factor	86
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1189 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-7107-4238			CAT.NO.	EM44256T-4				FRAME	449T	
HP	250	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P		
RPM	1189	AMPS	285	HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	90BC03J30X		DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	90BC03J30X		ENCL	TEFC	CODE	G					
SER.NO.				POWER FACTOR	86	NEMA-NOM-EFFICIENCY				95.8	
						MAX CORR KVAR	68.2	GUARANTEED EFFICIENCY		95	
						NEMA NOM/CSA QUOTED EFF					
						MOTOR WEIGHT					

Parts List

Part number	Description	Quantity
SA296389	SA A44-7107-4238	1.000 ea
RA282429	RA A44-7107-4238	1.000 ea
421948044	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
412118006A	DRAIN	2.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
415072001B	CLAMP	1.000 ea
083199126A	G440 MOLDED FAN COVER	1.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
078557001E	FAN 440 078557001F	1.000 ea
004824015A	GREASE POLYREX EM	1.000 lb
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
410700004A	WSHR	1.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034530064BB	P/NIP 1/4X8 PLATED	1.000 ea
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
702623022A	G28 AIR DEFLECTOR DRIVE END -- PLASTIC	1.000 ea
418151014G	RETAIN RING	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
034530064BB	P/NIP 1/4X8 PLATED	1.000 ea

034690002AB	PPLG 1/4" PLTD.	1.000 ea
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
034001013AB	FLTW BAFFLE	3.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
415915007G	GASK, LAC	1.000 ft
702658001B	+C/BOX, PAINTED 440	1.000 ea
702658002A	+C/BOX CVR, PAINTED 440	1.000 ea
406056008A	GASKET, TERBD 440	1.000 ea
418153001A	GASK 440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.500 ga
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
604797056	400-447 FRAME 60 X 42	1.000 ea
032510026D	CARRIAGE BOLT - 440	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

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449TD	250	P	3/60	1189	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
285	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
444238	418143090SE	---	---	.0162		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	96.3	1200	3.61	0	
1/4	62.6	117	1197	53.2	93.8	
2/4	125	163	1195	75.1	95.8	
3/4	187	220	1192	83.0	96.1	
4/4	250	286	1189	85.5	95.8	
5/4	312	358	1186	85.7	95.3	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	162	1786	1849	
PULL UP		240	142	1566	1791	
BREAKDOWN		1148	252	2788	1052	
FULL LOAD		1189	100	1104	286	
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-CALCULATED DATA-NEMA NOM. EFF. 95.8 PCT.						
		DR. BY	G. R. WEBB	A-C MOTOR PERFORMANCE DATA		
		CK. BY	W. L. SMITH			
		APP. BY	W. L. SMITH			
		DATE	04/09/15			
				A44WG4238-R001 ISSUE DATE 04/04/19		

REL S.O.

 RPM **1189**

 S.F. **1.15**

 ROTOR **418143090SE**

 FRAME **449TD**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **250**

 AMPS **285**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

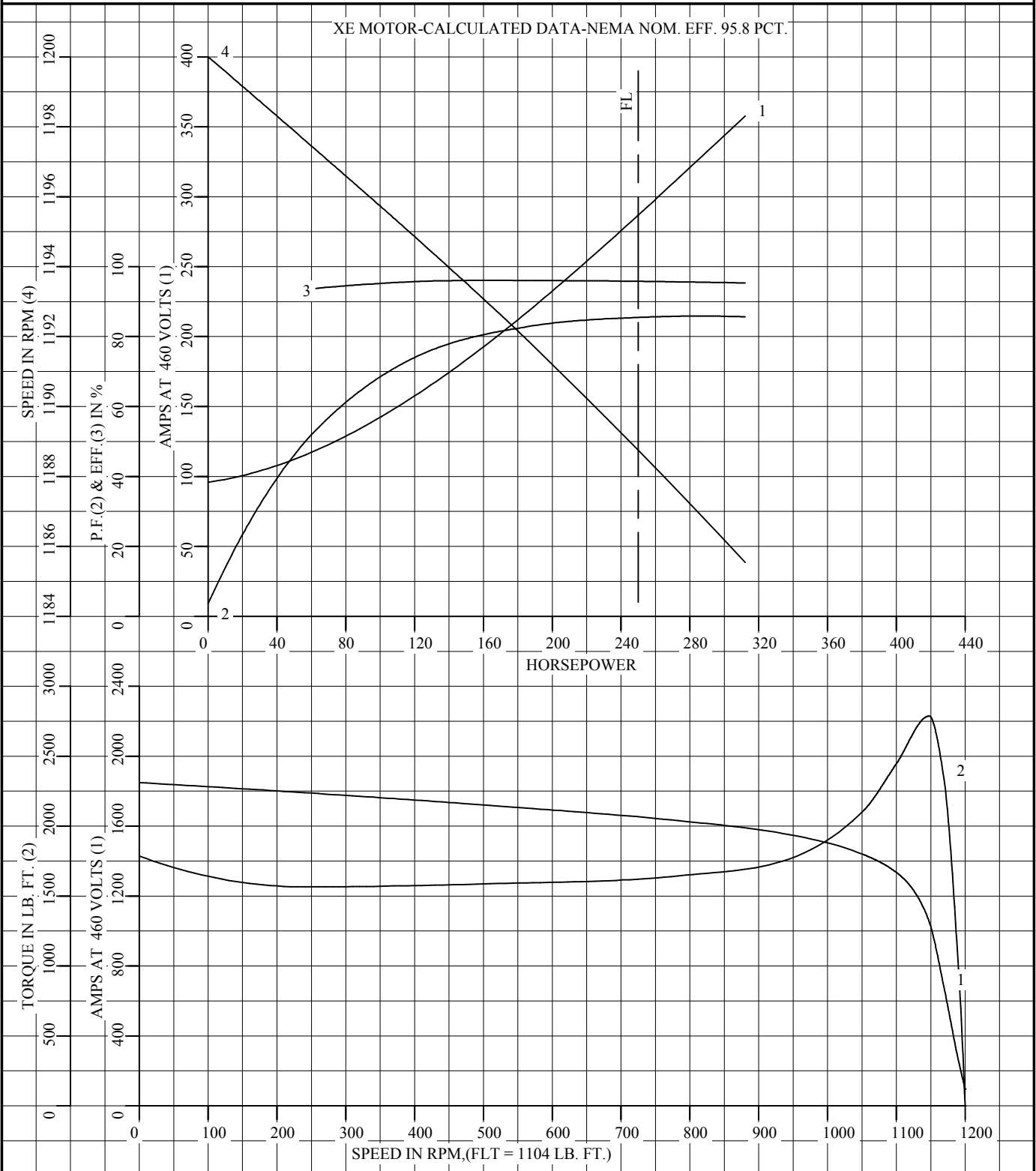
 STATOR RES. @ 25 °C **.0162**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **444238**

OHMS (BETWEEN LINES)



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

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY G. R. WEBB
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 04/09/15

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG4238-R001

ISSUE DATE **04/04/19**

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REL. S.O.

 RPM **1189**

 S.F. **1.15**

 ROTOR **418143090SE**

 FRAME **449TD**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **250**

 AMPS **285**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

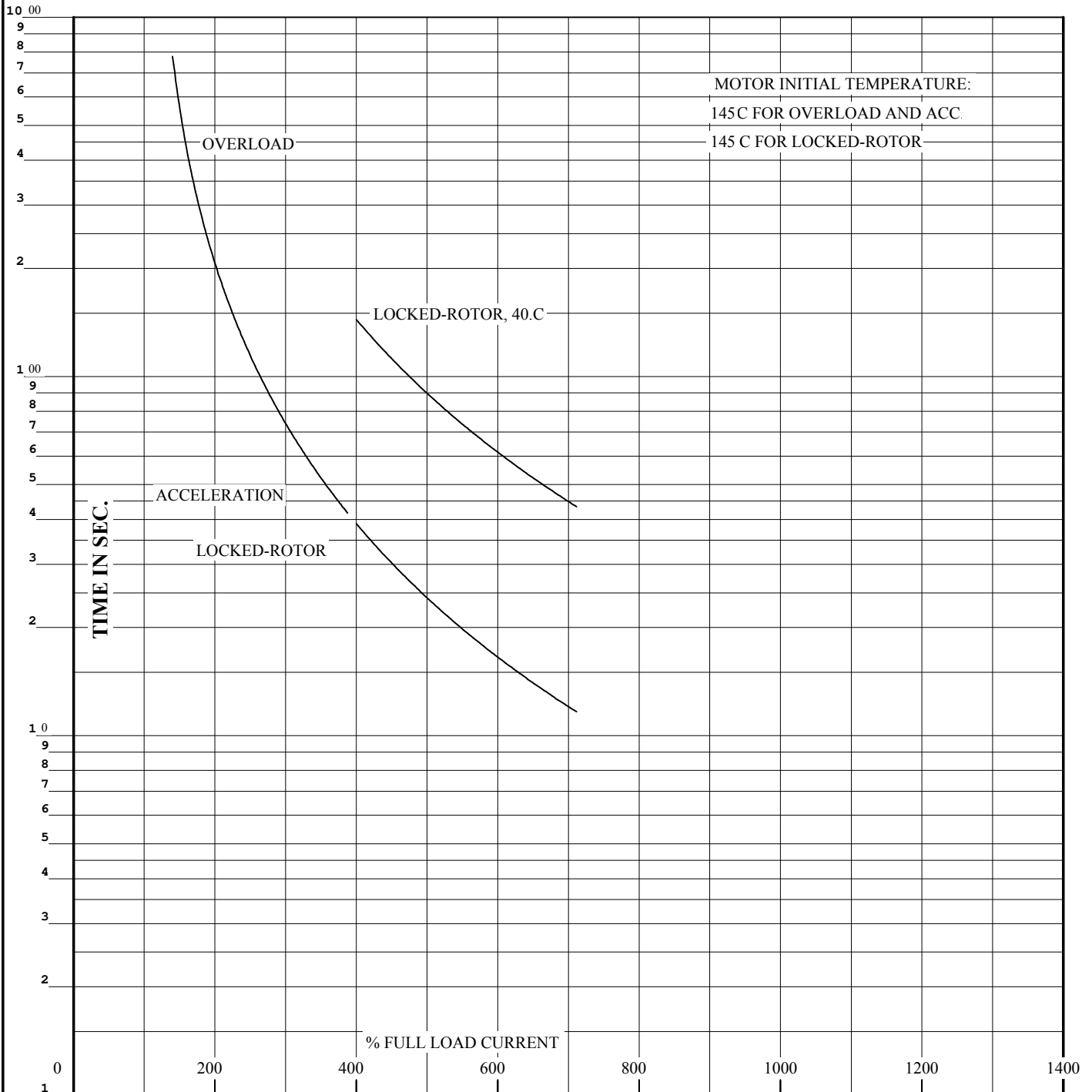
 STATOR RES. @ 25 °C **.0162**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **444238**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

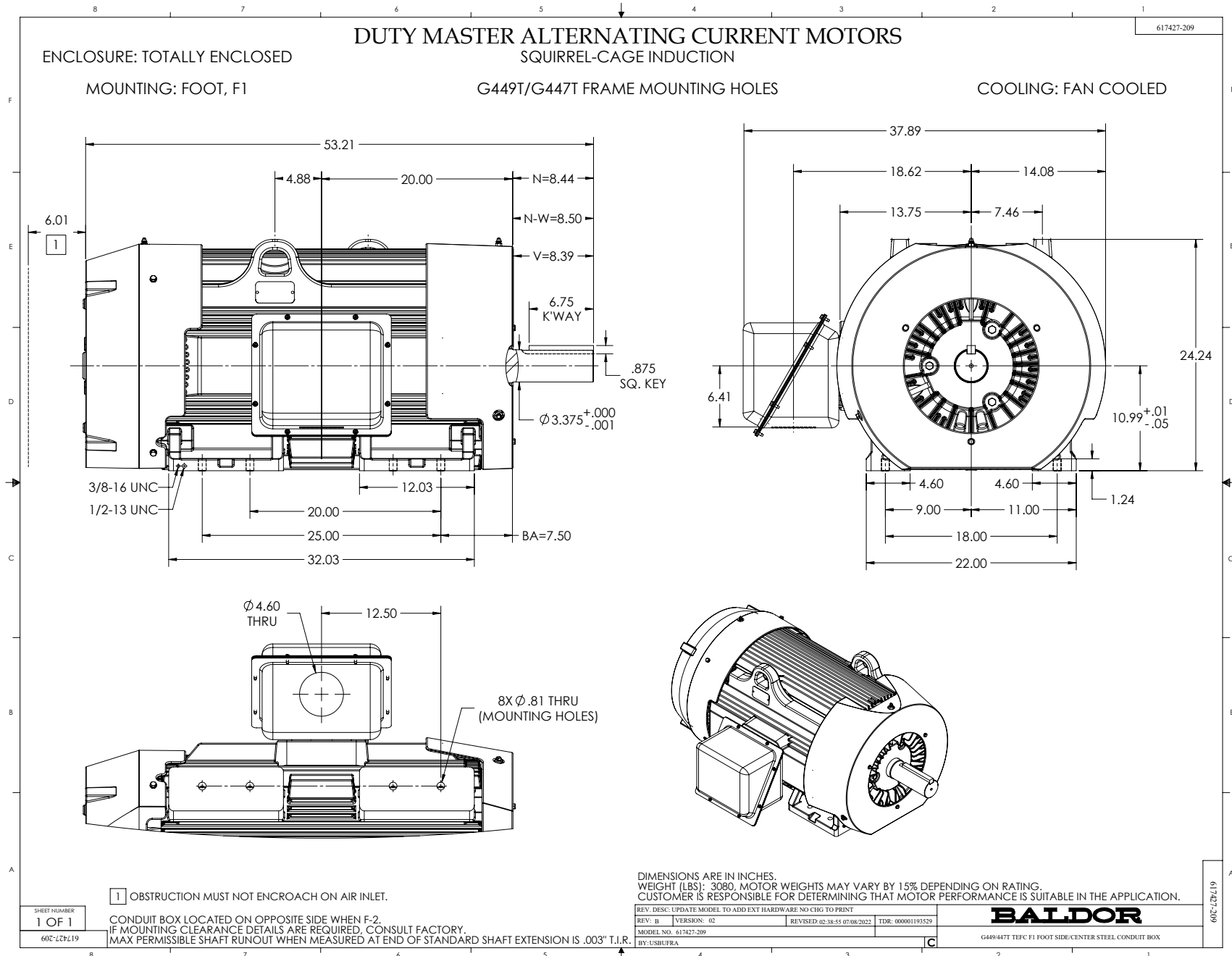
XE MOTOR-CALCULATED DATA-NEMA NOM. EFF. 95.8 PCT.

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 DR. BY G. R. WEBB
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**A-C MOTOR
PERFORMANCE
CURVES**
A44WG4238-R001

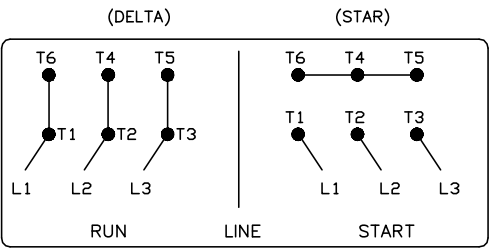
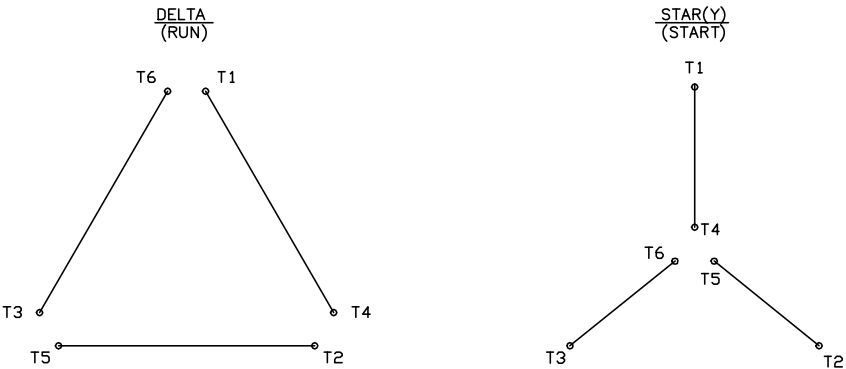
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416820-008

A-C MOTOR
CONNECTION DIAGRAM

STANDARD 6 LEAD Y START – DELTA RUN



< N. P. 1767-DC >

REV. DESC: ADDED T4 TO Y CONNECT DIAGRAM		
REV. LTR: D	VERSION: 04	TDR: 000000847713
FILE: \RAG\00001\808	REVISED: 10: 41: 26 04/08/2014	BY: RAGJSS1
MTL: —		

BALDOR

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN
SH 1 of 1

416820-008