

# ABB BALDOR RELIANCE III

---

## Customer information packet

### EM4406TR-4

150HP, 1785RPM, 3PH, 60HZ, 445T, A4488M, TEFC

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	445T
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	None
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	150.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	CURUSEEV CCSAUSEEV
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Mobil SHC 220 (Athens Only)
<b>Current @ Voltage</b>	169.000 A @ 460.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	95.8 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	169.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	F
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Motor Lead Quantity/Wire Size</b>	6 @ 2 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A4488M

**Part Detail**

<b>Revision</b>	U
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A44WG3783
<b>Layout</b>	617435-164
<b>Eff. date</b>	09-25-2025
<b>CD Diagram</b>	416820-008
<b>Poles</b>	04
<b>Leads</b>	6#2
<b>Proprietary</b>	False
<b>Created date</b>	02-18-2013

<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	44.75 IN
<b>Power Factor</b>	86
<b>Product Family</b>	Other
<b>Pulley End Bearing Type</b>	Roller
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	3.375 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>	Wye Start - Delta Run
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

**NP2349L**

<b>SPEC NO.</b>	P44G4026	<b>CAT.NO.</b>	EM4406TR-4	<b>FRAME</b>	445T				
<b>HP</b>	150	<b>VOLTS</b>	460	<b>PHASE</b>	3	<b>DESIGN</b>	B	<b>TYPE</b>	P
<b>RPM</b>	1785	<b>AMPS</b>	169	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>DRIVE END BEARING</b>	110RU02M30X	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F				
<b>OPP D.E. BEARING</b>	90BC03J30X	<b>ENCL</b>	TEFC	<b>CODE</b>	F				
<b>SER.NO.</b>		<b>POWER FACTOR</b>	86	<b>NEMA-NOM-EFFICIENCY</b>	95.8				
		<b>MAX CORR KVAR</b>	30	<b>GUARANTEED EFFICIENCY</b>	95				
		<b>NEMA NOM/CSA QUOTED EFF</b>							
		<b>MOTOR WEIGHT</b>							

---

**NP2496L**

---

MOBIL SHC 220 GREASE

---

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	445VP	150	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
169	CONT	40/F	1.15	B	F	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
498865	418143053AE	---	---	.0298		

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	48.9	1800	4.26	0
1/4	37.6	69.1	1796	54.4	93.6
2/4	75.0	96.9	1792	75.7	95.7
3/4	112	131	1788	83.6	96.0
4/4	150	169	1784	86.8	95.8
5/4	188	210	1779	87.9	95.3

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	130	572	1041
PULL UP	270	116	511	1020
BREAKDOWN	1729	280	1237	579
FULL LOAD	1784	100	442	169

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

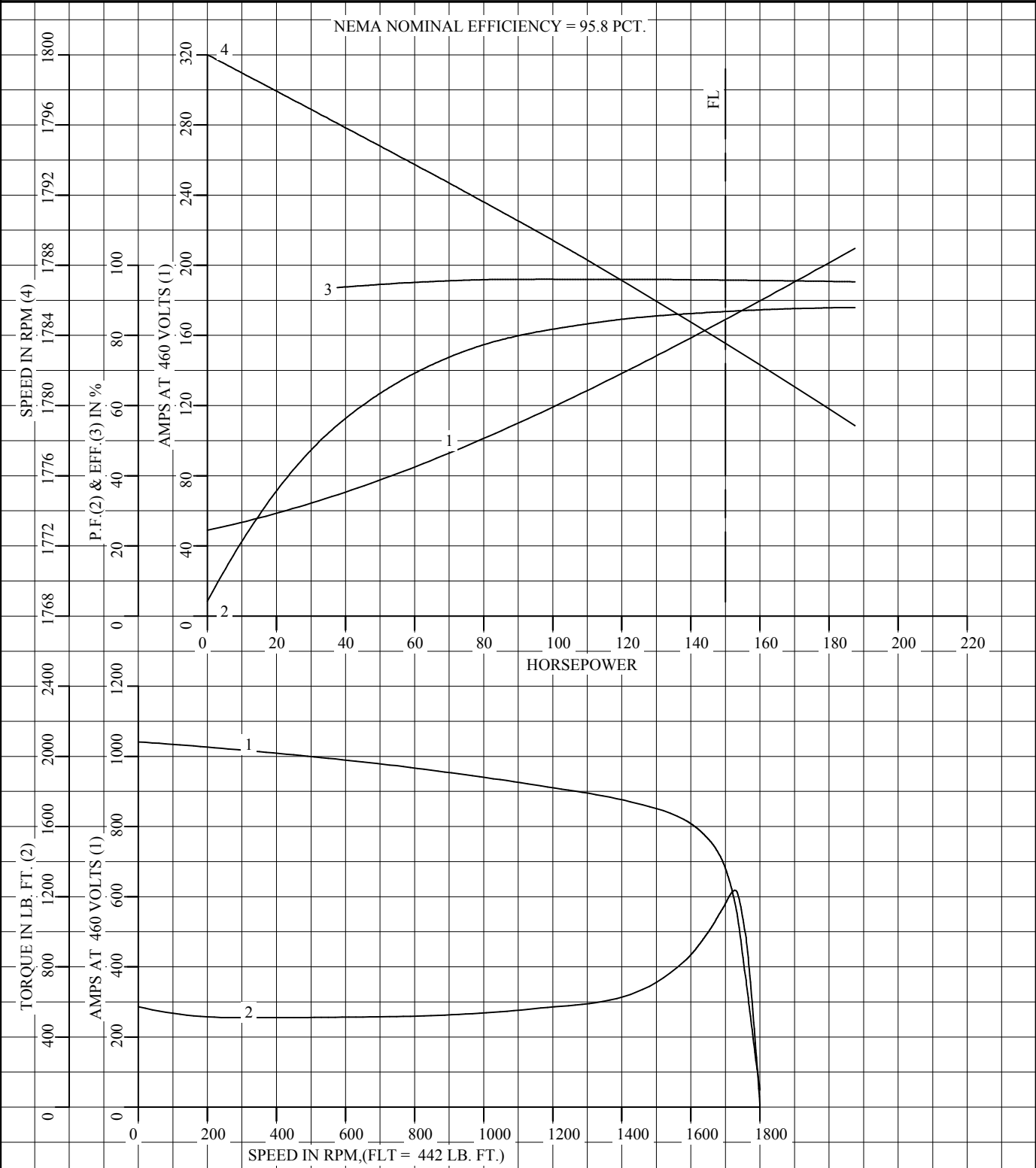
REMARKS: TYPICAL DATA  
NEMA NOMINAL EFFICIENCY = 95.8 PCT.



DR. BY CD  
 CK. BY CD  
 APP. BY T. KELATI  
 DATE 1/18/11

**A-C MOTOR  
 PERFORMANCE DATA A44WG3783-R001  
 ISSUE DATE 09/27/19**

REL S.O.	RPM <b>1785</b>	S.F. <b>1.15</b>	ROTOR <b>418143053AE</b>
FRAME <b>445VP</b>	VOLTS <b>460</b>	NEMA DESIGN <b>B</b>	TEST S.O. <b>TYPICAL DATA</b>
HP <b>150</b>	AMPS <b>169</b>	CODE LETTER <b>F</b>	TEST DATE ---
TYPE <b>P</b>	DUTY <b>CONT</b>	ENCLOSURE <b>TEFC</b>	STATOR RES. @ 25 °C <b>.0298</b>
PHASE/HERTZ <b>3/60</b>	AMB °C/INSUL <b>40/F</b>	E/S <b>498865</b>	OHMS (BETWEEN LINES)



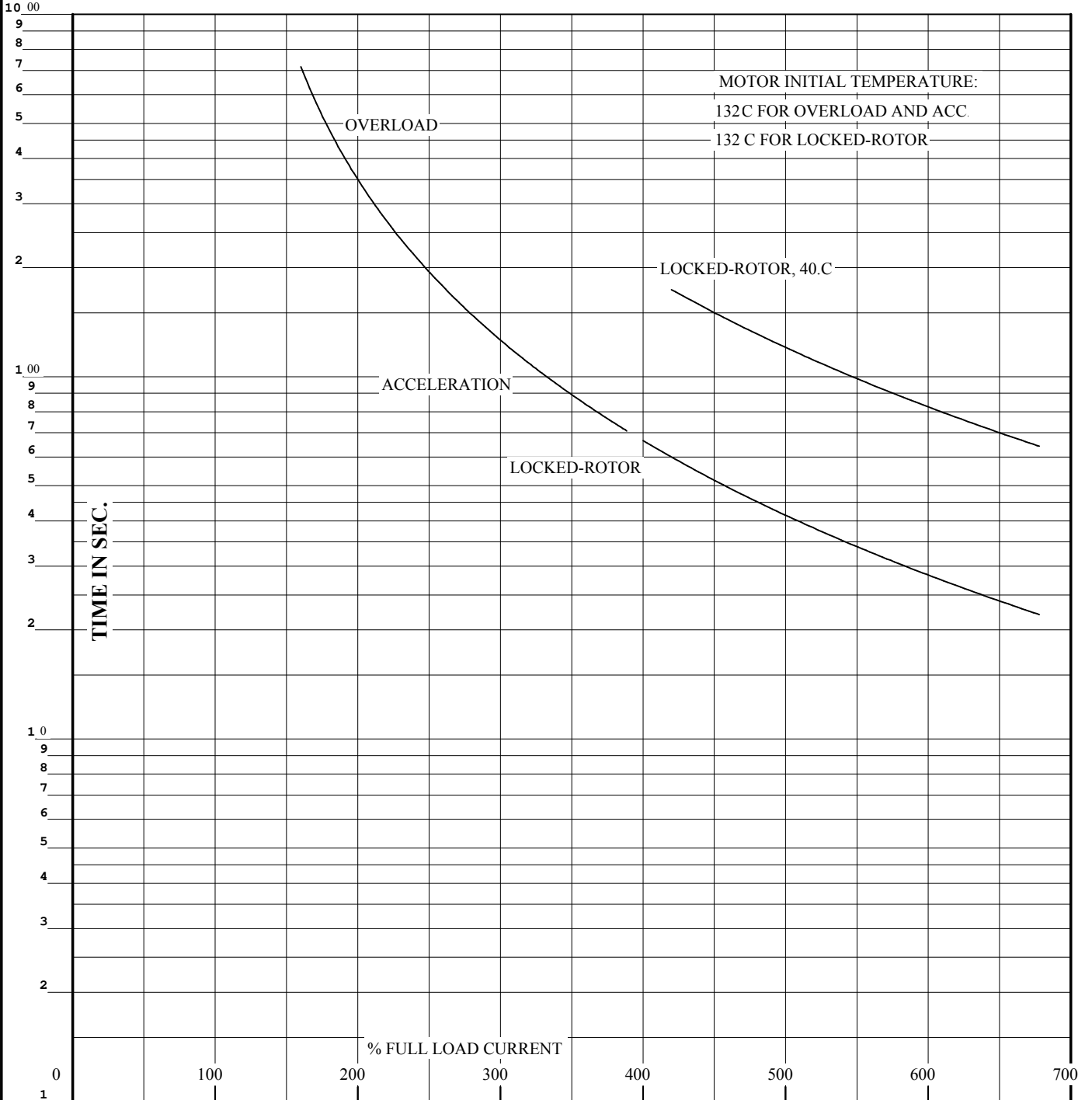
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY CD  
 CK. BY CD  
 APP. BY T. KELATI  
 DATE 1/18/11

**A-C MOTOR  
PERFORMANCE  
CURVES** **A44WG3783-R001**  
 ISSUE DATE 09/27/19

REL. S.O.	RPM <b>1785</b>	S.F. <b>1.15</b>	ROTOR <b>418143053AE</b>
FRAME <b>445VP</b>	VOLTS <b>460</b>	NEMA DESIGN <b>B</b>	TEST S.O. <b>TYPICAL DATA</b>
HP <b>150</b>	AMPS <b>169</b>	CODE LETTER <b>F</b>	TEST DATE <b>---</b>
TYPE <b>P</b>	DUTY <b>CONT</b>	ENCLOSURE <b>TEFC</b>	STATOR RES. @ 25 °C <b>.0298</b>
PHASE/HERTZ <b>3/60</b>	AMB °C/INSUL <b>40/F</b>	E/S <b>498865</b>	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

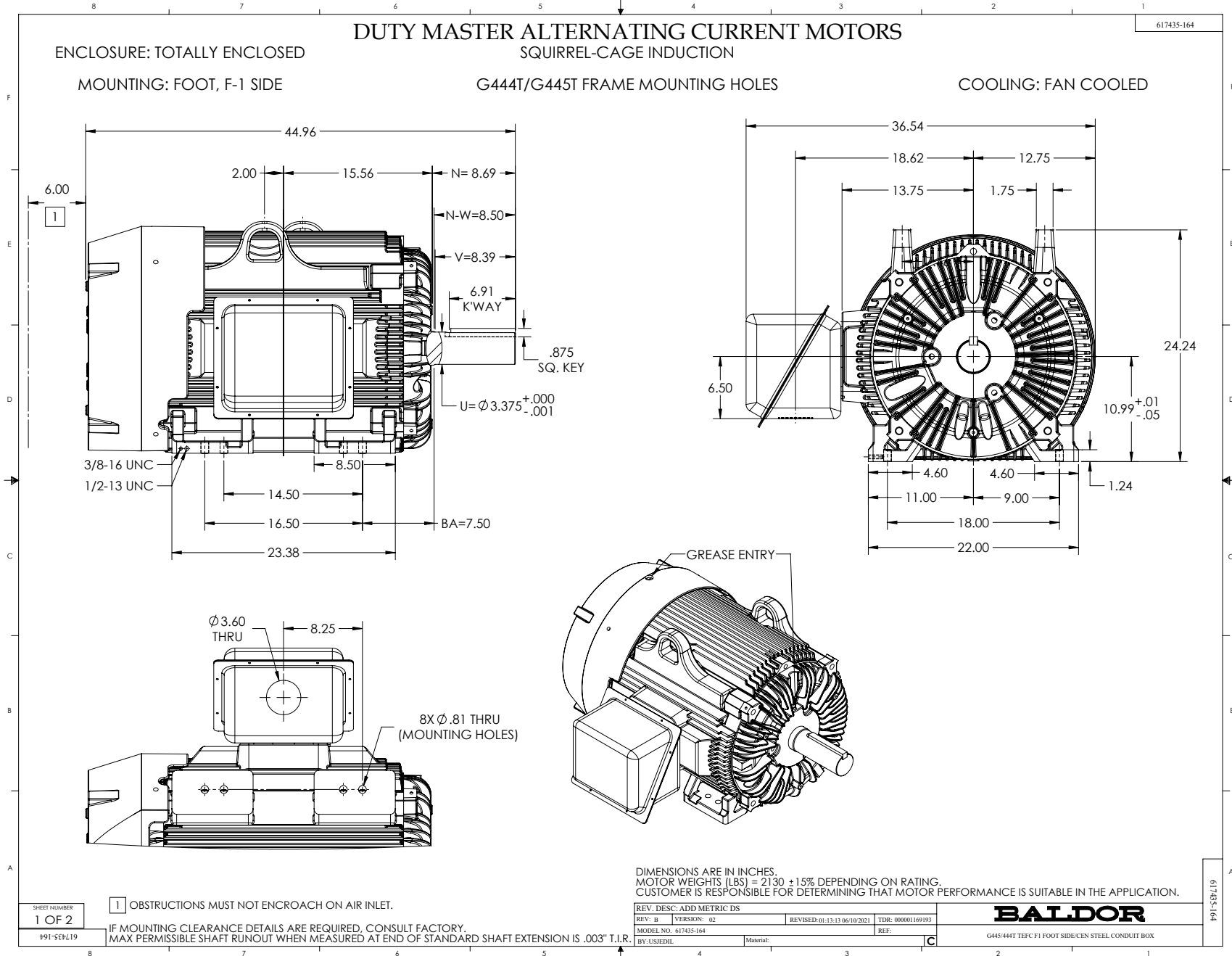
REMARKS: NEMA NOMINAL EFFICIENCY = 95.8 PCT.

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



DR. BY CD  
 CK. BY CD  
 APP. BY T. KELATI  
 DATE 1/18/11

**A-C MOTOR  
PERFORMANCE  
CURVES** **A44WG3783-R001**  
 ISSUE DATE 09/27/19 Page 8 of 11



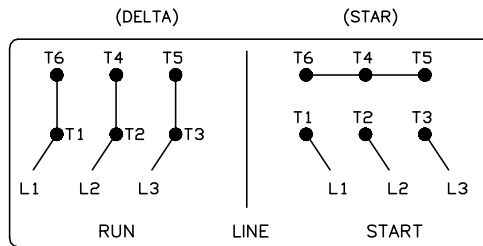
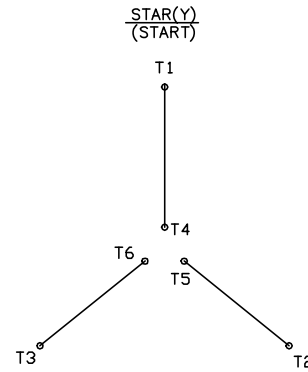
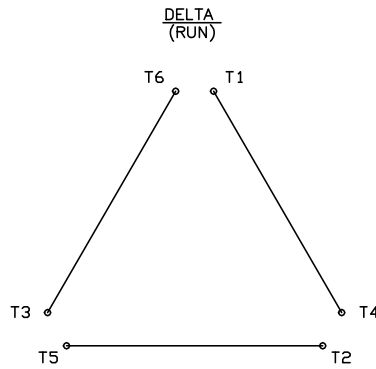


416820-008

# 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: 00000847713
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