

# **ABB BALDOR RELIANCE III**

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## **Customer information packet**

DRX441544T

150HP, 1785RPM, 3PH, 60HZ, 445T, TEFC, F1

Class - CLI GP C,D

Division - Division I

**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>	CLI GP C,D
<b>Haz Area Division</b>	Division I
<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>	UL CSA CCSAUSEEV
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Constant Torque Speed Range</b>	10-60
<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>Haz Area Temp Code</b>	T3C
<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>IP Rating</b>	NONE
<b>KVA Code</b>	F

**Part Detail**

<b>Revision</b>	A
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A44WG3335
<b>Layout</b>	617426-001
<b>Eff. date</b>	05-06-2024
<b>CD Diagram</b>	416820-036
<b>Poles</b>	04
<b>Leads</b>	3#1/0
<b>Proprietary</b>	False
<b>Created date</b>	03-11-2019

<b>Max Speed</b>	3600 rpm
<b>Motor Lead Quantity/Wire Size</b>	3 @ 1/0 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A4488M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	44.97 IN
<b>Power Factor</b>	86
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<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>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	Normally Closed Thermostat

**Nameplate**

<b>NP2496L</b>
MOBIL POLYREX EM

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**000613006PC**

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<b>CLASS I GROUP</b>	C D X	<b>NO.</b>	
<b>CLASS II GROUP</b>	X X X		
<b>OPERATING TEMP CODE</b>	T3C		

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**NP3140L**

<b>SPEC NO.</b>	A44-9223-3335	<b>CAT.NO.</b>	DRX441544T	<b>FRAME</b>	445T
<b>HP</b>	150	<b>VOLTS</b>	460	<b>PHASE</b>	3
<b>RPM</b>	1785	<b>AMPS</b>	169	<b>HZ</b>	60
<b>DRIVE END BEARING</b>	90BC03J30X	<b>DUTY</b>	CONT	<b>DESIGN</b>	B
<b>OPP D.E. BEARING</b>	90BC03J30X	<b>ENCL</b>	TEFC	<b>TYPE</b>	P
<b>SF</b>	1.15	<b>INSUL.CLASS</b>	F	<b>AMB</b>	40
<b>CT HZ</b>	10-60	<b>MAG CUR</b>	48.9	<b>SF</b>	1.00
		<b>RPM MAX</b>	3600		
		<b>VT HZ</b>	0-60	<b>CHP HZ</b>	60-90
		<b>NEMA-NOM-EFF</b>	95.8		
	SUIT FOR 55C AMB AT 1.00 SF			<b>IP55</b>	
<b>SER.NO.</b>		<b>MOTOR WEIGHT</b>			

<b>CUSTOMER INFORMATION PACKET</b>		DRX441544T - 150HP, 1785RPM, 3PH, 60HZ, 445T, TEFC, F1				
<b>FRAME</b>	<b>HP</b>	<b>TYPE</b>	<b>PHASE/ HERTZ</b>	<b>RPM</b>	<b>VOLTS</b>	
445T	150	P	3/60	1785	460	

<b>AMPS</b>	<b>DUTY</b>	<b>AMB °C/ INSUL</b>	<b>S.F.</b>	<b>NEMA DESIGN</b>	<b>CODE LETTER</b>	<b>ENCLOSURE</b>
169	CONT	40/F	1.15	B	F	TEFC

<b>E/S</b>	<b>ROTOR</b>	<b>TEST S.O.</b>	<b>TEST DATE</b>	<b>STATOR RES. @25 °C OHMS (BETWEEN LINES)</b>
498808	418143053AE	---	---	.0298

**PERFORMANCE**


<b>LOAD</b>	<b>HP</b>	<b>AMPERES</b>	<b>RPM</b>	<b>% POWER FACTOR</b>	<b>% EFFICIENCY</b>
NO LOAD	0	48.9	1800	4.26	0
1/4	37.6	69.1	1796	54.3	93.6
2/4	75.0	97.1	1792	75.6	95.7
3/4	112	131	1788	83.4	96.0
4/4	150	169	1784	86.5	95.8
5/4	188	210	1779	87.6	95.3

**SPEED TORQUE**

	<b>RPM</b>	<b>TORQUE % FULL LOAD</b>	<b>TORQUE LB.-FT.</b>	<b>AMPERES</b>
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 CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

TYPICAL DATA  
NEMA NOMINAL EFFICIENCY = 95.8 PCT.

	<b>DRAWN BY: C.B.ATANGANE</b>	<b>AC MOTOR PERFORMANCE DATA</b>	<b>A44WG3335-R001</b>
	<b>CHECKED BY: C.E.JAMISON</b>		
	<b>APPROVED BY: C.E.JAMISON</b>		<b>DATE ISSUED 02/03/25</b>
	<b>DATE: 10/16/23</b>		

FRAME 445T

RPM 1785

S.F. 1:15

TEST S.O. TYPICAL DATA

HP 150

VOLTS 460

NEMA DESIGN B

TEST DATE ---

TYPE P

AMPS 169

CODE LETTER F

STATOR RES. @ 25°C .0298

PHASE / HERTZ 3/60

DUTY CONT

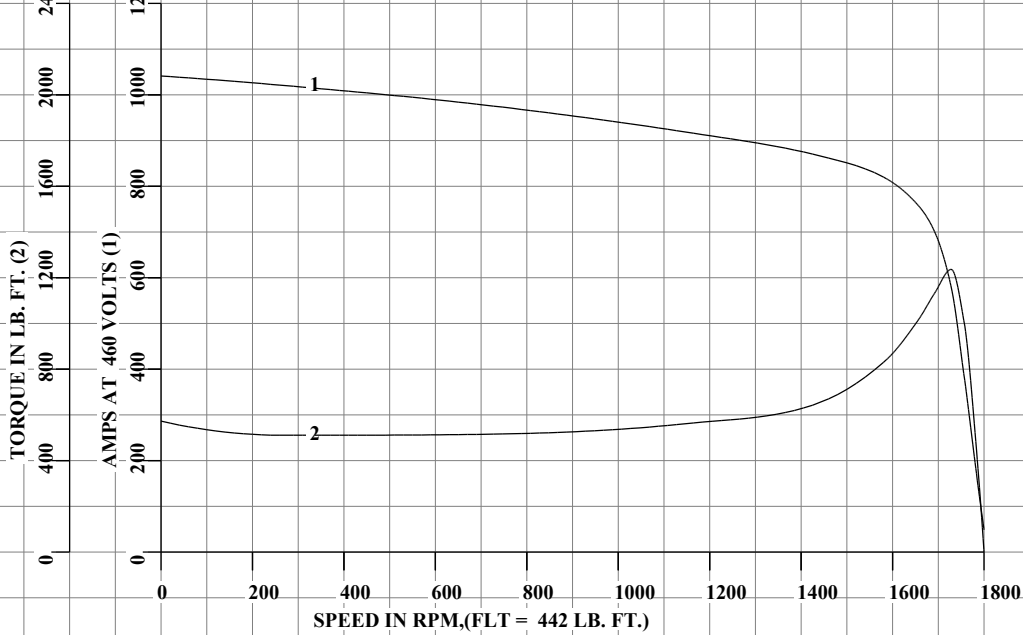
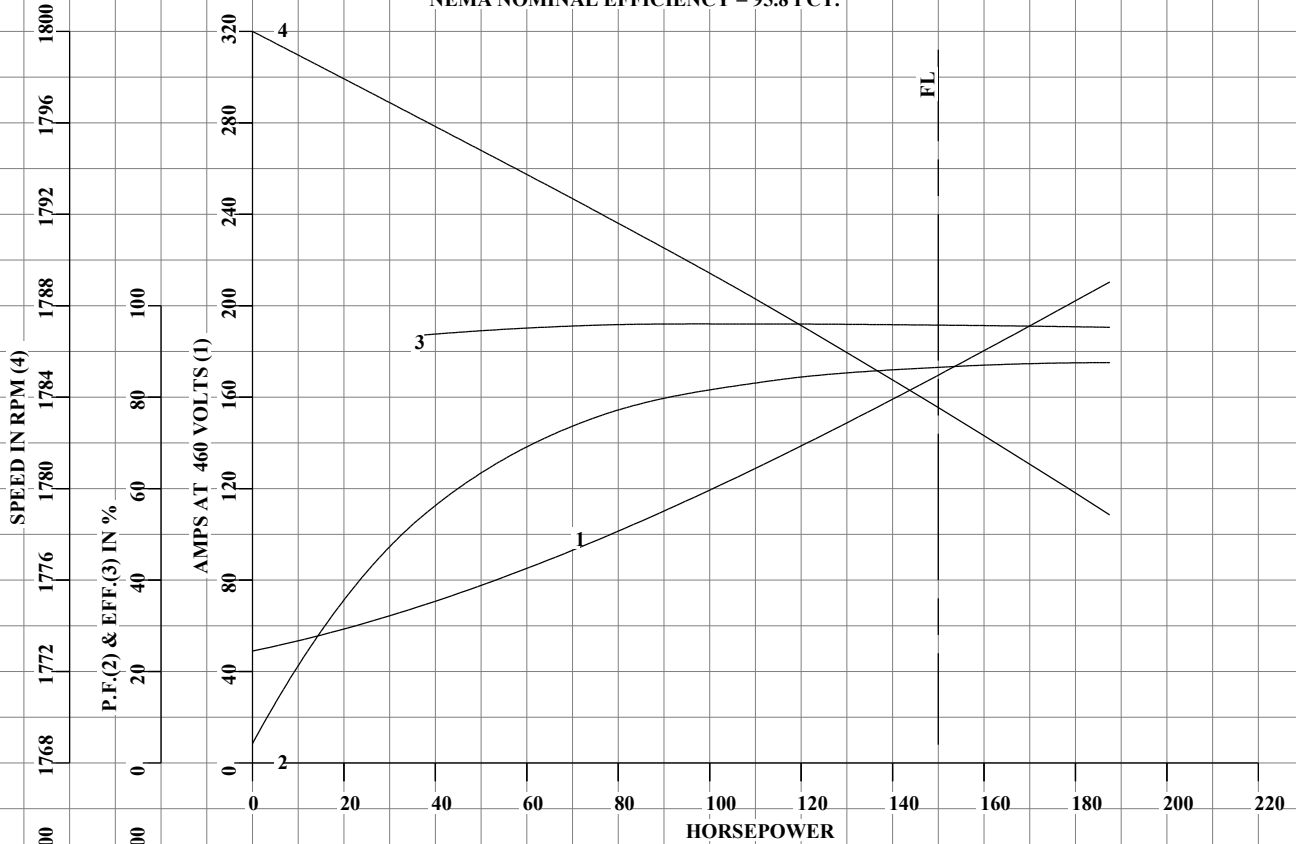
ENCLOSURE TEFC

OHMS (BETWEEN LINES)

AMB °C / INSUL 40/F

E/S 498808

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.



DRAWN BY: C.B.ATANGANE  
 CHECKED BY: C.E.JAMISON  
 APPROVED BY: C.E.JAMISON  
 DATE: 10/16/23

AC MOTOR  
 PERFORMANCE  
 DATA

**A44WG3335-R001**

ISSUE DATE 02/03/25

FRAME 445T

RPM 1785

S.F. 1:15

NEMA DESIGN B

HP 150

VOLTS 460

TEST S.O. TYPICAL DATA

TYPE P

AMPS 169

CODE LETTER F

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

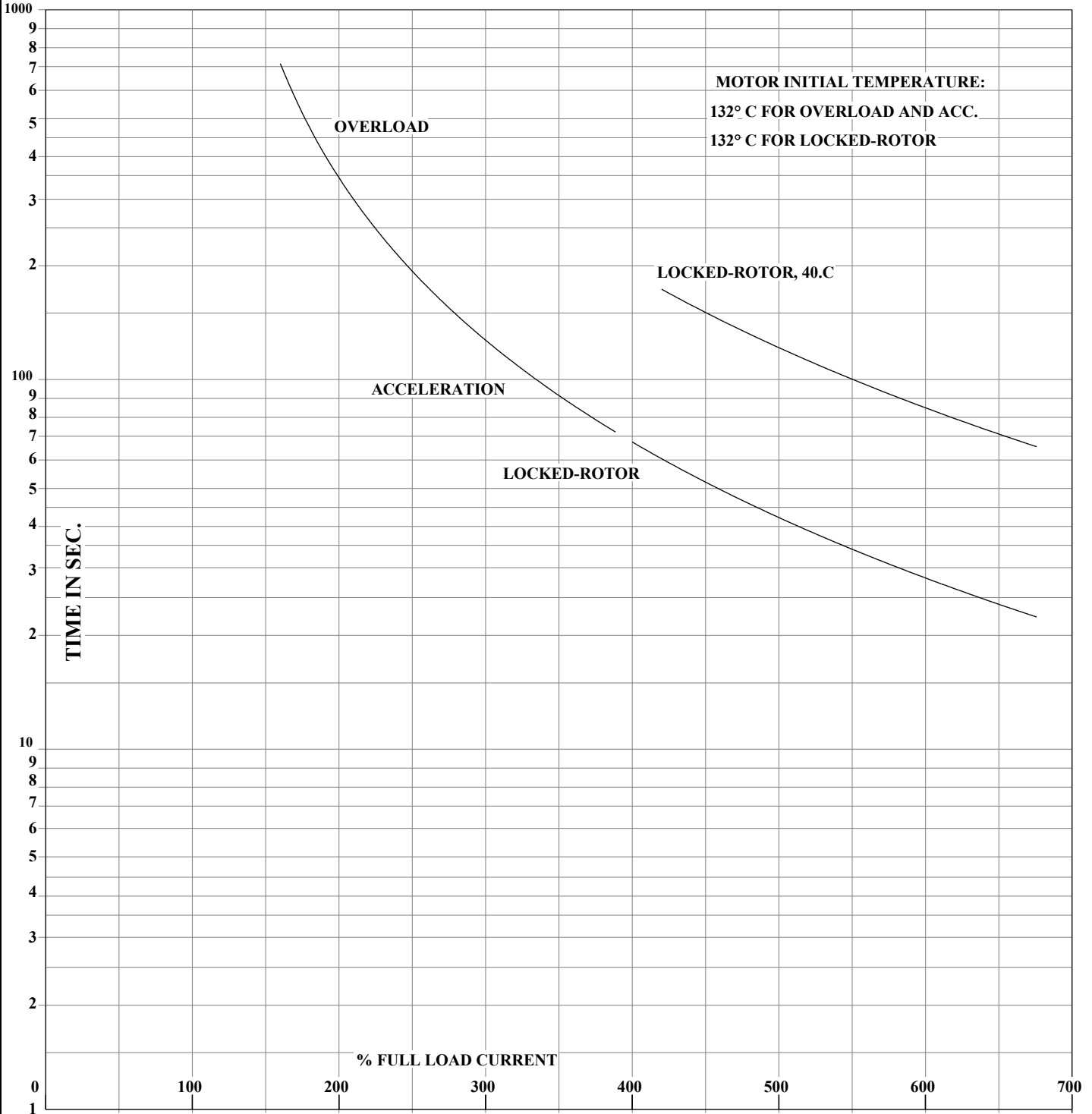
ENCLOSURE TEFC

STATOR RES. @ 25°C .0298

AMB °C / INSUL 40/F

E/S 498808

OHMS (BETWEEN LINES)



**THERMAL LIMIT CURVE**  
 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.

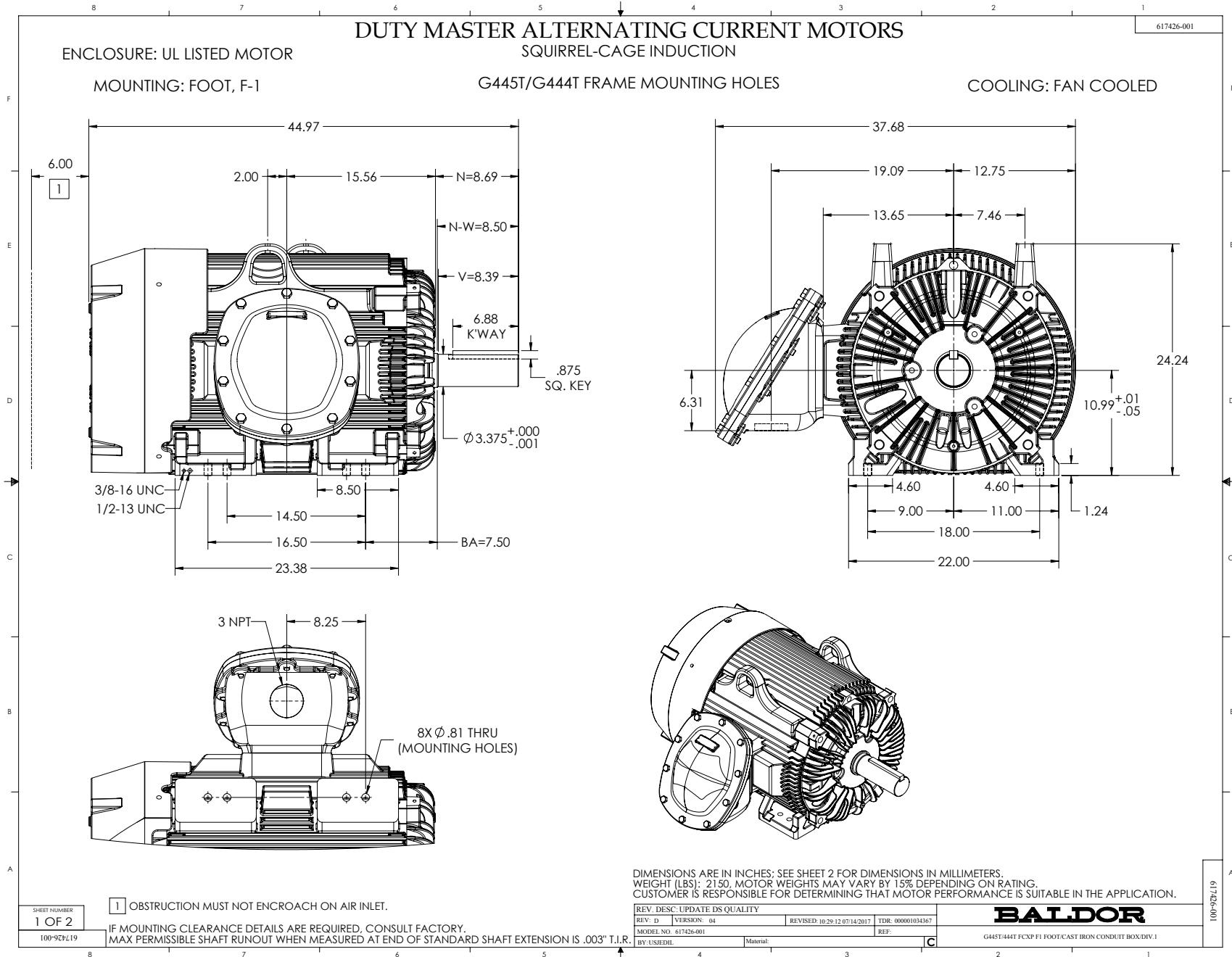


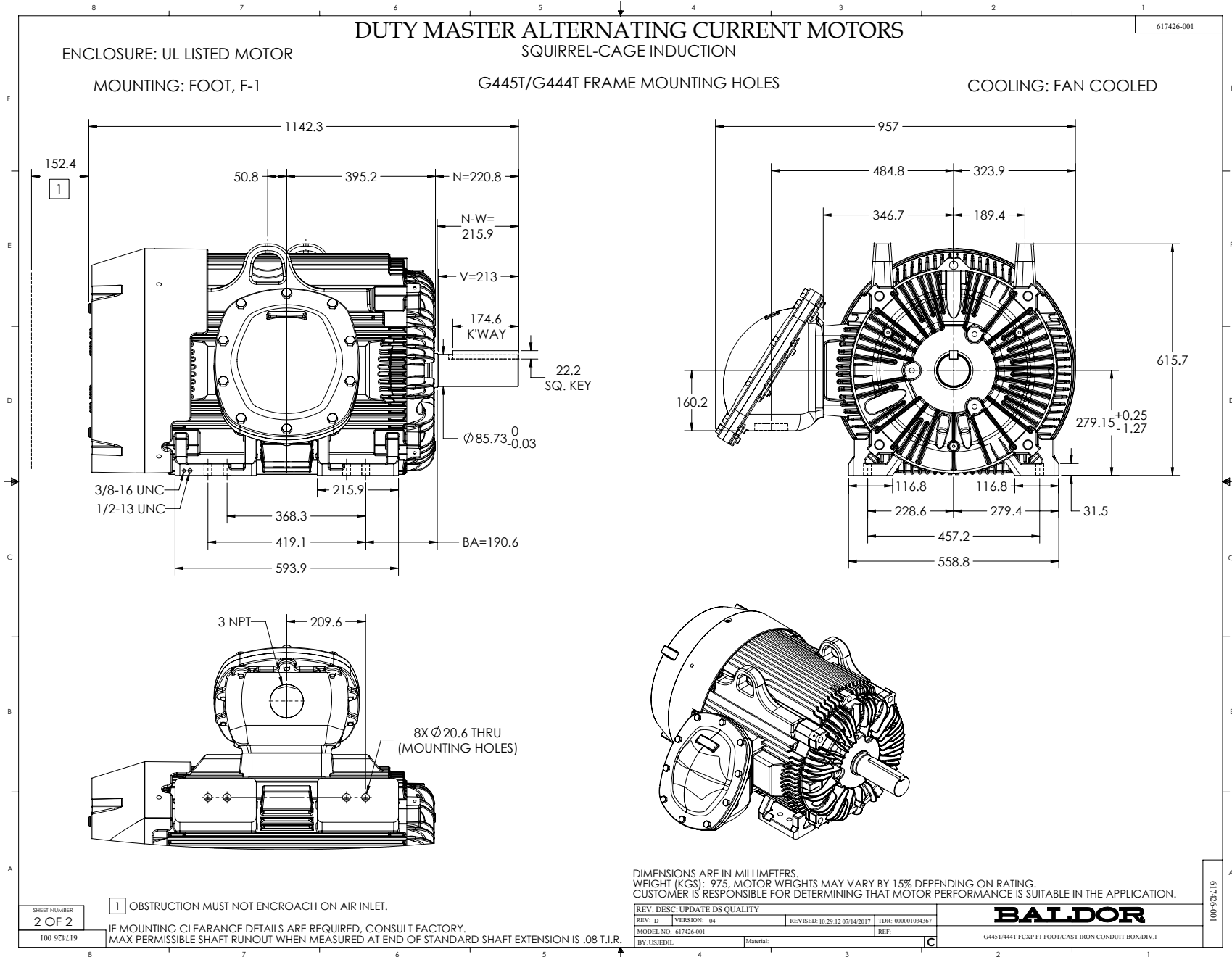
DRAWN BY: C.B.ATANGANE  
 CHECKED BY: C.E.JAMISON  
 APPROVED BY: C.E.JAMISON  
 DATE: 10/16/23

**AC MOTOR  
PERFORMANCE  
DATA**

**A44WG3335-R001**

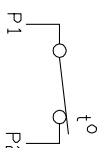
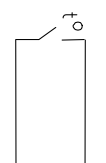
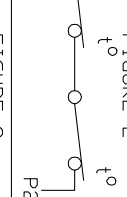
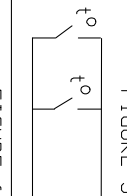
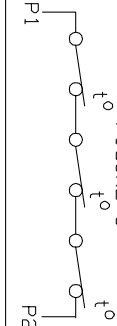
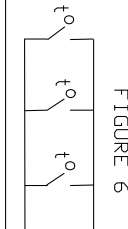
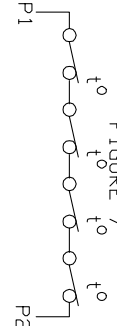
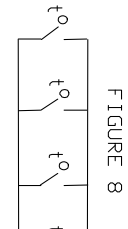
ISSUE DATE 02/03/25





# CONNECTION DIAGRAM ACCESSORIES

MOTOR WINDING THERMOSTATS	
CONTACTS _____ @ _____ °C	
FIGURE NUMBER _____	
CONTACT RATING	
VOLTS	CONTINUOUS AMPERES
110-120	3.0
220-240	1.5
440-480	0.75
550-600	0.60
	INRUSH AMPERES
	30
	15
	7.5
	6.0

NORMALLY CLOSED	THERMOSTATS	NORMALLY OPEN
 <p>FIGURE 1</p>		 <p>FIGURE 4</p>
 <p>FIGURE 2</p>		 <p>FIGURE 5</p>
 <p>FIGURE 3</p>		 <p>FIGURE 6</p>
 <p>FIGURE 7</p>		 <p>FIGURE 8</p>

CUSTOMER \_\_\_\_\_ CUSTOMER ORDER NO. \_\_\_\_\_ S.O. NO. \_\_\_\_\_

418174-006

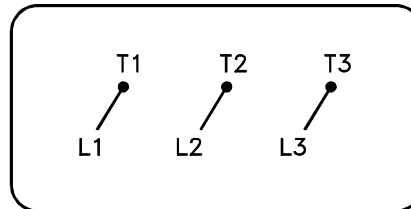
418174-006

REV. DESC: LOADED TO BUS		
REV. LTR: A	VERSION: 01	TDR: 000000570390
FILE: \RAG\00013\849	REVISED: 10:16:21 12/07/2010	BY: RAGDRF
MTL: -		

**BALDOR**  
A-C MOTOR CONNECTION ACCESSORIES  
SH 1 of 1

416820-036

**A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD CONNECTED**



(N.P. 1575-BA)

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11: 54: 06 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 3 LEAD  
SH 1 of 1

416820-036