

# ABB BALDOR RELIANCE III

---

## Customer information packet

### EM2555T-CI

100HP, 1785RPM, 3PH, 60HZ, 404T, ODP, FOOT,  
Class - None  
Division - Not Applicable

**Specifications**

<b>Enclosure</b>	DP
<b>Frame</b>	404T
<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>	100.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSA US CCSAUSEEV CSA EEV CURUSEEV
<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>Current @ Voltage</b>	230.000 A @ 230.0 V 115.000 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>	95.4 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	115.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G

**Part Detail**


<b>Revision</b>	Q
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A40WG0707
<b>Layout</b>	617428-119
<b>Eff. date</b>	09-04-2024
<b>CD Diagram</b>	416820-002
<b>Poles</b>	04
<b>Leads</b>	3#2,6#4
<b>Proprietary</b>	False
<b>Created date</b>	02-03-2011

<b>Lifting Lugs</b>	<b>Standard Lifting Lugs</b>
<b>Motor Lead Quantity/Wire Size</b>	3 @ 2 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A40052M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	34.00 IN
<b>Power Factor</b>	85
<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>	P40G297	<b>CAT.NO.</b>	EM2555T-CI	<b>FRAME</b>	404T				
<b>HP</b>	100	<b>VOLTS</b>	230/460	<b>PHASE</b>	3	<b>DESIGN</b>	B	<b>TYPE</b>	P
<b>RPM</b>	1785	<b>AMPS</b>	230/115	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<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>	DP	<b>CODE</b>	G				
<b>SER.NO.</b>		<b>POWER FACTOR</b>	85	<b>NEMA-NOM-EFFICIENCY</b>	95.4				
		<b>MAX CORR KVAR</b>	20.0	<b>GUARANTEED EFFICIENCY</b>	95.0				
		<b>NEMA NOM/CSA QUOTED EFF</b>							
		<b>MOTOR WEIGHT</b>							

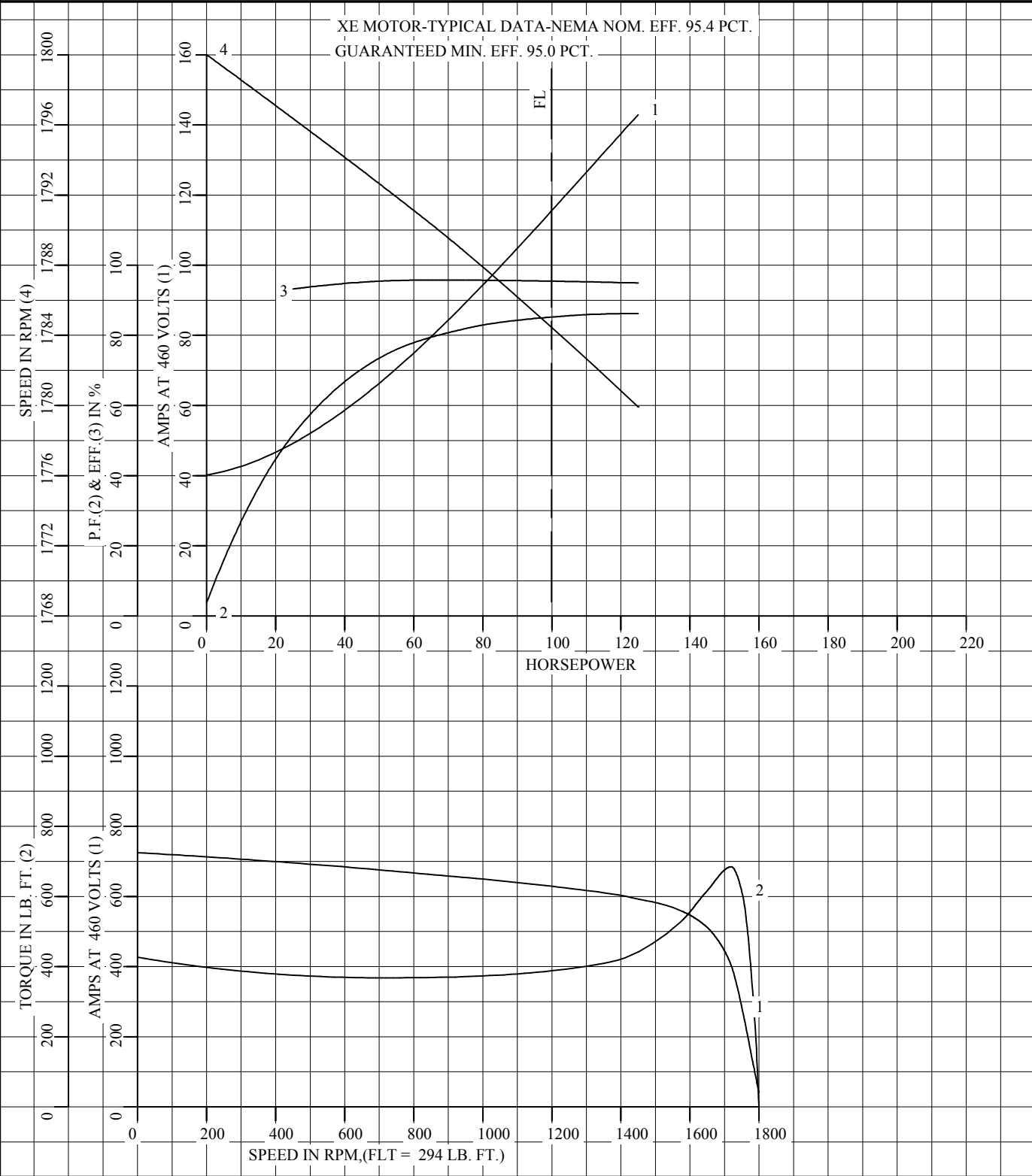
REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	404T	100	P	3/60	1785	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
230/115	CONT	40/B	1.15	B	G	PROT
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
595948	418142-31-NE	---	---	.0132/.0531		
<b>PERFORMANCE</b>						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	40.3	1800	3.80	0	
1/4	25.0	48.7	1796	51.7	93.2	
2/4	50.0	66.7	1793	73.5	95.4	
3/4	74.9	89.5	1789	81.9	95.7	
4/4	99.9	115	1785	85.2	95.4	
5/4	125	143	1780	86.2	94.9	
<b>SPEED TORQUE</b>						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	145	427	725	
PULL UP		700	125	368	676	
BREAKDOWN		1720	233	685	401	
FULL LOAD		1785	100	294	115	
<p>AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE</p> <p>REMARKS: XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 95.4 PCT. GUARANTEED MIN. EFF. 95.0 PCT.</p>						
		DR. BY <u>D. M. BYRD</u> CK. BY <u>W. L. SMITH</u>		<b>A-C MOTOR PERFORMANCE A40WG0707-R001 DATA</b>		
		APP. BY <u>D. M. BYRD</u> DATE <u>04/14/2004</u>				

FRAME 404T  
HP 100  
TYPE P  
PHASE/HERTZ 3/60

VOLTS 230/460  
AMPS 230/115  
DUTY CONT  
AMB °C/INSUL 40/B

NEMA DESIGN B  
CODE LETTER G  
ENCLOSURE PROT  
E/S 595948

TEST S.O. ---  
TEST DATE ---  
STATOR RES. @ 25 °C .0132/.0531  
OHMS (BETWEEN LINES)

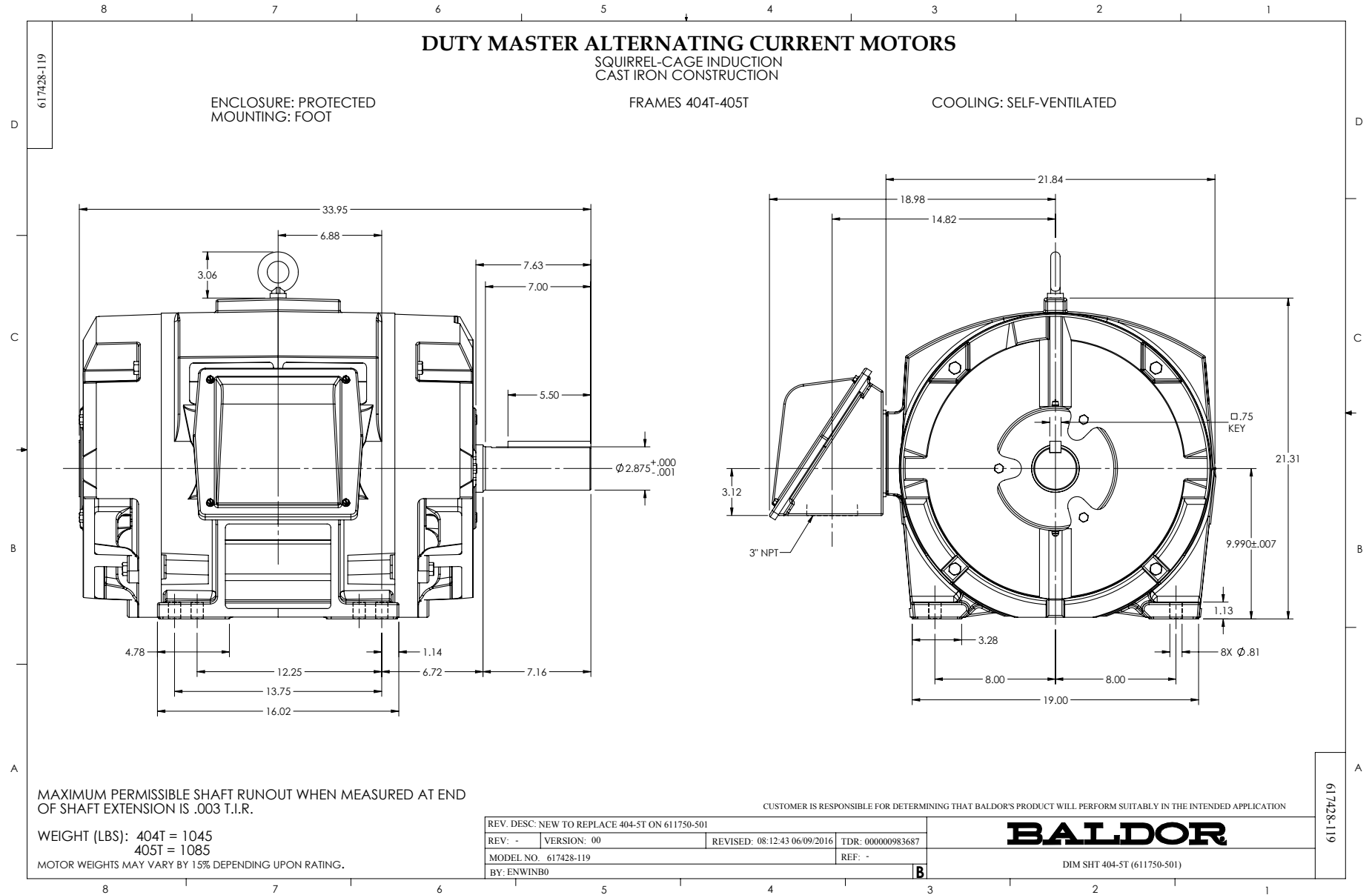


AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



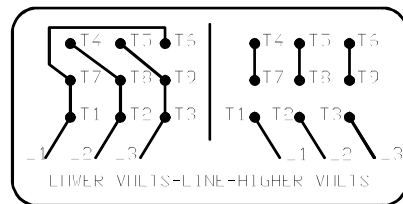
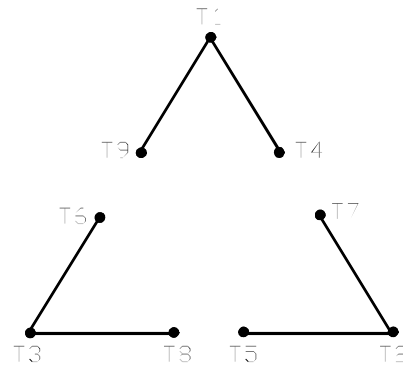
DR. BY D. M. BYRD  
CK. BY W. L. SMITH  
APP. BY D. M. BYRD  
DATE 04/14/2004

**A-C MOTOR  
PERFORMANCE CURVES** A40WG0707-R001  
ISSUE DATE 04/14/2004



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
MTL: -	© □	

**BALDOR - RELIANCE®**

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1