

# **ABB BALDOR RELIANCE III**

---

## **Customer information packet**

### ECP4313T

75HP, 3555RPM, 3PH, 60HZ, 365TS, A36068M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	365TS
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	CLI GP A,B,C,D
<b>Haz Area Division</b>	Division II
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	75.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	3600 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
<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>	80.700 A @ 460.0 V 161.000 A @ 230.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	93.6 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Haz Area Temp Code</b>	T3
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	80.7 a
<b>Insulation Class</b>	F

**Part Detail**

<b>Revision</b>	AA
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A36WG0107
<b>Layout</b>	617428-036
<b>Eff. date</b>	08-26-2024
<b>CD Diagram</b>	416820-002
<b>Poles</b>	02
<b>Leads</b>	3#2,6#4
<b>Proprietary</b>	False
<b>Created date</b>	10-19-2010

<b>Inverter Code</b>	Inverter Ready
<b>IP Rating</b>	NONE
<b>KVA Code</b>	F
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Max Speed</b>	4500 rpm
<b>Motor Lead Quantity/Wire Size</b>	3 @ 2 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A36068M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	31.37 IN
<b>Power Factor</b>	92
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3555 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**

**NP4033LUA**

<b>CAT #</b>	ECP4313T		<b>SER</b>			<b>CC</b>	010A					
<b>SPEC</b>	P36G402		<b>RATING</b>	40C AMB-CONT								
<b>HZ</b>	<b>VOLTS</b>		<b>AMPS</b>		<b>RPM</b>	<b>HP</b>	<b>CODE</b>	<b>- SF</b>	<b>DES</b>	<b>PF</b>	<b>NEMA NOM. EFF</b>	
60	230/460		161/80.7		3555	75	F	1.15	B	92 %	93.6 %	
										%	%	
<b>PH</b>	3	<b>CL</b>	F	<b>MAX RPM</b>	4500	<b>MAX CORR KVAR</b>	5					
<b>BRG</b>	<b>DE</b>	6313	<b>ODE</b>	6313	<b>ENCL</b>	TEFC	<b>FR</b>	365TS	<b>IP</b>	55		
<b>GREASE</b>	POLYREX EM					<b>MTR WT</b>	915	<b>LBS</b>				
<b>CL I DIV 2 GRPS A,B,C,D</b>				<b>CL I ZONE 2 GRPS</b>				<b>IIA,IIB,IIC</b>	<b>TEMP T</b>	200	<b>C</b>	
<b>INV READY</b>	<b>CT</b>	15-60	<b>HZ</b>	4:1	<b>VT</b>	3-60	<b>HZ</b>	20:1	<b>CHP</b>	60-75	<b>HZ</b>	1.25:1
<b>INV TEMP CL</b>	200	<b>C</b>	<b>USABLE AT</b>	50HZ 60HP 190/380V 156/78A					<b>SF1.0</b>			

<b>CUSTOMER INFORMATION PACKET</b>		ECP4313T - 75HP, 3555RPM, 3PH, 60HZ, 365TS, A36068M, TEFC				
<b>FRAME</b>	<b>HP</b>	<b>TYPE</b>	<b>PHASE/ HERTZ</b>	<b>RPM</b>	<b>VOLTS</b>	
365TS	75	P	3/60	3555	230/460	

<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>
161/80.7	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>
892019	418141005TE	---	---	.0186/.0744

**PERFORMANCE**

<b>LOAD</b>	<b>HP</b>	<b>AMPERES</b>	<b>RPM</b>	<b>% POWER FACTOR</b>	<b>% EFFICIENCY</b>
NO LOAD	0	15.5	3600	8.92	0
1/4	18.8	24.5	3589	77.9	91.9
2/4	37.5	40.9	3579	90.9	94.5
3/4	56.2	60.2	3567	92.2	94.8
4/4	75.0	81.1	3555	91.6	94.5
5/4	93.8	103	3542	90.9	93.9

**SPEED TORQUE**

	<b>RPM</b>	<b>TORQUE % FULL LOAD</b>	<b>TORQUE LB.-FT.</b>	<b>AMPERES</b>
LOCKED ROTOR	0	218	242	520
PULL UP	1565	189	210	440
BREAKDOWN	3395	227	251	259
FULL LOAD	3555	100	111	81.1

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

**TYPICAL DATA**

XE MOTOR-NEMA NOM. EFF. 93.6 %  
GUARANTEED MIN. EFF. 92.4%



DRAWN BY: J.J.HARRISON  
CHECKED BY: G. R. WEBB  
APPROVED BY: W.L.SMITH  
DATE: 10/16/02

**AC MOTOR  
PERFORMANCE  
DATA**

**A36WG0107-R001**

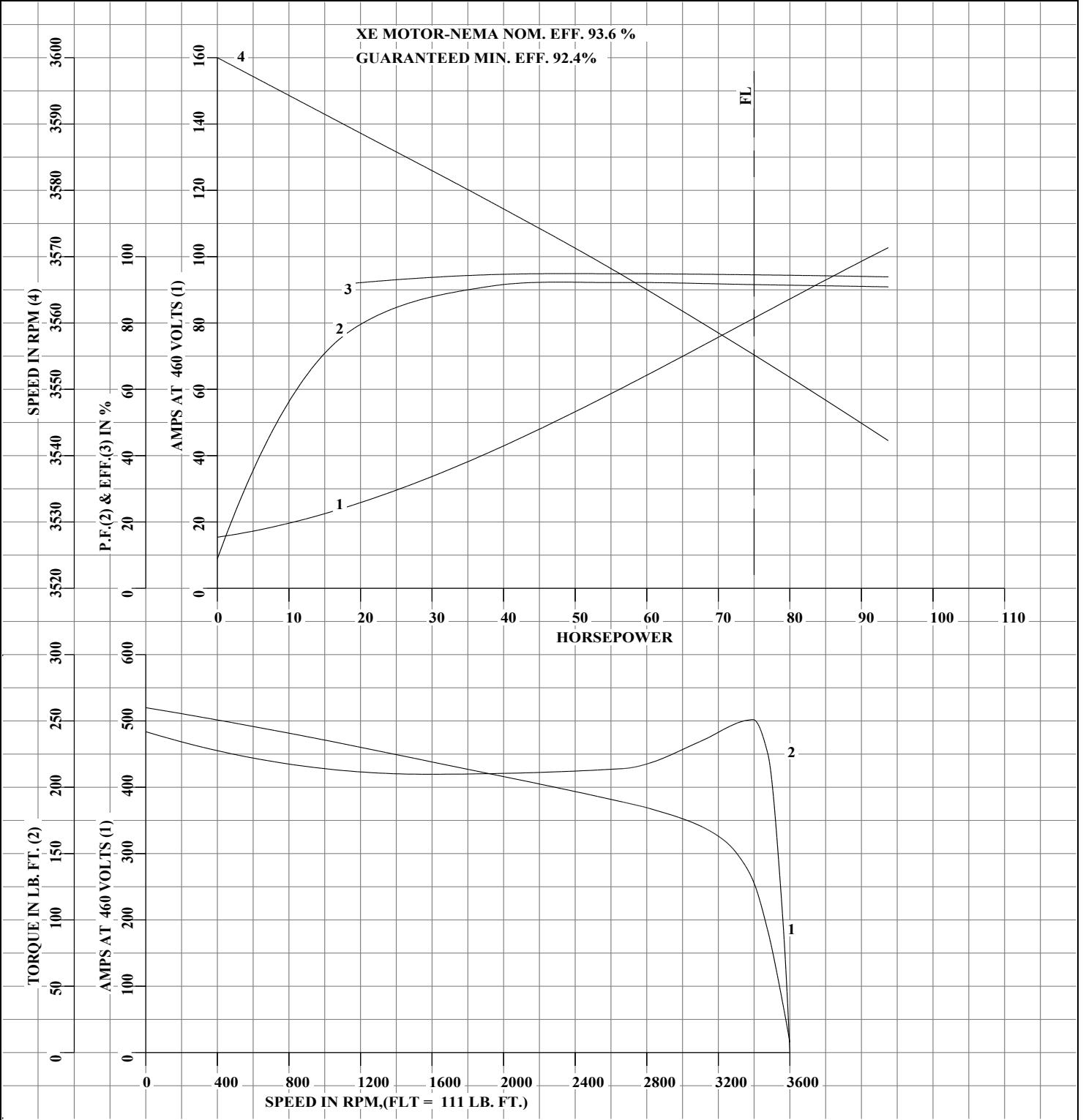
DATE ISSUED 12/14/10

FRAME 365TS  
HP 75  
TYPE P  
PHASE / HERTZ 3/60

RPM 3555  
VOLTS 230/460  
AMPS 161/80.7  
DUTY CONT  
AMB °C / INSUL 40/F

S.F. 1.15  
NEMA DESIGN B  
CODE LETTER F  
ENCLOSURE TEFC  
E/S 892019

ROTOR 418141005TE  
TEST S.O. TYPICAL DATA  
TEST DATE ---  
STATOR RES. @ 25°C .0186/.0744  
OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 230/460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: J.J.HARRISON  
 CHECKED BY: G. R. WEBB  
 APPROVED BY: W.L.SMITH  
 DATE: 10/16/02

AC MOTOR  
PERFORMANCE  
DATA

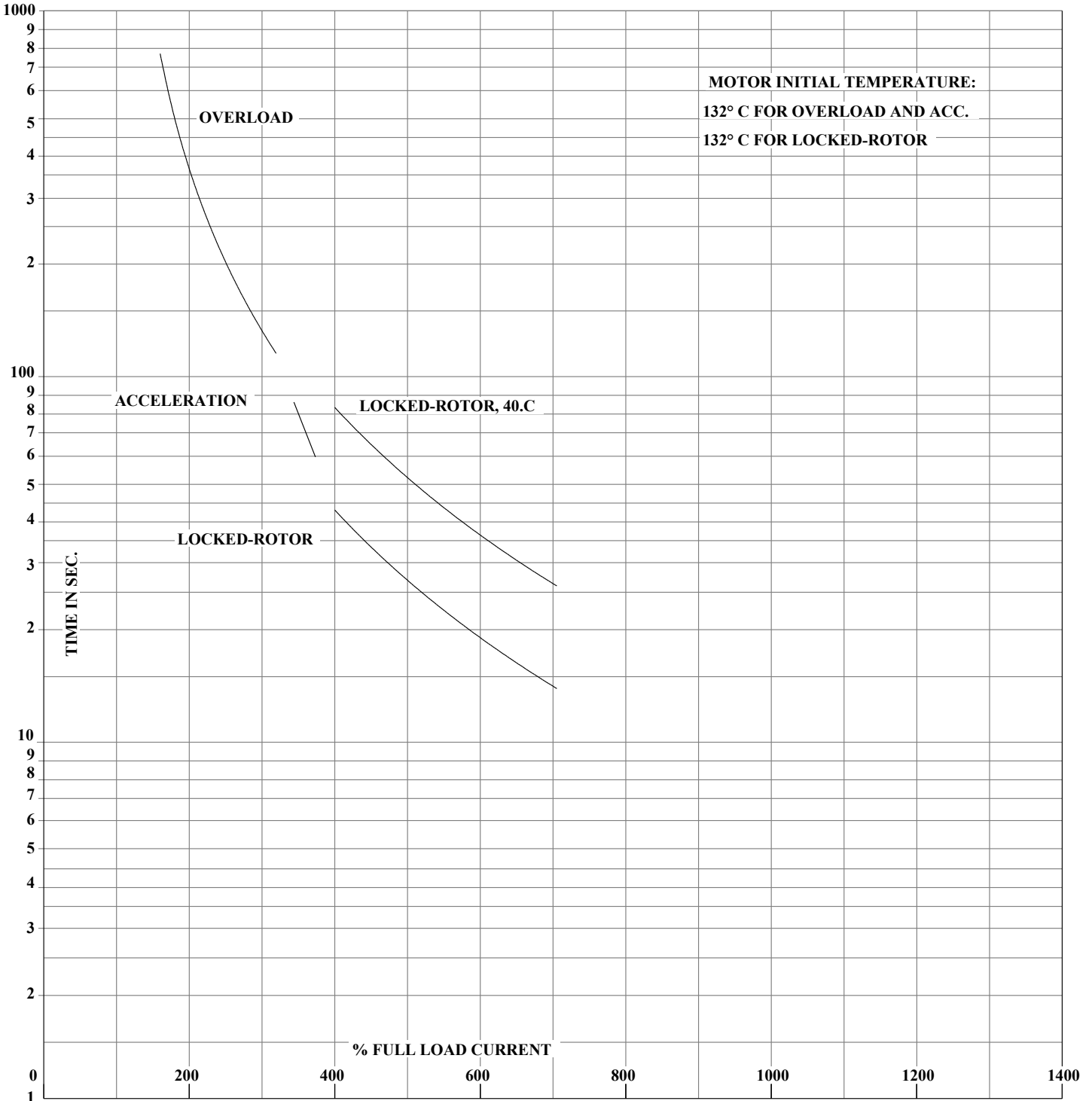
**A36WG0107-R001**  
ISSUE DATE 12/14/10

FRAME 365TS  
HP 75  
TYPE P  
PHASE / HERTZ 3/60

RPM 3555  
VOLTS 230/460  
AMPS 161/80.7  
DUTY CONT  
AMB °C / INSUL 40/F

S.F. 1.15  
NEMA DESIGN B  
CODE LETTER F  
ENCLOSURE TEFC  
E/S 892019

ROTOR 418141005TE  
TEST S.O. TYPICAL DATA  
TEST DATE ---  
STATOR RES. @ 25°C .0186/.0744  
OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

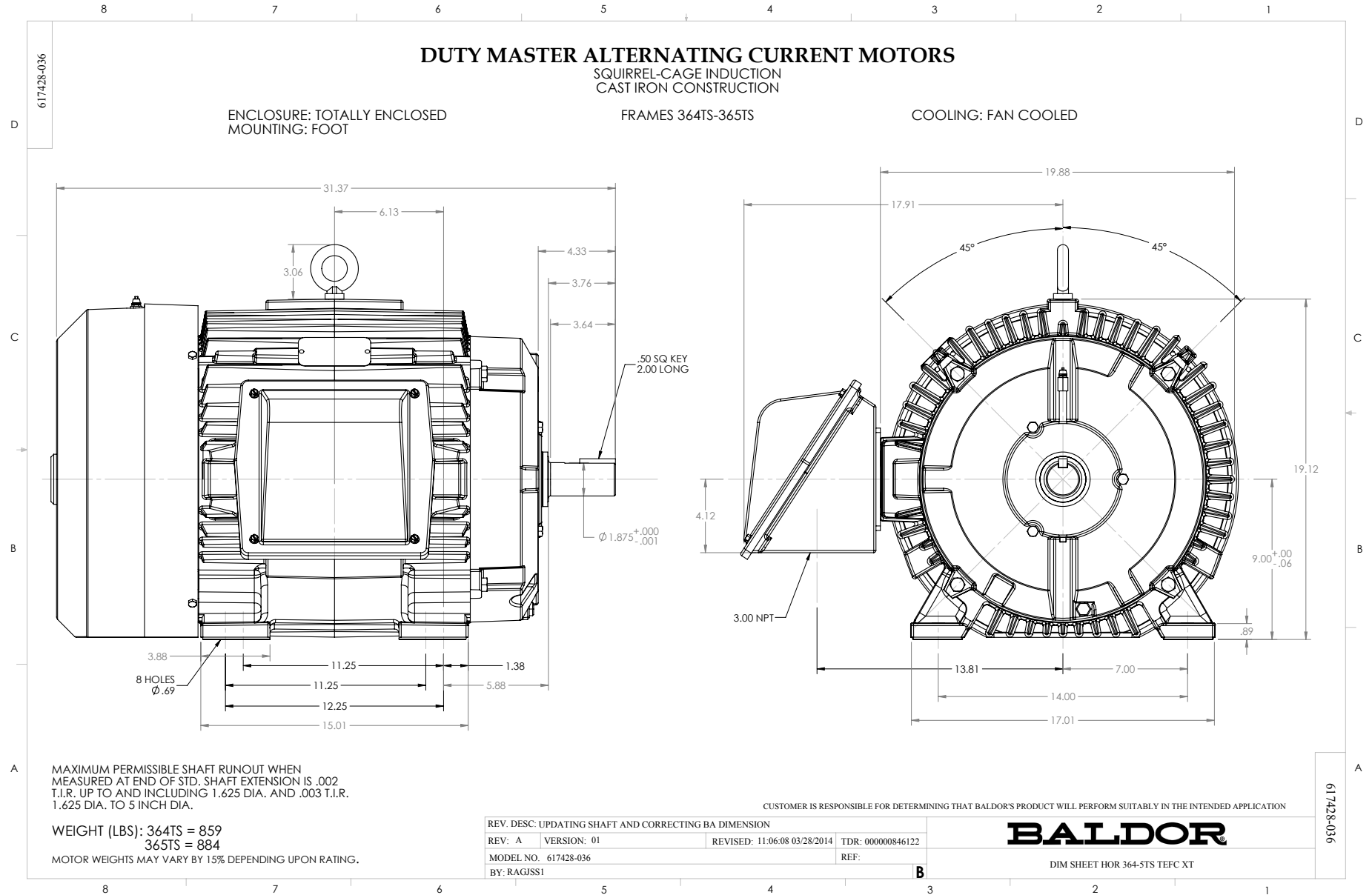
AMPERES SHOWN FOR 230/460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: J.J.HARRISON  
 CHECKED BY: G. R. WEBB  
 APPROVED BY: W.L.SMITH  
 DATE: 10/16/02

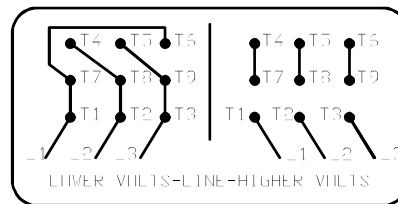
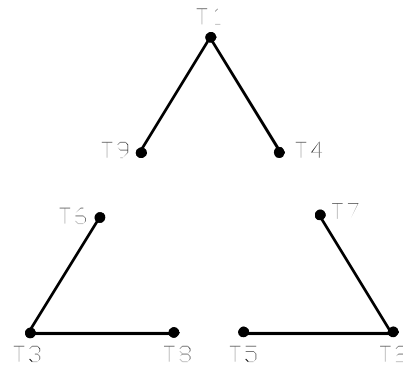
AC MOTOR  
PERFORMANCE  
DATA

**A36WG0107-R001**  
ISSUE DATE 12/14/10



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
MTL: -	© □	

**BALDOR - RELIANCE®**

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1