

# **ABB BALDOR RELIANCE III**

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## **Customer information packet**

### EM2540T-CI

40HP, 1185RPM, 3PH, 60HZ, 364T, 1458M, OPEN, F1

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	DP
<b>Frame</b>	364T
<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>	40.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1200 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	CURUSEEV CSA EEV CCSAUSEEV CCSA US
<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>	49.400 A @ 460.0 V 98.800 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>	94.1 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	49.4 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Not Inverter
<b>IP Rating</b>	NONE

**Part Detail**

<b>Revision</b>	N
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A36WG0752
<b>Layout</b>	617428-115
<b>Eff. date</b>	09-04-2024
<b>CD Diagram</b>	416820-002
<b>Poles</b>	06
<b>Leads</b>	3#4,6#6
<b>Proprietary</b>	False
<b>Created date</b>	10-19-2010

<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Motor Lead Quantity/Wire Size</b>	3 @ 4 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A36062M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	6
<b>Overall Length</b>	29.70 IN
<b>Power Factor</b>	81
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.374 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1190 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>	P36G3402	<b>CAT.NO.</b>	EM2540T-CI	<b>FRAME</b>	364T				
<b>HP</b>	40	<b>VOLTS</b>	230/460	<b>PHASE</b>	3	<b>DESIGN</b>	B	<b>TYPE</b>	P
<b>RPM</b>	1190	<b>AMPS</b>	98.8/49.4	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>DRIVE END BEARING</b>	65BC03J30X	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F				
<b>OPP D.E. BEARING</b>	65BC03J30X	<b>ENCL</b>	DP	<b>CODE</b>	G				
<b>SER.NO.</b>		<b>POWER FACTOR</b>	80.5	<b>NEMA-NOM-EFFICIENCY</b>	94.1				
		<b>MAX CORR KVAR</b>	12.0	<b>GUARANTEED EFFICIENCY</b>	93.6				
		<b>NEMA NOM/CSA QUOTED EFF</b>							
		<b>MOTOR WEIGHT</b>							

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	364VPZ	40	P	3/60	1190	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
98.8/49.4	CONT	40/F	1.15	B	G	DP
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @ 25 °C OHMS (BETWEEN LINES)		
491378	418141-71JE	---	---	.0380/.152		

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	17.8	1200	5.94	0
1/4	10.0	21.6	1197	48.6	89.2
2/4	20.0	29.0	1194	69.3	93.2
3/4	30.0	38.5	1191	77.4	94.1
4/4	40.0	49.4	1188	80.6	94.1
5/4	50.0	61.0	1184	82.0	93.6

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	158	280	290
PULL UP	480	136	241	270
BREAKDOWN	1135	243	430	167
FULL LOAD	1188	100	177	49.4

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

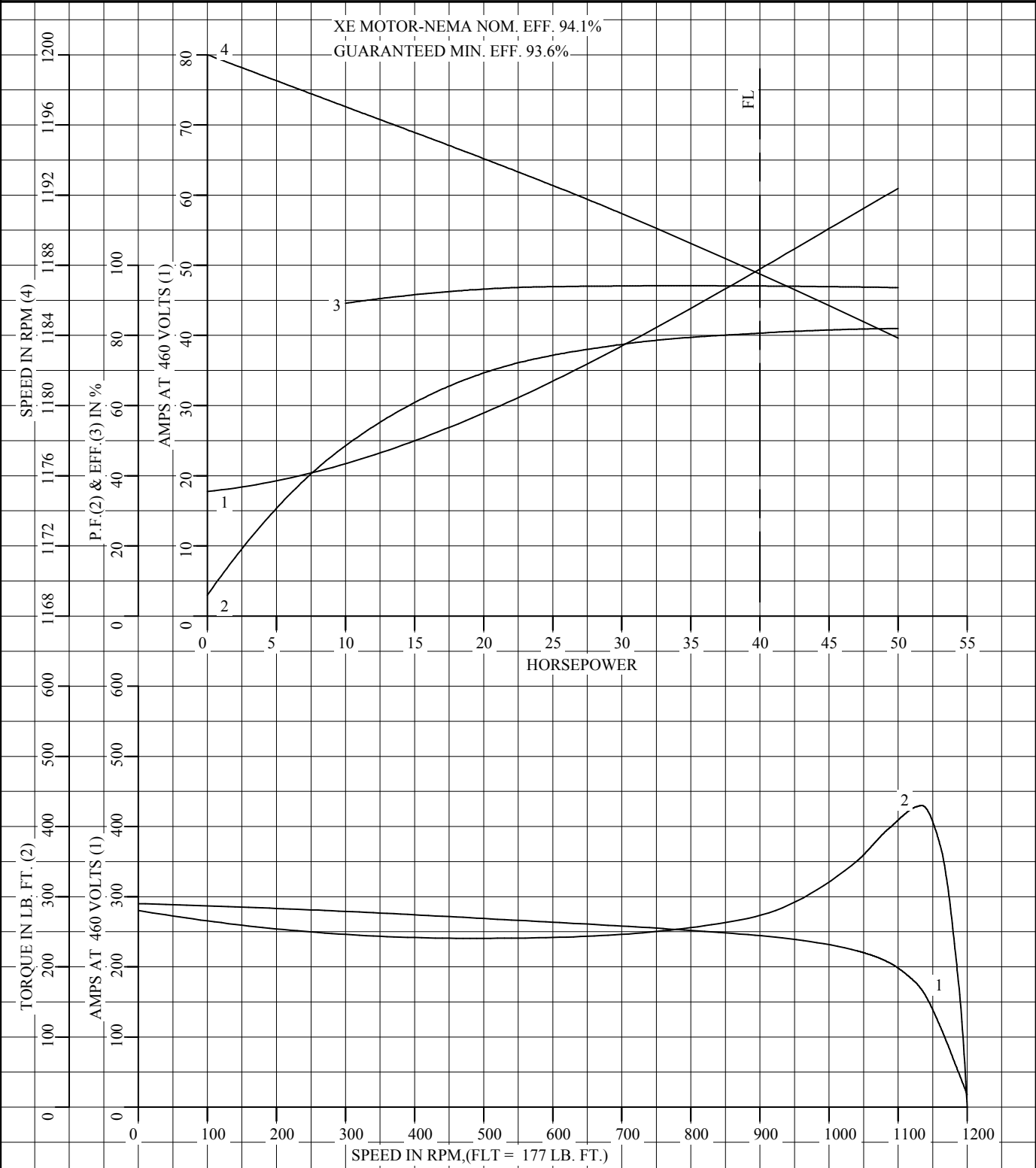
REMARKS: TYPICAL DATA  
XE MOTOR-NEMA NOM. EFF. 94.1%  
GUARANTEED MIN. EFF. 93.6%



DR. BY J.J.HARRISON  
CK. BY W.L.SMITH  
APP. BY W.L.SMITH  
DATE 04/15/10

**A-C MOTOR  
PERFORMANCE DATA** A36WG0752-R001  
ISSUE DATE 04/16/18

REL S.O.	RPM 1190	S.F. 1.15	ROTOR 418141-71JE
FRAME 364VPZ	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 40	AMPS 98.8/49.4	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE DP	STATOR RES. @ 25 °C .0380/.152
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 491378	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 J.J.HARRISON  
 CK. BY W.L.SMITH  
 APP. BY W.L.SMITH  
 DATE 04/15/10

**A-C MOTOR  
PERFORMANCE  
CURVES**

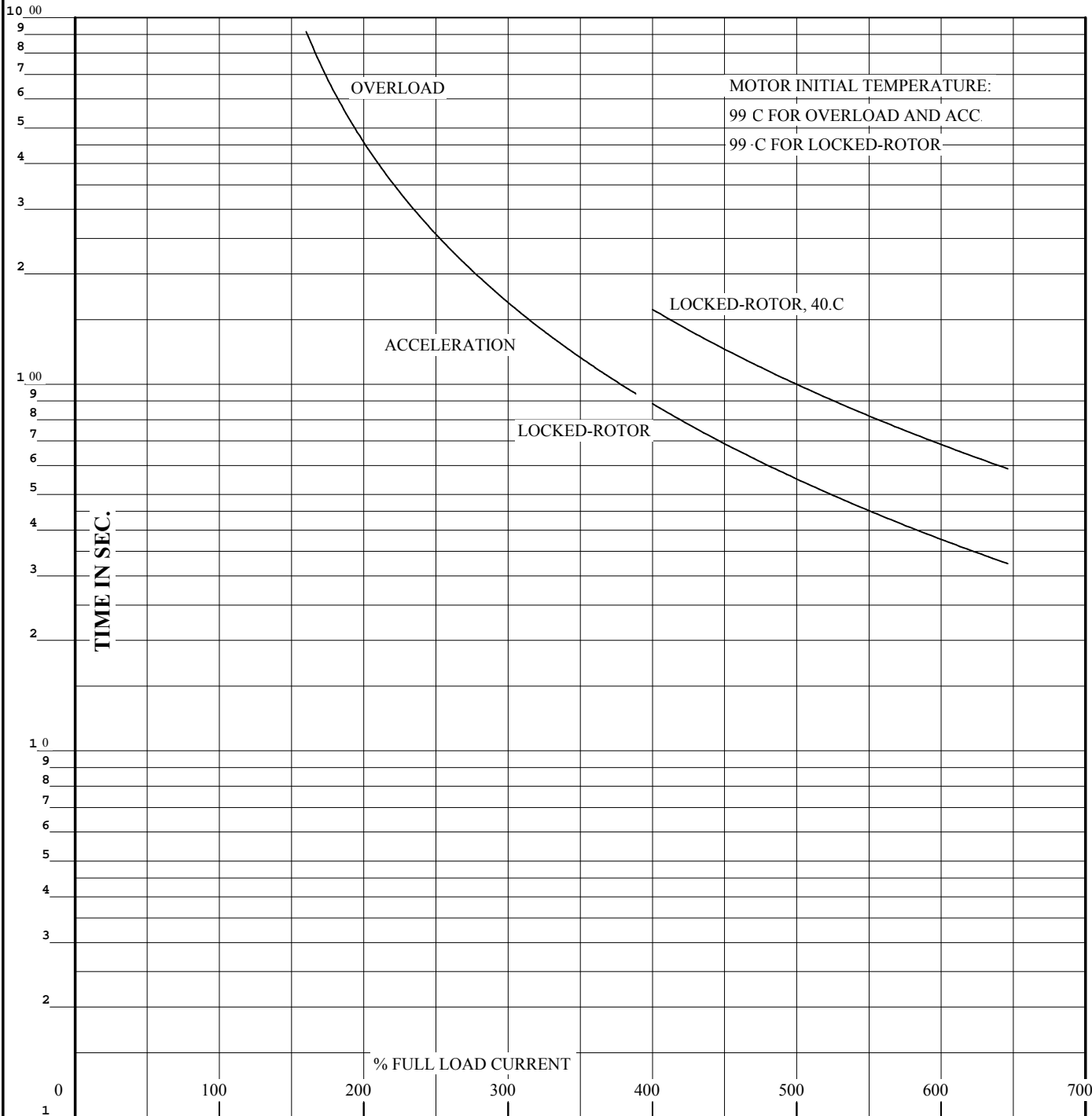
**A36WG0752-R001**  
 ISSUE DATE 04/16/18

REL. S.O.  
FRAME 364VPZ  
HP 40  
TYPE P  
PHASE/HERTZ 3/60

RPM 1190  
VOLTS 230/460  
AMPS 98.8/49.4  
DUTY CONT  
AMB °C/INSUL 40/F

S.F. 1.15  
NEMA DESIGN B  
CODE LETTER G  
ENCLOSURE DP  
E/S 491378

ROTOR 418141-71JE  
TEST S.O. TYPICAL DATA  
TEST DATE ---  
STATOR RES. @ 25 °C .0380/.152  
OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

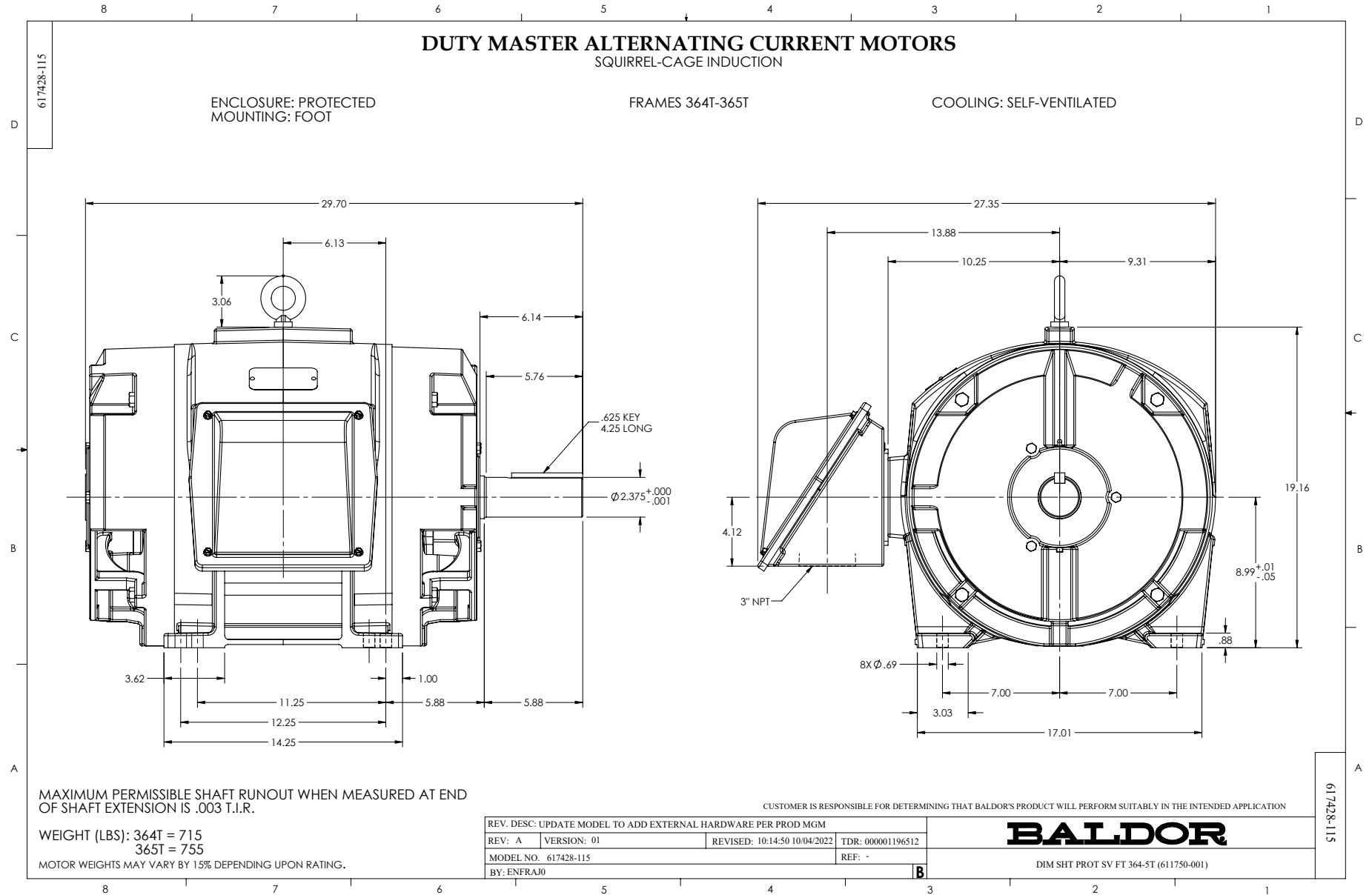
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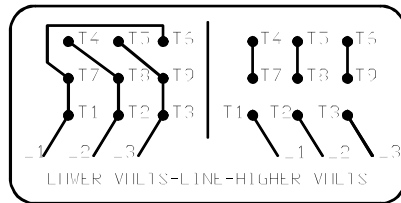
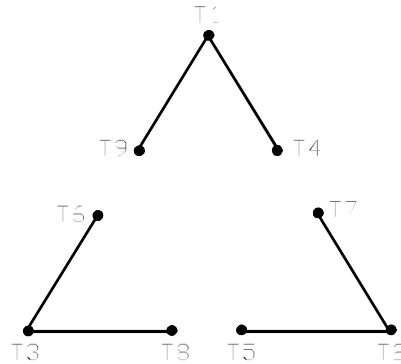
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**A-C MOTOR  
PERFORMANCE CURVES** A36WG0752-R001  
ISSUE DATE 04/16/18



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
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**BALDOR - RELIANCE®**

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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