

# **ABB BALDOR RELIANCE III**

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## **Customer information packet** IDDRPM364004R1

400HP, 1775/2400/2700, 460V, RL3614, DPFV, F1

**Specifications**

<b>Enclosure</b>	DPFV
<b>Frame</b>	RL3614
<b>Frame Material</b>	Exposed Laminations
<b>Frequency</b>	60.00 Hz
<b>Output @ Frequency</b>	400.000 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>	CCSA US
<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>	459.000 A @ 460.0 V
<b>Duty Rating</b>	CONT
<b>Feedback Device</b>	NO FEEDBACK
<b>Frame Prefix</b>	RL
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	459.0 a
<b>Insulation Class</b>	H
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F1
<b>Overall Length</b>	43.22 IN
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	2.874 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1777 rpm
<b>Starting Method</b>	Full Voltage
<b>Thermal Device - Bearing</b>	None

**Part Detail**

<b>Revision</b>	B
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	L9458A
<b>Layout</b>	619684-001
<b>Eff. date</b>	08-21-2023
<b>CD Diagram</b>	422927-001
<b>Poles</b>	04
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	02-03-2023

**Thermal Device - Winding**

**Normally Closed Thermostat**

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**Nameplate**

**000613006MY**

	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>	
	CONT	400	1777		460	460	60
	CONT	400	2400		450	460	81.1
	CONT	400	2700		453	460	91.3
<b>CAT.NO.</b>	IDDRPM364004R1		<b>SPEC. NO.</b>	R36-A000-0264			
<b>SER.NO</b>		<b>FR</b>	RL 3614	<b>INSUL</b>	H		
<b>PH.</b>	3	<b>MAX SAFE SPEED</b>	3750	<b>AMB.</b>	40	<b>MIN. AMB.</b>	-25
<b>DESIGN NO.</b>	L9458A	<b>TYPE</b>		<b>ENCL.</b>	DP		
<b>S.F.</b>	1.0		<b>D.E. BRG.</b>	95BC02J30X			
<b>ENCL MOD</b>	FORCE VENT		<b>O.D.E. BRG.</b>	80BC03J30X			

FRAME	RL3614	AMPS	460	MAX SAFE SPEED	3750			
HP	400	DUTY	CONT	IM (AMPS)	146	R1	.00910	X1 .0657
BASE SPEED	1777	S.F.	1.0	P.F. @NL / FL	.039/.877	R2	.00528	X2 .0657
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	45			XM 1.86

**RATED FULL LOAD DATA**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1776	400	1183	460	60	462
MAX SPEED	2700	400	778	460	91.3	455
MIN SPEED	0	0	1183	13.3	.814	462

**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	143
1/4	1794	100	294	460	60	183
1/2	1788	200	588	460	60	261
3/4	1782	300	884	460	60	356
FULL LOAD	1776	400	1183	460	60	462
0/L	1741	785	2366	460	60	969

REMARKS:  
TYPICAL DATA  
CORRELATED DATA



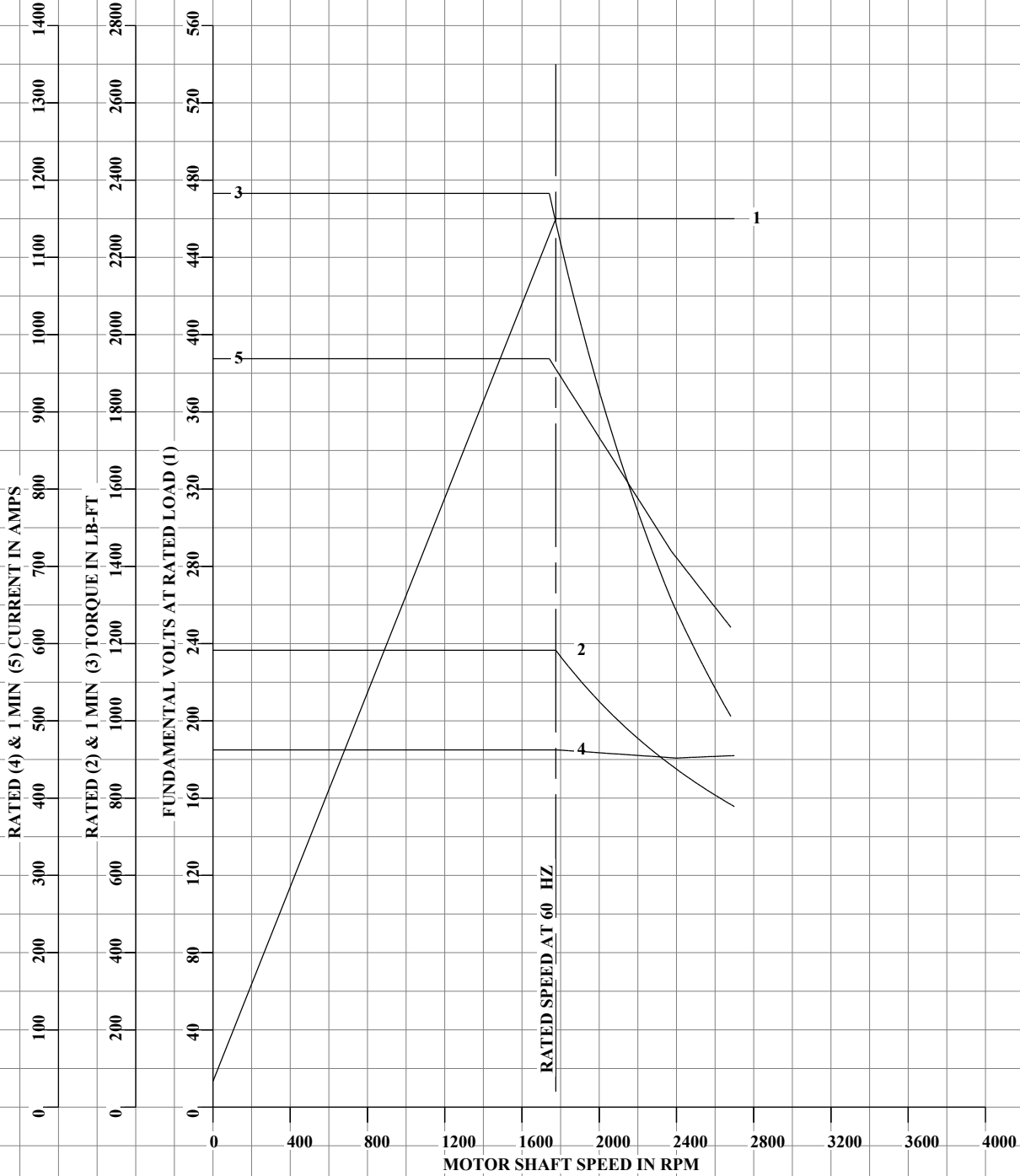
DRAWN BY: A. BROOKINS  
CHECKED BY: B. GRANT  
APPROVED BY: J. MARTIN  
DATE: 3-14-23

AC MOTOR  
PERFORMANCE  
DATA

**L9458A**  
ISSUE DATE 3-14-23

FRAME	RL3614	VOLTS	460	ENCLOSURE	DPFV	WYE CONNECTIONS PER PHASE (AT BASE RATING, 25°C)		
HP	400	AMPS	460	MAX SAFE SPEED	3750	R1	.00910	X1 .0657
BASE SPEED	1777	DUTY	CONT	IM (AMPS)	146	R2	.00528	X2 .0657
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.039/.877			XM 1.86
		AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	45			

**CORRELATED DATA  
VARIABLE SPEED AC MOTOR CURVES**



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



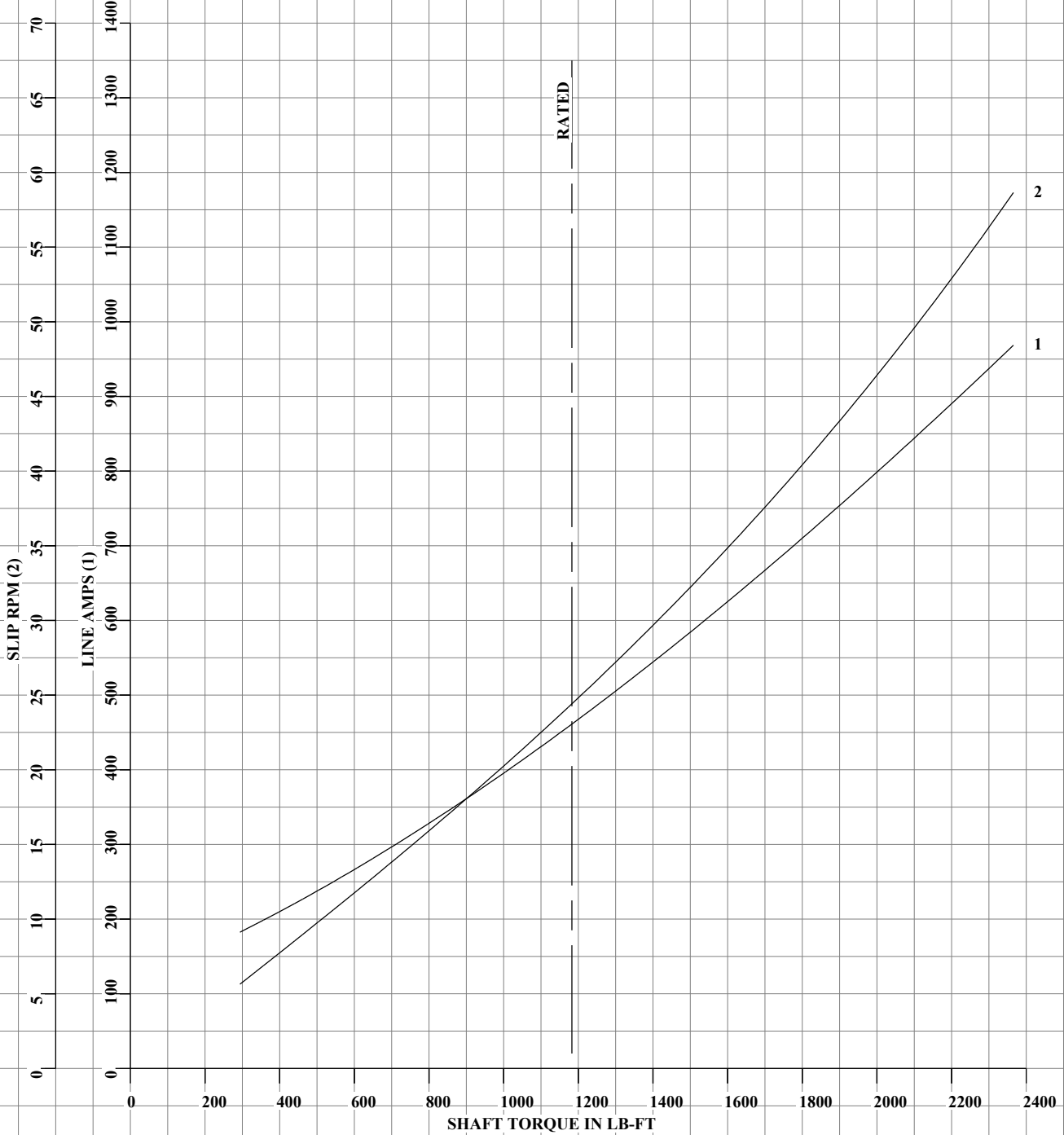
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**AC MOTOR  
PERFORMANCE  
DATA**

**L9458A**  
 ISSUE DATE: 3-14-23

		VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)		
FRAME	RL3614	AMPS	460	MAX SAFE SPEED	3750			
HP	400	DUTY	CONT	IM (AMPS)	146	R1	.00910	X1 .0657
BASE SPEED	1777	S.F.	1.0	P.F. @NL / FL	.039/.877	R2	.00528	X2 .0657
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	45			XM 1.86

**CORRELATED DATA  
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)**



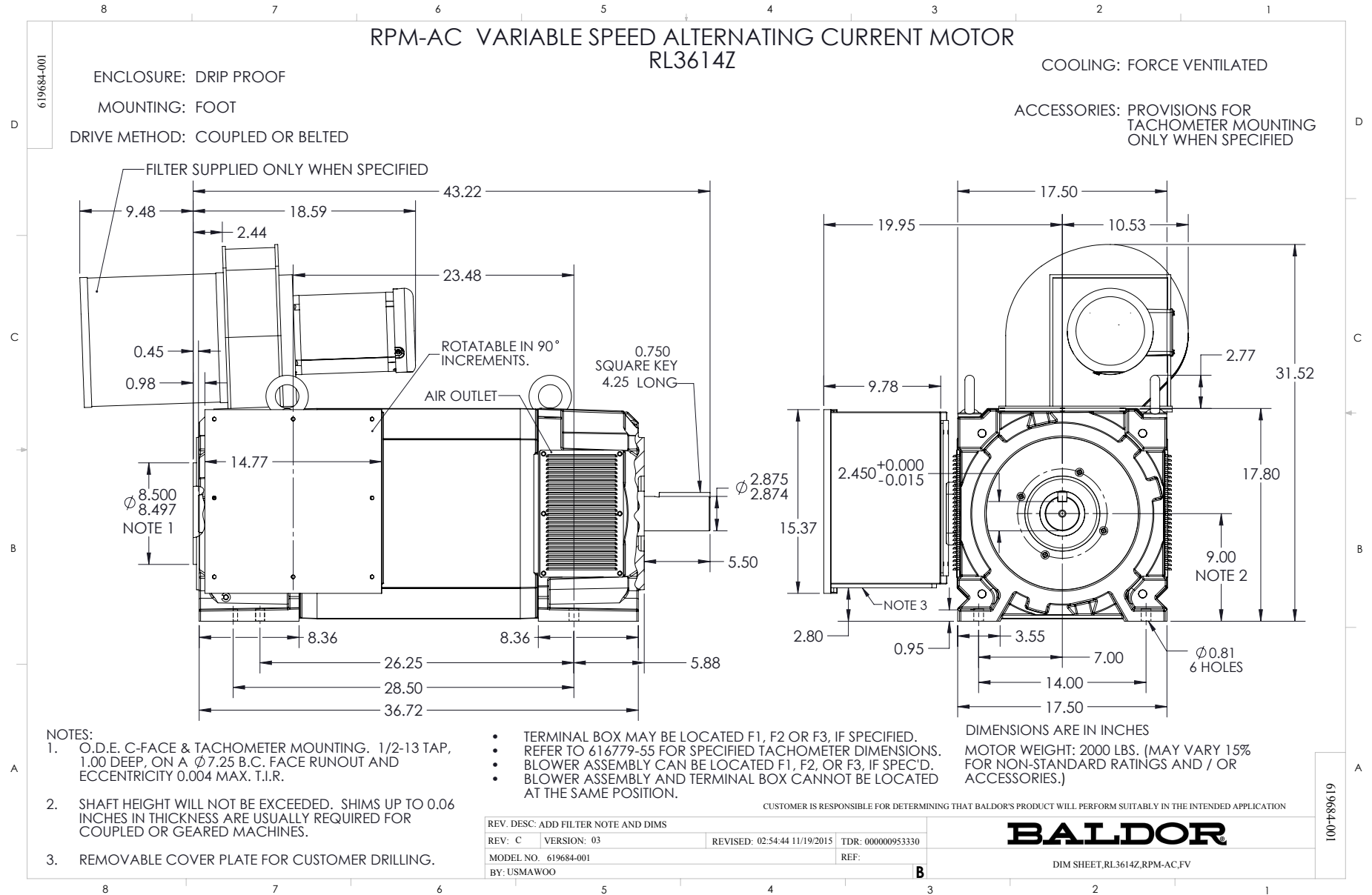
TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



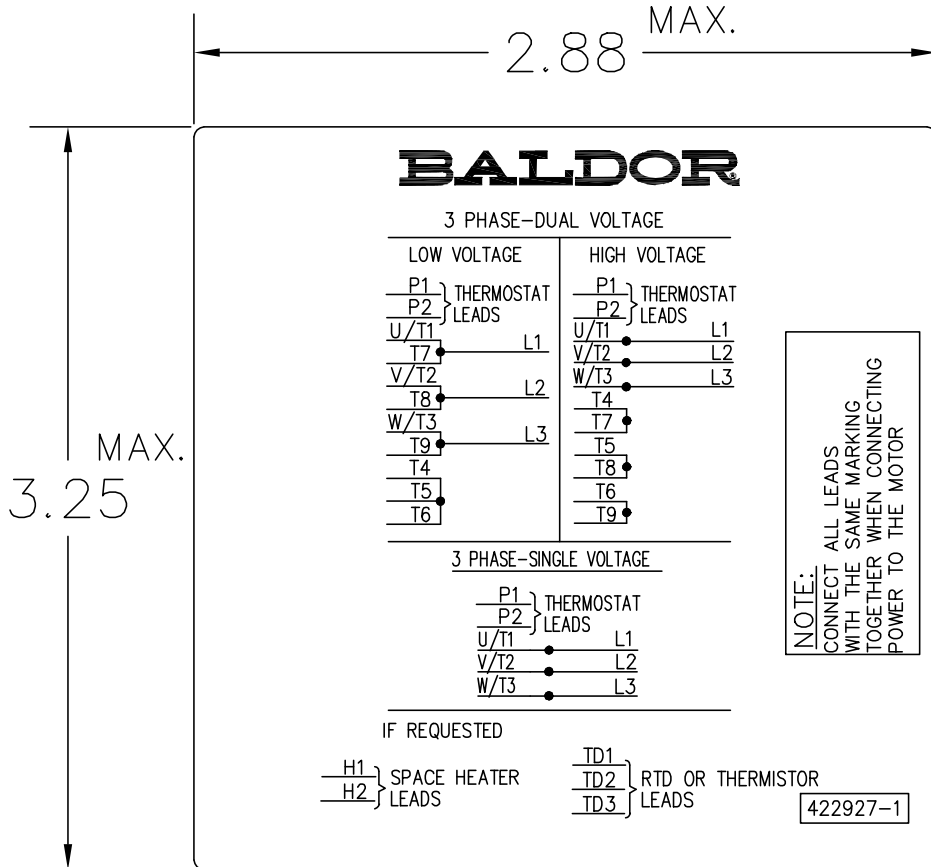
DRAWN BY: A. BROOKINS  
 CHECKED BY: B. GRANT  
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 DATE: 3-14-23

**AC MOTOR  
PERFORMANCE  
DATA**

**L9458A**  
 ISSUE DATE: 3-14-23



422927-001



NOTE:  
DATA TO BE SIZED  
SO THAT IT FITS INTO  
MATERIAL DECAL  
DIMENSIONS. MAKE  
LETTERS & NUMBERS  
AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4  
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS  
AND LINES TO BE BLACK  
ON WHITE BACKGROUND.

NOTE:  
CONNECT ALL LEADS  
WITH THE SAME MARKING  
TOGETHER WHEN CONNECTING  
POWER TO THE MOTOR

422927-1

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 00000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

**BALDOR**

EXTERNAL CONNECTION LABEL

SH 1 of 1