

# **ABB BALDOR RELIANCE III**

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## **Customer information packet** IDDRPM406004R1

600HP, 1780/2665, 460V, RL4046, DPFV, F1

**Specifications**

<b>Enclosure</b>	DPFV
<b>Frame</b>	RL4046
<b>Frame Material</b>	Exposed Laminations
<b>Frequency</b>	60.00 Hz
<b>Output @ Frequency</b>	600.000 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>	673.000 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>	673.0 a
<b>Insulation Class</b>	H
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F1
<b>Overall Length</b>	48.62 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>	3.624 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1780 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>	L9461A
<b>Layout</b>	619657-001
<b>Eff. date</b>	12-16-2025
<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

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	600	1780		674	460	60
	CONT	600	2670		661	460	90
<b>CAT.NO.</b>	IDDRPM406004R1		<b>SPEC. NO.</b>		R40-A000-0300		
<b>SER.NO</b>			<b>FR</b>	RL 4046	<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>	L9461A		<b>TYPE</b>		<b>ENCL.</b>	DP	
<b>S.F.</b>	1.00		<b>D.E. BRG.</b>	95BC02J30X			
<b>ENCL MOD</b>	FORCE VENT		<b>O.D.E. BRG.</b>	6316/C3VL0241			

FRAME	RL4046	AMPS	674	MAX SAFE SPEED	3750			
HP	600	DUTY	CONT	IM (AMPS)	203	R1	.00515	X1 .0394
BASE SPEED	1780	S.F.	1.0	P.F. @NL / FL	.037/.891	R2	.00301	X2 .0430
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	85			XM 1.34

**RATED FULL LOAD DATA**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1780	600	1770	460	60	674
MAX SPEED	2669	600	1181	460	90	661
MIN SPEED	0	0	1770	10.3	.653	674

**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	199
1/4	1795	150	440	460	60	260
1/2	1791	300	881	460	60	378
3/4	1786	450	1323	460	60	519
FULL LOAD	1780	600	1770	460	60	674
0/L	1746	1354	4071	460	60	1655

REMARKS:

CORRELATED DATA



DRAWN BY: A. BROOKINS  
 CHECKED BY: R. GARCIA  
 APPROVED BY: J. MARTIN  
 DATE: 3-15-23

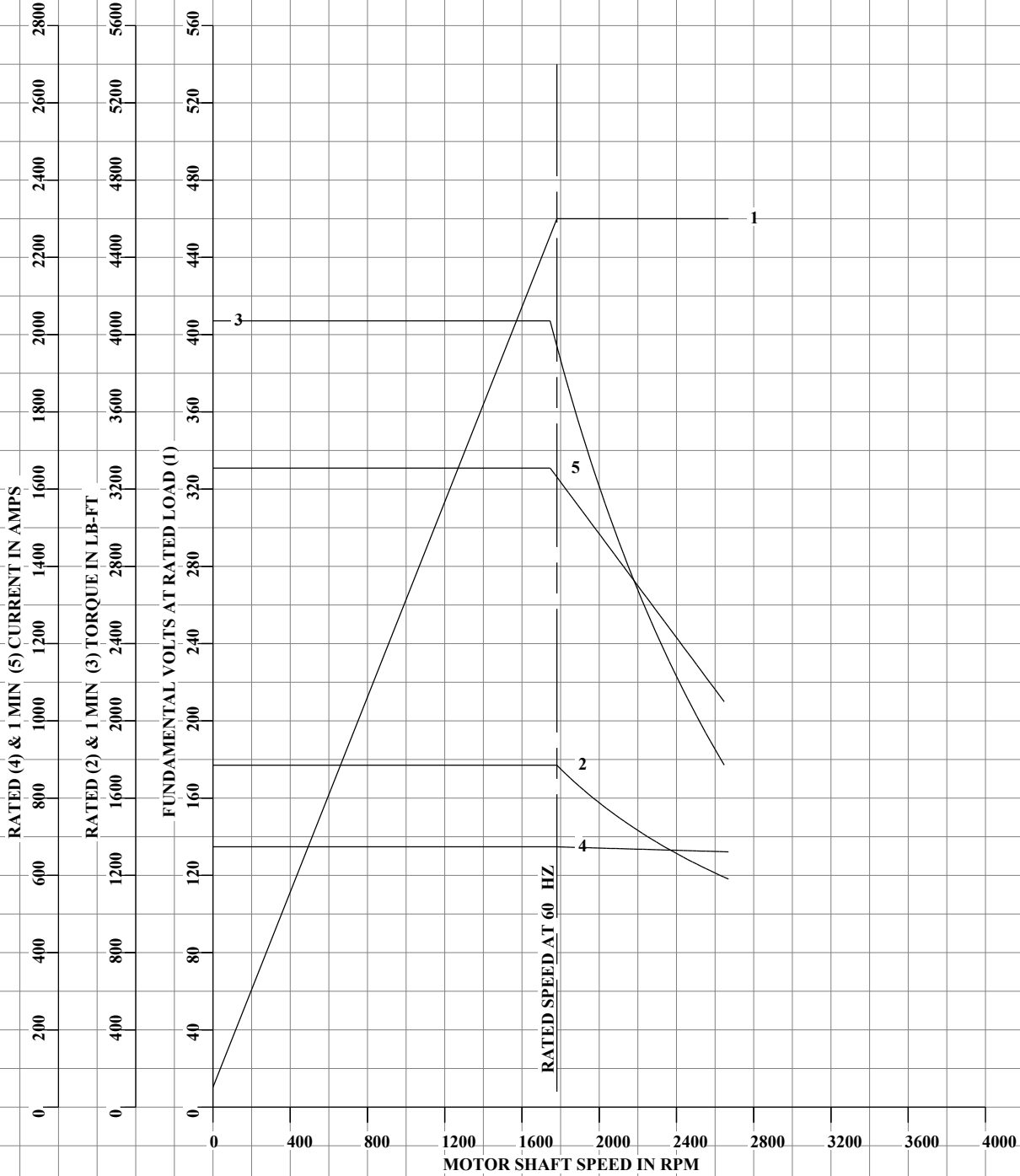
AC MOTOR  
PERFORMANCE  
DATA

**L9461A**

ISSUE DATE 3-15-23

		VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CRT OHMS PER PHASE (AT BASE RATING, 25°C)		
FRAME	RL4046	AMPS	674	MAX SAFE SPEED	3750			
HP	600	DUTY	CONT	IM (AMPS)	203	R1	.00515	X1 .0394
BASE SPEED	1780	S.F.	1.0	P.F. @NL / FL	.037/.891	R2	.00301	X2 .0430
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	85			XM 1.34

**CORRELATED DATA  
VARIABLE SPEED AC MOTOR CURVES**



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



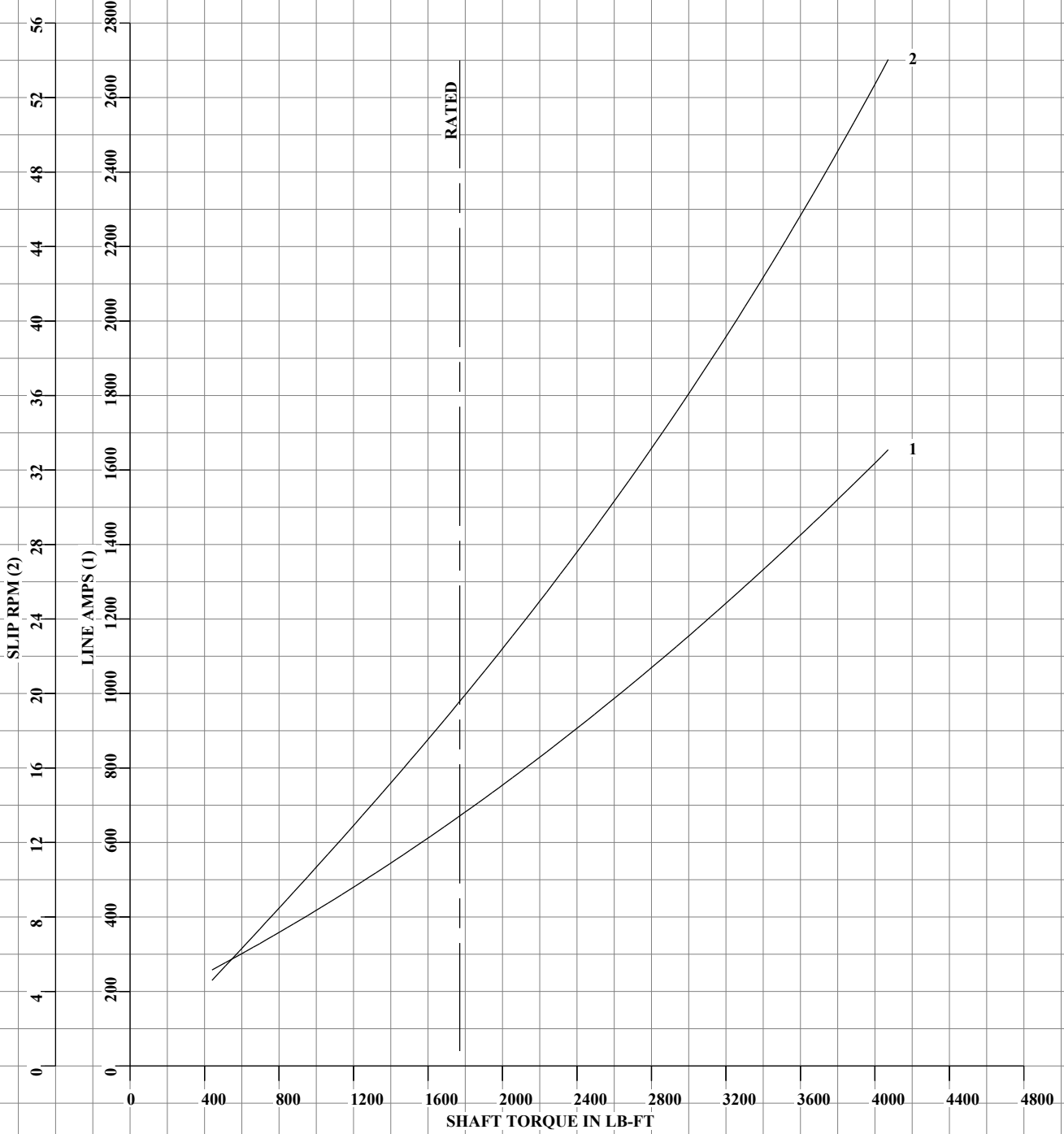
DRAWN BY: A. BROOKINS  
 CHECKED BY: R. GARCIA  
 APPROVED BY: J. MARTIN  
 DATE: 3-15-23

**AC MOTOR  
PERFORMANCE  
DATA**

**L9461A**  
 ISSUE DATE: 3-15-23

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PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	85			XM 1.34

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



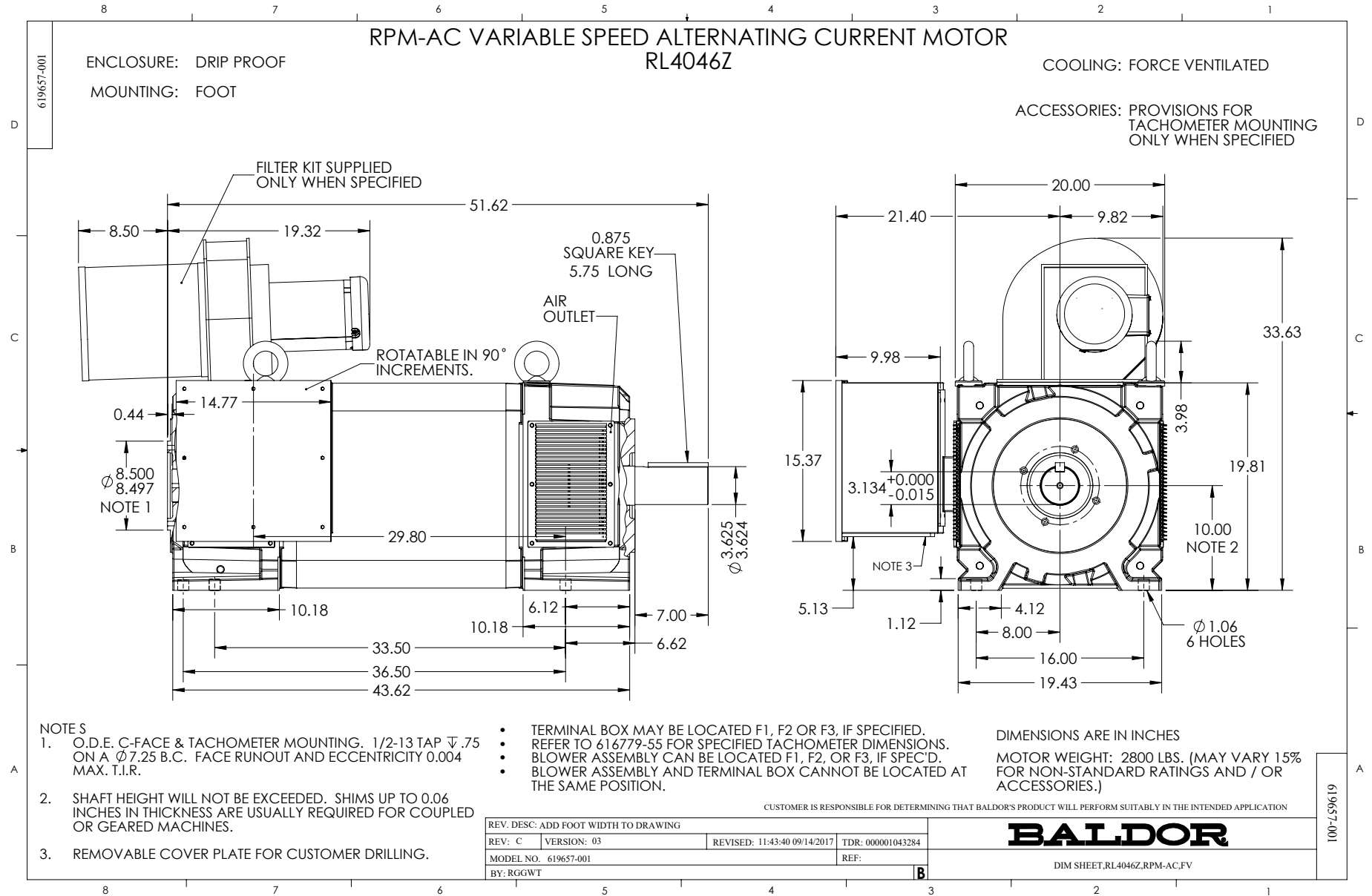
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



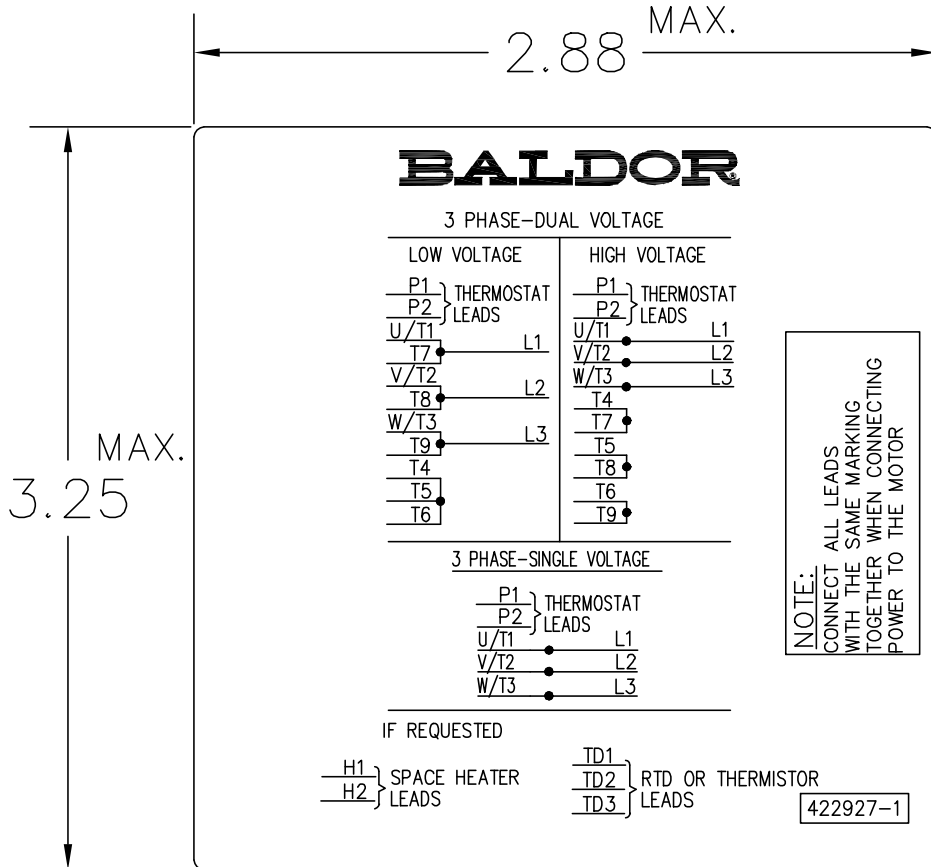
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 CHECKED BY: R. GARCIA  
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**AC MOTOR  
PERFORMANCE  
DATA**

**L9461A**  
 ISSUE DATE: 3-15-23



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.

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