

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM406004R1

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

Specifications

Enclosure	DPFV
Frame	RL4046
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	600.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	673.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	673.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	48.62 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	3.624 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1780 rpm
Starting Method	Full Voltage
Thermal Device - Bearing	None

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L9461A
Layout	619657-001
Eff. date	12-16-2025
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	02-03-2023

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	600	1780		674	460		60	
	CONT	600	2670		661	460		90	
CAT.NO.	IDDRPM406004R1		SPEC. NO.		R40-A000-0300				
SER.NO			FR	RL 4046	INSUL	H			
PH.	3	MAX SAFE SPEED		3750	AMB.	40	MIN. AMB.	-25	
DESIGN NO.	L9461A		TYPE		ENCL.		DP		
S.F.	1.00		D.E. BRG.		95BC02J30X				
ENCL MOD	FORCE VENT		O.D.E. BRG.		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 ² (Lb-Ft ²)	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

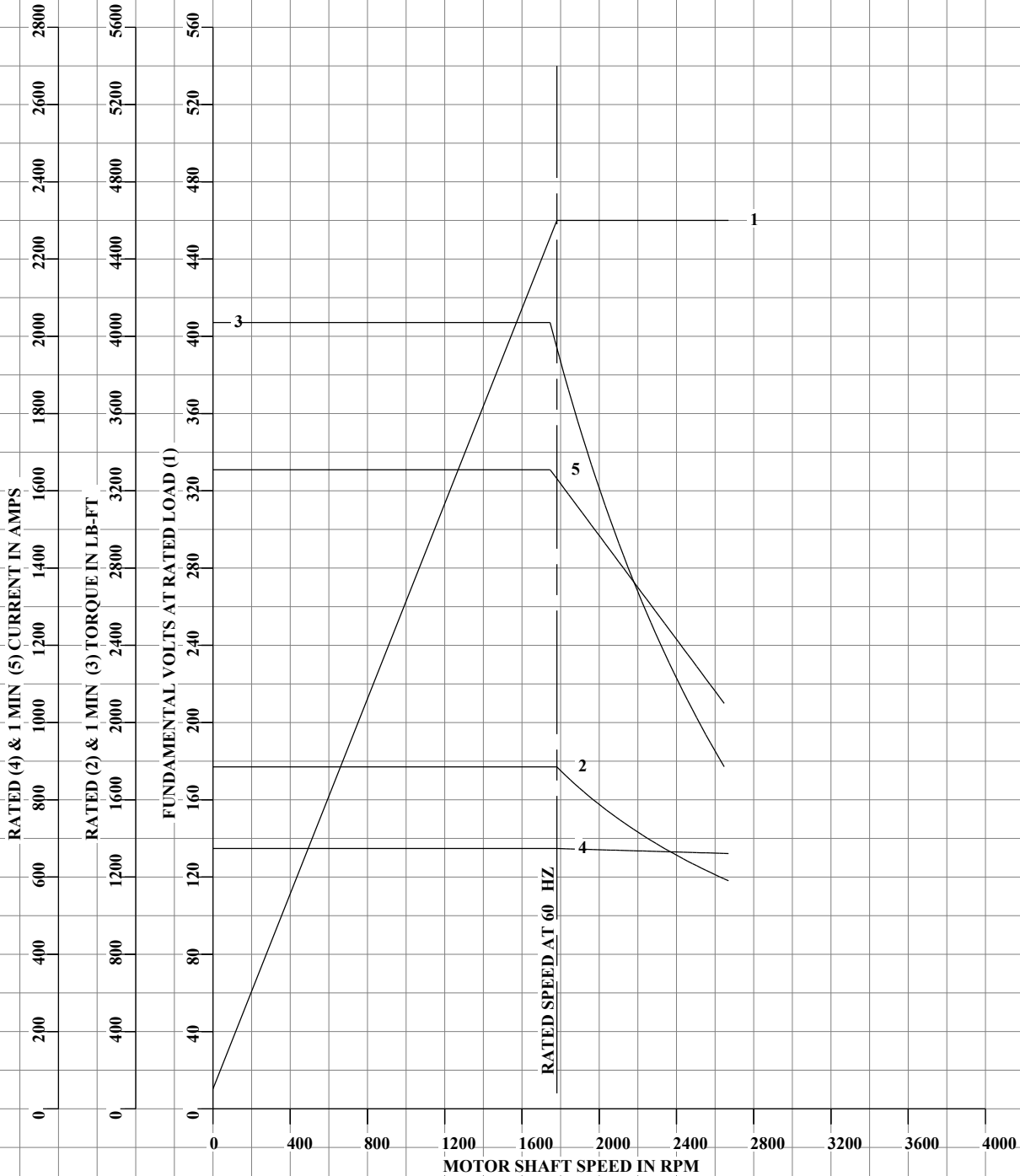
**AC MOTOR
PERFORMANCE
DATA**

L9461A

ISSUE DATE 3-15-23

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

**CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES**



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



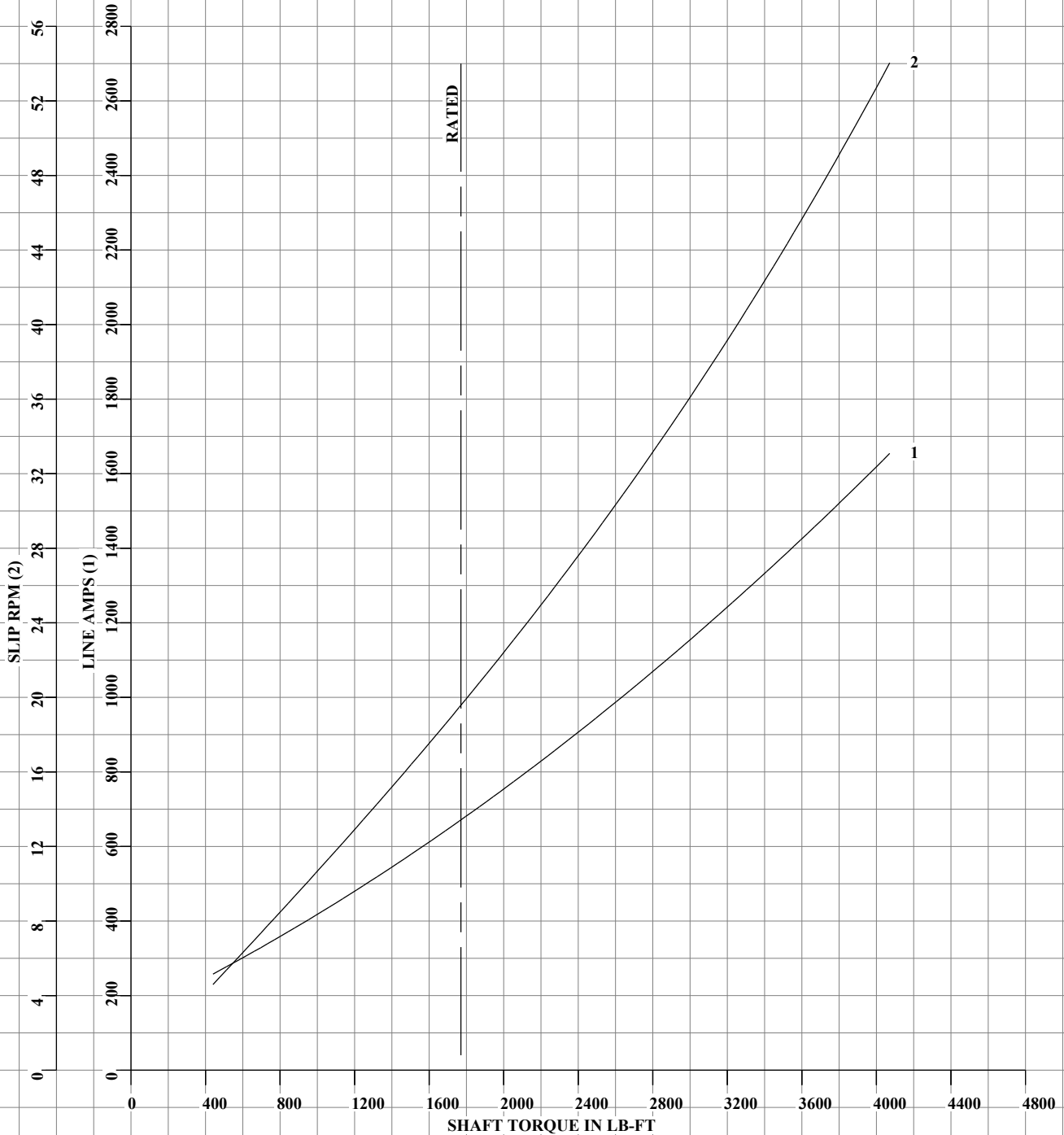
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 CHECKED BY: R. GARCIA
 APPROVED BY: J. MARTIN
 DATE: 3-15-23

**AC MOTOR
PERFORMANCE
DATA**

L9461A
 ISSUE DATE: 3-15-23

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

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



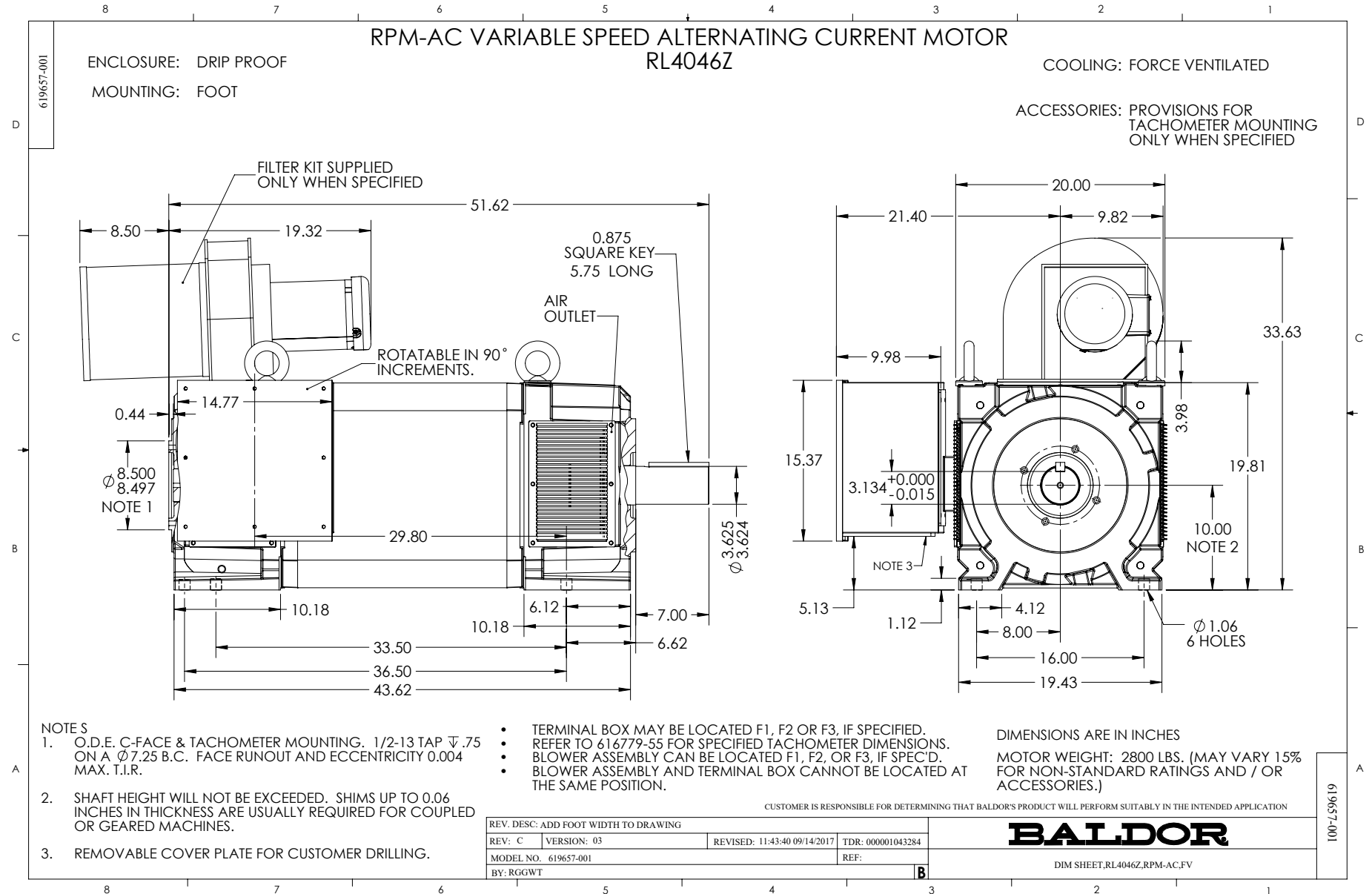
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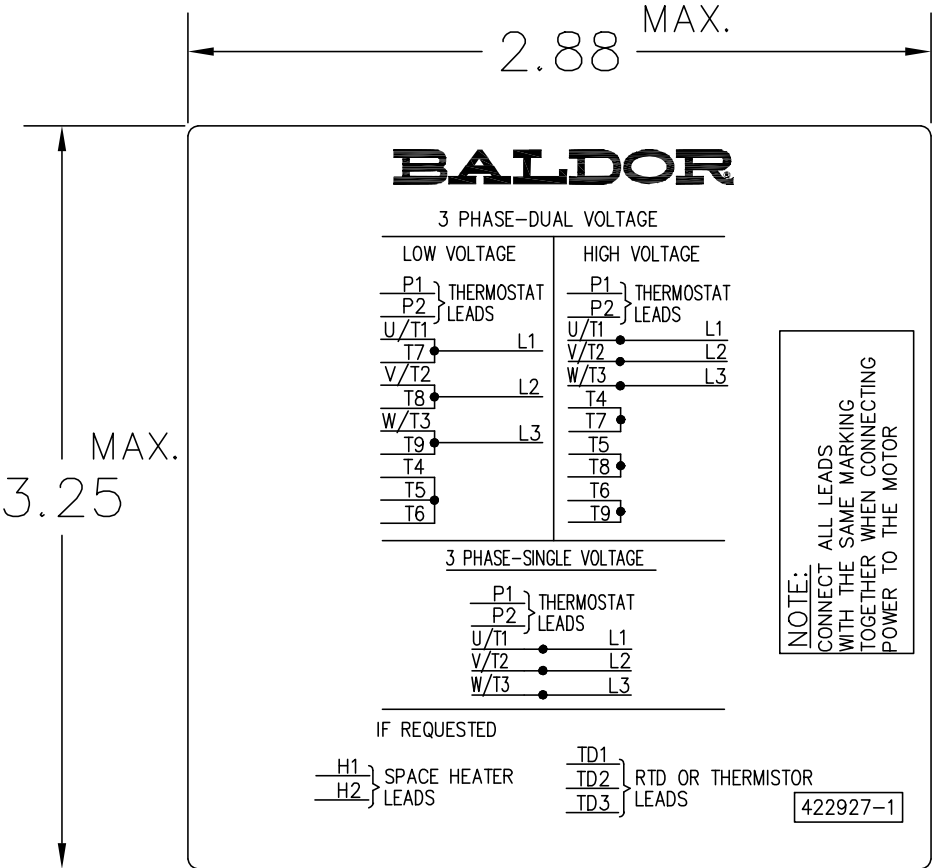
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**AC MOTOR
PERFORMANCE
DATA**

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: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR
EXTERNAL CONNECTION LABEL
SH 1 of 1