

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM406004R1ED

600HP, 1750, 460V, RL4046, DPFV, F1

Specifications

Enclosure	DPFV
Frame	RL4046Z
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
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	60.12 IN
Product Family	Extruder
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	3.624 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1780 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L9461A
Layout	619657-001
Eff. date	03-23-2023
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	03-01-2023

Thermal Device - Bearing	None
Thermal Device - Winding	Thermostat And RTD

Nameplate

000613006ABS							
	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	600	1780		674	460	60
	CONT	600	2670		661	460	90
CAT.NO.	IDDRPM406004R1ED			SPEC. NO.	R40-A000-0308		
SER.NO				FR	RL4046Z	INSUL	H
PH.	3	MAX SAFE SPEED			3750	AMB.	40
DESIGN NO.	L9461A	TYPE				ENCL.	DPG-FV
S.F.	1.00			D.E. BRG.	95BC02J30X		
ENCL MOD				O.D.E. BRG.	6316/C3VL0241		
	IDDRPM406004R1ED					IP23	

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



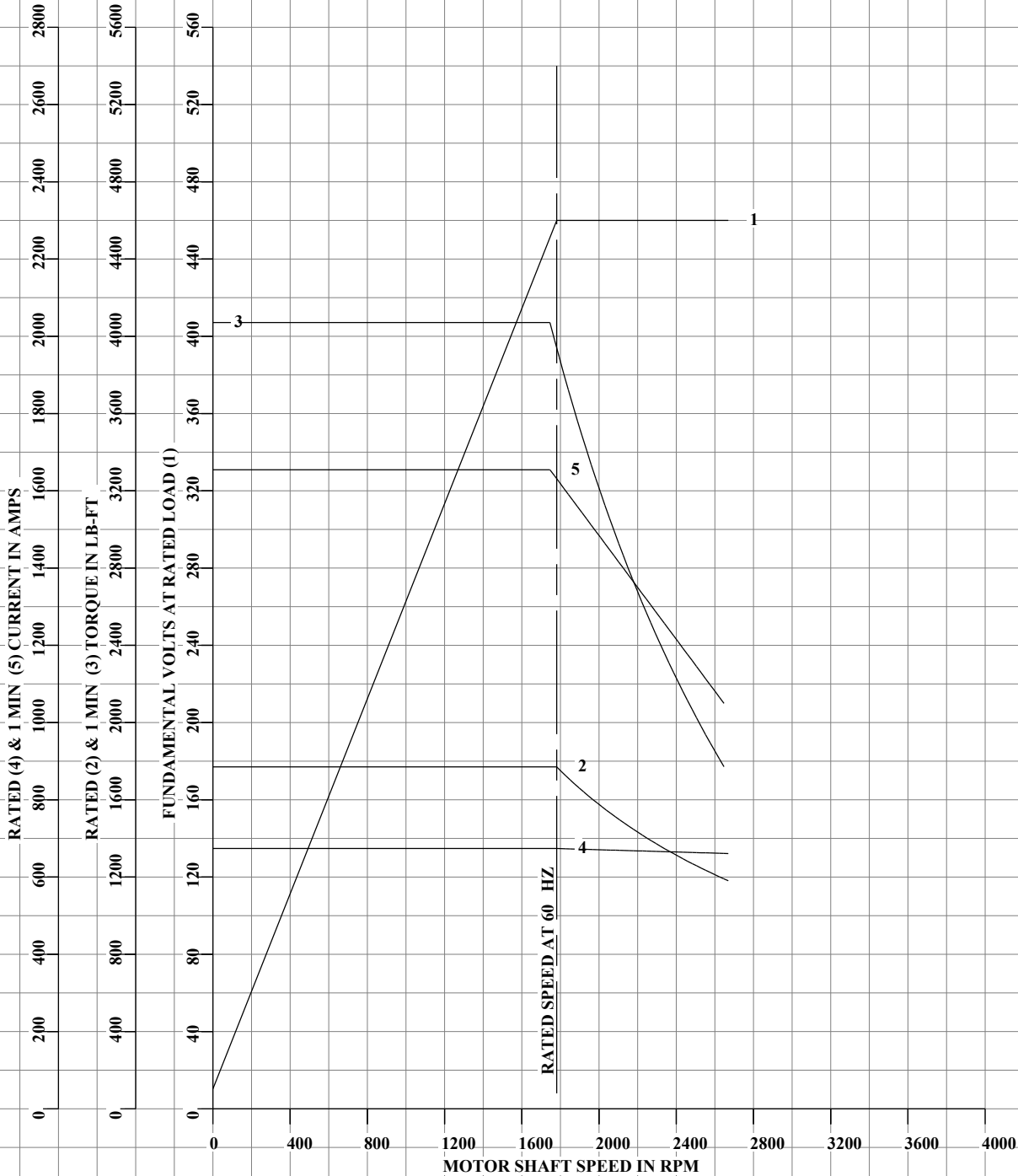
DRAWN BY: A. BROOKINS
CHECKED BY: R. GARCIA
APPROVED BY: J. MARTIN
DATE: 3-15-23

**AC MOTOR
PERFORMANCE
DATA**

L9461A
ISSUE DATE 3-15-23

FRAME	RL4046	VOLTS	460	ENCLOSURE	DPFV	WYE 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
VARIABLE SPEED AC MOTOR CURVES**



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



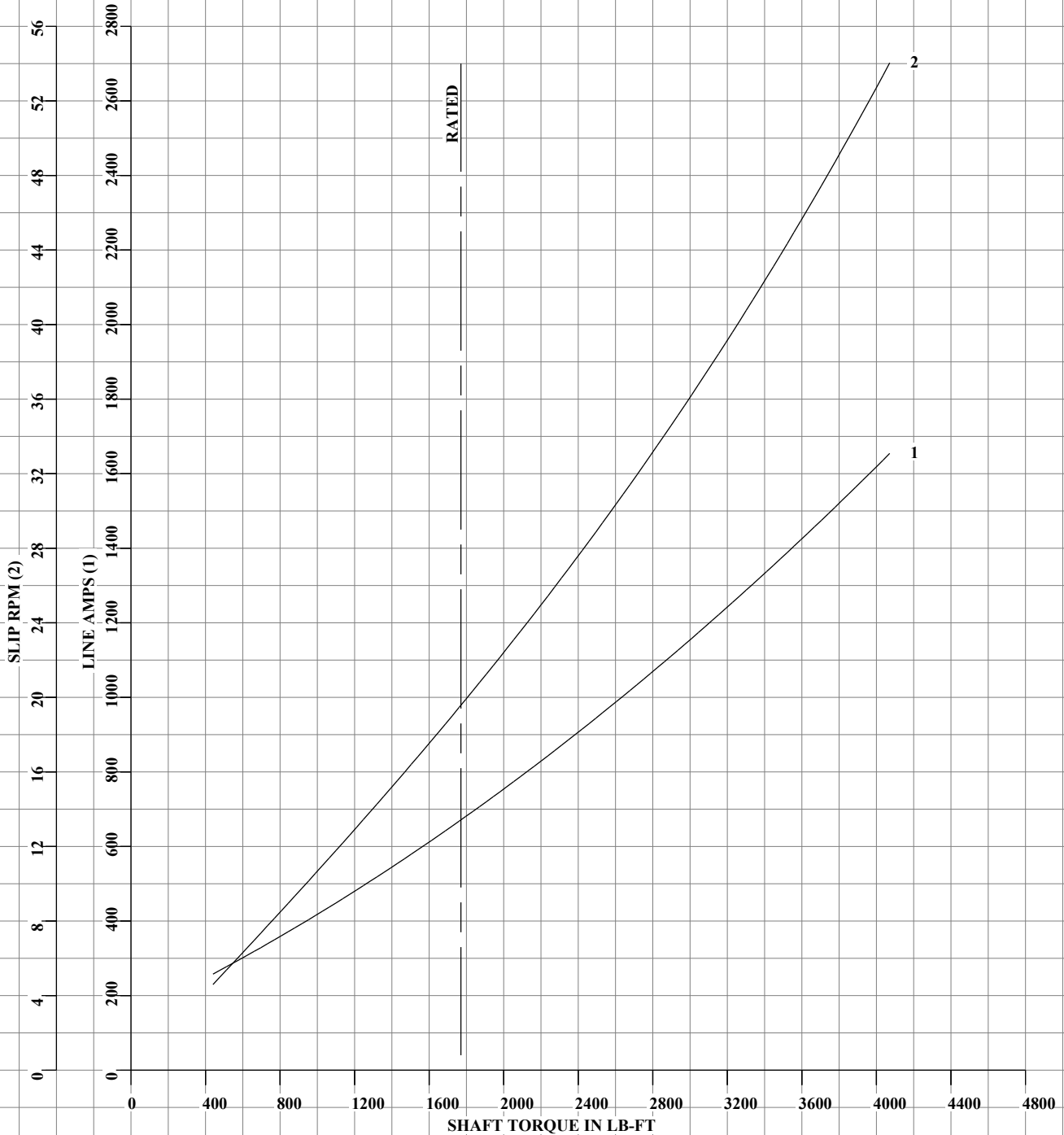
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**AC MOTOR
PERFORMANCE
DATA**

L9461A
 ISSUE DATE: 3-15-23

FRAME	RL4046	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT 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)**



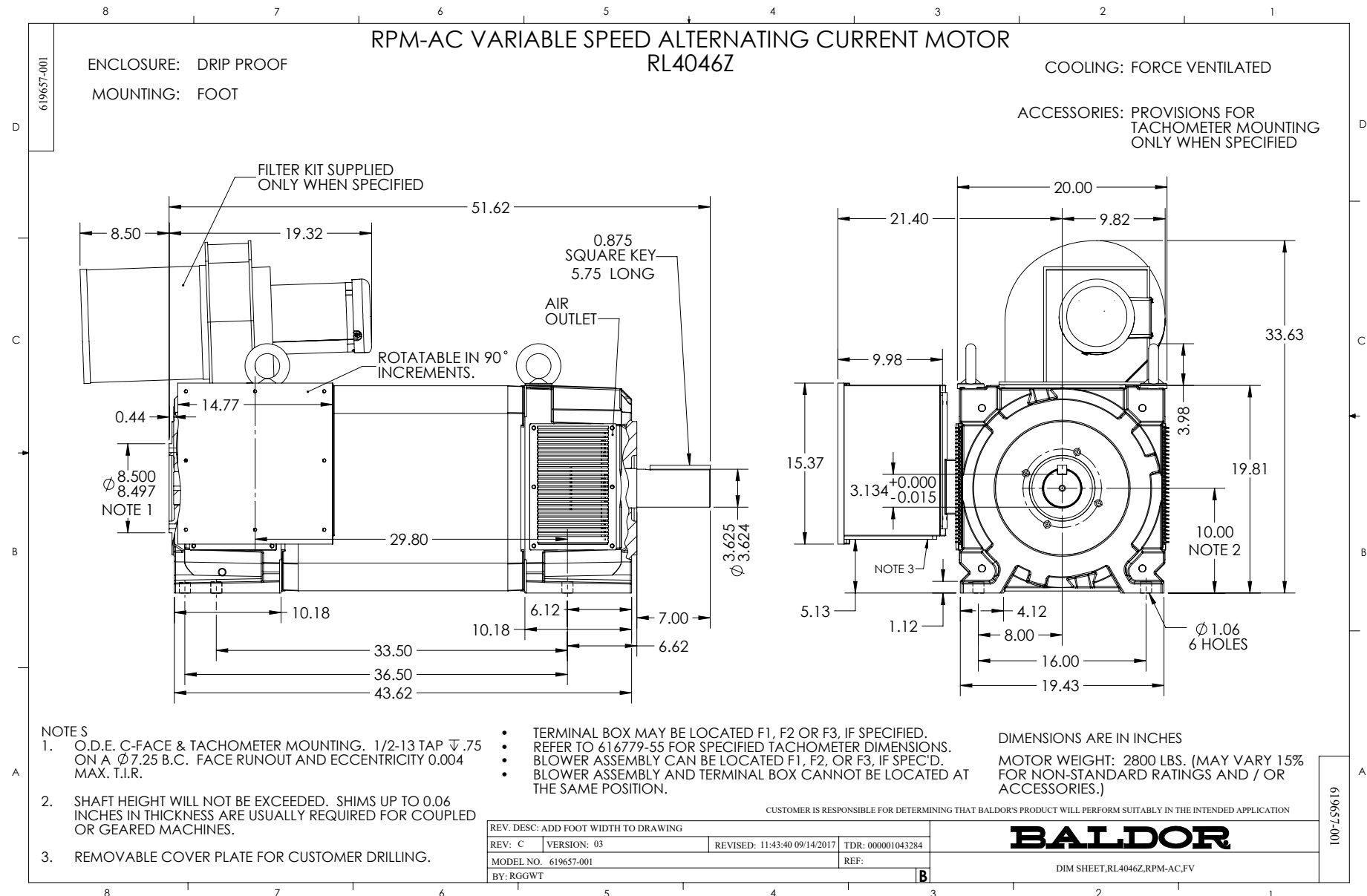
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



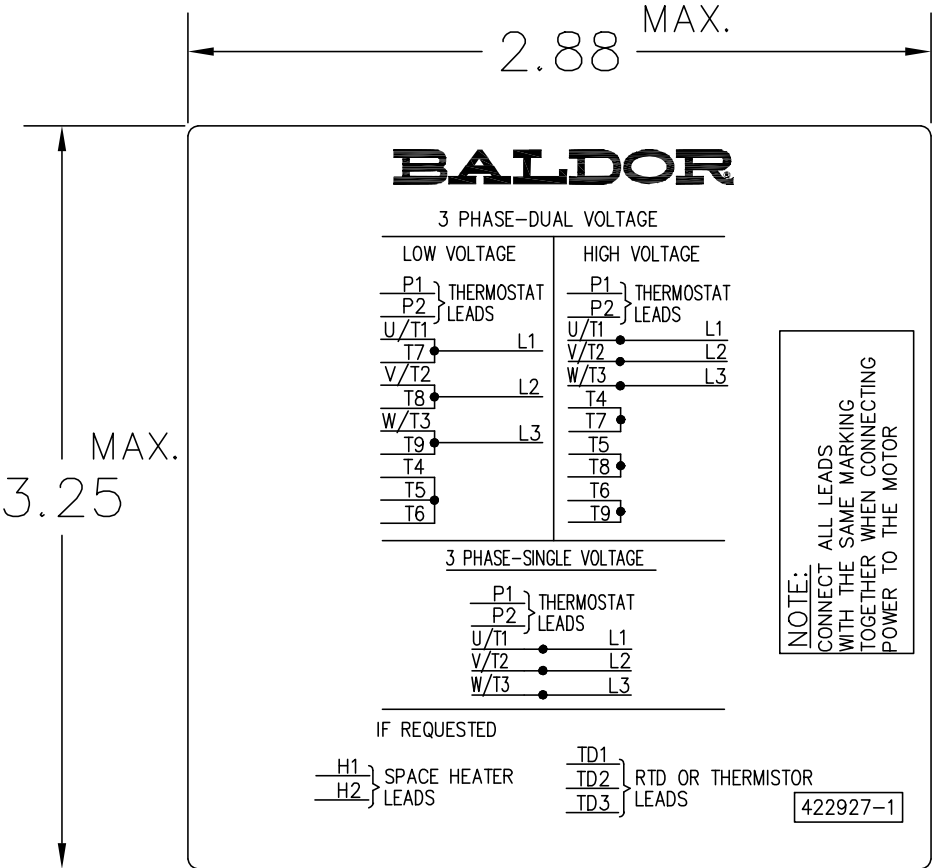
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**AC MOTOR
PERFORMANCE
DATA**

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