

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM405004R2ED

500HP, 1750, 460V, RL4034, DPFV, F1

Specifications

Enclosure	DPFV
Frame	RL4034Z
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	500.000 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	559.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	559.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	57.12 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	1778 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L9460A
Layout	619654-001
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	500	1778		559	460	60
	CONT	500	2400		553	460	81
CAT.NO.	IDDRPM405004R2ED			SPEC. NO.	R40-A000-0309		
SER.NO				FR	RL4034Z	INSUL	H
PH.	3	MAX SAFE SPEED			3750	AMB.	40
DESIGN NO.	L9460A	TYPE				ENCL.	DPG-FV
S.F.	1.00		D.E. BRG.		95BC02J30X		
ENCL MOD			O.D.E. BRG.		6316/C3VL0241		
	IP23						

FRAME	RL4034	AMPS	559	MAX SAFE SPEED	3750				
HP	500	DUTY	CONT	IM (AMPS)	149	R1	.00695	X1	.0530
BASE SPEED	1778	S.F.	1.0	P.F. @NL / FL	.039/.898	R2	.00395	X2	.0541
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	77.0			XM	1.82

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1779	500	1476	460	60	559
MAX SPEED	2401	500	1094	460	81	553
MIN SPEED	0	0	1476	11.7	.684	559

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	146
1/4	1795	125	367	460	60	201
1/2	1790	250	734	460	60	305
3/4	1785	375	1103	460	60	426
FULL LOAD	1779	500	1476	460	60	559
0/L	1752	985	2952	460	60	1180

REMARKS:
TYPICAL DATA
CORRELATED DATA



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

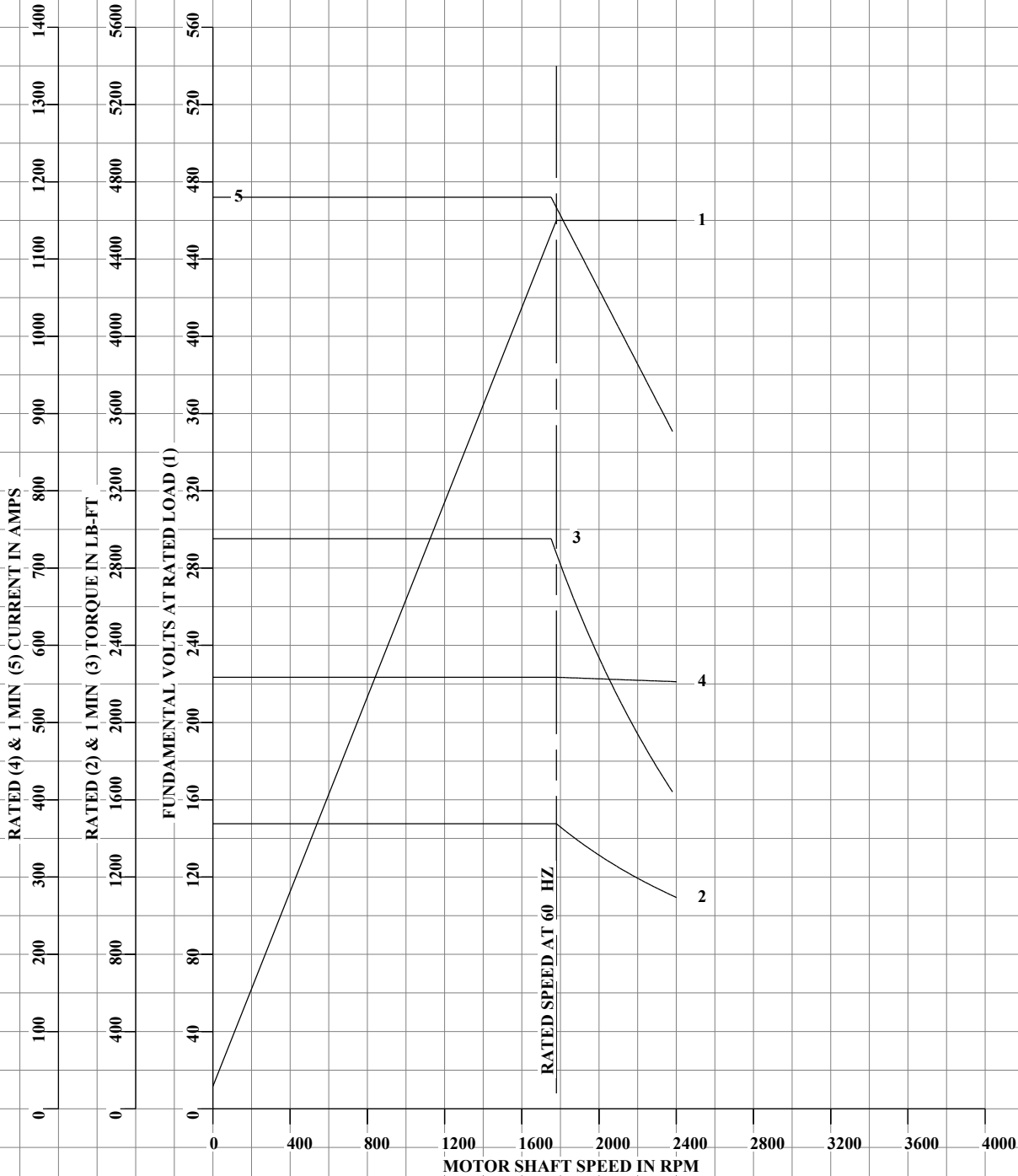
AC MOTOR
PERFORMANCE
DATA

L9460A

ISSUE DATE 3-14-23

FRAME	RL4034	VOLTS	460	ENCLOSURE	DPFV	WYE CONNECT OHMS PER PHASE (AT BASE RATING, 25°C)		
HP	500	AMPS	559	MAX SAFE SPEED	3750	R1	.00695	X1 .0530
BASE SPEED	1778	DUTY	CONT	IM (AMPS)	149	R2	.00395	X2 .0541
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.039/.898			XM 1.82
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	77.0			

**CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES**



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



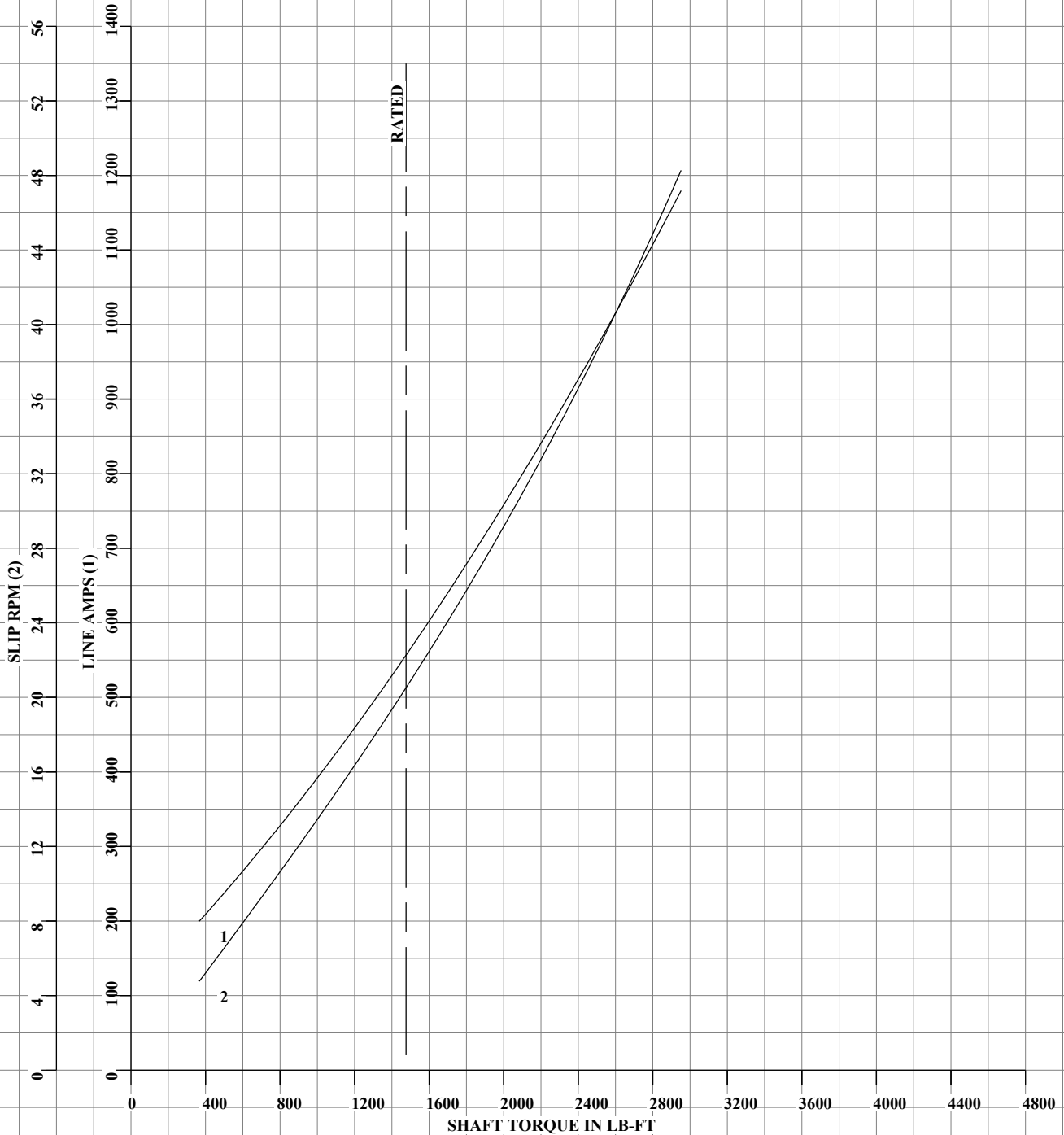
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**AC MOTOR
PERFORMANCE
DATA**

L9460A
 ISSUE DATE: 3-14-23

FRAME	RL4034	VOLTS	460	ENCLOSURE	DPFV	WYE CONNECTION OHMS PER PHASE (AT BASE RATING, 25°C)		
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		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	77.0			

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



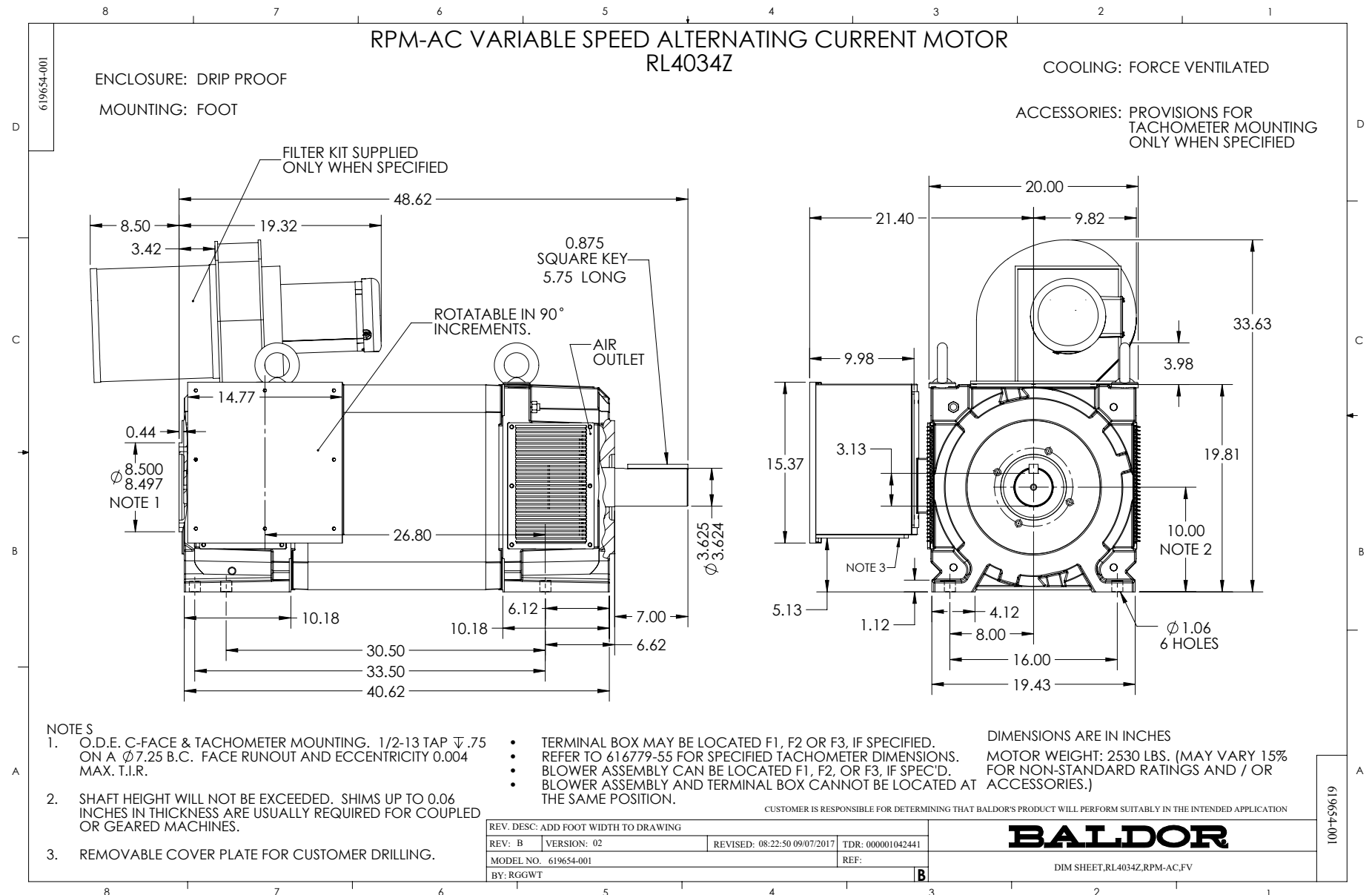
TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



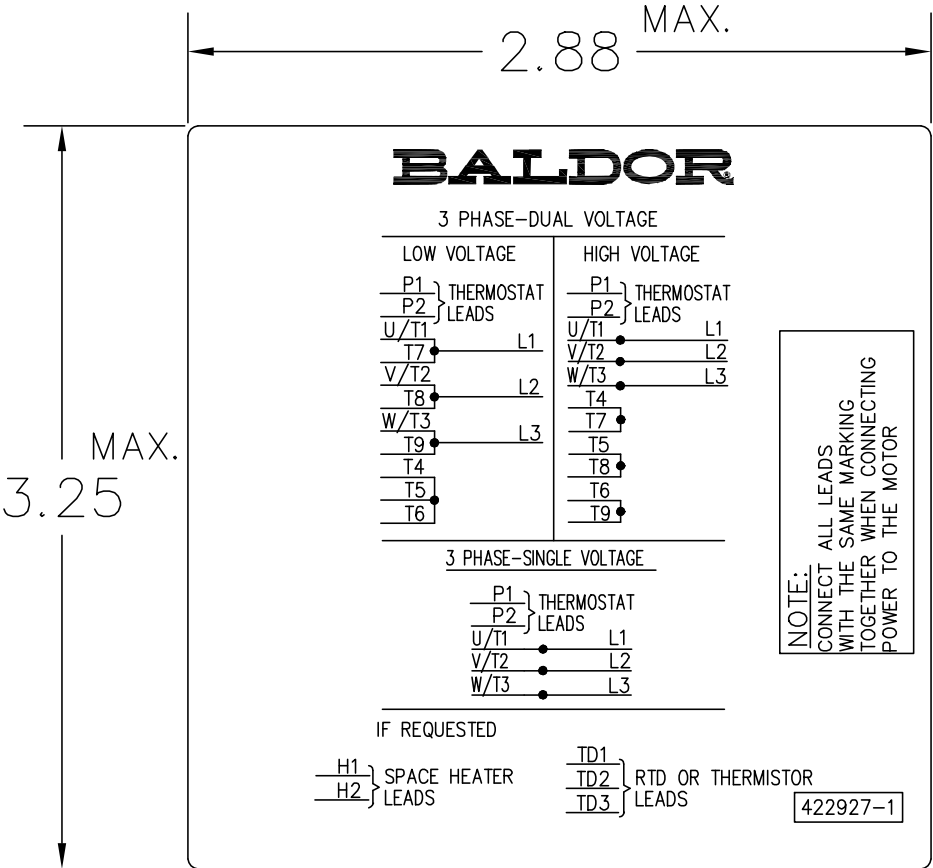
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**AC MOTOR
PERFORMANCE
DATA**

L9460A
 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.

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