

ABB BALDOR RELIANCE III

Customer information packet

IDBRPM445004

500HP, 1750, 460V, FL4461, TEBC, F3

Specifications

Enclosure	TEBC
Frame	FL4461Z
Frame Material	Exposed Laminations
Frequency	90.00 Hz
Output @ Frequency	500.000 HP @ 90 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 90 HZ
Voltage @ Frequency	460.0 V @ 90 HZ
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	597.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	597.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	83.82 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	4.250 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1790 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L7847A
Layout	617547-001
Eff. date	01-19-2022
CD Diagram	422927-001
Poles	06
Leads	
Proprietary	False
Created date	10-04-2021

Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	500	1790		597	460		90	
	CONT	500	2900		601	460		146	
CAT.NO.	IDBRPM445004		SPEC. NO.		F44-A000-0153				
SER.NO			FR	FL4461Z	INSUL	H			
PH.	3	MAX SAFE SPEED		3150	AMB.	40	MIN. AMB.		-25
DESIGN NO.	L7847A		TYPE		ENCL.		TEAO-BC		
S.F.	1.00		D.E. BRG.		110BC02J30X				
ENCL MOD			O.D.E. BRG.		6222/C3VL0241				
	IP44								

FRAME	FL4461	AMPS	597	MAX SAFE SPEED	2700		
HP	500	DUTY	CONT	IM (AMPS)	199	R1 .00259	X1 .0407
BASE SPEED	1790	S.F.	1.0	P.F. @NL / FL	.034/.828	R2 .00198	X2 .0809
PHASE/HZ	3/90	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	212	XM 1.20	

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1789	500	1468	460	90	597
MAX SPEED	2900	501	906	460	146	602
MIN SPEED	0	0	1468	4.54	.541	597

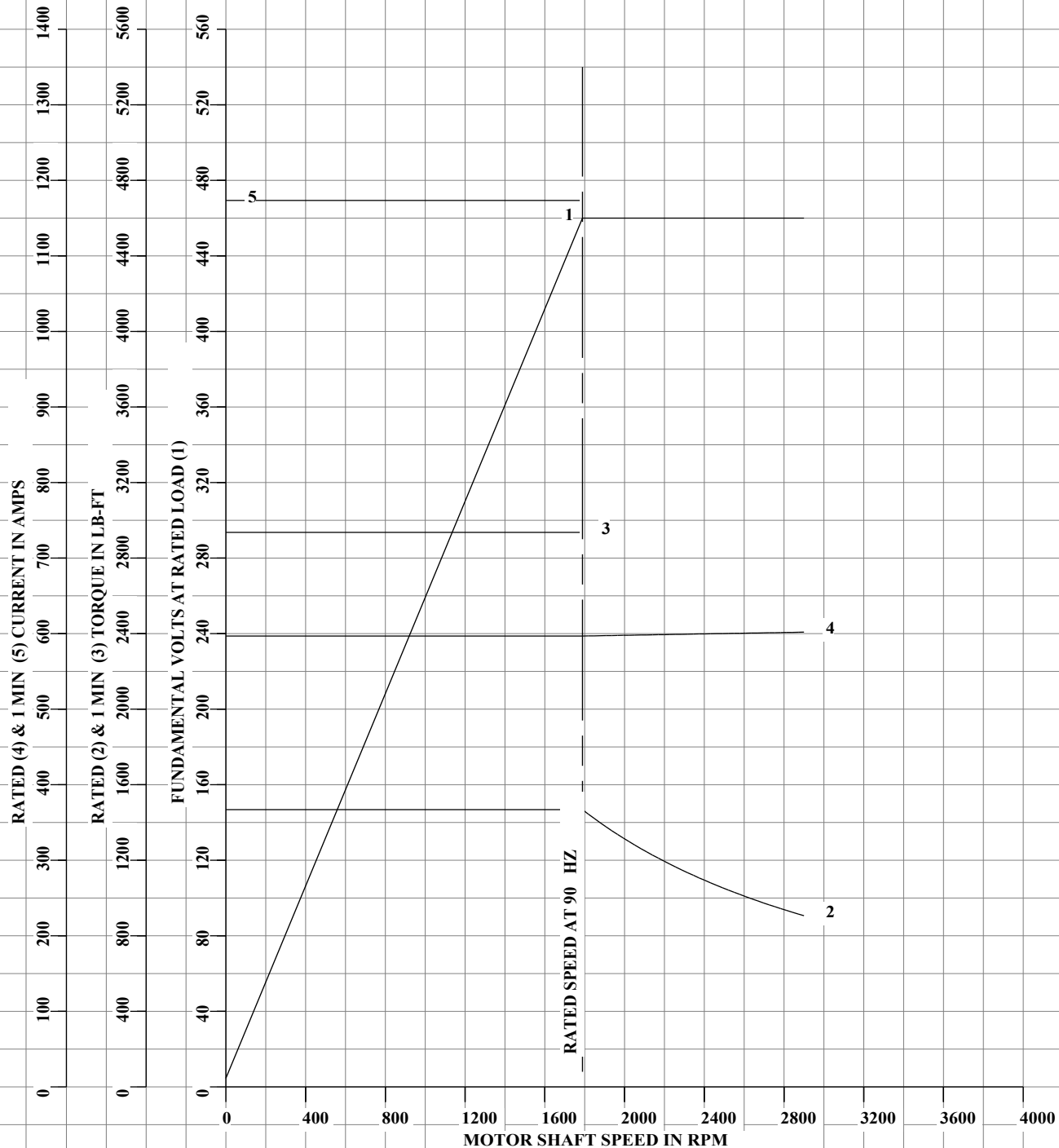
LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	90	199
1/4	1797	125	366	460	90	259
1/2	1795	250	732	460	90	350
3/4	1792	375	1099	460	90	466
FULL LOAD	1789	500	1468	460	90	597
0/L	1776	993	2936	460	90	1173

REMARKS:
CORRELATED DATA

FRAME	FL4461	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)		
HP	500	AMPS	597	MAX SAFE SPEED	2700	R1	.00259	X1 .0407
BASE SPEED	1790	DUTY	CONT	IM (AMPS)	199	R2	.00198	X2 .0809
PHASE/HZ	3/90	S.F.	1.0	P.F. @NL / FL	.034/.828			XM 1.20
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	212			

**CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES**



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DRAWN BY: B. GRANT
 CHECKED BY: B. GRANT
 APPROVED BY: J. MARTIN
 DATE: 12-5-17

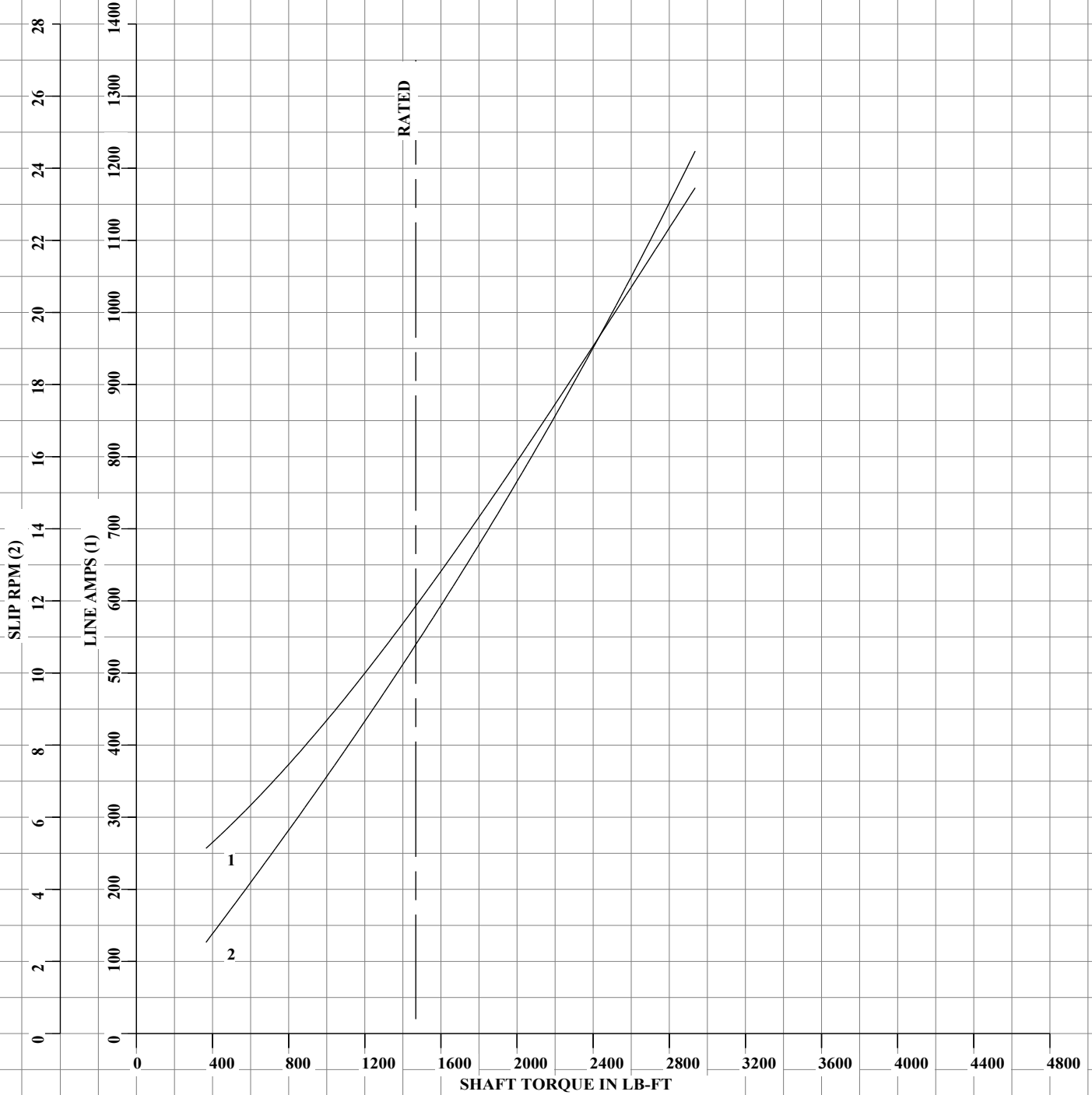
**AC MOTOR
PERFORMANCE
DATA**

L7847A

ISSUE DATE: 12-5-17

FRAME	FL4461	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)		
HP	500	AMPS	597	MAX SAFE SPEED	2700	R1	.00259	X1 .0407
BASE SPEED	1790	DUTY	CONT	IM (AMPS)	199	R2	.00198	X2 .0809
PHASE/HZ	3/90	S.F.	1.0	P.F. @NL / FL	.034/.828			XM 1.20
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	212			

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



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

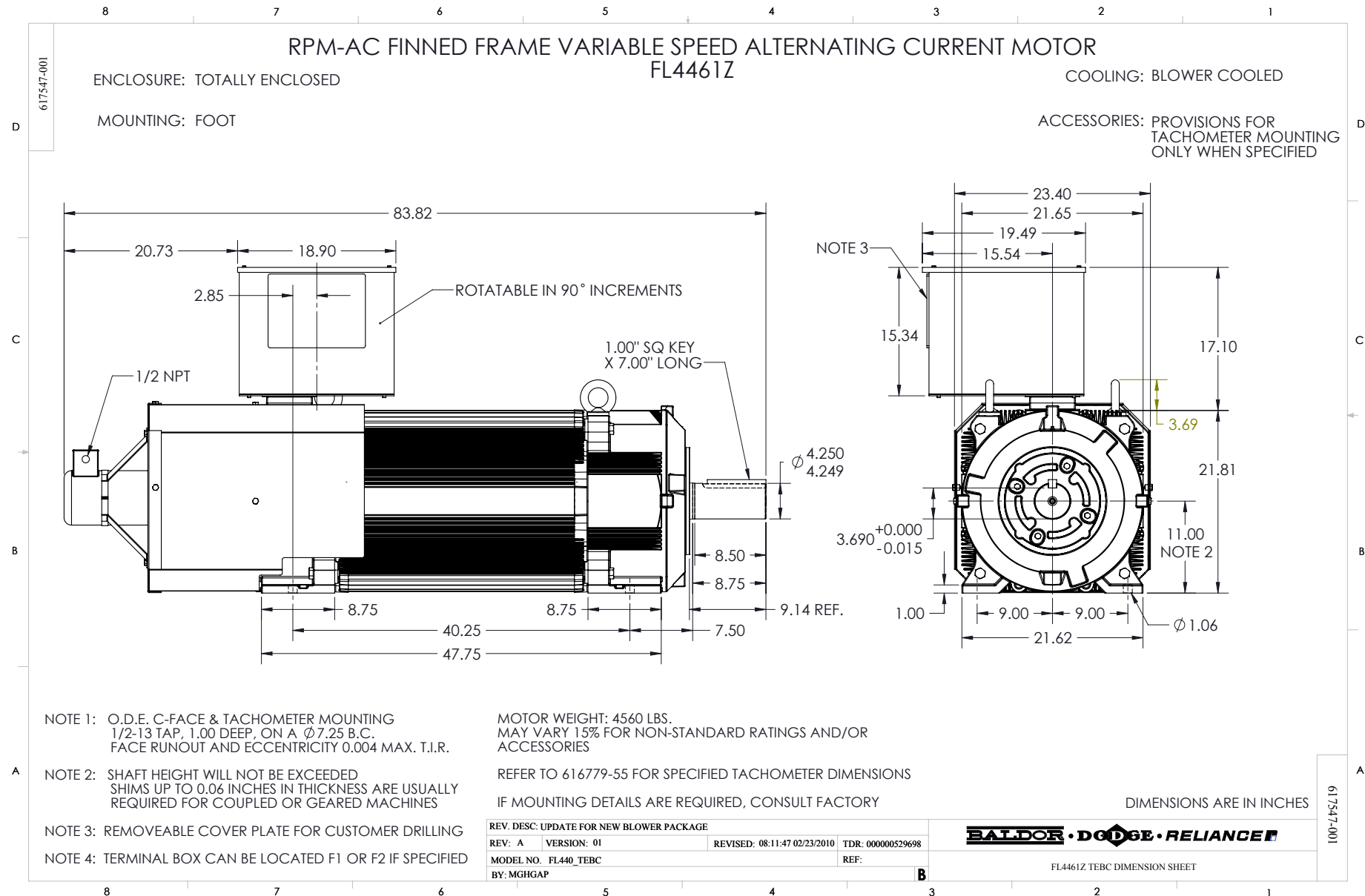


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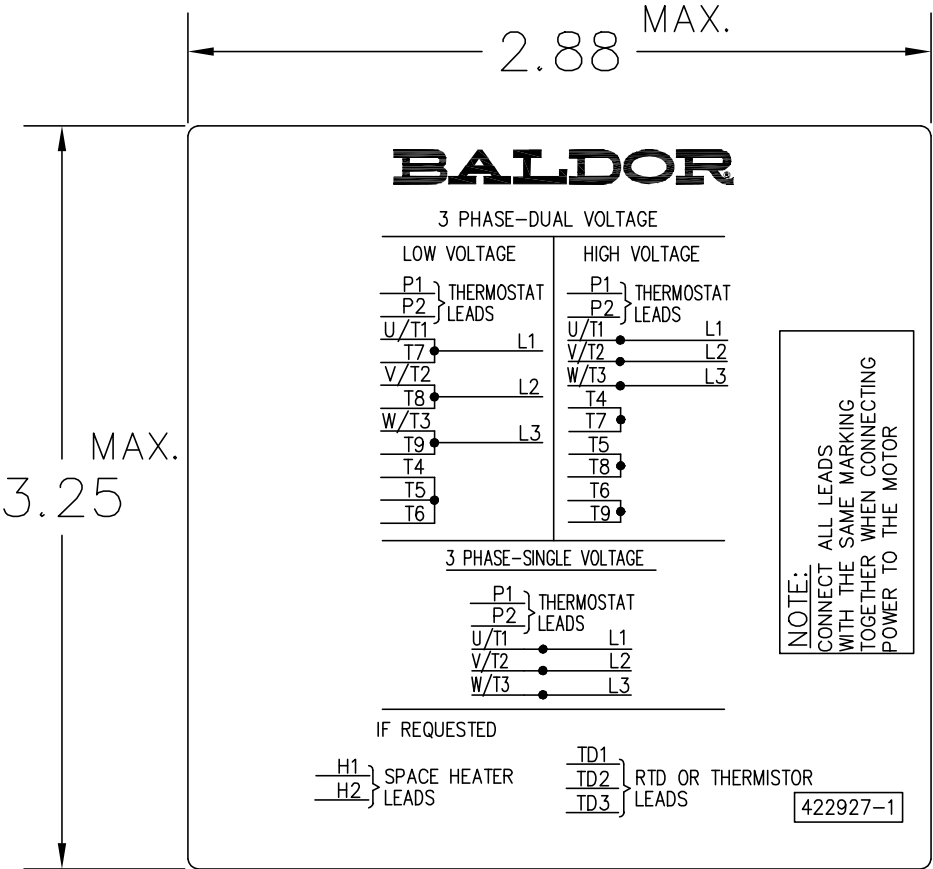
**AC MOTOR
PERFORMANCE
DATA**

L7847A

ISSUE DATE: 12-5-17



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