

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								

Parts List

Part number	Description	Quantity
WS392243	WS F44-A000-0153	1.000 ea
RA388780	RA F44-A000-0153	1.000 ea
418057249A	LABEL (WARNING)	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	1.000 ea
000692000NH	LABEL DIRECTION AIR FL	1.000 ea
000692000XM	LABEL QR CODE	1.000 ea
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 ea
422927001	C/D LABEL	1.000 ea
004824007AB	PAINT,XT	0.100 ea
807587004AAB	BRKT,ODE,FL440	1.000 ea
807587003AAA	BRKT,DE,FL440	1.000 ea
423317001B	GRD BRUSH	1.000 ea
036310010FB	RHMS TERM/BLK MTG	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
004824015A	GREASE POLYREX EM	1.100 lb
424433001A	WAVY SPRING WSHER	1.000 ea
036000020GB	HHCS SH B/HLDR MT	2.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001BB	GREASE FTG,GRS.IN	1.000 ea
036000080KB	HHCSM10-1.5X80MMPLTD-360	4.000 ea
036000080KB	HHCSM10-1.5X80MMPLTD-360	4.000 ea
036140001F	M30-3.5 X 45MM EYEBOLT	2.000 ea
034693003AB	PPLG 3/8" SLOT PIPE PLUG	1.000 ea
034693003AB	PPLG 3/8" SLOT PIPE PLUG	1.000 ea
036500014AB	M-20 METRIC HEX NUT	4.000 ea
036500014AB	M-20 METRIC HEX NUT	4.000 ea
609830005ADK	TBOLT METRIC M20-2.5 X 38.38	4.000 ea
423317001A	GRD BRUSH HOLDER	1.000 ea

610490007A	2/1.5KWHP,1760 1/MINRPM,3PH,60HZ,56CZ,35	1.000 ea
415000103F	TLUG	2.000 ea
417733004M	GASKT	2.000 ea
613450026A	FAN	1.000 ea
807500076A	FL440,FAN CVR GRILL	1.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
807500074A	FL440,FAN CVR,TOP MTG	1.000 ea
036000025KB	HHCS,BRACE C/BOX M10X25 HXHDCS 304528	4.000 ea
417733036B	GASKT,C/BOX BACKPLATE,REF 706310063E	1.000 ea
418057256C	HHCS M10 25MM 440 IEC	1.000 ea
036000016KB	HHCSM10-1.5X16MM PLTD-280	2.000 ea
036610010AB	MHSLW M10 PLATED	4.000 ea
036600008AD	FLTWSHR,T BLK SPT	8.000 ea
036000025KB	HHCS,BRACE C/BOX M10X25 HXHDCS 304528	8.000 ea
706310389A	706310389AA ENTRY PLATE	1.000 ea
417733014F	GASKT L440	1.000 ea
036000020JD	HHCS M8X20MM LONG 304S.S	5.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	4.000 ea
034530024AB	PNIPL 1/8X3L PLATED	1.000 ea
049730000H	PLUG 1.25"	1.000 ea
049730000H	PLUG 1.25"	1.000 ea
036000070LB	MHHCS M12-1.75X70M -360	4.000 ea
036620010AB	M10 EXT. TOOTH LK WASHER	2.000 ea
036620010AB	M10 EXT. TOOTH LK WASHER	1.000 ea
034630001AJ	1/8" PIPE COUPLING	1.000 ea
706310082A	ADAPT (CBOX) L440	1.000 ea
418010012F	CONDUIT BOX SPACER	1.000 ea
034530016AB	P/NIP 1/8X2 PLATED - 320	1.000 ea
036000020HB	HHCS M6-1.0X20MM PLATED	2.000 ea
036000025KB	HHCS,BRACE C/BOX M10X25 HXHDCS 304528	2.000 ea
036500008AB	METRIC H.NUT M6-1.0 PLTD	2.000 ea
418019012A	SETSCREW METRIC	2.000 ea
807500075B	FL440,BLWR MOTOR BRACE	1.000 ea
807500075A	MTR BRACE, BLOWER, FL440, TEBC	1.000 ea

706310063E	CBOX L440 1260A MAX	1.000 ea
706310058E	KOBX CVR - 18.90 [480] X 19.49 [495]	1.000 ea
417733013E	GASKT L440	1.000 ea
036000020HD	HHCS M6X20MM LONG 304S.S	8.000 ea
036000012KB	M10 1.50 X 12MM HXHDCS	4.000 ea
036600008AB	MFWSH M6 PLATED	4.000 ea
034180056LA	KEY 1X1X7 L	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
036000025NF	SCREW, HEX M16 BRASS	2.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.300 ea
417744143G	PACKAGING (PHANTOM)	1.000 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea

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

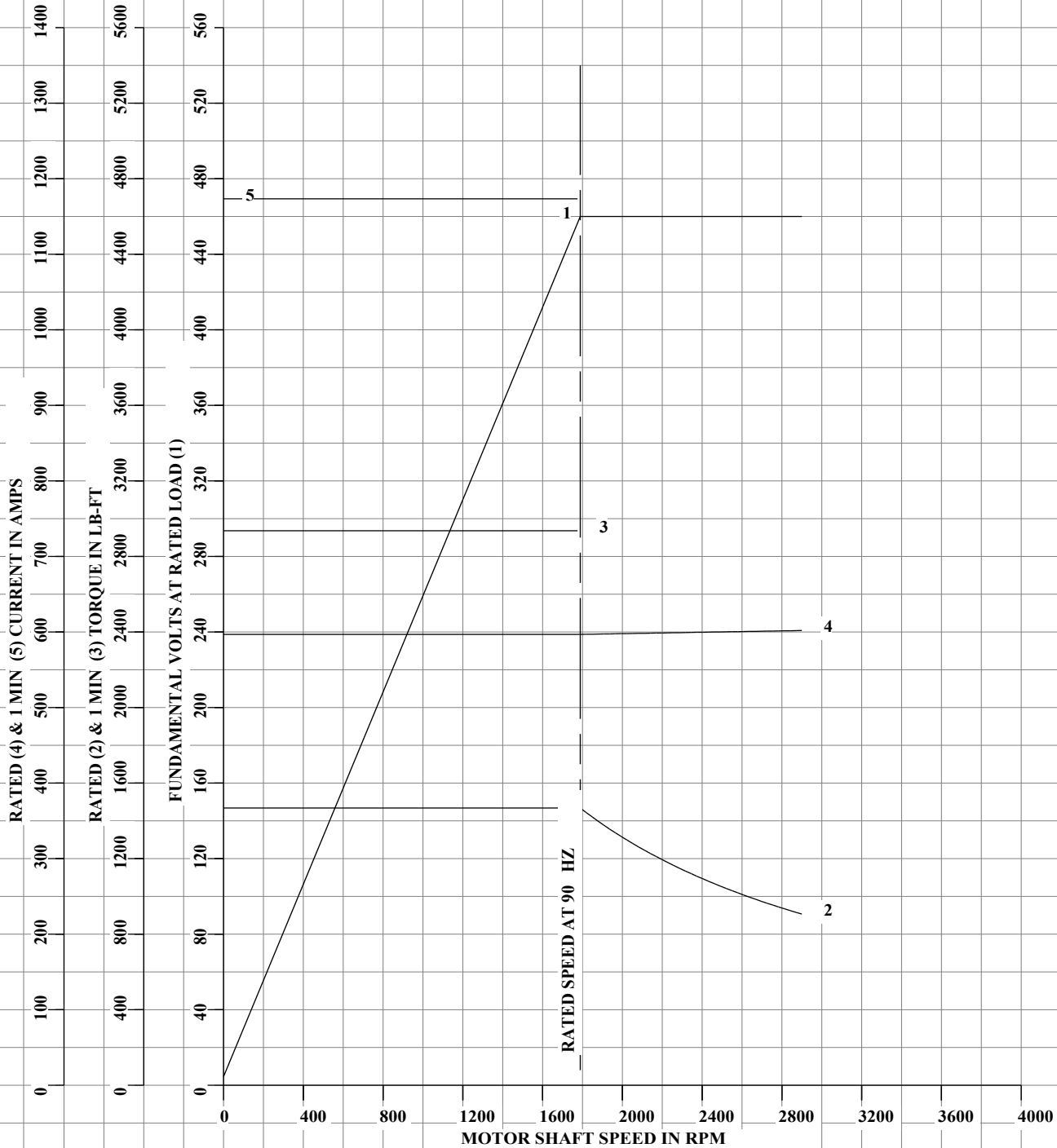
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	90	199
1/4	1797	125	366	460	90	259
1/2	1795	250	732	460	90	350
3/4	1792	375	1099	460	90	466
FULL LOAD	1789	500	1468	460	90	597
0/L	1776	993	2936	460	90	1173

REMARKS:
CORRELATED DATA

A MEMBER OF THE ABB GROUP
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
VARIABLE SPEED AC MOTOR CURVES**



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



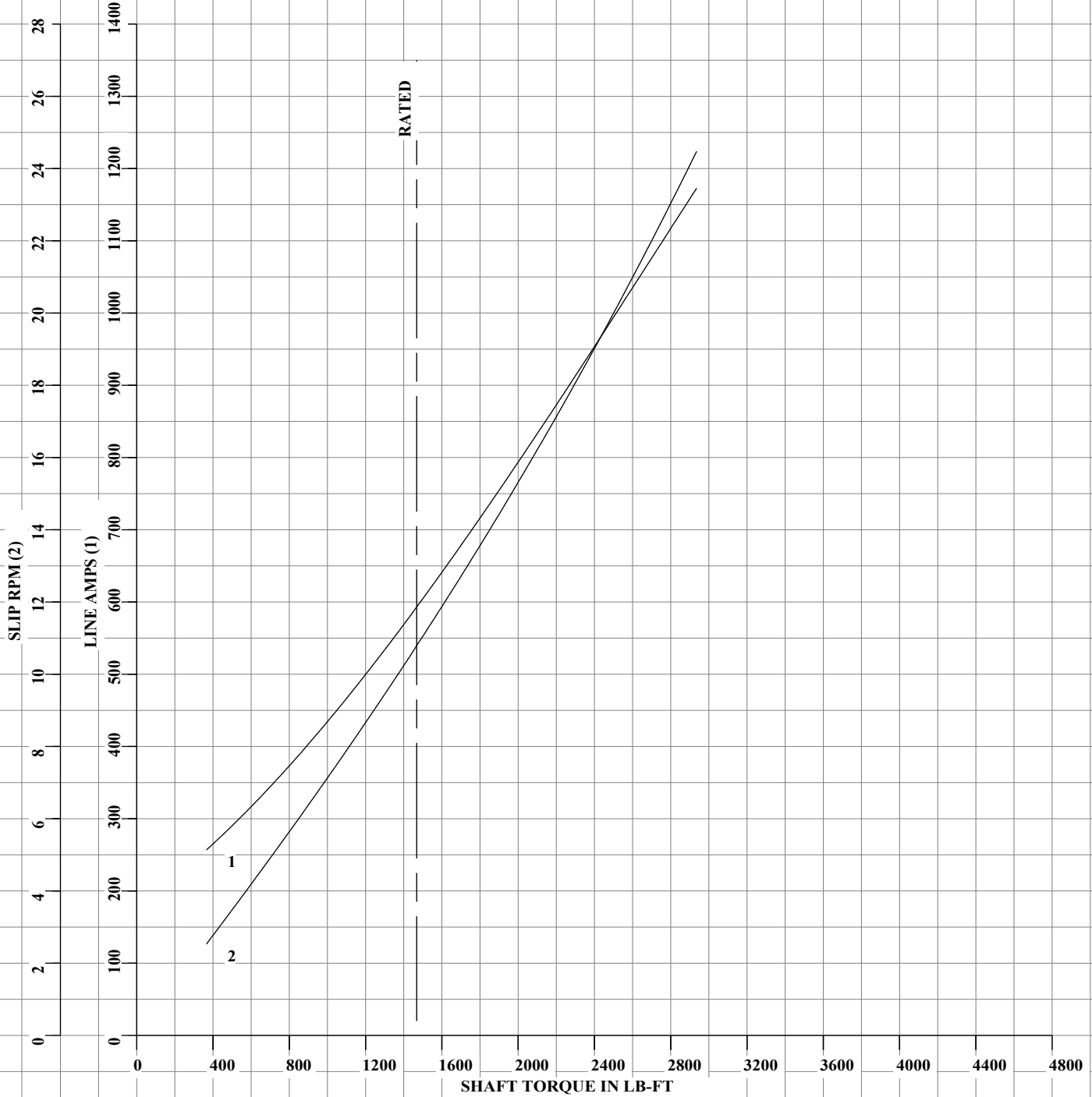
DRAWN BY: B. GRANT
 CHECKED BY: B. GRANT
 APPROVED BY: J. MARTIN
 DATE: 12-5-17

**AC MOTOR
PERFORMANCE
DATA**

L7847A
 ISSUE DATE: 12-5-17

FRAME	FL4461	AMPS	597	MAX SAFE SPEED	2700	(AT BASE RATING, 25°C)			
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

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



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

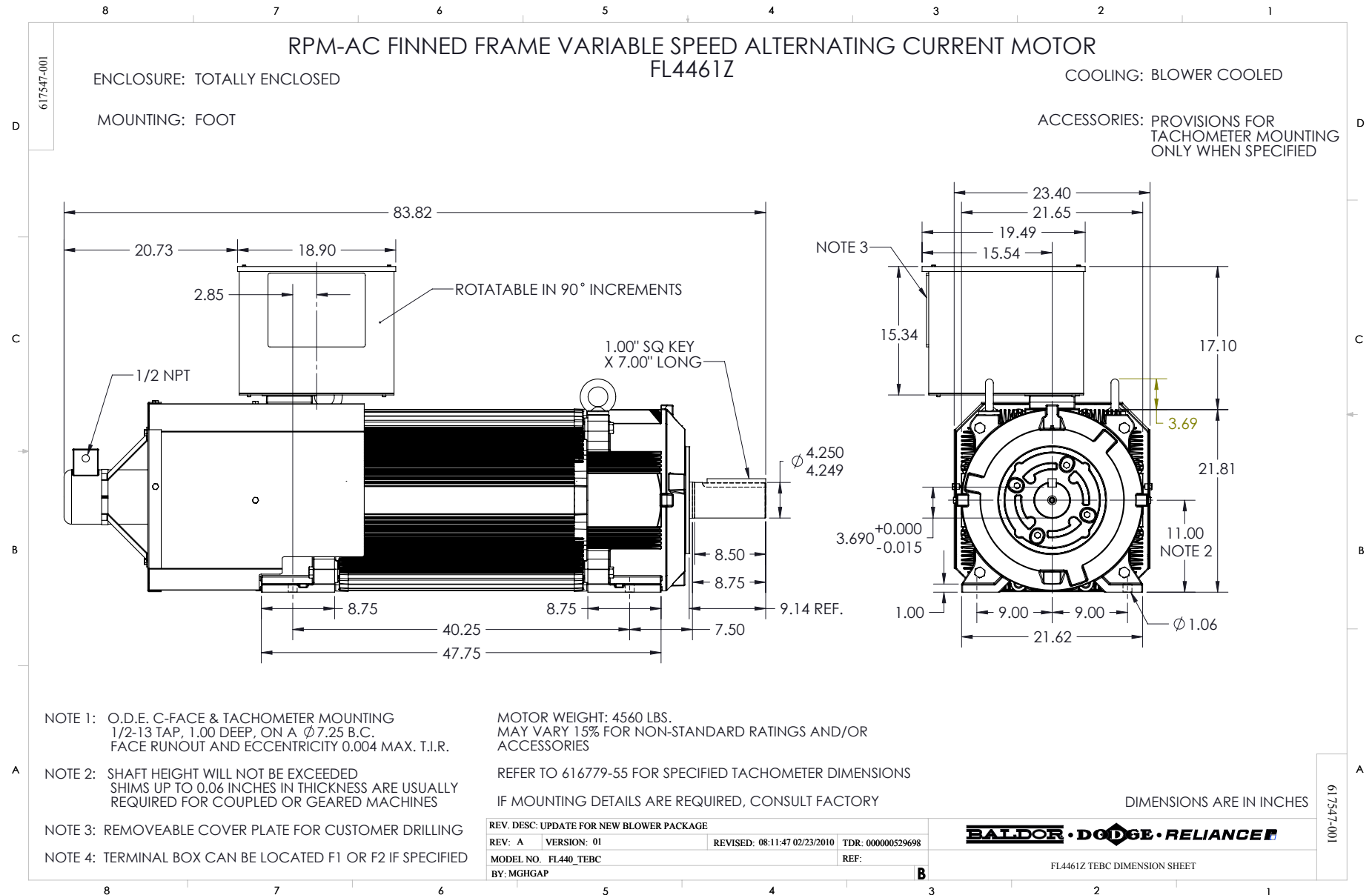


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 CHECKED BY: B. GRANT
 APPROVED BY: J. MARTIN
 DATE: 12-5-17

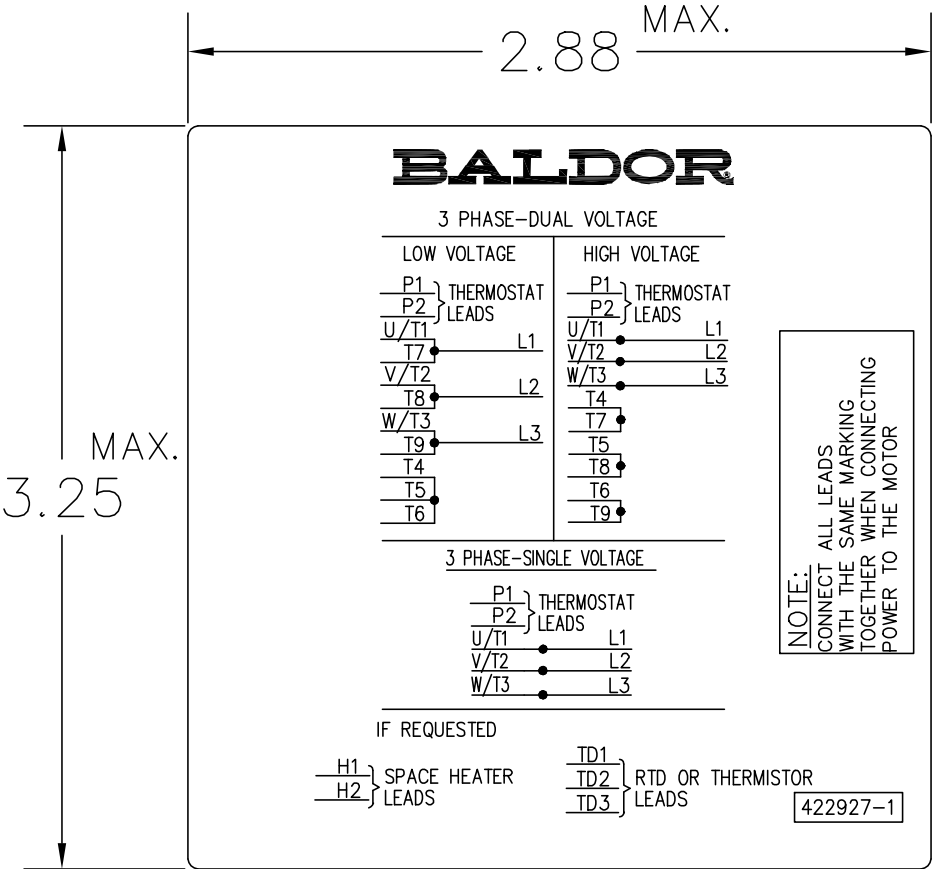
**AC MOTOR
PERFORMANCE
DATA**

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