ABB BALDOR RELIANCE

# Customer information packet

IDBRPM445004

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

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11/16/2026 1:18:10 PM

## 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 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SPEC** | | **VOLTS** | **460** | **ENCLOSURE** | **TEBC** | **WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)** | | | |
| **FRAME** | **FL4461** | **AMPS** | **597** | **MAX SAFE SPEED** | **3150** | | | | |
| **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** | **WK² (Lb-Ft²)** | **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

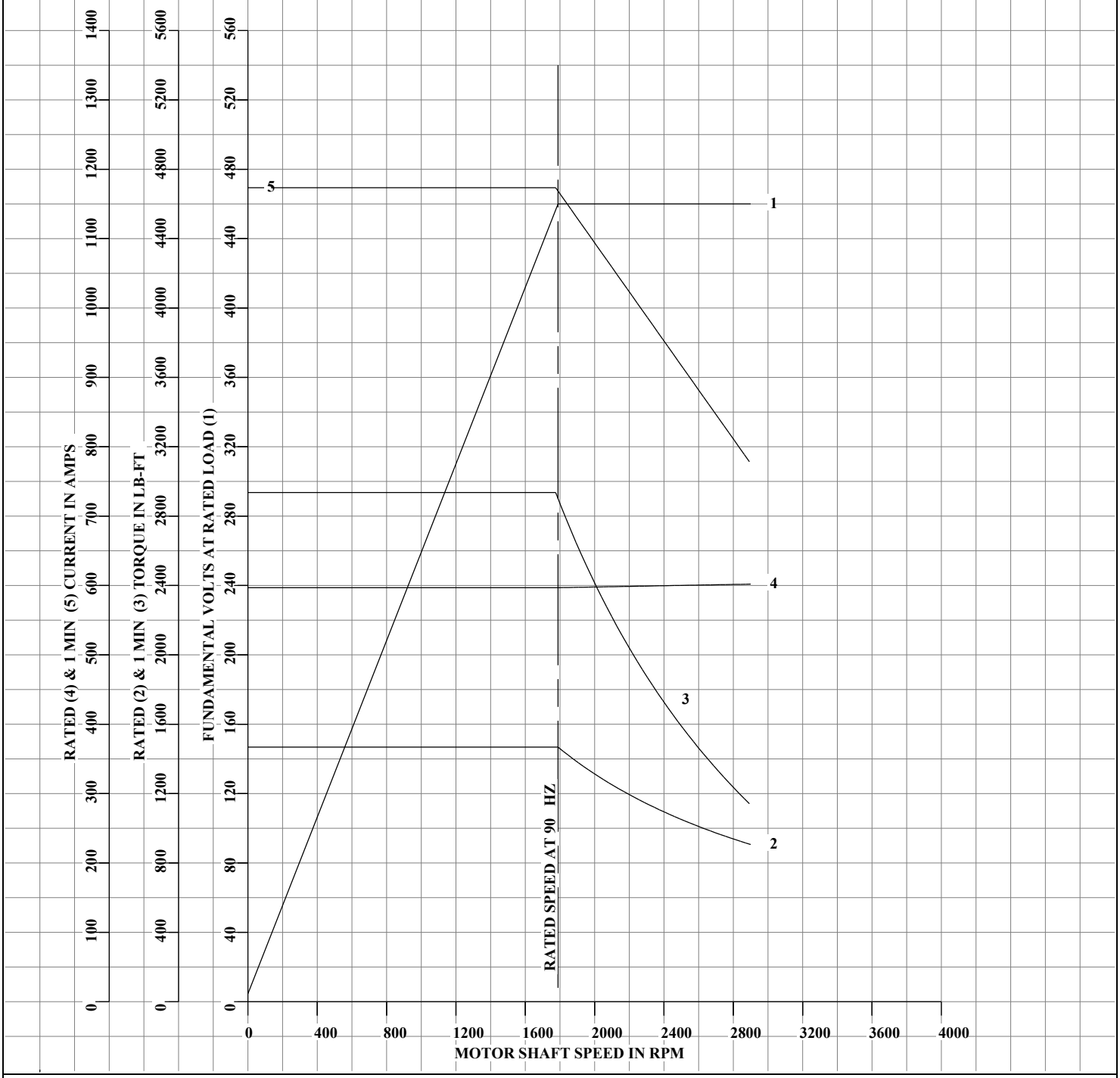
| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|---|---|---|---|---|---|---|
| **NO LOAD** | **1800** | **0** | **0** | **460** | **90** | **199** |
| **1/4** | **1797** | **125** | **366** | **460** | **90** | **259** |
| **1/2** | **1795** | **250** | **732** | **460** | **90** | **350** |
| **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**

| | | | |
|---|---|---|---|
| ABB | **DRAWN BY: B. GRANT**<br>**CHECKED BY: B. GRANT**<br>**APPROVED BY: J. MARTIN**<br>**DATE: 12-5-17** | **AC MOTOR PERFORMANCE DATA** | **L7847A**<br>**ISSUE DATE 9-17-26** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SPEC | | VOLTS | 460 | ENCLOSURE | TEBC | WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C) | | | |
| FRAME | FL4461 | AMPS | 597 | MAX SAFE SPEED | 3150 | | | | |
| 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 | WK² (Lb-Ft²) | 212 | | | XM | 1.20 |

CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES



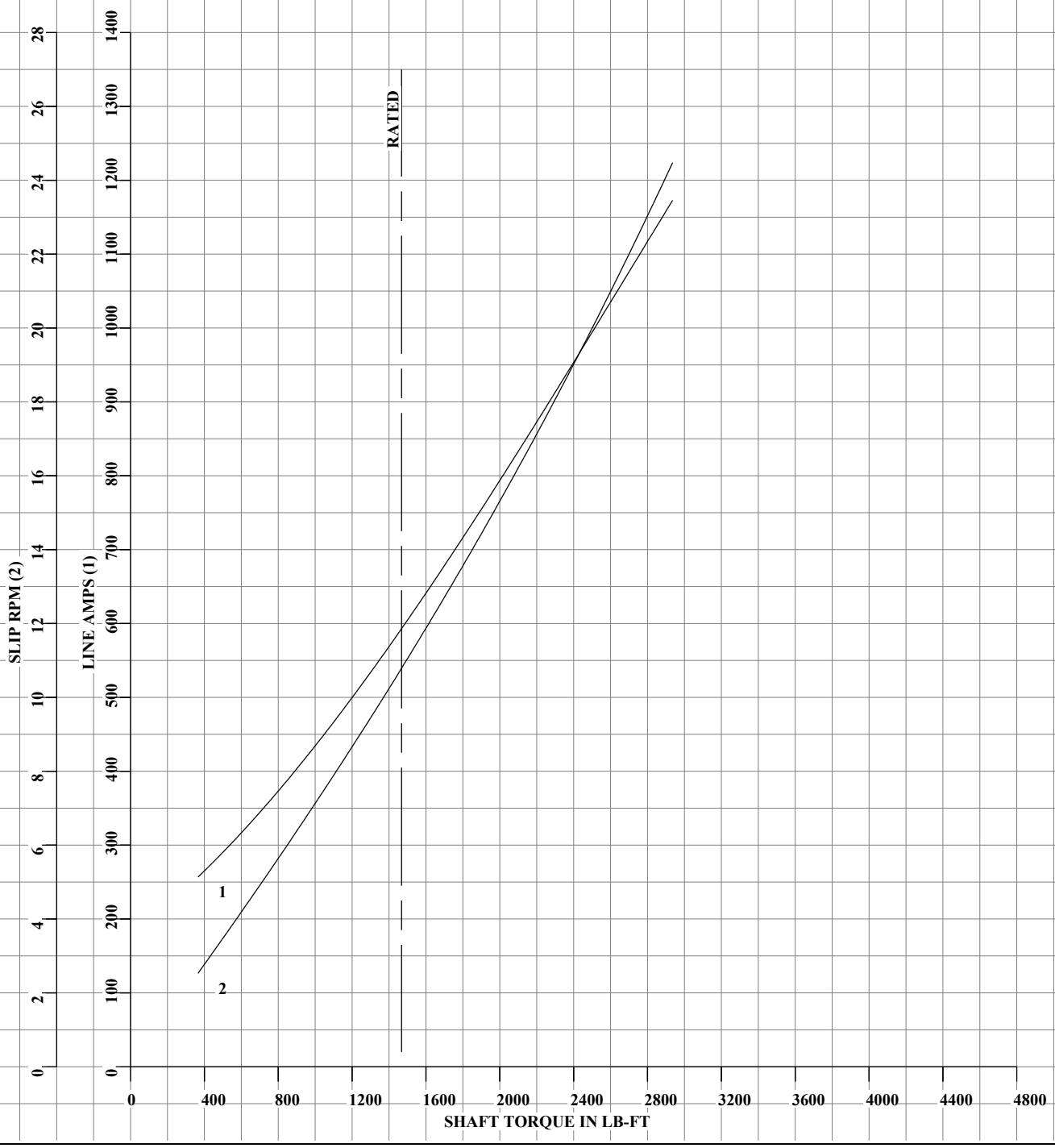

DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

| | | | |
|---|---|---|---|
| ABB | DRAWN BY: B. GRANT<br>CHECKED BY: B. GRANT<br>APPROVED BY: J. MARTIN<br>DATE: 12-5-17 | AC MOTOR PERFORMANCE DATA | L7847A<br>ISSUE DATE: 9-17-26 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SPEC | | VOLTS | 460 | ENCLOSURE | TEBC | WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C) | | | |
| FRAME | FL4461 | AMPS | 597 | MAX SAFE SPEED | 3150 | | | | |
| 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 | WK² (Lb-Ft²) | 212 | | | XM | 1.20 |

CORRELATED DATA

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)




DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

| | | | |
|---|---|---|---|
| ABB | DRAWN BY: B. GRANT<br>CHECKED BY: B. GRANT<br>APPROVED BY: J. MARTIN<br>DATE: 12-5-17 | AC MOTOR PERFORMANCE DATA | L7847A<br>ISSUE DATE: 9-17-26 |

# RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
## FL4461Z

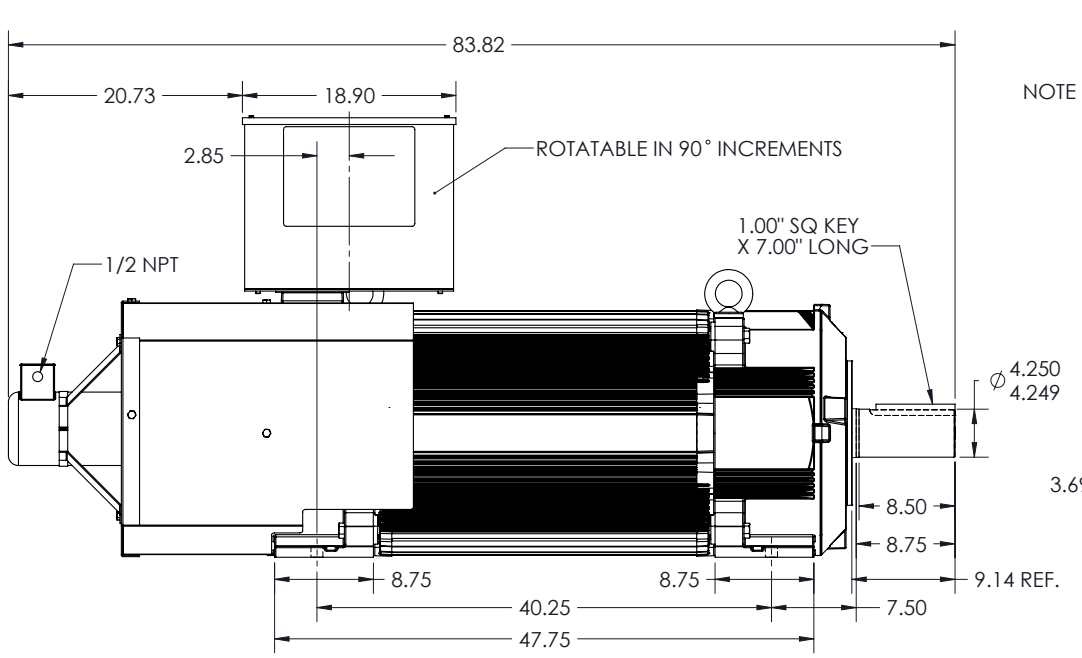
617547-001

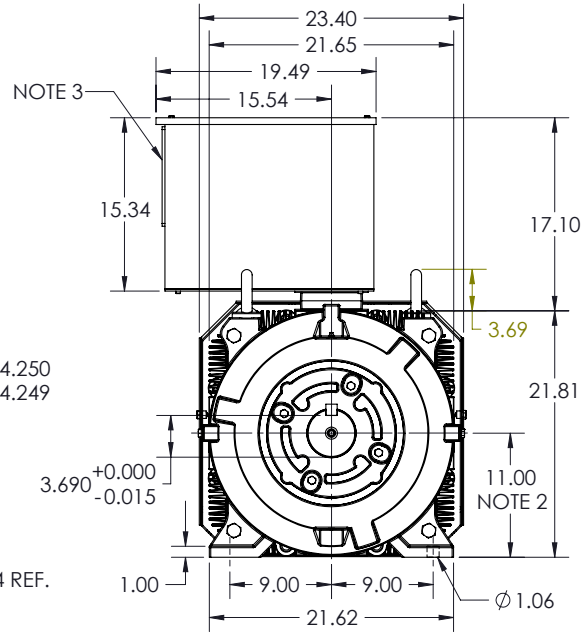
ENCLOSURE: TOTALLY ENCLOSED

COOLING: BLOWER COOLED

MOUNTING: FOOT

ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED




NOTE 1: O.D.E. C-FACE & TACHOMETER MOUNTING
1/2-13 TAP, 1.00 DEEP, ON A ∅7.25 B.C.
FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

NOTE 2: SHAFT HEIGHT WILL NOT BE EXCEEDED
SHIMS UP TO 0.06 INCHES IN THICKNESS ARE USUALLY
REQUIRED FOR COUPLED OR GEARED MACHINES

NOTE 3: REMOVEABLE COVER PLATE FOR CUSTOMER DRILLING

NOTE 4: TERMINAL BOX CAN BE LOCATED F1 OR F2 IF SPECIFIED

MOTOR WEIGHT: 4560 LBS.
MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES

REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

IF MOUNTING DETAILS ARE REQUIRED, CONSULT FACTORY

DIMENSIONS ARE IN INCHES

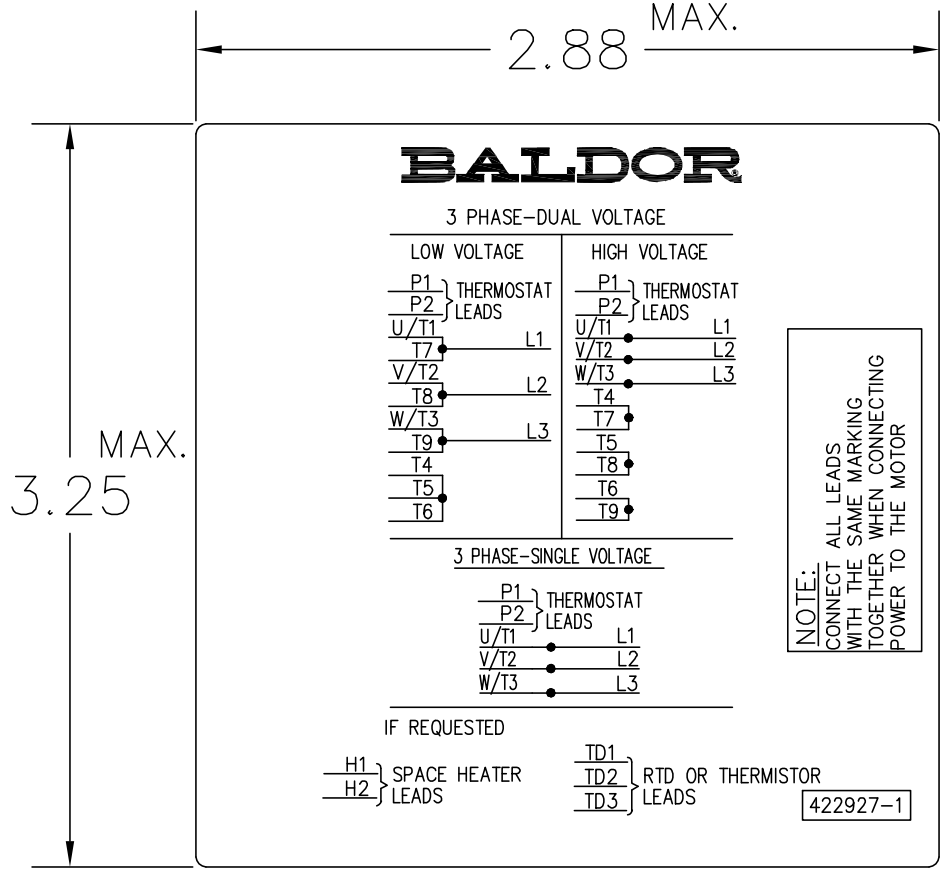
| | | | |
|---|---|---|---|
| REV. DESC: UPDATE FOR NEW BLOWER PACKAGE | | | |
| REV: A | VERSION: 01 | REVISED: 08:11:47 02/23/2010 | TDR: 000000529698 |
| MODEL NO. FL440_TEBC | | | REF: |
| BY: MGHGAP | | | B |

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FL4461Z TEBC DIMENSION SHEET

617547-001

422927–001




NOTE:
DATA TO BE SIZED SO THAT IT FITS INTO MATERIAL DECAL DIMENSIONS. MAKE LETTERS & NUMBERS AS LARGE AS POSIBLE.

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