

# ABB BALDOR RELIANCE III

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## Customer information packet

### IDDRPM323004R1ED

300HP, 1750, 460V, RL3213, DPFV, F1

**Specifications**

|                               |                         |
|-------------------------------|-------------------------|
| Enclosure                     | DPFV                    |
| Frame                         | RL3213Z                 |
| Frame Material                | Exposed Laminations     |
| Frequency                     | 60.00 Hz                |
| Output @ Frequency            | 300.000 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             | 351.000 A @ 460.0 V     |
| Duty Rating                   | CONT                    |
| Feedback Device               | NO FEEDBACK             |
| Frame Prefix                  | RL                      |
| Heater Indicator              | No Heater               |
| High Voltage Full Load Amps   | 351.0 a                 |
| Insulation Class              | H                       |
| IP Rating                     | NONE                    |
| Motor Standards               | NEMA                    |
| Mounting Arrangement          | F1                      |
| Overall Length                | 48.60 IN                |
| Product Family                | Extruder                |
| Pulley End Bearing Type       | Ball                    |
| Pulley Face Code              | Standard                |
| Service Factor                | 1.00                    |
| Shaft Diameter                | 2.874 IN                |
| Shaft Ground Indicator        | Shaft Grounding         |
| Shaft Rotation                | Reversible              |
| Speed                         | 1770 rpm                |
| Starting Method               | Full Voltage            |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | -          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | L9456A     |
| Layout       | 619695-001 |
| Eff. date    | 03-15-2023 |
| 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             | 300            | 1770        |         | 351           | 460    | 60            |
|              | CONT             | 300            | 3000        |         | 340           | 460    | 101.6         |
|              |                  |                |             |         |               |        |               |
| CAT.NO.      | IDDRPM323004R1ED |                | SPEC. NO.   |         | R32-A000-0412 |        |               |
| SER.NO       |                  |                | FR          | RL3213Z | INSUL         | H      |               |
| PH.          | 3                | MAX SAFE SPEED |             | 4000    | AMB.          | 40     | MIN. AMB. -25 |
| DESIGN NO.   | L9456A           |                | TYPE        |         | ENCL.         | DPG-FV |               |
| S.F.         | 1.00             |                | D.E. BRG.   |         | 85BC02J30X    |        |               |
| ENCL MOD     |                  |                | O.D.E. BRG. |         | 6313/C3VL0241 |        |               |
|              | IDDRPM323004R1ED |                |             |         | IP23          |        |               |
|              |                  |                |             |         |               |        |               |

|            |        |                |      |                                       |           |    |        |    |       |
|------------|--------|----------------|------|---------------------------------------|-----------|----|--------|----|-------|
| FRAME      | RL3213 | AMPS           | 351  | MAX SAFE SPEED                        | 4000      |    |        |    |       |
| HP         | 300    | DUTY           | CONT | IM (AMPS)                             | 120       | R1 | .0126  | X1 | .0749 |
| BASE SPEED | 1770   | S.F.           | 1.0  | P.F. @NL / FL                         | .039/.865 | R2 | .00856 | X2 | .0781 |
| PHASE/HZ   | 3/60   | AMB.°C / INSUL | 40/H | WK <sup>2</sup> (Lb-Ft <sup>2</sup> ) | 24        |    |        | XM | 2.09  |

**RATED FULL LOAD DATA**

|            | RPM  | HP  | TORQUE<br>LB-FT | FUND<br>VOLTS | FREQ-HZ | AMPS |
|------------|------|-----|-----------------|---------------|---------|------|
| BASE SPEED | 1773 | 300 | 889             | 460           | 60      | 351  |
| MAX SPEED  | 2999 | 300 | 525             | 460           | 101.6   | 341  |
| MIN SPEED  | 0    | 0   | 889             | 13.2          | .8986   | 351  |

**LOAD PERFORMANCE AT BASE SPEED**

|           | RPM  | HP   | TORQUE<br>LB-FT | FUND<br>VOLTS | FREQ-HZ | AMPS |
|-----------|------|------|-----------------|---------------|---------|------|
| NO LOAD   | 1800 | 0    | 0               | 460           | 60      | 127  |
| 1/4       | 1794 | 75.2 | 220             | 460           | 60      | 154  |
| 1/2       | 1787 | 150  | 441             | 460           | 60      | 207  |
| 3/4       | 1780 | 225  | 664             | 460           | 60      | 275  |
| FULL LOAD | 1773 | 300  | 889             | 460           | 60      | 351  |
| 0/L       | 1739 | 589  | 1778            | 460           | 60      | 700  |

**REMARKS:**  
**TYPICAL DATA**  
**CORRELATED DATA**



**DRAWN BY: A. BROOKINS**  
**CHECKED BY: B. GRANT**  
**APPROVED BY: J. MARTIN**  
**DATE: 1-24-23**

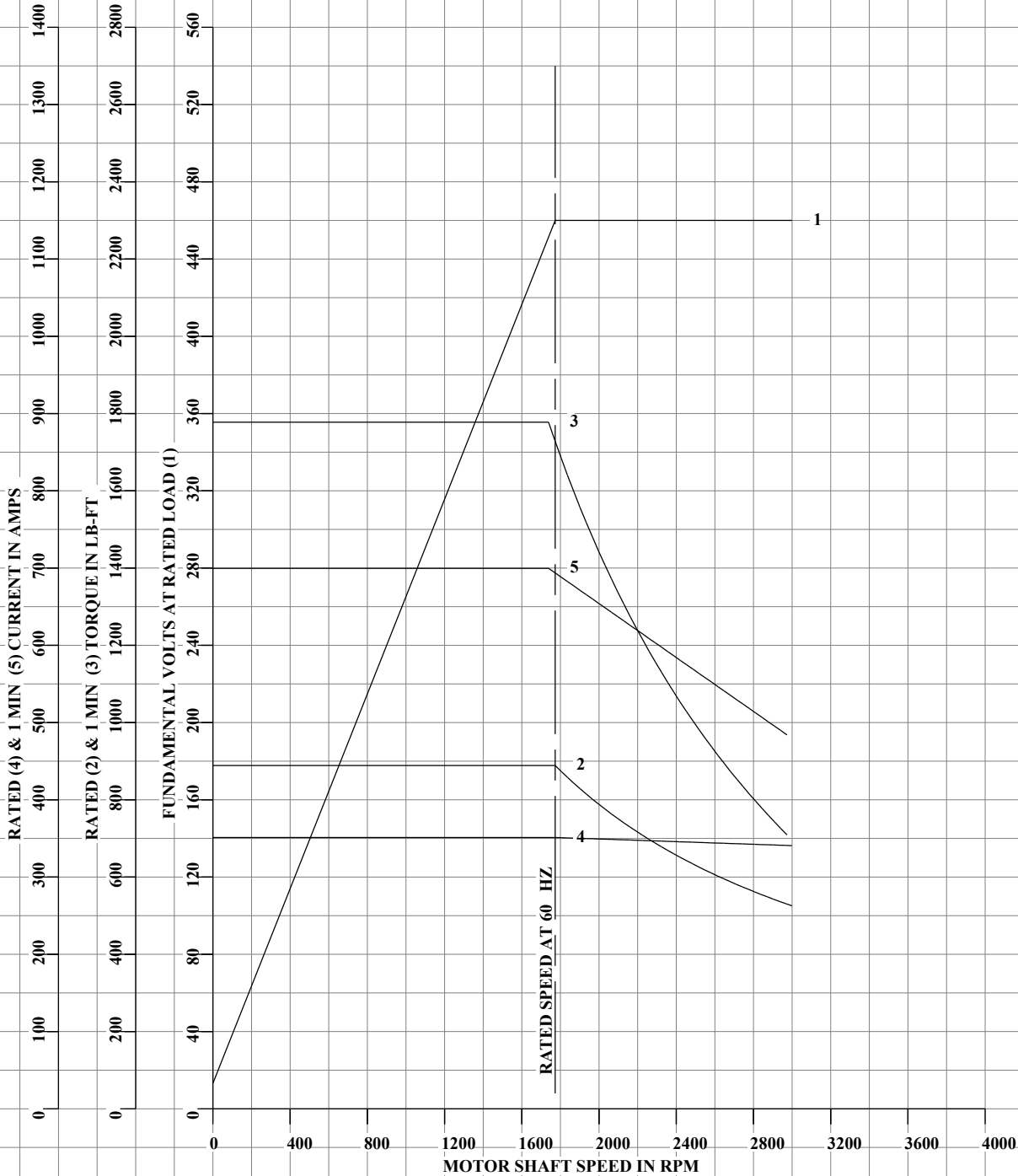
**AC MOTOR  
PERFORMANCE  
DATA**

**L9456A**

**ISSUE DATE 1-24-23**

| FRAME      | RL3213 | VOLTS          | 460  | ENCLOSURE                             | DPFV      | WYE CONN               | EQ CKT | OHMS PER PHASE |
|------------|--------|----------------|------|---------------------------------------|-----------|------------------------|--------|----------------|
| HP         | 300    | AMPS           | 351  | MAX SAFE SPEED                        | 4000      | (AT BASE RATING, 25°C) |        |                |
| BASE SPEED | 1770   | DUTY           | CONT | IM (AMPS)                             | 120       | R1                     | .0126  | X1 .0749       |
| PHASE/HZ   | 3/60   | S.F.           | 1.0  | P.F. @NL / FL                         | .039/.865 | R2                     | .00856 | X2 .0781       |
|            |        | AMB.°C / INSUL | 40/H | WK <sup>2</sup> (Lb-Ft <sup>2</sup> ) | 24        |                        |        | XM 2.09        |

**CORRELATED DATA  
VARIABLE SPEED AC MOTOR CURVES**



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DRAWN BY: A. BROOKINS  
CHECKED BY: B. GRANT  
APPROVED BY: J. MARTIN  
DATE: 1-24-23

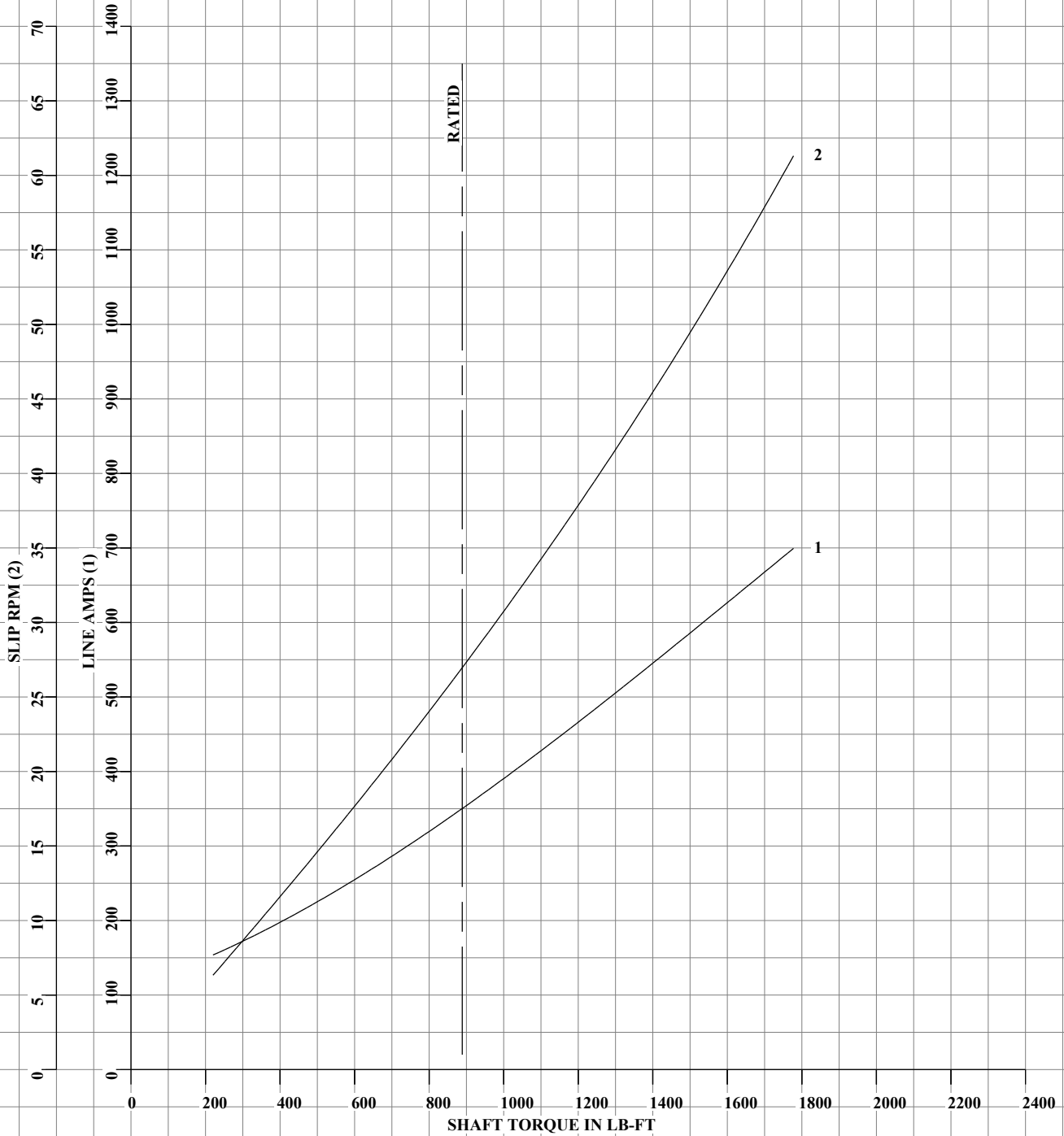
**AC MOTOR  
PERFORMANCE  
DATA**

**L9456A**

ISSUE DATE: 1-24-23

| FRAME      | RL3213 | VOLTS          | 460  | ENCLOSURE                             | DPV       | WYE CONN EQ CKT OHMS PER PHASE<br>(AT BASE RATING, 25°C) |        |          |
|------------|--------|----------------|------|---------------------------------------|-----------|----------------------------------------------------------|--------|----------|
| HP         | 300    | AMPS           | 351  | MAX SAFE SPEED                        | 4000      | R1                                                       | .0126  | X1 .0749 |
| BASE SPEED | 1770   | DUTY           | CONT | IM (AMPS)                             | 120       | R2                                                       | .00856 | X2 .0781 |
| PHASE/HZ   | 3/60   | S.F.           | 1.0  | P.F. @NL / FL                         | .039/.865 |                                                          |        | XM 2.09  |
|            |        | AMB.°C / INSUL | 40/H | WK <sup>2</sup> (Lb-Ft <sup>2</sup> ) | 24        |                                                          |        |          |

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



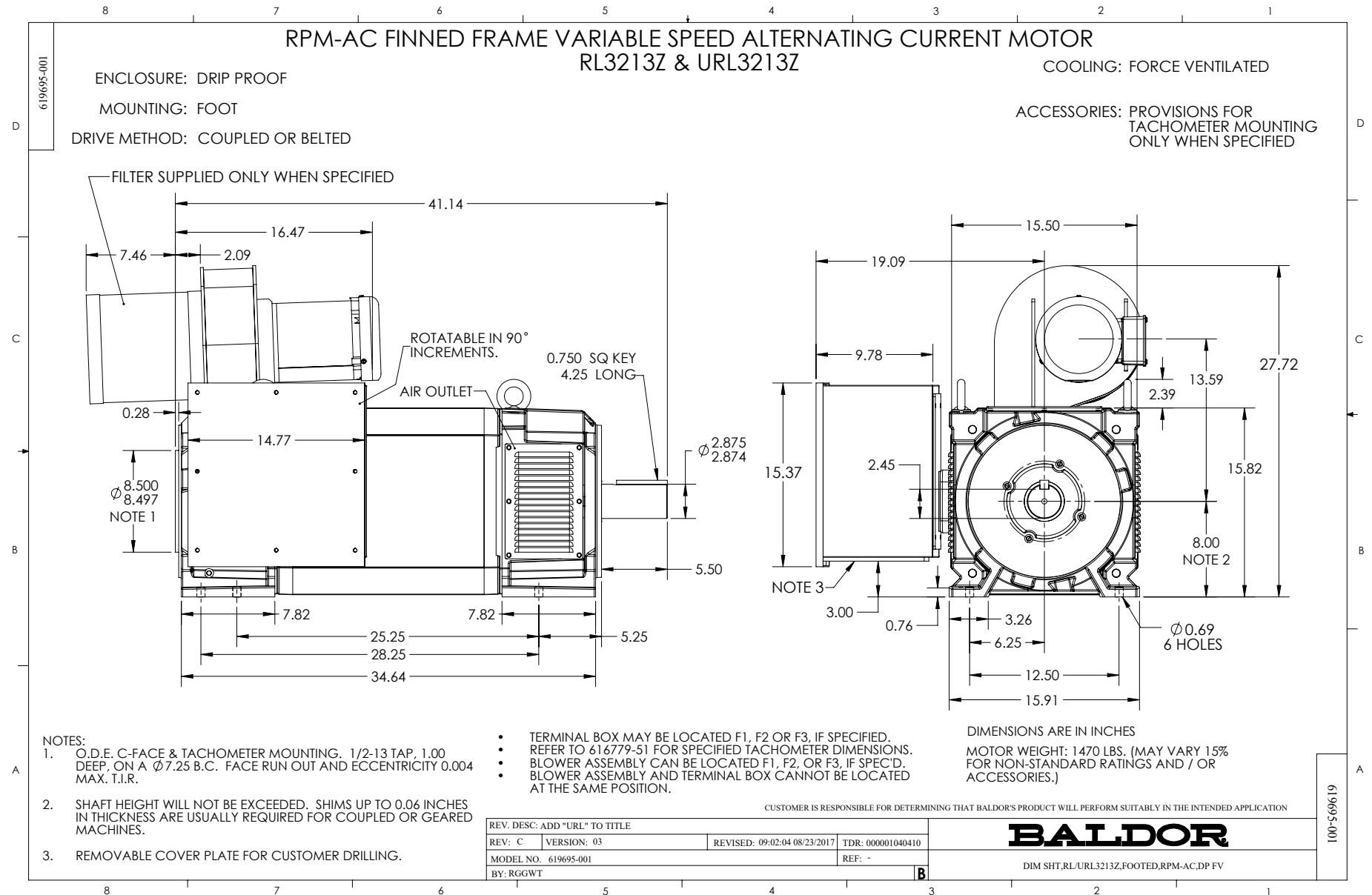
TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



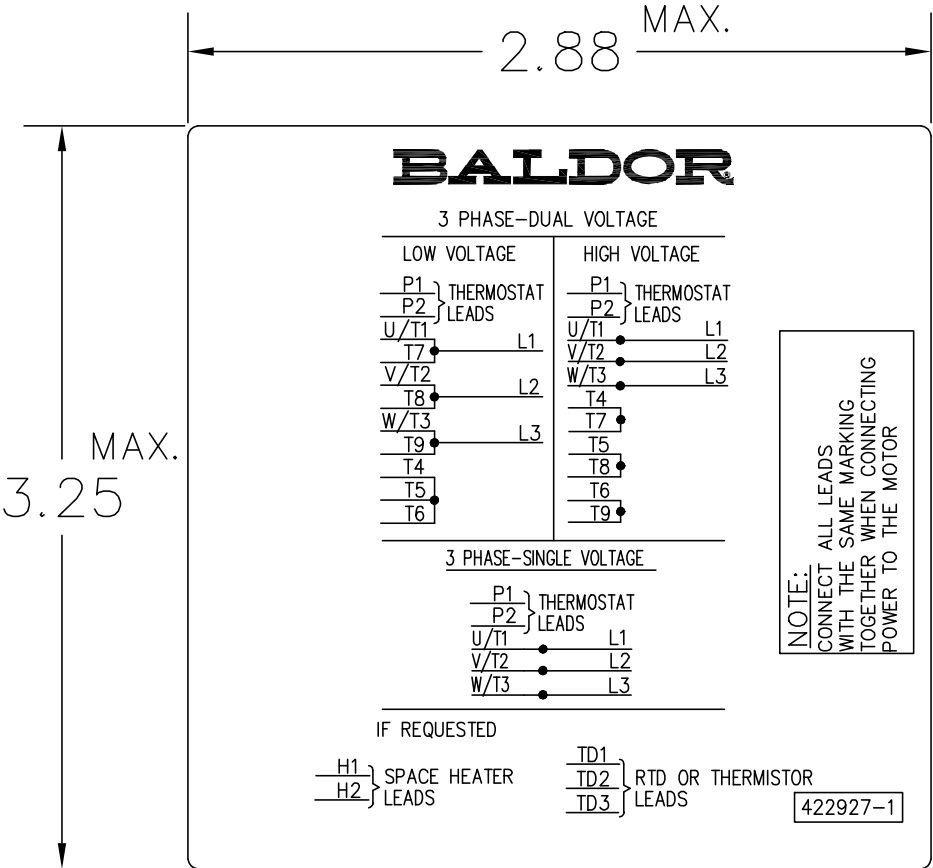
DRAWN BY: A. BROOKINS  
 CHECKED BY: B. GRANT  
 APPROVED BY: J. MARTIN  
 DATE: 1-24-23

**AC MOTOR  
PERFORMANCE  
DATA**

**L9456A**  
 ISSUE DATE: 1-24-23



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