

# ABB BALDOR RELIANCE III

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## Customer information packet

### IDDRPM446006

600HP, 1150, 460V, RL4451, DPFV, F1

**Specifications**

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Enclosure</b>                     | DPFV                    |
| <b>Frame</b>                         | RL4451Z                 |
| <b>Frame Material</b>                | Exposed Laminations     |
| <b>Frequency</b>                     | 60.00 Hz                |
| <b>Output @ Frequency</b>            | 600.000 HP @ 60 HZ      |
| <b>Phase</b>                         | 3                       |
| <b>Synchronous Speed @ Frequency</b> | 1200 RPM @ 60 HZ        |
| <b>Voltage @ Frequency</b>           | 460.0 V @ 60 HZ         |
| <b>Agency Approvals</b>              | CCSA US                 |
| <b>Auxiliary Box</b>                 | NO AUXILLARY BOX        |
| <b>Base Indicator</b>                | Rigid                   |
| <b>Bearing Grease Type</b>           | Polyrex EM (-20F +300F) |
| <b>Current @ Voltage</b>             | 743.000 A @ 460.0 V     |
| <b>Duty Rating</b>                   | CONT                    |
| <b>Feedback Device</b>               | NO FEEDBACK             |
| <b>Frame Prefix</b>                  | RL                      |
| <b>Heater Indicator</b>              | No Heater               |
| <b>High Voltage Full Load Amps</b>   | 743.0 a                 |
| <b>Insulation Class</b>              | H                       |
| <b>IP Rating</b>                     | NONE                    |
| <b>Motor Standards</b>               | NEMA                    |
| <b>Mounting Arrangement</b>          | F1                      |
| <b>Overall Length</b>                | 62.15 IN                |
| <b>Product Family</b>                | General Industrial      |
| <b>Pulley End Bearing Type</b>       | Ball                    |
| <b>Pulley Face Code</b>              | Standard                |
| <b>Service Factor</b>                | 1.00                    |
| <b>Shaft Diameter</b>                | 4.310 IN                |
| <b>Shaft Ground Indicator</b>        | Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible              |
| <b>Speed</b>                         | 1185 rpm                |
| <b>Starting Method</b>               | Full Voltage            |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | C          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | L1262A     |
| <b>Layout</b>       | 617601-001 |
| <b>Eff. date</b>    | 08-07-2025 |
| <b>CD Diagram</b>   | 422927-001 |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        |            |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 07-29-2021 |

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

**Nameplate**

| 000613006MY |              |                |             |           |               |       |        |           |     |
|-------------|--------------|----------------|-------------|-----------|---------------|-------|--------|-----------|-----|
|             | DUTY         | HP             | RPM         | AMPS      | VOLTS         | HZ    |        |           |     |
|             | CONT         | 600            | 1185        |           | 743           | 460   | 60     |           |     |
|             | CONT         | 600            | 1780        |           | 715           | 460   | 90     |           |     |
|             | CONT         | 600            | 2000        |           | 727           | 460   | 101.3  |           |     |
| CAT.NO.     | IDDRPM446006 |                |             | SPEC. NO. | R44-A000-0180 |       |        |           |     |
| SER.NO      |              |                |             | FR        | RL4451Z       | INSUL | H      |           |     |
| PH.         | 3            | MAX SAFE SPEED |             |           | 2700          | AMB.  | 40     | MIN. AMB. | -25 |
| DESIGN NO.  | L1262A       |                | TYPE        |           |               | ENCL. | DPG-FV |           |     |
| S.F.        | 1.00         |                | D.E. BRG.   |           | 110BC02J30X   |       |        |           |     |
| ENCL MOD    |              |                | O.D.E. BRG. |           | 6222/C3VL0241 |       |        |           |     |
|             | IP23         |                |             |           |               |       |        |           |     |
|             |              |                |             |           |               |       |        |           |     |

|             |        |              |      |                                       |           |                                |        |    |       |
|-------------|--------|--------------|------|---------------------------------------|-----------|--------------------------------|--------|----|-------|
| REL S.O.    | -      | VOLTS        | 460  | ENCLOSURE                             | DPFV      | WYE CONN EQ CKT OHMS PER PHASE |        |    |       |
| FRAME       | RL4451 | AMPS         | 743  | MAX SAFE RPM                          | 2700      | (AT BASE RATING, 25 °C)        |        |    |       |
| HP          | 600    | DUTY         | CONT | IM (AMPS)                             | 311       | R1                             | .00346 | X1 | .0399 |
| BASE SPEED  | 1185   | S.F.         | 1.0  | P.F.@NL/FL                            | .029/.806 | R2                             | .00300 | X2 | .0569 |
| PHASE/HERTZ | 3/60   | AMB °C/INSUL | 40/H | WK <sup>2</sup> (Lb-Ft <sup>2</sup> ) | 189       |                                |        | XM | .853  |

### RATED FULL LOAD DATA

|            | RPM  | HP  | TORQUE<br>LB-FT | FUND<br>VOLTS | FREQ-HZ | AMPS |
|------------|------|-----|-----------------|---------------|---------|------|
| BASE SPEED | 1186 | 600 | 2657            | 460           | 60      | 743  |
| MAX SPEED  | 2000 | 600 | 1575            | 460           | 101.3   | 727  |
| MIN SPEED  | 0    | 0   | 2657            | 7.61          | .6798   | 743  |

### LOAD PERFORMANCE AT BASE SPEED

|           | RPM  | HP  | TORQUE<br>LB-FT | FUND<br>VOLTS | FREQ-HZ | AMPS |
|-----------|------|-----|-----------------|---------------|---------|------|
| NO LOAD   | 1200 | 0   | 0               | 460           | 60      | 311  |
| 1/4       | 1197 | 152 | 667             | 460           | 60      | 356  |
| 1/2       | 1193 | 304 | 1337            | 460           | 60      | 462  |
| 3/4       | 1190 | 455 | 2009            | 460           | 60      | 597  |
| FULL LOAD | 1186 | 600 | 2657            | 460           | 60      | 743  |
| O/L       | 1178 | 894 | 3985            | 460           | 60      | 1082 |

REMARKS :



|         |          |
|---------|----------|
| DR. BY  | M. MANEY |
| CK. BY  | M. MANEY |
| APP. BY | T. EVON  |
| DATE    | 5/18/98  |

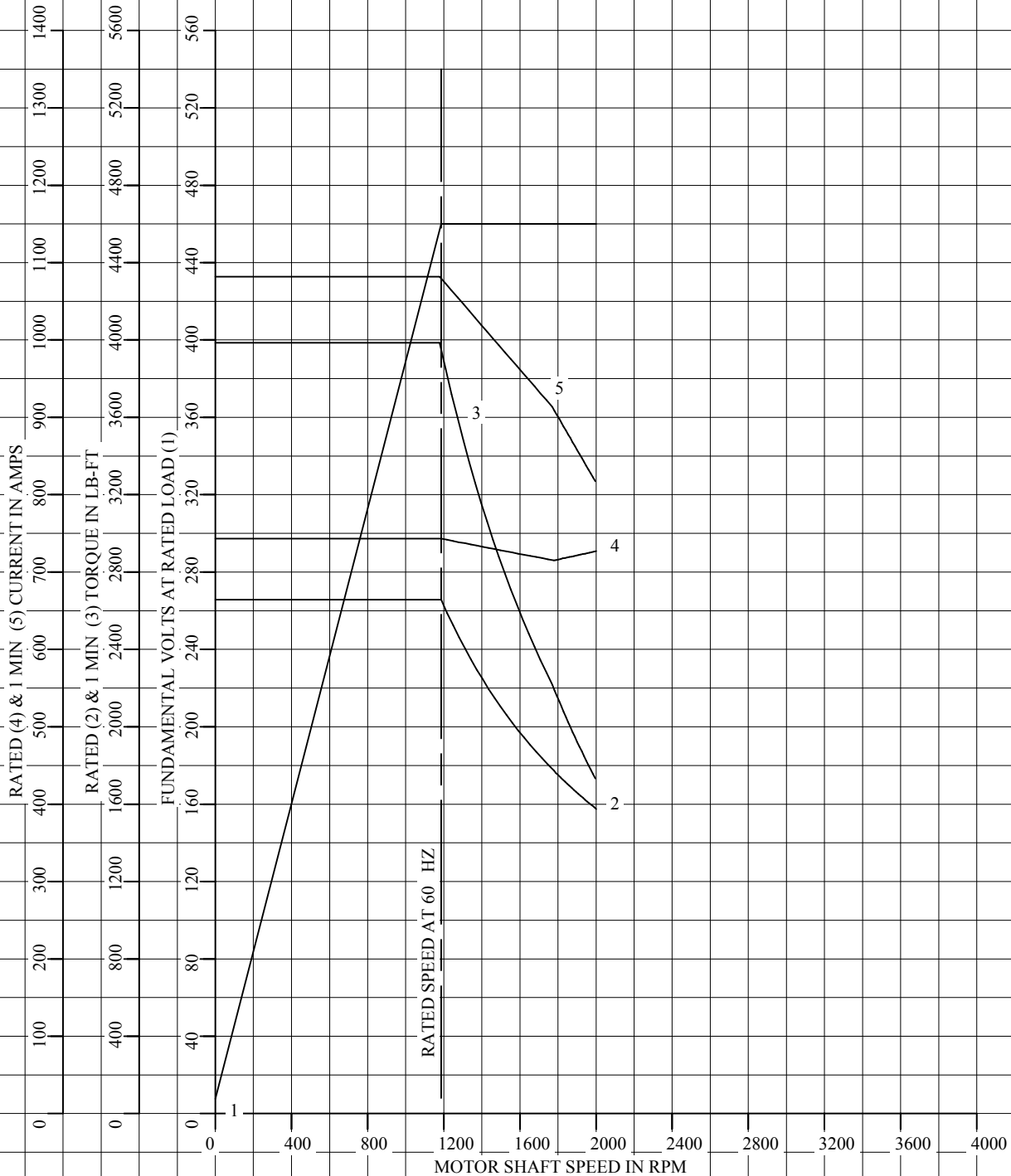
**A-C MOTOR  
PERFORMANCE DATA** **L1262A**

ISSUE DATE 12/10/15

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|             |        |              |      |                                       |           |                                |          |
|-------------|--------|--------------|------|---------------------------------------|-----------|--------------------------------|----------|
| REL S.O.    | -      | VOLTS        | 460  | ENCLOSURE                             | DPFV      | WYE CONN EQ CKT OHMS PER PHASE |          |
| FRAME       | RL4451 | AMPS         | 743  | MAX SAFE RPM                          | 2700      | (AT BASE RATING, 25 °C)        |          |
| HP          | 600    | DUTY         | CONT | IM (AMPS)                             | 311       | R1 .00346                      | X1 .0399 |
| BASE SPEED  | 1185   | S.F.         | 1.0  | P.F. @NL/FL                           | .029/.806 | R2 .00300                      | X2 .0569 |
| PHASE/HERTZ | 3/60   | AMB °C/INSUL | 40/H | WK <sup>2</sup> (Lb-Ft <sup>2</sup> ) | 189       | XM .853                        |          |

VARIABLE SPEED AC MOTOR CURVES



REMARKS:

DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



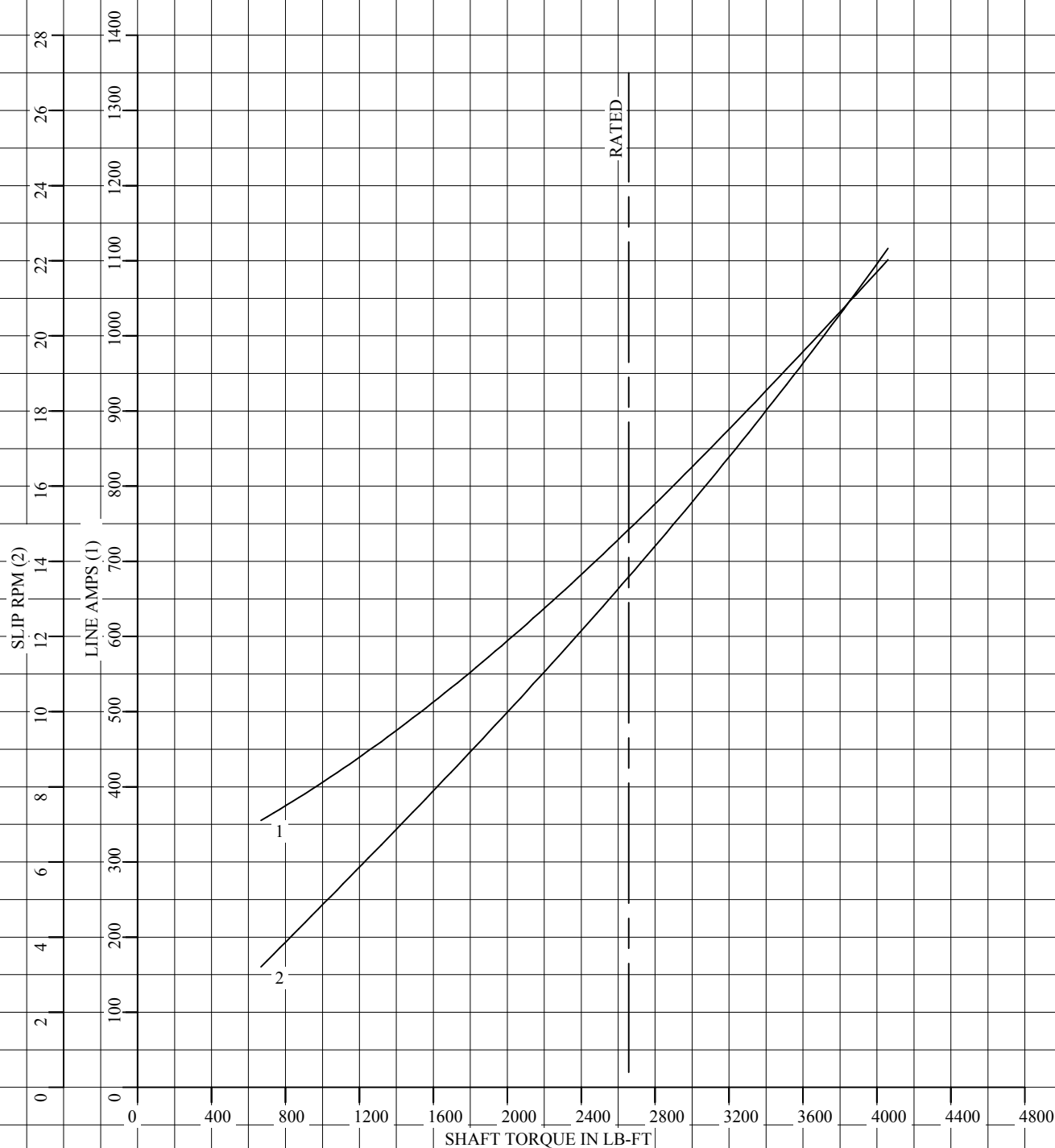
DR. BY M. MANEY  
CK. BY M. MANEY  
APP. BY T. EVON  
DATE 5/18/98

**A-C MOTOR  
PERFORMANCE  
CURVES**

**L1262A**  
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ISSUE DATE 12/10/15 Page 6 of 9

|             |        |              |      |                                       |           |                                |          |
|-------------|--------|--------------|------|---------------------------------------|-----------|--------------------------------|----------|
| REL S.O.    | -      | VOLTS        | 460  | ENCLOSURE                             | DPFV      | WYE CONN EQ CKT OHMS PER PHASE |          |
| FRAME       | RL4451 | AMPS         | 743  | MAX SAFE RPM                          | 2700      | (AT BASE RATING, 25 °C)        |          |
| HP          | 600    | DUTY         | CONT | IM (AMPS)                             | 311       | R1 .00346                      | X1 .0399 |
| BASE SPEED  | 1185   | S.F.         | 1.0  | P.F. @NL/FL                           | .029/.806 | R2 .00300                      | X2 .0569 |
| PHASE/HERTZ | 3/60   | AMB °C/INSUL | 40/H | WK <sup>2</sup> (Lb-Ft <sup>2</sup> ) | 189       | XM .853                        |          |

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS:

DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

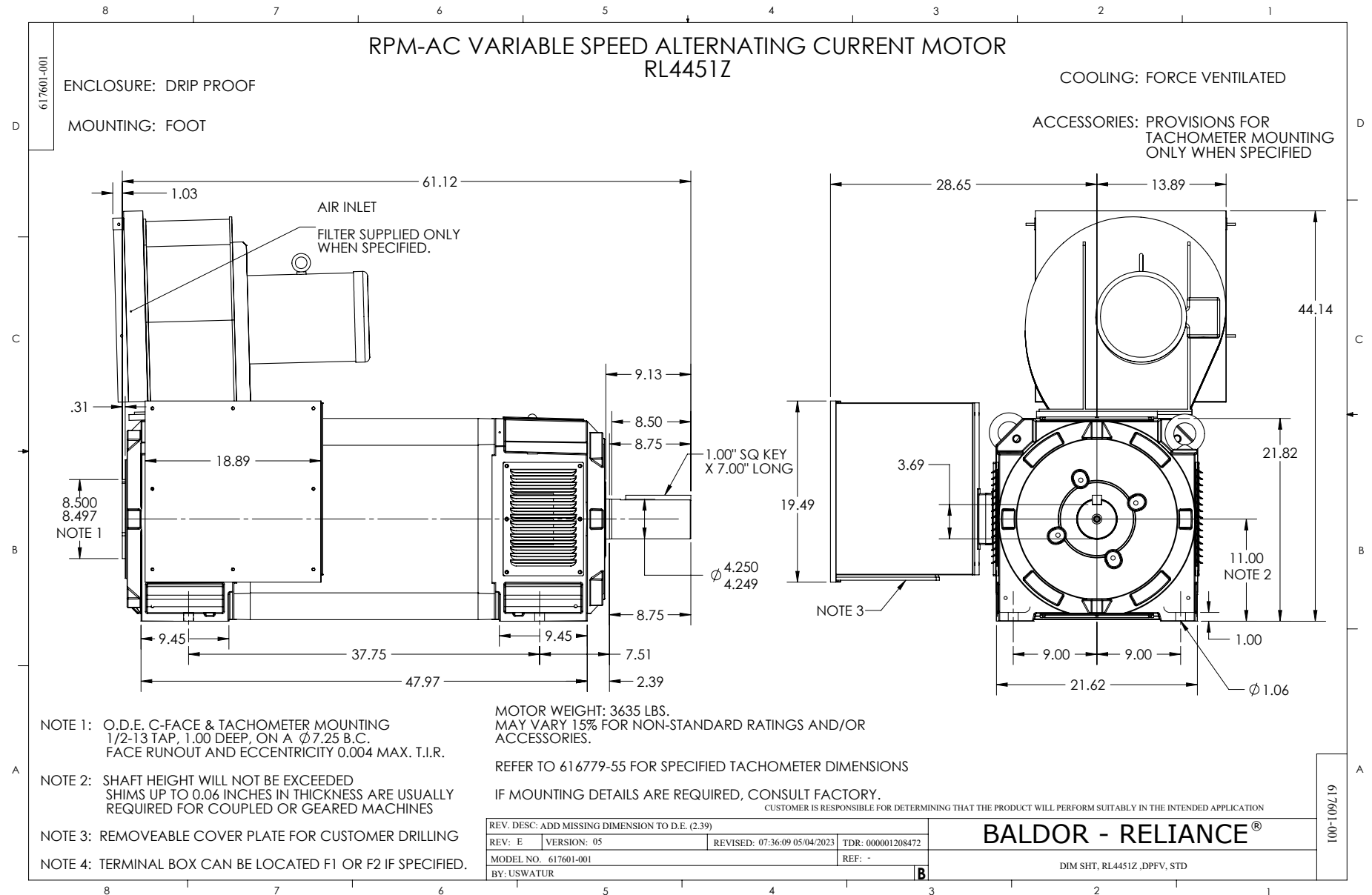
**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY M. MANEY  
CK. BY M. MANEY  
APP. BY T. EVON  
DATE 5/18/98

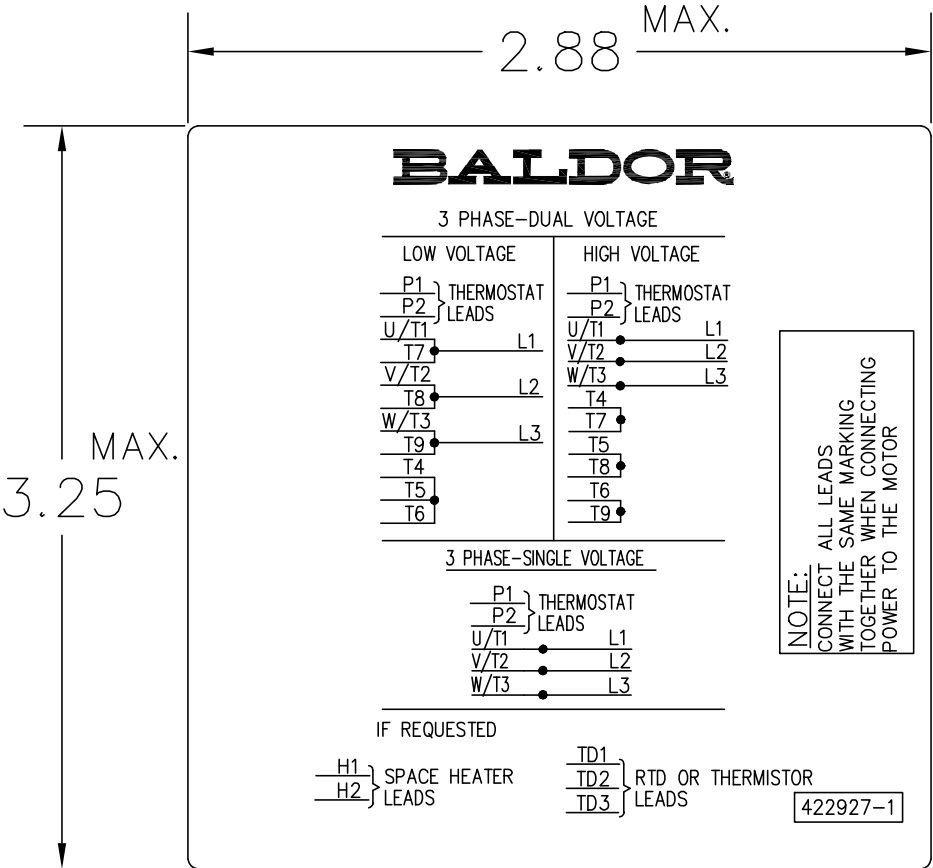
**A-C MOTOR  
PERFORMANCE  
CURVES**

**L1262A**  
SH 2 OF 2  
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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