

# **BALDOR® • RELIANCE**

## **Product Information Packet**

**IDBRPM25504**

**50 HP 1750 TEBC FL2570 460V**

| Part Detail |    |             |            |             |            |               |            |
|-------------|----|-------------|------------|-------------|------------|---------------|------------|
| Revision:   | -  | Status:     | PRD/A      | Change #:   |            | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | L3380A     | CD Diagram: | 422927-001 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 617573-001 | Poles:      | 04         | Created Date: | 04-10-2015 |
| Base:       |    | Eff. Date:  | 04-13-2015 | Leads:      |            |               |            |

| Specs                          |                     |  |  |
|--------------------------------|---------------------|--|--|
| Catalog Number:                | IDBRPM25504         |  |  |
| Enclosure:                     | TEAO                |  |  |
| Frame:                         | FL2570Z             |  |  |
| Frame Material:                | Exposed Laminations |  |  |
| Output @ Frequency:            | 50.000 HP @ 60 HZ   |  |  |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ    |  |  |
| Voltage @ Frequency:           | 460.0 V @ 60 HZ     |  |  |
| Agency Approvals:              | CCSA US             |  |  |
| Auxillary Box:                 | No Auxillary Box    |  |  |
| Base Indicator:                | Rigid               |  |  |
| Bearing Grease Type:           | No Grease           |  |  |
| Current @ Voltage:             | 65.000 A @ 460.0 V  |  |  |
| Duty Rating:                   | CONT                |  |  |
| Feedback Device:               | NO FEEDBACK         |  |  |
| Frame Prefix:                  | FL                  |  |  |
| Heater Indicator:              | No Heater           |  |  |
| Insulation Class:              | H                   |  |  |
| Mounting Arrangement:          | TP                  |  |  |

|                                  |                            |  |  |
|----------------------------------|----------------------------|--|--|
| <b>Product Family:</b>           | General Industrial         |  |  |
| <b>Pulley End Bearing Type:</b>  | Ball                       |  |  |
| <b>Pulley Face Code:</b>         | Standard                   |  |  |
| <b>Shaft Ground Indicator:</b>   | No Shaft Grounding         |  |  |
| <b>Shaft Rotation:</b>           | Reversible                 |  |  |
| <b>Motor Standards:</b>          | NEMA                       |  |  |
| <b>Thermal Device - Bearing:</b> | None                       |  |  |
| <b>Thermal Device - Winding:</b> | Normally Closed Thermostat |  |  |

Nameplate 000613006NS

|            | DUTY        | HP | RPM            | AMPS         | VOLTS    | HZ      |             |
|------------|-------------|----|----------------|--------------|----------|---------|-------------|
|            | CONT        | 50 | 1775           | 65           | 460      | 60      |             |
|            | CONT        | 50 | 3545           | 60           | 460      | 120     |             |
|            |             |    |                |              |          |         |             |
|            |             |    |                |              |          |         |             |
| CAT.NO.    | IDBRPM25504 |    | SPEC. NO.      |              | P25T0300 |         |             |
| SER.NO.    |             |    | FR             | FL 2570Z     | INSUL    | H       |             |
| PH.        | 3           |    | MAX SAFE SPEED | 5000         | AMB.     | 40      | MIN. AMB. 0 |
| DESIGN NO. | L3380A      |    | TYPE           |              | ENCL.    | TEAO-BC |             |
| S.F.       | 1.0         |    | D.E. BRG.      | 65BC03JPP30A |          |         |             |
| ENCL MOD   |             |    | O.D.E. BRG.    | 50BC03JPP30A |          |         |             |
|            |             |    |                |              |          |         |             |

|             |        |              |      |                                       |           |                         |                       |
|-------------|--------|--------------|------|---------------------------------------|-----------|-------------------------|-----------------------|
| REL. S.O.   | -      | VOLTS        | 460  | ENCLOSURE                             | TEBC      | WYE CONN                | EQ CKT OHMS PER PHASE |
| FRAME       | FL2570 | AMPS         | 65   | MAX SAFE RPM                          | 5000      | (AT BASE RATING, 25 °C) |                       |
| HP          | 50     | DUTY         | CONT | IM (AMPS)                             | 34        | R1                      | .0778 X1 .380         |
| BASE SPEED  | 1775   | S.F.         | 1.0  | P.F. @NL/FL                           | .049/.795 | R2                      | .0486 X2 .480         |
| PHASE/HERTZ | 3/60   | AMB °C/INSUL | 40/H | WK <sup>2</sup> (LB-FT <sup>2</sup> ) | 3.84      |                         | XM 8.13               |

| RATED FULL LOAD DATA |      |      |                 |               |         |      |
|----------------------|------|------|-----------------|---------------|---------|------|
|                      | RPM  | HP   | TORQUE<br>LB-FT | FUND<br>VOLTS | FREQ-HZ | AMPS |
| BASE SPEED           | 1774 | 50.0 | 148             | 460           | 60      | 65.1 |
| MAX SPEED            | 3542 | 50.0 | 74              | 460           | 120     | 59.8 |
| MIN SPEED            | 0    | 0    | 148             | 14.6          | .875    | 65.1 |

| LOAD PERFORMANCE AT BASE SPEED |      |      |                 |               |         |      |
|--------------------------------|------|------|-----------------|---------------|---------|------|
|                                | RPM  | HP   | TORQUE<br>LB-FT | FUND<br>VOLTS | FREQ-HZ | AMPS |
| NO LOAD                        | 1800 | 0    | 0               | 460           | 60      | 33.0 |
| 1/4                            | 1794 | 12.5 | 37              | 460           | 60      | 36.0 |
| 1/2                            | 1787 | 25.0 | 74              | 460           | 60      | 43.4 |
| 3/4                            | 1781 | 37.5 | 111             | 460           | 60      | 53.4 |
| FULL LOAD                      | 1774 | 50.0 | 148             | 460           | 60      | 65.1 |
| 0/L                            | 1741 | 98.1 | 296             | 460           | 60      | 122  |

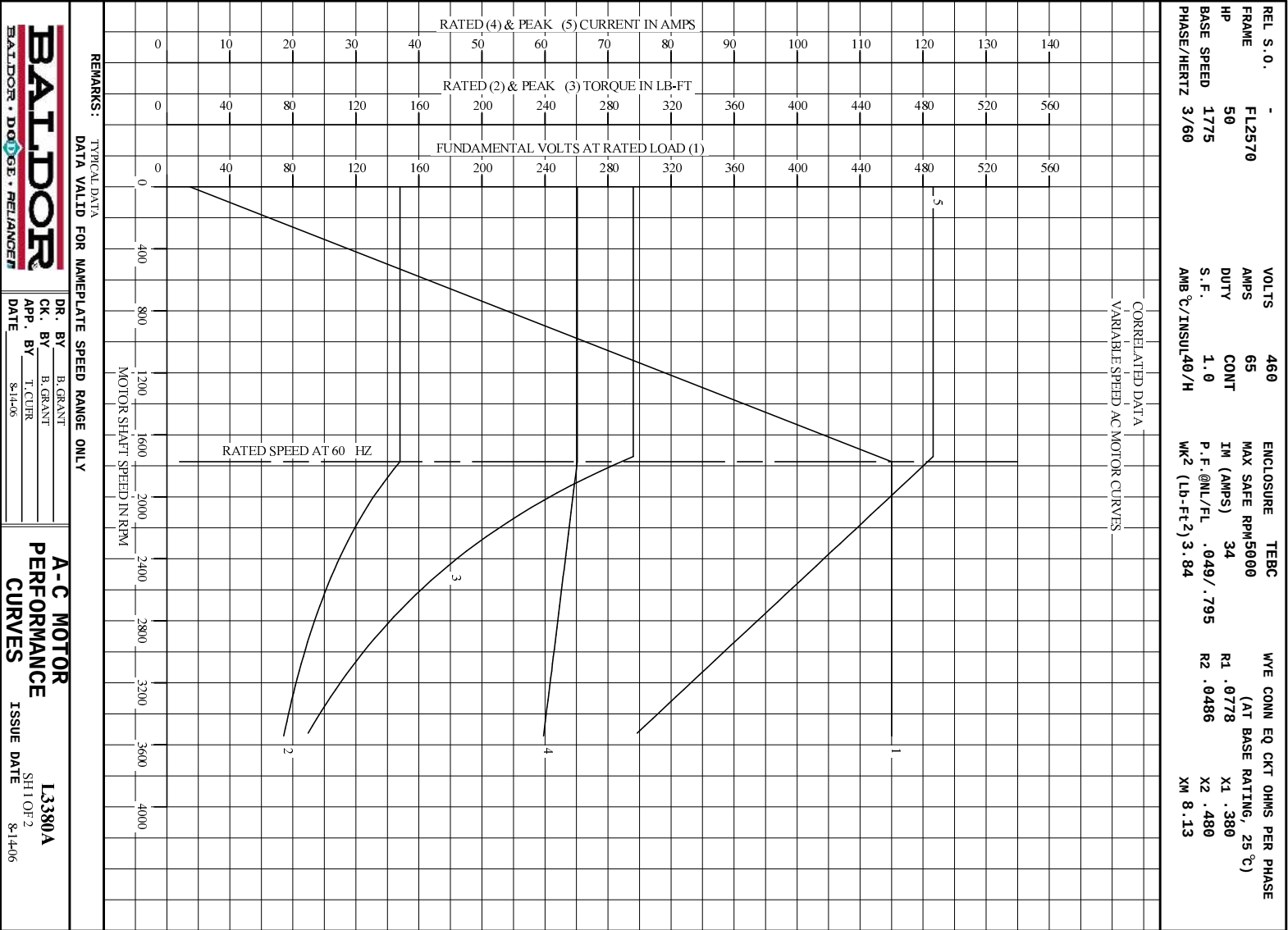
| BLOWER DATA | VOLTS | PH/HZ | FL AMPS | LR AMPS | FRAME | CFM |
|-------------|-------|-------|---------|---------|-------|-----|
|             |       |       |         |         |       |     |

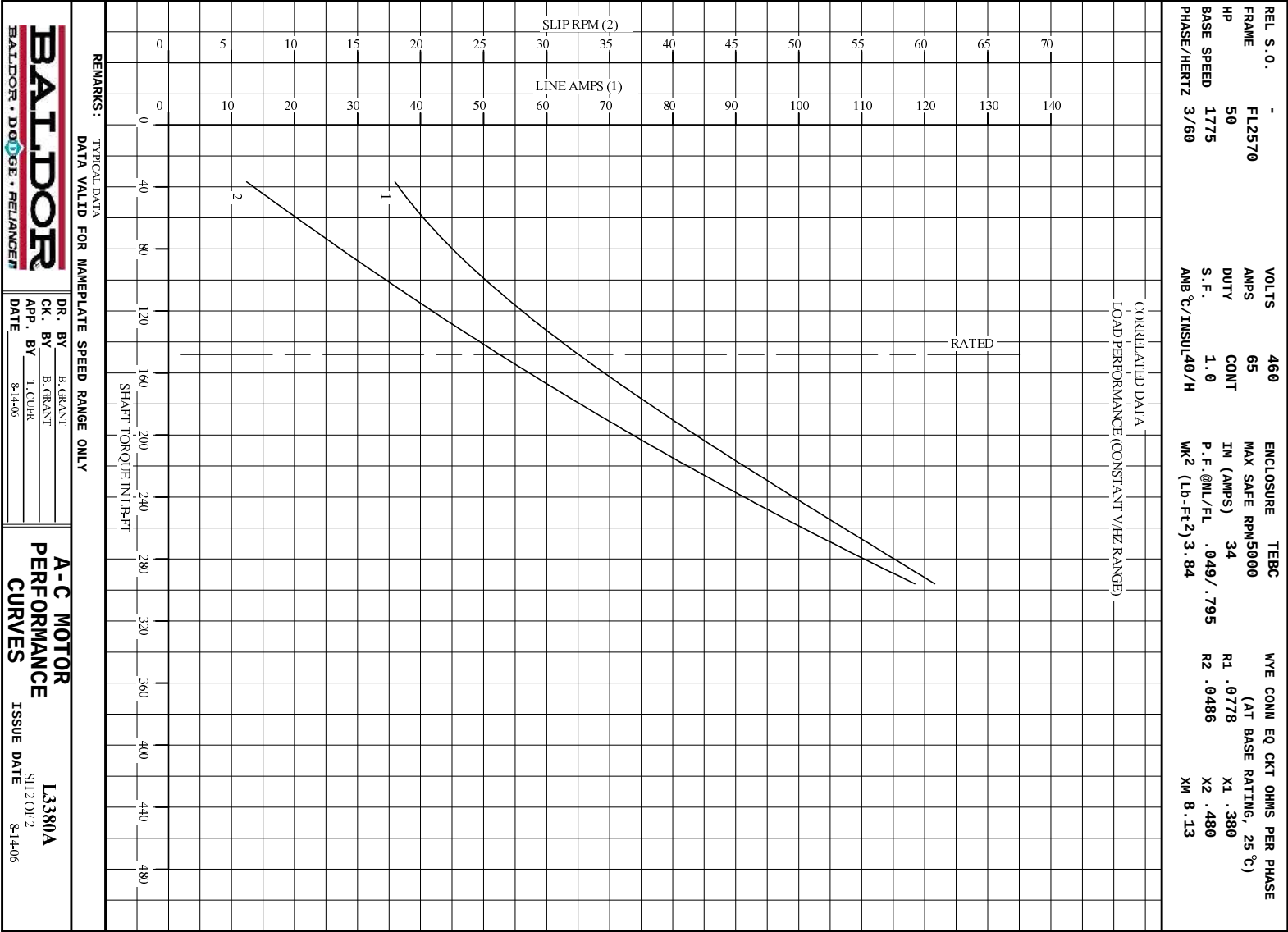
  

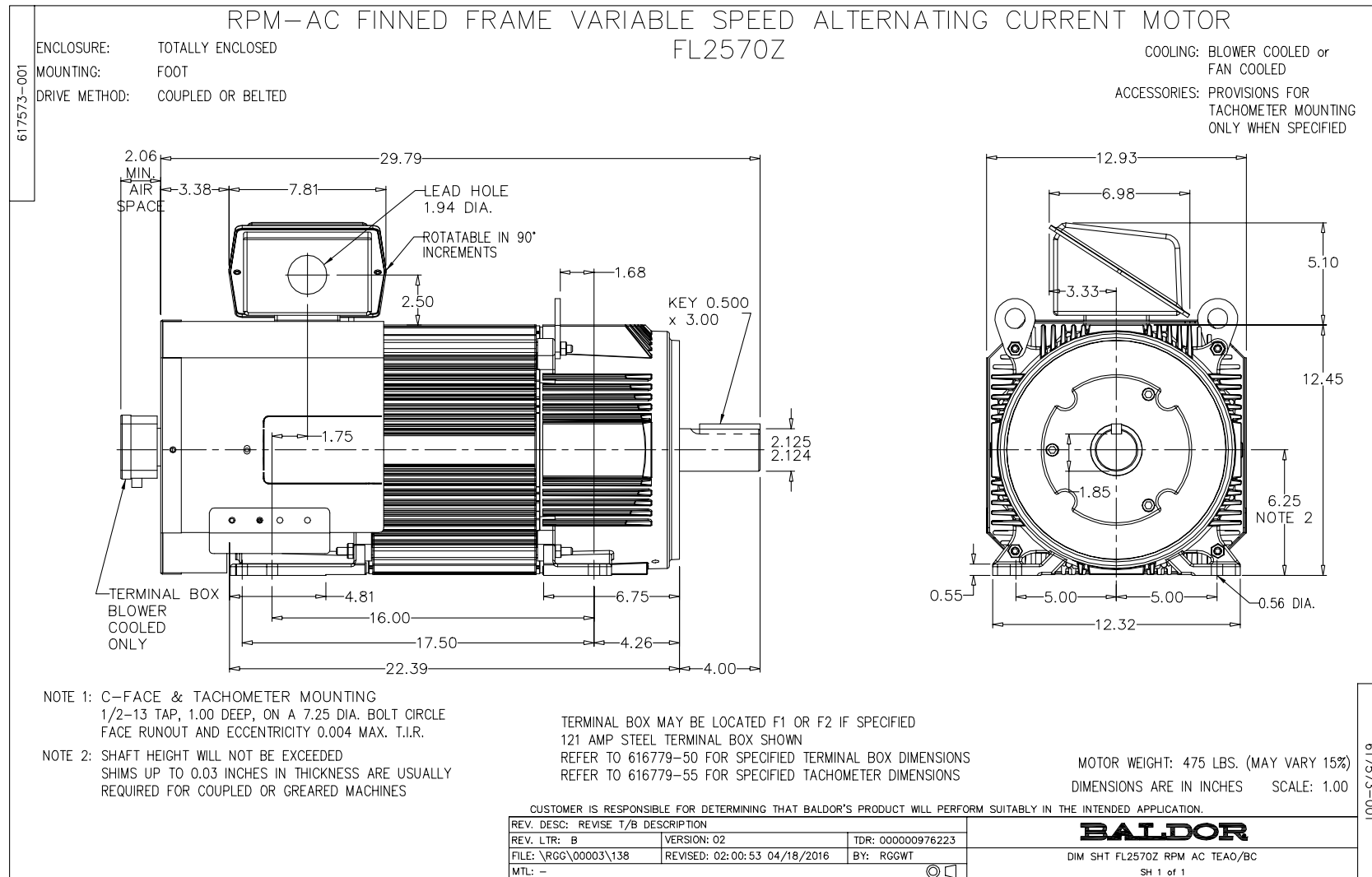
REMARKS: TYPICAL DATA  
CORRELATED DATA

|                                                                                   |  |                                                                                                   |                                                                          |
|-----------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
|  |  | DR. BY <u>B. GRANT</u><br>CK. BY <u>B. GRANT</u><br>App. BY <u>T. CUPR</u><br>DATE <u>8-14-06</u> | <b>A-C MOTOR PERFORMANCE DATA</b><br>L3380A<br>ISSUE DATE <u>8-14-06</u> |
|-----------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|







## 616779-050

SEE MOTOR D/S

ROTATION IN 90°

LEAD HOLE

TA

Y

XAB

T

XX

XY

OPTIONAL AUXILIARY CONDUIT BOX

| FRAME         | TYPE      | TERMINAL SHIP | AMPS | C/BOX      | Y    | TA   | T    | AA        |
|---------------|-----------|---------------|------|------------|------|------|------|-----------|
| FL180         | STEEL     | N             | 40   | 7063200034 | 5.00 | 1.82 | 3.00 | 1.12      |
| FL180         | STEEL     | Y/N           | 75   | 7063200034 | 6.12 | 2.36 | 4.38 | 1.75/2.00 |
| FL180         | STEEL     | N             | 208  | 7063200074 | 7.62 | 2.00 | 7.00 | 2.50/3.00 |
| FL180         | CAST IRON | Y/N           | 60   | 706320004C | 5.75 | 2.38 | 4.38 | 1.0 1AP   |
| FL180 & FL011 | MILL      | Y             | 100  | 706310006A | 7.75 | 2.50 | 4.40 | P029 /G16 |

[illegible]

|               |           |   |     |               |       |      |       |           |
|---------------|-----------|---|-----|---------------|-------|------|-------|-----------|
| FL250 & RL250 | STEEL     | N | 260 | 07/5452007/08 | 6.34  | 2.00 | 4.12  | 1.24      |
| FL250 & RL250 | STEEL     | N | 121 | 07/5452001/A  | 7.69  | 2.36 | 5.25  | 1.35      |
| FL250 & RL250 | STEEL     | N | 305 | 07/5452001/B  | 9.00  | 4.12 | 8.44  | 4.59      |
| FL250 & RL250 | CAST IRON | N | 100 | 07/6340002/8  | 7.25  | 2.50 | 5.45  | 1.5 TAP   |
| FL250 & RL250 | CAST IRON | N | 210 | 07/6350013/4  | 10.50 | 4.88 | 9.00  | 4.0 TAP   |
| FL16 & RL16   | MILL      | Y | 100 | 706310056A    | 7.75  | 2.20 | 5.40  | PG22/PG16 |
| FL250 & RL250 | MILL      | Y | 160 | 706310056B    | 9.00  | 3.06 | 5.40  | PG36/PG16 |
| FL250 & RL250 | MILL      | Y | 400 | 706310063B    | 14.39 | 7.43 | 12.15 | BLANK     |

|               |           |   |     |            |       |      |       |           |       |
|---------------|-----------|---|-----|------------|-------|------|-------|-----------|-------|
| F1280 & R1280 | STEEL     | N | 160 | 706320009A | 9.00  | 2.25 | 3.50  | 7.00      | 2.50  |
| F1280 & R1280 | STEEL     | N | 305 | 706320016A | 9.00  | 4.12 | 8.44  | 4.59      | 8.08  |
| F1280 & R1280 | STEEL     | N | 500 | 706320017A | 11.82 | 7.56 | 12.70 | 5.00      | 10.00 |
| F1280 & R1280 | CAST IRON | N | 100 | 706320013A | 10.50 | 4.88 | 9.00  | 4.00      | 7.00  |
| F1280 & R1280 | CAST IRON | N | 210 | 706320015A | 10.50 | 4.88 | 9.00  | 4.00      | 7.00  |
| F1280 & R1280 | CAST IRON | N | 510 | 706320004D | 15.00 | 7.56 | 12.81 | 5.0 TAP   | 10.00 |
| F1280 & R1280 | MILL      | Y | 100 | 706310056A | 7.75  | 2.30 | 4.40  | Pc36/Pg16 |       |
| F1280 & R1280 | MILL      | Y | 160 | 706310056B | 9.00  | 3.06 | 5.40  | Pc36/Pg16 |       |
| F1280 & R1280 | MILL      | Y | 160 | 706310056B | 9.00  | 3.06 | 5.40  | Pc36/Pg16 |       |
| F1280 & R1280 | MILL      | Y | 400 | 706310063B | 14.39 | 7.43 | 12.15 | BLANK     |       |

| OPTIMAL AUXILIARY CONJUGATE BOX DIMENSIONS (MAXIMUM) |      |      |      |             |                    |       |      |      |             |
|------------------------------------------------------|------|------|------|-------------|--------------------|-------|------|------|-------------|
| FRAME SIZE                                           |      | XX   | XY   | PART NUMBER | FRAME SIZE         |       | XX   | XY   | PART NUMBER |
| F1200TL132R200Q132                                   | 7.38 | 4.25 | 4.25 | 602007-26-A | F1200TL132R200Q132 | 10.88 | 8.00 | 8.00 | 706310-3-B  |
| F1250TL150R250Q150                                   | 8.44 | 4.25 | 4.25 | 602007-26-A | F1250TL150R250Q150 | 11.88 | 8.00 | 8.00 | 706310-3-B  |
| F1300TL180R300Q180                                   | 9.12 | 4.25 | 4.25 | 602007-26-A | F1300TL180R300Q180 | 12.62 | 8.00 | 8.00 | 706310-3-B  |

- TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

|                      |  |  |                              |                   |
|----------------------|--|--|------------------------------|-------------------|
| REV. LTR: D          |  |  | VERSION: 04                  | TDR: 000001047838 |
| FILE: \RGG\00003\692 |  |  | REVISED: 11:46:16 10/19/2017 | BY: RGGWT         |
| MTP: --              |  |  |                              |                   |

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180  
SH 1 of 1

422927-001

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

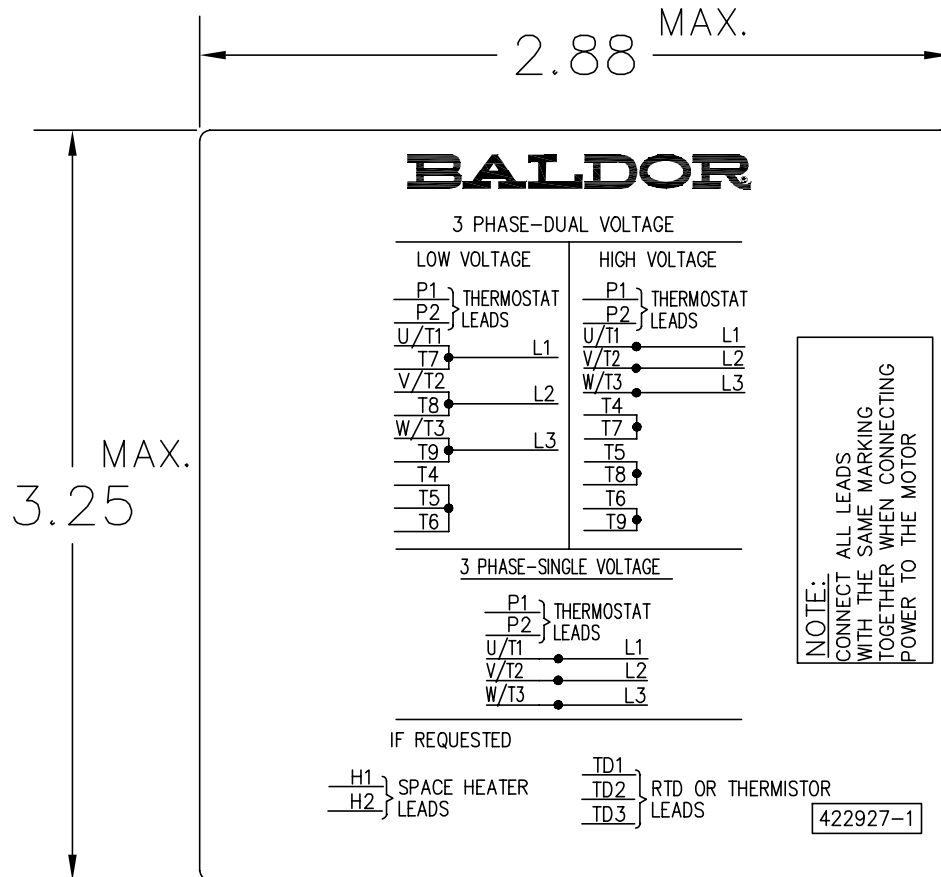
MATERIAL: CERAMATIC DGF-P4  
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS  
AND LINES TO BE BLACK  
ON WHITE BACKGROUND.

**NOTE:**  
CONNECT WITH THE TOGETHER POWER TEAM

422927-1

422927-001



|                                                       |
|-------------------------------------------------------|
| REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE |
|-------------------------------------------------------|

REV. LTR: B

VERSION: 02

|                   |
|-------------------|
| TDR: 000000788708 |
|-------------------|

FILE: \RGG\00000\203

REVISÉ: 08:09:29 03/04/2013

MTL: —

BY: RGGWT

# BALDOR.

EXTERNAL CONNECTION LABEL

SH 1 of 1