

BALDOR® • RELIANCE 

Product Information Packet

IDBRPM21254C

25 HP 1750 TEBC FL2162C (250TC)

| Part Detail | | | | | | | |
|-------------|----|-------------|------------|-------------|------------|---------------|------------|
| Revision: | - | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | L3306A | CD Diagram: | 422927-001 | Mfg Plant: | |
| Mech. Spec: | | Layout: | 617517-023 | Poles: | 04 | Created Date: | 04-10-2015 |
| Base: | | Eff. Date: | 04-13-2015 | Leads: | | | |

| Specs | | | |
|--------------------------------|---------------------|--|--|
| Catalog Number: | IDBRPM21254C | | |
| Enclosure: | TEBC | | |
| Frame: | FL2162CZ | | |
| Frame Material: | Exposed Laminations | | |
| Output @ Frequency: | 25.000 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: | 34.000 A @ 460.0 V | | |
| Duty Rating: | CONT | | |
| Feedback Device: | NO FEEDBACK | | |
| Frame Prefix: | FL | | |
| Heater Indicator: | No Heater | | |
| Insulation Class: | H | | |
| Mounting Arrangement: | F3 | | |

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

| | | | | | | | | | | | | |
|-----------------------|--------------|--|-----------------------|------|--------------------|--------------|-------------|--------------|--------------|--|------------------|---|
| Nameplate 000613006NS | | | | | | | | | | | | |
| | DUTY | | HP | | RPM | | AMPS | | VOLTS | | HZ | |
| | CONT | | 25 | | 1770 | | 34 | | 460 | | 60 | |
| | CONT | | 25 | | 3535 | | 31 | | 460 | | 120 | |
| | | | | | | | | | | | | |
| CAT.NO. | IDBRPM21254C | | | | SPEC. NO. | P21T0287 | | | | | | |
| SER.NO. | | | | | FR | FL 2162CZ | | INSUL | H | | | |
| PH. | 3 | | MAX SAFE SPEED | 5000 | | | AMB. | 40 | | | MIN. AMB. | 0 |
| DESIGN NO. | L3306A | | | | TYPE | | | | | | | |
| S.F. | 1.0 | | | | D.E. BRG. | 50BC03JPP30A | | | | | | |
| ENCL MOD | | | | | O.D.E. BRG. | 45BC02JPP30A | | | | | | |
| | | | | | | | | | | | | |

| Parts List | | |
|--------------|-------------------------------------|----------|
| Part Number | Description | Quantity |
| WS286741 | WS P21T0287 | 1.000 EA |
| RA282949 | RA P21T0287 | 1.000 EA |
| 000613006NS | RPM AC WITH CERTIFIED LOGO | 1.000 EA |
| 000692000FP | NP, WARNING LIFT INSTRUCTIONS | 1.000 EA |
| 000692000NH | LABEL DIRECTION AIR FL | 1.000 EA |
| 036170004EA | ROUND HEAD DRIVE SCREW | 4.000 EA |
| 411716004A | 219P039 - 219P039 - LA | 1.000 EA |
| 418018122A | LABEL | 2.000 EA |
| 418056062B | NP AC BLOWER DATA | 1.000 EA |
| 422927001 | C/D LABEL | 1.000 EA |
| 036100080KA | M10-1.50X 80MM HXSOCHDCS | 3.000 EA |
| 036500010AB | METRIC NUT M10-1.5PLTD400 | 4.000 EA |
| 036500010AB | METRIC NUT M10-1.5PLTD400 | 4.000 EA |
| 036610010AB | MHSLW M10 PLATED | 4.000 EA |
| 400638001AB | WASHER SPRING - 210 | 1.000 EA |
| 418057491A | LIFTING LUG | 2.000 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 |
| 609830005AN | TBOLT PURGE MTR | 4.000 EA |
| 807581003BAA | BRKT,FL210,DE 807581-1WCB | 1.000 EA |
| 807581004AAB | BRKT,FL210,DE 807581-2WCB | 1.000 EA |
| 032018004AK | HHCS 1/4-20X1/2 PLATED | 2.000 EA |
| 036000012HB | HHCS M6X12MM LONG PLATED | 3.000 EA |
| 036000045HB | MHHCS M6X45MM PLATED | 4.000 EA |

| Parts List (continued) | | |
|------------------------|---|----------|
| Part Number | Description | Quantity |
| 036620008AB | M6 METRIC EXT LOCKWASHER | 1.000 EA |
| 065564000B | GASK 250-280 | 1.000 EA |
| 075452000B | C/BOX, PAINTED 210-250 | 1.000 EA |
| 075453000A | CBOXC, PAINTED 250-280 | 1.000 EA |
| 406673002C | .75 CAP PLUG | 1.000 EA |
| 415000103A | T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT | 1.000 EA |
| 417733004AC | GASK C/BOX | 2.000 EA |
| 418018074A | GROUND LABEL G100 METRIC 160 D.C. | 1.000 EA |
| 418057260A | SCREW PHILLIPS PAN HD | 4.000 EA |
| 418057373A | SCREW SHEET METAL | 7.000 EA |
| 417077-141 | BLWR MTR | 1.000 EA |
| 708533003A | PLATE, BTM FAN/BLOWER | 2.000 EA |
| 708533050A | COVER, FAN | 1.000 EA |
| 708533051A | GRILL, FAN COVER | 1.000 EA |
| 000640000P | TAG WINDING THERMOST | 1.000 EA |
| 004824007K | SPECIAL PAINT | 0.100 EA |
| 034180022FA | KEY 3/8X3/8X2-3/4 L | 1.000 EA |
| 418010012J | CONDUIT BOX SPACER | 1.000 EA |

| | | | | | | |
|------------|--------|--------------|------|----------------|-----------|--|
| S/O | - | VOLTS | 460 | ENCLOSURE | TEBC | WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C) |
| FRAME | FL2162 | AMPS | 34 | MAX SAFE SPEED | 5000 | |
| HP | 25 | DUTY | CONT | IM (AMPS) | 19 | R1 .177 X1 .736 |
| BASE SPEED | 1771 | S.F. | 1.0 | P.F. @NL./FL | .066/.779 | R2 .107 X2 .887 |
| PHASE/HZ | 3/60 | AMB:°C/INSUL | 40/H | WK³ (lb.-ft³) | 1.92 | X3 .146 |


RATED FULL LOAD DATA

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|------------|------|------|--------------|------------|---------|------|
| BASE SPEED | 1771 | 25.0 | 74 | 460 | 60 | 33.8 |
| MAX SPEED | 3536 | 25.0 | 37 | 460 | 120 | 30.5 |
| MIN SPEED | 0 | 0 | 74 | 17.1 | .976 | 33.8 |

LOAD PERFORMANCE AT BASE SPEED

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|-----------|------|------|--------------|------------|---------|------|
| NO LOAD | 1800 | 0 | 0 | 460 | 60 | 18.1 |
| 1/4 | 1793 | 6.26 | 18 | 460 | 60 | 19.9 |
| 1/2 | 1786 | 12.5 | 37 | 460 | 60 | 23.2 |
| 3/4 | 1779 | 18.8 | 55 | 460 | 60 | 28.0 |
| FULL LOAD | 1771 | 25.0 | 74 | 460 | 60 | 33.8 |
| 0/L | 1734 | 49.0 | 148 | 460 | 60 | 61.6 |

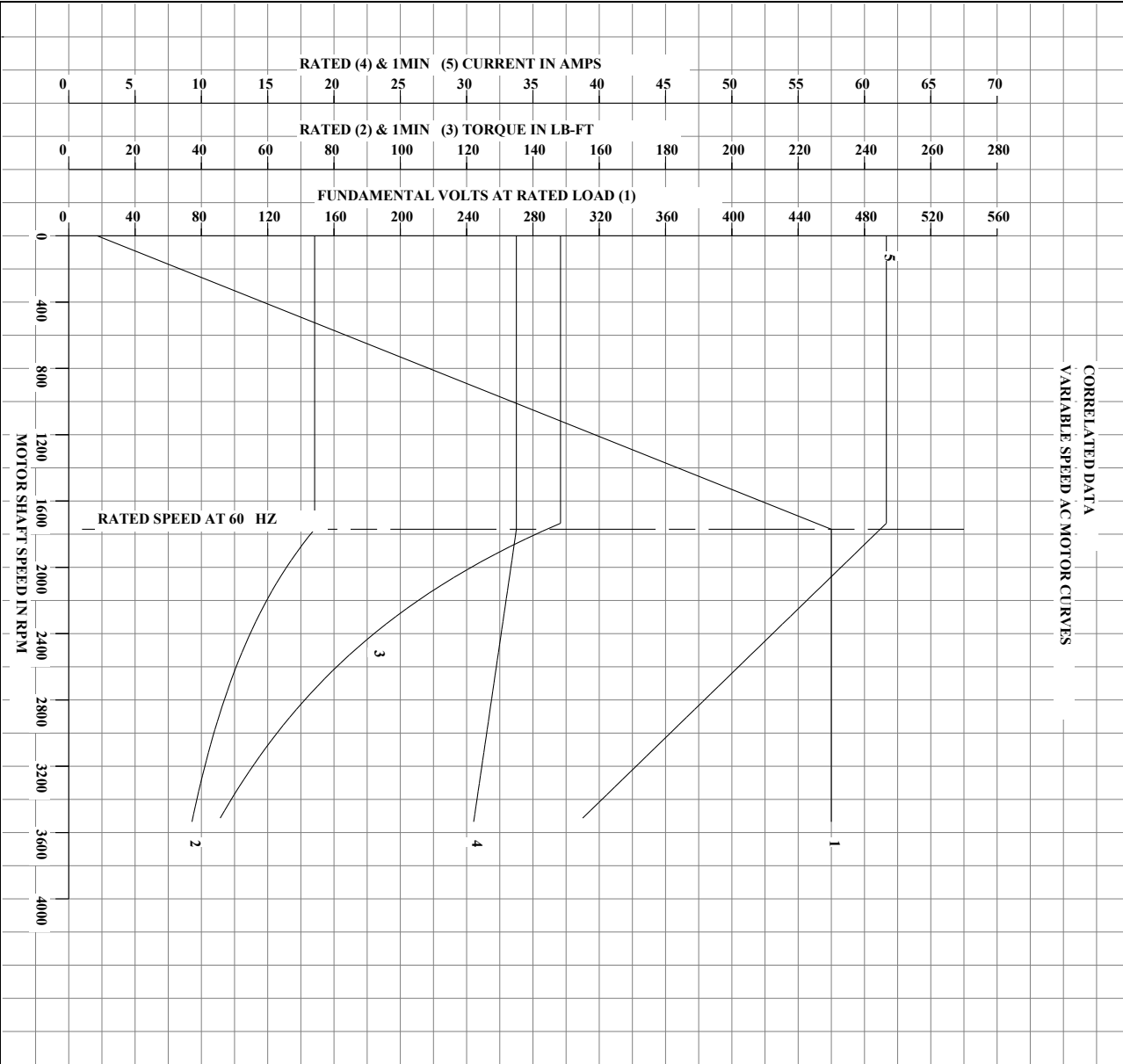
REMARKS:
TYPICAL DATA
CORRELATED DATA

| | | | |
|---|--|----------------------------------|---------------|
|  | DRAWN BY: B. GRANT | AC MOTOR PERFORMANCE DATA | L3306A |
| | CHECKED BY: B. GRANT APPROVED BY: T. CUER DATE: 6-5-06 | | |

USBAGRA

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| | | | | | | |
|------------|--------|------------------|------|---------------------------------------|-------------|---|
| S/O | - | VOLTS | 460 | ENCLOSURE | TEBC | WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C) |
| FRAME | FL2162 | AMPS | 34 | MAX SAFE SPEED | 5000 | R1 .177 X1 .736 |
| HP | 25 | DUTY | CONT | IM (AMPS) | 19 | R2 .107 X2 .887 |
| BASE SPEED | 1771 | S.F. | 1.0 | P.F. @ NL / FL | .066 / .779 | X3 .146 |
| PHASE/HZ | 3/60 | AMB. °C / INSUL. | 40/H | WK ₂ (LB-FT ²) | 1.92 | |



TYPICAL DATA. DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



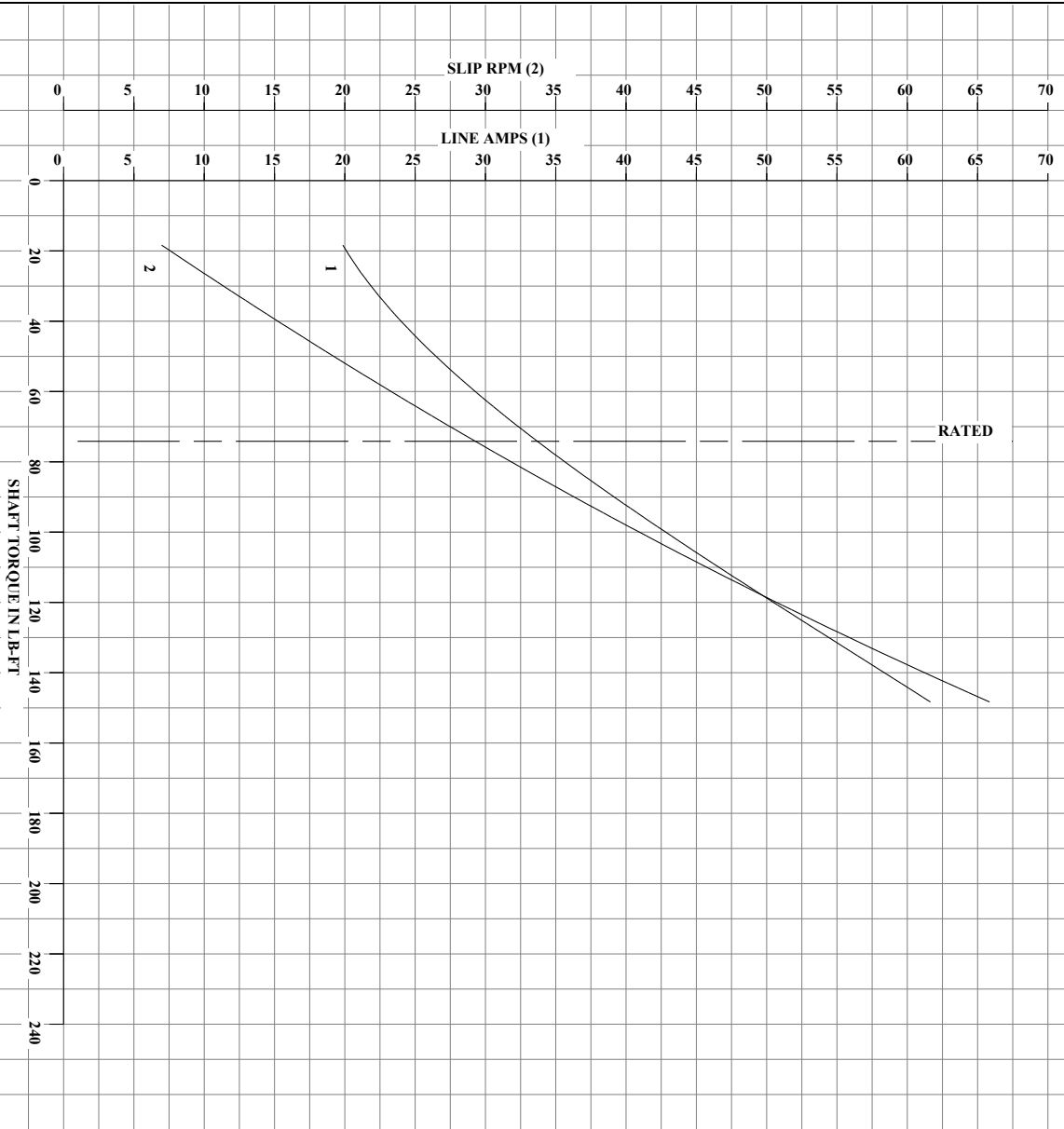
DRAWN BY: B. GRANT
 CHECKED BY: B. GRANT
 APPROVED BY: T. CLER
 DATE: 6-5-06

AC MOTOR
 PERFORMANCE
 DATA

L3306A
 ISSUE DATE: 8-6-19

| | | | | | | |
|------------|--------|------------------|------|---------------------------------------|-------------|---|
| S/O | - | VOLTS | 460 | ENCLOSURE | TEBC | WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C) |
| FRAME | FL2162 | AMPS | 34 | MAX SAFE SPEED | 5000 | R1 .177 X1 .736 |
| HP | 25 | DUTY | CONT | IM (AMPS) | 19 | R2 .107 X2 .887 |
| BASE SPEED | 1771 | S.F. | 1.0 | P.F. @ NL / FL | .066 / .779 | X3 .877 X4 .877 |
| PHASE/HZ | 3/60 | AMB. °C / INSUL. | 40/H | WK ₂ (LB-FT ²) | 1.92 | X5 .877 X6 .877 |

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/Hz RANGE)



TYPICAL DATA. DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DRAWN BY: B. GRANT
CHECKED BY: B. GRANT
APPROVED BY: T. CUEER
DATE: 6-5-06

AC MOTOR
PERFORMANCE
DATA

L3306A
ISSUE DATE: 8-6-19

USBAGRA

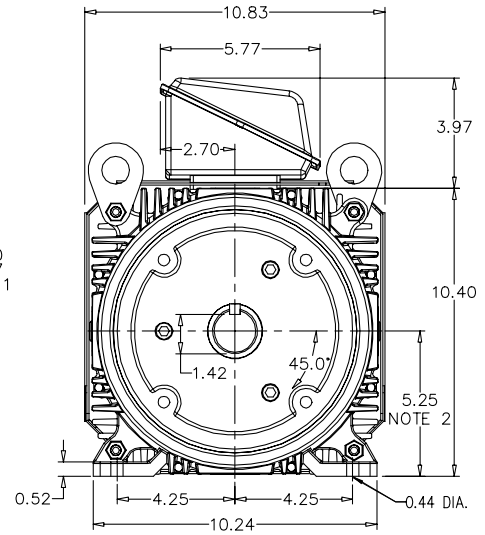
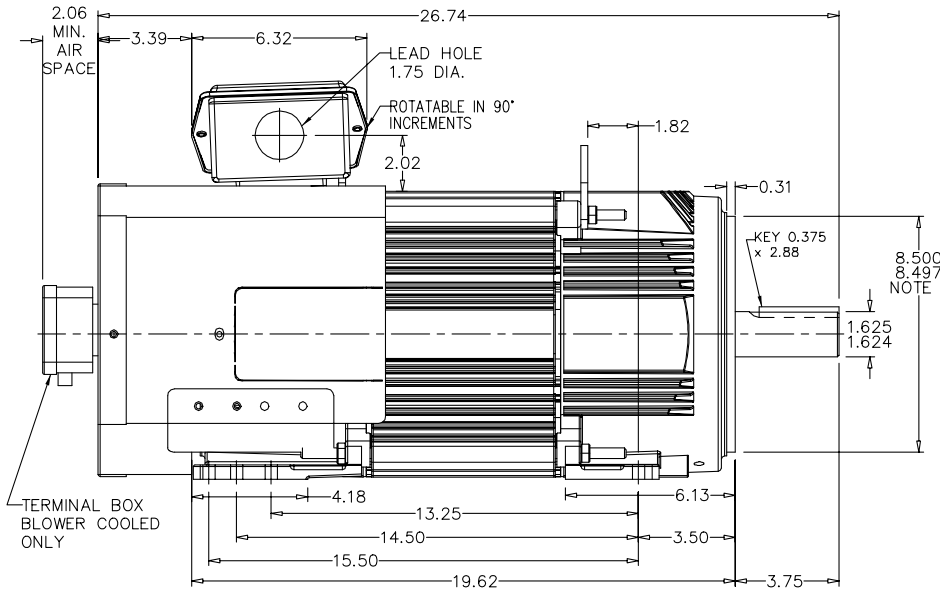
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617517-023

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING
CURRENT MOTOR
FL2162CZ

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 250TC C-FACE
DRIVE METHOD: COUPLED OR BELTED

COOLING: BLOWER COOLED or
FAN COOLED
ACCESSORIES: PROVISIONS FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED



NOTE 1: C-FACE & TACHOMETER MOUNTING
1/2-13 TAP, 1.00 DEEP, ON A 7.25 DIA. BOLT CIRCLE
FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

NOTE 2: SHAFT HEIGHT WILL NOT BE EXCEEDED
SHIMS UP TO 0.03 INCHES IN THICKNESS ARE USUALLY
REQUIRED FOR COUPLED OR GREARED MACHINES

TERMINAL BOX MAY BE LOCATED F1 OR F2 IF SPECIFIED
61 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 290 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617517-023

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THIS PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

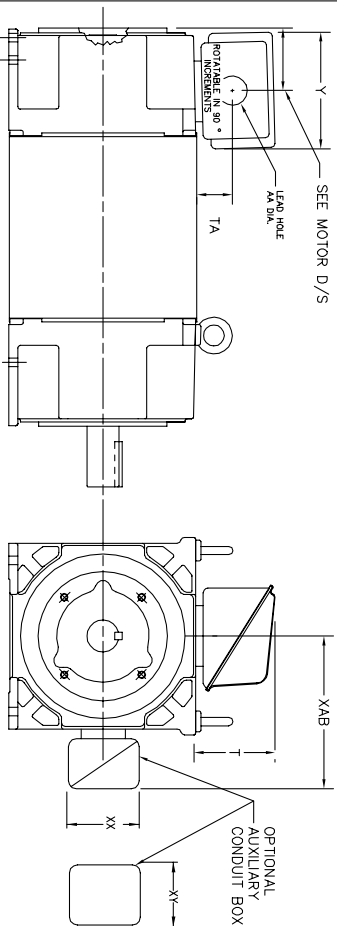
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BALDOR

DIM SHT RPMAC TEBC/FC FL2162CZ FT MT PROV FOR TACH
SH 1 of 1

INDUSTRIAL ALTERNATING CURRENT MOTORS RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS
NEMA FRAMES FL210 thru FL280 and IEC FRAMES RDL132 thru RDL180
NEMA FRAMES FL180 thru FL280 and IEC FRAMES FDL112 thru FDL180



| FRAME | TYPE | TERMINAL STRIP | AMPS | C/BOX | Y | TA | T | AA |
|---------------|-----------|----------------|------|------------|------|------|------|-----------|
| FL180 | STEEL | N | 40 | 706320003A | 5.00 | 1.62 | 3.00 | 1.12 |
| FL210 & RL210 | STEEL | N | 75 | 706320005A | 6.12 | 2.38 | 4.38 | 1.75/2.00 |
| FL180 | STEEL | N | 208 | 706320007A | 7.62 | 2.00 | 7.00 | 2.50/3.00 |
| FL180 & FDL11 | CAST IRON | Y/N | 60 | 706320004C | 5.75 | 2.38 | 4.38 | 1.0 TAP |
| FL180 & FDL11 | MILL | Y | 100 | 706310056A | 7.75 | 2.30 | 4.40 | PG29/PG16 |

| | | | | | | | | |
|---------------|-----------|---|-----|-------------|------|------|------|-----------|
| FL210 & RL210 | STEEL | N | 61 | 0754520008 | 6.34 | 2.00 | 4.12 | 1.75 |
| FL210 & RL210 | STEEL | N | 121 | 075454001AJ | 7.69 | 2.38 | 5.25 | 1.94 |
| FL210 & RL210 | STEEL | N | 305 | 706320016A | 9.00 | 4.12 | 8.44 | 4.59 |
| FL210 & RL210 | CAST IRON | N | 110 | 0754600628 | 7.25 | 2.50 | 5.25 | 1.5 TAP |
| FL210 & RL210 | MILL | Y | 100 | 706310225R | 7.75 | 2.30 | 4.40 | PG29/PG16 |
| FL210 & RL210 | MILL | Y | 160 | 706310226R | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FDL13 & RDL13 | MILL | Y | 160 | 706310056B | 9.00 | 3.06 | 5.40 | PG36/PG16 |

| | | | | | | | | |
|---------------|-----------|---|-----|-------------|-------|------|-------|-----------|
| FL250 & RL250 | STEEL | N | 61 | 0754520008 | 6.34 | 2.00 | 4.12 | 1.75 |
| FL250 & RL250 | STEEL | N | 121 | 075454001AJ | 7.69 | 2.38 | 5.25 | 1.94 |
| FL250 & RL250 | STEEL | N | 305 | 706320016A | 9.00 | 4.12 | 8.44 | 4.59 |
| FL250 & RL250 | CAST IRON | N | 110 | 0754600628 | 7.25 | 2.50 | 5.25 | 1.5 TAP |
| FL250 & RL250 | CAST IRON | N | 210 | 706320013A | 10.50 | 4.88 | 9.00 | 4.0 TAP |
| FL250 & RL250 | CAST IRON | N | 510 | 706320014D | 15.00 | 7.56 | 12.81 | 5.0 TAP |
| FL16 & RDL16 | MILL | Y | 100 | 706310056A | 7.75 | 2.30 | 4.40 | PG29/PG16 |
| FL250 & RL250 | MILL | Y | 160 | 706310225R | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FL16 & RDL16 | 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 |

| | | | | | | | | |
|---------------|-----------|---|-----|------------|-------|------|-------|-----------|
| FL280 & RL280 | STEEL | N | 160 | 706320009A | 7.25 | 3.50 | 7.06 | 2.50 |
| FL280 & RL280 | STEEL | N | 305 | 706320016A | 9.00 | 4.12 | 8.44 | 4.59 |
| FL280 & RL280 | STEEL | N | 500 | 702658001C | 14.62 | 7.56 | 12.70 | 5.00 |
| FL280 & RL280 | CAST IRON | N | 140 | 706320012B | 9.25 | 4.81 | 8.58 | 3.0 TAP |
| FL280 & RL280 | CAST IRON | N | 210 | 706320013A | 10.50 | 4.88 | 9.00 | 4.0 TAP |
| FL280 & RL280 | CAST IRON | N | 510 | 706320014D | 15.00 | 7.56 | 12.81 | 5.0 TAP |
| FL16 & RDL16 | MILL | Y | 100 | 706310056A | 7.75 | 2.30 | 4.40 | PG29/PG16 |
| FL16 & RDL16 | MILL | Y | 160 | 706310056B | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FL280 & RL280 | MILL | Y | 160 | 706310056B | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FL16 & RDL16 | MILL | Y | 400 | 706310063B | 14.39 | 7.43 | 12.15 | BLANK |

| FRAME SIZE | OPTIMAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM) | | | | | | | | |
|-------------------------|--|------|------|--------------|-------------------------|-------|------|------|-------------|
| | XAB | XX | XY | PART NUMBER | FRAME SIZE | XAB | XX | XY | PART NUMBER |
| FL210/FL180/RL210/VL132 | 7.38 | 4.25 | 4.25 | 603C007-26-A | FL210/FL180/RL210/VL132 | 10.88 | 8.00 | 8.00 | 706310-3-B |
| FL250/FL160/RL250/VL160 | 8.44 | 4.25 | 4.25 | 603C007-26-A | FL250/FL160/RL250/VL160 | 11.88 | 8.00 | 8.00 | 706310-3-B |
| FL280/FL180/RL280/VL180 | 9.12 | 4.25 | 4.25 | 603C007-26-A | FL280/FL180/RL280/VL180 | 12.62 | 8.00 | 8.00 | 706310-3-B |

- (1) TAP CONDUIT
- (2) TAP PIPE TAP
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
- (4) 2" DN -5A or 1" TAP DN -4C

TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM SIDE. LEAD IN AND LEAD OUT DIMENSIONS SPECIFIED IN BOX LOCATED ON TYP WHEN SPECIFIED.

050-667919

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

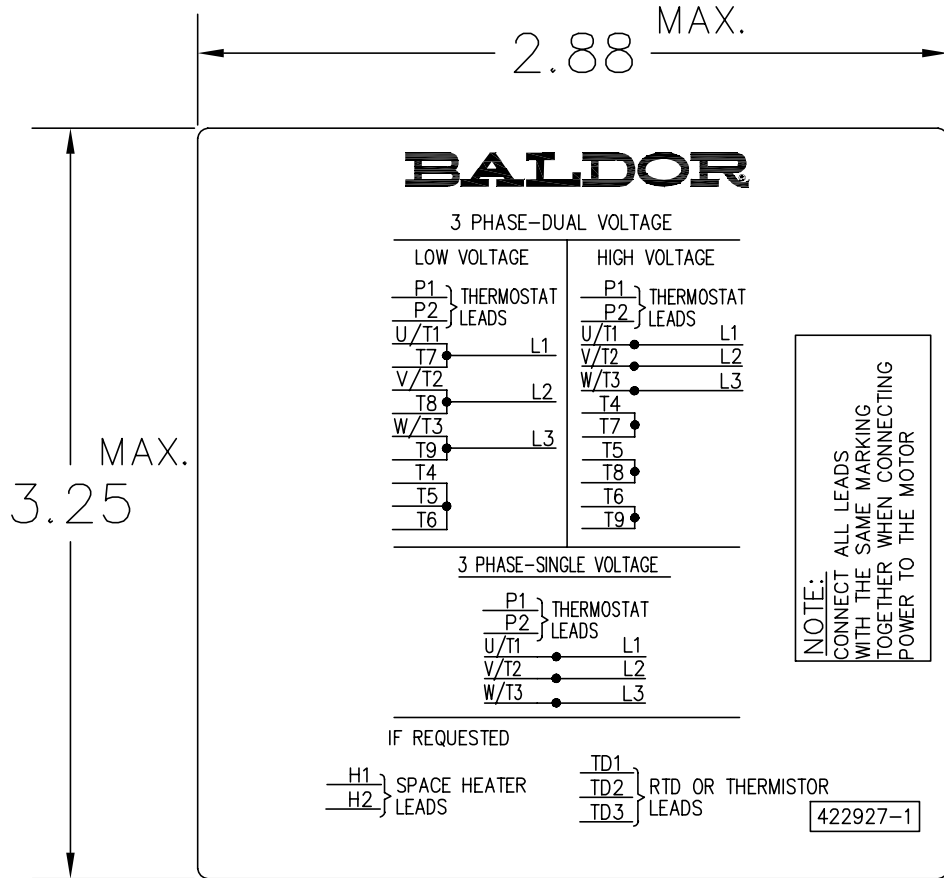
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| FILE: \RGG\00003\692 | | |
| MTL: 1 | | |

BALDOR - RELIANCE®

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.

422927-001

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

BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1

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