ABB BALDOR RELIANCE

# Customer information packet

IDDRPM281256

125HP, 1150, 460V, RL2898, DPFV, F1

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10/10/2026 12:36:51 AM

## Specifications

| | |
|---|---|
| **Enclosure** | DPFV |
| **Frame** | RL2898Z |
| **Frame Material** | Exposed Laminations |
| **Frequency** | 40.00 Hz |
| **Output @ Frequency** | 125.000 HP @ 40 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1200 RPM @ 40 HZ |
| **Voltage @ Frequency** | 460.0 V @ 40 HZ |
| **Agency Approvals** | CCSA US |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Base Indicator** | Rigid |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Current @ Voltage** | 150.900 A @ 460.0 V |
| **Duty Rating** | CONT |
| **Feedback Device** | NO FEEDBACK |
| **Frame Prefix** | RL |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 150.9 a |
| **Insulation Class** | H |
| **IP Rating** | NONE |
| **Motor Standards** | NEMA |
| **Mounting Arrangement** | F1 |
| **Overall Length** | 42.43 IN |
| **Product Family** | General Industrial |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | Standard |
| **Service Factor** | 1.00 |
| **Shaft Diameter** | 2.624 IN |
| **Shaft Ground Indicator** | Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Speed** | 1165 rpm |
| **Starting Method** | Full Voltage |

## Part Detail

| | |
|---|---|
| **Revision** | B |
| **Type** | AC |
| **Mech. spec.** | |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | L1591A |
| **Layout** | 617249-051 |
| **Eff. date** | 03-24-2022 |
| **CD Diagram** | 422927-001 |
| **Poles** | 04 |
| **Leads** | |
| **Proprietary** | False |
| **Created date** | 10-29-2021 |

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

**Nameplate**

**000613006MY**

| DUTY | HP | RPM | AMPS | VOLTS | HZ |
|---|---|---|---|---|---|
| CONT | 125 | 1165 | 150.9 | 460 | 40 |
| CONT | 125 | 1970 | 159 | 460 | 68 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CAT.NO.** | IDDRPM281256 | | **SPEC. NO.** | R28-A000-0373 | | | |
| **SER.NO** | | **FR** | RL2898Z | **INSUL** | H | | |
| **PH.** | 3 | **MAX SAFE SPEED** | 5000 | **AMB.** | 40 | **MIN. AMB.** | -25 |
| **DESIGN NO.** | L1591A | **TYPE** | | **ENCL.** | DPG-FV | | |
| **S.F.** | 1.00 | **D.E. BRG.** | 75BC02J30X | | | | |
| **ENCL MOD** | | **O.D.E. BRG.** | 55BC02J30X | | | | |
| | IP23 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| REL S.O. | – | VOLTS | 460 | ENCLOSURE | DPFV | WYE CONN EQ CKT OHMS PER PHASE | | | |
| FRAME | RL2898 | AMPS | 151 | MAX SAFE RPM | 5000 | (AT BASE RATING, 25 °C) | | | |
| HP | 125 | DUTY | CONT | IM (AMPS) | 48 | R1 | .0460 | X1 | .223 |
| BASE SPEED | 1165 | S.F. | 1.0 | P.F.@NL/FL | .055/.870 | R2 | .0346 | X2 | .239 |
| PHASE/HERTZ | 3/40 | AMB °C/INSUL | 40/H | $WK^2$ ($Lb-Ft^2$) | 11.1 | | | XM | 5.66 |

## RATED FULL LOAD DATA

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|---|---|---|---|---|---|---|
| BASE SPEED | 1167 | 125 | 562 | 460 | 40 | 151 |
| MAX SPEED | 1969 | 125 | 333 | 460 | 67.8 | 157 |
| MIN SPEED | 0 | 0 | 0 | 21.4 | 1.10 | 151 |

## LOAD PERFORMANCE AT BASE SPEED

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|---|---|---|---|---|---|---|
| NO LOAD | 1200 | 0 | 0 | 460 | 40 | 47.0 |
| 1/4 | 1193 | 31.3 | 138 | 460 | 40 | 59.2 |
| 1/2 | 1185 | 62.6 | 278 | 460 | 40 | 84.3 |
| 3/4 | 1177 | 93.7 | 418 | 460 | 40 | 115 |
| FULL LOAD | 1167 | 125 | 562 | 460 | 40 | 151 |
| O/L | 1144 | 184 | 844 | 460 | 40 | 233 |

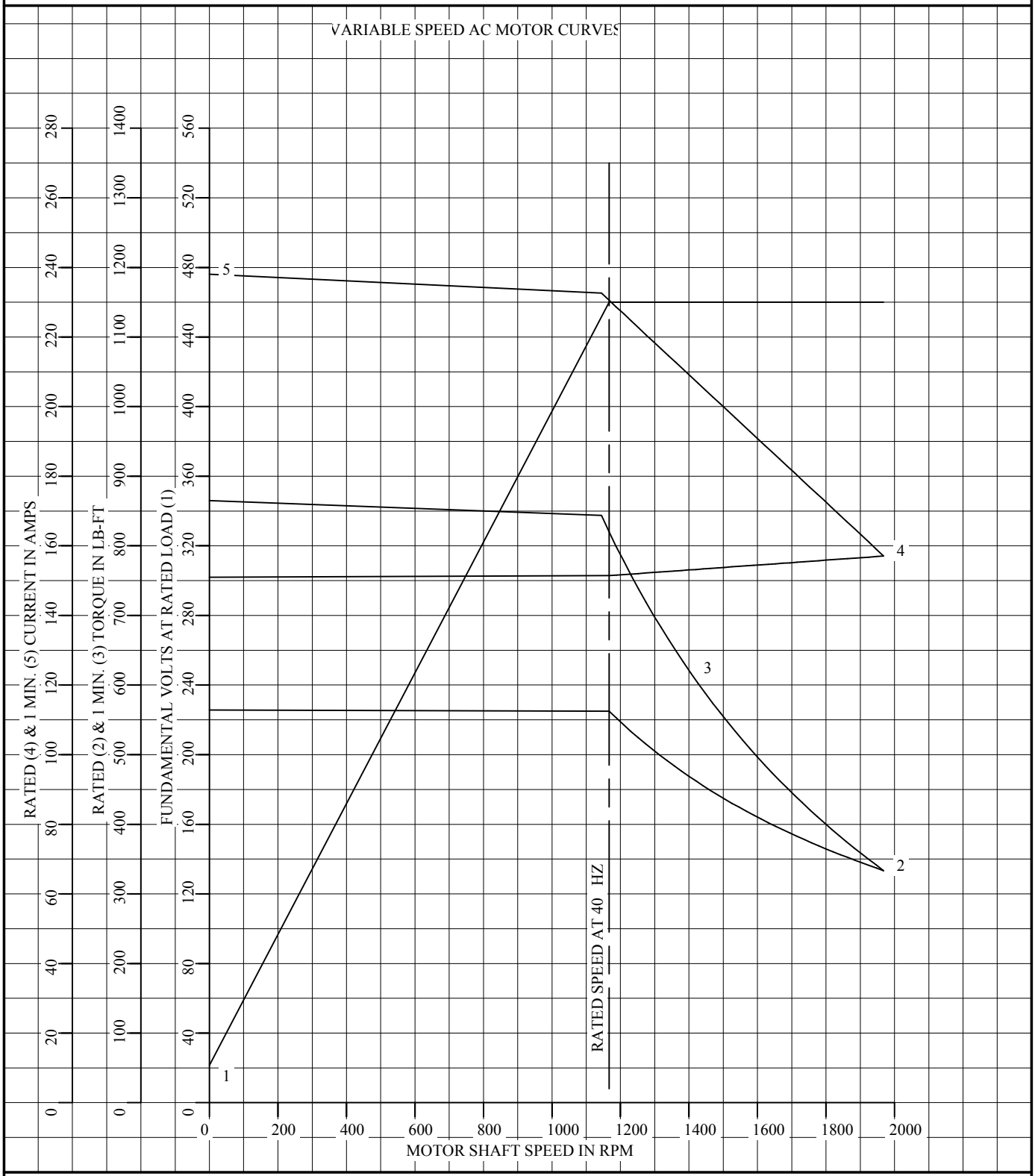
REMARKS: TYPICAL DATA

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY M. ORDERS
CK. BY B. GRANT
APP. BY T. EVON
DATE 11-8-99

A-C MOTOR PERFORMANCE DATA L1591A
ISSUE DATE 11-8-99

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | DPFV | WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 ℃) | |
| FRAME | RL2898 | AMPS | 151 | MAX SAFE RPM | 5000 | | |
| HP | 125 | DUTY | CONT | IM (AMPS) | 48 | R1 .0460 | X1 .223 |
| BASE SPEED | 1165 | S.F. | 1.0 | P.F.@NL/FL | .055/.870 | R2 .0346 | X2 .239 |
| PHASE/HERTZ | 3/40 | AMB ℃/INSUL | 40/H | WK$^2$ (Lb-Ft$^2$) | 11.1 | | XM 5.66 |




REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

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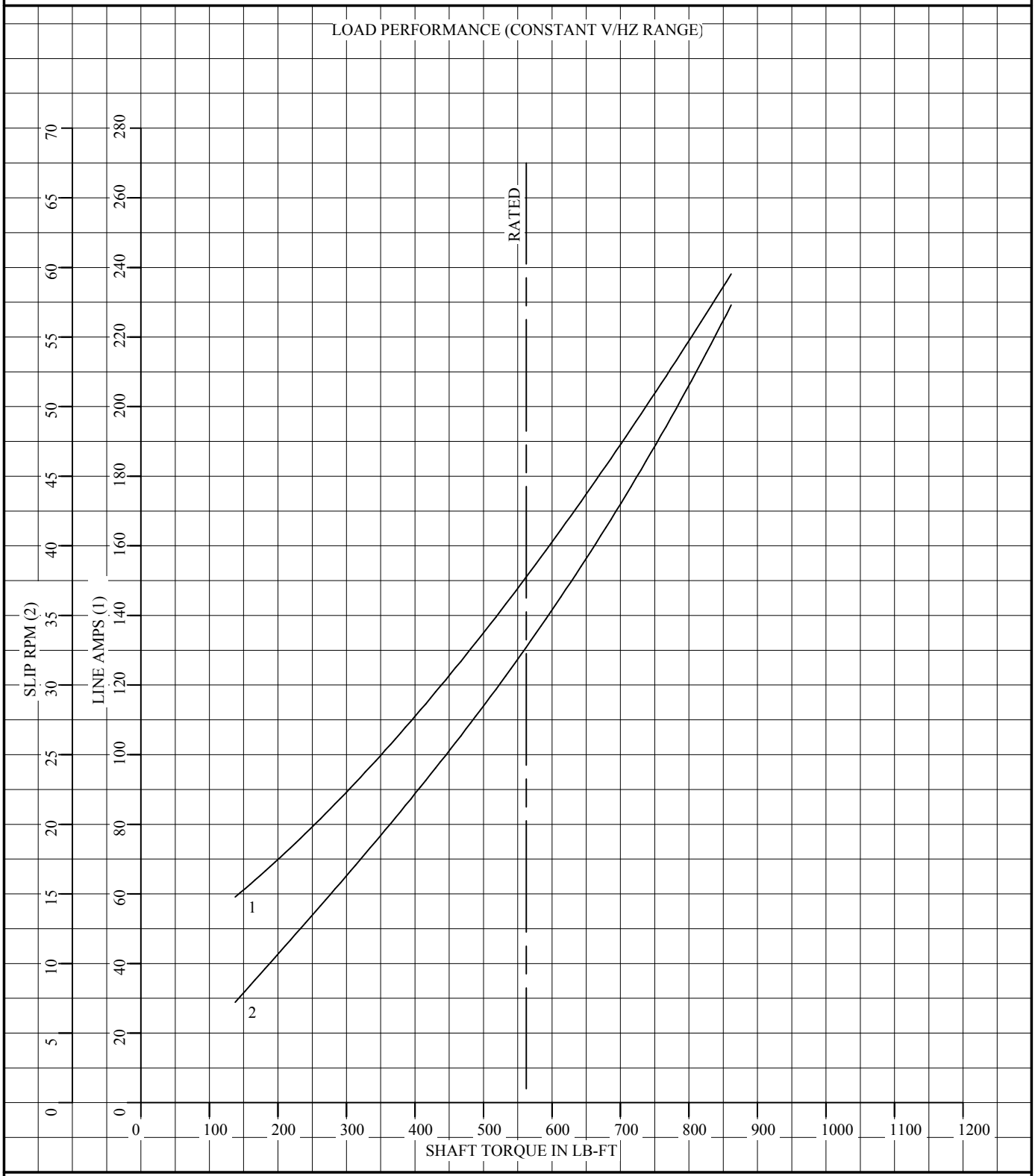
CK. BY B. GRANT
APP. BY T. EVON
DATE 11-8-99

A-C MOTOR PERFORMANCE CURVES

L1591A
SH 1 OF 2
ISSUE DATE 11-8-99

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | DPFV | WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 °C) | |
| FRAME | RL2898 | AMPS | 151 | MAX SAFE RPM | 5000 | | |
| HP | 125 | DUTY | CONT | IM (AMPS) | 48 | R1 .0460 | X1 .223 |
| BASE SPEED | 1165 | S.F. | 1.0 | P.F.@NL/FL | .055/.870 | R2 .0346 | X2 .239 |
| PHASE/HERTZ | 3/40 | AMB °C/INSUL | 40/H | WK$^2$ (Lb-Ft$^2$) | 11.1 | | XM 5.66 |




REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

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| | |
|---|---|
| DR. BY | M. ORDERS |
| CK. BY | B. GRANT |
| APP. BY | T. EVON |
| DATE | 11-8-99 |

A-C MOTOR PERFORMANCE CURVES

L1591A
SH 2 OF 2
ISSUE DATE 11-8-99

# RPMAC VARIABLE SPEED ALTERNATING CURRENT MOTOR
## RL & URL2898Z

617249-051

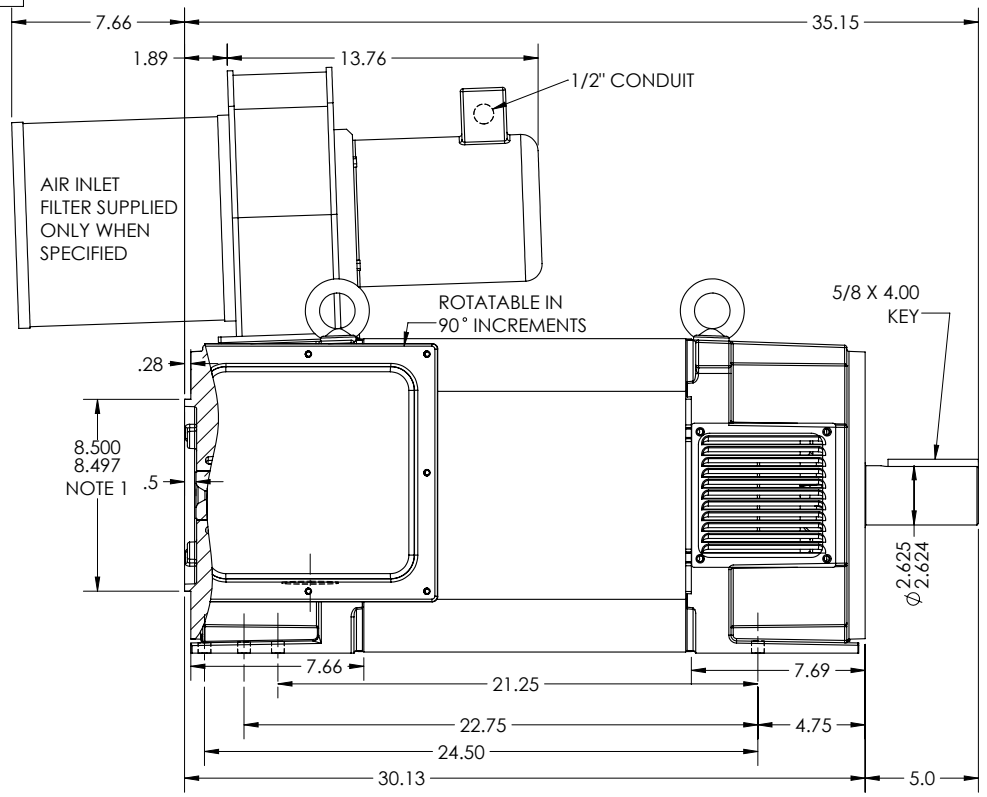
ENCLOSURE: DRIP PROOF

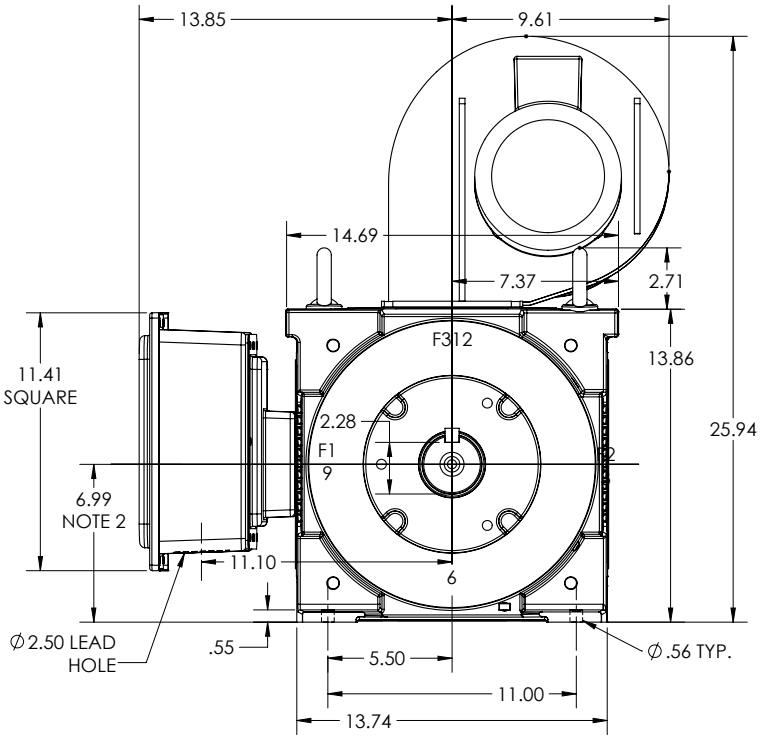
MOUNTING: FOOT

DRIVE METHOD: COUPLED OR BELTED

COOLING: FORCE VENTILATED

ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED




NOTE 1 TACHOMETER MOUNTING
1/2-13 TAP .88 DEEP, ON A 7.25 DIA. BOLT CIRCLE FACE RUNOUT AND ECCENTRICITY .004 MAX T.I.R.

NOTE 2 SHAFT HEIGHT WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.

NOTE 3 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .002 T.I.R. UP TO AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 TO 5 INCH DIA.

235 AMP MILL TERMINAL BOX SHOWN

MOTOR WEIGHT 930 LBS. (MAY VARY 15%)

DIMENSIONS ARE IN INCHES SCALE 1:1

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

| | | | |
|---|---|---|---|
| REV. DESC: CORRECT NOTE 1 | | | |
| REV: B | VERSION: 02 | REVISED: 03:06:35 01/17/2023 | TDR: 000001202572 |
| MODEL NO. 617249-051 | | | REF: - |
| BY: USWATUR | | | B |

BALDOR - RELIANCE®

DIM SHT RPMAC DPFV RL & URL2898Z F1 MILL BOX

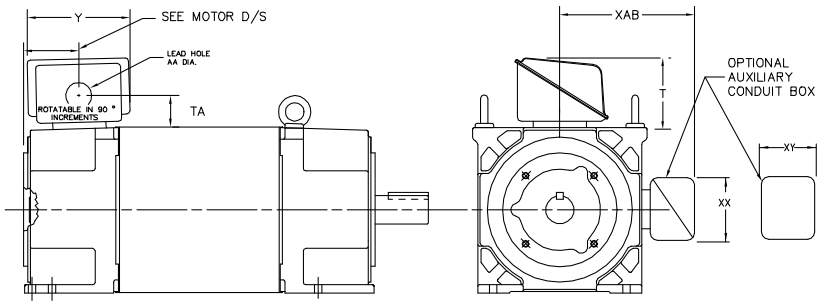
617249-051

616779-050

# INDUSTRIAL ALTERNATING CURRENT MOTORS
## RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS

NEMA FRAMES RL210 thru RL280 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 |
| FL180 | STEEL | Y/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 | 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 | 075452000B | 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 | 075460062B | 7.25 | 2.50 | 5.25 | 1.5 TAP |
| FL210 & RL210 FDL13 & RDL13 | MILL | Y | 100 | 706310225R 706310056A | 7.75 | 2.30 | 4.40 | PG29/PG16 |
| FL210 & RL210 FDL13 & RDL13 | MILL | Y | 160 | 706310226R 706310056B | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FL210 & RL210 FDL13 & RDL13 | MILL | Y/N | 235 | 706310637A | 11.42 | 4.00 | 6.72 | 2.50 |
| FL250 & RL250 | STEEL | N | 61 | 075452000B | 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 | 075460062B | 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 FDL16 & RDL16 | MILL | Y | 100 | 706310225R 706310056A | 7.75 | 2.30 | 4.40 | PG29/PG16 |
| FL250 & RL250 FDL16 & RDL16 | MILL | Y | 160 | 706310226R 706310056B | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FL250 & RL250 FDL16 & RDL16 | MILL | Y/N | 235 | 706310637A | 11.42 | 4.00 | 6.72 | 2.50 |
| FL250 & RL250 FDL16 & RDL16 | 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 | 8.56 | 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 |
| FL280 & RL280 FDL18 & RDL18 | MILL | Y | 100 | 706310056A | 7.75 | 2.30 | 4.40 | PG29/PG16 |
| FL280 & RL280 FDL18 & RDL18 | MILL | Y | 160 | 706310056B | 9.00 | 3.06 | 5.40 | PG36/PG16 |
| FL280 & RL280 FDL18 & RDL18 | MILL | Y/N | 235 | 706310637A | 11.42 | 4.00 | 6.72 | 2.50 |
| FL280 & RL280 FDL18 & RDL18 | MILL | Y | 400 | 706310063B | 14.39 | 7.43 | 12.15 | BLANK |

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)

| FRAME SIZE | XAB | XX | XY | PART NUMBER | FRAME SIZE | XAB | XX | XY | PART NUMBER |
|---|---|---|---|---|---|---|---|---|---|
| FL210/FDL132/RL210/RDL132 | 7.38 | 4.25 | 4.25 | 602007-26-A | FL210/FDL132/RL210/RDL132 | 10.88 | 8.00 | 8.00 | 706310-3-B |
| FL250/FDL160/RL250/RDL160 | 8.44 | 4.25 | 4.25 | 602007-26-A | FL250/FDL160/RL250/RDL160 | 11.88 | 8.00 | 8.00 | 706310-3-B |
| FL280/FDL180/RL280/RDL180 | 9.12 | 4.25 | 4.25 | 602007-26-A | FL280/FDL180/RL280/RDL180 | 12.62 | 8.00 | 8.00 | 706310-3-B |

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

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.

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

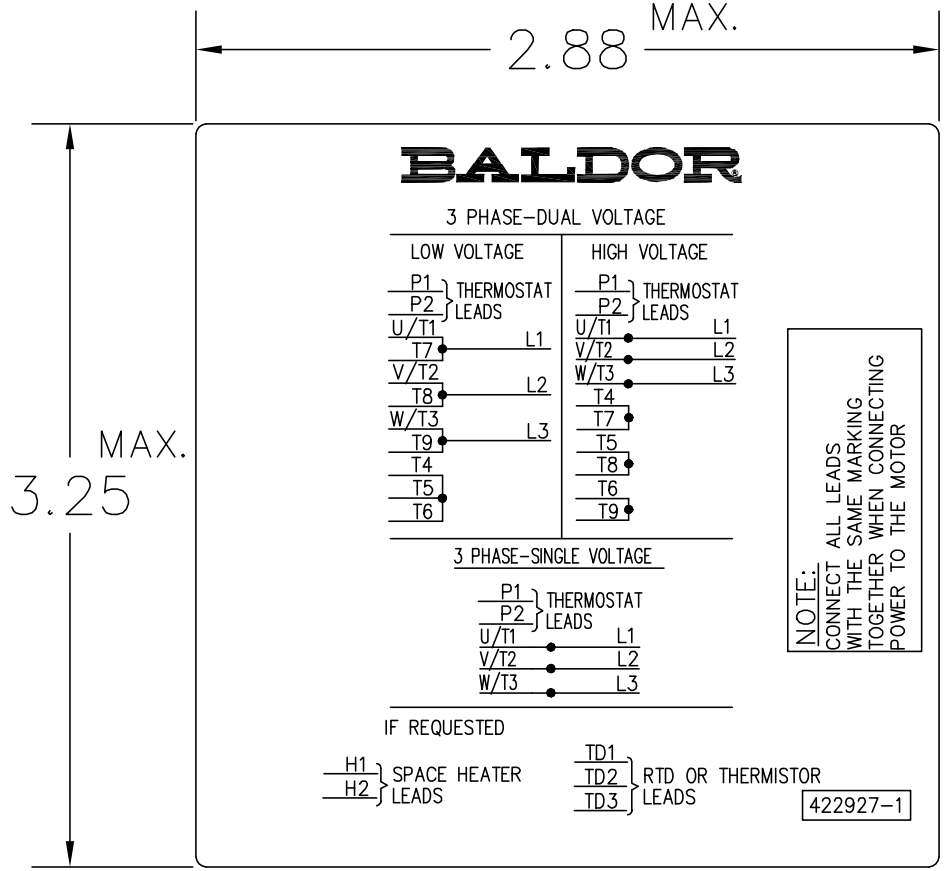
BALDOR - RELIANCE®

| | | |
|---|---|---|
| REV. DESC: ADD 706310-637 & 639 BOX | | TDR: 00000118O260 |
| REV. LTR: F | VERSION: 06 | |
| FILE: \RGV\00003\692 | REVISED: 11:08:56 10/26/2021 | BY: RGGRWM |
| MTL: - | | |

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

616779-050

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