

ABB BALDOR RELIANCE III



Customer information packet IDDRPM25606

60HP, 1150, 460V, RL2578, DPFV, F1

Specifications

| | |
|--------------------------------------|-------------------------|
| Enclosure | DPFV |
| Frame | RL2578Z |
| Frame Material | Exposed Laminations |
| Frequency | 40.00 Hz |
| Output @ Frequency | 60.000 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 | 73.000 A @ 460.0 V |
| Duty Rating | CONT |
| Feedback Device | NO FEEDBACK |
| Frame Prefix | RL |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 73.0 a |
| Insulation Class | H |
| IP Rating | NONE |
| Motor Standards | NEMA |
| Mounting Arrangement | F1 |
| Overall Length | 36.67 IN |
| Product Family | General Industrial |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Service Factor | 1.00 |
| Shaft Diameter | 2.124 IN |
| Shaft Ground Indicator | Shaft Grounding |
| Shaft Rotation | Reversible |
| Speed | 1150 rpm |
| Starting Method | Full Voltage |

Part Detail

| | |
|---------------------|------------|
| Revision | A |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | L1866A |
| Layout | 617218-051 |
| Eff. date | 01-21-2022 |
| CD Diagram | 422927-001 |
| Poles | 04 |
| Leads | |
| Proprietary | False |
| Created date | 11-02-2021 |

Thermal Device - Bearing

None

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY

| | DUTY | HP | RPM | AMPS | VOLTS | HZ | |
|-------------------|-------------|-----------------------|------------------|---------------|--------|------------------|-----|
| | CONT | 60 | 1150 | 73 | 460 | 40 | |
| | CONT | 60 | 1300 | 71 | 460 | 45 | |
| CAT.NO. | IDDRPM25606 | | SPEC. NO. | R25-A000-0366 | | | |
| SER.NO | | FR | RL2578Z | INSUL | H | | |
| PH. | 3 | MAX SAFE SPEED | 5000 | AMB. | 40 | MIN. AMB. | -25 |
| DESIGN NO. | L1866A | TYPE | | ENCL. | DPG-FV | | |
| S.F. | 1.00 | D.E. BRG. | 65BC03JPP30A | | | | |
| ENCL MOD | | O.D.E. BRG. | 50BC03JPP30A | | | | |
| | IP23 | | | | | | |

| | | | | | | | | |
|-------------|--------|--------------|------|---------------------------------------|-----------|--------------------------------|------|---------|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | DPFV | WYE CONN EQ CKT OHMS PER PHASE | | |
| FRAME | RL2578 | AMPS | 73 | MAX SAFE RPM | 5000 | (AT BASE RATING, 25 °C) | | |
| HP | 60 | DUTY | CONT | IM (AMPS) | 22 | R1 | .137 | X1 .453 |
| BASE SPEED | 1150 | S.F. | 1.0 | P.F. @NL/FL | .066/.887 | R2 | .103 | X2 .438 |
| PHASE/HERTZ | 3/40 | AMB °C/INSUL | 40/H | WK ² (Lb-Ft ²) | 4.2 | | | XM 12.5 |

RATED FULL LOAD DATA

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|------------|------|------|-----------------|---------------|---------|------|
| BASE SPEED | 1152 | 60.0 | 274 | 460 | 40 | 73.1 |
| MAX SPEED | 1295 | 60.0 | 243 | 460 | 45 | 72.4 |
| MIN SPEED | 0 | 0 | 0 | 31.0 | 1.61 | 73.0 |

LOAD PERFORMANCE AT BASE SPEED

| | RPM | HP | TORQUE LB-FT | FUND VOLTS | FREQ-HZ | AMPS |
|-----------|------|------|-----------------|---------------|---------|------|
| NO LOAD | 1200 | 0 | 0 | 460 | 40 | 21.5 |
| 1/4 | 1190 | 15.0 | 66 | 460 | 40 | 27.5 |
| 1/2 | 1178 | 30.0 | 134 | 460 | 40 | 39.9 |
| 3/4 | 1166 | 45.0 | 203 | 460 | 40 | 55.3 |
| FULL LOAD | 1152 | 60.0 | 274 | 460 | 40 | 73.1 |
| O/L | 1117 | 87.3 | 410 | 460 | 40 | 114 |

REMARKS: TYPICAL DATA
CORRELATED DATA

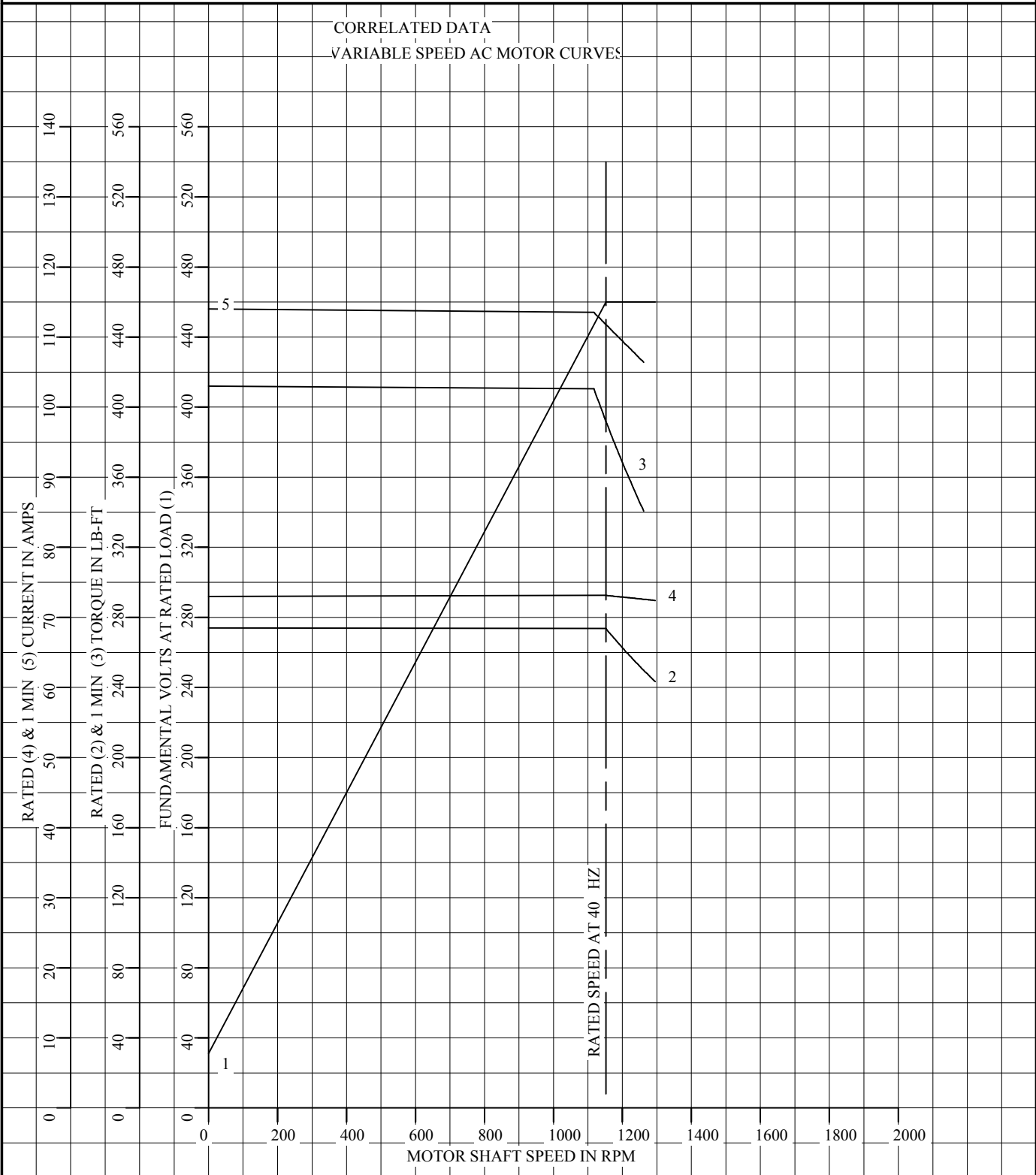


DR. BY K GREEN
 CK. BY B. GRANT
 APP. BY J. MARTIN
 DATE 08-15-2014

**A-C MOTOR
 PERFORMANCE DATA** L1866A
 ISSUE DATE 08-15-20

| | | | | | | | |
|-------------|--------|--------------|------|---------------------------------------|-----------|--------------------------------|--------------|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | DPFV | WYE CONN EQ CKT OHMS PER PHASE | |
| FRAME | RL2578 | AMPS | 73 | MAX SAFE RPM | 5000 | (AT BASE RATING, 25 °C) | |
| HP | 60 | DUTY | CONT | IM (AMPS) | 22 | R1 | .137 X1 .453 |
| BASE SPEED | 1150 | S.F. | 1.0 | P.F. @NL/FL | .066/.887 | R2 | .103 X2 .438 |
| PHASE/HERTZ | 3/40 | AMB °C/INSUL | 40/H | WK ² (Lb-Ft ²) | 4.2 | | XM 12.5 |

CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



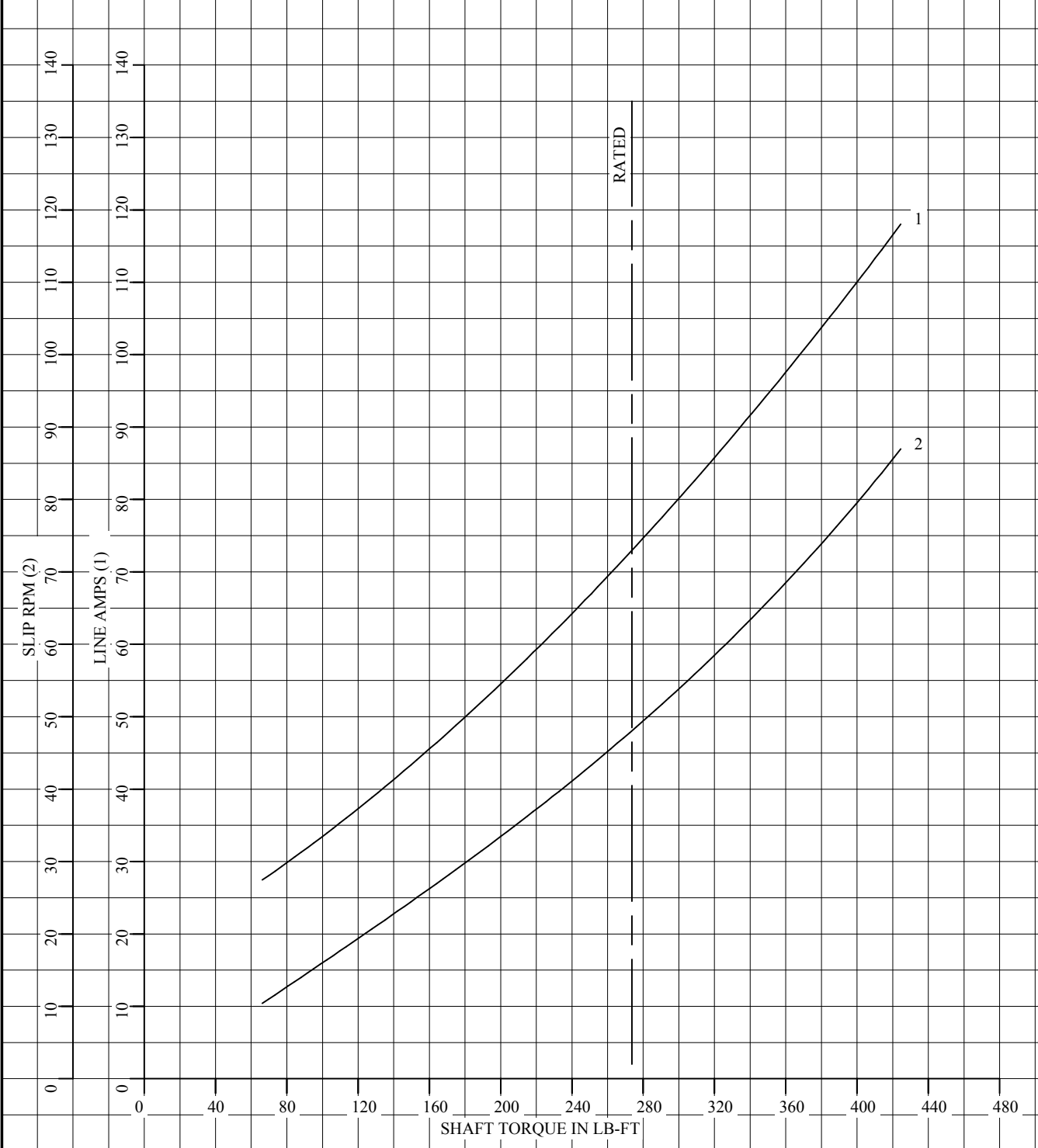
DR. BY K GREEN
CK. BY B. GRANT
APP. BY J. MARTIN
DATE 08-15-2014

**A-C MOTOR
PERFORMANCE
CURVES**

L1866A
SH 1 OF 2
ISSUE DATE 08-15-2014

| | | | | | | | |
|-------------|--------|--------------|------|---------------------------------------|-----------|--------------------------------|--------------|
| REL S.O. | - | VOLTS | 460 | ENCLOSURE | DPFV | WYE CONN EQ CKT OHMS PER PHASE | |
| FRAME | RL2578 | AMPS | 73 | MAX SAFE RPM | 5000 | (AT BASE RATING, 25 °C) | |
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| PHASE/HERTZ | 3/40 | AMB °C/INSUL | 40/H | WK ² (Lb-Ft ²) | 4.2 | | XM 12.5 |

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



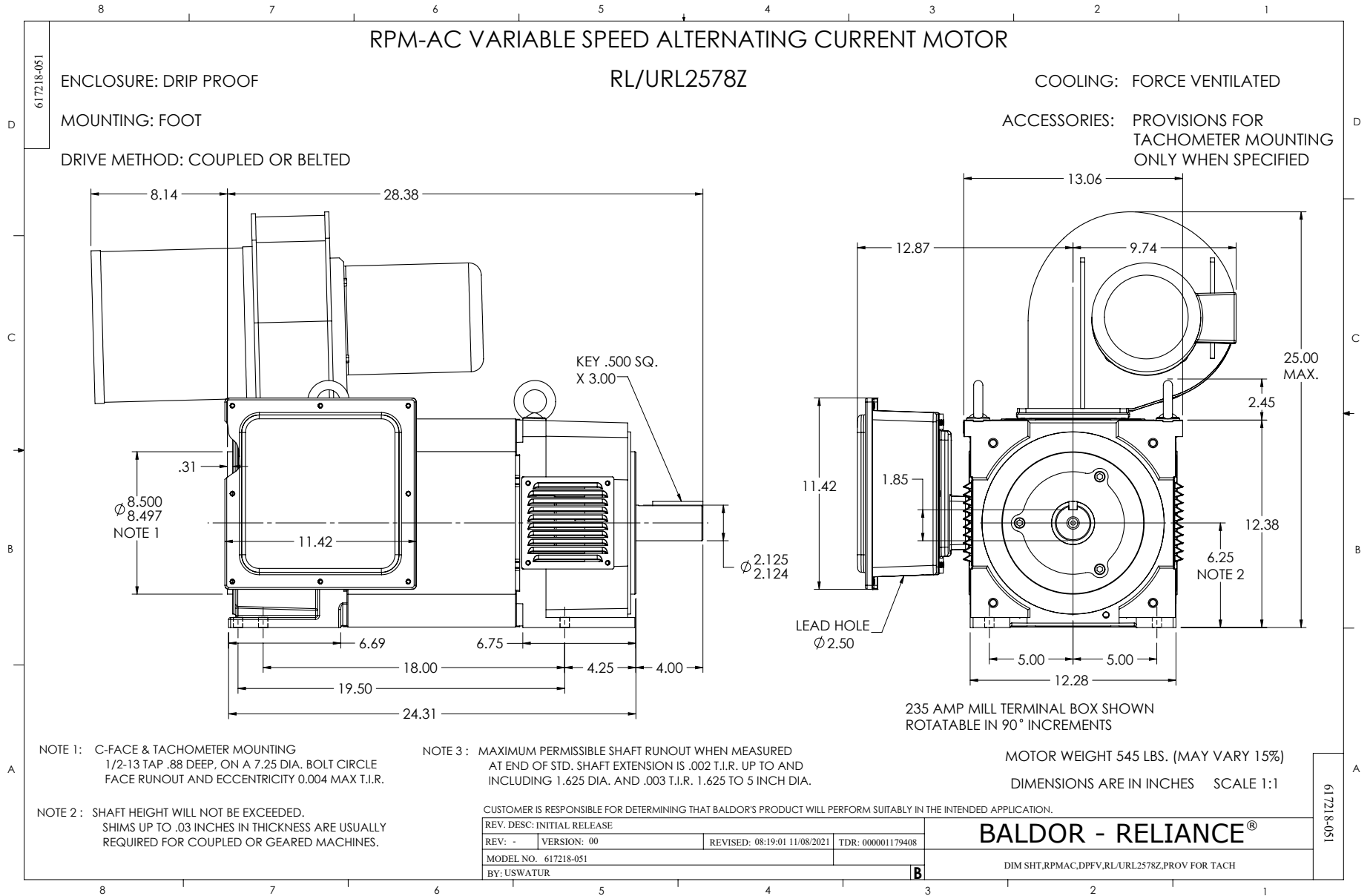
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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APP. BY J. MARTIN
DATE 08-15-2014

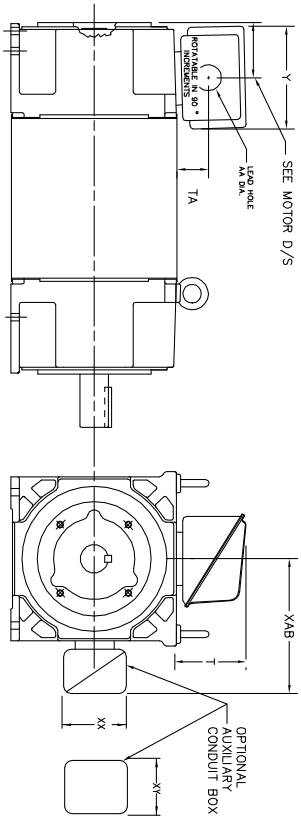
**A-C MOTOR
PERFORMANCE
CURVES**

L1866A
SH 2 OF 2
ISSUE DATE 08-15-2014



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 | N | 75 | 706320003A | 6.12 | 2.38 | 4.38 | 1.75/2.00 |
| FL180 | STEEL | N | 208 | 706320007A | 6.82 | 2.00 | 7.00 | 2.50/2.00 |
| FL180 | CAST IRON | N | 40 | 706320003A | 5.75 | 2.38 | 4.38 | 1.50/1.75 |
| FL180 & FDL11 | MILL | Y | 100 | 706310028A | 7.75 | 2.30 | 4.40 | PC29/PG16 |
| FL210 & RL210 | STEEL | N | 61 | 0754520009 | 6.34 | 2.00 | 4.12 | 1.75 |
| FL210 & RL210 | STEEL | N | 121 | 0754520009 | 7.69 | 2.38 | 5.25 | 1.94 |
| FL210 & RL210 | STEEL | N | 336 | 706320016A | 9.00 | 4.12 | 8.42 | 4.89 |
| FL210 & RL210 | CAST IRON | N | 110 | 075460052B | 7.25 | 2.50 | 5.25 | 1.5 TAP |
| FL210 & RL210 | MILL | Y | 100 | 706310225A | 7.75 | 2.30 | 4.40 | PC29/PG16 |
| FL210 & RL210 | MILL | Y | 160 | 706310056A | 9.00 | 3.06 | 5.40 | PC36/PG16 |
| FL210 & RL210 | MILL | Y/N | 235 | 706310637A | 11.42 | 4.00 | 6.72 | 2.50 |
| FL250 & RL250 | STEEL | N | 61 | 0754520009 | 6.34 | 2.00 | 4.12 | 1.75 |
| FL250 & RL250 | STEEL | N | 121 | 0754520009 | 7.69 | 2.38 | 5.25 | 1.94 |
| FL250 & RL250 | STEEL | N | 336 | 706320016A | 9.00 | 4.12 | 8.42 | 4.89 |
| FL250 & RL250 | CAST IRON | N | 110 | 075460052B | 7.25 | 2.50 | 5.25 | 1.5 TAP |
| FL250 & RL250 | CAST IRON | N | 210 | 706320017A | 10.50 | 4.88 | 9.00 | 4.0 TAP |
| FL250 & RL250 | MILL | Y | 100 | 706310225A | 7.75 | 2.30 | 4.40 | PC29/PG16 |
| FL250 & RL250 | MILL | Y | 160 | 706310056A | 9.00 | 3.06 | 5.40 | PC36/PG16 |
| FL250 & RL250 | MILL | Y/N | 235 | 706310637A | 11.42 | 4.00 | 6.72 | 2.50 |
| FL250 & RL250 | MILL | Y | 400 | 706310063B | 14.39 | 7.43 | 12.15 | BLANK |
| FL280 & RL280 | STEEL | N | 160 | 706320029A | 7.25 | 3.50 | 7.06 | 2.50 |
| FL280 & RL280 | STEEL | N | 306 | 706320018 | 9.00 | 4.12 | 8.42 | 4.89 |
| FL280 & RL280 | STEEL | N | 500 | 702565001C | 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 | 706320015A | 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 | MILL | Y | 100 | 706310056A | 7.75 | 2.30 | 4.40 | PC29/PG16 |
| FL280 & RL280 | MILL | Y | 160 | 706310056B | 9.00 | 3.06 | 5.40 | PC36/PG16 |
| FL280 & RL280 | MILL | Y/N | 235 | 706310637A | 11.42 | 4.00 | 6.72 | 2.50 |
| FL280 & RL280 | MILL | Y | 400 | 706310063B | 14.39 | 7.43 | 12.15 | BLANK |

| FRAME SIZE | XAB | XX | XY | PART NUMBER | FRAME SIZE | XAB | XX | XY | PART NUMBER |
|-------------------------|------|------|------|-------------|-------------------------|-------|------|------|-------------|
| FL210/FL180/RL210/RL180 | 7.38 | 4.25 | 4.25 | 602007-26-A | FL210/FL180/RL210/RL180 | 10.88 | 8.00 | 8.00 | 706310-3-B |
| FL250/FL160/RL250/RL160 | 8.44 | 4.25 | 4.25 | 602007-26-A | FL250/FL160/RL250/RL160 | 11.88 | 8.00 | 8.00 | 706310-3-B |
| FL280/FL190/RL280/RL190 | 9.12 | 4.25 | 4.25 | 602007-26-A | FL280/FL190/RL280/RL190 | 12.62 | 8.00 | 8.00 | 706310-3-B |

(1) 7/8" PIPE TAP.
(2) CUSTOMER TO PROVIDE WIRE TYPE CONDUIT.
(3) DIM SA ON 1" DIA DN W/2"

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

050-677919

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

| | | |
|-------------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD 706310-637 & 639 BOX | VERSION: 06 | TDR: 000001180260 |
| REV. LTR: F | REVISED: 11: 08: 56 10/26/2021 | BY: RCGRWM |
| FILE: \\RGG\00003\692 | | |
| MTL: - | | |

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.

NOTE:
CONNECT ALL LEADS
WITH THE SAME MARKING
TOGETHER WHEN CONNECTING
POWER TO THE MOTOR

422927-1

422927-001

| | | |
|-------------------------------------------------------|------------------------------|------------------|
| REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE | | |
| REV. LTR: B | VERSION: 02 | TDR: 00000788708 |
| FILE: \RGG\00000\203 | REVISED: 08:09:29 03/04/2013 | |
| MTL: - | BY: RGGWT | |

BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1