

# ABB BALDOR RELIANCE III

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## Customer information packet

VXM18322T

3//2HP, 3450//2890RPM, 3PH, 60//50HZ, 182TC

Class - CLI GP D; CLII GP F,G

Division - Division I

**Specifications**

|                                |                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------|
| Enclosure                      | XPFC                                                                             |
| Frame                          | 182TC                                                                            |
| Frame Material                 | Steel                                                                            |
| Frequency                      | 50.00 Hz<br>60.00 Hz                                                             |
| Haz Area Class and Group       | CLI GP D; CLII GP F,G                                                            |
| Haz Area Division              | Division I                                                                       |
| Motor Letter Type              | Three Phase                                                                      |
| Output @ Frequency             | 3.000 HP @ 60 HZ<br>2.000 HP @ 50 HZ                                             |
| Phase                          | 3                                                                                |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                                                 |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>190.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>380.0 V @ 50 HZ         |
| Agency Approvals               | UL<br>CSA EEV                                                                    |
| Ambient Temperature            | 40 °C                                                                            |
| Auxiliary Box                  | NO AUXILLARY BOX                                                                 |
| Auxiliary Box Lead Termination | None                                                                             |
| Base Indicator                 | No Mounting                                                                      |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                                          |
| Blower                         | None                                                                             |
| Constant Torque Speed Range    | 6                                                                                |
| Current @ Voltage              | 3.000 A @ 380.0 V<br>3.700 A @ 460.0 V<br>6.000 A @ 190.0 V<br>7.400 A @ 230.0 V |
| Design Code                    | A                                                                                |
| Drip Cover                     | No Drip Cover                                                                    |
| Duty Rating                    | CONT                                                                             |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | A          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 36WGS041   |
| Layout       | 36LYQ330   |
| Eff. date    | 06-18-2021 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#16       |
| Proprietary  | False      |
| Created date | 03-02-2021 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Efficiency @ 100% Load</b>        | 86.5 %                     |
| <b>Electrically Isolated Bearing</b> | Not Electrically Isolated  |
| <b>Feedback Device</b>               | NO FEEDBACK                |
| <b>Haz Area Temp Code</b>            | T3C                        |
| <b>Heater Indicator</b>              | No Heater                  |
| <b>High Voltage Full Load Amps</b>   | 3.0 a                      |
| <b>Insulation Class</b>              | F                          |
| <b>Inverter Code</b>                 | Inverter Duty              |
| <b>IP Rating</b>                     | NONE                       |
| <b>KVA Code</b>                      | K                          |
| <b>Lifting Lugs</b>                  | No Lifting Lugs            |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Max Speed</b>                     | 5400 rpm                   |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 3622M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 2                          |
| <b>Overall Length</b>                | 17.49 IN                   |
| <b>Power Factor</b>                  | 91                         |
| <b>Product Family</b>                | General Purpose            |
| <b>Pulley Face Code</b>              | C-Face                     |
| <b>Rodent Screen</b>                 | None                       |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 1.125 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Speed</b>                         | 3450 rpm                   |
| <b>Speed Code</b>                    | Single Speed               |
| <b>Starting Method</b>               | Direct on line             |
| <b>Thermal Device - Bearing</b>      | None                       |
| <b>Thermal Device - Winding</b>      | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor        |
| <b>Winding Thermal 1</b>             | None                       |

Winding Thermal 2

None

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**Nameplate**

| NP0887XPSLEV |                        |        |   |              |         |          |            |      |     |          |  |    |  |
|--------------|------------------------|--------|---|--------------|---------|----------|------------|------|-----|----------|--|----|--|
| NO.          |                        |        |   |              |         |          | CC         | 010A |     |          |  |    |  |
| S/N          |                        |        |   |              |         |          | TEMP CODE  |      | T3C |          |  |    |  |
| SPEC.        | 36-0000-0477           |        |   |              |         |          | INV.TYPE   |      | PWM |          |  |    |  |
| CAT.NO.      | VXM18322T              |        |   |              |         |          | C HP FR    |      | 60  | C HP TO  |  | 90 |  |
| HP           | 3//2                   |        |   |              |         |          | CT HZ FROM |      | 6   | CT HZ TO |  | 60 |  |
| VOLTS        | 230/460//190/380       |        |   |              |         |          | VT HZ FROM |      | 6   | VT HZ TO |  | 60 |  |
| AMPS         | 7.4/3.7//6/3           |        |   |              | MAG CUR |          | 2.4/1.2    |      |     |          |  |    |  |
| RPM          | 3450//2890             |        |   |              | MX RPM  |          | 5400       |      |     |          |  |    |  |
| HZ           | 60//50                 | PH     | 3 | CL           | F       | NOM.EFF. |            | 86.5 |     |          |  |    |  |
| SER.F.       | 1.00                   | DES    | A | SL HZ        |         | 2.5      | WK2        | 0.1  |     |          |  |    |  |
| FRAME        | 182TC                  | RATING |   | 40C AMB-CONT |         |          |            |      |     |          |  |    |  |
|              | NEMA MG-1 PART 5, IP54 |        |   |              |         |          |            |      |     |          |  |    |  |
|              | 1.15 SF ON SINE WAVE   |        |   |              |         |          |            |      |     |          |  |    |  |

**AC Induction Motor Performance Data**

Record # 73670

Typical performance - not guaranteed values

| Winding: 36WGS041-R041 |                   | Type: 3622M                              | Enclosure: XPFC |
|------------------------|-------------------|------------------------------------------|-----------------|
| Nameplate Data         |                   | 460 V, 60 Hz:<br>High Voltage Connection |                 |
| Rated Output (HP)      | 3//2              | Full Load Torque                         | 4.7 LB-FT       |
| Volts                  | 230/460//190/380  | Start Configuration                      | direct on line  |
| Full Load Amps         | 7.4/3.7//6/3      | Breakdown Torque                         | 19.7 LB-FT      |
| R.P.M.                 | 3450//2890        | Pull-up Torque                           | 12 LB-FT        |
| Hz                     | 60//50 Phase      | Locked-rotor Torque                      | 14.1 LB-FT      |
| NEMA Design Code       | A KVA Code        | Starting Current                         | 33.3 A          |
| Service Factor (S.F.)  | 1                 | No-load Current                          | 1.17 A          |
| NEMA Nom. Eff.         | 86.5 Power Factor | Line-line Res. @ 25°C                    | 4.71 Ω          |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                  | 52°C            |
|                        |                   | Locked-rotor Power Factor                | 48.4            |
|                        |                   | Rotor inertia                            | 0.0984 LB-FT2   |

**Load Characteristics 460 V, 60 Hz, 3 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 66   | 82   | 88   | 91   | 92   | 93   |
| Efficiency      | 80.3 | 86   | 87.3 | 86.9 | 86   | 84.5 |
| Speed           | 3565 | 3535 | 3504 | 3472 | 3434 | 3394 |
| Line amperes    | 1.56 | 2.17 | 2.93 | 3.67 | 4.57 | 5.5  |

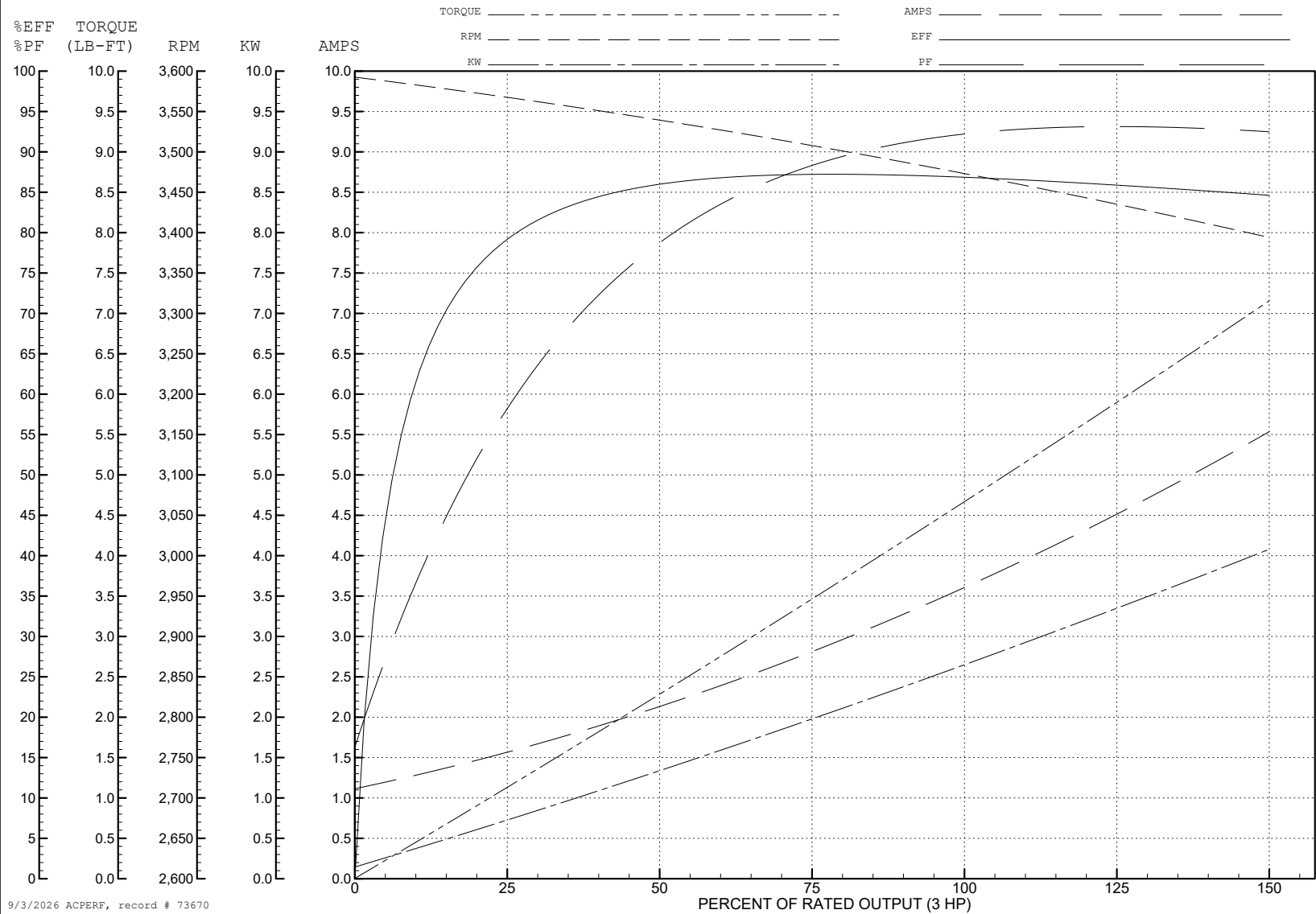
ABB Motors and Mechanical Inc.

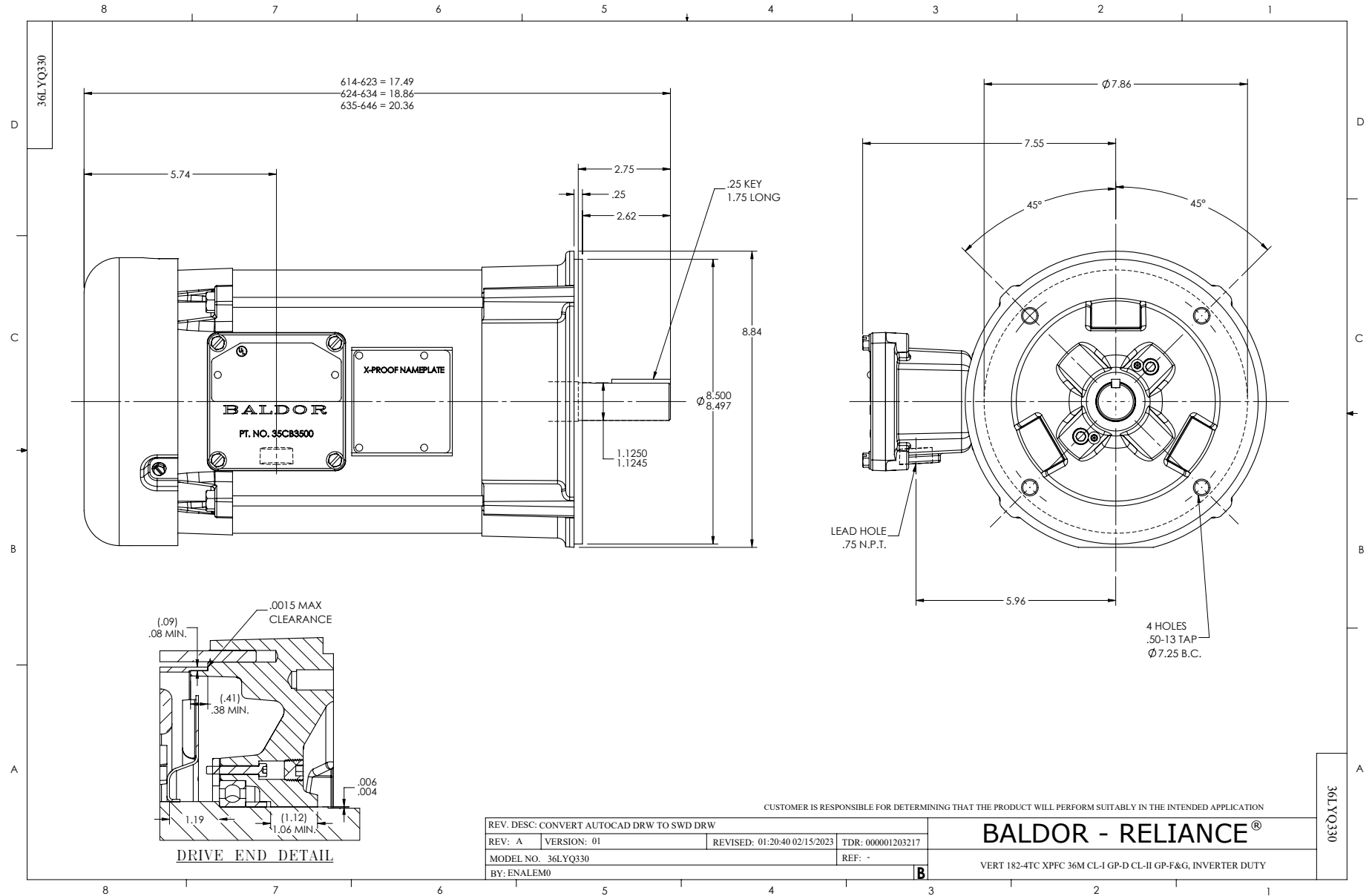
WINDING # 36WGS041

Typical performance - not guaranteed values.

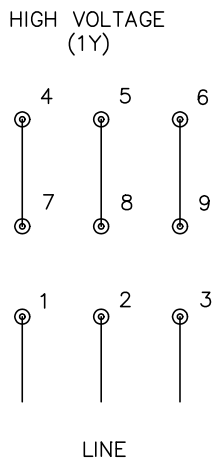
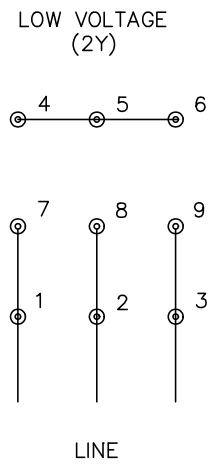
3 HP 3 PH 60 HZ 3472 RPM 460 V 3622M

TORQUES (LB-FT): PO=19.7 PU=12 LR=14.1 LRA=33.3





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
  - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|                                           |         |                         |              |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005