

# ABB BALDOR RELIANCE III

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## Customer information packet

### M3452

.17HP, 1140RPM, 3PH, 60HZ, 48, 3408M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                            |
|---------------------------------------|------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                       |
| <b>Frame</b>                          | 48                                                         |
| <b>Frame Material</b>                 | Steel                                                      |
| <b>Frequency</b>                      | 60.00 Hz                                                   |
| <b>Haz Area Class and Group</b>       | None                                                       |
| <b>Haz Area Division</b>              | Not Applicable                                             |
| <b>Motor Letter Type</b>              | Three Phase                                                |
| <b>Output @ Frequency</b>             | .170 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                          |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                           |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                         |
| <b>Agency Approvals</b>               | C UR US                                                    |
| <b>Ambient Temperature</b>            | 40 °C                                                      |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                           |
| <b>Auxiliary Box Lead Termination</b> | None                                                       |
| <b>Base Indicator</b>                 | Rigid                                                      |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                    |
| <b>Blower</b>                         | None                                                       |
| <b>Current @ Voltage</b>              | .550 A @ 460.0 V<br>1.100 A @ 230.0 V<br>1.300 A @ 208.0 V |
| <b>Design Code</b>                    | B                                                          |
| <b>Drip Cover</b>                     | No Drip Cover                                              |
| <b>Duty Rating</b>                    | CONT                                                       |
| <b>Efficiency @ 100% Load</b>         | 57.5 %                                                     |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                  |
| <b>Feedback Device</b>                | NO FEEDBACK                                                |
| <b>Front Face Code</b>                | Standard                                                   |
| <b>Front Shaft Indicator</b>          | None                                                       |
| <b>Heater Indicator</b>               | No Heater                                                  |
| <b>High Voltage Full Load Amps</b>    | 0.6 a                                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | U          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34A051     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGW011   |
| <b>Layout</b>       | 34LYA051   |
| <b>Eff. date</b>    | 12-30-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-01-0001 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Insulation Class</b>              | <b>B</b>                   |
| <b>Inverter Code</b>                 | <b>Not Inverter</b>        |
| <b>KVA Code</b>                      | <b>K</b>                   |
| <b>Lifting Lugs</b>                  | <b>No Lifting Lugs</b>     |
| <b>Locked Bearing Indicator</b>      | <b>No Locked Bearing</b>   |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>              |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 18 AWG</b>          |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>        |
| <b>Motor Standards</b>               | <b>NEMA</b>                |
| <b>Motor Type</b>                    | <b>3408M</b>               |
| <b>Mounting Arrangement</b>          | <b>F1</b>                  |
| <b>Number of Poles</b>               | <b>6</b>                   |
| <b>Overall Length</b>                | <b>10.73 IN</b>            |
| <b>Power Factor</b>                  | <b>49</b>                  |
| <b>Product Family</b>                | <b>General Purpose</b>     |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                |
| <b>Pulley Face Code</b>              | <b>Standard</b>            |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>            |
| <b>Rodent Screen</b>                 | <b>None</b>                |
| <b>Service Factor</b>                | <b>1.35</b>                |
| <b>Shaft Diameter</b>                | <b>0.500 IN</b>            |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>          |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>  |
| <b>Shaft Rotation</b>                | <b>Reversible</b>          |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>          |
| <b>Speed</b>                         | <b>1140 rpm</b>            |
| <b>Speed Code</b>                    | <b>Single Speed</b>        |
| <b>Starting Method</b>               | <b>Direct on line</b>      |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                |
| <b>Thermal Device - Winding</b>      | <b>None</b>                |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b> |
| <b>Winding Thermal 1</b>             | <b>None</b>                |
| <b>Winding Thermal 2</b>             | <b>None</b>                |

**Nameplate**

| NP1256L      |              |  |      |      |     |   |       |   |  |
|--------------|--------------|--|------|------|-----|---|-------|---|--|
| CAT.NO.      | M3452        |  |      |      |     |   |       |   |  |
| SPEC.        | 34A51W11     |  |      |      |     |   |       |   |  |
| HP           | .17          |  |      |      |     |   |       |   |  |
| VOLTS        | 230/460      |  |      |      |     |   |       |   |  |
| AMP          | 1.1/.55      |  |      |      |     |   |       |   |  |
| RPM          | 1140         |  |      |      |     |   |       |   |  |
| FRAME        | 48           |  | HZ   | 60   |     |   | PH    | 3 |  |
| SER.F.       | 1.35         |  | CODE | K    | DES | B | CLASS | B |  |
| NEMA-NOM-EFF | 57.5         |  | PF   | 49   |     |   |       |   |  |
| RATING       | 40C AMB-CONT |  |      |      |     |   |       |   |  |
| CC           |              |  |      |      |     |   |       |   |  |
| DE           | 6203         |  | ODE  | 6203 |     |   |       |   |  |
| ENCL         | TEFC         |  | SN   |      |     |   |       |   |  |
|              | SFA 1.2/.6   |  |      |      |     |   |       |   |  |

**Parts List**

| <b>Part number</b> | <b>Description</b>                       | <b>Quantity</b> |
|--------------------|------------------------------------------|-----------------|
| SA009763           | SA 34A51W11                              | 1.000 ea        |
| RA006208           | RA 34A51W11                              | 1.000 ea        |
| NS2512A01          | INSULATOR, CONDUIT BOX X                 | 1.000 ea        |
| 34CB3002A          | CB CAST W/.88 DIA HOLE                   | 1.000 ea        |
| 34GS1029A01        | GASKET, CONDUIT BOX                      | 1.000 ea        |
| 51XB1016A07        | 10-16 X 7/16 HXWSSLD SERTYB              | 2.000 ea        |
| 11XW1032G06        | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea        |
| 34EP3102A01SP      | FR ENDPLATE, MACH                        | 1.000 ea        |
| HW5100A03          | WAVY WASHER (W1543-017)                  | 1.000 ea        |
| 34EP3102A02SP      | FR/PU ENDPLATE, MACH                     | 1.000 ea        |
| XY1032A02          | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 ea        |
| 34FN3002A01SP      | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 ea        |
| 34FH4002A01SP      | IEC FH NO GREASER PRIMED                 | 1.000 ea        |
| 51XW1032A06        | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea        |
| 34CB4517           | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 ea        |
| 34GS1031A01        | GASKET, FLAT CONDUIT BOX LID (LEXIDE)    | 1.000 ea        |
| 51XW0832A07        | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea        |
| MG1050G01          | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.014 ga        |
| 85XU0407S04        | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea        |
| HA3100A12          | THRUBOLT 10-32 X 7.375                   | 4.000 ea        |
| LC0005E01          | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 ea        |
| NP1256L            | ALUM UL CC INDUSTRIAL MOTOR A60          | 1.000 ea        |
| 34PA1002           | PKG GRP, PRINT PK1001A01                 | 1.000 ea        |

**Accessories**

| Part number | Description | Multiplier |
|-------------|-------------|------------|
| 34-3900T    | C-FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 6844

Typical performance - not guaranteed values

| Winding: 34WGW011-R001 |          |              | Type: 3408M                              |  | Enclosure: TEFC |  |
|------------------------|----------|--------------|------------------------------------------|--|-----------------|--|
| Nameplate Data         |          |              | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |          | .17          | Full Load Torque                         |  | 0.78 LB-FT      |  |
| Volts                  |          | 230/460      | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |          | 1.1/.55      | Breakdown Torque                         |  | 2.5 LB-FT       |  |
| R.P.M.                 |          | 1140         | Pull-up Torque                           |  | 1.6 LB-FT       |  |
| Hz                     | 60 Phase | 3            | Locked-rotor Torque                      |  | 1.7 LB-FT       |  |
| NEMA Design Code       |          | B            | KVA Code                                 |  | K               |  |
| Service Factor (S.F.)  |          | 1.35         | Starting Current                         |  | 1.6 A           |  |
| NEMA Nom. Eff.         |          | 57.5         | Power Factor                             |  | 49              |  |
| Rating - Duty          |          | 40C AMB-CONT | Temp. Rise @ Rated Load                  |  | 38°C            |  |
| S.F. Amps              |          | 1.2/.6       | Temp. Rise @ S.F. Load                   |  | 48°C            |  |

**Load Characteristics 460 V, 60 Hz, 0.17 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 28   | 38   | 47   | 55   | 63   | 68   | 66   |
| Efficiency      | 35   | 50   | 58   | 61   | 62   | 62   | 62.4 |
| Speed           | 1185 | 1174 | 1159 | 1144 | 1127 | 1108 | 1120 |
| Line amperes    | 0.42 | 0.43 | 0.44 | 0.47 | 0.5  | 0.54 | 0.51 |

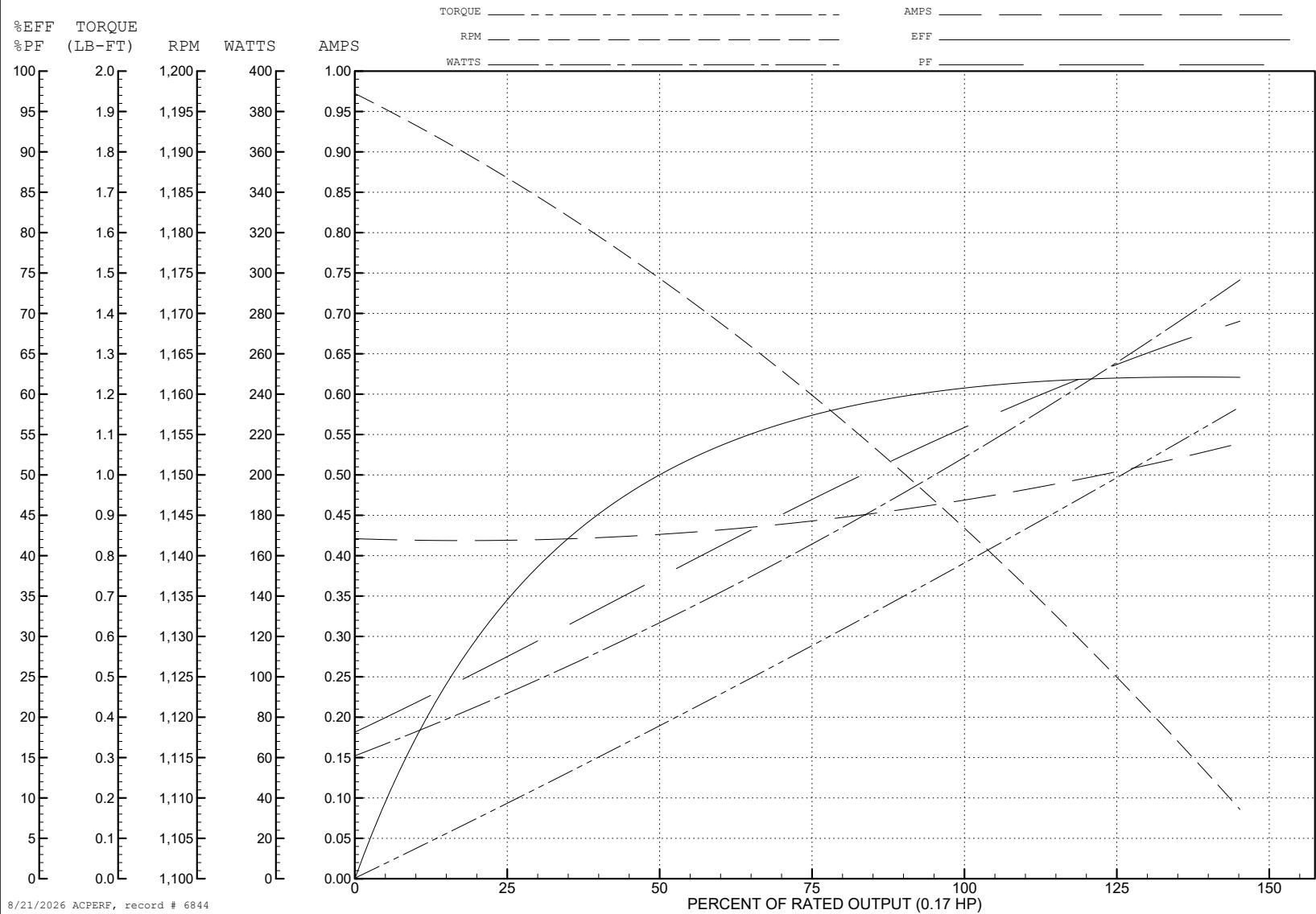
ABB Motors and Mechanical Inc.

WINDING # 34WG011

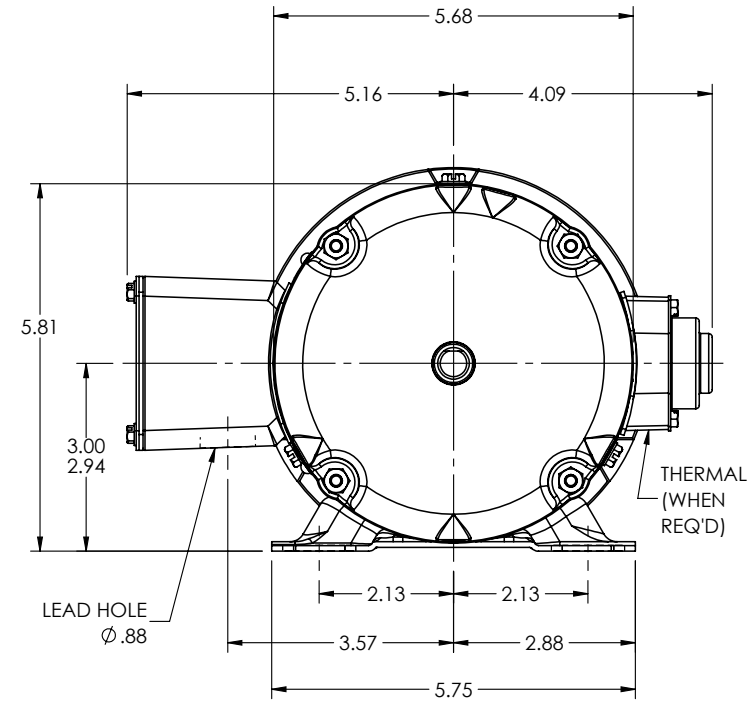
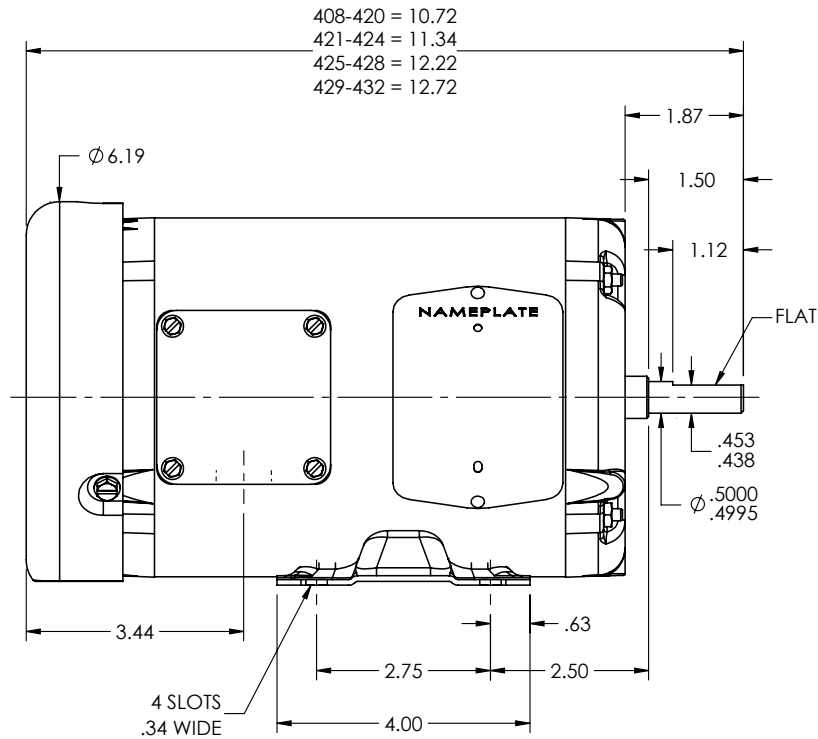
Typical performance - not guaranteed values.

0.17 HP 3 PH 60 HZ 1140 RPM 460 V 3408M

TORQUES (LB-FT) : PO=2.5 PU=1.6 LR=1.7 LRA=1.6



34LYA051



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

REV. DESC: UPDATE DIMENSION GRAPHICS

REV: P

VERSION: 07

REVISED: 03:05:58 11/26/2024

TDR: 000001245356

**BALDOR - RELIANCE®**

34LYA051

MODEL NO. 34LYA051

BY: ENJEFD0

REF: -

STD HORZ 34M NEMA 48 TEFC

34LYA051

