

# ABB BALDOR RELIANCE III

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## Customer information packet

### SPNM3457

.33HP, 3450RPM, 3PH, 60HZ, 48, 3416M, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>Enclosure</b>                      | TENV                                  |
| <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>             | .330 HP @ 60 HZ                       |
| <b>Phase</b>                          | 3                                     |
| <b>Synchronous Speed @ Frequency</b>  | 3600 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<br>WEEE                       |
| <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>              | 1.000 A @ 230.0 V<br>.500 A @ 460.0 V |
| <b>Design Code</b>                    | B                                     |
| <b>Drip Cover</b>                     | No Drip Cover                         |
| <b>Duty Rating</b>                    | CONT                                  |
| <b>Efficiency @ 100% Load</b>         | 74.0 %                                |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated             |
| <b>Feedback Device</b>                | NO FEEDBACK                           |
| <b>Front Shaft Indicator</b>          | None                                  |
| <b>Heater Indicator</b>               | No Heater                             |
| <b>High Voltage Full Load Amps</b>    | 0.5 a                                 |
| <b>Insulation Class</b>               | F                                     |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | B          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34T124     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGS342   |
| <b>Layout</b>       | 34LYT124   |
| <b>Eff. date</b>    | 10-29-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-13-2023 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Inverter Code</b>                 | Not Inverter        |
| <b>KVA Code</b>                      | P                   |
| <b>Lifting Lugs</b>                  | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing   |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 18 AWG          |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3416M               |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 2                   |
| <b>Overall Length</b>                | 9.63 IN             |
| <b>Power Factor</b>                  | 81                  |
| <b>Product Family</b>                | General Purpose     |
| <b>Pulley End Bearing Type</b>       | Ball                |
| <b>Pulley Face Code</b>              | Standard            |
| <b>Pulley Shaft Indicator</b>        | Standard            |
| <b>Rodent Screen</b>                 | None                |
| <b>Service Factor</b>                | 1.35                |
| <b>Shaft Diameter</b>                | 0.500 IN            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding  |
| <b>Shaft Rotation</b>                | Reversible          |
| <b>Shaft Slinger Indicator</b>       | No Slinger          |
| <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>      | None                |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor |
| <b>Winding Thermal 1</b>             | None                |
| <b>Winding Thermal 2</b>             | None                |

Page 4 of 8

**AC Induction Motor Performance Data**

Record # 100833

Preliminary Data Sheet

| Winding: 34WGS342-R003 |          |              | Type: 3416M                              |  | Enclosure: TENV |  |
|------------------------|----------|--------------|------------------------------------------|--|-----------------|--|
| Nameplate Data         |          |              | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |          | .33          | Full Load Torque                         |  | 0.5 LB-FT       |  |
| Volts                  |          | 230/460      | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |          | .8/.4        | Breakdown Torque                         |  | 2.9 LB-FT       |  |
| R.P.M.                 |          | 3450         | Pull-up Torque                           |  | 1.65 LB-FT      |  |
| Hz                     | 60 Phase | 3            | Locked-rotor Torque                      |  | 2.3 LB-FT       |  |
| NEMA Design Code       |          | B            | Starting Current                         |  | 4.5 A           |  |
| Service Factor (S.F.)  |          | 1.35         | No-load Current                          |  | 0.29 A          |  |
| NEMA Nom. Eff.         |          | 74           | Power Factor                             |  | 81              |  |
| Rating - Duty          |          | 40C AMB-CONT | Line-line Res. @ 25°C                    |  | 34.8 Ω          |  |
| S.F. Amps              |          | 1/.5         | Temp. Rise @ Rated Load                  |  | 66°C            |  |
|                        |          |              | Temp. Rise @ S.F. Load                   |  | 76°C            |  |
|                        |          |              | Locked-rotor Power Factor                |  | 65.1            |  |
|                        |          |              | Rotor inertia                            |  | 0.0148 lb-ft²   |  |

**Load Characteristics 460 V, 60 Hz, 0.33 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F.  |
|-----------------|------|------|------|------|------|------|-------|
| Power Factor    | 50   | 65   | 75   | 81   | 85   | 87   | 86    |
| Efficiency      | 48.1 | 63.6 | 70.8 | 74.6 | 76.6 | 77.1 | 76.8  |
| Speed           | 3559 | 3535 | 3509 | 3482 | 3453 | 3441 | 3448  |
| Line amperes    | 0.33 | 0.37 | 0.44 | 0.51 | 0.59 | 0.63 | 0.606 |

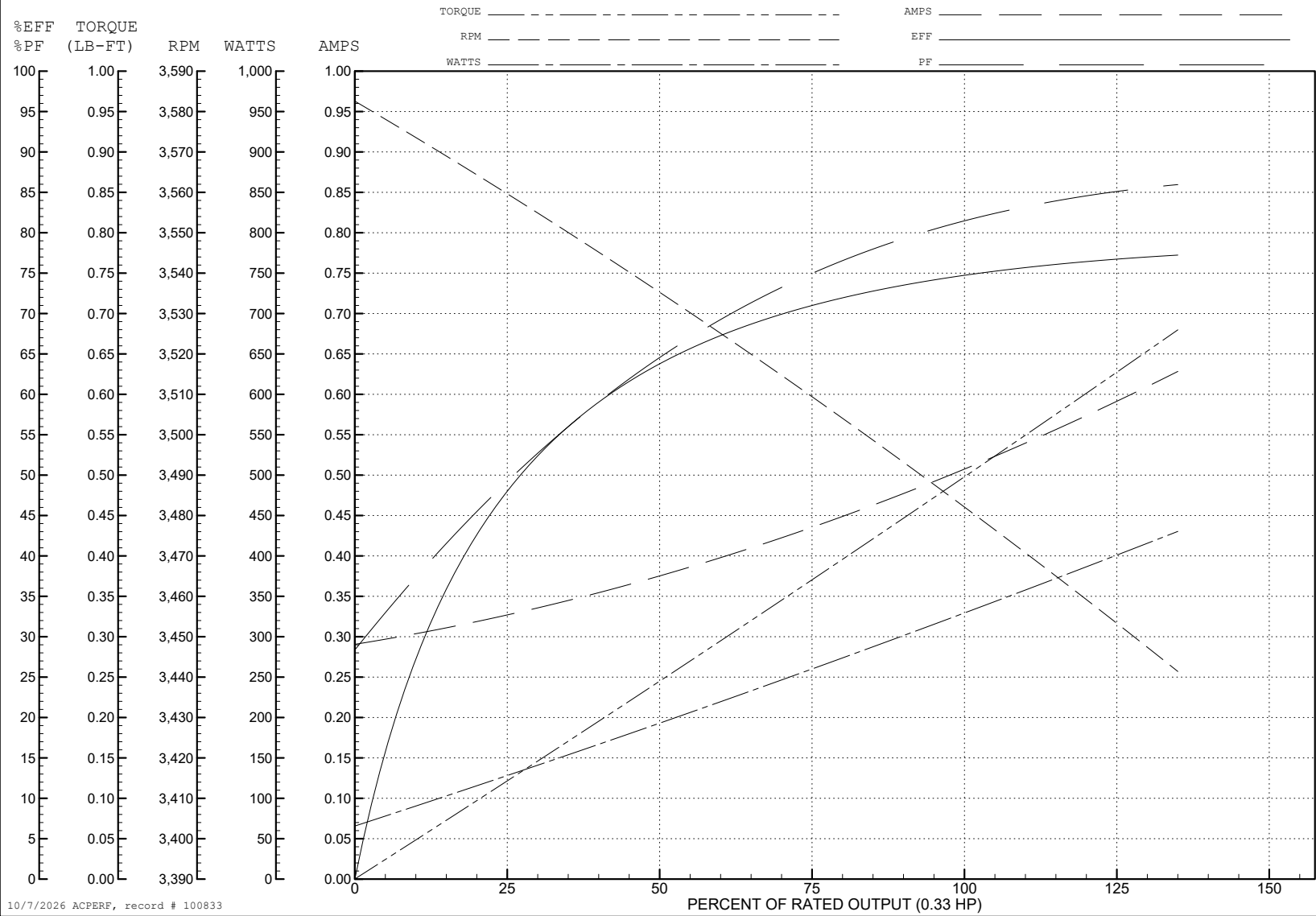
ABB Motors and Mechanical Inc.

WINDING # 34WGS342

Typical performance - not guaranteed values.

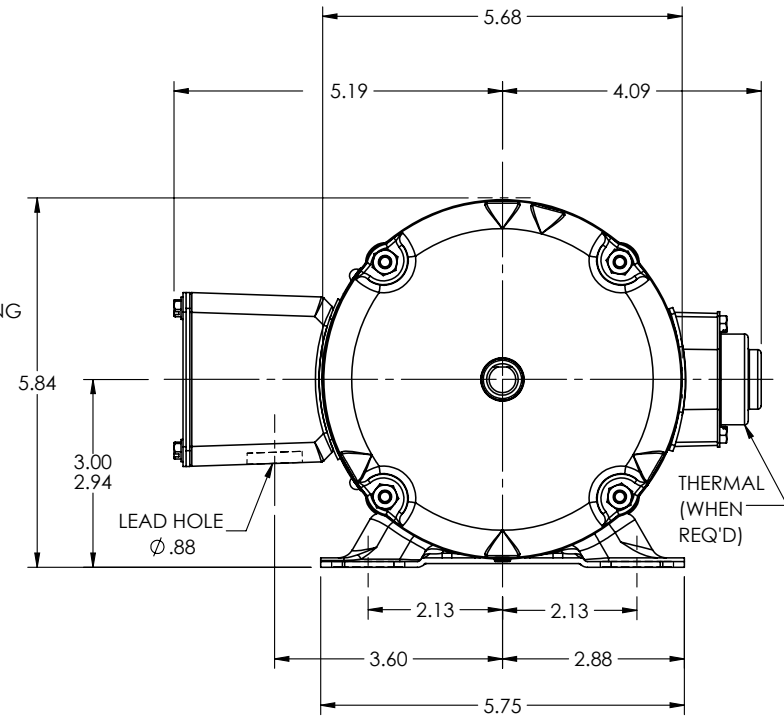
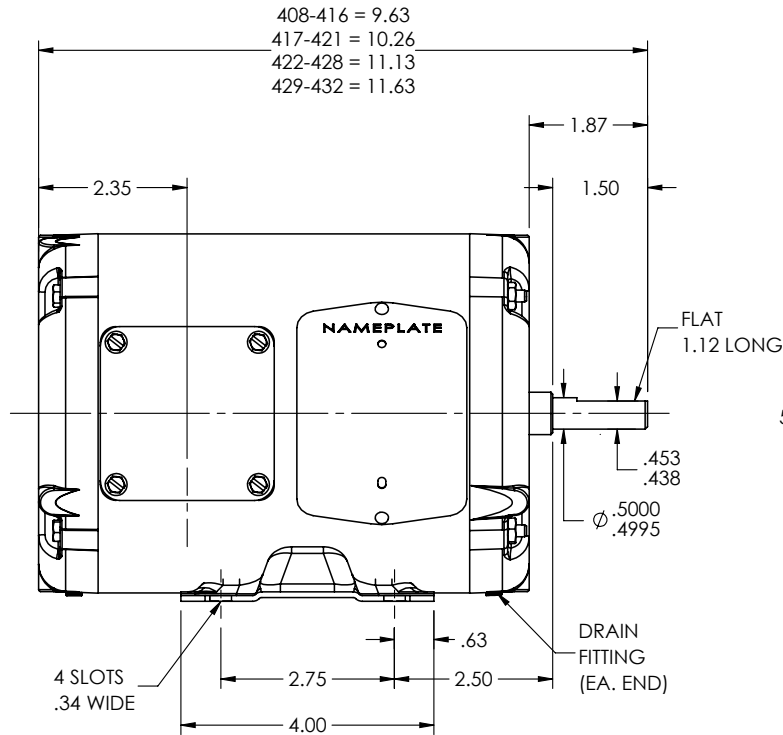
0.33 HP 3 PH 60 HZ 3450 RPM 460 V 3416M

TORQUES (LB-FT) : PO=2.9 PU=1.65 LR=2.3 LRA=4.5



10/7/2026 ACPERF, record # 100833

34LYT124



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

REV. DESC: NEW

REV: -

VERSION: 00

REVISED: 01:05:26 08/25/2023

TDR: 000001213521

34LYT124

MODEL NO. 34LYT124

BY: USALMAZ

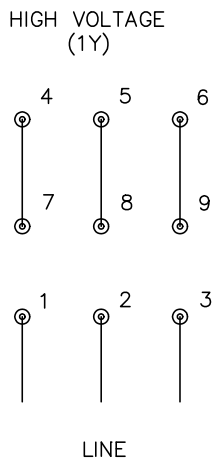
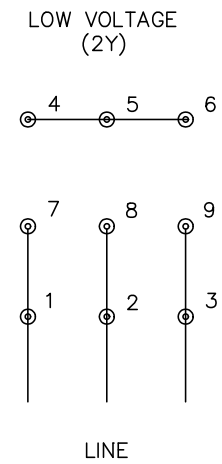
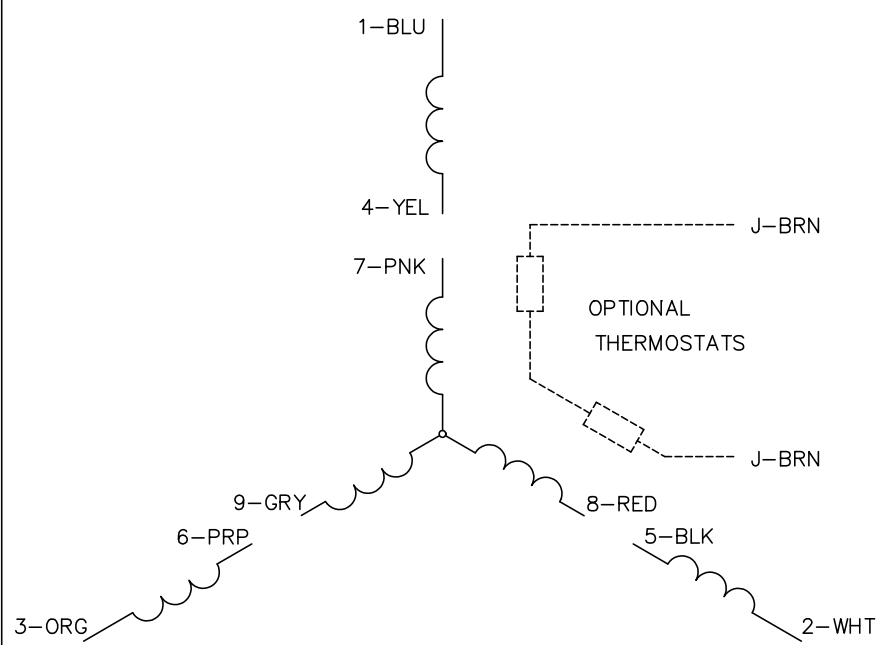
REF: -

**BALDOR - RELIANCE®**

STD HORZ MODEL 34M NEMA 48 TENV W/DRAIN FITTINGS, IP54

34LYT124

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