# Customer information packet

## VBM3108

.5HP, 1720RPM, 3PH, 60HZ, 56C, 3416M, OPEN, F1
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | OPEN |
| **Frame** | 56C |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | .500 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 V @ 60 HZ |
| **Agency Approvals** | CSA |
| | UR |
| **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 |
| **Current @ Voltage** | .800 A @ 460.0 V |
| | 1.600 A @ 230.0 V |
| | 1.700 A @ 208.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 75.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 0.8 a |

## Part Detail

| | |
|---|---|
| **Revision** | D |
| **Type** | AC |
| **Mech. spec.** | 34-3093 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 34WGR706 |
| **Layout** | 34LY3093 |
| **Eff. date** | 03-25-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 Y |
| **Proprietary** | False |
| **Created date** | 01-29-2021 |

| | |
|---|---|
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |
| **KVA Code** | J |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3416M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 14.36 IN |
| **Power Factor** | 75 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.25 |
| **Shaft Diameter** | 0.625 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1720 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP1256L | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VBM3108 | | | | | | | | | | |
| **SPEC.** | 34-3093R706-B | | | | | | | | | | |
| **HP** | .5 | | | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | | | |
| **AMP** | 1.6/.8 | | | | | | | | | | |
| **RPM** | 1720 | | | | | | | | | | |
| **FRAME** | 56C | | **HZ** | 60 | | | **PH** | 3 | | | |
| **SER.F.** | 1.25 | **CODE** | J | **DES** | B | **CLASS** | F | | | | |
| **NEMA-NOM-EFF** | 75.5 | **PF** | 75 | | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | |
| **CC** | | | | | | | | | | | |
| **DE** | 6203 | | **ODE** | 6203 | | | | | | | |
| **ENCL** | OPEN | **SN** | | | | | | | | | |
| | SFA 1.9/0.95 | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 86431
Typical performance - not guaranteed values

| **Winding:** 34WGR706-R003 | **Type:** 3416M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 0.5 | **Full Load Torque** | 1.53 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 1.6/0.8 | **Breakdown Torque** | 5.15 LB-FT |
| **R.P.M.** | | | 1720 | **Pull-up Torque** | 2.87 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 3.94 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | J | **Starting Current** | 5 A |
| **Service Factor (S.F.)** | | | 1.25 | **No-load Current** | 0.577 A |
| **NEMA Nom. Eff.** | 75.5 | **Power Factor** | 75 | **Line-line Res. @ 25ºC** | 48.9 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 50°C |
| **S.F. Amps** | | | 1.9/0.95 | **Temp. Rise @ S.F. Load** | 70°C |
| | | | | **Locked-rotor Power Factor** | 70.8 |
| | | | | **Rotor inertia** | 0.0381 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 34 | 53 | 66 | 75 | 81 | 84 | 81 |
| **Efficiency** | 58.6 | 70.6 | 74.6 | 75.5 | 74.8 | 72.9 | 74.8 |
| **Speed** | 1779 | 1761 | 1741 | 1718 | 1692 | 1662 | 1692 |
| **Line amperes** | 0.583 | 0.631 | 0.712 | 0.824 | 0.962 | 1.14 | 0.962 |

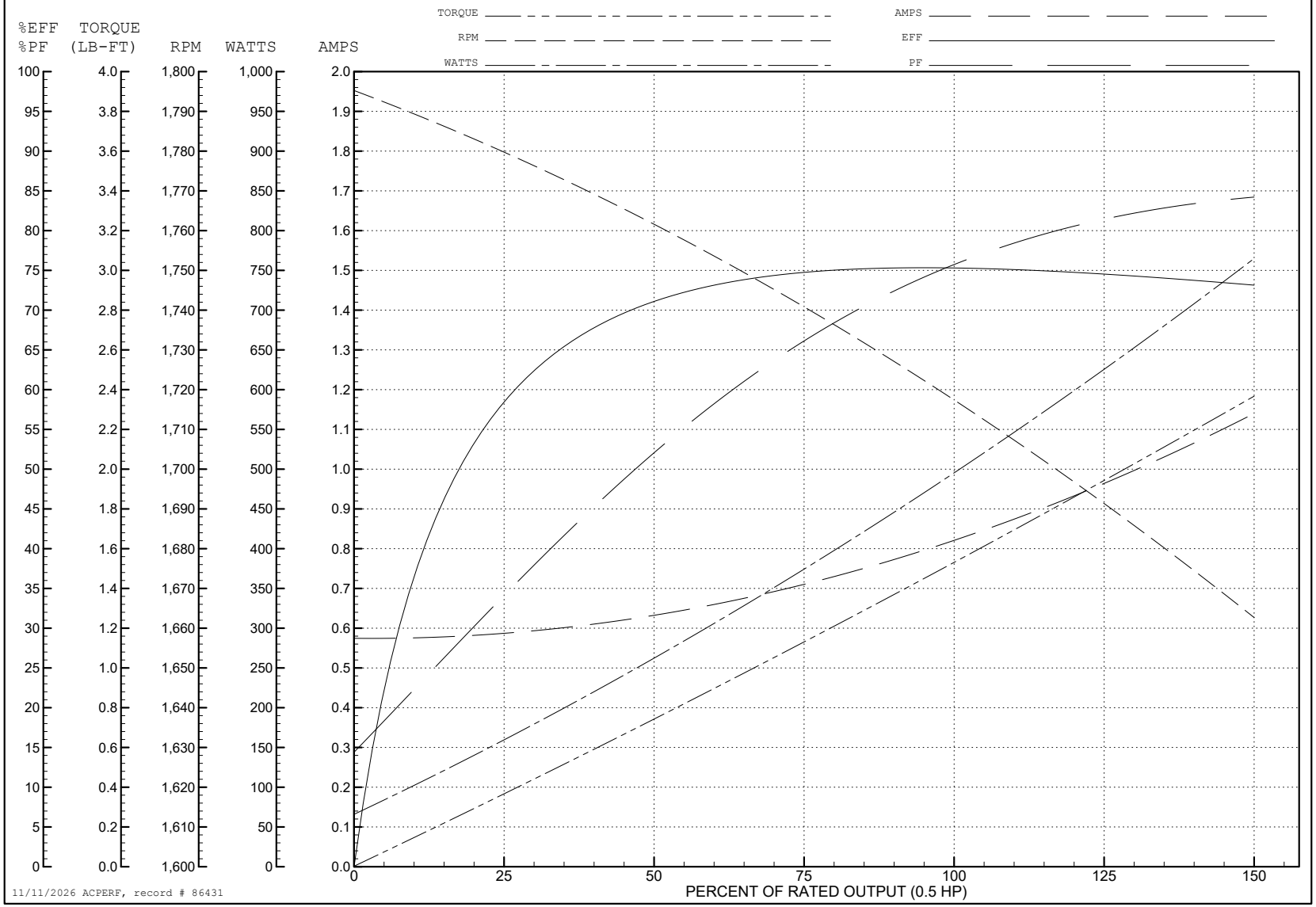
ABB Motors and Mechanical Inc.

WINDING # 34WGR706

0.5 HP 3 PH 60 HZ 1720 RPM 460 V 3416M

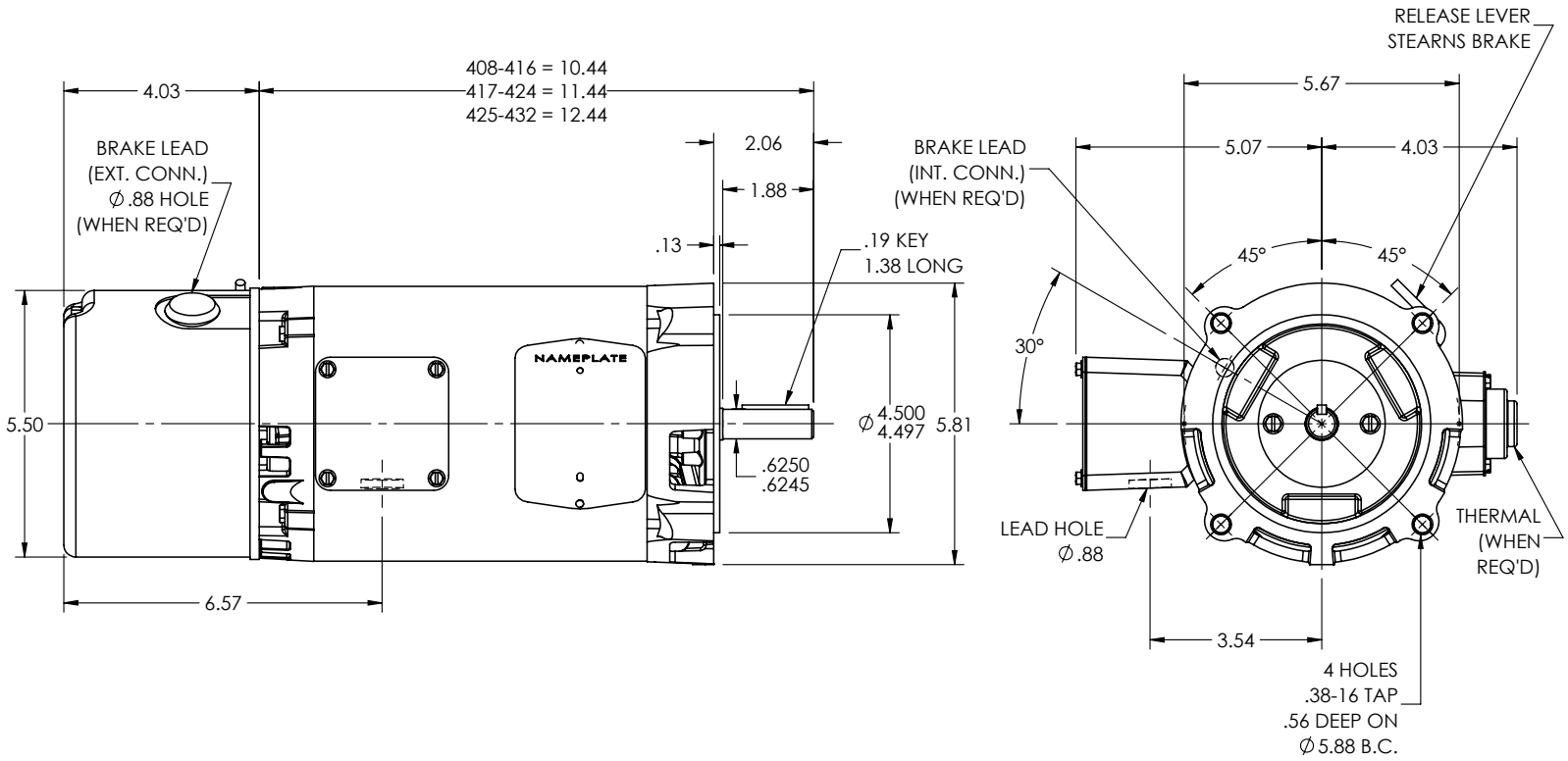
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=5.15 PU=2.87 LR=3.94 LRA=5




11/11/2026 ACPERF, record # 86431

34LY3093

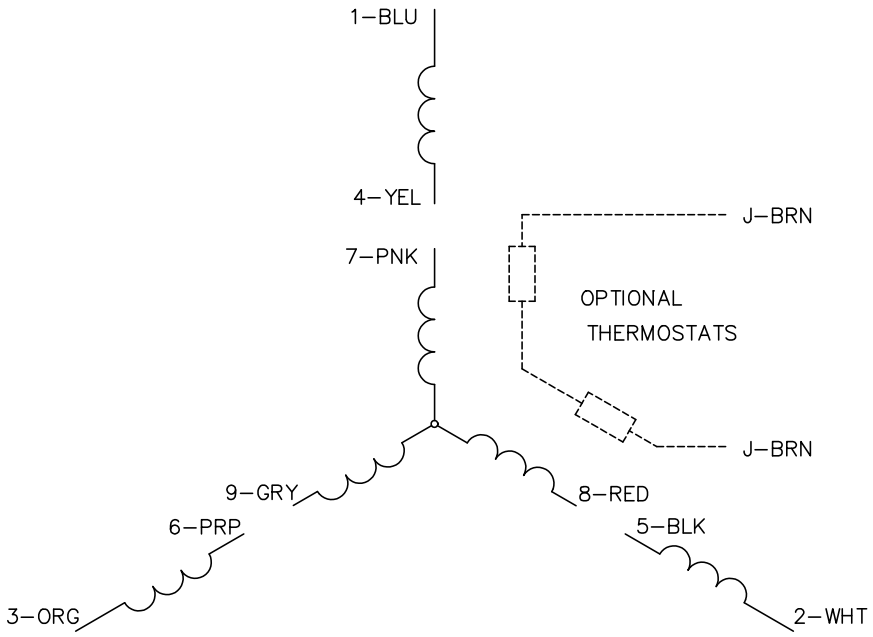


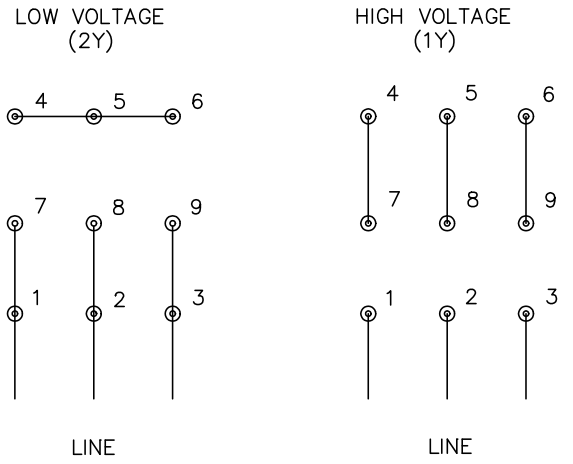

34LY3093

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

| | | | | |
|---|---|---|---|---|
| REV. DESC: LOAD TO SOLIDWORKS - REV E | | | | BALDOR - RELIANCE® |
| REV: F | VERSION: 03 | REVISED: 02:53:32 05/18/2023 | TDR: 000001201165 | |
| 34LY3093 | MODEL NO. 34LY3093 | | REF: - | STD VERT MODEL 34M NEMA 56C OPEN W/STEARNS BRAKE (48 SERIES) |
| | BY: ENFRAJ0 | | | |

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.

CD0005

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|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |