ABB BALDOR RELIANCE

# Customer information packet

VL3507

.75HP, 1725RPM, 1PH, 60HZ, 56C, 3428LC, TEFC, F
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 56C |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Cap Start, Cap Run |
| **Output @ Frequency** | .750 HP @ 60 HZ |
| **Phase** | 1 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 115.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| **Agency Approvals** | C UR US |
| **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** | 4.200 A @ 230.0 V |
| | 4.400 A @ 208.0 V |
| | 8.400 A @ 115.0 V |
| **Design Code** | N |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 72.0 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 4.2 a |
| **Insulation Class** | F |

## Part Detail

| | |
|---|---|
| **Revision** | F |
| **Type** | AC |
| **Mech. spec.** | 34G452 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 34WGR714 |
| **Layout** | 34LYG452 |
| **Eff. date** | 02-11-2025 |
| **CD Diagram** | CD0055 |
| **Poles** | 04 |
| **Leads** | 6#18 |
| **Proprietary** | False |
| **Created date** | 11-19-2020 |

| | |
|---|---|
| **Inverter Code** | Not Inverter |
| **KVA Code** | J |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 6 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3428LC |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 12.47 IN |
| **Power Factor** | 78 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.25 |
| **Shaft Diameter** | 0.625 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1725 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.** | VL3507 | | | | | | | | |
| **SPEC.** | 34G452R714 | | | | | | | | |
| **HP** | .75 | | | | | | | | |
| **VOLTS** | 115/230 | | | | | | | | |
| **AMP** | 8.4/4.2 | | | | | | | | |
| **RPM** | 1725 | | | | | | | | |
| **FRAME** | 56C | **HZ** | 60 | | | **PH** | 1 | | |
| **SER.F.** | 1.25 | **CODE** | J | **DES** | N | **CLASS** | F | | |
| **NEMA-NOM-EFF** | 72 | **PF** | 78 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | | | | | | | | | |
| **DE** | 6203 | **ODE** | 6203 | | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | | |
| | SFA 10/5 | | | | | | | | |

**Parts List**

| Part number | Description | Quantity |
|---|---|---|
| SA388042 | SA 34G452R714 | 1.000 ea |
| RA378384 | RA 34G452R714 | 1.000 ea |
| OC3020F12SP | CAPACITORS 20 MFD 370 VAC | 1.000 ea |
| EC1270A02SP | ELEC CAP, 270-324 MFD, 125V, 1.48D X 3. | 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 |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 ea |
| 34EP3102A01SP | FR ENDPLATE, MACH | 1.000 ea |
| NS2501A02 | INSULATOR, CAPACITOR BOX | 1.000 ea |
| 34CB3801 | CAPACITOR BOX, DIE CAST | 1.000 ea |
| 34GS3002 | GASKET, CAPACITOR BOX | 1.000 ea |
| 51XB1214A08 | 12-14 X 1/2HX WS SL SR TYBX | 2.000 ea |
| WD1000A16 | 2-520128-2 AMP FLAG TERMINAL(4M/RL) | 1.000 ea |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 ea |
| 34EP3300A24SP | PU ENDPLATE, MACH | 1.000 ea |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 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 |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 ea |
| HA7000A04 | KEY RETAINER 0.625 DIA SHAFTS | 1.000 ea |
| 34GS5003A01 | FOAM SLEEVE, ID = 2 1/16" X 4 3/8" | 3.000 ea |
| MG1050G01 | CELEROL MEDIUM CHARCOAL METALLIC GRAY | 0.014 ga |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| SP5051B17 | MDL 34 TORQ STAT SW,TYPE LC, STD F1 & F2 | 1.000 ea |

| | | |
|---|---|---|
| HA3100A37 | THRUBOLT 10-32 X 8.500 | 4.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
| LC0001A01 | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 ea |
| NP1256L | ALUM UL CC INDUSTRIAL MOTOR A60 | 1.000 ea |
| PK3083 | STYROFOAM PACKING CRADLE | 1.000 ea |
| PK3088 | MICROFOAM, 8"X"8 PERF. SHEETS | 1.000 ea |
| 35PA1066 | PKG GRP, PRINT PK1008A07 | 1.000 ea |

**AC Induction Motor Performance Data**
Record # 85524
Typical performance - not guaranteed values

| **Winding:** 34WGR714-R001 | **Type:** 3428LC | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **230 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | .75 | **Full Load Torque** | 2.25 LB-FT |
| **Volts** | | | 115/230 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 8.4/4.2 | **Breakdown Torque** | 5.4 LB-FT |
| **R.P.M.** | | | 1725 | **Pull-up Torque** | 5.1 LB-FT |
| **Hz** | 60 | **Phase** | 1 | **Locked-rotor Torque** | 7.04 LB-FT |
| **NEMA Design Code** | N | **KVA Code** | J | **Starting Current** | 24.54 A |
| **Service Factor (S.F.)** | | | 1.25 | **No-load Current** | 2.39 A |
| **NEMA Nom. Eff.** | 72 | **Power Factor** | 78 | **Line-line Res. @ 25ºC** | 0.726 Ω A Ph<br>3.03 Ω B Ph |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 66°C |
| **S.F. Amps** | | | 10/5 | **Temp. Rise @ S.F. Load** | 84°C |
| | | | | **Locked-rotor Power Factor** | 83 |
| | | | | **Rotor inertia** | 0.0665 lb-ft² |

**Load Characteristics 230 V, 60 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 46 | 62 | 73 | 80 | 83 | 83 | 83 |
| **Efficiency** | 52.6 | 68.4 | 72.5 | 73.5 | 73 | 69.2 | 73 |
| **Speed** | 1780 | 1765 | 1747 | 1727 | 1704 | 1670 | 1704 |
| **Line amperes** | 2.54 | 2.9 | 3.45 | 4.09 | 4.92 | 6.06 | 4.92 |

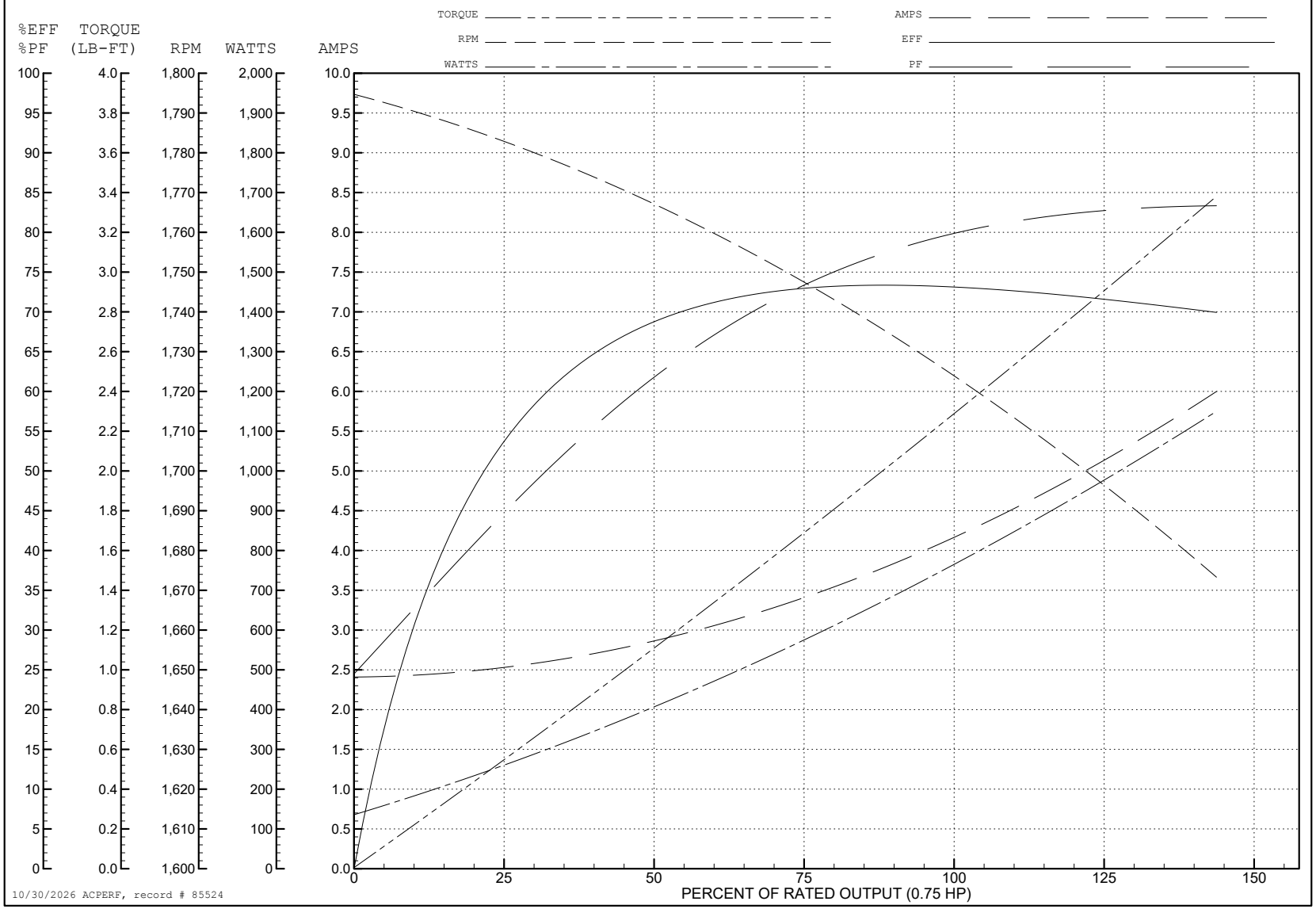
ABB Motors and Mechanical Inc.

WINDING # 34WGR714

0.75 HP 1 PH 60 HZ 1725 RPM 230 V 3428LC

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=5.4 PU=5.1 LR=7.04 LRA=24.54




10/30/2026 ACPERF, record # 85524

**AC Induction Motor Performance Data**
Record # 85532
Typical performance - not guaranteed values

| **Winding:** 34WGR714-R001 | **Type:** 3428LC | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **115 V, 60 Hz: Low Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | .75 | **Full Load Torque** | 2.26 LB-FT |
| **Volts** | | | 115/230 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 8.4/4.2 | **Breakdown Torque** | 5.41 LB-FT |
| **R.P.M.** | | | 1725 | **Pull-up Torque** | 5.31 LB-FT |
| **Hz** | 60 | **Phase** | 1 | **Locked-rotor Torque** | 7.32 LB-FT |
| **NEMA Design Code** | N | **KVA Code** | J | **Starting Current** | 47.96 A |
| **Service Factor (S.F.)** | | | 1.25 | **No-load Current** | 4.78 A |
| **NEMA Nom. Eff.** | 72 | **Power Factor** | 78 | **Line-line Res. @ 25ºC** | 0.726 Ω A Ph<br>3.03 Ω B Ph |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 66°C |
| **S.F. Amps** | | | 10/5 | **Temp. Rise @ S.F. Load** | 82°C |
| | | | | **Locked-rotor Power Factor** | 85.8 |
| | | | | **Rotor inertia** | 0.0665 lb-ft² |

**Load Characteristics 115 V, 60 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 46 | 62 | 73 | 80 | 83 | 84 | 83 |
| **Efficiency** | 52.7 | 68.4 | 72.5 | 73.6 | 72.8 | 69 | 72.8 |
| **Speed** | 1780 | 1765 | 1747 | 1726 | 1703 | 1670 | 1703 |
| **Line amperes** | 5.07 | 5.78 | 6.88 | 8.16 | 9.82 | 12.09 | 9.82 |

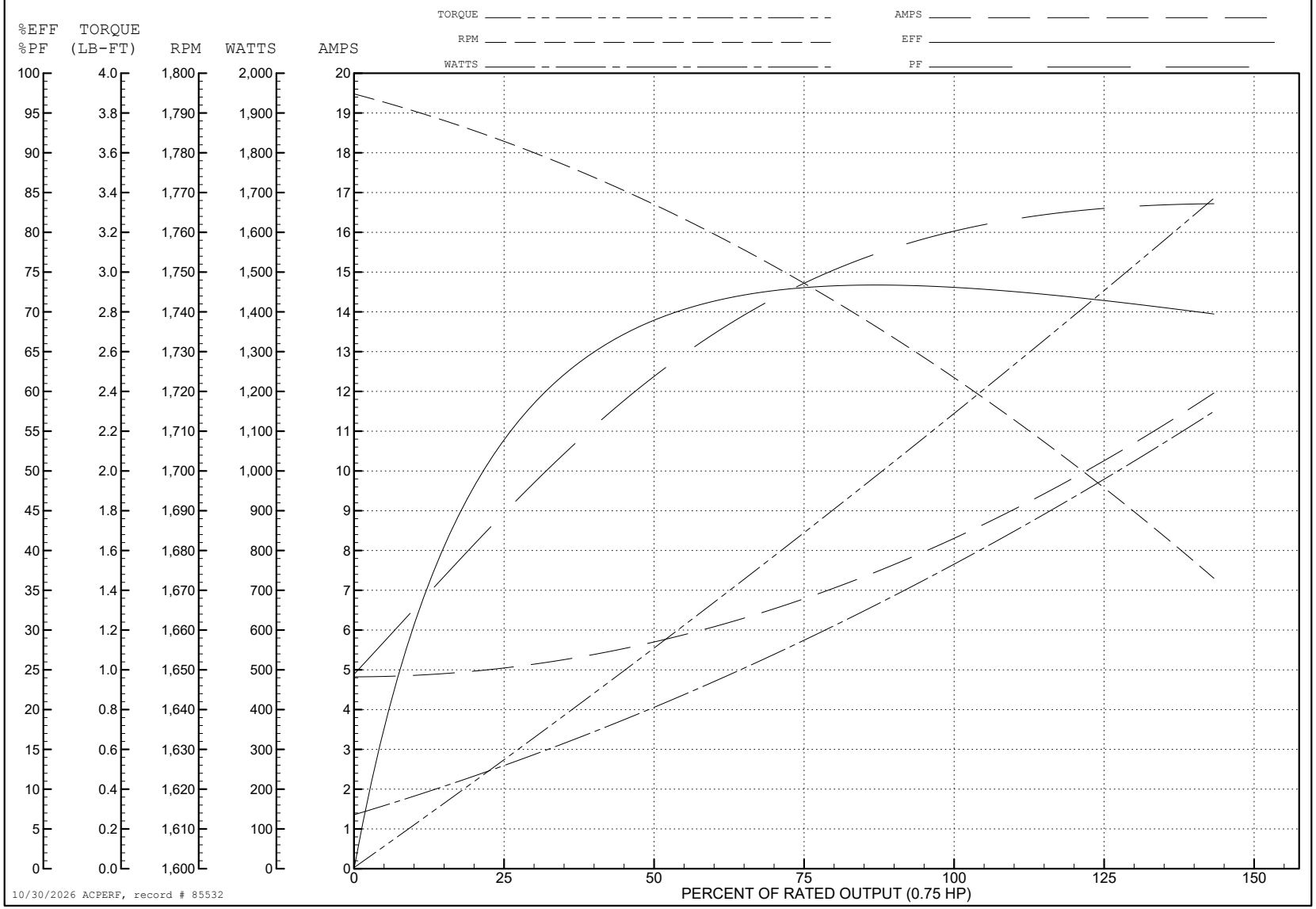
ABB Motors and Mechanical Inc.

WINDING # 34WGR714

0.75 HP 1 PH 60 HZ 1725 RPM 115 V 3428LC

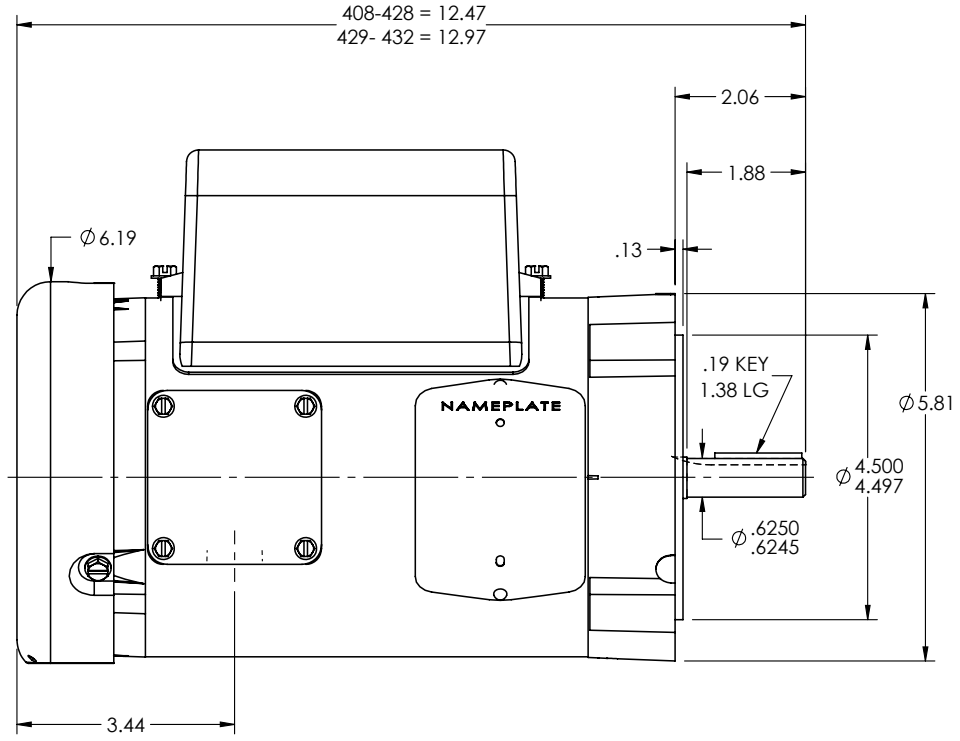
Typical performance - not guaranteed values.

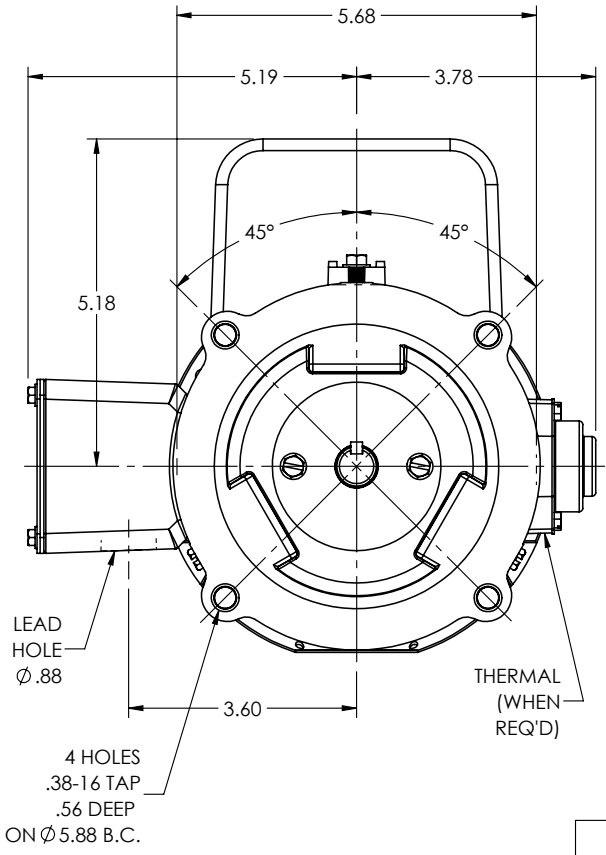
TORQUES(LB-FT): PO=5.41 PU=5.31 LR=7.32 LRA=47.96




10/30/2026 ACPERF, record # 85532

34LYG452




34LYG452

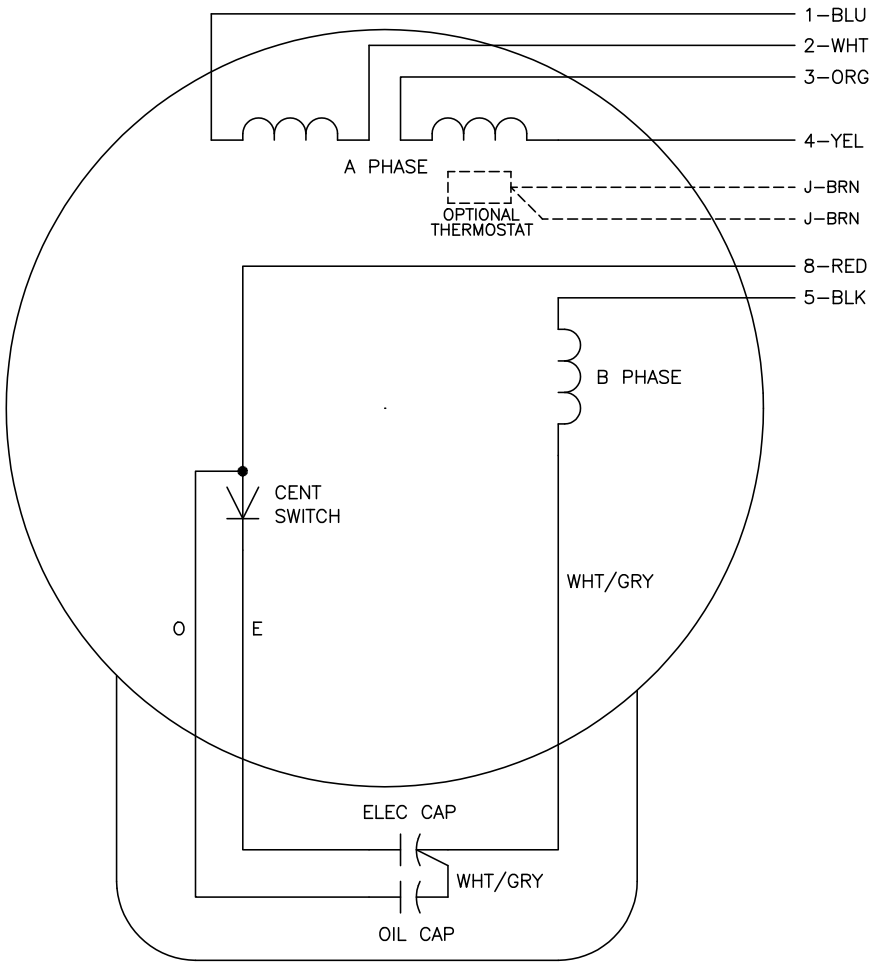
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

| | | | |
|---|---|---|---|
| REV. DESC: CLEAN UP DIMENSIONS | | | |
| REV: G | VERSION: 05 | REVISED: 01:30:50 04/17/2026 | TDR: 000001275712 |
| 34LYG452 | MODEL NO. 34LYG452 | | REF: - |
| | BY: ENJEFD0 | | |

BALDOR - RELIANCE®

STD VERT 34LC NEMA 56C TEFC

CD0055




| | LINE A | LINE B | JOIN |
|---|---|---|---|
| HIGH STD | 1 | 4,5 | 2,3,8 |
| HIGH OPP | 1 | 4,8 | 2,3,5 |
| LOW STD | 1,3,8 | 2,4,5 | – |
| LOW OPP | 1,3,5 | 2,4,8 | – |

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0055

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: D | BY: JLP | REVISED: 04/08/99 1:17 | TDR: 0178636 |
| CD0055 | | FILE: AAA00007414 | MDL: – |
| | | MTL: – | TYPE LC, DV, REV, 6 LEADS |