ABB BALDOR RELIANCE

# Customer information packet

33E388W698

.17HP, 1650//1375RPM, 1PH, 60//50HZ, 42CZ, 33

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## Specifications

| | |
|---|---|
| **Enclosure** | OPEN |
| **Frame** | 42CZ |
| **Frame Material** | Steel |
| **Frequency** | 50.00 Hz |
| | 60.00 Hz |
| **Motor Letter Type** | Oil Capacitor Start and Run |
| **Output @ Frequency** | .170 HP @ 50 HZ |
| | .170 HP @ 60 HZ |
| **Phase** | 1 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 110.0 V @ 50 HZ |
| | 110.0 V @ 60 HZ |
| **Agency Approvals** | C UR US |
| | CURUS |
| **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** | 2.350 A @ 110.0 V |
| | 1.800 A @ 110.0 V |
| **Design Code** | - |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 64.0 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Feedback Signal** | NONE |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |

## Part Detail

| | |
|---|---|
| **Revision** | AW |
| **Type** | AC |
| **Mech. spec.** | 33E388 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 33WGW698 |
| **Layout** | 33LYE388 |
| **Eff. date** | 10-16-2025 |
| **CD Diagram** | CD0531A05 |
| **Poles** | 04 |
| **Leads** | 5#18 |
| **Proprietary** | False |
| **Created date** | 06-25-2007 |

| | |
|---|---|
| **High Voltage Full Load Amps** | 1.8 a |
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |
| **KVA Code** | - |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Lead Hole |
| **Motor Lead Quantity/Wire Size** | 5 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3318C |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 18.18 IN |
| **Power Factor** | 90 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Special Combination |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.25 |
| **Shaft Diameter** | 0.625 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1375 rpm<br>1650 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** | Automatic Thermal Overload |
| **Winding Thermal 1 Location** | WG |
| **Winding Thermal 2** | None |

**Nameplate**

| | NP1257L | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | 50HZ VOLTAGE TOL: +/- 5% | | | | | | | |
| **SPEC.** | 33E388W698 | | | | | | | |
| **HP** | .17 | | | | | | | |
| **VOLTS** | 110 | | | | | | | |
| **AMP** | 1.8//2.35 | | | | | | | |
| **RPM** | 1650//1375 | | | | | | | |
| **FRAME** | 42CZ | **HZ** | 60//50 | **PH** | 1 | | | |
| **SER.F.** | 1.25 | **CODE** | - | **DES** | - | **CL** | F | |
| **NEMA-NOM-EFF** | 64 | **PF** | 90 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | |
| **CC** | | | | | | | | |
| **DE** | 6203 | **ODE** | 6203 | | | | | |
| **ENCL** | OPEN | **SN** | | | | | | |
| | SFA 2//2.65 | | | | | | | |

**AC Induction Motor Performance Data**
Record # 6512
Typical performance - not guaranteed values

| **Winding:** 33WGW698 | **Type:** 3318C | **Enclosure:** OPEN |
|---|---|---|

| **Nameplate Data** | | | | **115 V, 50 Hz: Single Voltage Motor** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | .17 | **Full Load Torque** | 0.64 LB-FT |
| **Volts** | | | 115 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 2.6//1.9 | **Breakdown Torque** | 1.5 LB-FT |
| **R.P.M.** | | | 1400//1700 | **Pull-up Torque** | 0.58 LB-FT |
| **Hz** | 50//60 | **Phase** | 1 | **Locked-rotor Torque** | 0.61 LB-FT |
| **NEMA Design Code** | - | **KVA Code** | - | **Starting Current** | 7.04 A |
| **Service Factor (S.F.)** | | | 1.25 | **No-load Current** | 2.303 A |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 | **Line-line Res. @ 25ºC** | 4.512 Ω A Ph<br>7.502 Ω B Ph |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 85°C |
| **S.F. Amps** | | | 2.8//2.1 | **Temp. Rise @ S.F. Load** | 88°C |

**Load Characteristics 115 V, 50 Hz, 0.17 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 52 | 60 | 66 | 74 | 79 | 85 | 79 |
| **Efficiency** | 24.3 | 40.6 | 51.8 | 56.8 | 60.5 | 60.4 | 60.5 |
| **Speed** | 1461 | 1438 | 1414 | 1383 | 1353 | 1312 | 1353 |
| **Line amperes** | 2.3 | 2.352 | 2.444 | 2.61 | 2.785 | 3.042 | 2.78 |

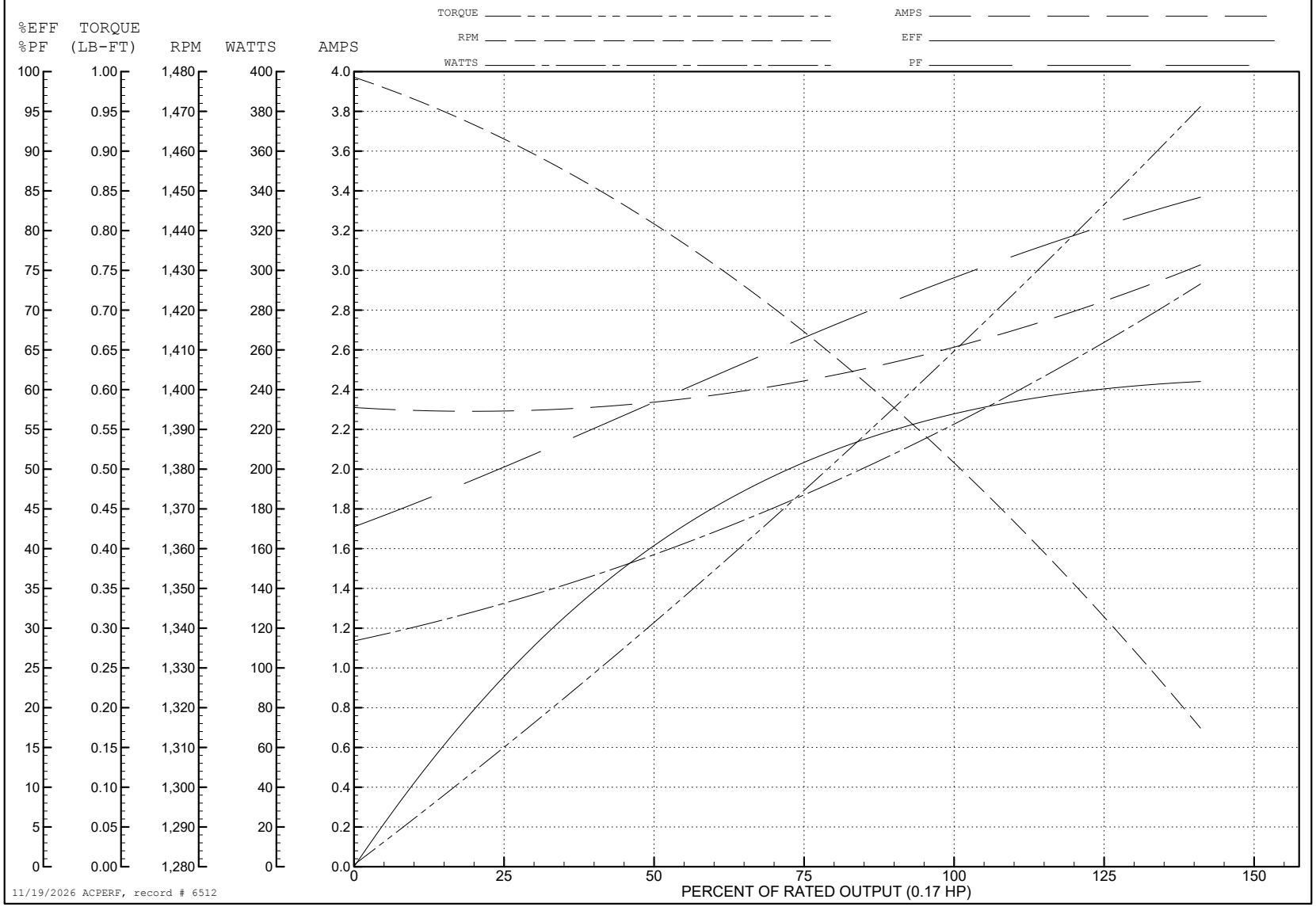
ABB Motors and Mechanical Inc.

WINDING # 33WGW698

0.17 HP 1 PH 50 HZ 1383 RPM 115 V 3318C

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=1.5 PU=0.58 LR=0.61 LRA=7.04



**AC Induction Motor Performance Data**
Record # 6513
Typical performance - not guaranteed values

| **Winding:** 33WGW698 | **Type:** 3318C | **Enclosure:** OPEN |
|---|---|---|

| **Nameplate Data** | | | | **115 V, 60 Hz: Single Voltage Motor** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | .17 | **Full Load Torque** | 0.529 LB-FT |
| **Volts** | | | 115 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 2.6//1.9 | **Breakdown Torque** | 1.34 LB-FT |
| **R.P.M.** | | | 1400//1700 | **Pull-up Torque** | 0.6 LB-FT |
| **Hz** | 50//60 | **Phase** | 1 | **Locked-rotor Torque** | 0.61 LB-FT |
| **NEMA Design Code** | - | **KVA Code** | D | **Starting Current** | 6.51 A |
| **Service Factor (S.F.)** | | | 1.25 | **No-load Current** | 1.171 A |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 | **Line-line Res. @ 25ºC** | 4.512 Ω A Ph<br>7.502 Ω B Ph |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | |
| **S.F. Amps** | | | 2.8//2.1 | **Temp. Rise @ S.F. Load** | |

**Load Characteristics 115 V, 60 Hz, 0.17 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 79 | 86 | 88 | 90 | 94 | 94 | 94 |
| **Efficiency** | 28.1 | 45.9 | 57.9 | 64.7 | 67.3 | 68 | 67.3 |
| **Speed** | 1761 | 1740 | 1714 | 1683 | 1653 | 1608 | 1653 |
| **Line amperes** | 1.294 | 1.443 | 1.647 | 1.885 | 2.124 | 2.457 | 2.12 |

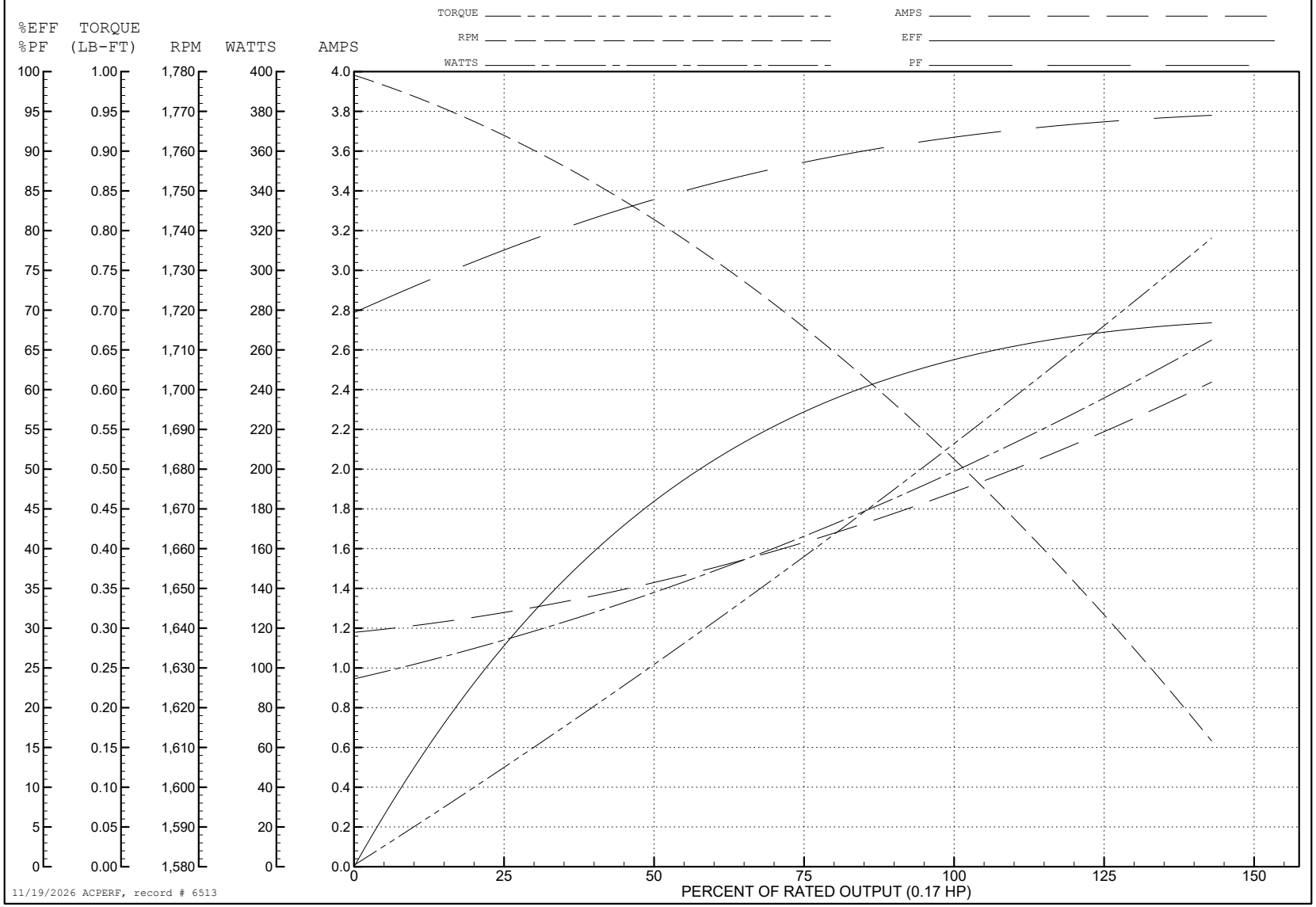
ABB Motors and Mechanical Inc.

WINDING # 33WGW698

0.17 HP 1 PH 60 HZ 1683 RPM 115 V 3318C

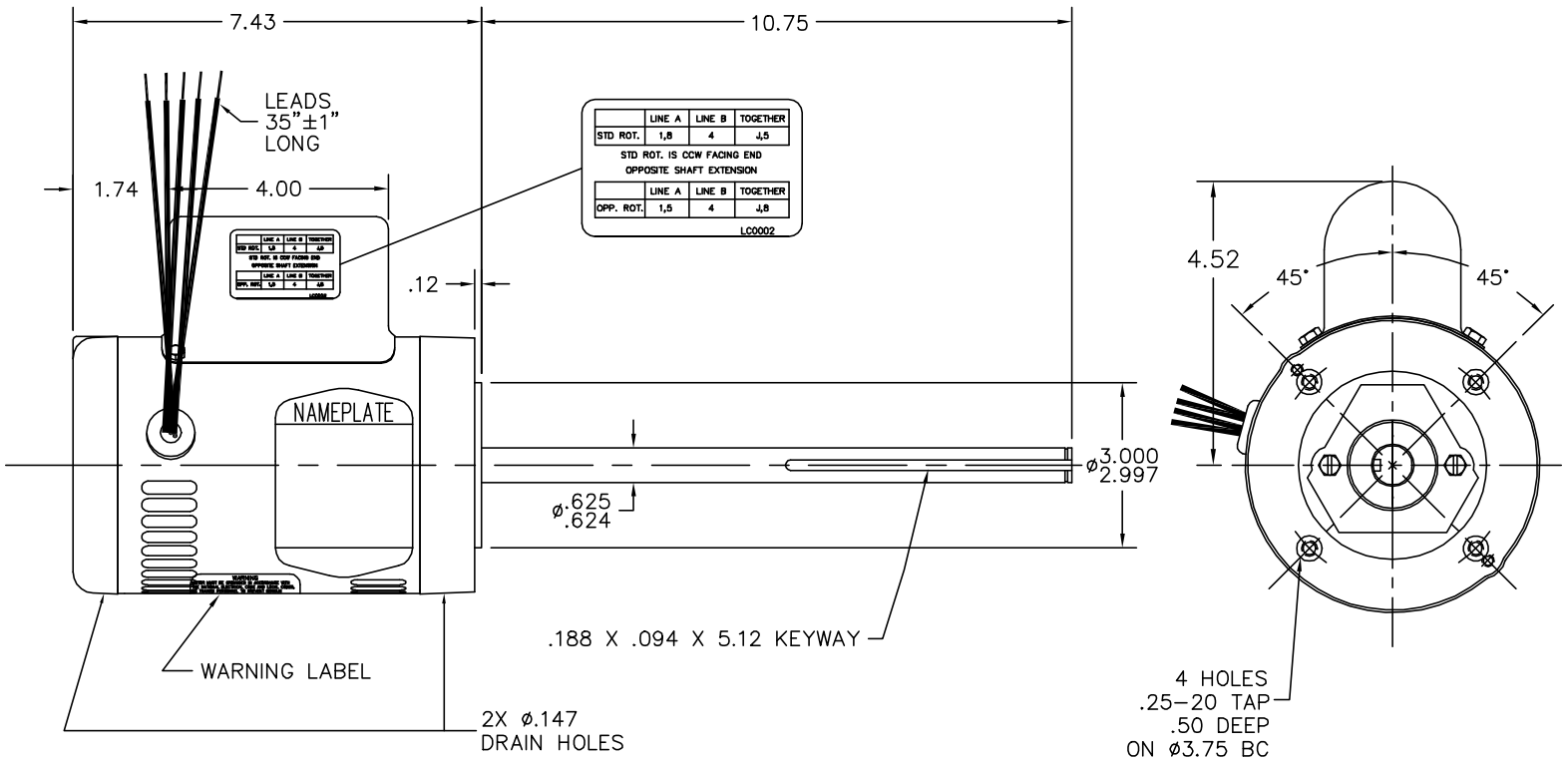
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=1.34 PU=0.6 LR=0.61 LRA=6.51




11/19/2026 ACPERF, record # 6513

33E388W698



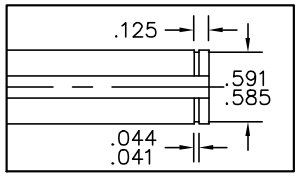

| | LINE A | LINE B | TOGETHER |
|---|---|---|---|
| STD ROT. | 1,8 | 4 | 4,5 |

STD ROT. IS CCW FACING END OPPOSITE SHAFT EXTENSION

| | LINE A | LINE B | TOGETHER |
|---|---|---|---|
| OPP. ROT. | 1,5 | 4 | 4,8 |

LC0002

NOTE:
SHAFT RUNOUT .007 MAX.
MEASURED .50" FROM END OF SHAFT

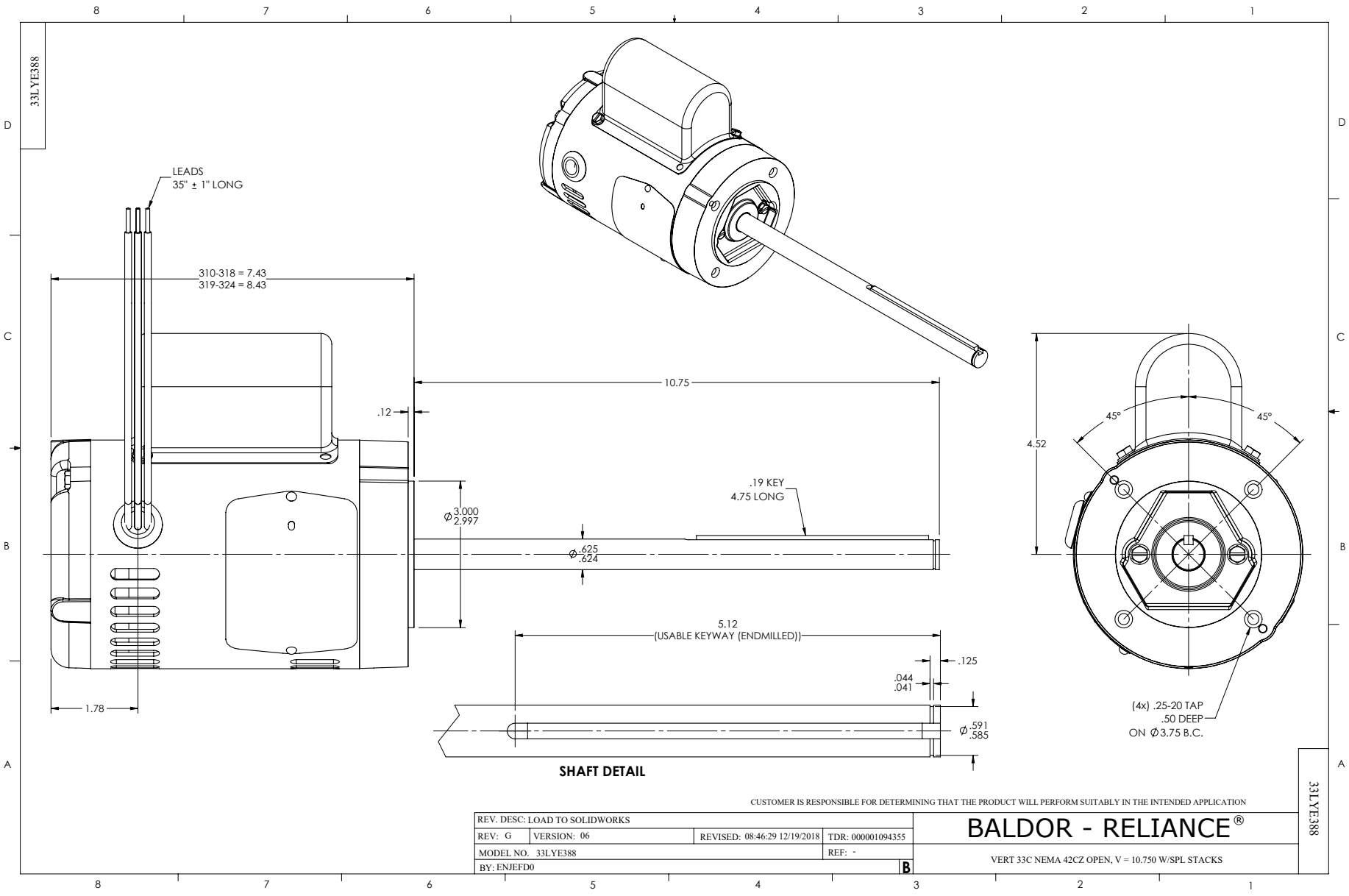



SHAFT DETAIL

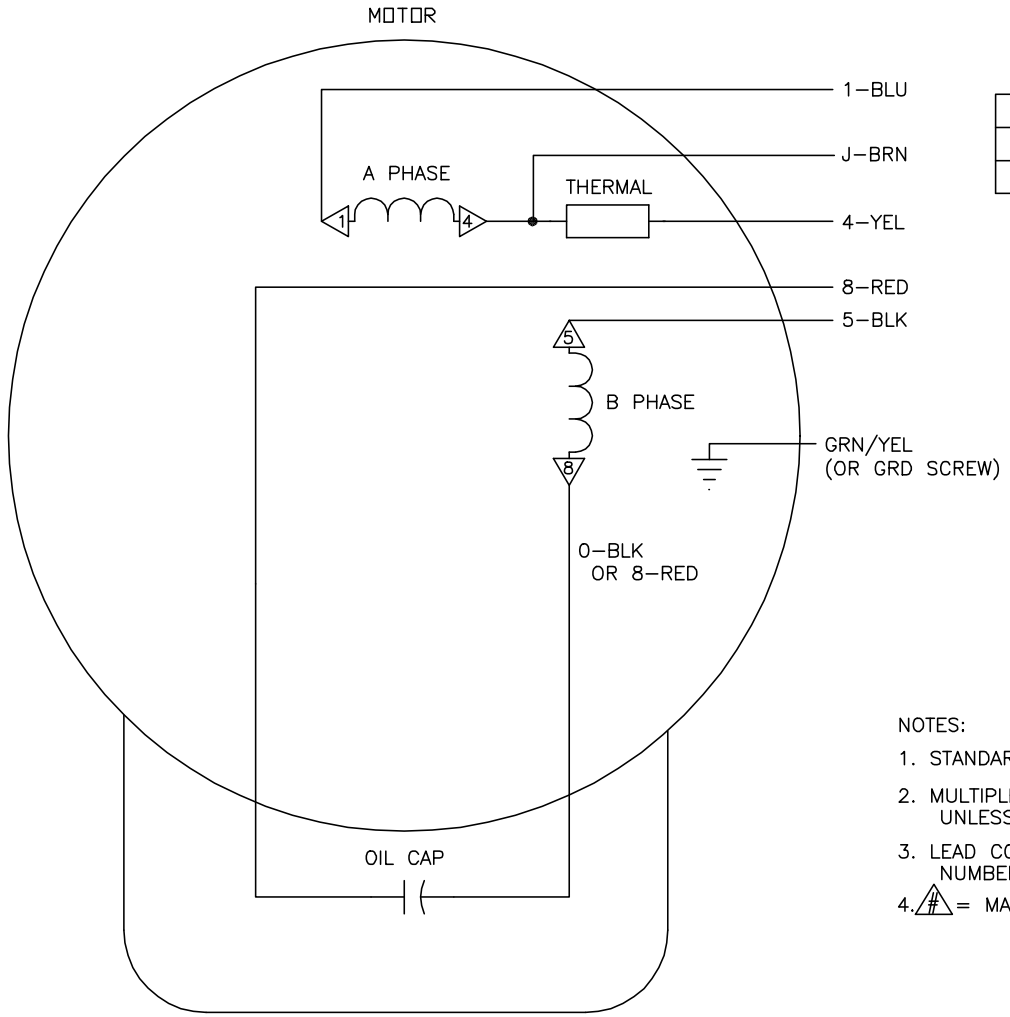
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

| | | | |
|---|---|---|---|
| REV. DESC: NEW | | | BALDOR • DODGE • RELIANCE |
| REV. LTR: – | VERSION: 00 | TDR: 000000475117 | |
| 869M88E3E3 | FILE: \CKA\00034\669 | REVISED: 10:51:21 09/04/2008 | VERT 33C NEMA 42CZ OPEN, V = 10.750 |
| | MTL: – | BY: CKGLEH0 | SH 1 of 2 |

33E388W698


33LYE388
LEADS
35" ± 1" LONG
310-318 = 7.43
319-324 = 8.43
10.75
.12
.19 KEY
4.75 LONG
Ø3.000
2.997
Ø.625
.624
5.12
(USABLE KEYWAY (ENDMILLED))
.125
.044
.041
Ø.591
.585
1.78
4.52
45°
45°
(4x) .25-20 TAP
.50 DEEP
ON Ø3.75 B.C.
SHAFT DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD TO SOLIDWORKS
REV: G
VERSION: 06
REVISED: 08:46:29 12/19/2018
TDR: 000001094355
MODEL NO. 33LYE388
REF: -
BY: ENJEFD0
B
BALDOR - RELIANCE®
VERT 33C NEMA 42CZ OPEN, V = 10.750 W/SPL STACKS
33LYE388

CD0531A05




| | LINE A | LINE B | JOIN |
|---|---|---|---|
| STD | 1,8 | 4 | J,5 |
| OPP | 1,5 | 4 | J,8 |

NOTES:

1. STANDARD ROTATION IS CCW VIEWING LEAD END
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.
4. (#) = MAGNET WIRE COIL END WITH I.D. NUMBER.

CD0531A05

| | | | |
|---|---|---|---|
| REV. DESC: ADD #8 (RED) LEAD TO THE BLACK LEAD | | | **Baldor • Dodge • Reliance** |
| REV. LTR: A | VERSION: 01 | TDR: 000000435893 | |
| CD0531A05 | FILE: \CKA\00029\028 | REVISED: 16:41:51 06/28/2007 | TYPE C, SV, REV, 5 LDS, T'STAT IN LINE, CK |
| | MTL: — | BY: CKPHIW0 | |