

# ABB BALDOR RELIANCE III

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## Customer information packet

### VXL050542A

.5HP, 1725RPM, 1PH, 60HZ, 56C, 3424L, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | XPFC                                                        |
| <b>Frame</b>                          | 56C                                                         |
| <b>Frame Material</b>                 | Steel                                                       |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | CLI GP D; CLII GP F,G                                       |
| <b>Haz Area Division</b>              | Division I                                                  |
| <b>Motor Letter Type</b>              | Cap Start, Induction Run                                    |
| <b>Output @ Frequency</b>             | .500 HP @ 60 HZ                                             |
| <b>Phase</b>                          | 1                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>115.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| <b>Agency Approvals</b>               | CSA<br>UL                                                   |
| <b>Ambient Temperature</b>            | 40 °C                                                       |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                            |
| <b>Auxiliary Box Lead Termination</b> | None                                                        |
| <b>Base Indicator</b>                 | No Mounting                                                 |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 3.700 A @ 230.0 V<br>3.900 A @ 208.0 V<br>7.400 A @ 115.0 V |
| <b>Design Code</b>                    | N                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 64.0 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Haz Area Temp Code</b>             | T3C                                                         |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |                |
|---------------------|----------------|
| <b>Revision</b>     | E              |
| <b>Type</b>         | AC             |
| <b>Mech. spec.</b>  |                |
| <b>Base</b>         |                |
| <b>Status</b>       | PRD/A          |
| <b>Elec. spec.</b>  | 34WGW369       |
| <b>Layout</b>       | 34LY5335       |
| <b>Eff. date</b>    | 09-04-2024     |
| <b>CD Diagram</b>   | CD0565         |
| <b>Poles</b>        | 04             |
| <b>Leads</b>        | 6#18,1#16 #4TH |
| <b>Proprietary</b>  | False          |
| <b>Created date</b> | 03-22-2021     |

|                             |                            |
|-----------------------------|----------------------------|
| High Voltage Full Load Amps | 3.7 a                      |
| Insulation Class            | B                          |
| Inverter Code               | Not Inverter               |
| IP Rating                   | NONE                       |
| KVA Code                    | J                          |
| Lifting Lugs                | No Lifting Lugs            |
| Locked Bearing Indicator    | No Locked Bearing          |
| Motor Lead Termination      | Flying Leads               |
| Motor Standards             | NEMA                       |
| Motor Type                  | 3424L                      |
| Mounting Arrangement        | F1                         |
| Number of Poles             | 4                          |
| Overall Length              | 14.22 IN                   |
| Power Factor                | 66                         |
| Product Family              | Hazardous Location Motor   |
| Pulley Face Code            | C-Face                     |
| Rodent Screen               | None                       |
| Service Factor              | 1.00                       |
| Shaft Diameter              | 0.625 IN                   |
| Shaft Ground Indicator      | No Shaft Grounding         |
| Shaft Rotation              | Reversible                 |
| 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           | Automatic Thermal Overload |
| Winding Thermal 1 Location  | EP                         |
| Winding Thermal 2           | None                       |

Nameplate

| NP0016XPSL |                        |    |               |     |  |       |   |    |  |
|------------|------------------------|----|---------------|-----|--|-------|---|----|--|
| NO.        |                        | CC |               |     |  |       |   |    |  |
| SER. #     |                        |    |               |     |  |       |   |    |  |
| SPEC       | 34-0000-0408           |    |               |     |  |       |   |    |  |
| CAT.NO.    | VXL050542A             |    |               |     |  |       |   |    |  |
| H.P.       | .5                     |    | T. CODE       | T3C |  |       |   |    |  |
| VOLTS      | 115/208-230            |    |               |     |  |       |   |    |  |
| AMPS       | 7.4/3.9-3.7            |    |               |     |  |       |   |    |  |
| R.P.M.     | 1725 34WGW369          |    |               |     |  |       |   |    |  |
| HZ         | 60                     |    | PH            | 1   |  | CLASS | B |    |  |
| SER.F.     | 1.00                   |    | DES           | N   |  | CODE  | J |    |  |
| RATING     | 40C AMB-CONT           |    |               |     |  |       |   |    |  |
| FRAME      | 56C                    |    | NEMA NOM. EFF |     |  |       |   | 64 |  |
|            |                        | PF | 66            |     |  |       |   |    |  |
| BLANK      | NEMA MG-1 PART 5, IP54 |    |               |     |  |       |   |    |  |

**AC Induction Motor Performance Data**

Record # 48773

Typical performance - not guaranteed values

| Winding: 34WGW369-R001 |          |                             | Type: 3424L                             |                         | Enclosure: XPFC |  |
|------------------------|----------|-----------------------------|-----------------------------------------|-------------------------|-----------------|--|
| Nameplate Data         |          |                             | 115 V, 60 Hz:<br>Low Voltage Connection |                         |                 |  |
| Rated Output (HP)      |          | .5                          | Full Load Torque                        |                         | 1.5 LB-FT       |  |
| Volts                  |          | 115/208-230                 | Start Configuration                     |                         | direct on line  |  |
| Full Load Amps         |          | 7.4/3.9-3.7                 | Breakdown Torque                        |                         | 4.4 LB-FT       |  |
| R.P.M.                 |          | 1725                        | Pull-up Torque                          |                         | 4 LB-FT         |  |
| Hz                     | 60 Phase | 1                           | Locked-rotor Torque                     |                         | 5.1 LB-FT       |  |
| NEMA Design Code       |          | N                           | KVA Code                                |                         | J               |  |
| Service Factor (S.F.)  |          | 1                           | Starting Current                        |                         | 38.8 A          |  |
| Service Factor (S.F.)  |          | 1                           | No-load Current                         |                         | 5.62 A          |  |
| NEMA Nom. Eff.         |          | 64                          | Power Factor                            |                         | 66              |  |
| NEMA Nom. Eff.         |          | 64                          | Power Factor                            |                         | 66              |  |
| Line-line Res. @ 25°C  |          | 0.913 Ω A Ph<br>2.88 Ω B Ph |                                         |                         |                 |  |
| Rating - Duty          |          | 40C AMB-CONT                |                                         | Temp. Rise @ Rated Load |                 |  |
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**Load Characteristics 115 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 37   | 48   | 59   | 67   | 74   | 79   |
| Efficiency      | 38.9 | 55.3 | 62.3 | 64.9 | 65.3 | 63.8 |
| Speed           | 1781 | 1768 | 1753 | 1736 | 1717 | 1696 |
| Line amperes    | 5.78 | 6.12 | 6.62 | 7.38 | 8.26 | 9.38 |

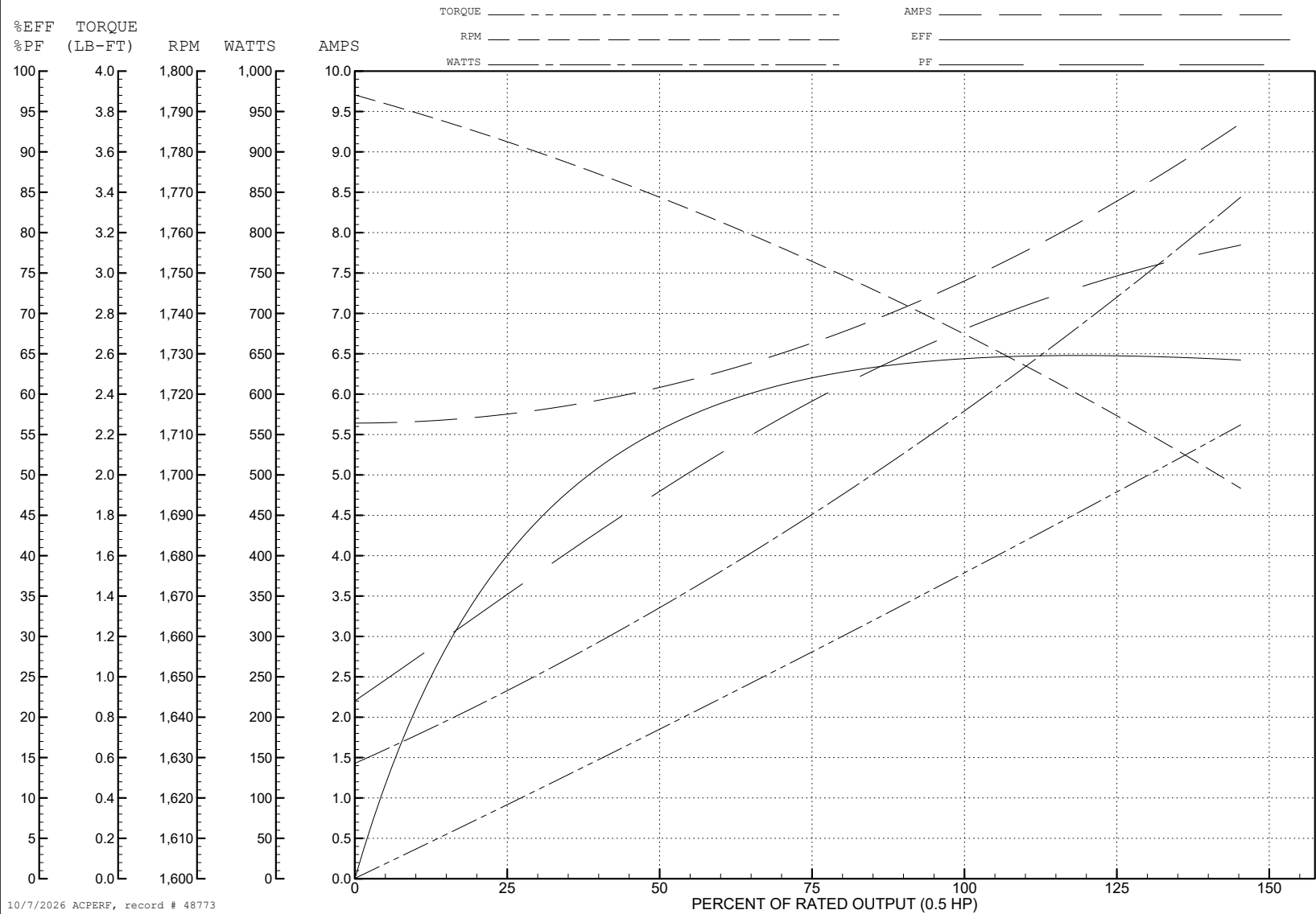
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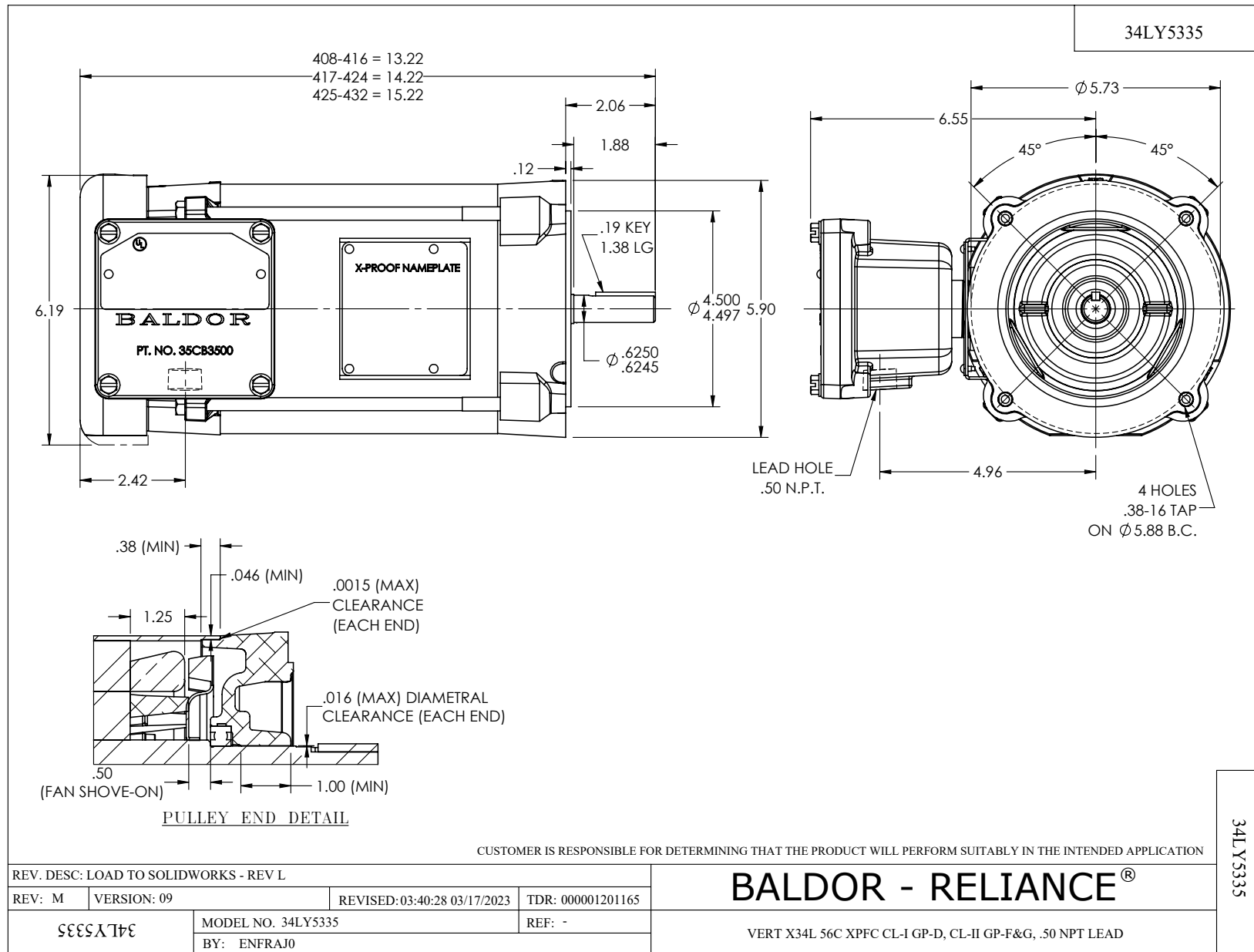
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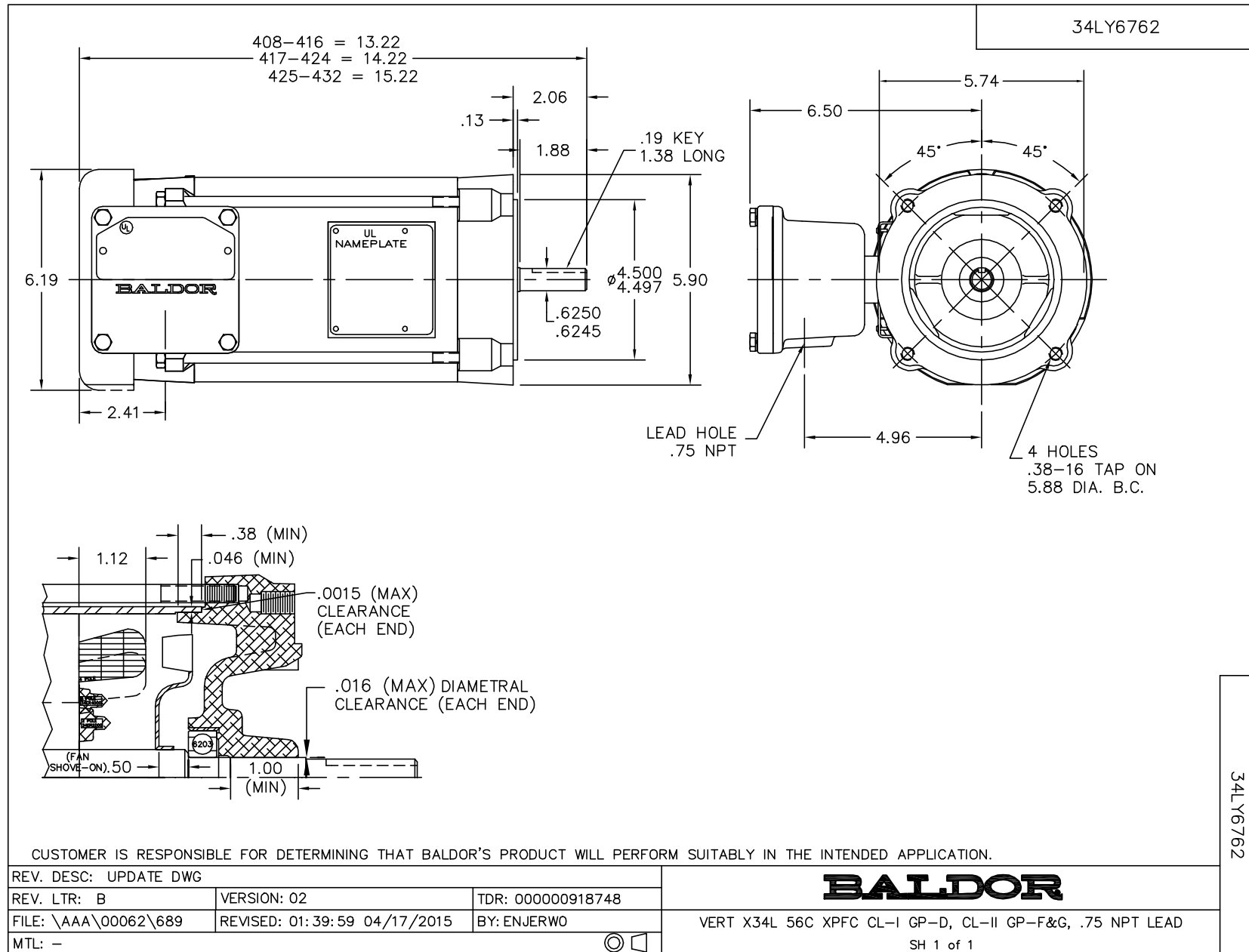
Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1725 RPM 115 V 3424L

TORQUES (LB-FT) : PO=4.4 PU=4 LR=5.1 LRA=38.8







CD0565

