

# ABB BALDOR RELIANCE III

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## Customer information packet

### L1321T

1.5HP, 1730RPM, 1PH, 60HZ, 145T, 3536L, OPEN, F

Class - None

Division - Not Applicable

**Specifications**

|                                |                                                              |
|--------------------------------|--------------------------------------------------------------|
| Enclosure                      | OPEN                                                         |
| Frame                          | 145T                                                         |
| Frame Material                 | Steel                                                        |
| Frequency                      | 60.00 Hz                                                     |
| Haz Area Class and Group       | None                                                         |
| Haz Area Division              | Not Applicable                                               |
| Motor Letter Type              | Cap Start, Induction Run                                     |
| Output @ Frequency             | 1.500 HP @ 60 HZ                                             |
| Phase                          | 1                                                            |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                             |
| Voltage @ Frequency            | 115.0 V @ 60 HZ<br>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                 | Rigid                                                        |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                      |
| Blower                         | None                                                         |
| Current @ Voltage              | 8.300 A @ 208.0 V<br>7.800 A @ 230.0 V<br>15.500 A @ 115.0 V |
| Design Code                    | L                                                            |
| 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    | 7.8 a                                                        |
| Insulation Class               | F                                                            |

**Part Detail**

|              |                     |
|--------------|---------------------|
| Revision     | D                   |
| Type         | AC                  |
| Mech. spec.  | 35DD001             |
| Base         |                     |
| Status       | PRD/A               |
| Elec. spec.  | 35WGG406            |
| Layout       | 35LYDD001           |
| Eff. date    | 07-02-2024          |
| CD Diagram   | CD0001              |
| Poles        | 04                  |
| Leads        | 4#14 A PH,2#18 B PH |
| Proprietary  | False               |
| Created date | 08-01-2022          |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Inverter Code</b>                 | Not Inverter        |
| <b>KVA Code</b>                      | M                   |
| <b>Lifting Lugs</b>                  | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing   |
| <b>Motor Lead Quantity/Wire Size</b> | 4 @ 14 AWG, A PH    |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3536L               |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 4                   |
| <b>Overall Length</b>                | 14.38 IN            |
| <b>Power Factor</b>                  | 80                  |
| <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>                | 1.15                |
| <b>Shaft Diameter</b>                | 0.875 IN            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding  |
| <b>Shaft Rotation</b>                | Reversible          |
| <b>Shaft Slinger Indicator</b>       | No Slinger          |
| <b>Speed</b>                         | 1730 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                |

**Nameplate**

| NP1256L      |              |  |      |      |     |   |       |   |  |
|--------------|--------------|--|------|------|-----|---|-------|---|--|
| CAT.NO.      | L1321T       |  |      |      |     |   |       |   |  |
| SPEC.        | 35DD001G406  |  |      |      |     |   |       |   |  |
| HP           | 1.5          |  |      |      |     |   |       |   |  |
| VOLTS        | 115/230      |  |      |      |     |   |       |   |  |
| AMP          | 15.5/7.8     |  |      |      |     |   |       |   |  |
| RPM          | 1730         |  |      |      |     |   |       |   |  |
| FRAME        | 145T         |  | HZ   | 60   |     |   | PH    | 1 |  |
| SER.F.       | 1.15         |  | CODE | M    | DES | L | CLASS | F |  |
| NEMA-NOM-EFF | 75.5         |  | PF   | 80   |     |   |       |   |  |
| RATING       | 40C AMB-CONT |  |      |      |     |   |       |   |  |
| CC           |              |  |      |      |     |   |       |   |  |
| DE           | 6205         |  | ODE  | 6203 |     |   |       |   |  |
| ENCL         | OPEN         |  | SN   |      |     |   |       |   |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA407288      | SA 35DD001G406                           | 1.000 ea |
| RA398787      | RA 35DD001G406                           | 1.000 ea |
| EC1645A06SP   | ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.  | 1.000 ea |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 ea |
| 35CB3009      | 35 CB W/1.09 DIA. LEAD HOLE @ 6:         | 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 |
| 35EP3209A00   | MASTER ODE,203 BRG,GRSR                  | 1.000 ea |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 ea |
| 35CB4802A02SP | CAPACITOR COVER, STAMPED X               | 1.000 ea |
| 51XB1016A05   | 10-16X5/16HX WA SL SR TYB (F/S)          | 2.000 ea |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 ea |
| 35EP3210A00   | MASTER DE,205 BRG,1.000SH,GRSR           | 1.000 ea |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 ea |
| XY1032A02     | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 ea |
| 35CB4521      | 35 LIPPED CB LID (GALV & PHOSPH)         | 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 |
| HA7000A01     | KEY RETAINER 7/8" DIA SHAFT              | 1.000 ea |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| WD1000A15     | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 2.000 ea |
| MJ1000A02     | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| MG1050G01     | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.017 ga |
| SP5051A24     | MODEL 35 TORQ STATIONARY SWITCH FOR "L"  | 1.000 ea |
| SP1006A01     | INSULATOR MODEL 35 SWITCH                | 1.000 ea |
| HA3100A26     | THRUBOLT 10-32 X 11.500                  | 4.000 ea |
| LC0001A01     | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 ea |
| MN416A01      | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| NP1256L       | ALUM UL CC INDUSTRIAL MOTOR A60          | 1.000 ea |
| 35PA1066      | PKG GRP, PRINT PK1008A07                 | 1.000 ea |

|            |                  |          |
|------------|------------------|----------|
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 ea |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 ea |

**Accessories**

| Part number   | Description  | Multiplier |
|---------------|--------------|------------|
| 35-8764       | C FACE KIT   | A8         |
| 35EP1604A01SP | D-FLANGE KIT |            |

**AC Induction Motor Performance Data**

Record # 89156

Typical performance - not guaranteed values

| Winding: 35WGG406-R001 |    |              |              | Type: 3536L                             |                       | Enclosure: OPEN |                             |
|------------------------|----|--------------|--------------|-----------------------------------------|-----------------------|-----------------|-----------------------------|
| Nameplate Data         |    |              |              | 115 V, 60 Hz:<br>Low Voltage Connection |                       |                 |                             |
| Rated Output (HP)      |    | 1.5          |              | Full Load Torque                        |                       | 4.56 LB-FT      |                             |
| Volts                  |    | 115/230      |              | Start Configuration                     |                       | direct on line  |                             |
| Full Load Amps         |    | 15.5/7.8     |              | Breakdown Torque                        |                       | 9.82 LB-FT      |                             |
| R.P.M.                 |    | 1730         |              | Pull-up Torque                          |                       | 9.83 LB-FT      |                             |
| Hz                     | 60 | Phase        | 1            | Locked-rotor Torque                     |                       | 14.77 LB-FT     |                             |
| NEMA Design Code       |    | L            | KVA Code     | M                                       | Starting Current      |                 | 100 A                       |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                         |                       | 10.35 A         |                             |
| NEMA Nom. Eff.         |    | 75.5         | Power Factor | 80                                      | Line-line Res. @ 25°C |                 | 0.446 Ω A Ph<br>1.18 Ω B Ph |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                 |                       | 82°C            |                             |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                  |                       | 101°C           |                             |
|                        |    |              |              | Locked-rotor Power Factor               |                       | 90.9            |                             |
|                        |    |              |              | Rotor inertia                           |                       | 0.261 lb-ft²    |                             |

**Load Characteristics 115 V, 60 Hz, 1.5 HP**

| % of Rated Load | 25   | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|------|-------|-------|-------|-------|-------|------|
| Power Factor    | 42   | 62    | 73    | 81    | 83    | 85    | 82   |
| Efficiency      | 66.2 | 75.9  | 78.2  | 77.1  | 73.2  | 67.7  | 74.8 |
| Speed           | 1782 | 1767  | 1748  | 1728  | 1697  | 1658  | 1709 |
| Line amperes    | 8.89 | 10.27 | 12.73 | 15.64 | 19.99 | 25.47 | 18.2 |

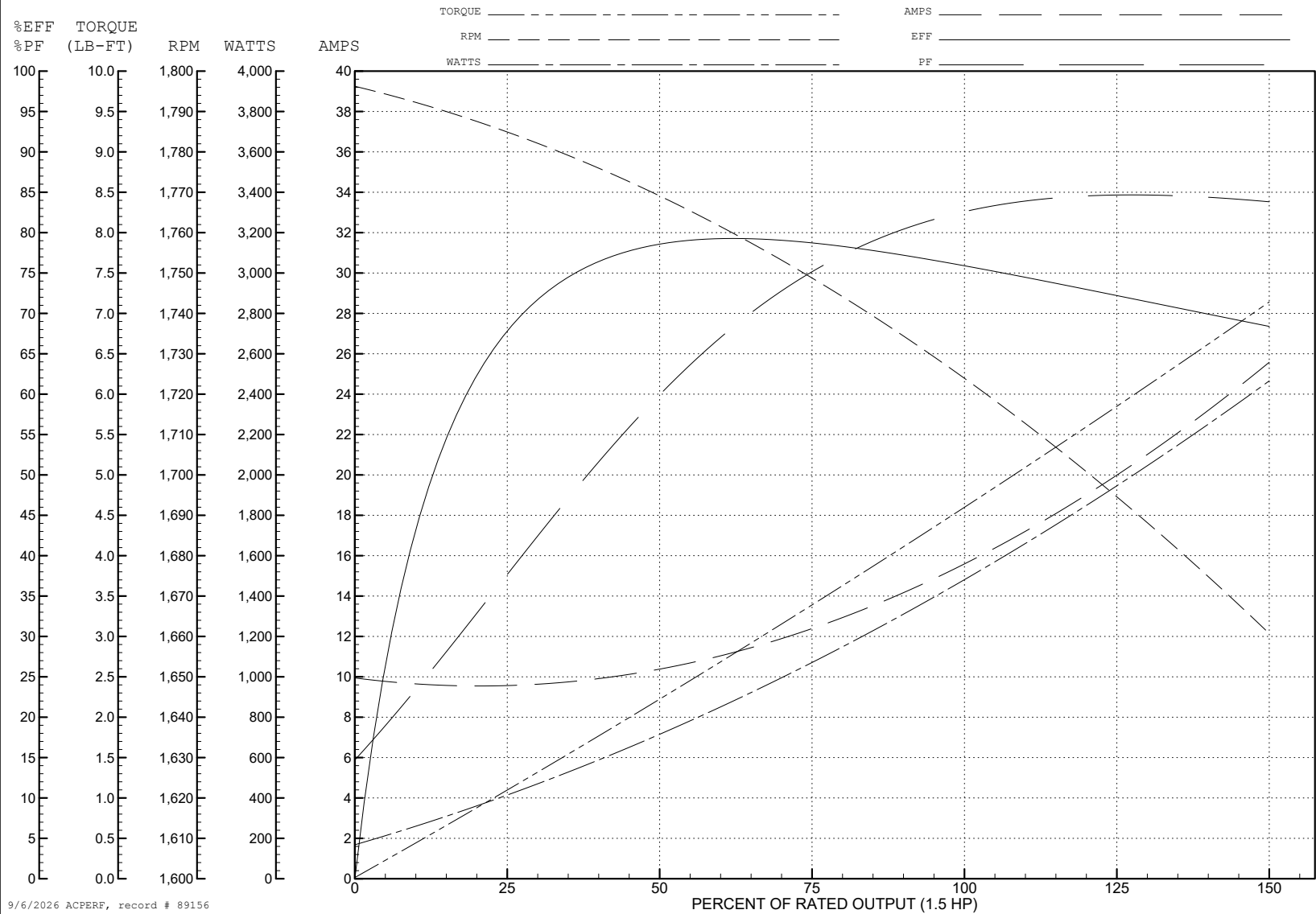
ABB Motors and Mechanical Inc.

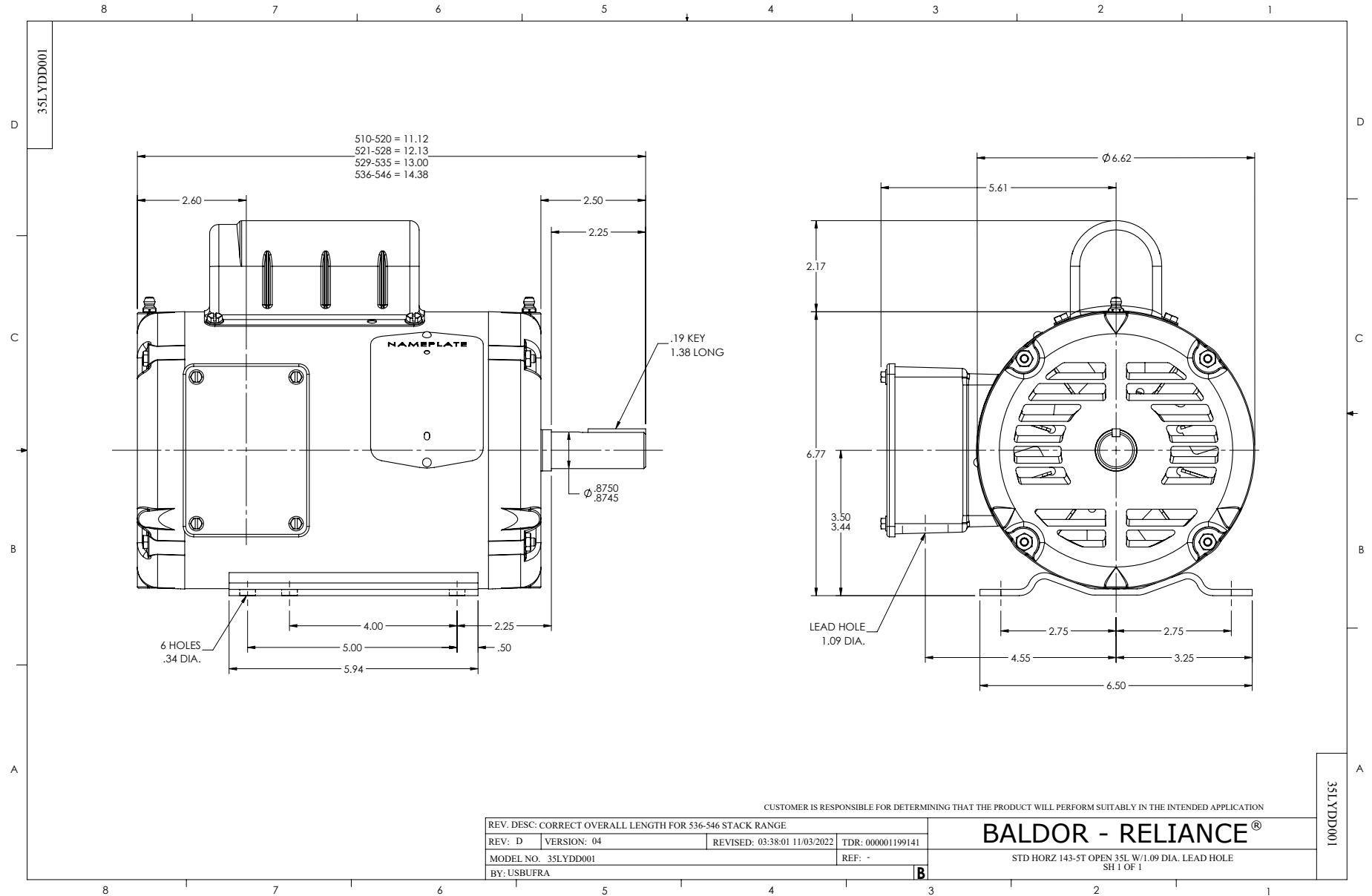
WINDING # 35WGG406

Typical performance - not guaranteed values.

1.5 HP 1 PH 60 HZ 1730 RPM 115 V 3536L

TORQUES (LB-FT): PO=9.82 PU=9.83 LR=14.77 LRA=100





CD0001

