

# ABB BALDOR RELIANCE III

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## Customer information packet

### M1505T

1.5/.75HP, 1750/870RPM, 3PH, 60HZ, 145T, 3534

Class - None

Division - Not Applicable

**Specifications**

|                                |                                     |
|--------------------------------|-------------------------------------|
| Enclosure                      | TEFC                                |
| Frame                          | 145T                                |
| 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             | 1.500 HP @ 60 HZ<br>.750 HP @ 60 HZ |
| Phase                          | 3                                   |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                    |
| Voltage @ Frequency            | 230.0 V @ 60 HZ                     |
| Agency Approvals               | UR<br>CSA                           |
| 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              | 4.250 A @ 230.0 V                   |
| Design Code                    | -                                   |
| Drip Cover                     | No Drip Cover                       |
| Duty Rating                    | CONT                                |
| Electrically Isolated Bearing  | Not Electrically Isolated           |
| Feedback Device                | NO FEEDBACK                         |
| Front Shaft Indicator          | None                                |
| Heater Indicator               | No Heater                           |
| High Voltage Full Load Amps    | 4.3 a                               |
| Insulation Class               | H                                   |
| Inverter Code                  | Not Inverter                        |
| KVA Code                       | F                                   |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  | 35AA001    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG368   |
| Layout       | 35LYAA001  |
| Eff. date    | 10-28-2025 |
| CD Diagram   | CD0011     |
| Poles        | 04/08      |
| Leads        | 6#18       |
| Proprietary  | False      |
| Created date | 02-23-2023 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Lifting Lugs</b>                  | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing   |
| <b>Motor Lead Quantity/Wire Size</b> | 6 @ 18 AWG          |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3534M               |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 4<br>8              |
| <b>Overall Length</b>                | 14.19 IN            |
| <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>                         | 1750 rpm<br>870 rpm |
| <b>Speed Code</b>                    | 2S-1W-CT            |
| <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.      | M1505T        |  |      |      |     |   |       |   |  |
| SPEC.        | 35AA001G368G1 |  |      |      |     |   |       |   |  |
| HP           | 1.5/.75       |  |      |      |     |   |       |   |  |
| VOLTS        | 230           |  |      |      |     |   |       |   |  |
| AMP          | 4.25/5.7      |  |      |      |     |   |       |   |  |
| RPM          | 1750/870      |  |      |      |     |   |       |   |  |
| FRAME        | 145T          |  | HZ   | 60   |     |   | PH    | 3 |  |
| SER.F.       | 1.15          |  | CODE | F    | DES | - | CLASS | H |  |
| NEMA-NOM-EFF |               |  | PF   |      |     |   |       |   |  |
| RATING       | 40C AMB-CONT  |  |      |      |     |   |       |   |  |
| CC           |               |  |      |      |     |   |       |   |  |
| DE           | 6205          |  | ODE  | 6203 |     |   |       |   |  |
| ENCL         | TEFC          |  | SN   |      |     |   |       |   |  |
|              | SFA 4.75/5.8  |  |      |      |     |   |       |   |  |

**Accessories**

| Part number   | Description  | Multiplier |
|---------------|--------------|------------|
| 35-8762       | C FACE KIT   | A8         |
| 35EP1506A01SP | D-FLANGE KIT | A8         |

**AC Induction Motor Performance Data**

Record # 87904

Typical performance - not guaranteed values

| Winding: 35WGG368-R001 |    |              | Type: 3534M                            |                           | Enclosure: TEFC  |                       |         |        |
|------------------------|----|--------------|----------------------------------------|---------------------------|------------------|-----------------------|---------|--------|
| Nameplate Data         |    |              | 230 V, 60 Hz:<br>High Speed Connection |                           |                  |                       |         |        |
| Rated Output (HP)      |    | 1.5/.75      | Full Load Torque                       |                           | 4.47 LB-FT       |                       |         |        |
| Volts                  |    | 230          | Start Configuration                    |                           | direct on line   |                       |         |        |
| Full Load Amps         |    | 4.25/6.1     | Breakdown Torque                       |                           | 13.32 LB-FT      |                       |         |        |
| R.P.M.                 |    | 1750/870     | Pull-up Torque                         |                           | 7.22 LB-FT       |                       |         |        |
| Hz                     | 60 | Phase        | 3                                      | Locked-rotor Torque       |                  | 7.92 LB-FT            |         |        |
| NEMA Design Code       |    | -            | KVA Code                               | F                         | Starting Current |                       | 26.72 A |        |
| Service Factor (S.F.)  |    | 1.15         |                                        | No-load Current           |                  | 2.14 A                |         |        |
| NEMA Nom. Eff.         |    | 0            | Power Factor                           |                           | 0                | Line-line Res. @ 25°C |         | 4.83 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                        | Temp. Rise @ Rated Load   |                  | 49°C                  |         |        |
| S.F. Amps              |    |              |                                        | Temp. Rise @ S.F. Load    |                  | 60°C                  |         |        |
|                        |    |              |                                        | Locked-rotor Power Factor |                  | 76                    |         |        |
|                        |    |              |                                        | Rotor inertia             |                  | 0.245 lb-ft²          |         |        |

**Load Characteristics 230 V, 60 Hz, 1.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 41   | 62   | 76   | 81   | 86   | 89   | 84   |
| Efficiency      | 78.5 | 83.8 | 83.3 | 81   | 77.9 | 75.2 | 79.1 |
| Speed           | 1789 | 1778 | 1764 | 1749 | 1731 | 1714 | 1738 |
| Line amperes    | 2.27 | 2.78 | 3.37 | 4.25 | 5.09 | 5.96 | 4.75 |

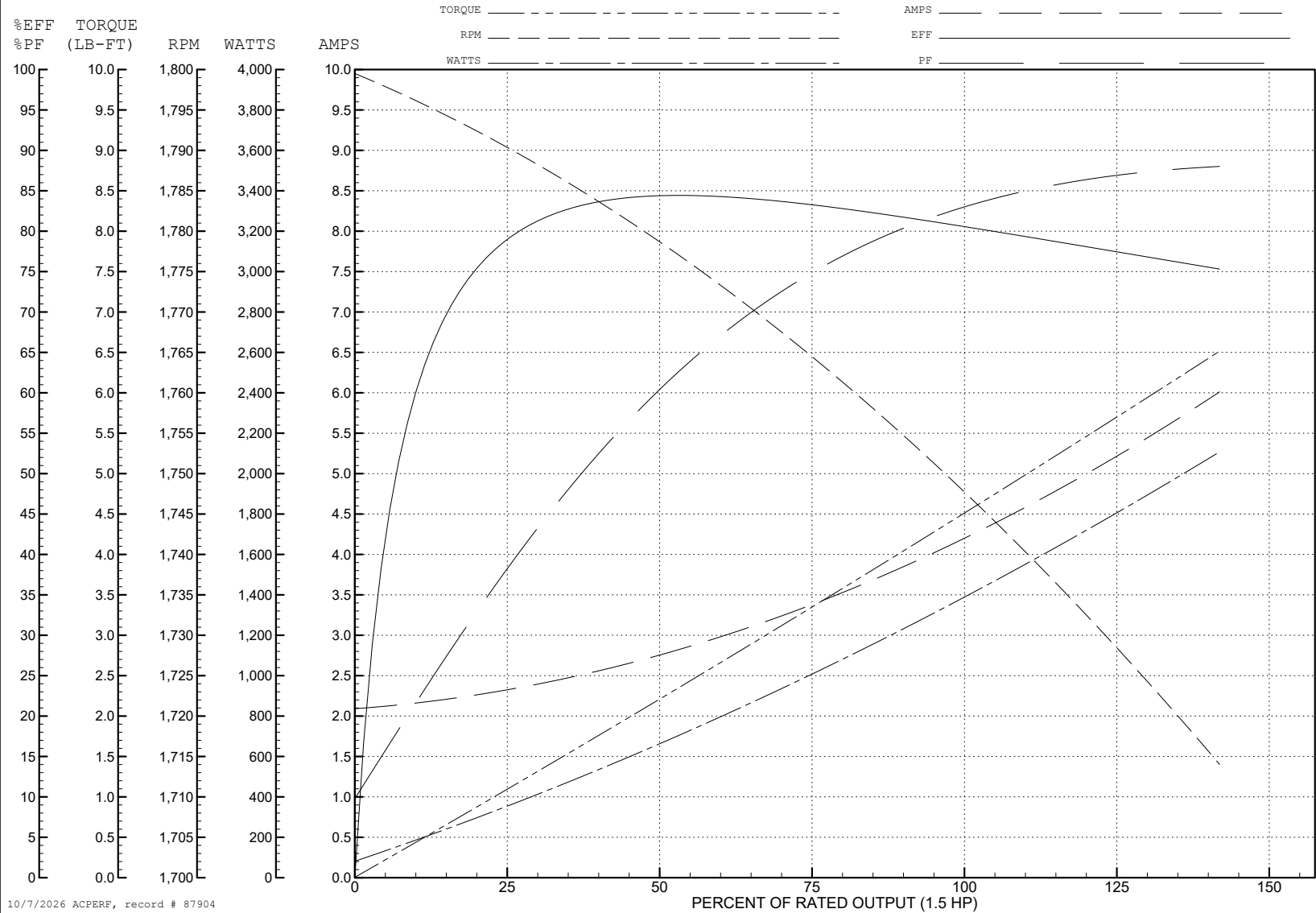
ABB Motors and Mechanical Inc.

WINDING # 35WGG368

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1749 RPM 230 V 3534M

TORQUES (LB-FT): PO=13.32 PU=7.22 LR=7.92 LRA=26.72



**AC Induction Motor Performance Data**

Record # 87905

Typical performance - not guaranteed values

| Winding: 35WGG368-R001 |    |              | Type: 3534M  |                                       | Enclosure: TEFC       |                |              |
|------------------------|----|--------------|--------------|---------------------------------------|-----------------------|----------------|--------------|
| Nameplate Data         |    |              |              | 230 V, 60 Hz:<br>Low Speed Connection |                       |                |              |
| Rated Output (HP)      |    | 1.5/.75      |              | Full Load Torque                      |                       | 4.49 LB-FT     |              |
| Volts                  |    | 230          |              | Start Configuration                   |                       | direct on line |              |
| Full Load Amps         |    | 4.25/6.1     |              | Breakdown Torque                      |                       | 19.8 LB-FT     |              |
| R.P.M.                 |    | 1750/870     |              | Pull-up Torque                        |                       | 11.61 LB-FT    |              |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                   |                       | 13.3 LB-FT     |              |
| NEMA Design Code       |    | - KVA Code   |              | Starting Current                      |                       | 20.5 A         |              |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                       |                       | 5.62 A         |              |
| NEMA Nom. Eff.         |    | 0            | Power Factor | 0                                     | Line-line Res. @ 25°C |                | 6.59 Ω       |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load               |                       |                |              |
|                        |    |              |              | Locked-rotor Power Factor             |                       |                | 76           |
|                        |    |              |              | Rotor inertia                         |                       |                | 0.245 lb-ft² |

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

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|------|
| Power Factor    | 23    | 29    | 36    | 42    | 48    | 54    | 46   |
| Efficiency      | 27.7  | 42.9  | 52.3  | 58.2  | 62.1  | 64.5  | 60.5 |
| Speed           | 894.6 | 889.9 | 884.9 | 879.5 | 873.8 | 867.6 | 876  |
| Line amperes    | 5.59  | 5.6   | 5.64  | 5.73  | 5.87  | 6.06  | 5.81 |

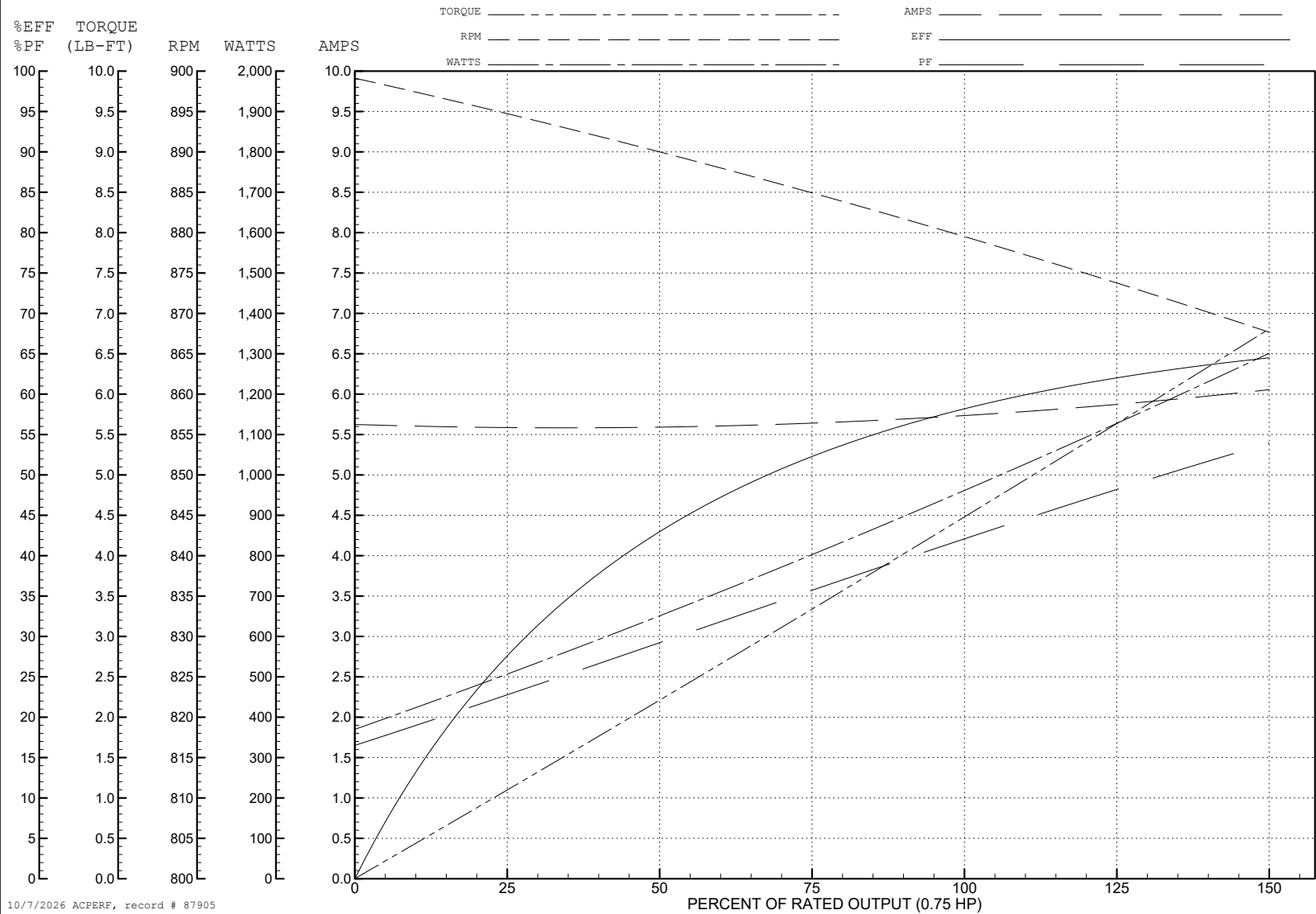
ABB Motors and Mechanical Inc.

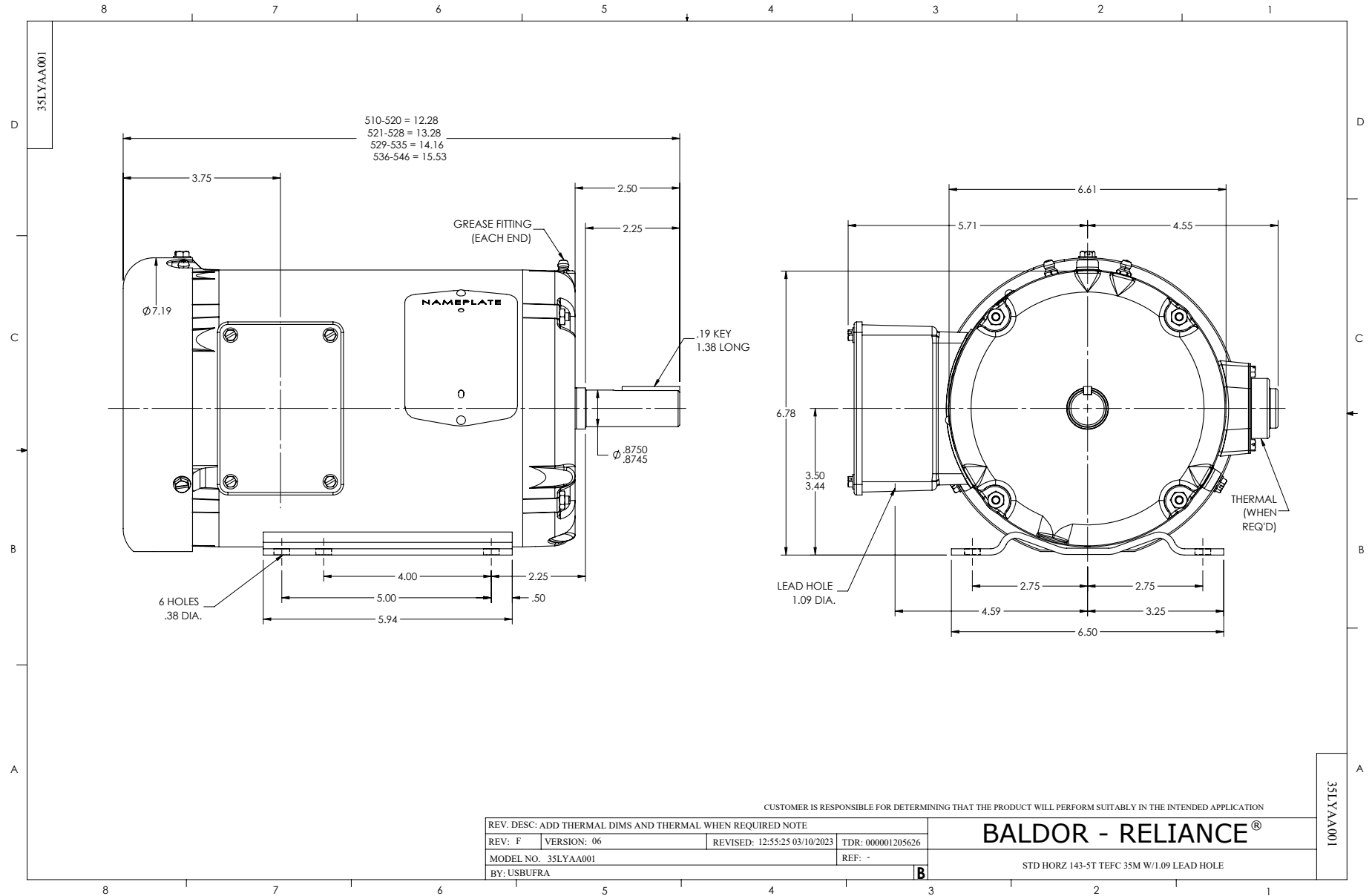
WINDING # 35WGG368

Typical performance - not guaranteed values.

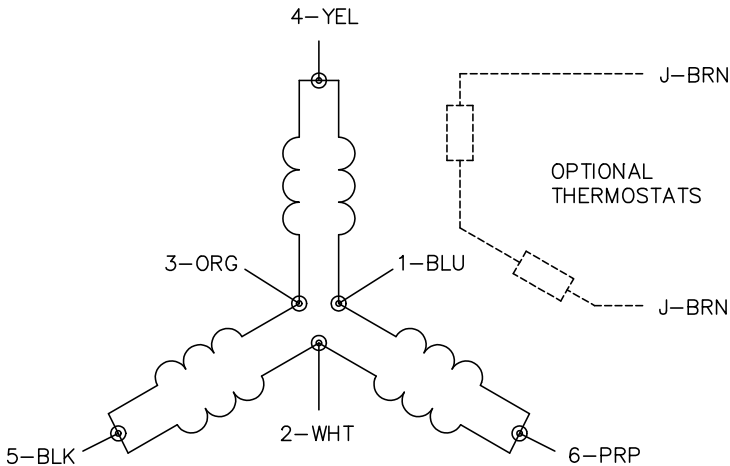
0.75 HP 3 PH 60 HZ 879.5 RPM 230 V 3534M

TORQUES (LB-FT): PO=19.8 PU=11.61 LR=13.3 LRA=20.5

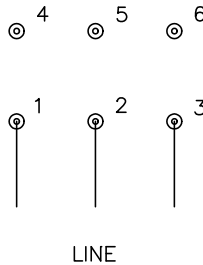




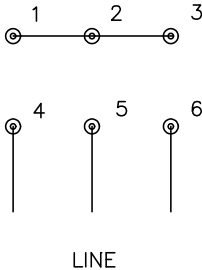
CD0011



LOW SPEED  
(1D)



HIGH SPEED  
(2Y)



- 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.

|                                           |         |                        |              |
|-------------------------------------------|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: F                               | BY: JLP | REVISED: 01/21/99 5:04 | TDR: 0171435 |
| 110000                                    |         | FILE: DWG\142.wg       | MDL: -       |
|                                           |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING CONSTANT TORQUE

CD0011