

# ABB BALDOR RELIANCE III

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## Customer information packet

### CDP3430-V24

.5HP, 1800RPM, DC, 56C, 3424P, TENV, F1

Class - None

Division -

**Specifications**

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Armature Voltage</b>              | 24 V                    |
| <b>Base Speed</b>                    | 1800 rpm                |
| <b>Enclosure</b>                     | TENV                    |
| <b>Frame</b>                         | 56C                     |
| <b>Frame Material</b>                | Steel                   |
| <b>Haz Area Class and Group</b>      | None                    |
| <b>Output Power</b>                  | 0.500 HP                |
| <b>Agency Approvals</b>              | CSA                     |
|                                      | UR                      |
| <b>Ambient Temperature</b>           | 40 °C                   |
| <b>Armature Current</b>              | 19.6 a                  |
| <b>Armature Inertia</b>              | 8.264 lb-ft2            |
| <b>Base Indicator</b>                | Rigid                   |
| <b>Bearing Grease Type</b>           | Polyrex EM (-20F +300F) |
| <b>Drip Cover</b>                    | No Drip Cover           |
| <b>Duty Rating</b>                   | CONT                    |
| <b>Feedback Device</b>               | NO FEEDBACK             |
| <b>Heater Indicator</b>              | No Heater               |
| <b>Lifting Lugs</b>                  | No Lifting Lugs         |
| <b>Motor Lead Exit</b>               | Ko Box                  |
| <b>Motor Lead Quantity/Wire Size</b> | 2 @ 12 AWG              |
| <b>Motor Lead Termination</b>        | Flying Leads            |
| <b>Motor Standards</b>               | NEMA                    |
| <b>Mounting Arrangement</b>          | F1                      |
| <b>Overall Length</b>                | 12.60 IN                |
| <b>Product Family</b>                | General Purpose         |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing          |
| <b>Service Factor</b>                | 1.00                    |
| <b>Shaft Diameter</b>                | 0.625 IN                |
| <b>Shaft Extension Location</b>      | Pulley End              |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding      |
| <b>Shaft Rotation</b>                | Reversible              |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | K          |
| <b>Type</b>         | DC         |
| <b>Mech. spec.</b>  | 34-6943    |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGZ611   |
| <b>Layout</b>       | 34LY6943   |
| <b>Eff. date</b>    | 10-25-2024 |
| <b>CD Diagram</b>   | CD0194     |
| <b>Poles</b>        | 00         |
| <b>Leads</b>        |            |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-01-0001 |

**Shaft Slinger Indicator**

**No Slinger**

Nameplate

| NP0111L  |               |         |       |
|----------|---------------|---------|-------|
| CAT.NO.  | CDP3430-V24   |         |       |
| SPEC.    | 34-6943Z611G2 |         |       |
| HP       | .5            | ENCL    | TENV  |
| RPM      | 1800          |         |       |
| FRAME    | 56C           | TYPE    | 3424P |
| ARM V    | 24            | ARM A   | 19.6  |
| FLD V    |               | FLD A   |       |
| INSUL    | F             | AMB.    | 40    |
| DUTY     | CONT          | SUPPLY  | A     |
| BRG/DE   | 6203          | BRG/ODE | 6203  |
| BRUSHES  | 2/BP5104BV01  |         |       |
|          | BLANK         |         |       |
| SER.     |               |         |       |
| BLANK    |               |         |       |
| APRV-CSA |               | APRV-UL |       |

**DC Motor Performance Data**

Record # 500

Typical performance - not guaranteed values

| Winding: 34WGZ611-R003 |              | Type: 3424P                   | Enclosure: TENV        |
|------------------------|--------------|-------------------------------|------------------------|
| Nameplate Data         |              | General Characteristics       |                        |
| Rated Output (HP)      | 0.5          | Armature Resistance<br>@ 25°C | 0.0933 Ω               |
| R.P.M.                 | 1800         |                               |                        |
| Armature Volts         | 24           | Voltage Constant              | 12.46 v/krpm           |
| Armature Amps          | 19.6         |                               |                        |
| Field Volts            |              | Armature Inductance           | 0.7493 mH              |
| Field Amps             |              | Armature Inertia              | 8.2643 LI <sup>2</sup> |
| Rating - Duty          | 40C AMB-CONT |                               |                        |
| Power Supply Code      | A            |                               |                        |

**Load Characteristics at 24 Armature Volts**

| Load Point       | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|------------------|------|------|------|------|------|------|------|
| Armature Amps    | 2.28 | 5.71 | 9.68 | 13.5 | 17.5 | 21.4 | 25   |
| R.P.M.           | 1900 | 1861 | 1807 | 1760 | 1703 | 1658 | 1591 |
| Torque ( LB-FT ) | 0    | 0.37 | 0.73 | 1.1  | 1.47 | 1.83 | 2.2  |

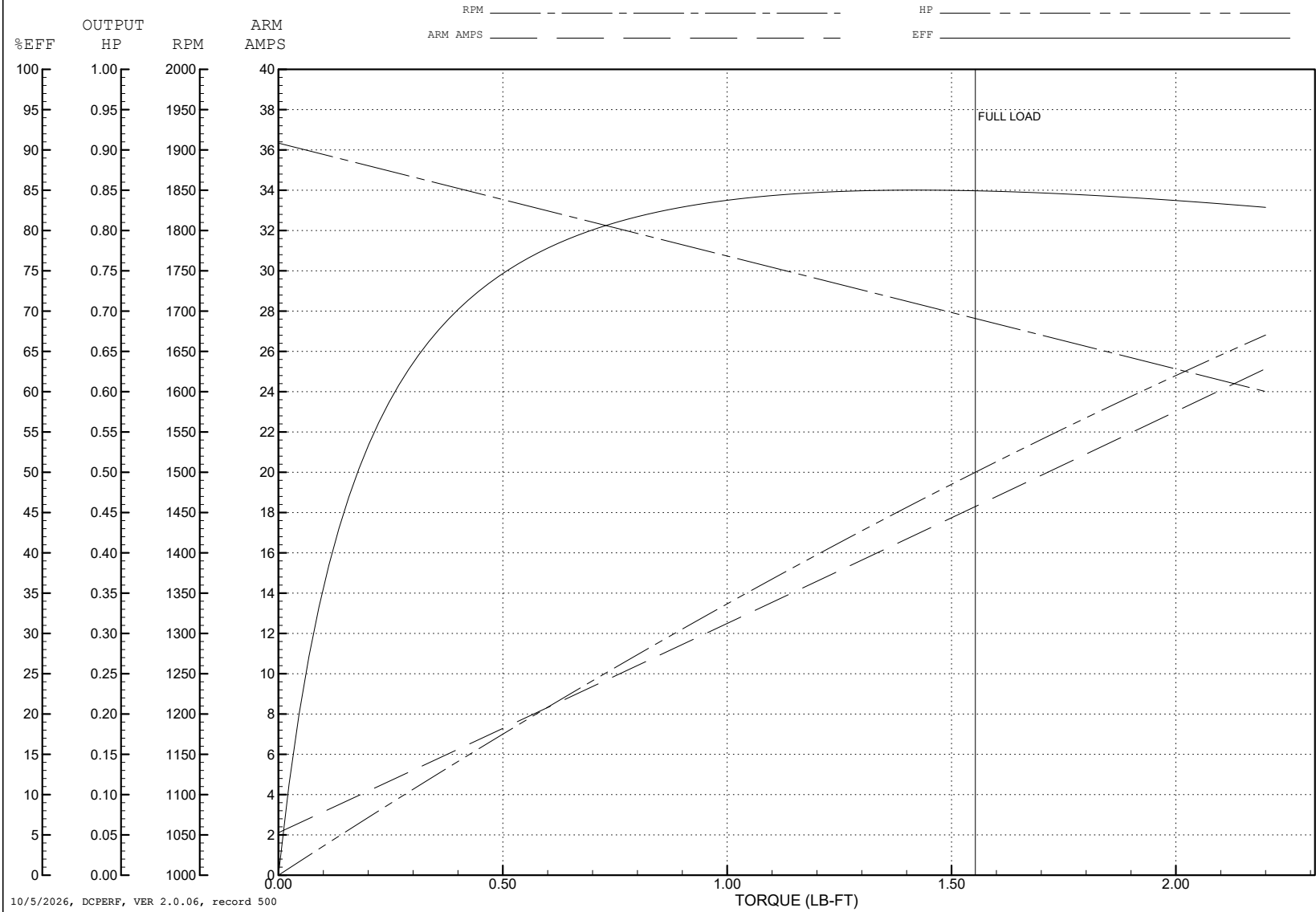
ABB Motors and Mechanical Inc.

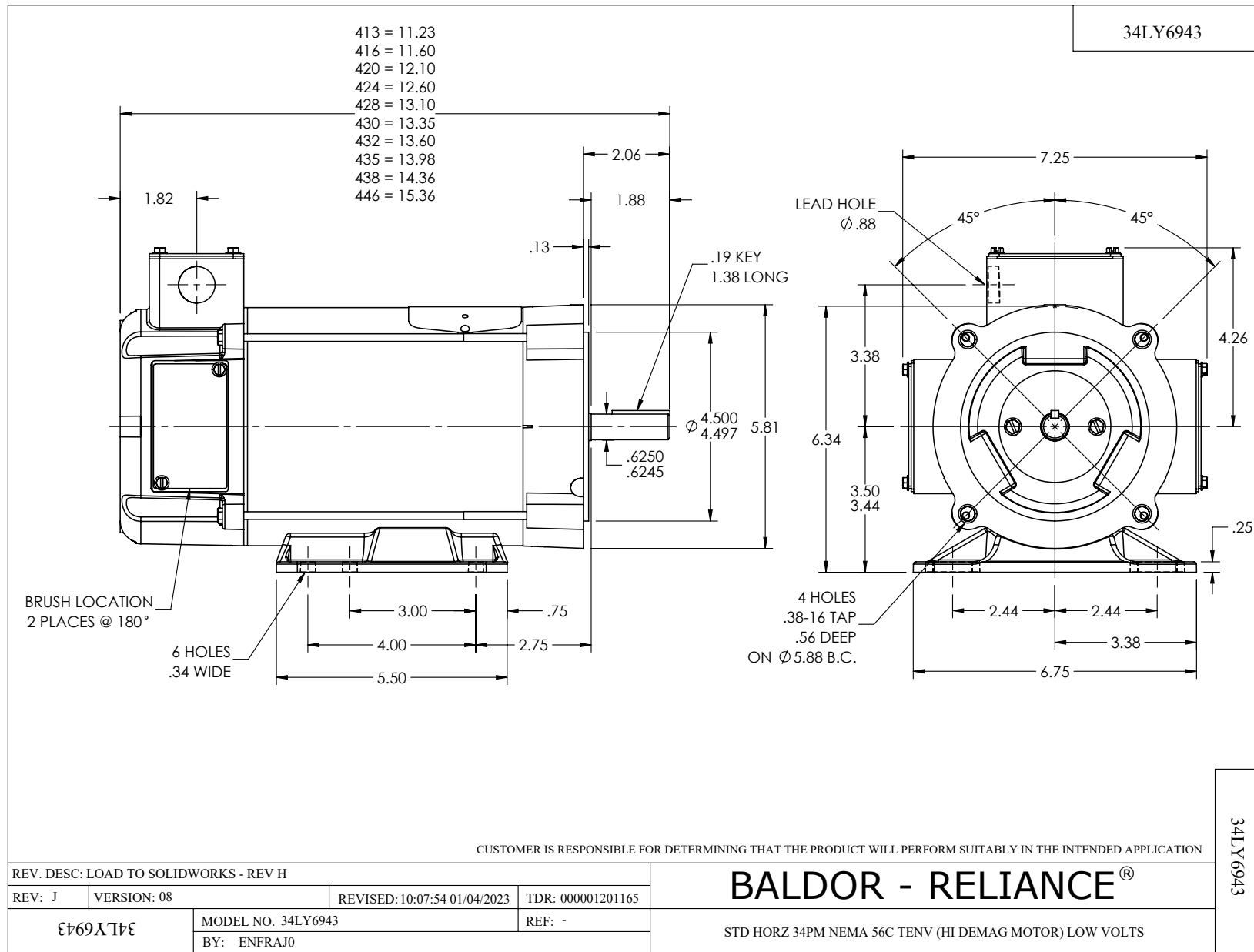
WINDING # 34WGZ611

Typical performance - not guaranteed values.

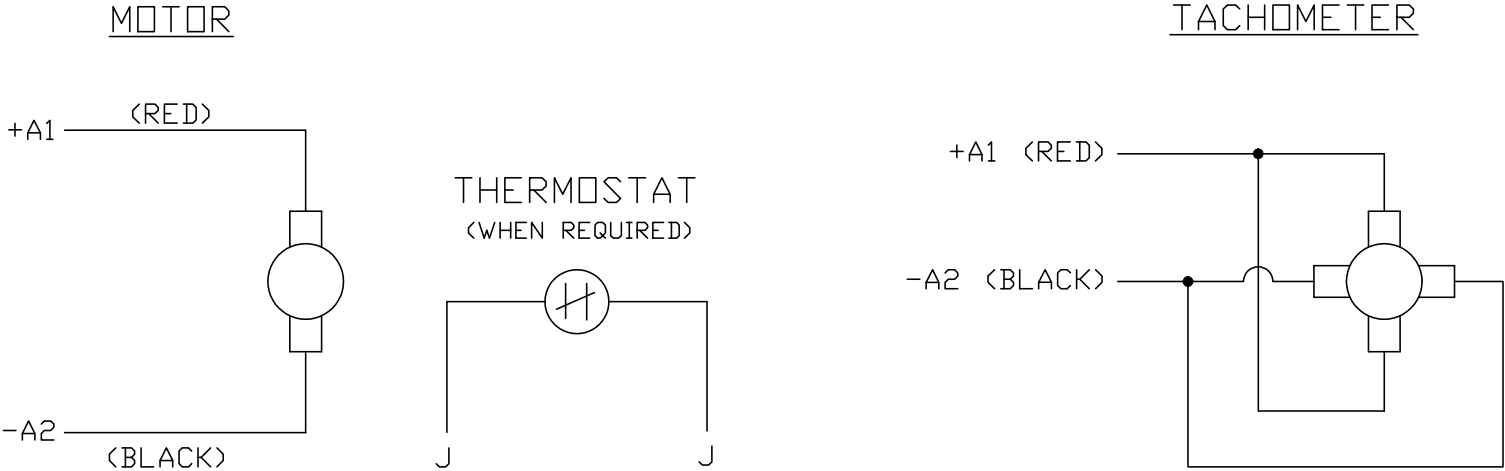
0.5 HP DC 1800 RPM 24 V 3424P

ENCL: TENV DUTY: CONT CL: F





CD0194



NOTES:

1. CCW ROTATION AS SHOWN FACING COMMUTATOR END. TO REVERSE MOTOR ROTATION OR TACHOMETER OUTPUT POLARITY INTERCHANGE LEADS A1(RED) & A2(BLACK)
2. LEAD COLORS FOR REFERENCE ONLY & NOT SPECIFIED BY THIS DRAWING. LEAD COLORS SPECIFIED BY LAYOUT DRAWING & BILL OF MATERIAL ONLY.

|         |   |                                                  |              |
|---------|---|--------------------------------------------------|--------------|
| MATL: - |   |                                                  |              |
| REV:    | E | ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &..." |              |
| CD0194  |   | SCALE: -                                         | BY: CK       |
|         |   | FILE: AAA00004503                                | TDR: 0078737 |

**BALDOR ELECTRIC Co.**

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194