

**BALDOR • RELIANCE**

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# Customer information packet

## CBXMN14142T

1//.75HP, 1770//1475RPM, 3PH, 60//50HZ, 143T

Class - CLI GP D; CLII GP F,G

Division - Division I

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | XPNV  |
| Frame                          | 143TC   |
| Frame Material                 | Steel   |
| Frequency                      | 50.00 Hz<br>60.00 Hz  |
| Haz Area Class and Group       | CLI GP D; CLII GP F,G   |
| Haz Area Division              | Division I  |
| Motor Letter Type              | Three Phase   |
| Output @ Frequency             | .750 HP @ 50 HZ<br>1.000 HP @ 60 HZ   |
| Phase                          | 3   |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ  |
| Voltage @ Frequency            | 380.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>190.0 V @ 50 HZ<br>460.0 V @ 60 HZ                              |
| Agency Approvals               | CSA EEV<br>UL   |
| Ambient Temperature            | 40 °C   |
| Auxillary Box                  | No Auxillary Box  |
| Auxillary Box Lead Termination | None  |
| Base Indicator                 | Rigid   |
| Bearing Grease Type            | Polyrex EM (-20F +300F)   |
| Blower                         | None  |
| Constant Torque Speed Range    | 6   |
| Current @ Voltage              | 3.340 A @ 230.0 V<br>3.300 A @ 208.0 V<br>3.200 A @ 190.0 V<br>1.670 A @ 460.0 V<br>1.600 A @ 380.0 V |
| Design Code                    | B   |
| Drip Cover                     | No Drip Cover   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | B          |
| Type         | AC         |
| Mech. spec.  | 35U456     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WZ818    |
| Layout       | 35LYU456   |
| Eff. date    | 03-08-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 02-23-2023 |

|                               |                           |
|-------------------------------|---------------------------|
| Duty Rating                   | CONT                      |
| Efficiency @ 100% Load        | 85.5 %                    |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device               | NO FEEDBACK               |
| Front Shaft Indicator         | None                      |
| Haz Area Temp Code            | T3C                       |
| Heater Indicator              | No Heater                 |
| High Voltage Full Load Amps   | 1.6 a                     |
| Insulation Class              | F                         |
| Inverter Code                 | Inverter Duty             |
| KVA Code                      | M                         |
| Lifting Lugs                  | No Lifting Lugs           |
| Locked Bearing Indicator      | Locked Bearing            |
| Max Speed                     | 2700 rpm                  |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG                |
| Motor Lead Termination        | Flying Leads              |
| Motor Standards               | NEMA                      |
| Motor Type                    | X3522M                    |
| Mounting Arrangement          | F1                        |
| Number of Poles               | 4                         |
| Overall Length                | 20.37 IN                  |
| Power Factor                  | 66                        |
| Product Family                | General Purpose           |
| Pulley End Bearing Type       | Ball                      |
| Pulley Face Code              | C-Face                    |
| Pulley Shaft Indicator        | Standard                  |
| Rodent Screen                 | None                      |
| Service Factor                | 1.00                      |
| Shaft Diameter                | 0.875 IN                  |
| Shaft Ground Indicator        | No Shaft Grounding        |
| Shaft Rotation                | Reversible                |
| Speed                         | 1475 rpm<br>1770 rpm      |
| Speed Code                    | Single Speed              |

|                                   |                            |
|-----------------------------------|----------------------------|
| <b>Starting Method</b>            | Direct on line             |
| <b>Thermal Device - Bearing</b>   | None                       |
| <b>Thermal Device - Winding</b>   | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b> | No Vibration Sensor        |
| <b>Winding Thermal 1</b>          | None                       |
| <b>Winding Thermal 2</b>          | None                       |

**Nameplate**

**NP0887XPSL**

|                |                      |                   |                    |                 |    |
|----------------|----------------------|-------------------|--------------------|-----------------|----|
| <b>NO.</b>     |                      | <b>CC</b>         |                    |                 |    |
| <b>S/N</b>     |                      | <b>TEMP CODE</b>  | T3C                |                 |    |
| <b>SPEC.</b>   | 35U456Z818           | <b>INV.TYPE</b>   | PWM                |                 |    |
| <b>CAT.NO.</b> | CBXMN14142T          | <b>C HP FR</b>    | 60                 | <b>C HP TO</b>  | 90 |
| <b>HP</b>      | 1//.75               | <b>CT HZ FROM</b> | 6                  | <b>CT HZ TO</b> | 60 |
| <b>VOLTS</b>   | 230/460//190/380     | <b>VT HZ FROM</b> | 6                  | <b>VT HZ TO</b> | 60 |
| <b>AMPS</b>    | 3.34/1.67//3.2/1.6   | <b>MAG CUR</b>    | 2.46/1.23//2.4/1.2 |                 |    |
| <b>RPM</b>     | 1770//1475           | <b>MX RPM</b>     | 2700               |                 |    |
| <b>HZ</b>      | 60//50               | <b>PH</b>         | 3                  | <b>CL</b>       | F  |
|                |                      | <b>NOM.EFF.</b>   | 85.5               |                 |    |
| <b>SER.F.</b>  | 1.00                 | <b>DES</b>        | B                  | <b>SL HZ</b>    | 1  |
|                |                      | <b>WK2</b>        | 0.159              |                 |    |
| <b>FRAME</b>   | 143TC                | <b>RATING</b>     | 40C AMB-CONT       |                 |    |
|                | 1.15 SF ON SINE WAVE |                   |                    |                 |    |

**AC Induction Motor Performance Data**

Record # 81938

Typical performance - not guaranteed values

| Winding: 35WGP529-R059 |                      | Type: 3524M               | Enclosure: TENV                                  |  |
|------------------------|----------------------|---------------------------|--|--|
| <b>Nameplate Data</b>  |                      |                           | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |  |
| Rated Output (HP)      | 1                    | Full Load Torque          | 2.99 LB-FT                                       |  |
| Volts                  | 208-230/460//190/380 | Start Configuration       | direct on line                                   |  |
| Full Load Amps         | 3.1-3/1.5//3.4/1.7   | Breakdown Torque          | 15.8 LB-FT                                       |  |
| R.P.M.                 | 1765//1460           | Pull-up Torque            | 9.1 LB-FT  |  |
| Hz                     | 60//50 Phase         | Locked-rotor Torque       | 11 LB-FT   |  |
| NEMA Design Code       | B KVA Code           | Starting Current          | 15 A   |  |
| Service Factor (S.F.)  | 1                    | No-load Current           | 1.02 A   |  |
| NEMA Nom. Eff.         | 87.5 Power Factor    | Line-line Res. @ 25°C     | 11.2 Ω   |  |
| Rating - Duty          | 40C AMB-30 MIN       | Temp. Rise @ Rated Load   | 26°C   |  |
|                        |                      | Locked-rotor Power Factor | 48.9   |  |
|                        |                      | Rotor inertia             | 0.142 lb-ft <sup>2</sup>                         |  |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 28   | 48   | 60   | 70   | 76   | 81   |
| Efficiency      | 74.2 | 83.5 | 86.6 | 87.8 | 87.3 | 87   |
| Speed           | 1793 | 1785 | 1778 | 1770 | 1761 | 1753 |
| Line amperes    | 1.07 | 1.18 | 1.33 | 1.53 | 1.76 | 2    |

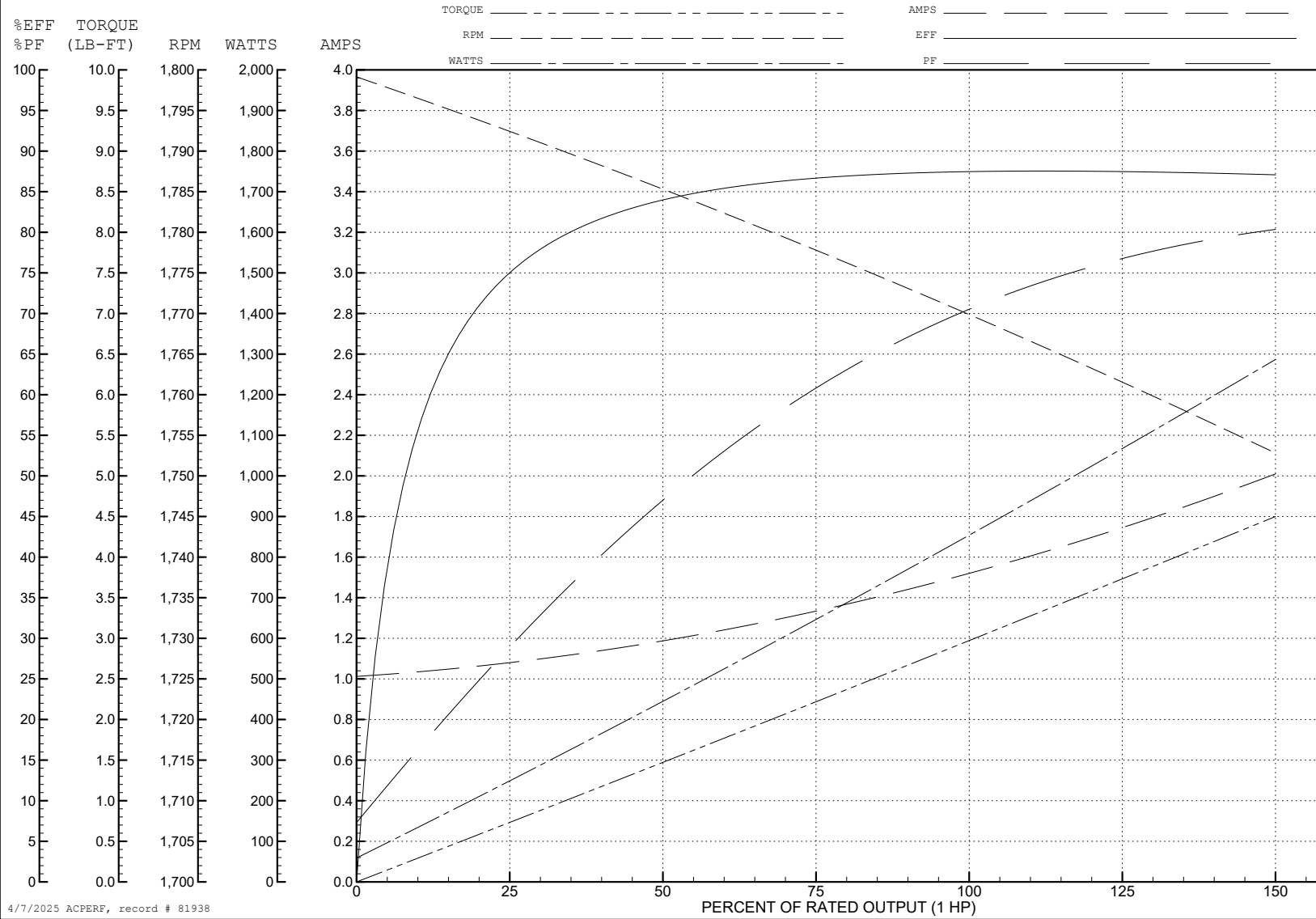
ABB Motors and Mechanical Inc.

WINDING # 35WGP529

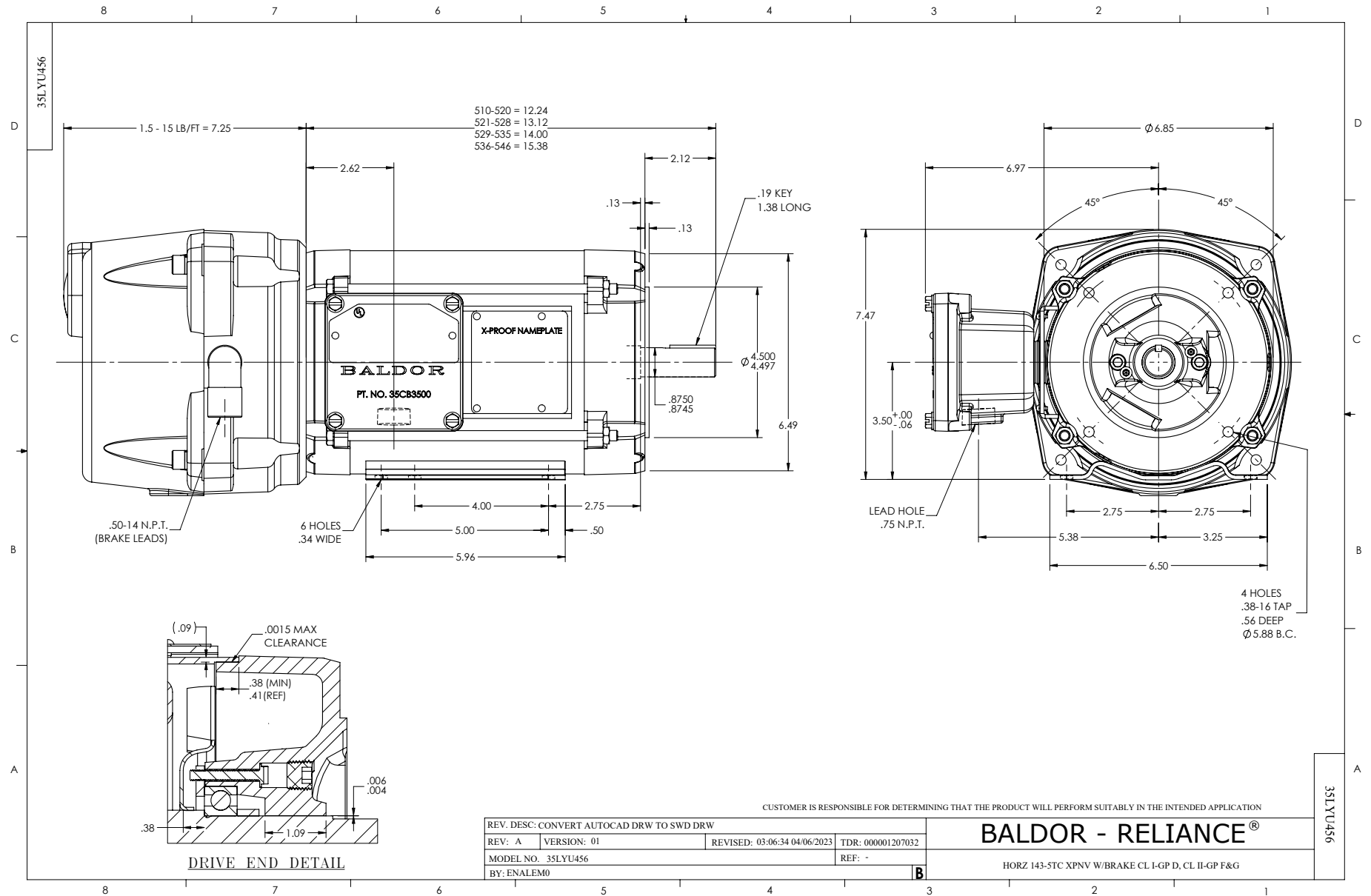
1 HP 3 PH 60 HZ 1770 RPM 460 V 3524M

Typical performance - not guaranteed values.

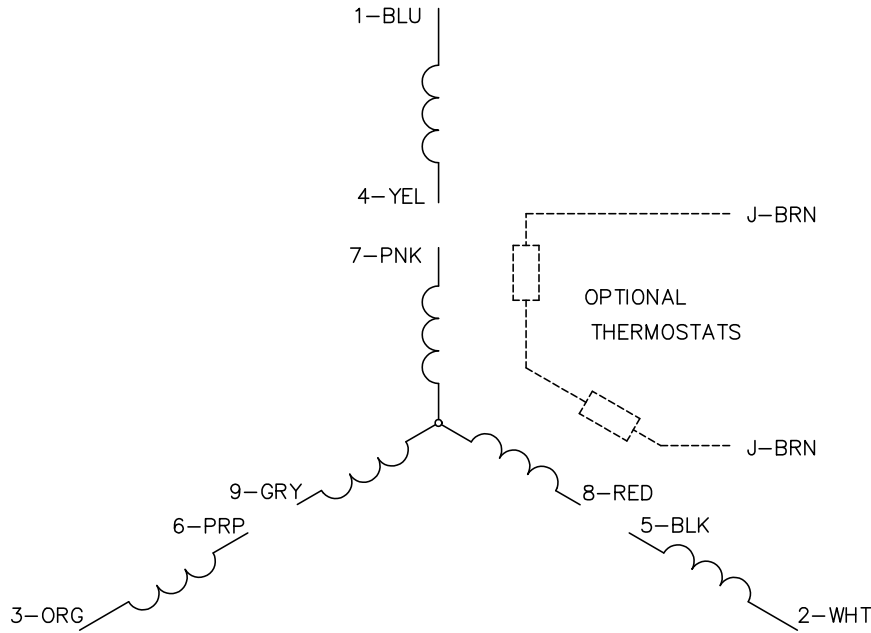
TORQUES (LB-FT): PO=15.8 PU=9.1 LR=11 LRA=15



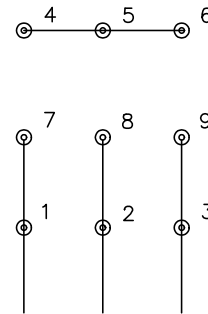
4/7/2025 ACPERF, record # 81938



CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

**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.

CD0005

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS