

# ABB BALDOR RELIANCE III

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## Customer information packet

### CXL050522A

0.5HP, 3450RPM, 1PH, 60HZ, 56C, 3420L, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

**Specifications**

|                                |                                        |
|--------------------------------|----------------------------------------|
| Enclosure                      | XPFC                                   |
| Frame                          | 56C                                    |
| Frame Material                 | Steel                                  |
| Frequency                      | 60.00 Hz                               |
| Haz Area Class and Group       | CLI GP D; CLII GP F,G                  |
| Haz Area Division              | Division I                             |
| Motor Letter Type              | Cap Start, Induction Run               |
| Output @ Frequency             | .500 HP @ 60 HZ                        |
| Phase                          | 1                                      |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                       |
| Voltage @ Frequency            | 115.0 V @ 60 HZ<br>230.0 V @ 60 HZ     |
| Agency Approvals               | CSA<br>UL                              |
| 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              | 4.700 A @ 230.0 V<br>9.400 A @ 115.0 V |
| Design Code                    | N                                      |
| Drip Cover                     | No Drip Cover                          |
| Duty Rating                    | CONT                                   |
| Efficiency @ 100% Load         | 60.0 %                                 |
| Electrically Isolated Bearing  | Not Electrically Isolated              |
| Feedback Device                | NO FEEDBACK                            |
| Haz Area Temp Code             | T3C                                    |
| Heater Indicator               | No Heater                              |
| High Voltage Full Load Amps    | 4.7 a                                  |
| Insulation Class               | B                                      |

**Part Detail**

|              |               |
|--------------|---------------|
| Revision     | E             |
| Type         | AC            |
| Mech. spec.  |               |
| Base         |               |
| Status       | PRD/A         |
| Elec. spec.  | 34WG0656      |
| Layout       | 34LY5328      |
| Eff. date    | 05-01-2024    |
| CD Diagram   | CD0565        |
| Poles        | 02            |
| Leads        | 6#18,1#16 4TH |
| Proprietary  | False         |
| Created date | 03-29-2021    |

|                                   |                            |
|-----------------------------------|----------------------------|
| <b>Inverter Code</b>              | Not Inverter               |
| <b>IP Rating</b>                  | NONE                       |
| <b>KVA Code</b>                   | N                          |
| <b>Lifting Lugs</b>               | No Lifting Lugs            |
| <b>Locked Bearing Indicator</b>   | No Locked Bearing          |
| <b>Motor Lead Termination</b>     | Flying Leads               |
| <b>Motor Standards</b>            | NEMA                       |
| <b>Motor Type</b>                 | 3420L                      |
| <b>Mounting Arrangement</b>       | F1                         |
| <b>Number of Poles</b>            | 2                          |
| <b>Overall Length</b>             | 14.22 IN                   |
| <b>Power Factor</b>               | 60                         |
| <b>Product Family</b>             | Hazardous Location Motor   |
| <b>Pulley Face Code</b>           | C-Face                     |
| <b>Rodent Screen</b>              | None                       |
| <b>Service Factor</b>             | 1.00                       |
| <b>Shaft Diameter</b>             | 0.625 IN                   |
| <b>Shaft Ground Indicator</b>     | No Shaft Grounding         |
| <b>Shaft Rotation</b>             | Reversible                 |
| <b>Speed</b>                      | 3450 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>          | Automatic Thermal Overload |
| <b>Winding Thermal 1 Location</b> | EP                         |
| <b>Winding Thermal 2</b>          | None                       |

**Nameplate**

| NP0016XPSL     |                        |                      |     |              |   |  |  |  |  |
|----------------|------------------------|----------------------|-----|--------------|---|--|--|--|--|
| <b>NO.</b>     |                        | <b>CC</b>            |     |              |   |  |  |  |  |
| <b>SER. #</b>  |                        |                      |     |              |   |  |  |  |  |
| <b>SPEC</b>    | 34-0000-0398           |                      |     |              |   |  |  |  |  |
| <b>CAT.NO.</b> | CXL050522A             |                      |     |              |   |  |  |  |  |
| <b>H.P.</b>    | .5                     | <b>T. CODE</b>       | T3C |              |   |  |  |  |  |
| <b>VOLTS</b>   | 115/230                |                      |     |              |   |  |  |  |  |
| <b>AMPS</b>    | 9.4/4.7                |                      |     |              |   |  |  |  |  |
| <b>R.P.M.</b>  | 3450 34WG0656          |                      |     |              |   |  |  |  |  |
| <b>HZ</b>      | 60                     | <b>PH</b>            | 1   | <b>CLASS</b> | B |  |  |  |  |
| <b>SER.F.</b>  | 1.00                   | <b>DES</b>           | N   | <b>CODE</b>  | N |  |  |  |  |
| <b>RATING</b>  | 40C AMB-CONT           |                      |     |              |   |  |  |  |  |
| <b>FRAME</b>   | 56C                    | <b>NEMA NOM. EFF</b> | 60  |              |   |  |  |  |  |
|                | <b>PF</b>              | 60                   |     |              |   |  |  |  |  |
| <b>BLANK</b>   | NEMA MG-1 PART 5, IP54 |                      |     |              |   |  |  |  |  |

**AC Induction Motor Performance Data**

Record # 88187

Typical performance - not guaranteed values

| Winding: 34WG0656     |    |         | Type: 3420L                             |                     | Enclosure: XPFC             |            |
|-----------------------|----|---------|-----------------------------------------|---------------------|-----------------------------|------------|
| Nameplate Data        |    |         | 115 V, 60 Hz:<br>Low Voltage Connection |                     |                             |            |
| Rated Output (HP)     |    | 0.5     | Full Load Torque                        |                     | 0.753 LB-FT                 |            |
| Volts                 |    | 115/230 | Start Configuration                     |                     | Unknown                     |            |
| Full Load Amps        |    | 9.4/4.7 | Breakdown Torque                        |                     | 2.82 LB-FT                  |            |
| R.P.M.                |    | 3450    | Pull-up Torque                          |                     | 2.31 LB-FT                  |            |
| Hz                    | 60 | Phase   | 1                                       | Locked-rotor Torque |                             | 3.13 LB-FT |
| NEMA Design Code      |    | N       | KVA Code                                |                     | N                           |            |
| Service Factor (S.F.) |    | 1       | Starting Current                        |                     | 44.9 A                      |            |
| NEMA Nom. Eff.        |    | 60      | Power Factor                            |                     | 60                          |            |
| Rating - Duty         |    | 40C     | AMB-CONT                                |                     | Line-line Res. @ 25°C       |            |
|                       |    |         |                                         |                     | 0.782 Ω A Ph<br>2.48 Ω B Ph |            |
|                       |    |         |                                         |                     | Temp. Rise @ Rated Load     |            |
|                       |    |         |                                         |                     | 69°C                        |            |
|                       |    |         |                                         |                     | Locked-rotor Power Factor   |            |
|                       |    |         |                                         |                     | 95.1                        |            |
|                       |    |         |                                         |                     | Rotor inertia               |            |
|                       |    |         |                                         |                     | 0.0186 lb-ft²               |            |

**Load Characteristics 115 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 35   | 44   | 53   | 60   | 67   | 72   |
| Efficiency      | 27.8 | 42.6 | 51.4 | 56.9 | 60.2 | 62.1 |
| Speed           | 3561 | 3540 | 3516 | 3491 | 3464 | 3434 |
| Line amperes    | 8.33 | 8.59 | 8.97 | 9.48 | 10.1 | 10.9 |

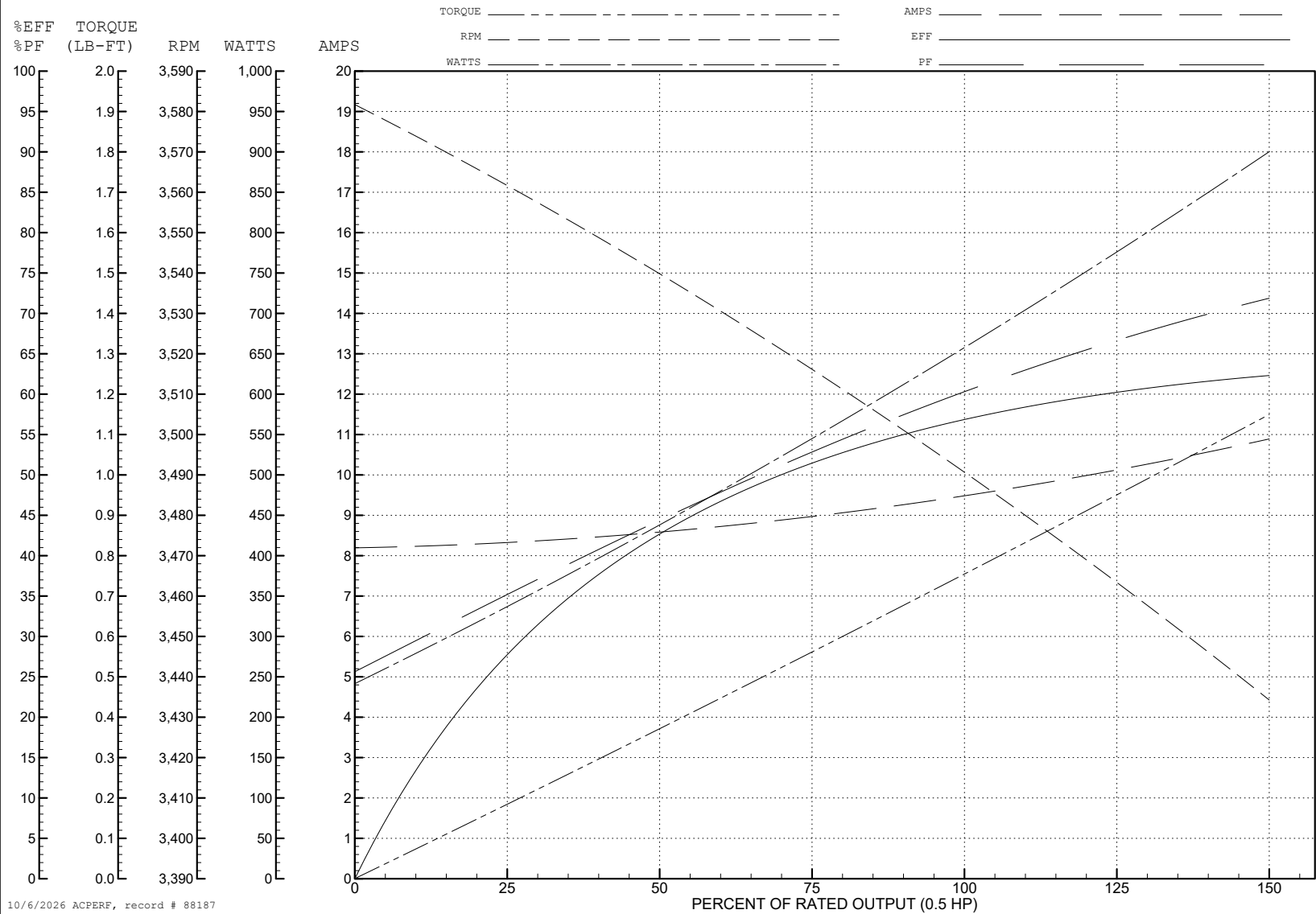
ABB Motors and Mechanical Inc.

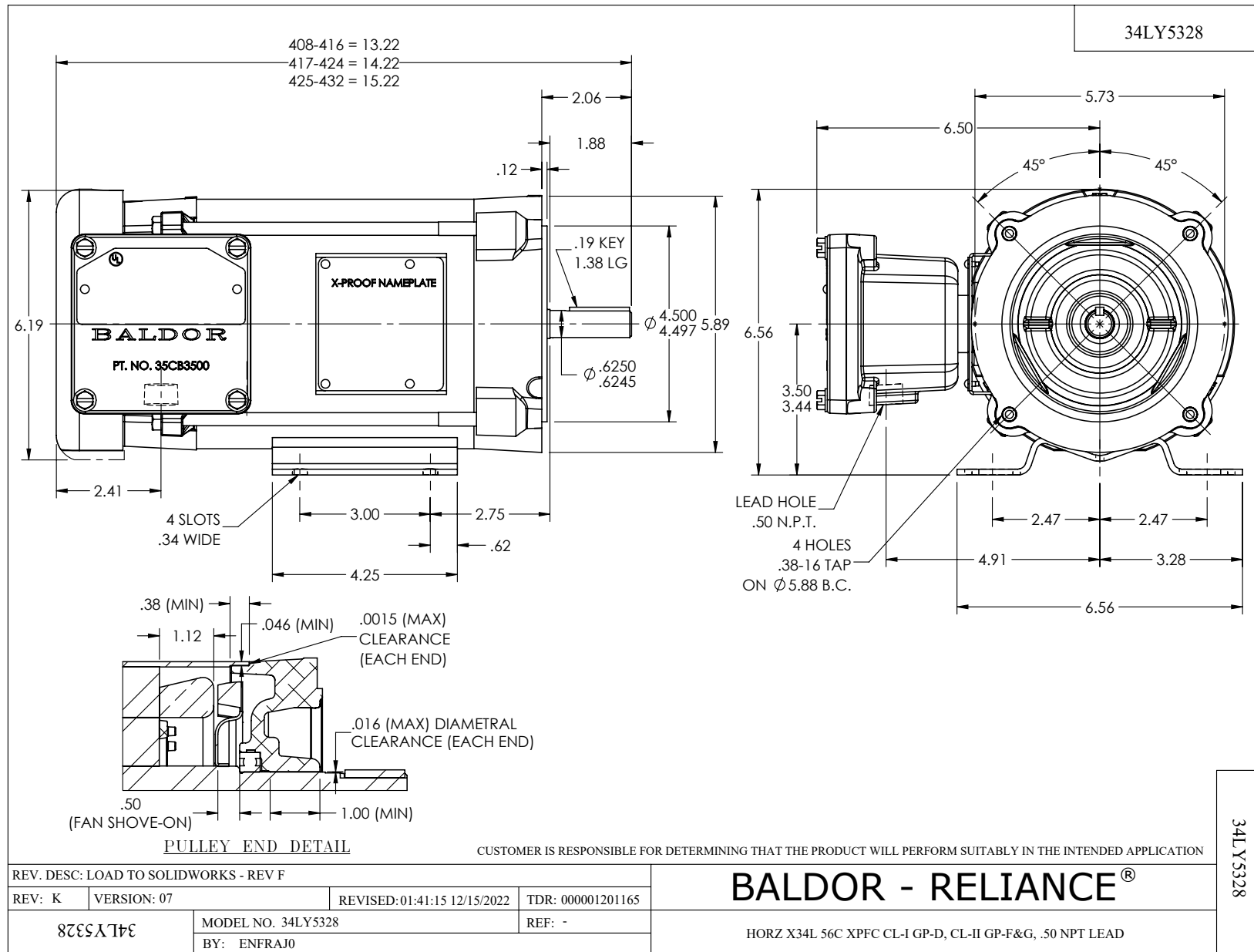
WINDING # 34WG0656

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 3450 RPM 115 V 3420L

TORQUES (LB-FT) : PO=2.82 PU=2.31 LR=3.13 LRA=44.9





CD0565

