

# ABB BALDOR RELIANCE III

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## Customer information packet

### EL11304A

.5HP, 1725RPM, 1PH, 60HZ, 56, 3424LC, OPEN, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | OPEN                                                        |
| <b>Frame</b>                          | 56                                                          |
| <b>Frame Material</b>                 | Steel                                                       |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | None                                                        |
| <b>Haz Area Division</b>              | Not Applicable                                              |
| <b>Motor Letter Type</b>              | Cap Start, Cap Run                                          |
| <b>Output @ Frequency</b>             | .500 HP @ 60 HZ                                             |
| <b>Phase</b>                          | 1                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 115.0 V @ 60 HZ<br>230.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CURUSEEV                                                    |
| <b>Ambient Temperature</b>            | 40 °C                                                       |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                            |
| <b>Auxiliary Box Lead Termination</b> | None                                                        |
| <b>Base Indicator</b>                 | Rigid                                                       |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 2.300 A @ 230.0 V<br>2.500 A @ 208.0 V<br>4.600 A @ 115.0 V |
| <b>Design Code</b>                    | N                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 76.2 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |
| <b>High Voltage Full Load Amps</b>    | 2.3 a                                                       |
| <b>Insulation Class</b>               | F                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | E          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34F353     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGR584   |
| <b>Layout</b>       | 34LYF353   |
| <b>Eff. date</b>    | 12-31-2024 |
| <b>CD Diagram</b>   | CD0320     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 7#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 11-08-2018 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Inverter Code</b>                 | Not Inverter               |
| <b>KVA Code</b>                      | K                          |
| <b>Lifting Lugs</b>                  | No Lifting Lugs            |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing          |
| <b>Motor Lead Quantity/Wire Size</b> | 7 @ 18 AWG                 |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 3424LC                     |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 4                          |
| <b>Overall Length</b>                | 11.00 IN                   |
| <b>Power Factor</b>                  | 94                         |
| <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>RoHS Status</b>                   | ROHS COMPLIANT             |
| <b>Service Factor</b>                | 1.25                       |
| <b>Shaft Diameter</b>                | 0.625 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | No Slinger                 |
| <b>Speed</b>                         | 1725 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>    | SB                         |
| <b>Winding Thermal 2</b>             | None                       |

**Nameplate**

| NP3273L        |              |  |      |      |     |   |  |    |   |  |  |
|----------------|--------------|--|------|------|-----|---|--|----|---|--|--|
| CAT.NO.        | EL11304A     |  |      |      |     |   |  |    |   |  |  |
| SPEC.          | 34F353R584G2 |  |      |      |     |   |  |    |   |  |  |
| HP             | .5           |  |      |      |     |   |  |    |   |  |  |
| VOLTS          | 115/230      |  |      |      |     |   |  |    |   |  |  |
| AMP            | 4.6/2.3      |  |      |      |     |   |  |    |   |  |  |
| RPM            | 1725         |  |      |      |     |   |  |    |   |  |  |
| FRAME          | 56           |  | HZ   | 60   |     |   |  | PH | 1 |  |  |
| SER.F.         | 1.25         |  | CODE | K    | DES | N |  | CL | F |  |  |
| F.L. AVG. EFF. | 76.2         |  | PF   | 94   |     |   |  |    |   |  |  |
| RATING         | 40C AMB-CONT |  |      |      |     |   |  |    |   |  |  |
| CC             |              |  |      |      |     |   |  |    |   |  |  |
| DE             | 6203         |  | ODE  | 6203 |     |   |  |    |   |  |  |
| ENCL           | OPEN         |  | SN   |      |     |   |  |    |   |  |  |
|                | SFA 5.9/2.95 |  |      |      |     |   |  |    |   |  |  |

**AC Induction Motor Performance Data**

Record # 73454

Typical performance - not guaranteed values

| Winding: 34WGR584-R002 |    |              |              | Type: 3424LC                            |  | Enclosure: OPEN            |  |
|------------------------|----|--------------|--------------|-----------------------------------------|--|----------------------------|--|
| Nameplate Data         |    |              |              | 115 V, 60 Hz:<br>Low Voltage Connection |  |                            |  |
| Rated Output (HP)      |    | .5           |              | Full Load Torque                        |  | 1.51 LB-FT                 |  |
| Volts                  |    | 115/230      |              | Start Configuration                     |  | direct on line             |  |
| Full Load Amps         |    | 4.6/2.3      |              | Breakdown Torque                        |  | 4.01 LB-FT                 |  |
| R.P.M.                 |    | 1725         |              | Pull-up Torque                          |  | 3.75 LB-FT                 |  |
| Hz                     | 60 | Phase        | 1            | Locked-rotor Torque                     |  | 6.42 LB-FT                 |  |
| NEMA Design Code       |    | N            | KVA Code     | Starting Current                        |  | 31.9 A                     |  |
| Service Factor (S.F.)  |    | 1.25         |              | No-load Current                         |  | 1.06 A                     |  |
| NEMA Nom. Eff.         |    | 76.2         | Power Factor | Line-line Res. @ 25°C                   |  | 1.59 Ω A Ph<br>2.09 Ω B Ph |  |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                 |  | 37°C                       |  |
| S.F. Amps              |    | 5.9/2.95     |              | Temp. Rise @ S.F. Load                  |  | 49°C                       |  |
|                        |    |              |              | Locked-rotor Power Factor               |  | 99.7                       |  |
|                        |    |              |              | Rotor inertia                           |  | 0.057 lb-ft²               |  |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 89   | 94   | 95   | 96   | 95   | 94   | 95   |
| Efficiency      | 60   | 72.9 | 76.7 | 76.5 | 73.2 | 67.2 | 73.2 |
| Speed           | 1783 | 1768 | 1749 | 1727 | 1694 | 1648 | 1694 |
| Line amperes    | 1.56 | 2.34 | 3.34 | 4.6  | 5.8  | 7.69 | 5.8  |

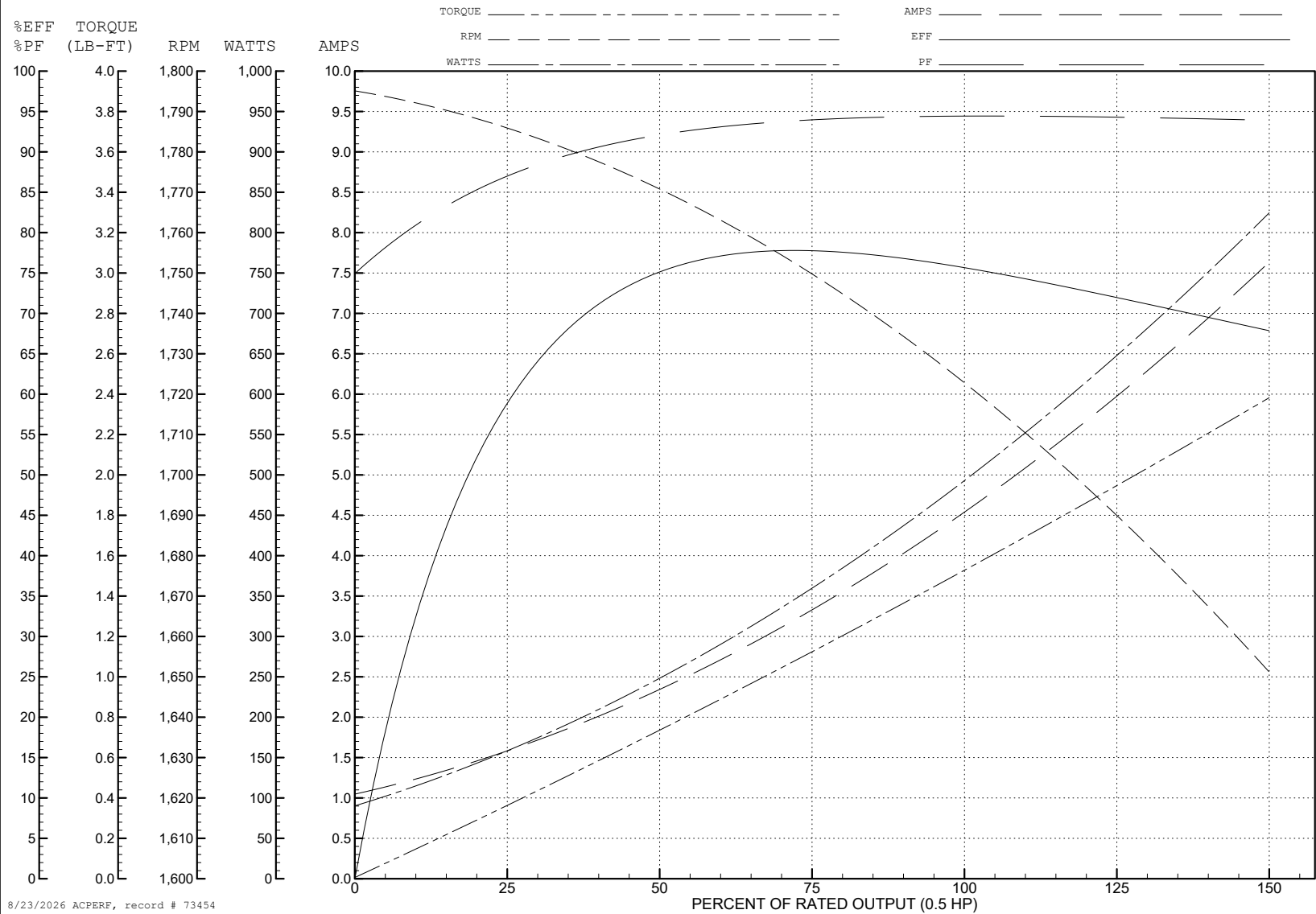
ABB Motors and Mechanical Inc.

WINDING # 34WGR584

Typical performance - not guaranteed values.

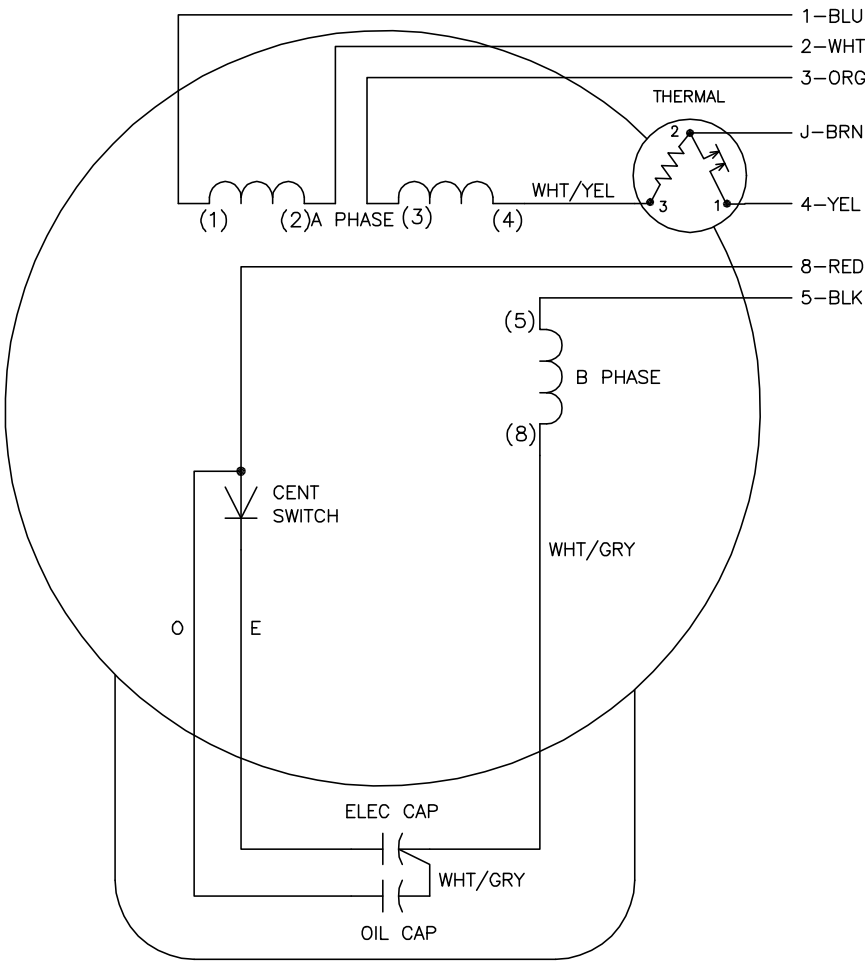
0.5 HP 1 PH 60 HZ 1725 RPM 115 V 3424LC

TORQUES (LB-FT): PO=4.01 PU=3.75 LR=6.42 LRA=31.9





CD0320



|          | LINE A | LINE B | JOIN  | JOIN  |
|----------|--------|--------|-------|-------|
| HIGH STD | 1,8    | 4      | 2,3,5 | J     |
| HIGH OPP | 1,5    | 4      | 2,3,8 | J     |
| LOW STD  | 1,3,8  | 4      | —     | 2,J,5 |
| LOW OPP  | 1,3,5  | 4      | —     | 2,J,8 |

- NOTES:
1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
  2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
  3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0320

|                                                          |                                |                   |
|----------------------------------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD INTERNAL CONNECTION TO HELP MANUFACTURING |                                |                   |
| REV. LTR: G                                              | VERSION: 01                    | TDR: 000000941594 |
| FILE: \AAA\00007\422                                     | REVISED: 02: 21: 00 08/28/2015 | BY: ENALEM0       |
| MTL: —                                                   | © □                            |                   |

**BALDOR**

TYPE LC, DV, REV, THERMAL, B PH AMPS THRU HTR HVC, 7 LEAD  
SH 1 of 1