

# ABB BALDOR RELIANCE III

---

## Customer information packet

### ECS100T4H3DC4

3HP, 1800RPM, 3PH, 60HZ, 145TC, 3532B, TEFC, F1

**Part Detail**

|              |                        |
|--------------|------------------------|
| Revision     | B                      |
| Type         | AC                     |
| Mech. spec.  | 35E5353                |
| Base         |                        |
| Status       | PRD/A                  |
| Elec. spec.  | 35WGG943               |
| Layout       | 35LYE5353              |
| Eff. date    | 09-19-2025             |
| CD Diagram   | CD0006B03              |
| Poles        | 04                     |
| Leads        | 3#116 13" LONG LEADS Y |
| Proprietary  | False                  |
| Created date | 05-08-2024             |

**Nameplate**

| NP3968A01A01 |               |    |       |           |         |       |      |      |     |
|--------------|---------------|----|-------|-----------|---------|-------|------|------|-----|
| CAT.NO.      | ECS100T4H3DC4 |    |       |           |         |       |      |      |     |
| SPEC.        | 35E5353G943   |    |       |           |         |       |      |      |     |
| FRAME        | 145TC         |    |       | ENCL.     |         | TEFC  |      | IP   | 54  |
| HP           | 3             | 40 | C AMB |           |         | CONT  |      |      |     |
| NOM. EFF.    | 91            | PF | 97    | SF        |         | 1.15  |      |      |     |
| VOLTS        | 460           |    |       | FLA       |         | 3.5   |      |      |     |
| RPM          | 1800          |    |       | RPM-MAX   |         |       | 4000 |      |     |
| HZ           | 60            |    |       | PH.       | 3       | CLASS |      | F    |     |
| BEMF (V)     | 267           |    |       | RS (OHMS) |         |       |      | 6.72 |     |
| LD (MH)      | 57.9          |    |       |           | LQ (MH) |       |      |      | 218 |
| VPWM         | CHP           | 60 | TO    |           | 133     |       |      |      |     |
| CT           | 6             | TO | 60    | VT        |         | 6     | TO   | 60   |     |
| MATCHED INV  | ECI4A4P1      |    |       |           |         |       |      |      |     |
| DE           | 6205          |    |       | ODE       |         | 6203  |      |      |     |
| SERIAL #     |               |    |       |           |         |       |      |      |     |

| NP3978A01 |          |              |   |    |     |
|-----------|----------|--------------|---|----|-----|
| PART NO.  | ECI4A4P1 |              |   |    |     |
| U1        | 480      | PH           | 3 | HZ | 60  |
| I1        | 4.8      | W/EXT. CHOKE |   |    | 4.5 |
| SERIAL #  |          |              |   |    |     |

|          |      |          |              |            |           |       |                  |
|----------|------|----------|--------------|------------|-----------|-------|------------------|
| Volts    | 460  | Max RPM  | 3000         | Conn Diag. | CD0006B03 | Leads | 3                |
| Amps     | 3.7  | Max Amps |              | Cs Diagram | CS1126    | BEMF  | 172              |
| HP       | 3    | VFD#     | ECI4A4P1     |            |           | LD    | 51               |
| RPM      | 1800 | S.F.     | 1.00         |            |           | LQ    | 177              |
| Phase/Hz | 3/60 | Rating   | 40C AMB CONT |            |           | Rs    | 3.8460 Meas. L-L |

### 60034-2-3 Motor Performance at Standardized Operating Points

|    | RPM  | % Speed | LB-FT | % Torque | HP  | Efficiency | Loss<br>(% FL) | Watts Loss<br>(W) |
|----|------|---------|-------|----------|-----|------------|----------------|-------------------|
| P1 | 1627 | 90%     | 8.8   | 100%     | 2.7 | 91.3       | 8.59%          | 194               |
| P2 | 904  | 50%     | 8.8   | 100%     | 1.5 | 89.3       | 6.00%          | 136               |
| P3 | 452  | 25%     | 8.8   | 100%     | 0.8 | 83.4       | 4.94%          | 112               |
| P4 | 1628 | 90%     | 4.4   | 50%      | 1.4 | 91.8       | 3.99%          | 90                |
| P5 | 904  | 50%     | 4.4   | 50%      | 0.8 | 89.9       | 2.80%          | 63                |
| P6 | 904  | 50%     | 2.2   | 25%      | 0.4 | 87.9       | 1.70%          | 39                |
| P7 | 452  | 25%     | 2.2   | 25%      | 0.2 | 83.7       | 1.21%          | 27                |

### 61800-9-2 PDS Performance at Reference Operating Points

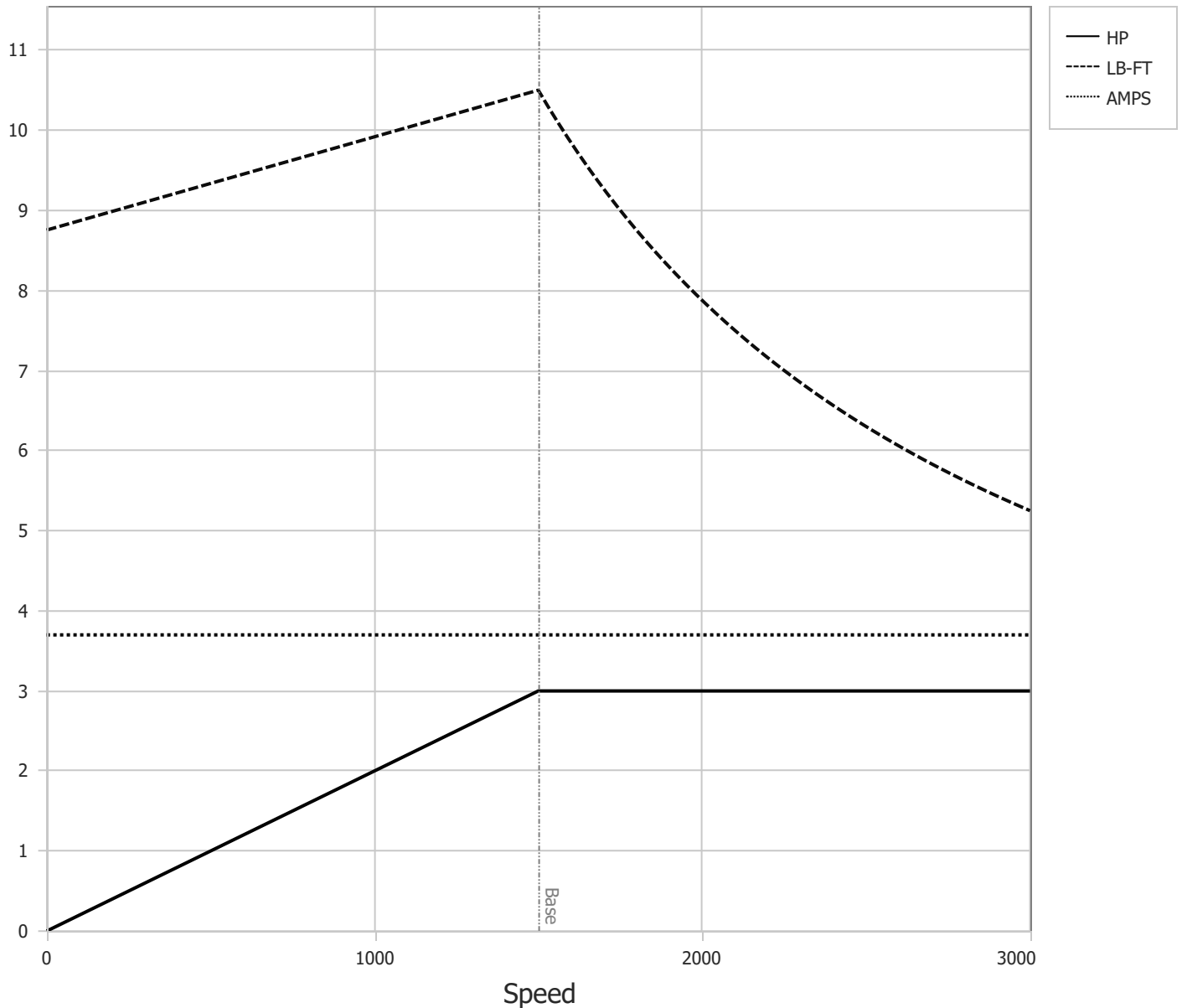
|    | RPM  | % Speed | LB-FT | % Torque | HP  | System<br>Efficiency | Loss<br>(% FL) | Watts Loss<br>(W) |
|----|------|---------|-------|----------|-----|----------------------|----------------|-------------------|
| P1 | 1804 | 100%    | 8.8   | 100%     | 3.0 | 89.8                 | 11.23%         | 254               |
| P2 | 904  | 50%     | 8.8   | 100%     | 1.5 | 84.8                 | 8.87%          | 201               |
| P3 | 301  | 17%     | 8.8   | 100%     | 0.5 | 69.2                 | 7.37%          | 167               |
| P4 | 1809 | 100%    | 4.4   | 50%      | 1.5 | 88.5                 | 6.44%          | 146               |
| P5 | 904  | 50%     | 4.4   | 50%      | 0.8 | 84.1                 | 4.70%          | 106               |
| P6 | 301  | 17%     | 4.4   | 50%      | 0.3 | 68.2                 | 3.86%          | 87                |
| P7 | 904  | 50%     | 2.2   | 25%      | 0.4 | 80.2                 | 3.06%          | 69                |
| P8 | 301  | 17%     | 2.2   | 25%      | 0.1 | 62.6                 | 2.46%          | 56                |

Points not taken in certified order.

|                                                                                    |         |                   |                                            |                                                   |
|------------------------------------------------------------------------------------|---------|-------------------|--------------------------------------------|---------------------------------------------------|
|  | DR By:  | <u>R &amp; D</u>  | <b>AC MOTOR<br/>PERFORMANCE<br/>CURVES</b> | <b>36WGA0025</b><br>36-0000-3655<br>Test - 111781 |
|                                                                                    | CK By:  | <u>USBIBAK</u>    |                                            |                                                   |
|                                                                                    | APP By: | <u>USJAROB1</u>   |                                            |                                                   |
|                                                                                    | Date:   | <u>01/09/2025</u> |                                            |                                                   |

|          |      |          |              |            |           |       |                 |
|----------|------|----------|--------------|------------|-----------|-------|-----------------|
| Volts    | 460  | Max RPM  | 3000         | Conn Diag. | CD0006B03 | Leads | 3               |
| Amps     | 3.7  | Max Amps |              | Cs Diagram | CS1126    | BEMF  | 172             |
| HP       | 3    | VFD #    | ECI4A4P1     |            |           | LD    | 51              |
| RPM      | 1800 | S.F.     | 1.00         |            |           | LQ    | 177             |
| Phase/Hz | 3/60 | Rating   | 40C AMB CONT |            |           | Rs    | 3.8460 Meas L-L |

### Constant Duty Operating Range


**BALDOR • RELIANCE**

DR By: R & D  
 CK By: USBIBAK  
 APP By: USJAROB1  
 Date: 01/09/2025

**AC MOTOR  
PERFORMANCE  
CURVES**

**36WGA0025**  
 36-0000-3655  
 Test - 111781

