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# Customer information packet

## ECS100T2H3EC4

3HP, 1800RPM, 3PH, 60HZ, 182TC, 3624B, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                           |
|--------------------------------|---------------------------|
| Enclosure                      | TEFC                      |
| Frame                          | 182TC                     |
| Frame Material                 | Steel                     |
| Frequency                      | 60.00 Hz                  |
| Haz Area Class and Group       | None                      |
| Haz Area Division              | Not Applicable            |
| Motor Letter Type              | Three Phase               |
| Output @ Frequency             | 3.000 HP @ 60 HZ          |
| Phase                          | 3                         |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ          |
| Voltage @ Frequency            | 230.0 V @ 60 HZ           |
| Agency Approvals               | UL<br>WEEE                |
| 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                      |
| Constant Torque Speed Range    | 6                         |
| Current @ Voltage              | 7.300 A @ 230.0 V         |
| Drip Cover                     | No Drip Cover             |
| Duty Rating                    | CONT                      |
| Efficiency @ 100% Load         | 92.8 %                    |
| Electrically Isolated Bearing  | Not Electrically Isolated |
| Feedback Device                | NO FEEDBACK               |
| Heater Indicator               | No Heater                 |
| High Voltage Full Load Amps    | 7.3 a                     |
| Insulation Class               | F                         |
| Inverter Code                  | Inverter Duty             |
| IP Rating                      | NONE                      |
| Lifting Lugs                   | Standard Lifting Lugs     |

## Part detail

|              |                     |
|--------------|---------------------|
| Revision     | H                   |
| Type         | AC                  |
| Mech. spec.  |                     |
| Base         |                     |
| Status       | PRD/A               |
| Elec. spec.  | 36WGA0023           |
| Layout       | 36LYT270            |
| Eff. date    | 05-08-2024          |
| CD Diagram   | CD0006B03           |
| Poles        | 04                  |
| Leads        | 3#14 19" LONG LEADS |
| Proprietary  | False               |
| Created date | 09-28-2020          |

|                                   |                     |
|-----------------------------------|---------------------|
| <b>Locked Bearing Indicator</b>   | Locked Bearing      |
| <b>Motor Lead Termination</b>     | Flying Leads        |
| <b>Motor Standards</b>            | NEMA                |
| <b>Motor Type</b>                 | 3624B               |
| <b>Mounting Arrangement</b>       | F1                  |
| <b>Number of Poles</b>            | 4                   |
| <b>Overall Length</b>             | 16.71 IN            |
| <b>Power Factor</b>               | 97                  |
| <b>Product Family</b>             | General Purpose     |
| <b>Pulley Face Code</b>           | C-Face              |
| <b>Rodent Screen</b>              | None                |
| <b>Service Factor</b>             | 1.00                |
| <b>Shaft Diameter</b>             | 1.125 IN            |
| <b>Shaft Ground Indicator</b>     | Shaft Grounding     |
| <b>Shaft Rotation</b>             | Reversible          |
| <b>Speed</b>                      | 1800 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>          | None                |
| <b>Winding Thermal 2</b>          | None                |

**Nameplate**

| NP3978A01 |           |              |   |    |    |     |
|-----------|-----------|--------------|---|----|----|-----|
| PART NO.  | ECI2A10P5 |              |   |    |    |     |
| U1        | 240       | PH           | 3 | HZ | 60 |     |
| I1        | 9.3       | W/EXT. CHOKE |   |    |    | 7.8 |
| SERIAL #  |           |              |   |    |    |     |

| NP3968A01A01 |               |    |       |           |         |      |      |      |    |
|--------------|---------------|----|-------|-----------|---------|------|------|------|----|
| CAT.NO.      | ECS100T2H3EC4 |    |       |           |         |      |      |      |    |
| SPEC.        | 36-0001727    |    |       |           |         |      |      |      |    |
| FRAME        | 182TC         |    |       | ENCL.     |         | TEFC |      | IP   | 54 |
| HP           | 3             | 40 | C AMB |           |         | CONT |      |      |    |
| NOM. EFF.    | 92.8          | PF | 97    | SF        |         | 1    |      |      |    |
| VOLTS        | 230           |    |       | FLA       |         | 7.3  |      |      |    |
| RPM          | 1800          |    |       | RPM-MAX   |         |      | 4000 |      |    |
| HZ           | 60            |    | PH.   | 3         | CLASS   |      | F    |      |    |
| BEMF (V)     | 106           |    |       | RS (OHMS) |         |      |      | 0.97 |    |
| LD (MH)      | 14.4          |    |       |           | LQ (MH) |      |      | 54.4 |    |
| VPWM         | CHP           | 60 | TO    |           | 133     |      |      |      |    |
| CT           | 6             | TO | 60    |           | VT      | 1    | TO   | 133  |    |
| MATCHED INV  | ECI2A10P5     |    |       |           |         |      |      |      |    |
| DE           | 6206          |    |       | ODE       |         | 6205 |      |      |    |
| SERIAL #     |               |    |       |           |         |      |      |      |    |

|          |         |          |              |            |           |       |           |
|----------|---------|----------|--------------|------------|-----------|-------|-----------|
| Volts    | 208-230 | Max RPM  | 4000         | Conn Diag. | CD0006B03 | Leads | 3         |
| Amps     | 7.4-7.3 | Max Amps |              | Cs Diagram | CS1127    | BEMF  | 106       |
| HP       | 3       | VFD#     | ECIN2A10P5   |            |           | LD    | 14.4      |
| RPM      | 1800    | S.F.     | 1.00         |            |           | LQ    | 54.4      |
| Phase/Hz | 3/60    | Rating   | 40C AMB-CONT |            |           | Rs    | 1.0504    |
|          |         |          |              |            |           |       | Meas. L-L |

60034-2-3 Motor Performance at Standardized Operating Points

|    | RPM  | % Speed | LB-FT | % Torque | HP  | Efficiency | Loss (% FL) | Watts Loss (W) |
|----|------|---------|-------|----------|-----|------------|-------------|----------------|
| P1 | 1629 | 90%     | 8.8   | 100%     | 2.7 | 92.0       | 7.86%       | 178            |
| P2 | 904  | 50%     | 8.8   | 100%     | 1.5 | 90.1       | 5.50%       | 125            |
| P3 | 452  | 25%     | 8.8   | 100%     | 0.8 | 84.6       | 4.51%       | 102            |
| P4 | 1628 | 90%     | 4.4   | 50%      | 1.4 | 92.3       | 3.75%       | 85             |
| P5 | 905  | 50%     | 4.4   | 50%      | 0.8 | 90.7       | 2.54%       | 58             |
| P6 | 905  | 50%     | 2.2   | 25%      | 0.4 | 89.2       | 1.51%       | 34             |
| P7 | 452  | 25%     | 2.2   | 25%      | 0.2 | 86.7       | 0.96%       | 22             |

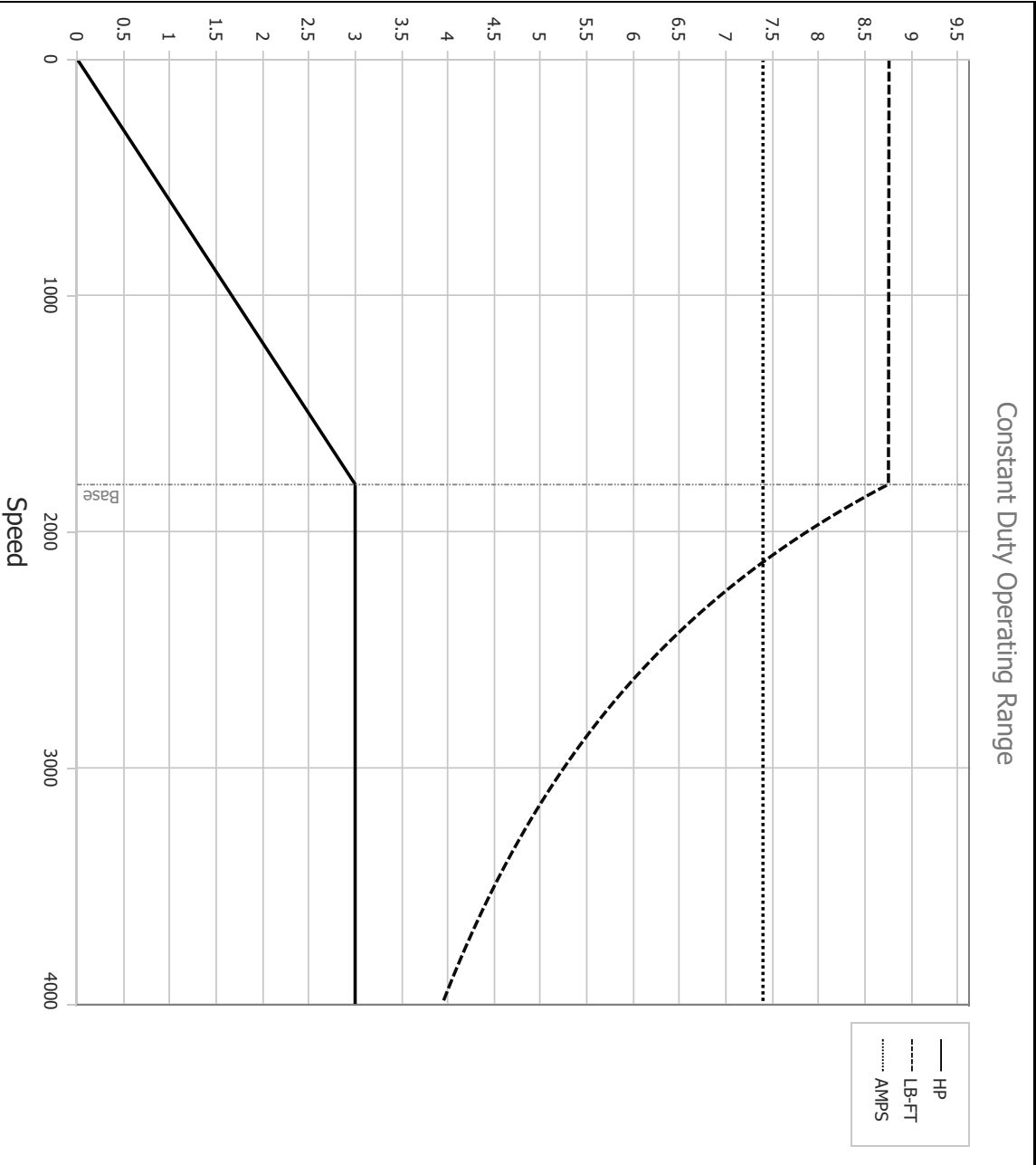
61800-9-2 PDS Performance at Reference Operating Points

|    | RPM  | % Speed | LB-FT | % Torque | HP  | System Efficiency | Loss (% FL) | Watts Loss (W) |
|----|------|---------|-------|----------|-----|-------------------|-------------|----------------|
| P1 | 1810 | 100%    | 8.8   | 100%     | 3.0 | 90.3              | 10.73%      | 243            |
| P2 | 904  | 50%     | 8.8   | 100%     | 1.5 | 84.5              | 9.12%       | 206            |
| P3 | 301  | 17%     | 8.8   | 100%     | 0.5 | 68.5              | 7.60%       | 172            |
| P4 | 1808 | 100%    | 4.4   | 50%      | 1.5 | 88.7              | 6.33%       | 143            |
| P5 | 905  | 50%     | 4.4   | 50%      | 0.8 | 84.5              | 4.54%       | 103            |
| P6 | 301  | 17%     | 4.4   | 50%      | 0.3 | 69.6              | 3.61%       | 82             |
| P7 | 905  | 50%     | 2.2   | 25%      | 0.4 | 81.7              | 2.79%       | 63             |
| P8 | 301  | 17%     | 2.2   | 25%      | 0.1 | 66.9              | 2.04%       | 46             |

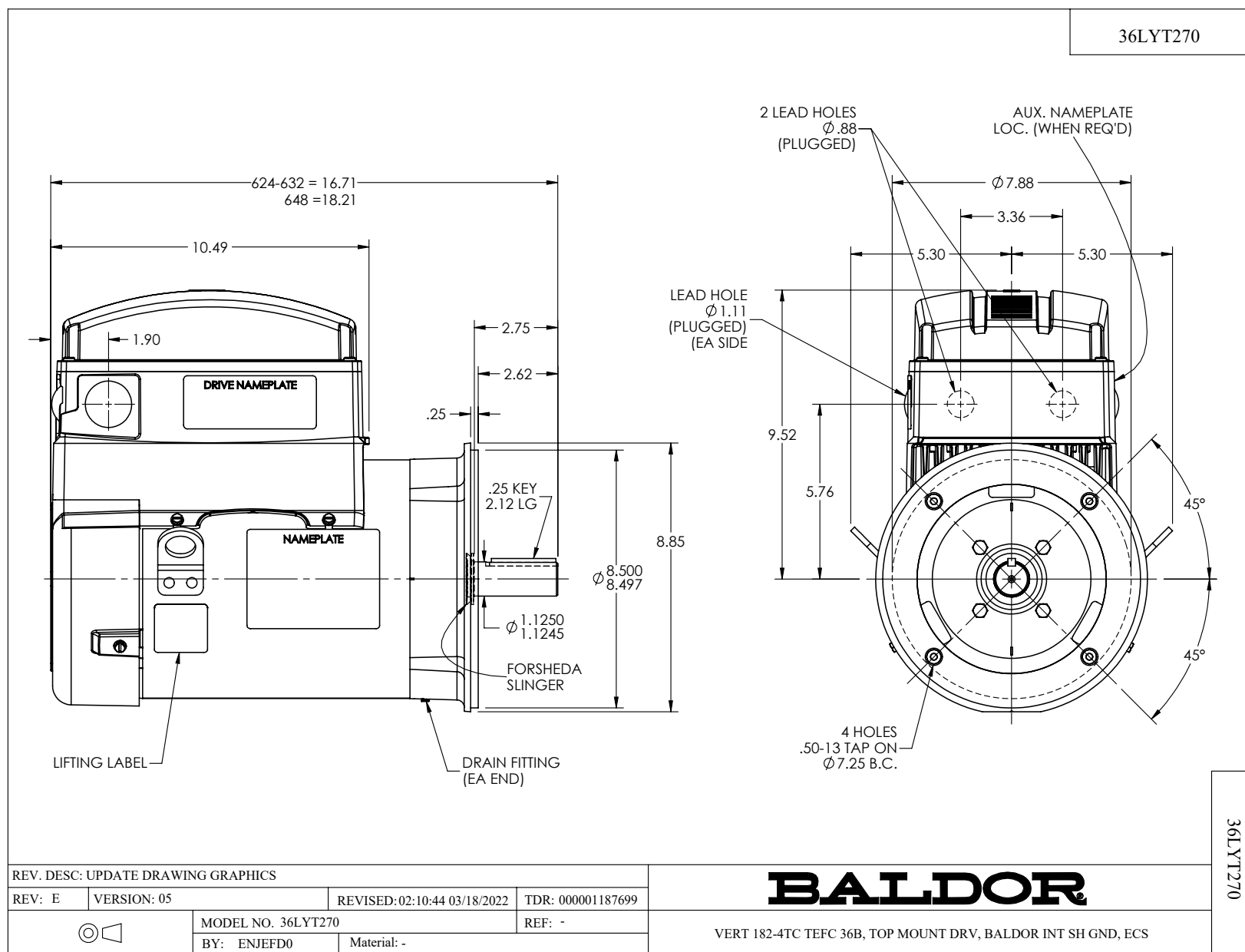
Points not taken in certified order.

|                          |                                                                                                        |                                    |                                                   |
|--------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------|
| <b>BALDOR • RELIANCE</b> | DR By: <u>R &amp; D</u><br>CK By: <u>USBIBAK</u><br>APP By: <u>USWEQUA1</u><br>Date: <u>01/28/2025</u> | <b>AC MOTOR PERFORMANCE CURVES</b> | <b>36WGA0023</b><br>36-0000-0620<br>Test - 111850 |
|--------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------|

|          |         |          |              |            |           |       |                 |
|----------|---------|----------|--------------|------------|-----------|-------|-----------------|
| Volts    | 208-230 | Max RPM  | 4000         | Conn Diag. | CD0006B03 | Leads | 3               |
| Amps     | 7.4-7.3 | Max Amps |              | Cs Diagram | CS1127    | BEMF  | 106             |
| HP       | 3       | VFD #    | ECIN2A10P5   |            |           | LD    | 14.4            |
| RPM      | 1800    | S.F.     | 1.00         |            |           | LQ    | 54.4            |
| Phase/Hz | 3/60    | Rating   | 40C AMB-CONT |            |           | Rs    | 1.0504 Meas L-L |

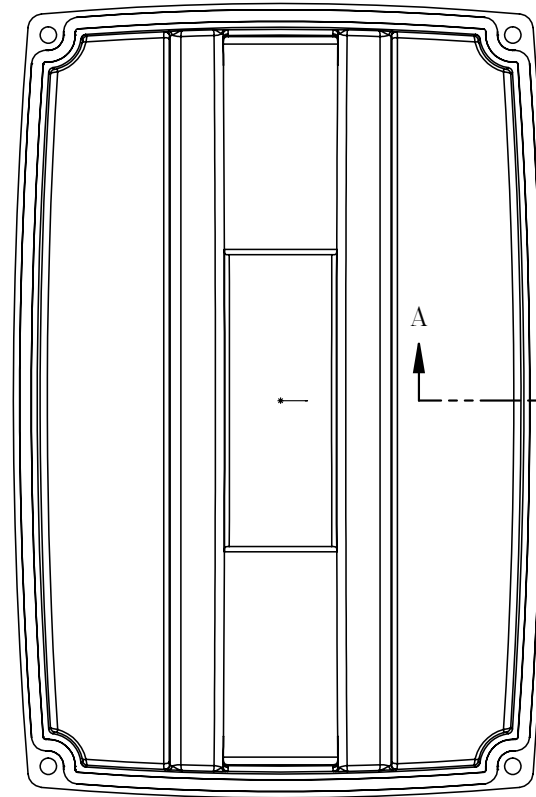


|                          |                                                                                                        |                                            |                                                   |
|--------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------|
| <b>BALDOR • RELIANCE</b> | DR By: <u>R &amp; D</u><br>CK By: <u>USBIBAK</u><br>APP By: <u>USWEQUA1</u><br>Date: <u>01/28/2025</u> | <b>AC MOTOR<br/>PERFORMANCE<br/>CURVES</b> | <b>36WGA0023</b><br>36-0000-0620<br>Test - 111850 |
|--------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------|

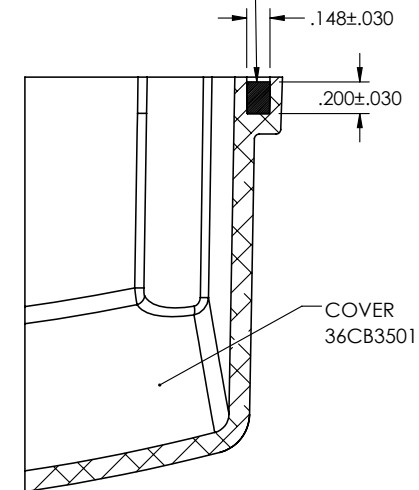




36CB3501A00



MATERIAL: RAMPF, RAKU-PUR 32-3280-51L



SECTION A-A

REV. DESC: UPDATE MATERIAL

REV: A

VERSION: 01

REVISED: 10:46:37 03/29/2019

TDR: 000001101646



MODEL NO. 36CB3501A00

REF: -

BY: ENMARS0

Material: -

BALDOR - RELIANCE®

36 &amp; 37 FRAME TOP ECM COVER WITH FOAM SEAL

36CB3501A00

