ABB BALDOR RELIANCE

# Customer information packet

## ECS100T4H7FF4

7.5HP, 1800RPM, 3PH, 60HZ, 213T, TEFC, TOP
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 213T |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Phase** | 3 |
| **Agency Approvals** | UL |
| | WEEE |
| **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 |
| **Design Code** | 0 |
| **Drip Cover** | No Drip Cover |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Heater Indicator** | No Heater |
| **Inverter Code** | Inverter Duty |
| **IP Rating** | NONE |
| **Lifting Lugs** | Standard Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 3 @ 14 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3730B |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 18.10 IN |

## Part Detail

| | |
|---|---|
| **Revision** | R |
| **Type** | AC |
| **Mech. spec.** | 37Q460 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 37WGL008 |
| **Layout** | 37LYQ460 |
| **Eff. date** | 08-17-2026 |
| **CD Diagram** | CD0006 |
| **Poles** | 04 |
| **Leads** | 3#14 |
| **Proprietary** | False |
| **Created date** | 02-04-2020 |

| | |
|---|---|
| **Product Family** | General Purpose |
| **Pulley Face Code** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Shaft Diameter** | 1.375 IN |
| **Shaft Ground Indicator** | Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Speed Code** | Single Speed |
| **Starting Method** | INVERTER SPECIAL |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

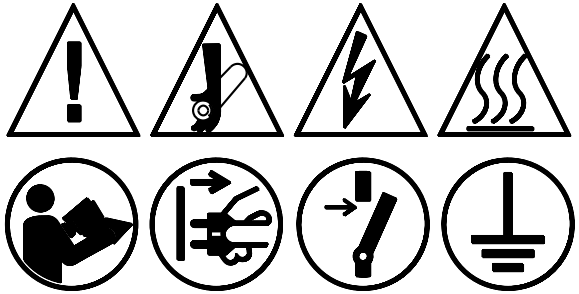
# BALDOR·RELIANCE

## EC-Titanium™

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CAT. NO. | ECS100T4H7FF4 | | | | | | |
| SPEC. | 37Q460L008G1 | | | | YR | *** | |
| FRAME | 213T | | ENCL. | TEFC | IP | 54 | |
| HP | 7.5 | RATING | 40C AMB-CONT | | | | |
| NOM. EFF. | 94.0% | PF | 92.3% | SF | 1.00 | | |
| VOLTS | 460 | | FLA | 8.7 | | | |
| RPM | 1800 | | RPM MAX | 3000 | | | |
| HZ | 60 | | PH. | 3 | CLASS | F | |
| BEMF (V) | 216 | | Rs (Ω) | 1.39 | | | |
| Ld (mH) | 26.5 | | Lq (mH) | 81.4 | | | |
| INV TYP | VPWM | CHP | 60 TO 100 HZ | | | | |
| | CT | 6 TO 60 HZ | VT | 1 TO 60 HZ | | | |
| MATCHED INV | EC14A9P5 | | | | | | |
| BEARING | DE | 6307 | ODE | 6206 | | | |
| SERIAL# | *** | | | | | | |

ELECTRONICALLY PROTECTED MOTOR
FOR INDUSTRIAL USE

FERRITE ASSISTED
SYNCHRONOUS RELUCTANCE MOTOR
FOR INVERTER USE ONLY



PERMANENT MAGNET MOTOR. WHEN SHAFT IS ROTATED, VOLTAGE WILL BE GENERATED AT THE MOTOR TERMINALS.
MOTEUR Á AIMANT PERMANENT. LORSQUE L'ARBRE TOURNE, UNE TENSION SERA GÉNÉRÉE AUX BORNES DU MOTEUR.

BALDOR-RELIANCE
SHAFT GROUNDING BRUSH INSTALLED

c UL us LISTED
E46145

ABB MOTORS AND MECHANICAL INC.
5711 R.S. BOREHAM JR. ST., FORT SMITH, AR. MFG IN U.S.A.

BALDOR • RELIANCE

EC-Titanium™

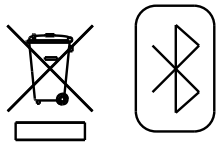
| | | | | | |
|---|---|---|---|---|---|
| PART NO. | EC14A9P5 | | | | |
| U1 | 480 | PH | 3 | HZ | 60 |
| I1 MAX | 7.8 | W/EXT. CHOKE | | | 7.0 |
| SERIAL # | *** | | | | |



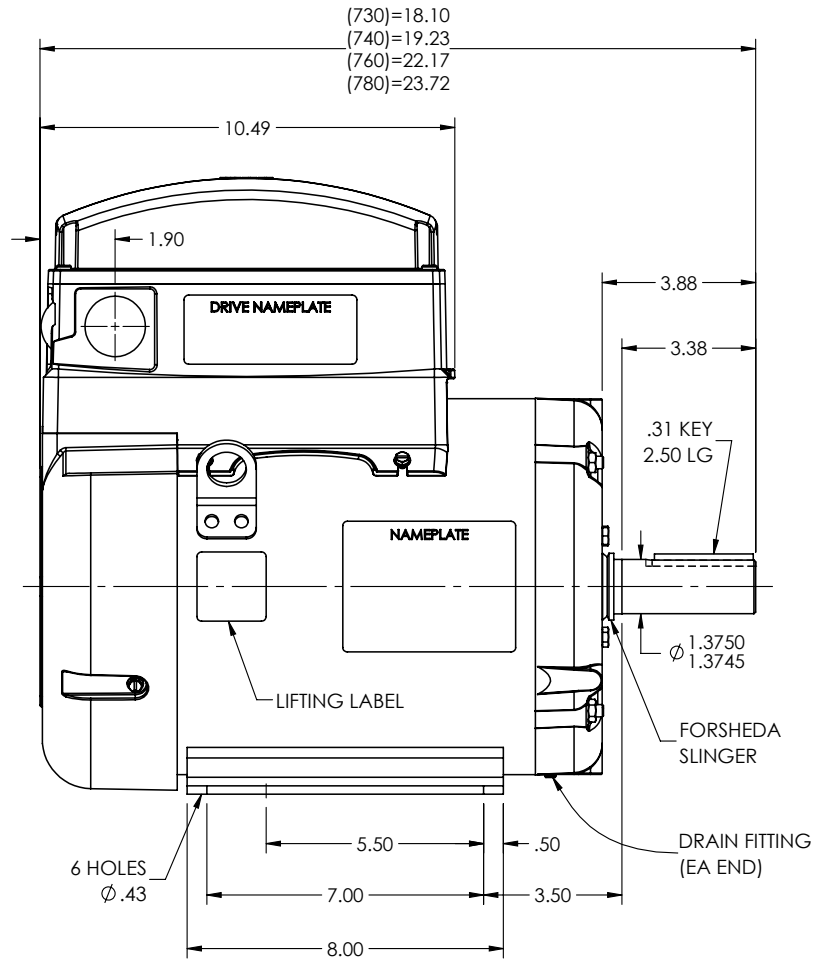
POWER DOWN FOR
5 MINUTES BEFORE
REMOVING COVER

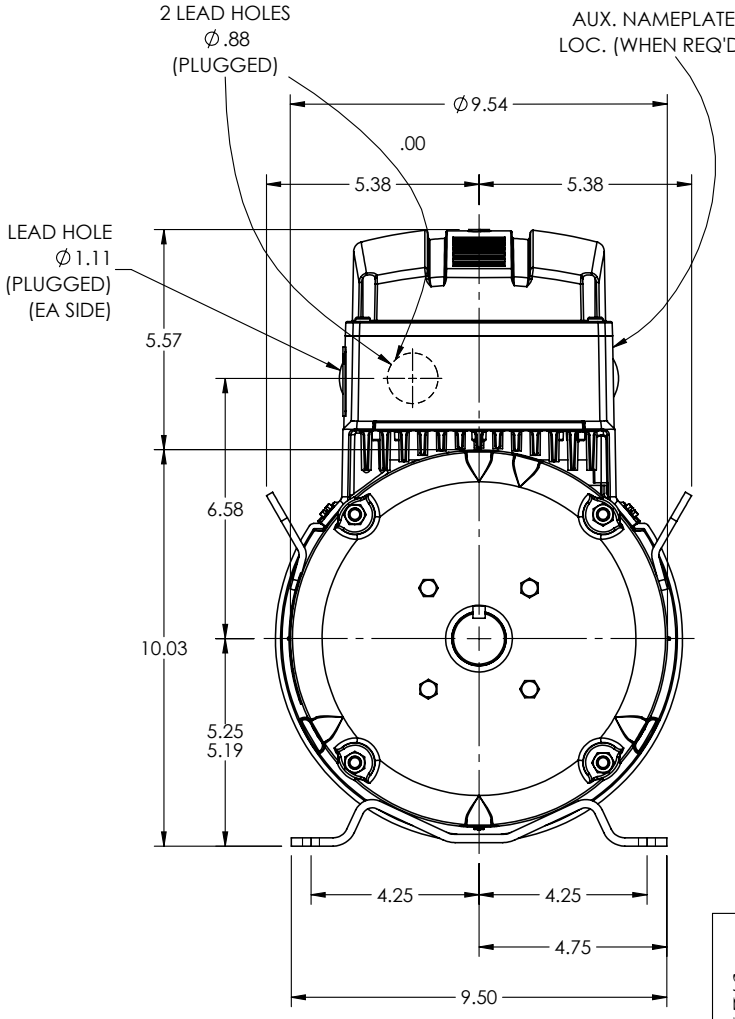
METTRE HORS TENSION
PENDANT 5 MINUTES
AVANT DE RETIRER LE
COUVERCLE

ABB MOTORS AND MECHANICAL
INC. FORT SMITH, AR.
MFG. IN U.S.A.



37LYQ460



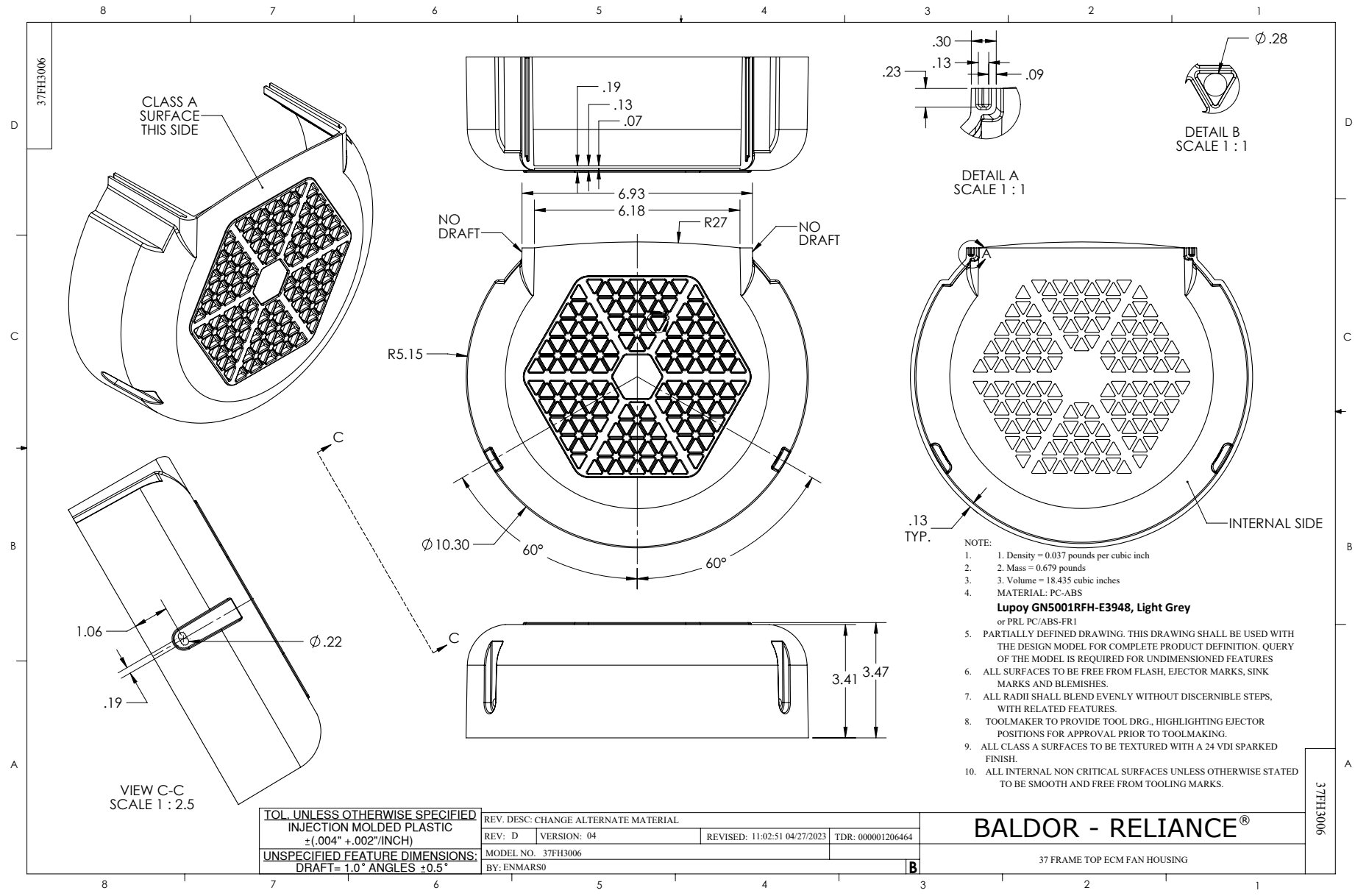




| | | | |
|---|---|---|---|
| REV. DESC: HW313104A59 WAS HW3100A82 | | | |
| REV: H | VERSION: 08 | REVISED: 09:32:21 06/05/2025 | TDR: 000001256072 |
| 37LYQ460 | MODEL NO. 37LYQ460 | | REF: - |
| | BY: USEROLI | | |

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HOR 213-5T TEFC B TOP MOUNT DRV INT SH GND ECS

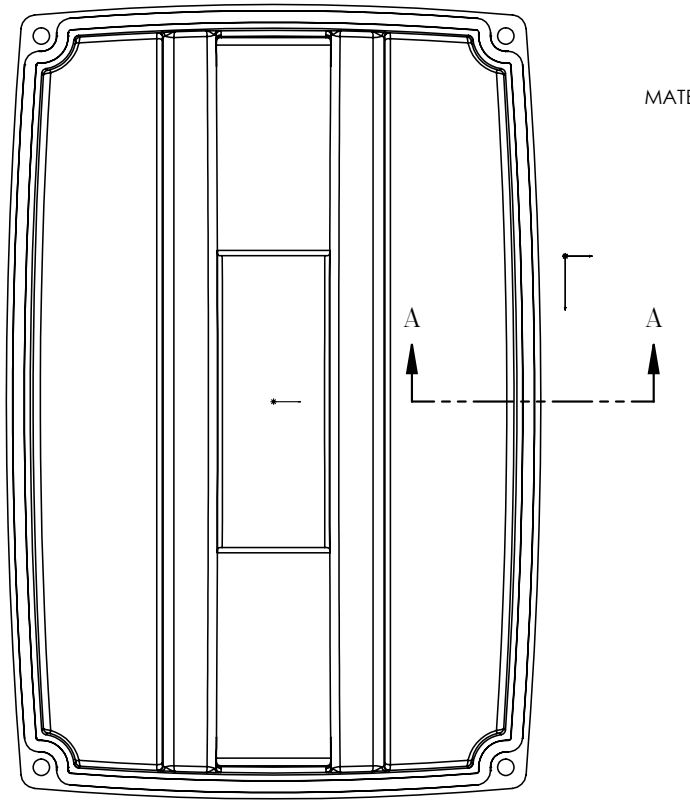
37LYQ460



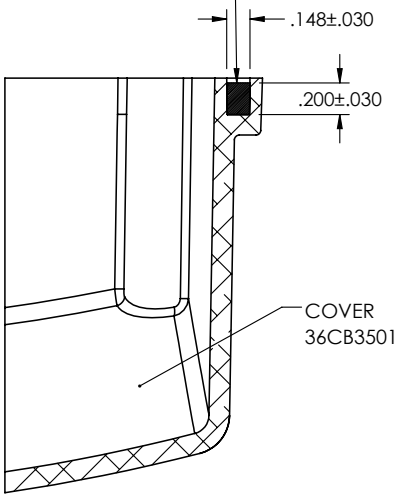

NOTE:
1. 1. Density = 0.037 pounds per cubic inch
2. 2. Mass = 0.679 pounds
3. 3. Volume = 18.435 cubic inches
4. MATERIAL: PC-ABS
   **Lupoy GN5001RFH-E3948, Light Grey**
   or PRL PC/ABS-FR1
5. PARTIALLY DEFINED DRAWING. THIS DRAWING SHALL BE USED WITH THE DESIGN MODEL FOR COMPLETE PRODUCT DEFINITION. QUERY OF THE MODEL IS REQUIRED FOR UNDIMENSIONED FEATURES
6. ALL SURFACES TO BE FREE FROM FLASH, EJECTOR MARKS, SINK MARKS AND BLEMISHES.
7. ALL RADII SHALL BLEND EVENLY WITHOUT DISCERNIBLE STEPS, WITH RELATED FEATURES.
8. TOOLMAKER TO PROVIDE TOOL DRG., HIGHLIGHTING EJECTOR POSITIONS FOR APPROVAL PRIOR TO TOOLMAKING.
9. ALL CLASS A SURFACES TO BE TEXTURED WITH A 24 VDI SPARKED FINISH.
10. ALL INTERNAL NON CRITICAL SURFACES UNLESS OTHERWISE STATED TO BE SMOOTH AND FREE FROM TOOLING MARKS.

| | | | |
|---|---|---|---|
| TOL. UNLESS OTHERWISE SPECIFIED INJECTION MOLDED PLASTIC ±(.004" +.002"/INCH) | REV. DESC: CHANGE ALTERNATE MATERIAL | | BALDOR - RELIANCE® |
| | REV: D VERSION: 04 | REVISED: 11:02:51 04/27/2023 TDR: 000001206464 | |
| UNSPECIFIED FEATURE DIMENSIONS: DRAFT= 1.0° ANGLES ±0.5° | MODEL NO. 37FH3006 | | 37 FRAME TOP ECM FAN HOUSING |
| | BY: ENMARS0 | B | 37FH3006 |

36CB3501A00




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



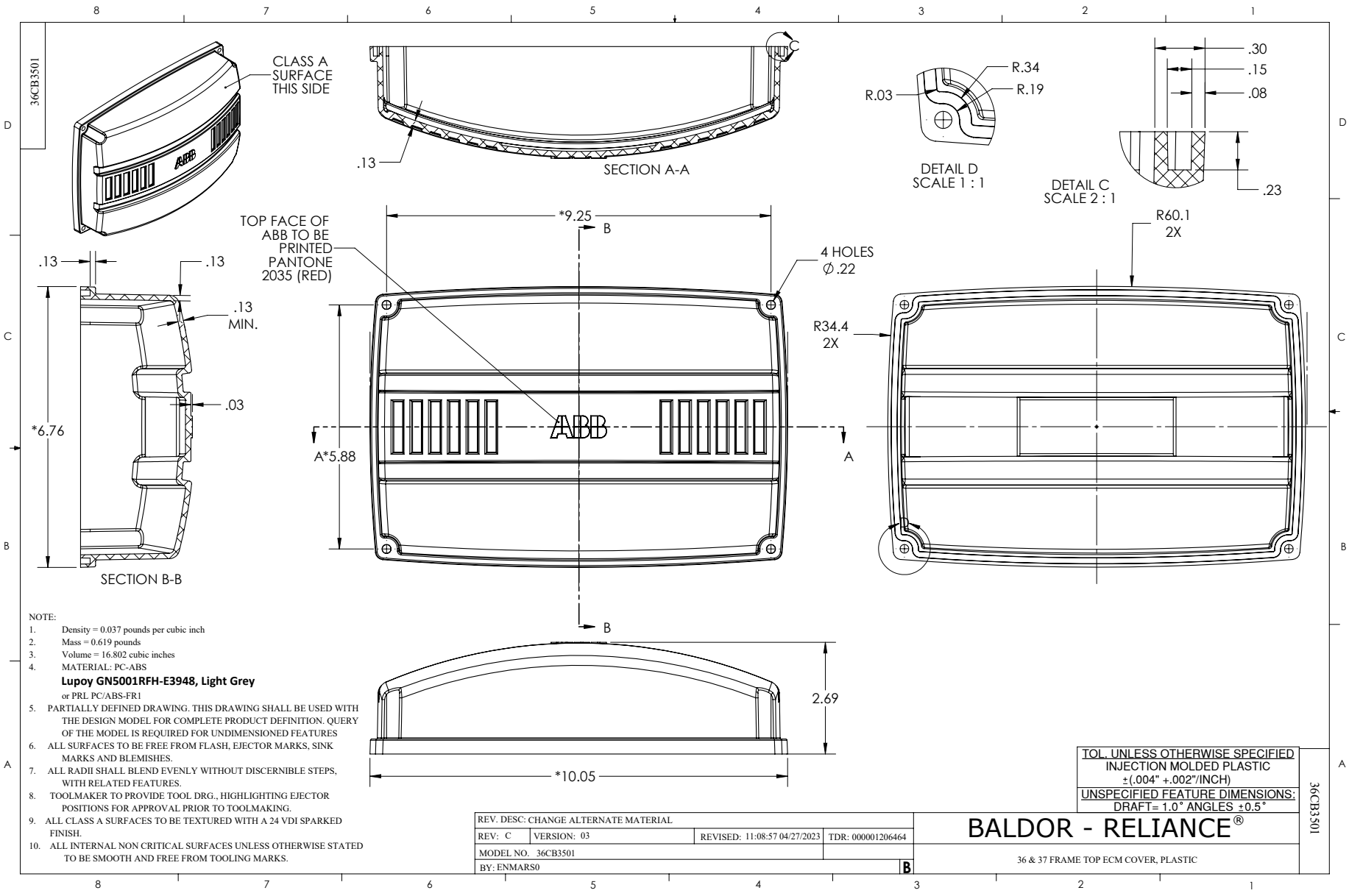

SECTION A–A

36CB3501A00

| | | | |
|---|---|---|---|
| REV. DESC: UPDATE MATERIAL | | | |
| REV: A | VERSION: 01 | REVISED: 10:46:37 03/29/2019 | TDR: 000001101646 |
| | MODEL NO. 36CB3501A00 | | REF: - |
| | BY: ENMARS0 | Material: - | |

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36 & 37 FRAME TOP ECM COVER WITH FOAM SEAL




NOTE:
1. Density = 0.037 pounds per cubic inch
2. Mass = 0.619 pounds
3. Volume = 16.802 cubic inches
4. MATERIAL: PC-ABS
   **Lupoy GN5001RFH-E3948, Light Grey**
   or PRL PC/ABS-FR1
5. PARTIALLY DEFINED DRAWING. THIS DRAWING SHALL BE USED WITH THE DESIGN MODEL FOR COMPLETE PRODUCT DEFINITION. QUERY OF THE MODEL IS REQUIRED FOR UNDIMENSIONED FEATURES
6. ALL SURFACES TO BE FREE FROM FLASH, EJECTOR MARKS, SINK MARKS AND BLEMISHES.
7. ALL RADII SHALL BLEND EVENLY WITHOUT DISCERNIBLE STEPS, WITH RELATED FEATURES.
8. TOOLMAKER TO PROVIDE TOOL DRG., HIGHLIGHTING EJECTOR POSITIONS FOR APPROVAL PRIOR TO TOOLMAKING.
9. ALL CLASS A SURFACES TO BE TEXTURED WITH A 24 VDI SPARKED FINISH.
10. ALL INTERNAL NON CRITICAL SURFACES UNLESS OTHERWISE STATED TO BE SMOOTH AND FREE FROM TOOLING MARKS.

| | | | |
|---|---|---|---|
| REV. DESC: CHANGE ALTERNATE MATERIAL | | | |
| REV: C | VERSION: 03 | REVISED: 11:08:57 04/27/2023 | TDR: 000001206464 |
| MODEL NO. 36CB3501 | | | |
| BY: ENMARS0 | | | B |

TOL. UNLESS OTHERWISE SPECIFIED
INJECTION MOLDED PLASTIC
±(.004" +.002"/INCH)
UNSPECIFIED FEATURE DIMENSIONS:
DRAFT= 1.0° ANGLES ±0.5°

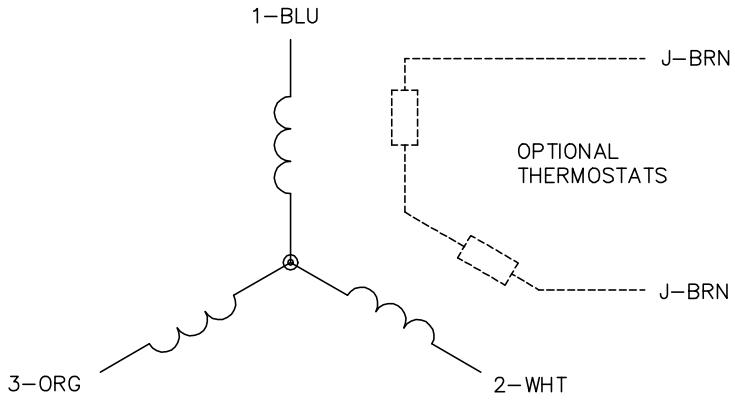
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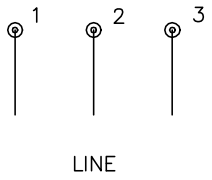
36 & 37 FRAME TOP ECM COVER, PLASTIC

36CB3501

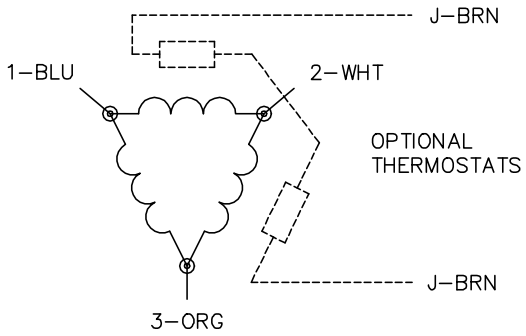
CD0006

TYPICAL WYE–CONNECTED MOTOR




TYPICAL DELTA–CONNECTED MOTOR




NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

| | | |
|---|---|---|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\141 | REVISED: 10:24:49 02/19/2019 | BY: ENBRIR0 |
| MTL: – | | |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1