

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECP4110T-4

40HP, 1775RPM, 3PH, 60HZ, 324T, 1254M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                                       |                                                          |
|---------------------------------------|----------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                     |
| <b>Frame</b>                          | 324T                                                     |
| <b>Frame Material</b>                 | Iron                                                     |
| <b>Frequency</b>                      | 60.00 Hz                                                 |
| <b>Haz Area Class and Group</b>       | CLI GP A,B,C,D                                           |
| <b>Haz Area Division</b>              | Division II                                              |
| <b>Motor Letter Type</b>              | Three Phase                                              |
| <b>Output @ Frequency</b>             | 40.000 HP @ 60 HZ                                        |
| <b>Phase</b>                          | 3                                                        |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                         |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ                                          |
| <b>Agency Approvals</b>               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR |
| <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>Constant Torque Speed Range</b>    | 0.8                                                      |
| <b>Current @ Voltage</b>              | 48.000 A @ 460.0 V                                       |
| <b>Design Code</b>                    | A                                                        |
| <b>Drip Cover</b>                     | No Drip Cover                                            |
| <b>Duty Rating</b>                    | CONT                                                     |
| <b>Efficiency @ 100% Load</b>         | 94.1 %                                                   |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                |
| <b>Feedback Device</b>                | NO FEEDBACK                                              |
| <b>Front Shaft Indicator</b>          | None                                                     |
| <b>Haz Area Temp Code</b>             | T3                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | J          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 12F904     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 12WGY399   |
| <b>Layout</b>       | 12LYF904   |
| <b>Eff. date</b>    | 10-16-2025 |
| <b>CD Diagram</b>   | CD0006     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 3#8        |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 05-29-2018 |

|                               |                             |
|-------------------------------|-----------------------------|
| Heater Indicator              | No Heater                   |
| High Voltage Full Load Amps   | 48.0 a                      |
| Insulation Class              | F                           |
| Inverter Code                 | Inverter Duty               |
| KVA Code                      | H                           |
| Lifting Lugs                  | Standard Lifting Lugs       |
| Locked Bearing Indicator      | Locked Bearing              |
| Max Speed                     | 2700 rpm                    |
| Motor Lead Quantity/Wire Size | 3 @ 8 AWG                   |
| Motor Lead Termination        | Flying Leads                |
| Motor Standards               | NEMA                        |
| Motor Type                    | 1254M                       |
| Mounting Arrangement          | F1                          |
| Number of Poles               | 4                           |
| Overall Length                | 30.28 IN                    |
| Power Factor                  | 82                          |
| Product Family                | Super-E Chemical Processing |
| Pulley End Bearing Type       | Ball                        |
| Pulley Face Code              | Standard                    |
| Pulley Shaft Indicator        | Standard                    |
| Rodent Screen                 | None                        |
| Service Factor                | 1.15                        |
| Shaft Diameter                | 2.125 IN                    |
| Shaft Ground Indicator        | No Shaft Grounding          |
| Shaft Rotation                | Reversible                  |
| Shaft Slinger Indicator       | Shaft Slinger               |
| Speed                         | 1775 rpm                    |
| Speed Code                    | Single Speed                |
| Starting Method               | Direct on line              |
| Thermal Device - Bearing      | None                        |
| Thermal Device - Winding      | None                        |
| Vibration Sensor Indicator    | No Vibration Sensor         |
| Winding Thermal 1             | None                        |
| Winding Thermal 2             | None                        |

**Nameplate**

| NP3241     |              |                    |    |              |           |      |          |                         |        |           |            |            |      |   |          |    |
|------------|--------------|--------------------|----|--------------|-----------|------|----------|-------------------------|--------|-----------|------------|------------|------|---|----------|----|
| CAT.NO.    | ECP4110T-4   |                    |    | P/N          |           |      |          |                         |        | ENCLOSURE |            | TEFC       |      |   |          |    |
| SPEC.      | 12F904Y399G6 |                    | CC | 010A         | FRAME     | 324T |          | S/N                     |        |           |            |            |      |   |          |    |
| HP         | 40           |                    |    | CLASS        | F         | HZ   | 60       | DES                     | A      |           |            |            |      |   |          |    |
| RPM        | 1775         |                    |    | RPM MAX      |           | 2700 |          | PH                      | 3      | KVA-CODE  |            | H          |      |   |          |    |
| VOLT       | 460          |                    |    | MOTOR WEIGHT |           |      | 595      |                         |        |           |            |            |      |   |          |    |
| AMP        | 48           |                    |    | SER.F.       | 1.15      | PF   | 82       | ODE BRG                 |        | 6312      | DE BRG     |            | 6312 |   |          |    |
| RATING     | 40C AMB-CONT |                    |    | NEMA-NOM-EFF |           |      | 94.1     |                         | GREASE |           | POLYREX EM |            |      |   |          |    |
|            |              |                    |    |              |           |      | INV.TYPE |                         | PWM    |           |            |            |      |   |          |    |
| TEMP CODE  | T3           | INVERTER-TEMP-CODE |    |              | 200       |      |          |                         |        |           |            |            |      |   |          |    |
| TEMP =     | 200          | C HP FR            | 60 | C HP TO      |           | 90   |          |                         |        |           |            |            |      |   |          |    |
| CT HZ FROM | 0.8          | CT HZ TO           |    | 60           |           |      |          |                         |        |           |            |            |      |   |          |    |
| HTR-VOLTS  |              | HTR-AMPS           |    |              | HTR-WATTS |      |          | MAX. SPACE HEATER TEMP. |        |           |            | VT HZ FROM |      | O | VT HZ TO | 60 |

**Parts List**

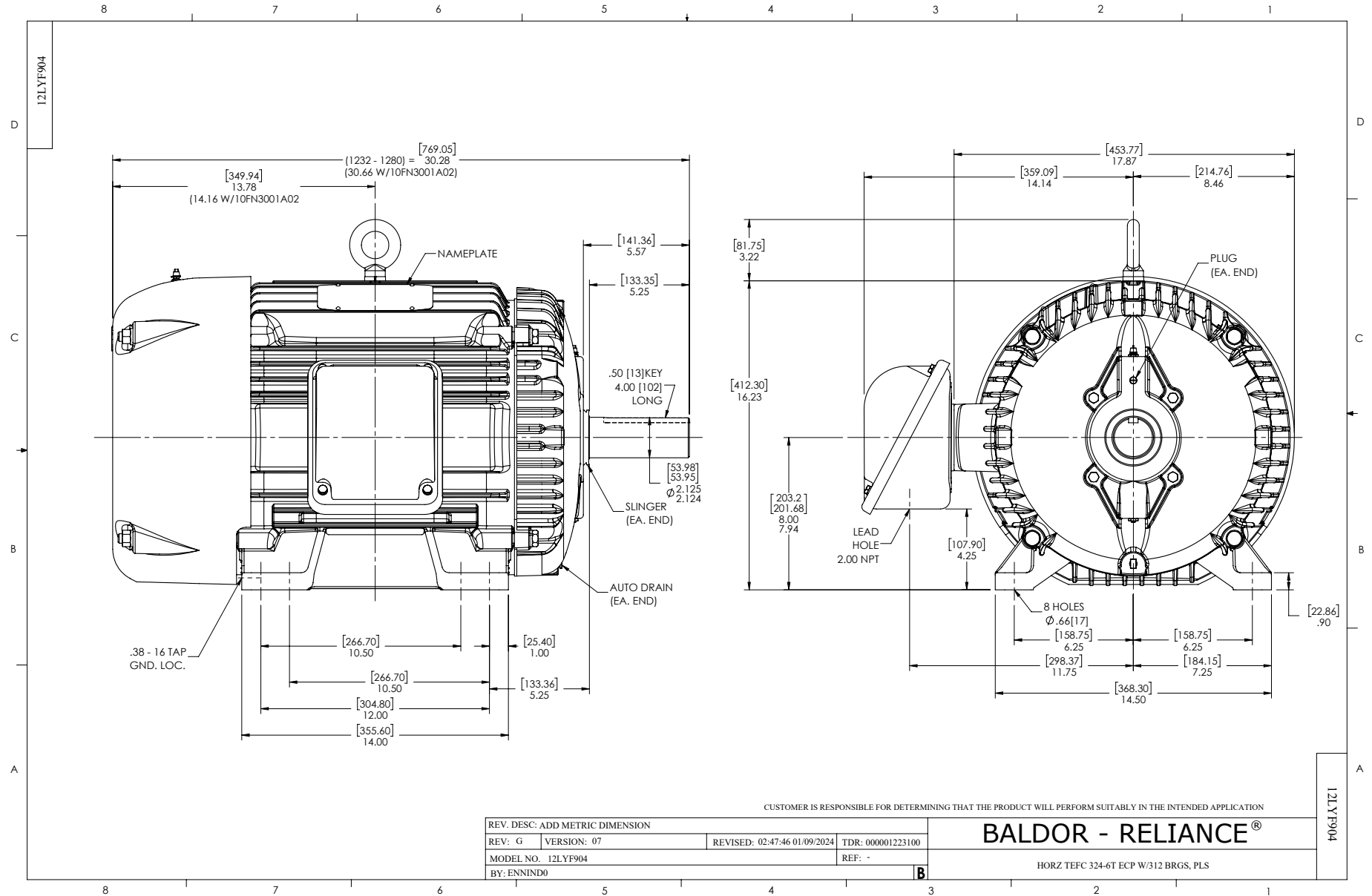
| Part number   | Description                               | Quantity |
|---------------|-------------------------------------------|----------|
| SA356371      | SA 12F904Y399G6                           | 1.000 ea |
| RA345317      | RA 12F904Y399G6                           | 1.000 ea |
| 09FN3001B03SP | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO  | 1.000 ea |
| 10CB1000A203P | KOBX W/2.00 NPT & .31 GND MTG, EPOXY PRI  | 1.000 ea |
| 09GS1010      | GASKET, DWG, LEADWIRE SEPERATOR           | 1.000 ea |
| 10XN3118K16   | 5/16-18 X 1' GRADE #5, STL, ZINC PLATE    | 4.000 ea |
| HW1001A31     | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 ea |
| WD1000B25     | GND LUG, BURNDY L125HP OR T&B L125HP-BB   | 1.000 ea |
| 19XW3118G08   | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN    | 1.000 ea |
| HA4017A10     | 1/8X1.25 GREASE EXT (F/S)                 | 1.000 ea |
| HW4019A01     | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING  | 1.000 ea |
| HA4017A01     | 1/8 X 4 GREASE EXT (F/S)                  | 1.000 ea |
| HW1001A50     | LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I | 4.000 ea |
| 10CB1503P     | CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER   | 1.000 ea |
| HA1005A04     | SLINGER, OD 3.620, ID 1.98,               | 1.000 ea |
| HW5100A15     | W4997-050 WVY WSHR (WB)                   | 1.000 ea |
| HW4500A20     | 1/8NPT SL PIPE PLUG                       | 1.000 ea |
| 10XN3118K40   | 5/16-18 X 2.50" HEX HD, GRADE 5           | 4.000 ea |
| 12EP1111A30P  | SPL PUEP 312 BRG W/EPOXY                  | 1.000 ea |
| 10XN5013K32   | 1/2-13 X 2.00" HEX HD GRD 5 (20051)       | 4.000 ea |
| HW1001A50     | LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I | 4.000 ea |
| HW4500A20     | 1/8NPT SL PIPE PLUG                       | 1.000 ea |
| HW4600B41     | V-RING SLINGER 2.125 X 2.880 X 0.280      | 1.000 ea |
| 10XN3118K40   | 5/16-18 X 2.50" HEX HD, GRADE 5           | 4.000 ea |
| 12FH1002A33P  | FAN COVER, MACH ,EPOXY PRIMER             | 1.000 ea |
| XY5013A12     | NUT,1/2-13,HEX,STEEL,ZINCPLATED           | 4.000 ea |
| HW1001A50     | LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I | 4.000 ea |
| 14GS1003      | GASKET CONDUIT BOX LID, NEOP              | 1.000 ea |
| 10XN2520K16   | 1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P    | 4.000 ea |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I  | 4.000 ea |
| HW2501H34     | KEY, 1/2 SQ X 4.00                        | 1.000 ea |

|                |                                          |          |
|----------------|------------------------------------------|----------|
| MJ5001A27      | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.031 qt |
| MJ5002A01      | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.033 ea |
| MJ5002A01      | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.025 ea |
| LB1002N        | LABEL,MARINE DUTY (ON ROLLS)             | 1.000 ea |
| 12EP1111A35LP5 | FREP, MACH W/EPOXY PRIMER & MG1025L14    | 1.000 ea |
| HA3400A13      | STUD, 1/2-13 X 7" WELKER                 | 4.000 ea |
| HA4051A00      | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| HW4500A21      | 1618BALEMITE FITTING 825 UNIVERSAL       | 1.000 ea |
| HW4500A17      | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| HA4054         | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 ea |
| MJ1000A02      | GREASE, POLYREX EM EXXON                 | 0.200 lb |
| HA4051A00      | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| HW4500A03      | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 ea |
| HW4500A17      | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| HA4054         | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 ea |
| 09FN3001B03SP  | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO | 1.000 ea |
| HW2500A25      | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 ea |
| MG1025N19      | WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8  | 0.125 ga |
| 85XU0407S04    | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| LB1624         | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0006         | CONNECTION LABEL                         | 1.000 ea |
| NP3241         | SS SUPER-E INV UL CSA-EEV PREM CC        | 1.000 ea |
| 14PA2000       | PKGP, CTN ID 42X34X25, STD BASE          | 1.000 ea |
| LB1449         | DIV-2/NEC WARNING LABEL                  | 1.000 ea |
| MN416A01       | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |

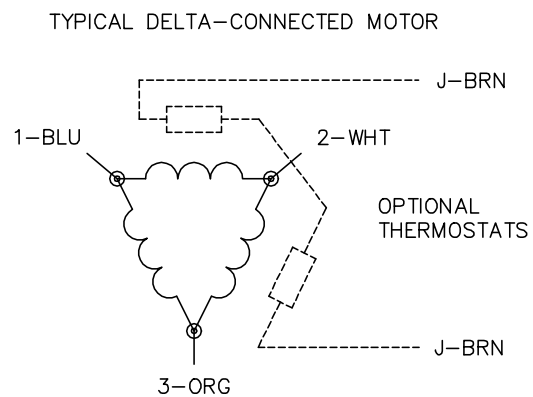
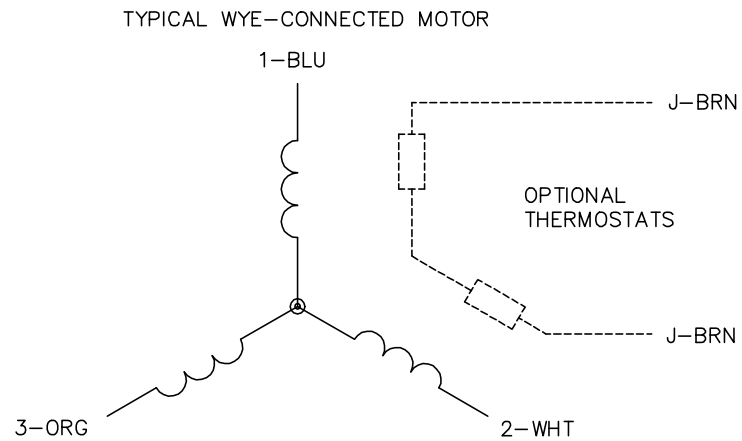
**Accessories**

| Part number | Description                            | Multiplier |
|-------------|----------------------------------------|------------|
| 12-1105ECP  | C FACE KIT (C-FACE SWAP FOR ECP MOTOR) | A8         |





CD0006



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: ENBRIRO

MTL: -



**BALDOR - RELIANCE®**

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

SH 1 of 1