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# Customer information packet

## ECTM4110T-G-AO

40 AIR OVERHP, 1775RPM, 3PH, 60HZ, 324T, 1254

Class - None

Division - Not Applicable

## Specifications

|                                |                                                                 |
|--------------------------------|-----------------------------------------------------------------|
| Enclosure                      | TEAO                                                            |
| Frame                          | 324T                                                            |
| Frame Material                 | Iron                                                            |
| Frequency                      | 60.00 Hz                                                        |
| Haz Area Class and Group       | None                                                            |
| Haz Area Division              | Not Applicable                                                  |
| Motor Letter Type              | Three Phase                                                     |
| Output @ Frequency             | 40.000 HP @ 60 HZ                                               |
| Phase                          | 3                                                               |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                                |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                              |
| Agency Approvals               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR                   |
| 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                                                            |
| Current @ Voltage              | 96.000 A @ 230.0 V<br>48.000 A @ 460.0 V<br>102.000 A @ 208.0 V |
| Design Code                    | A                                                               |
| Drip Cover                     | No Drip Cover                                                   |
| Duty Rating                    | CONT                                                            |
| Efficiency @ 100% Load         | 94.1 %                                                          |
| Electrically Isolated Bearing  | Not Electrically Isolated                                       |
| Feedback Device                | NO FEEDBACK                                                     |
| Front Shaft Indicator          | None                                                            |

## Part detail

|              |            |
|--------------|------------|
| Revision     | F          |
| Type         | AC         |
| Mech. spec.  | 12T111     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 12WGY276   |
| Layout       | 12LYT111   |
| Eff. date    | 12-09-2025 |
| CD Diagram   | CD0180     |
| Poles        | 04         |
| Leads        | 9#8        |
| Proprietary  | False      |
| Created date | 03-25-2022 |

|                               |                              |
|-------------------------------|------------------------------|
| Heater Indicator              | Heater Included, 115 V       |
| High Voltage Full Load Amps   | 48.0 a                       |
| Insulation Class              | F                            |
| Inverter Code                 | Inverter Ready               |
| KVA Code                      | H                            |
| Lifting Lugs                  | Vertical Lifting Lugs        |
| Locked Bearing Indicator      | Locked Bearing               |
| Motor Lead Quantity/Wire Size | 9 @ 8 AWG                    |
| Motor Lead Termination        | Flying Leads                 |
| Motor Standards               | NEMA                         |
| Motor Type                    | 1254M                        |
| Mounting Arrangement          | F1                           |
| Number of Poles               | 4                            |
| Overall Length                | 28.23 IN                     |
| Power Factor                  | 82                           |
| Product Family                | Chemical Processing (Not DC) |
| Pulley End Bearing Type       | Sealed Bearing               |
| Pulley Face Code              | Standard                     |
| Pulley Shaft Indicator        | Tapped & Key                 |
| Rodent Screen                 | None                         |
| RoHS Status                   | ROHS COMPLIANT               |
| Service Factor                | 1.15                         |
| Shaft Diameter                | 2.125 IN                     |
| Shaft Ground Indicator        | 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

| NP2178       |                 |    |      |      |     |    |    |   |  |
|--------------|-----------------|----|------|------|-----|----|----|---|--|
| CAT.NO.      | ECTM4110T-G-AO  |    |      |      |     |    |    |   |  |
| SPEC.        | 12T111Y276G1    |    |      |      |     |    |    |   |  |
| HP           | 40 AIR OVER     |    |      |      |     |    |    |   |  |
| VOLTS        | 230/460         |    |      |      |     |    |    |   |  |
| AMP          | 96/48           |    |      |      |     |    |    |   |  |
| RPM          | 1775            |    |      |      |     |    |    |   |  |
| FRAME        | 324T            |    | HZ   | 60   |     | PH | 3  |   |  |
| SER.F.       | 1.15            |    | CODE | H    | DES | A  | CL | F |  |
| NEMA-NOM-EFF | 94.1            |    | PF   | 82   |     |    |    |   |  |
| RATING       | 40C AMB-CONT    |    |      |      |     |    |    |   |  |
| CC           |                 |    |      |      |     |    |    |   |  |
| DE           | 6312            |    | ODE  | 6311 |     |    |    |   |  |
| ENCL         | TEAO            | SN |      |      |     |    |    |   |  |
|              | INV DUT 20:1 VT |    |      |      |     |    |    |   |  |

## AC Induction Motor Performance Data

Record # 35502

Typical performance - not guaranteed values

| Winding: 12WGY276-R003 |  |              |  | Type: 1254M                              |  | Enclosure: TEAO     |  |                           |  |           |  |
|------------------------|--|--------------|--|------------------------------------------|--|---------------------|--|---------------------------|--|-----------|--|
| Nameplate Data         |  |              |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                     |  |                           |  |           |  |
| Rated Output (HP)      |  | 40 AIR OVER  |  | Full Load Torque                         |  | 118 LB-FT           |  |                           |  |           |  |
| Volts                  |  | 230/460      |  | Start Configuration                      |  | direct on line      |  |                           |  |           |  |
| Full Load Amps         |  | 96/48        |  | Breakdown Torque                         |  | 386 LB-FT           |  |                           |  |           |  |
| R.P.M.                 |  | 1775         |  | Pull-up Torque                           |  | 193 LB-FT           |  |                           |  |           |  |
| Hz                     |  | 60 Phase     |  | 3                                        |  | Locked-rotor Torque |  | 216 LB-FT                 |  |           |  |
| NEMA Design Code       |  | A            |  | KVA Code                                 |  | H                   |  | Starting Current          |  | 338 A     |  |
| Service Factor (S.F.)  |  | 1.15         |  | No-load Current                          |  | 19.9 A              |  | Line-line Res. @ 25°C     |  | 0.14898 Ω |  |
| NEMA Nom. Eff.         |  | 94.1         |  | Power Factor                             |  | 82                  |  | Temp. Rise @ Rated Load   |  | 54°C      |  |
| Rating - Duty          |  | 40C AMB-CONT |  | Temp. Rise @ S.F. Load                   |  | 64°C                |  | Locked-rotor Power Factor |  | 27        |  |
| S.F. Amps              |  |              |  | Rotor inertia                            |  | 7.19 LB-FT2         |  |                           |  |           |  |

## Load Characteristics 460 V, 60 Hz, 40 HP

| % of Rated Load | 25     | 50   | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|------|--------|--------|--------|--------|------|
| Power Factor    | 47     | 69   | 78     | 82     | 85     | 85     | 84   |
| Efficiency      | 90.1   | 93.5 | 94.2   | 94.2   | 93.8   | 93.1   | 94   |
| Speed           | 1793.5 | 1788 | 1782.5 | 1776.6 | 1770.7 | 1764.1 | 1773 |
| Line amperes    | 22.9   | 29.5 | 38.4   | 48.1   | 59.2   | 70.8   | 54.8 |

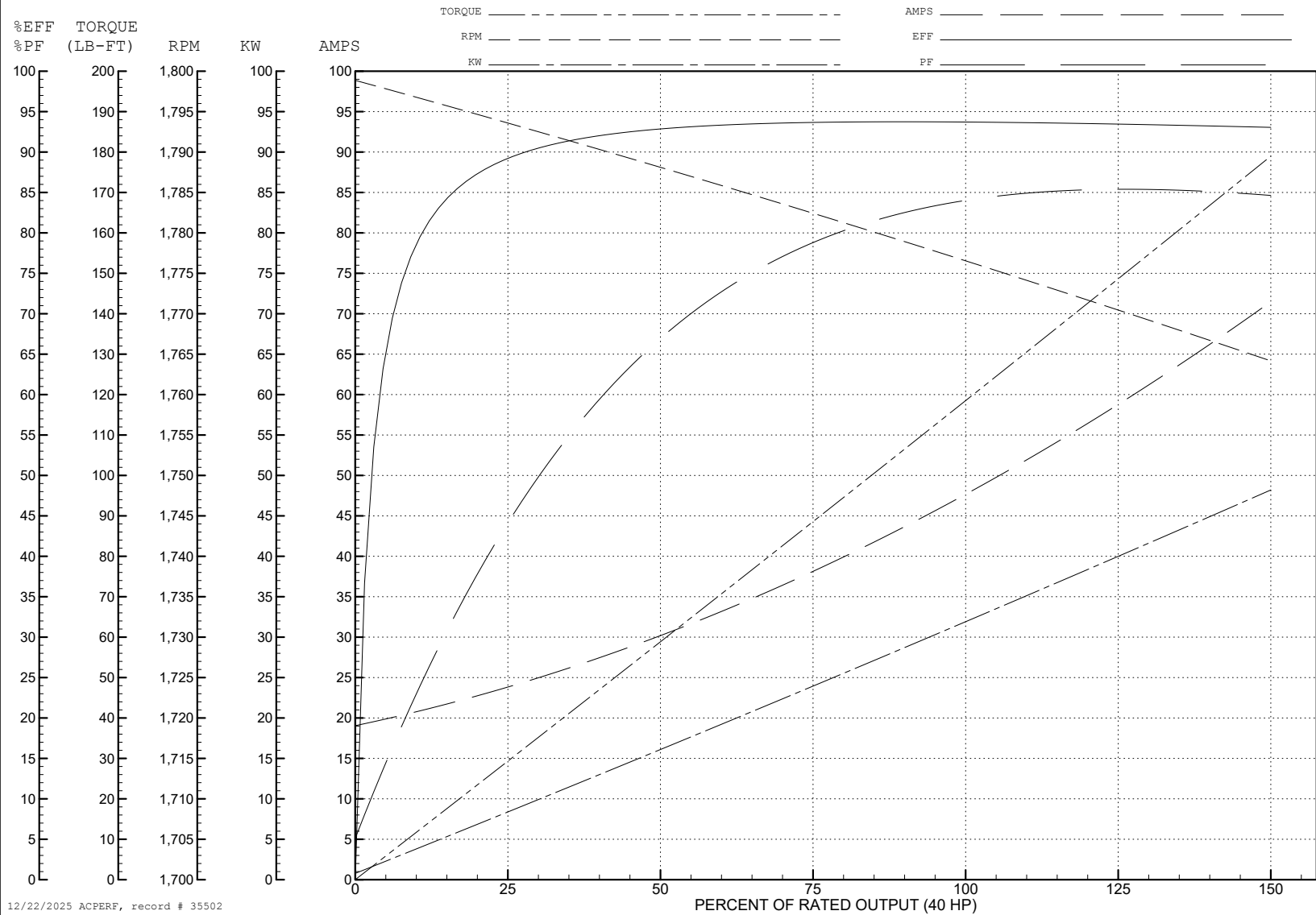
ABB Motors and Mechanical Inc.

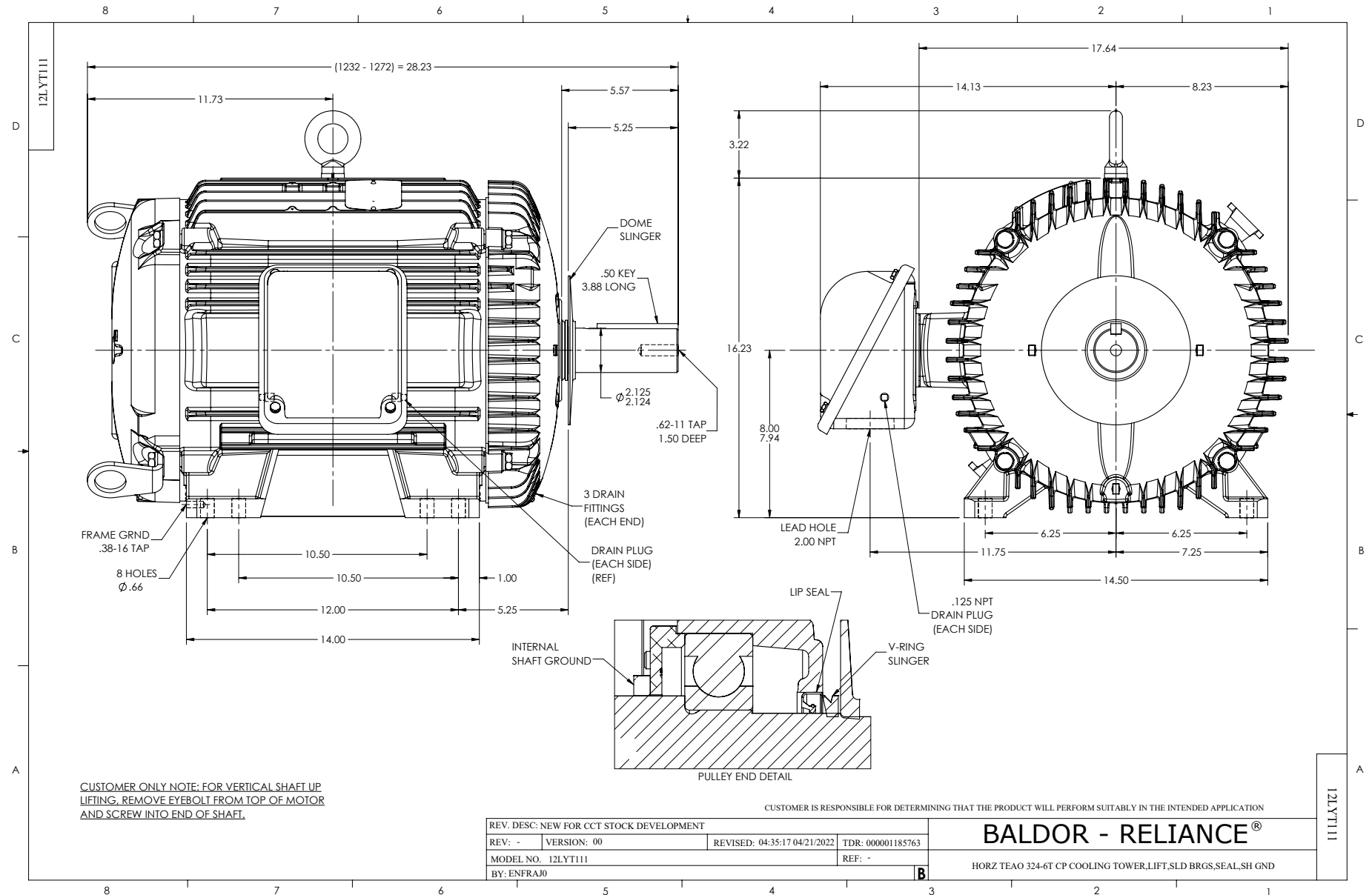
WINDING # 12WGY276

Typical performance - not guaranteed values.

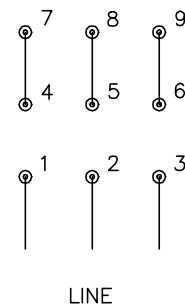
40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

TORQUES (LB-FT): PO=386 PU=193 LR=216 LRA=338





CD0180

LOW VOLTAGE  
(2D)HIGH VOLTAGE  
(1D)

## NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1