



---

# Customer information packet

## FDEM4115T-5

72M 4P TEFC HOR 326T FARM DUTY SE

Class - None

Division - Not Applicable

## Specifications

|                                |                                               |
|--------------------------------|-----------------------------------------------|
| Enclosure                      | TEFC                                          |
| Frame                          | 326T                                          |
| 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             | 50.000 HP @ 60 HZ                             |
| Phase                          | 3                                             |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                              |
| Voltage @ Frequency            | 575.0 V @ 60 HZ                               |
| Agency Approvals               | NEMA PREMIUM<br>NEMA_PREMIUM<br>UR<br>CSA EEV |
| 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              | 46.000 A @ 575.0 V                            |
| Design Code                    | A                                             |
| Drip Cover                     | No Drip Cover                                 |
| Duty Rating                    | CONT                                          |
| Efficiency @ 100% Load         | 94.5 %                                        |
| Electrically Isolated Bearing  | Not Electrically Isolated                     |
| Feedback Device                | NO FEEDBACK                                   |
| Front Shaft Indicator          | None                                          |
| Heater Indicator               | No Heater                                     |
| High Voltage Full Load Amps    | 46.0 a                                        |
| Insulation Class               | F                                             |

## Part detail

|              |            |
|--------------|------------|
| Revision     | G          |
| Type         | AC         |
| Mech. spec.  | 12G994     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 12WGY539   |
| Layout       | 12LYG994   |
| Eff. date    | 11-27-2024 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#8        |
| Proprietary  | False      |
| Created date | 06-14-2018 |

|                               |                       |
|-------------------------------|-----------------------|
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | H                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Quantity/Wire Size | 3 @ 8 AWG             |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 1272M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 4                     |
| Overall Length                | 30.28 IN              |
| Power Factor                  | 85                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Sealed Bearing        |
| 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

| NP3126L      |              |  |      |      |     |   |    |    |   |  |  |
|--------------|--------------|--|------|------|-----|---|----|----|---|--|--|
| CAT.NO.      | FDEM4115T-5  |  |      |      |     |   |    |    |   |  |  |
| SPEC.        | 12G994Y539G1 |  |      |      |     |   |    |    |   |  |  |
| HP           | 50           |  |      |      |     |   |    |    |   |  |  |
| VOLTS        | 575          |  |      |      |     |   |    |    |   |  |  |
| AMP          | 46           |  |      |      |     |   |    |    |   |  |  |
| RPM          | 1775         |  |      |      |     |   |    |    |   |  |  |
| FRAME        | 326T         |  | HZ   | 60   |     |   |    | PH | 3 |  |  |
| SER.F.       | 1.15         |  | CODE | H    | DES | A | CL | F  |   |  |  |
| NEMA-NOM-EFF | 94.5         |  | PF   | 85   |     |   |    |    |   |  |  |
| RATING       | 40C AMB-CONT |  |      |      |     |   |    |    |   |  |  |
| CC           | 010A         |  |      |      |     |   |    |    |   |  |  |
| DE           | 6312         |  | ODE  | 6311 |     |   |    |    |   |  |  |
| ENCL         | TEFC         |  | SN   |      |     |   |    |    |   |  |  |

**AC Induction Motor Performance Data**

Record # 36803

Typical performance - not guaranteed values

| Winding: 12WGY539-R001 |    |              |   | Type: 1272M                           |    | Enclosure: TEFC |                       |         |
|------------------------|----|--------------|---|---------------------------------------|----|-----------------|-----------------------|---------|
| Nameplate Data         |    |              |   | 575 V, 60 Hz:<br>Single Voltage Motor |    |                 |                       |         |
| Rated Output (HP)      |    | 50           |   | Full Load Torque                      |    | 147.44 LB-FT    |                       |         |
| Volts                  |    | 575          |   | Start Configuration                   |    | direct on line  |                       |         |
| Full Load Amps         |    | 46           |   | Breakdown Torque                      |    | 475.4 LB-FT     |                       |         |
| R.P.M.                 |    | 1775         |   | Pull-up Torque                        |    | 190 LB-FT       |                       |         |
| Hz                     | 60 | Phase        | 3 | Locked-rotor Torque                   |    | 205.9 LB-FT     |                       |         |
| NEMA Design Code       |    | A            |   | KVA Code                              | H  |                 | Starting Current      | 276.6 A |
| Service Factor (S.F.)  |    | 1.15         |   | No-load Current                       |    | 18.41 A         |                       |         |
| NEMA Nom. Eff.         |    | 94.5         |   | Power Factor                          | 85 |                 | Line-line Res. @ 25°C | 0.159 Ω |
| Rating - Duty          |    | 40C AMB-CONT |   | Temp. Rise @ Rated Load               |    | 63°C            |                       |         |
| S.F. Amps              |    |              |   | Temp. Rise @ S.F. Load                |    | 76°C            |                       |         |
|                        |    |              |   | Locked-rotor Power Factor             |    | 26.4            |                       |         |
|                        |    |              |   | Rotor inertia                         |    | 9.59 lb-ft²     |                       |         |

**Load Characteristics 575 V, 60 Hz, 50 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|------|
| Power Factor    | 49    | 72    | 81    | 86    | 88    | 88    | 86   |
| Efficiency      | 88.8  | 92.8  | 93.9  | 94.2  | 94.1  | 93.8  | 94.7 |
| Speed           | 1796  | 1791  | 1787  | 1775  | 1774  | 1773  | 1774 |
| Line amperes    | 21.48 | 28.21 | 36.86 | 46.49 | 56.88 | 67.83 | 52.8 |

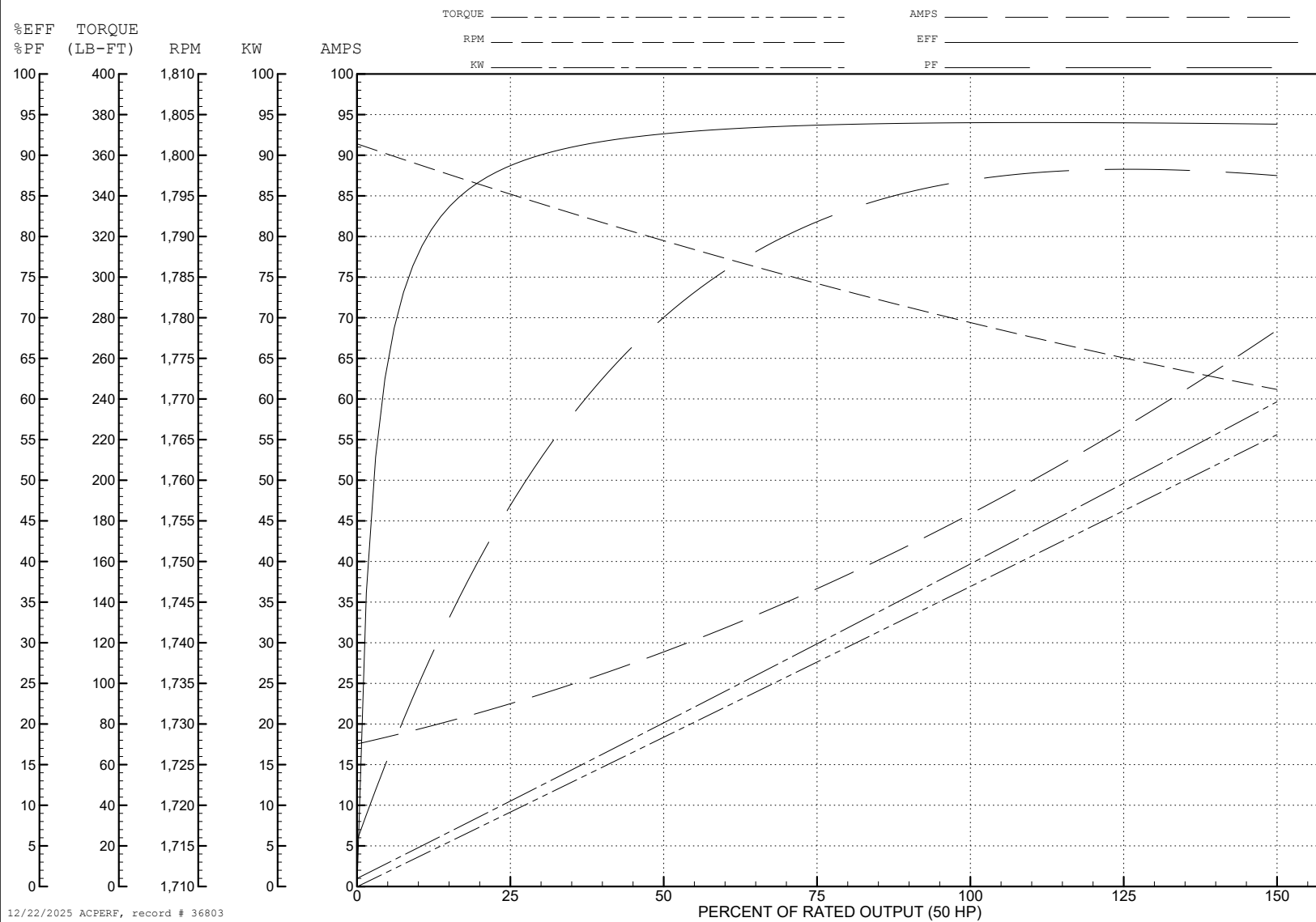
ABB Motors and Mechanical Inc.

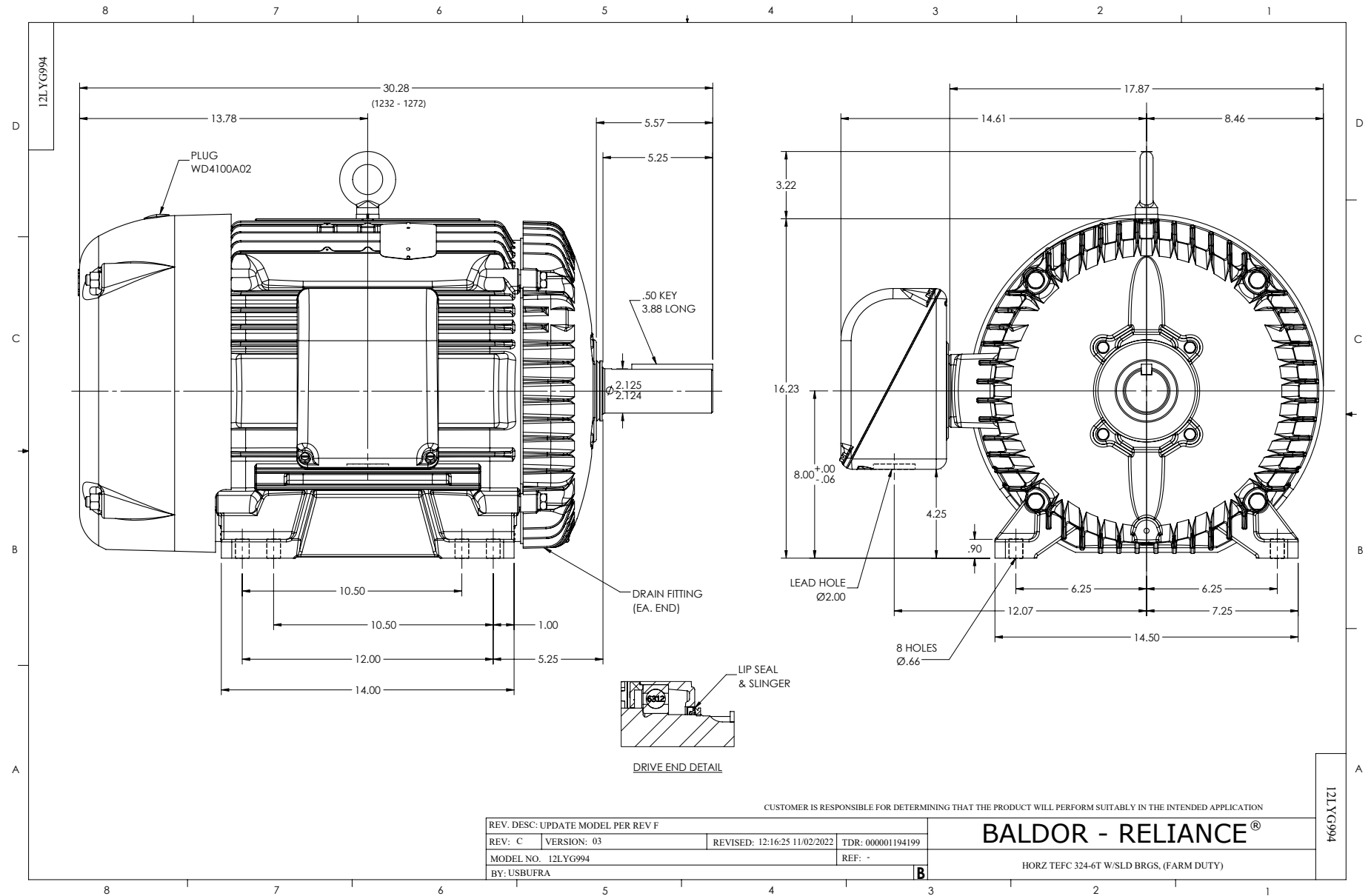
WINDING # 12WGY539

Typical performance - not guaranteed values.

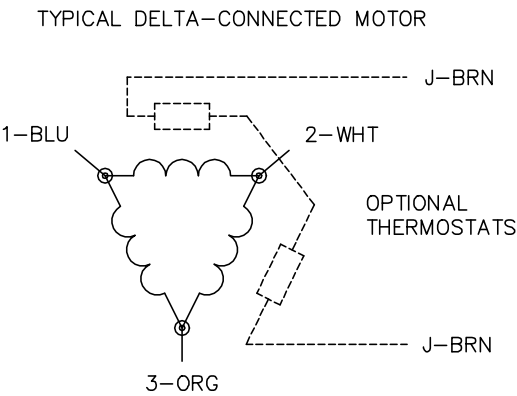
50 HP 3 PH 60 HZ 1775 RPM 575 V 1272M

TORQUES (LB-FT): PO=475.4 PU=190 LR=205.9 LRA=276.6





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