



---

# Customer information packet

## EM4107T-5

25HP, 3525RPM, 3PH, 60HZ, 284TS, 0946M, TEFC, F

Class - None

Division - Not Applicable

## Specifications

|                                |                                               |
|--------------------------------|-----------------------------------------------|
| Enclosure                      | TEFC                                          |
| Frame                          | 284TS                                         |
| 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             | 25.000 HP @ 60 HZ                             |
| Phase                          | 3                                             |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                              |
| Voltage @ Frequency            | 575.0 V @ 60 HZ                               |
| Agency Approvals               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR |
| Ambient Temperature            | 40 °C                                         |
| Auxillary Box                  | No Auxillary Box                              |
| Auxillary Box Lead Termination | None                                          |
| Base Indicator                 | Rigid                                         |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                       |
| Blower                         | None                                          |
| Current @ Voltage              | 23.000 A @ 575.0 V                            |
| Design Code                    | A                                             |
| Drip Cover                     | No Drip Cover                                 |
| Duty Rating                    | CONT                                          |
| Efficiency @ 100% Load         | 91.7 %                                        |
| Electrically Isolated Bearing  | Not Electrically Isolated                     |
| Feedback Device                | NO FEEDBACK                                   |
| Front Face Code                | Standard                                      |
| Front Shaft Indicator          | None                                          |
| Heater Indicator               | No Heater                                     |
| High Voltage Full Load Amps    | 23.0 a                                        |

## Part detail

|              |            |
|--------------|------------|
| Revision     | K          |
| Type         | AC         |
| Mech. spec.  | 09F629     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 09WGT369   |
| Layout       | 09LYF629   |
| Eff. date    | 09-11-2024 |
| CD Diagram   | CD0006     |
| Poles        | 02         |
| Leads        | 3#10       |
| Proprietary  | False      |
| Created date | 03-14-2018 |

|                               |                       |
|-------------------------------|-----------------------|
| Insulation Class              | F                     |
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | J                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Exit               | Ko Box                |
| Motor Lead Quantity/Wire Size | 3 @ 10 AWG            |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 0946M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 2                     |
| Overall Length                | 24.77 IN              |
| Power Factor                  | 88                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | Standard              |
| Pulley Shaft Indicator        | Standard              |
| Rodent Screen                 | None                  |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.625 IN              |
| Shaft Extension Location      | Pulley End            |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 3525 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

| NP3443L   |              |  |           |                |           |                     |       |         |         |        |            |      |      |
|-----------|--------------|--|-----------|----------------|-----------|---------------------|-------|---------|---------|--------|------------|------|------|
| CAT.NO.   | EM4107T-5    |  |           |                | CUST. P/N |                     |       |         | ENCL    |        |            |      | TEFC |
| SPEC.     | 09F629T369G1 |  | CC        | 010A           |           | FRAME               | 284TS |         | SER.NO. |        |            |      |      |
| HP        | 25           |  |           | CLASS          | F         |                     | HZ    | 60      |         |        |            |      |      |
| R.P.M.    | 3525         |  |           | PH             | 3         |                     | DES   | A       |         |        |            |      |      |
| VOLTS     | 575          |  |           |                | CODE      | J                   |       | ODE BRG | 6208    |        | DE BRG     | 6311 |      |
| AMPS      | 23           |  |           |                |           |                     |       |         |         |        |            |      |      |
| RATING    | 40C AMB-CONT |  |           | NEMA NOM. EFF. |           |                     |       | 91.7    |         | GREASE | POLYREX EM |      |      |
| P.F.      | 88           |  | SER.F.    | 1.15           |           | VPWM INVERTER READY |       |         |         |        |            |      |      |
|           |              |  |           |                |           |                     |       |         |         |        |            |      |      |
| HTR-VOLTS | HTR-AMPS     |  | HTR-WATTS |                |           |                     |       |         |         |        |            |      |      |

**Accessories**

| Part number | Description | Multiplier |
|-------------|-------------|------------|
| 09-1310     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 59038

Typical performance - not guaranteed values

| Winding: 09WGT369-R001 |  |              |  | Type: 0946M                           |  | Enclosure: TEFC |  |
|------------------------|--|--------------|--|---------------------------------------|--|-----------------|--|
| Nameplate Data         |  |              |  | 575 V, 60 Hz:<br>Single Voltage Motor |  |                 |  |
| Rated Output (HP)      |  | 25           |  | Full Load Torque                      |  | 37.15 LB-FT     |  |
| Volts                  |  | 575          |  | Start Configuration                   |  | direct on line  |  |
| Full Load Amps         |  | 23           |  | Breakdown Torque                      |  | 120 LB-FT       |  |
| R.P.M.                 |  | 3525         |  | Pull-up Torque                        |  | 71.02 LB-FT     |  |
| Hz                     |  | 60           |  | Phase                                 |  | 3               |  |
| NEMA Design Code       |  | A            |  | KVA Code                              |  | J               |  |
| Service Factor (S.F.)  |  | 1.15         |  | No-load Current                       |  | 200 A           |  |
| NEMA Nom. Eff.         |  | 91.7         |  | Power Factor                          |  | 88              |  |
| Rating - Duty          |  | 40C AMB-CONT |  | Temp. Rise @ Rated Load               |  | 84°C            |  |
| S.F. Amps              |  |              |  | Temp. Rise @ S.F. Load                |  | 103°C           |  |
|                        |  |              |  | Locked-rotor Power Factor             |  | 29.4            |  |
|                        |  |              |  | Rotor inertia                         |  | 1.17 LB-FT2     |  |

**Load Characteristics 575 V, 60 Hz, 25 HP**

| % of Rated Load | 25   | 50    | 75    | 100  | 125   | 150   | S.F. |
|-----------------|------|-------|-------|------|-------|-------|------|
| Power Factor    | 54   | 75    | 84    | 88   | 90    | 90    | 89   |
| Efficiency      | 87   | 91.3  | 92.2  | 91.9 | 91.1  | 90.2  | 91.4 |
| Speed           | 3582 | 3565  | 3550  | 3529 | 3509  | 3487  | 3517 |
| Line amperes    | 9.93 | 13.56 | 18.15 | 23.1 | 28.66 | 34.35 | 26.4 |

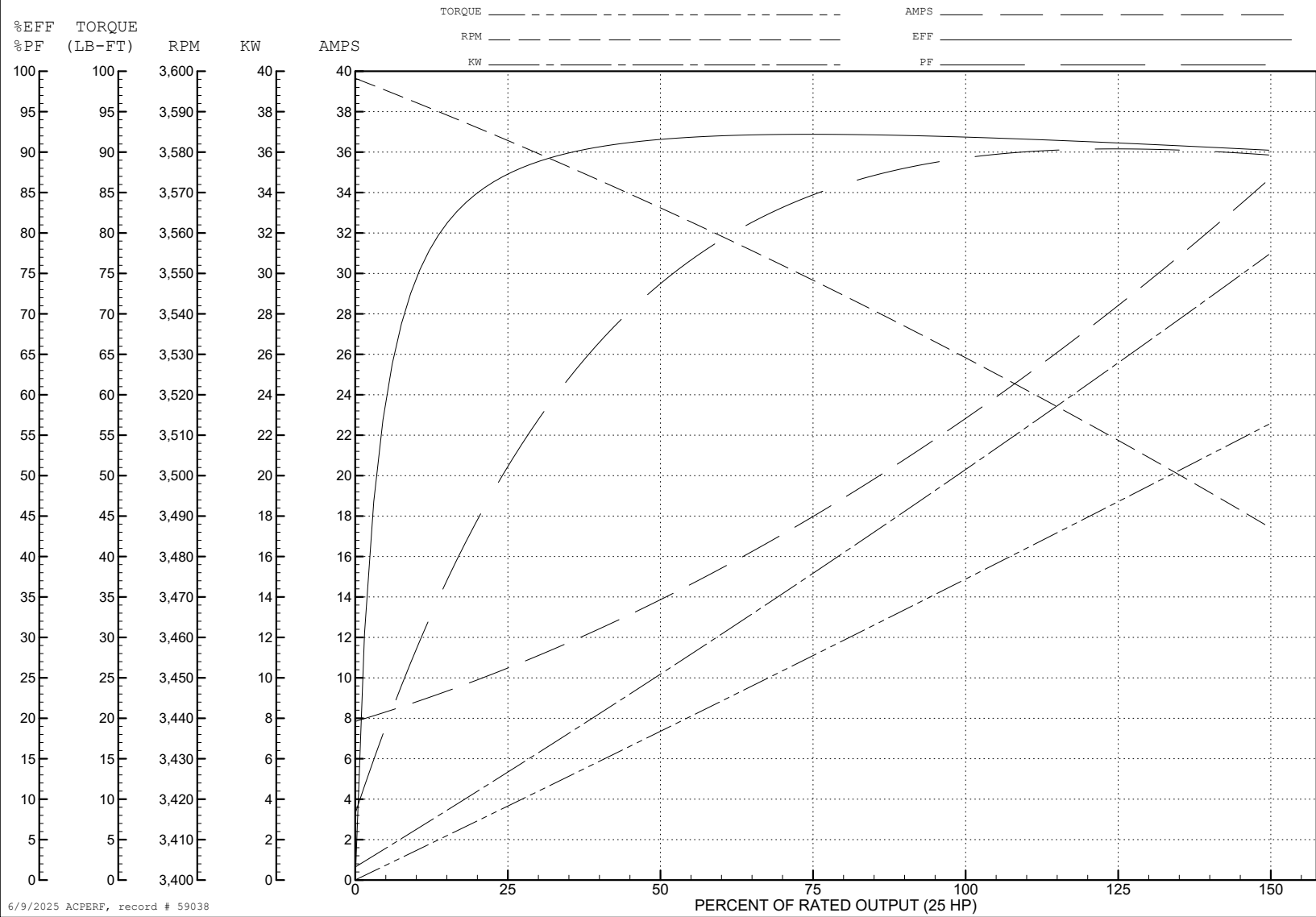
ABB Motors and Mechanical Inc.

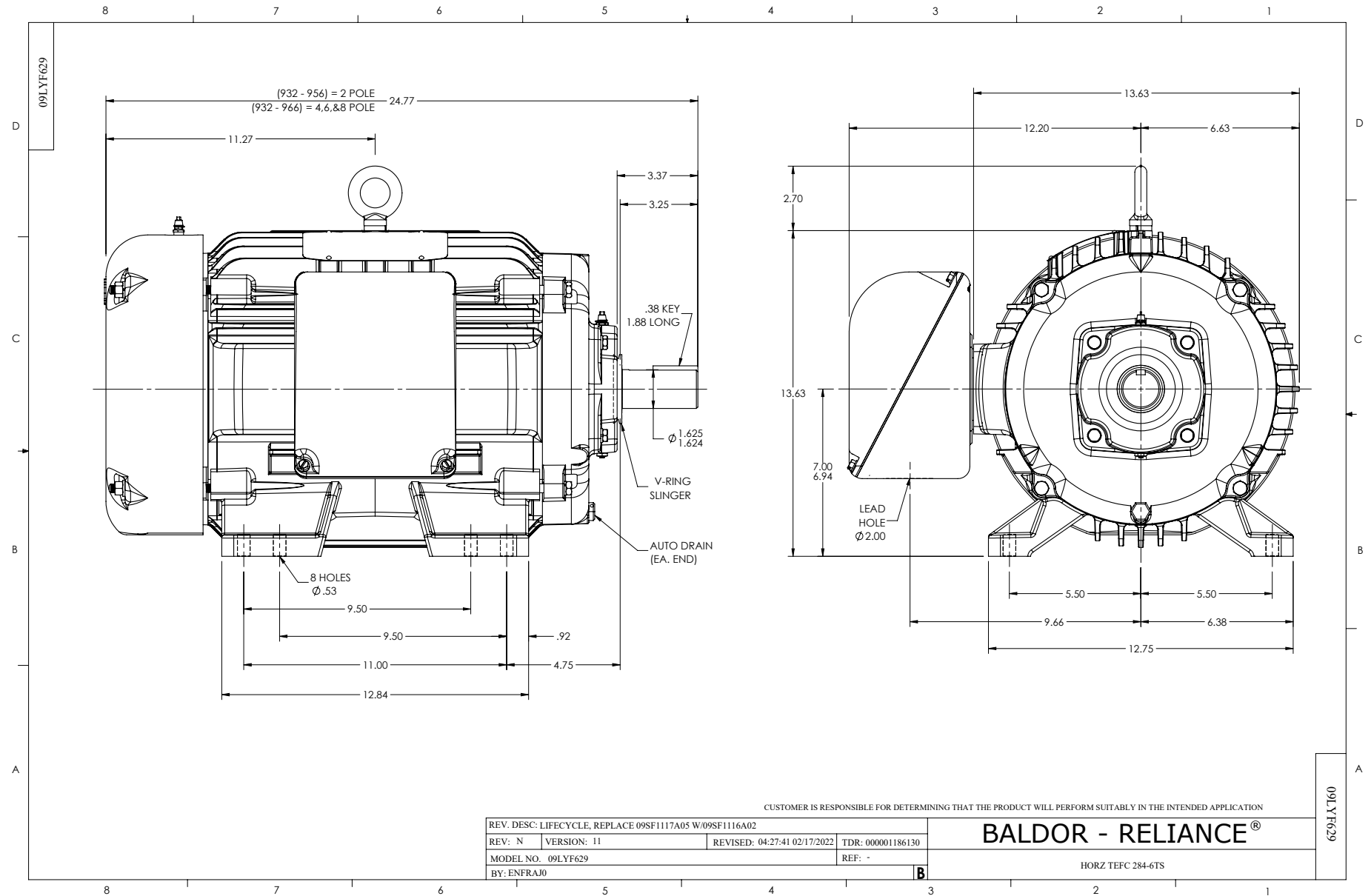
WINDING # 09WGT369

Typical performance - not guaranteed values.

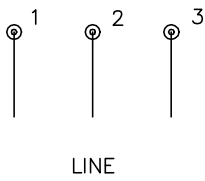
25 HP 3 PH 60 HZ 3525 RPM 575 V 0946M

TORQUES (LB-FT): PO=120 PU=71.02 LR=85.16 LRA=200





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