

BALDOR • RELIANCE

Customer information packet

FDEM4107T

44M 2P TEFC HOR 284TS FARM DUTY SE

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | TEFC |
| Frame | 284TS |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 25.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 3600 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| XP Class and Group | None |
| XP Division | Not Applicable |
| Agency Approvals | CSA EEV UR CSA |
| 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 | 29.000 A @ 460.0 V 58.000 A @ 230.0 V 62.000 A @ 208.0 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 Shaft Indicator | None |
| Heater Indicator | No Heater |

Part detail

| | |
|--------------|------------|
| Revision | J |
| Type | AC |
| Mech. spec. | 09L813 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 09WGT577 |
| Layout | 09LYL813 |
| Eff. date | 11-14-2023 |
| CD Diagram | CD0005 |
| Poles | 02 |
| Leads | 9#10 |
| Proprietary | False |
| Created date | 09-29-2018 |

| | |
|-------------------------------|-----------------------|
| High Voltage Full Load Amps | 29.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 0944M |
| Mounting Arrangement | F1 |
| Number of Poles | 2 |
| Overall Length | 24.71 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 Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | Shaft Slinger |
| Speed | 3520 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Winding | None |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

Nameplate

| NP3126L | | | | | | | | | |
|---------------------|--------------|-------------|-----------------------|------------|---|-----------|-----|--|--|
| CAT.NO. | FDEM4107T | | | | | | | | |
| SPEC. | 09L813T577G1 | | | | | | | | |
| HP | 25 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 58/29 | | | | | | | | |
| RPM | 3520 | | | | | | | | |
| FRAME | 284TS | | HZ | 60 | | PH | 3 | | |
| SER.F. | 1.15 | CODE | J | DES | A | CL | F | | |
| NEMA-NOM-EFF | 91.7 | PF | 88 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | USABLE AT 208V | | | | N/A | | |
| DE | 6311 | | ODE | 6208 | | | | | |
| ENCL | TEFC | SN | | | | | | | |

AC Induction Motor Performance Data

Record # 72672

Typical performance - not guaranteed values

| Winding: 09WGT577-R001 | | Type: 0944M | Enclosure: TEFC |
|------------------------|-------------------|--|-----------------|
| Nameplate Data | | 460 V, 60 Hz: High Voltage Connection | |
| Rated Output (HP) | 25 | Full Load Torque | 37.39 LB-FT |
| Volts | 230/460 | Start Configuration | direct on line |
| Full Load Amps | 58/29 | Breakdown Torque | 153 LB-FT |
| R.P.M. | 3520 | Pull-up Torque | 58.5 LB-FT |
| Hz | 60 Phase | Locked-rotor Torque | 75 LB-FT |
| NEMA Design Code | A KVA Code | Starting Current | 223 A |
| Service Factor (S.F.) | 1.15 | No-load Current | 10.1 A |
| NEMA Nom. Eff. | 91.7 Power Factor | Line-line Res. @ 25°C | 0.3381 Ω |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 74°C |
| S.F. Amps | | Temp. Rise @ S.F. Load | 91°C |
| | | Locked-rotor Power Factor | 29.7 |

Load Characteristics 460 V, 60 Hz, 25 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|------|--------|--------|------|
| Power Factor | 55 | 76 | 84 | 88 | 89 | 90 | 89 |
| Efficiency | 87.6 | 91.6 | 92.2 | 91.8 | 90.9 | 89.8 | 91.3 |
| Speed | 3580.5 | 3562.7 | 3544.2 | 3524 | 3501.4 | 3477.9 | 3510 |
| Line amperes | 12.3 | 16.9 | 22.7 | 29.1 | 36.1 | 43.5 | 33.3 |

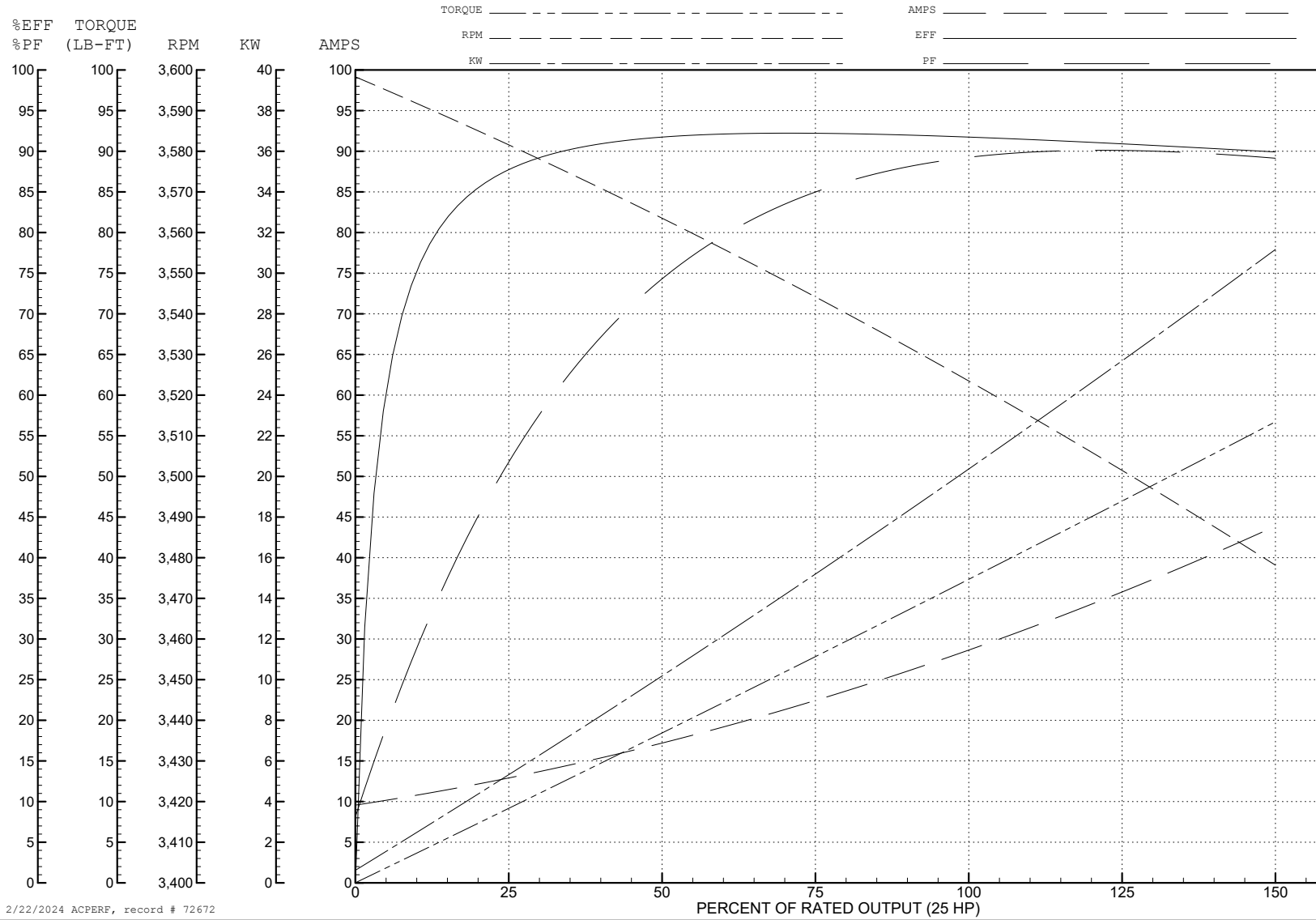
ABB Motors and Mechanical Inc.

WINDING # 09WGT577

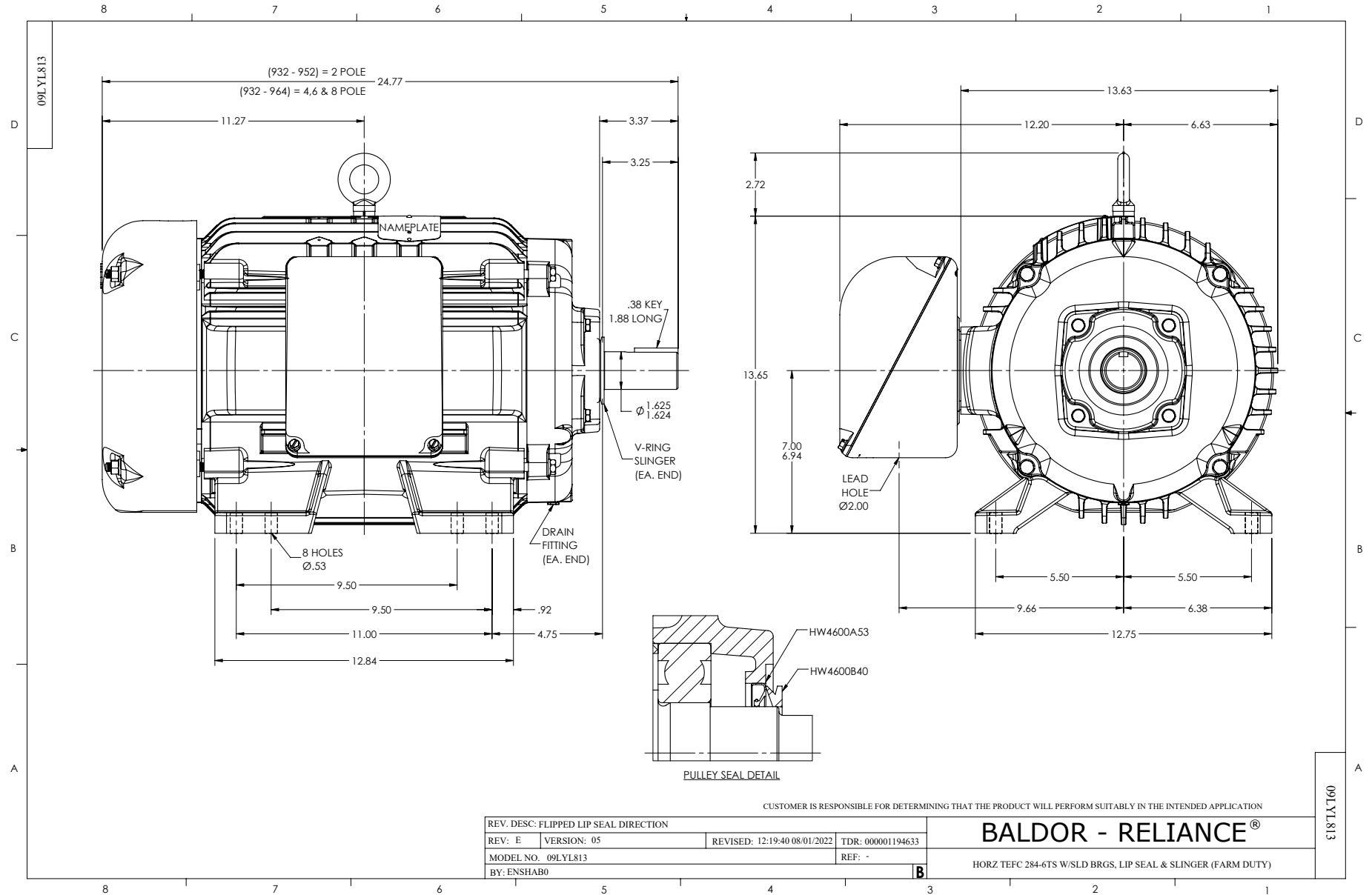
25 HP 3 PH 60 HZ 3520 RPM 460 V 0944M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=153 PU=58.5 LR=75 LRA=223



2/22/2024 ACPERF, record # 72672



CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

CD0005

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS