



Customer information packet

FDEM4108T

30HP, 3520RPM, 3PH, 60HZ, 286TS, 0950M, TEFC, F

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | TEFC |
| Frame | 286TS |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 30.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 3600 RPM @ 60 HZ |
| Voltage @ Frequency | 460.0 V @ 60 HZ 230.0 V @ 60 HZ |
| XP Class and Group | None |
| XP Division | Not Applicable |
| Agency Approvals | CSA CSA EEV 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 | 68.000 A @ 230.0 V 74.000 A @ 208.0 V 34.000 A @ 460.0 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 |

Part detail

| | |
|--------------|------------|
| Revision | K |
| Type | AC |
| Mech. spec. | 09L813 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 09WGT474 |
| Layout | 09LYL813 |
| Eff. date | 11-14-2023 |
| CD Diagram | CD0180 |
| Poles | 02 |
| Leads | 9#10 |
| Proprietary | False |
| Created date | 11-09-2017 |

| | |
|-------------------------------|-----------------------|
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 34.0 a |
| 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 | 9 @ 10 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 0950M |
| Mounting Arrangement | F1 |
| Number of Poles | 2 |
| Overall Length | 24.71 IN |
| Power Factor | 89 |
| 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 | 3520 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. | FDEM4108T | | | | | | | | |
| SPEC. | 09L813T474G1 | | | | | | | | |
| HP | 30 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 68/34 | | | | | | | | |
| RPM | 3520 | | | | | | | | |
| FRAME | 286TS | | HZ | 60 | | PH | 3 | | |
| SER.F. | 1.15 | CODE | J | DES | A | CL | F | | |
| NEMA-NOM-EFF | 91.7 | PF | 89 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | USABLE AT 208V | | | | N/A | | |
| DE | 6311 | | ODE | 6208 | | | | | |
| ENCL | TEFC | SN | | | | | | | |

AC Induction Motor Performance Data

Record # 67631

Typical performance - not guaranteed values

| Winding: 09WGT474-R001 | | Type: 0950M | Enclosure: TEFC | | |
|------------------------|----------|---------------------|--|-----------------------|----------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 30 | Full Load Torque | 44.65 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 68/34 | Breakdown Torque | 173 LB-FT | | |
| R.P.M. | 3520 | Pull-up Torque | 87.6 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 104 LB-FT | |
| NEMA Design Code | A | KVA Code | J | Starting Current | 283 A |
| Service Factor (S.F.) | 1.15 | No-load Current | 10.9 A | | |
| NEMA Nom. Eff. | 91.7 | Power Factor | 90 | Line-line Res. @ 25°C | 0.2527 Ω |
| Rating - Duty | 40C | AMB-CONT | Temp. Rise @ Rated Load | 79°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 97°C | |
| | | | Locked-rotor Power Factor | 28 | |

Load Characteristics 460 V, 60 Hz, 30 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|------|--------|------|------|
| Power Factor | 58 | 78 | 86 | 89 | 90 | 91 | 90 |
| Efficiency | 87.7 | 91.8 | 92.4 | 92.1 | 91.3 | 90.2 | 91.6 |
| Speed | 3580.7 | 3562.2 | 3542.3 | 3521 | 3497.7 | 3471 | 3507 |
| Line amperes | 13.7 | 19.4 | 26.4 | 34.2 | 42.4 | 51.3 | 39.1 |

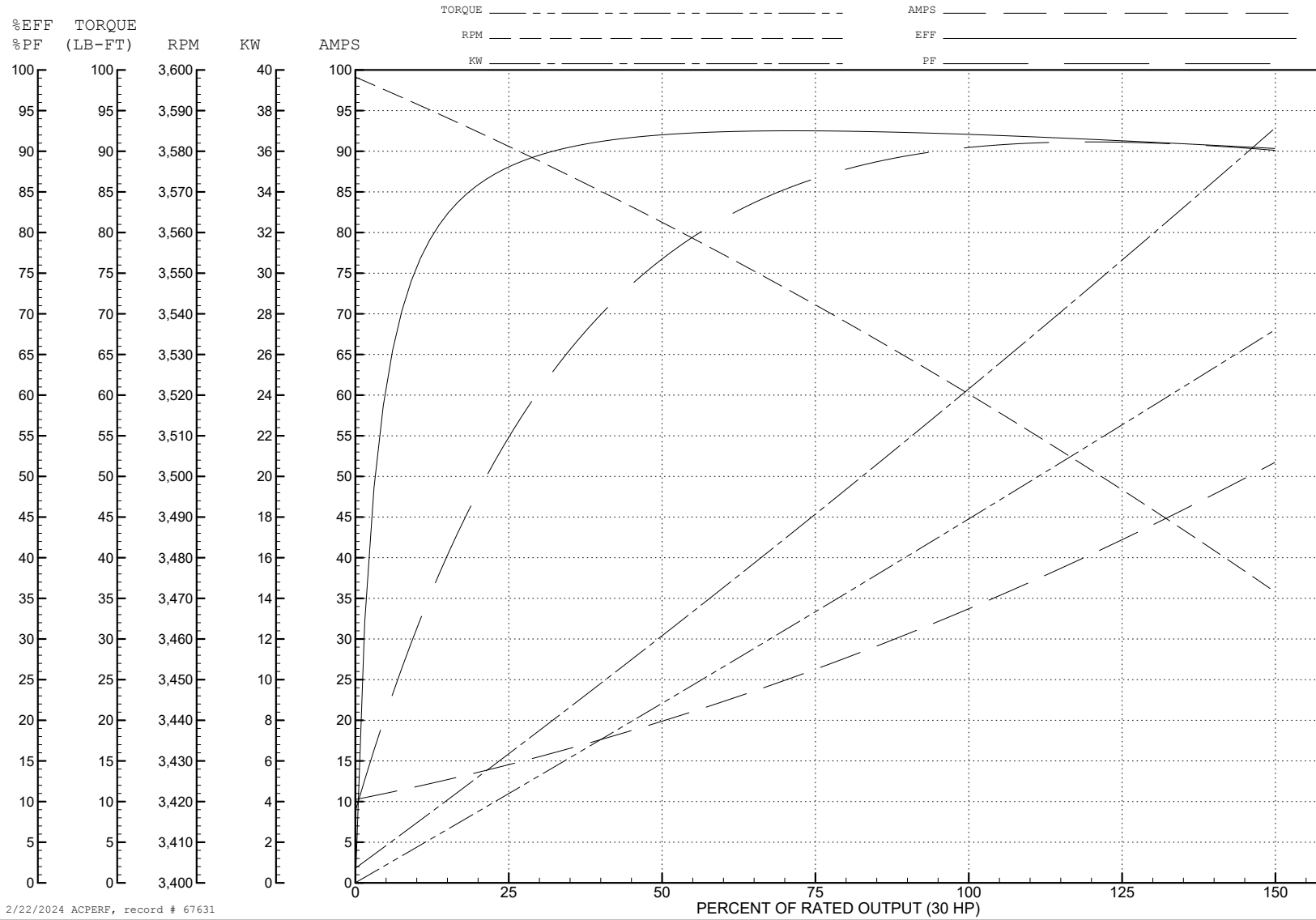
ABB Motors and Mechanical Inc.

WINDING # 09WGT474

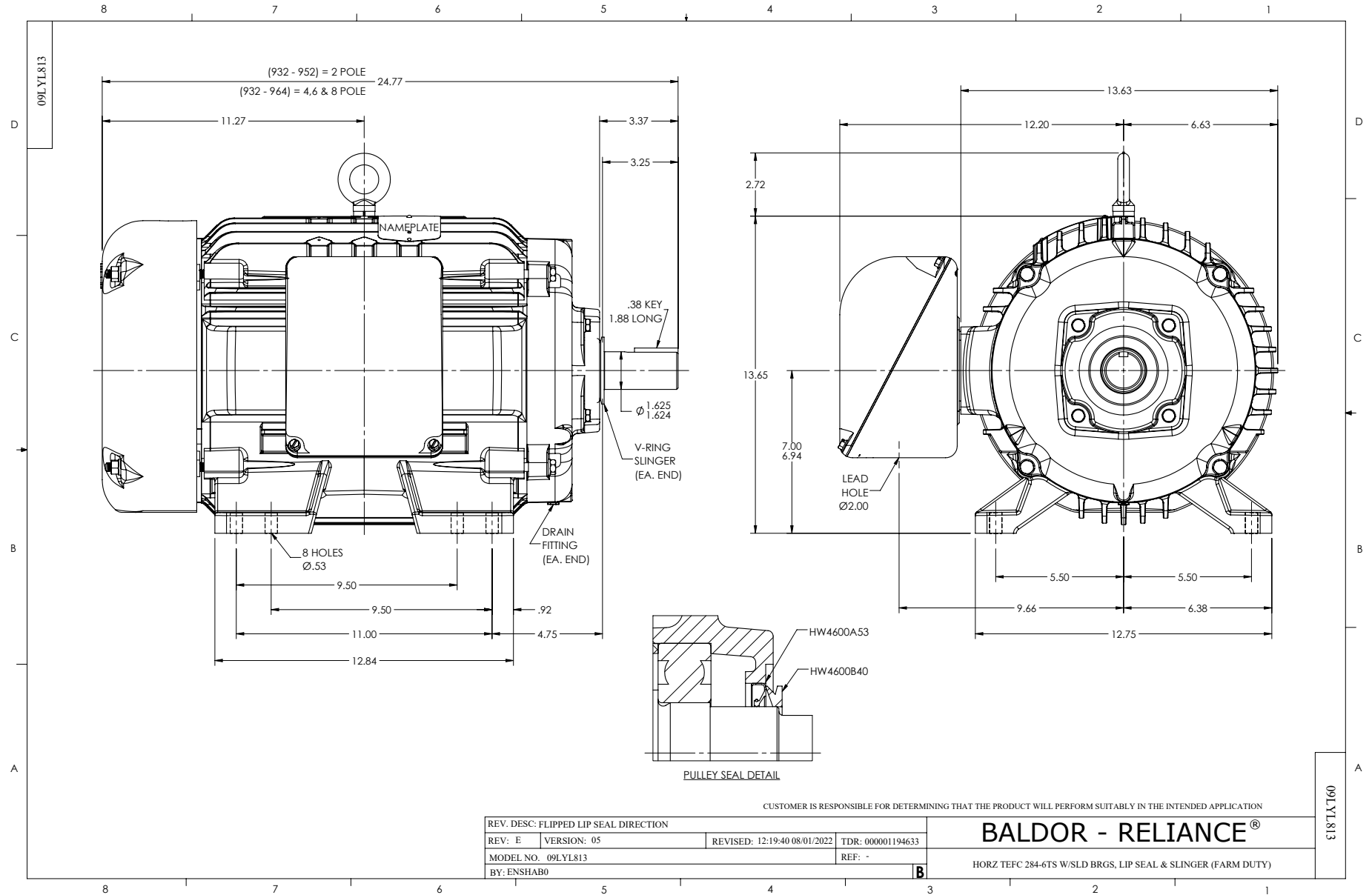
30 HP 3 PH 60 HZ 3520 RPM 460 V 0950M

Typical performance - not guaranteed values.

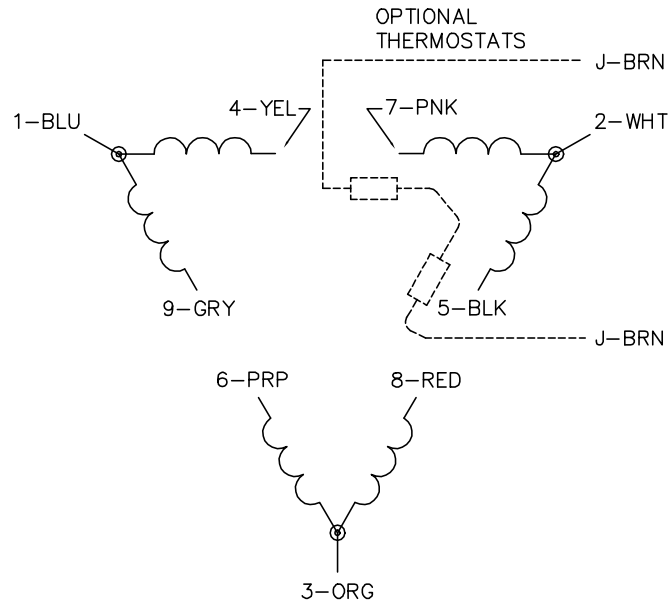
TORQUES (LB-FT): PO=173 PU=87.6 LR=104 LRA=283



2/22/2024 ACPERF, record # 67631



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

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|-----------------------------------|--------------------------------|-------------------|
| 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

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