

BALDOR® • RELIANCE 

Product Information Packet

EFM4103T

25HP,1775RPM,3PH,60HZ,284T,1054M,TEFC,F2

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | H | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 10WZ651 | CD Diagram: | CD0180 | Mfg Plant: | |
| Mech. Spec: | 10C156 | Layout: | 10LYC156 | Poles: | 04 | Created Date: | 10-19-2017 |
| Base: | RG | Eff. Date: | 02-21-2022 | Leads: | 9#10 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | EFM4103T | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 284T | Inverter Code: | Inverter Ready |
| Frame Material: | Iron | KVA Code: | J |
| Output @ Frequency: | 25.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 10 AWG |
| | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 1054M |
| Agency Approvals: | UR | Mounting Arrangement: | F2 |
| | CSA EEV | Power Factor: | 81 |
| | CSA | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Current @ Voltage: | 31.000 A @ 460.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 62.000 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 64.000 A @ 208.0 V | Shaft Slinger Indicator: | Shaft Slinger |
| Design Code: | A | Speed Code: | Single Speed |
| Drip Cover: | No Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | None |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| | | | | | | | | | | |
|--------------------------|--------------|--------|----------------|------|---------------------|-----------|------------|---------|------|------|
| Nameplate NP3443L | | | | | | | | | | |
| CAT.NO. | EFM4103T | | | | CUST. P/N | | | | ENCL | TEFC |
| SPEC. | 10C156Z651G1 | | CC | 010A | FRAME | 284T | | SER.NO. | | |
| HP | 25 | | CLASS | F | HZ | 60 | | | | |
| R.P.M. | 1775 | | PH | 3 | DES | A | | | | |
| VOLTS | 230/460 | | CODE | J | ODE BRG | 6309 | | DE BRG | 6311 | |
| AMPS | 62/31 | | USABLE AT 208V | 64 | | | | | | |
| RATING | 40C AMB-CONT | | NEMA NOM. EFF. | 93.6 | | GREASE | POLYREX EM | | | |
| P.F. | 81 | SER.F. | 1.15 | | VPWM INVERTER READY | | | | | |
| | SFA 69/34.5 | | | | | | | | | |
| HTR-VOLTS | | | HTR-AMPS | | | HTR-WATTS | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA346559 | SA 10C156Z651G1 | 1.000 EA |
| RA335092 | RA 10C156Z651G1 | 1.000 EA |
| 09FN3001C02 | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO | 1.000 EA |
| 10CB3000SP | KOBX, CAST W/2.00 LEAD HOLE | 1.000 EA |
| 09GS1000SP | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE | 1.000 EA |
| 10XN3118K12 | 5/16-18 X .75 GRADE 5, ZINC PLATED | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| WD1000B25 | GND LUG, BURNDY L125HP OR T&B L125HP-BB | 1.000 EA |
| 19XW3118G08 | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN | 1.000 EA |
| 10EP1106A01 | FR ENDPLATE, MACH | 1.000 EA |
| 10XN3816K32 | BOLT, 3/8-16X2 HH YZ(5) | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW5100A11 | W3917-042 WVY WSHR (WB) | 1.000 EA |
| 10XN2520K36 | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| 10XN3118K40 | 5/16-18 X 2.50" HEX HD, GRADE 5 | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 10EP1105A01 | PU ENDPLATE | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10FH4000 | 310 FAN HOUSING STAMPED | 1.000 EA |
| 51XF2520A08 | SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L | 4.000 EA |
| 10CB3500SP | CONDUIT BOX LID, CAST | 1.000 EA |
| 10GS1000SP | GASKET, CONDUIT BOX LID | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 4.000 EA |
| HW4600B40 | V-RING SLINGER 2.000 X 2.680 X .28 VITON | 1.000 EA |
| HW2501H28 | KEY, 1/2 SQ X 3.250 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| HW4500A21 | 1618BALEMITE FITTING 825 UNIVERSAL | 1.000 EA |
| HA4017A01 | 1/8 X 4 GREASE EXT (F/S) | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.130 LB |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW2500A25 | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.125 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0181 | CONNECTION LABEL | 1.000 EA |
| NP3443L | SS SUPER-E UL CSA-EEV PREM CC | 1.000 EA |
| 10PA1000 | PACKAGING GROUP COMBINED PRINT PK1023A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA |
| FE-0000022 | ZRTG FE ASSEMBLY | 1.000 EA |
| PE-0000013 | ZRTG PE ASSEMBLY | 1.000 EA |

| Accessories | | |
|--------------------|--------------------|-------------------|
| Part Number | Description | Multiplier |
| 10-1305 | C FACE KIT | A8 |
| 10EP1502A01SP | D-FLANGE KIT | A8 |

AC Induction Motor Performance Data

Record # 66703

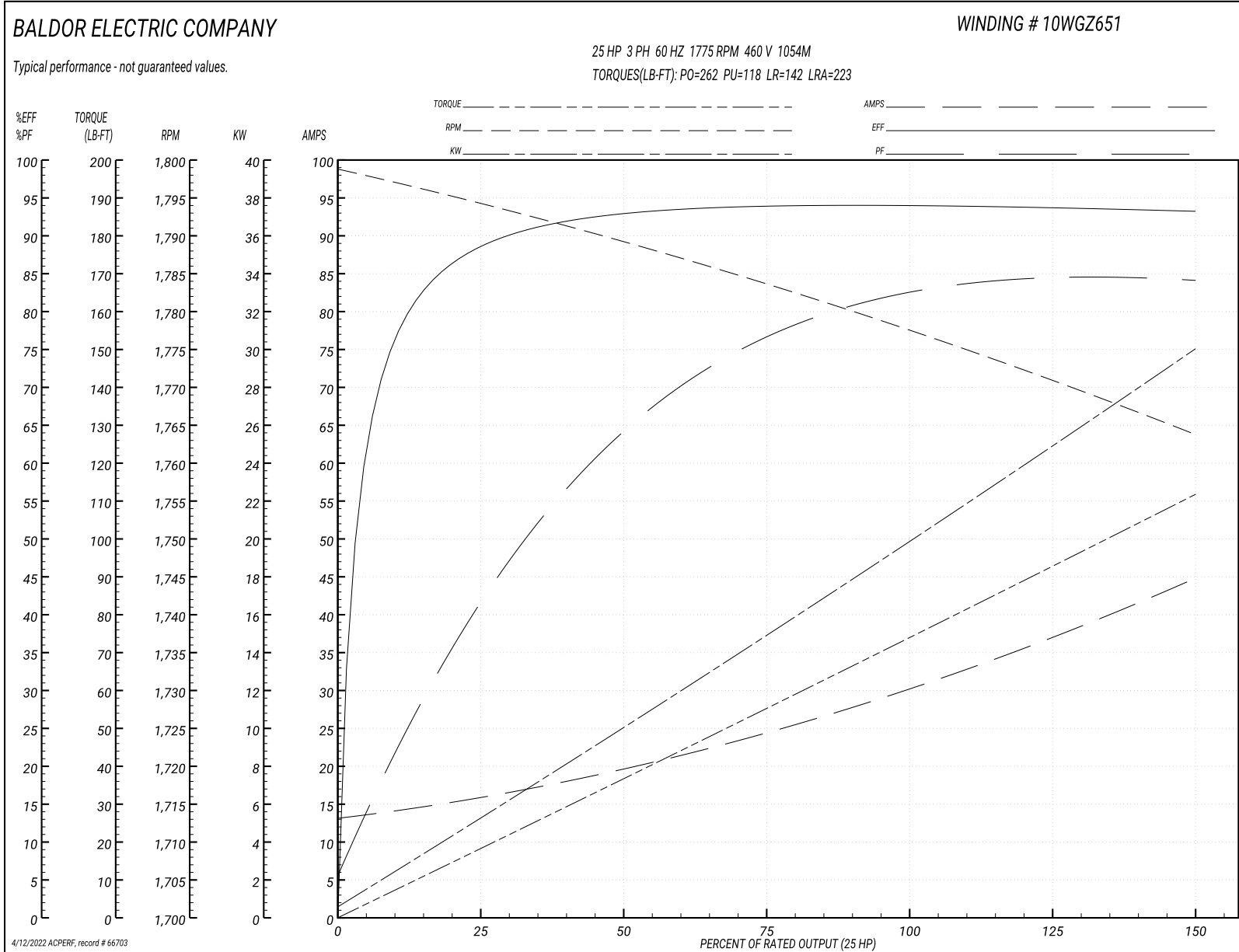
Typical performance - not guaranteed values

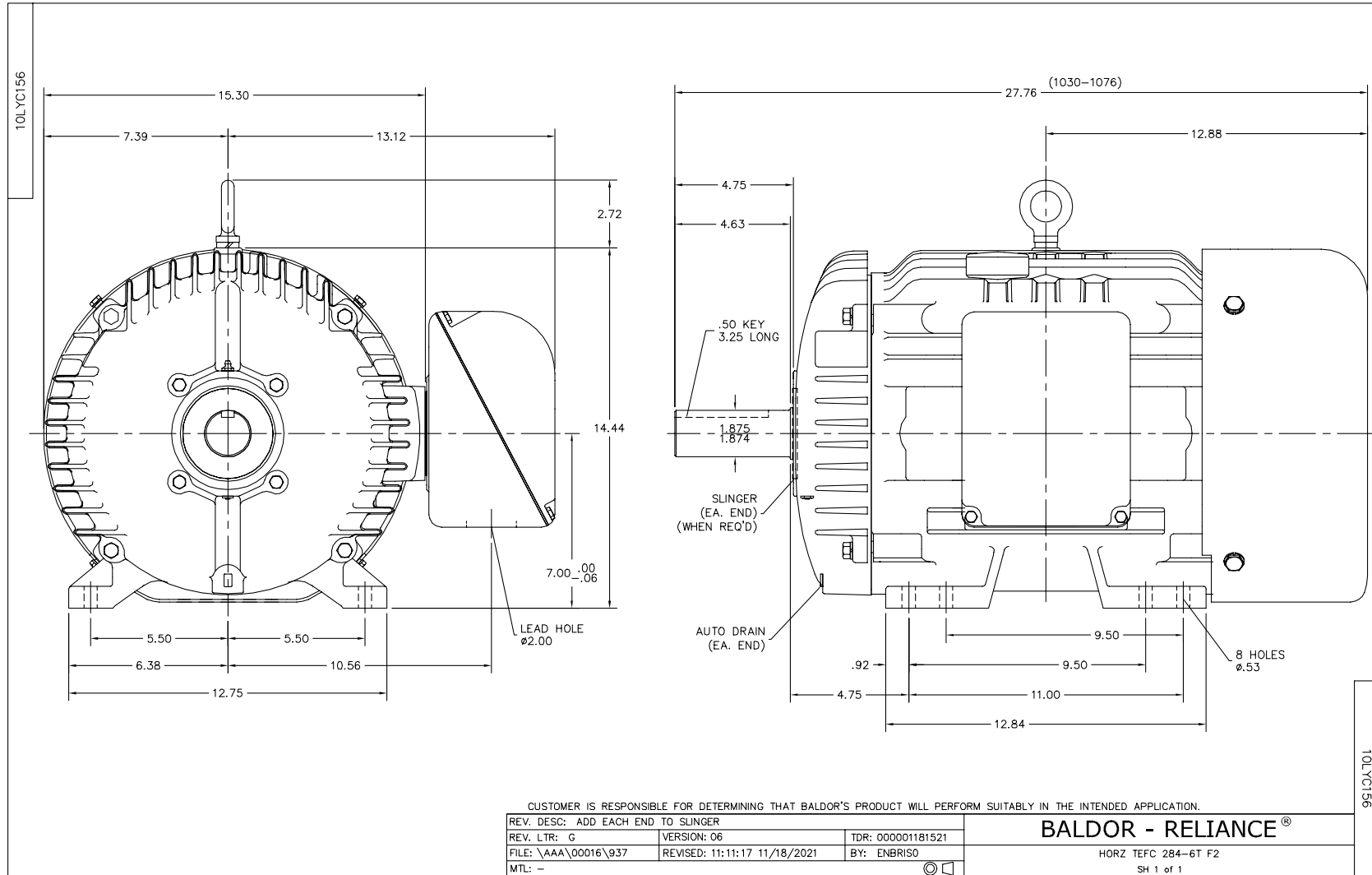
| Winding: 10WGZ651-R001 | | Type: 1054M | | Enclosure: TEFC | | | |
|-------------------------------|-----------------|----------------------------|--|------------------------------|----------|--|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | | | |
| Rated Output (HP) | 25 | Full Load Torque | 74.02 LB-FT | | | | |
| Volts | 230/460 | Start Configuration | direct on line | | | | |
| Full Load Amps | 62/31 | Breakdown Torque | 262 LB-FT | | | | |
| R.P.M. | 1775 | Pull-up Torque | 118 LB-FT | | | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 142 LB-FT | | | |
| NEMA Design Code | A | KVA Code | J | Starting Current | 223 A | | |
| Service Factor (S.F.) | 1.15 | No-load Current | 13.6 A | | | | |
| NEMA Nom. Eff. | 93.6 | Power Factor | 81 | Line-line Res. @ 25°C | 0.2345 Ω | | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 51°C | | | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 61°C | | | |
| | | | Locked-rotor Power Factor | 30.6 | | | |

Load Characteristics 460 V, 60 Hz, 25 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 43 | 65 | 76 | 81 | 84 | 85 | 83 |
| Efficiency | 88.3 | 92.8 | 93.9 | 94 | 93.7 | 93.1 | 93.8 |
| Speed | 1794.1 | 1789.3 | 1783.5 | 1777.8 | 1770.8 | 1763.8 | 1774 |
| Line amperes | 15.3 | 19.3 | 24.6 | 30.6 | 37.2 | 44.5 | 34.6 |

Performance Graph at 460V, 60Hz, 25.0HP Typical performance - Not guaranteed values

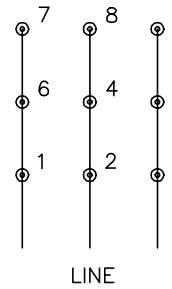




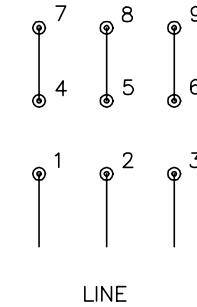
CD0180



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. LTR: D | VERSION: 01 | TDR: 000001099922 |
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3PH, DV, 9 LEADS, DELTA CONNECTION

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