

BALDOR® • RELIANCE 

Product Information Packet

ECR9074T

7.5HP,1760RPM,3PH,60HZ,213T,0748M,TEFC,F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | H | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 07WGR837 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 07N167 | Layout: | 07LYN167 | Poles: | 04 | Created Date: | 01-22-2015 |
| Base: | RG | Eff. Date: | 05-08-2017 | Leads: | 9#14 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------------|
| Catalog Number: | ECR9074T | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 213T | Inverter Code: | Inverter Duty |
| Frame Material: | Iron | KVA Code: | J |
| Output @ Frequency: | 7.500 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 @ 14 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: | 0748M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 85 |
| | CCSA US | Product Family: | Super-E Chemical Processing |
| 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 |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Constant Torque Speed Range: | 6 | Shaft Ground Indicator: | No Shaft Grounding |
| Current @ Voltage: | 18.600 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 9.300 A @ 460.0 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 (OLD) |
| 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 NP3294E | | | | | | | | | | | |
|-------------------|---------------|--|--|----------|------|----|------------|------|--|----------|----|
| CAT NO | ECR9074T | | | | | | | | | | |
| SPEC. | 07N167R837G1 | | | | | | ENCL | TEFC | | | |
| FRAME | 213T | | | HP | 7.5 | | | | | | |
| VOLTS | 230/460 | | | | | | | | | | |
| FLA | 18.6/9.3 | | | | I.P. | 55 | | | | | |
| RPM | 1760 | | | RPM MAX | 2700 | | | | | | |
| HZ | 60 | | | PH | 3 | | CLASS | F | | | |
| SER.F. | 1.25 | | | DES | A | | CC | 010A | | | |
| NEMA-NOM-EFF | 91.7 | | | | | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | | |
| DE BRG | 6309 | | | ODE BRG | 6307 | | | | | | |
| GREASE | POLYREX EM | | | | | | | | | | |
| INV.TYPE | PWM | | | C HP FR | 60 | | C HP TO | 90 | | | |
| CT HZ FROM | 6 | | | CT HZ TO | 60 | | VT HZ FROM | 6 | | VT HZ TO | 60 |
| SER.NO | SFA 22.4/11.2 | | | | | | | | | | |

| Parts List | | |
|--------------|---|----------|
| Part Number | Description | Quantity |
| SA293638 | SA 07N167R837G1 | 1.000 EA |
| RA279731 | RA 07N167R837G1 | 1.000 EA |
| 37FN3002C01 | EXFN, PLASTIC, 6.00 OD, 1.155 ID | 1.000 EA |
| HW3201A05 | 3/8-16 EYEBOLT | 1.000 EA |
| 09CB1002A05G | CONDUIT BOX, 1.00 N.P.T. (GRAY) | 1.000 EA |
| RM1017 | LEAD SEPERATOR GASKET MODEL 307 1/8" THK | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01 | BRASS CUP WASHER, FOR #10 SCREW | 1.000 EA |
| 37EP1101A55G | FR EP 07 BRG W/GRS, RELIEF, DRAIN (GRAY) | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 EA |
| 37EP1111A04G | PULLEY ENCL 309 BRG W/GRSR,RELIF & LOCKED | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| 10XN2520A26 | 1/4-20X 1 5/8 HEX HD | 4.000 EA |
| XY3118A12 | 5/16-18 HEX NUT DIRECTIONAL SERRATION | 4.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB | 1.000 EA |
| 07FH1001A01G | SPL FAN HOUSING, 307, W/GREASER, GRAY EP | 1.000 EA |

| Parts List (continued) | | |
|------------------------|---|----------|
| Part Number | Description | Quantity |
| 10XN2520A28 | 1/4-20X 1 3/4 HEX HD | 3.000 EA |
| WD4100A02 | DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL | 1.000 EA |
| 12CB1503G | CONDUIT BOX CAST. (GRAY) | 1.000 EA |
| 09GS1013A01 | 09 GS FOR 09CB3501 LID - BLACK NEOPRENE | 1.000 EA |
| 10XN2520A12 | O1/4-20X 3/4 HEX HEAD CAP | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| HW4600C51 | 31X39X7.5MM FACE SEAL FOR 1.375 DIA. SH | 1.000 EA |
| HW4600B44 | V-RING SLINGER 1.500 X 1.810 X .28 VITON | 1.000 EA |
| HW2501F21 | KEY, 5/16 SQ X 2.375 | 1.000 EA |
| HA7000A02 | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA | 1.000 EA |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.001 QT |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.050 LB |
| HA3104A32 | THRUBOLT- 5/16-18 X12.750 | 4.000 EA |
| MG1025G96 | WILKOFASST SG, 779.7048, MOUSE GRAY #7048 | 0.036 GA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3294E | SS CRUSHER DUTY INV UL CSA-C US EEV | 1.000 EA |
| 07PA1011 | PKG GRP, 07 CAST IRON PK1181 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |

AC Induction Motor Performance Data

Record # 49026 - Typical performance - not guaranteed values

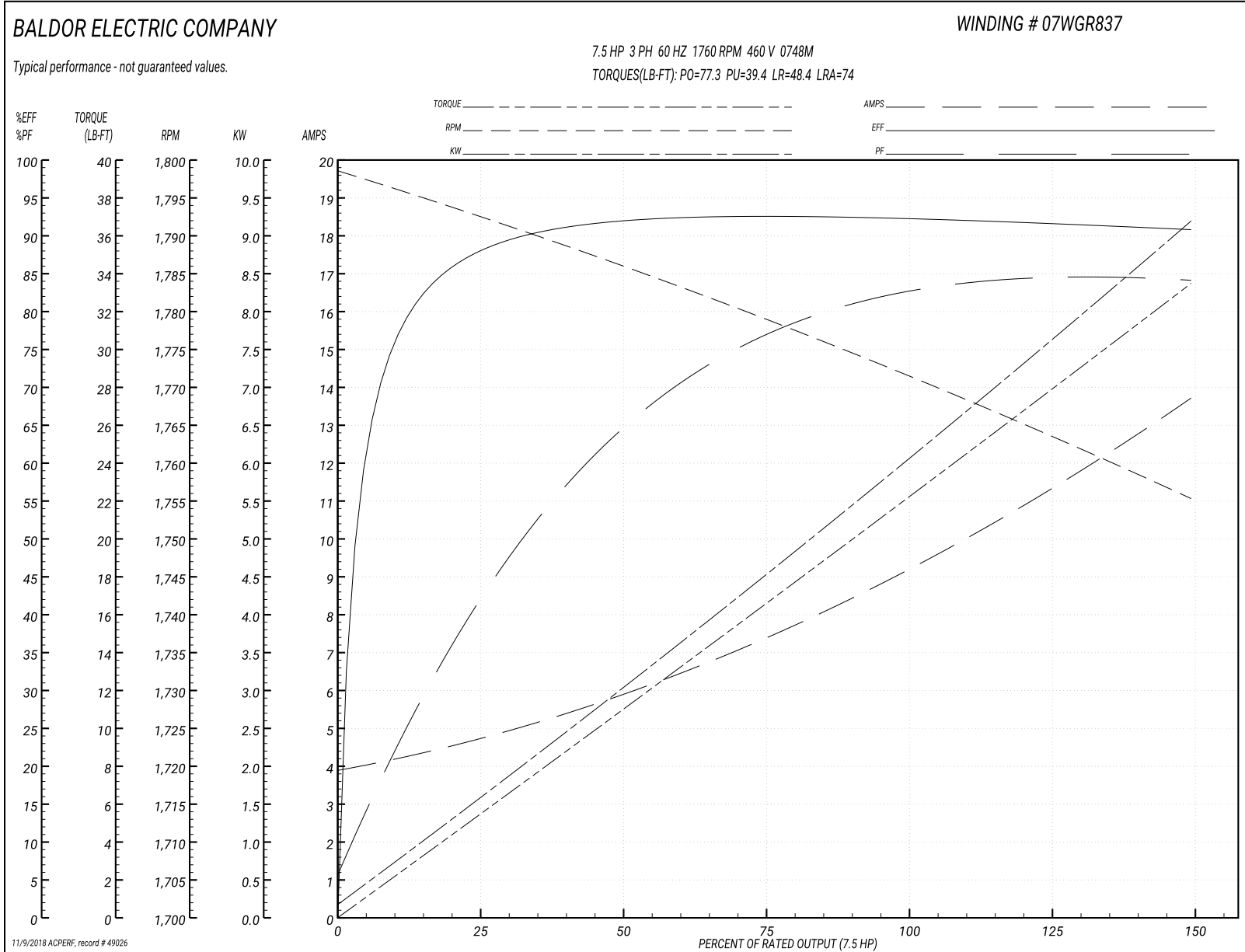
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 07WGR837-R001 | Type: 0748M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

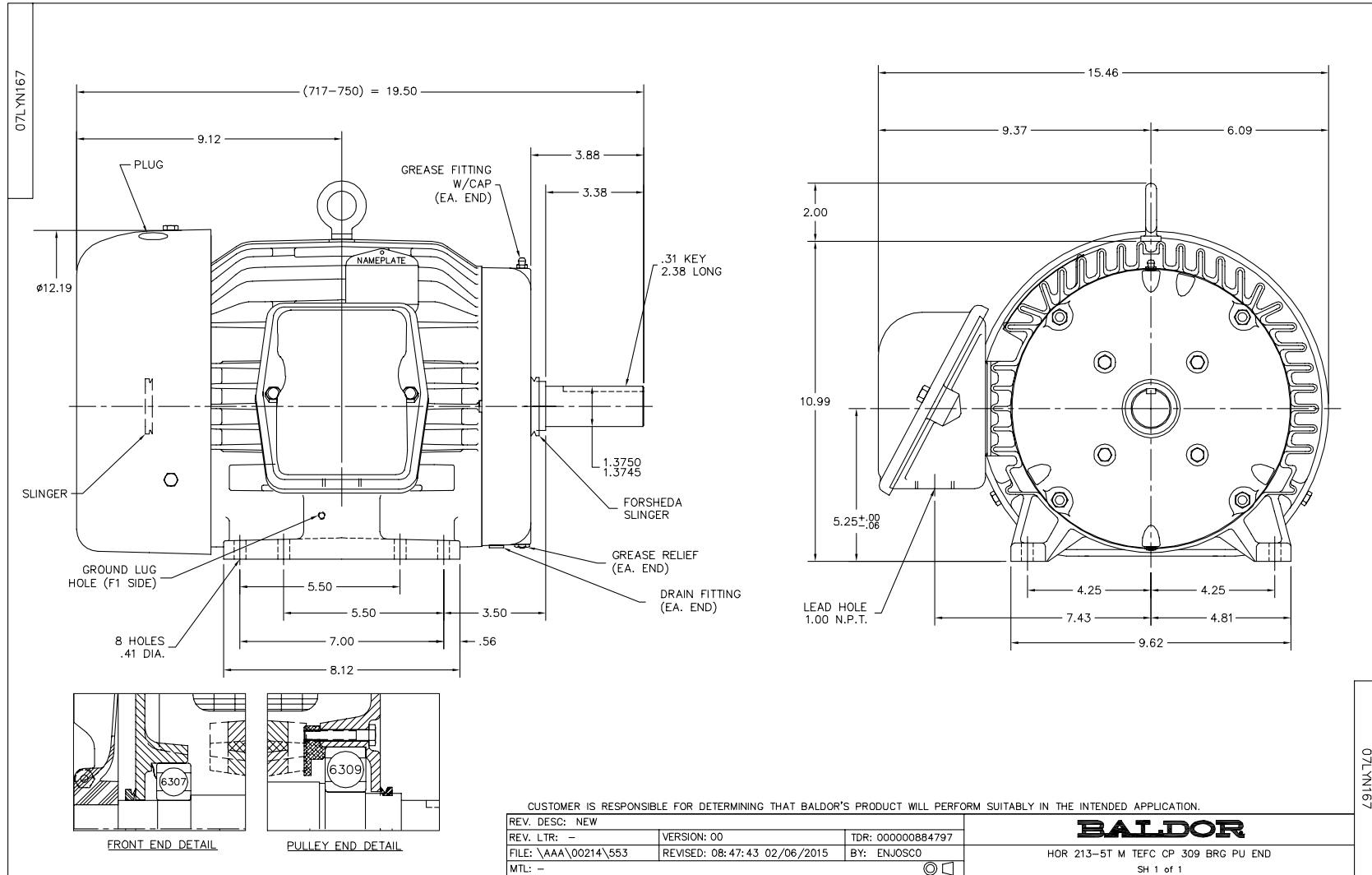
| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|-------------------------|
| Rated Output (HP) | 7.5 | | | Full Load Torque | 22.1 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 18.6/9.3 | | | Breakdown Torque | 77.3 LB-FT |
| R.P.M. | 1760 | | | Pull-up Torque | 39.4 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 48.4 LB-FT |
| NEMA Design Code | A | KVA Code | J | Starting Current | 74 A |
| Service Factor (S.F.) | 1.25 | | | No-load Current | 4.04 A |
| NEMA Nom. Eff. | 91.7 | Power Factor | 85 | Line-line Res. @ 25°C | 1.26 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 38°C |
| S.F. Amps | 22.4/11.2 | | | Temp. Rise @ S.F. Load | 52°C |
| | | | | Locked-rotor Power Factor | 37.9 |
| | | | | Rotor inertia | 1.18 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 44 | 66 | 77 | 81 | 84 | 85 | 84 |
| Efficiency | 87.5 | 91.9 | 92.5 | 92.5 | 91.7 | 90.8 | 91.8 |
| Speed | 1792 | 1786 | 1779 | 1772 | 1764 | 1755 | 1765 |
| Line amperes | 4.54 | 5.79 | 7.38 | 9.28 | 11.4 | 13.6 | 11.4 |

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





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.

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 90000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005