



## Product Information Packet

# ECP3764T

3HP,1165RPM,3PH,60HZ,213T,0738M,TEFC,F1

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | T      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 07WGX822   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 07K374 | Layout:     | 07LYK374   | Poles:      | 06     | Created Date: | 08-19-2006 |
| Base:       | RG     | Eff. Date:  | 10-02-2017 | Leads:      | 9#14   |               |            |

| Specs                           |                         |                                |                              |
|---------------------------------|-------------------------|--------------------------------|------------------------------|
| Catalog Number:                 | ECP3764T                | Insulation Class:              | F                            |
| Enclosure:                      | TEFC                    | Inverter Code:                 | Inverter Duty                |
| Frame:                          | 213T                    | KVA Code:                      | K                            |
| Frame Material:                 | Iron                    | Lifting Lugs:                  | Standard Lifting Lugs        |
| Output @ Frequency:             | 3.000 HP @ 60 HZ        | Locked Bearing Indicator:      | No Locked Bearing            |
| Synchronous Speed @ Frequency:  | 1200 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 14 AWG                   |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box                       |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads                 |
| XP Class and Group:             | None                    | Motor Type:                    | 0738M                        |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1                           |
| Agency Approvals:               | CSA EEV                 | Power Factor:                  | 70                           |
|                                 | UR                      | Product Family:                | Chemical Processing (Not DC) |
|                                 | CSA                     | Pulley End Bearing Type:       | Ball                         |
|                                 | CCSA US                 | Pulley Face Code:              | Standard                     |
| Auxillary Box:                  | No Auxillary Box        | Pulley Shaft Indicator:        | Standard                     |
| Auxillary Box Lead Termination: | None                    | Rodent Screen:                 | None                         |
| Base Indicator:                 | Rigid                   | RoHS Status:                   | ROHS COMPLIANT               |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Extension Location:      | Pulley End                   |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
| <b>Constant Torque Speed Range:</b>   | 1.8                       | <b>Shaft Rotation:</b>             | Reversible          |
| <b>Current @ Voltage:</b>             | 4.500 A @ 460.0 V         | <b>Shaft Slinger Indicator:</b>    | Shaft Slinger       |
|                                       | 9.000 A @ 230.0 V         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Design Code:</b>                   | B                         | <b>Motor Standards:</b>            | NEMA                |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Starting Method:</b>            | Direct on line      |
| <b>Duty Rating:</b>                   | CONT                      | <b>Thermal Device - Bearing:</b>   | NONE (OLD)          |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Winding:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Face Code:</b>               | Standard                  | <b>Winding Thermal 1:</b>          | None                |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 2:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>XP Temp Code:</b>               | T3C                 |

## Nameplate NP3257E

|              |              |      |      |
|--------------|--------------|------|------|
| CAT.NO.      | ECP3764T     |      |      |
| SPEC.        | 07K374X822G1 |      |      |
| HP           | 3            | TE   |      |
| VOLTS        | 230/460      |      |      |
| AMP          | 9/4.5        |      |      |
| RPM          | 1165         |      |      |
| FRAME        | 213T         | HZ   | 60   |
| SER.F.       | 1.15         | CODE | K    |
|              |              | DES  | B    |
| RATING       | 40C AMB-CONT |      |      |
| SN           |              |      |      |
| DE           | 6307         | ODE  | 6307 |
| NEMA-NOM-EFF | 90.2         | PF   | 70   |
| G.MIN.EFF    | 88.5         | CC   | 010A |
| T. CODE      | T3C          | T=   | 160  |

|    |   |
|----|---|
| PH | 3 |
| CL | F |

## Nameplate NP3260E

|             |              |                         |     |
|-------------|--------------|-------------------------|-----|
| SPEC.       | 07K374X822G1 |                         |     |
| D.E. BRG.   | 35BC03XP30X  |                         |     |
| O.D.E. BRG. | 35BC03XP30X  |                         |     |
| GREASE      | POLYREX EM   |                         |     |
| RPM MAX     | 1800         | MAX. KVAR               | N/A |
| BLANK       |              |                         |     |
| INV. TYPE   | PWM          |                         |     |
| T=          | 160          |                         |     |
| C HP FR     | 60           | C HP TO                 | 90  |
| CT HZ FROM  | 1.8          | CT HZ TO                | 60  |
| VT HZ FROM  | 0-           | VT HZ TO                | 60  |
| HTR-VOLTS   |              | HTR-AMPS                |     |
| HTR-WATTS   |              |                         |     |
|             |              | MAX. SPACE HEATER TEMP. |     |

| Parts List   |                                          |          |
|--------------|------------------------------------------|----------|
| Part Number  | Description                              | Quantity |
| SA148630     | SA 07K374X822G1                          | 1.000 EA |
| RA137588     | RA 07K374X822G1                          | 1.000 EA |
| 37FN3002C01  | EXFN, PLASTIC, 6.00 OD, 1.155 ID         | 1.000 EA |
| HW3201A05    | 3/8-16 EYEBOLT                           | 1.000 EA |
| 09CB1001A03G | CONDUIT BOX, MACH GRAY                   | 1.000 EA |
| RM1017       | LEAD SEPERATOR GASKET MODEL 307 1/8" THK | 1.000 EA |
| 19XW2520A16  | SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91    | 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 |
| 10XN2520S06  | 1/4 20X3/8 HX HD CAP S.S.                | 2.000 EA |
| WD1000B16    | T&B CX70TN TERMINAL                      | 1.000 EA |
| 37EP1101C43G | TEFC 307 BRG, GRSR,RELIEF,,25-20 FH TAPS | 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 |
| 37EP1101A32G | PU ENDPLATE MACH                         | 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 |
| XY3118A12    | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 51XB1214A20  | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| 07FH1001A01G           | SPL FAN HOUSING, 307, W/GREASER, GRAY EP | 1.000 EA |
| 10XN2520A28            | 1/4-20X 1 3/4 HEX HD                     | 3.000 EA |
| WD4100A02              | DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL  | 1.000 EA |
| 09CB1504A01G           | LIPPED CONDUIT BOX LID, MACH GRAY EPOXY  | 1.000 EA |
| 09GS1001A01            | GASKET, BOX LID, 1/8 THICK BLACK NEOPREN | 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 |
| HA1005A07              | SLINGER, OD 2.25, ID 1.344, 307 BRG      | 1.000 EA |
| HW4600B33              | V-RING SLINGER 1.375 X 1.890 X .35 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 |
| LB1002N                | LABEL,MARINE DUTY (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 |
| MG1025N19              | WILKOFASST, 778.50, RELIANCE BLUE-GREEN  | 0.036 GA |
| LC0005E01              | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| LB1449                 | DIV-2/NEC WARNING LABEL                  | 1.000 EA |
| NP3257E                | SS CP SUPER-E DIV-2 UL CSA-C US EEV PREM | 1.000 EA |
| NP3260E                | SS CP SUPER-E AUX DATA INFORMATION       | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 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 # 47059 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGX822-R032 | <b>Type:</b> 0738M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 3            |              |    | Full Load Torque                         | 13.46 LB-FT              |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 9/4.5        |              |    | Breakdown Torque                         | 46.79 LB-FT              |
| R.P.M.                | 1165         |              |    | Pull-up Torque                           | 30.52 LB-FT              |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 34.44 LB-FT              |
| NEMA Design Code      | B            | KVA Code     | K  | Starting Current                         | 32 A                     |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 2.35 A                   |
| NEMA Nom. Eff.        | 90.2         | Power Factor | 70 | Line-line Res. @ 25°C                    | 2.62 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 31°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 37°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 22.7                     |
|                       |              |              |    | Rotor inertia                            | 0.945 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 3 HP

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 33   | 51   | 62   | 69   | 73   | 75   | 72   |
| Efficiency      | 83.1 | 88.7 | 90.7 | 90.3 | 89.4 | 87.7 | 89.6 |
| Speed           | 1191 | 1184 | 1176 | 1170 | 1160 | 1147 | 1162 |
| Line amperes    | 2.62 | 3.11 | 3.75 | 4.51 | 5.38 | 6.39 | 5    |

## Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values





