

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM3714T-5**

**10HP,1770RPM,3PH,60HZ,215TC,3752M,TEFC,F**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | K      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 37WGS829   | CD Diagram: | CD0006 | Mfg Plant:    |            |
| Mech. Spec: | 37G814 | Layout:     | 37LYG814   | Poles:      | 04     | Created Date: | 07-30-2010 |
| Base:       | RG     | Eff. Date:  | 07-31-2020 | Leads:      | 3#14   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | CEM3714T-5              | Inverter Code:                 | Inverter Ready        |
| Enclosure:                      | TEFC                    | KVA Code:                      | K                     |
| Frame:                          | 215TC                   | Lifting Lugs:                  | Standard Lifting Lugs |
| Frame Material:                 | Steel                   | Locked Bearing Indicator:      | Locked Bearing        |
| Output @ Frequency:             | 10.000 HP @ 60 HZ       | Motor Lead Quantity/Wire Size: | 3 @ 14 AWG            |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Exit:               | Ko Box                |
| Voltage @ Frequency:            | 575.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads          |
| XP Class and Group:             | None                    | Motor Type:                    | 3752M                 |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1                    |
| Agency Approvals:               | CSA                     | Power Factor:                  | 85                    |
|                                 | CSA EEV                 | Product Family:                | General Purpose       |
|                                 | UR                      | Pulley End Bearing Type:       | Ball                  |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | C-Face                |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Standard              |
| Base Indicator:                 | Rigid                   | Rodent Screen:                 | None                  |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Extension Location:      | Pulley End            |
| Blower:                         | None                    | Shaft Ground Indicator:        | No Shaft Grounding    |
| Current @ Voltage:              | 9.600 A @ 575.0 V       | Shaft Rotation:                | Reversible            |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Design Code:</b>                   | A                         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Speed Code:</b>                 | Single Speed        |
| <b>Duty Rating:</b>                   | CONT                      | <b>Motor Standards:</b>            | NEMA                |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Starting Method:</b>            | Direct on line      |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 1:</b>          | None                |
| <b>Insulation Class:</b>              | F                         | <b>Winding Thermal 2:</b>          | None                |

|  |              |  |             |    |                       |      |  |           |           |   |
|--|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| <b>Nameplate NP3441L</b>                                 |              |  |             |    |                       |      |  |           |           |   |
| <b>CAT.NO.</b>   | CEM3714T-5   |  |             |    |                       |      |  |           |           |   |
| <b>SPEC.</b>   | 37G814S829G1 |  |             |    |                       |      |  |           |           |   |
| <b>HP</b>  | 10           |  |             |    |                       |      |  |           |           |   |
| <b>VOLTS</b>   | 575          |  |             |    |                       |      |  |           |           |   |
| <b>AMP</b>   | 9.6          |  |             |    |                       |      |  |           |           |   |
| <b>RPM</b>   | 1770         |  |             |    |                       |      |  |           |           |   |
| <b>FRAME</b>   | 215TC        |  |             |    | <b>HZ</b>             | 60   |  |           | <b>PH</b> | 3 |
| <b>SER.F.</b>  | 1.15         |  | <b>CODE</b> | K  | <b>DES</b>            | A    |  | <b>CL</b> | F         |   |
| <b>NEMA-NOM-EFF</b>                                      | 91.7         |  | <b>PF</b>   | 85 |                       |      |  |           |           |   |
| <b>RATING</b>  | 40C AMB-CONT |  |             |    |                       |      |  |           |           |   |
| <b>CC</b>  | 010A         |  |             |    | <b>USABLE AT 208V</b> |      |  |           |           |   |
| <b>DE</b>  | 6307         |  |             |    | <b>ODE</b>            | 6206 |  |           |           |   |
| <b>ENCL</b>  | TEFC         |  | <b>SN</b>   |    |                       |      |  |           |           |   |
| <b>VPWM INVERTER READY</b><br>CT6-60H(10:1)VT3-60H(20:1) |              |  |             |    |                       |      |  |           |           |   |
|  |              |  |             |    |                       |      |  |           |           |   |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA200646    | SA 37G814S829G1                          | 1.000 EA |
| RA187957    | RA 37G814S829G1                          | 1.000 EA |
| 37FN3002C01 | EXFN, PLASTIC, 6.00 OD, 1.155 ID         | 1.000 EA |
| HW3200A01   | 3/8-16X3/4 I-BLT WELDED F/S              | 1.000 EA |
| 37CB3006    | 37 CB CASTING W/1.38 LEAD HOLE @ 6:00    | 1.000 EA |
| 37GS1000SP  | GASKET, CONDUIT BOX STD., .06 THICK LEXI | 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 |
| 37EP3101A01 | FR ENDPLATE, FOR ROUTING PURPOSES        | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A06   | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 37PE3300A01 | PUEP ASSEMBLY FOR ROUTING                | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 10XN2520A30 | HEX HD CAP SCREW-STD THD-.25 X 20 THD PE | 4.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| XY3118A12   | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| 07FH4007SP  | PRIMED                                   | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 37CB4516    | LIPPED LID FOR 37 FRAME NEC KOBX         | 1.000 EA |
| 37GS1008    | 37 GS FOR CB LID - LEXIDE                | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 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 |

| <b>Parts List (continued)</b> |   |                 |
|-------------------------------|---|-----------------|
| <b>Part Number</b>            | <b>Description</b>                      | <b>Quantity</b> |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS             | 2.000 EA        |
| LB1115N                       | LABEL,LIFTING DEVICE (ON ROLLS)         | 1.000 EA        |
| MJ1000A02                     | GREASE, MOBIL POLYREX EM - 124047       | 0.050 LB        |
| HA3104A25                     | THRUBOLT .31-18 X 14.75                 | 4.000 EA        |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,     | 0.028 GA        |
| LB1119N                       | WARNING LABEL                           | 1.000 EA        |
| LC0006                        | CONNECTION LABEL                        | 1.000 EA        |
| NP3441L                       | ALUM SUPER-E VPWM INVERTER READY UL     | 1.000 EA        |
| 37PA1074                      | PALLET PACK GRP, PRINT BOX PK1026A06    | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 31008

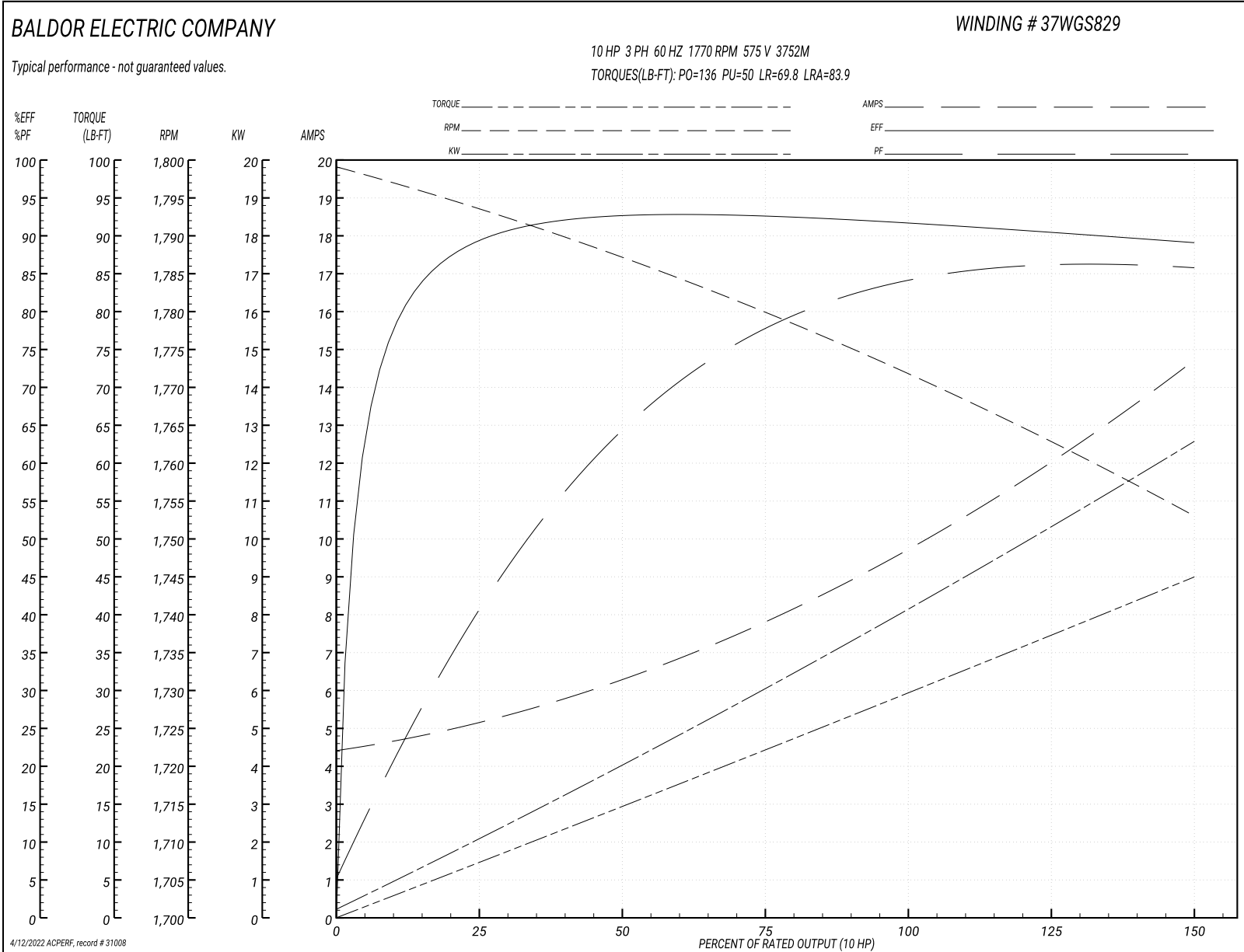
Typical performance - not guaranteed values

| Winding: 37WGS829-R001 |                   | Type: 3752M                                   | Enclosure: TEFC         |
|------------------------|-------------------|---|-------------------------|
| <b>Nameplate Data</b>  |                   | <b>575 V, 60 Hz:<br/>Single Voltage Motor</b> |                         |
| Rated Output (HP)      | 10                | Full Load Torque                              | 29.5 LB-FT              |
| Volts                  | 575               | Start Configuration                           | direct on line          |
| Full Load Amps         | 9.6               | Breakdown Torque                              | 136 LB-FT               |
| R.P.M.                 | 1770              | Pull-up Torque                                | 50 LB-FT                |
| Hz                     | 60 Phase          | Locked-rotor Torque                           | 69.8 LB-FT              |
| NEMA Design Code       | A KVA Code        | Starting Current                              | 83.9 A                  |
| Service Factor (S.F.)  | 1.15              | No-load Current                               | 4.52 A                  |
| NEMA Nom. Eff.         | 91.7 Power Factor | Line-line Res. @ 25°C                         | 1.42 Ω                  |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                       | 63°C                    |
| S.F. Amps              |                   | Temp. Rise @ S.F. Load                        | 79°C                    |
|                        |                   | Locked-rotor Power Factor                     | 35                      |
|                        |                   | Rotor inertia                                 | 1.28 LB-FT <sup>2</sup> |

**Load Characteristics 575 V, 60 Hz, 10 HP**

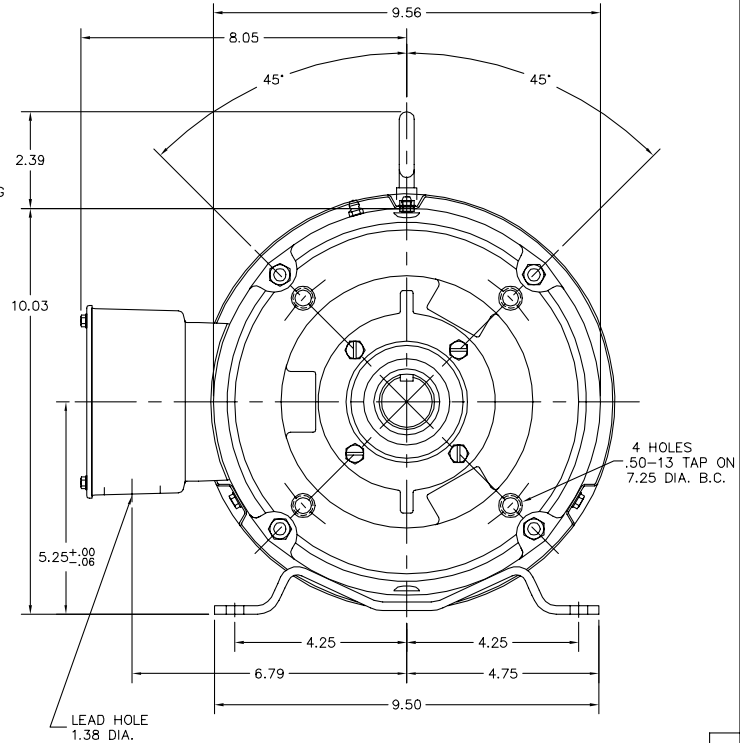
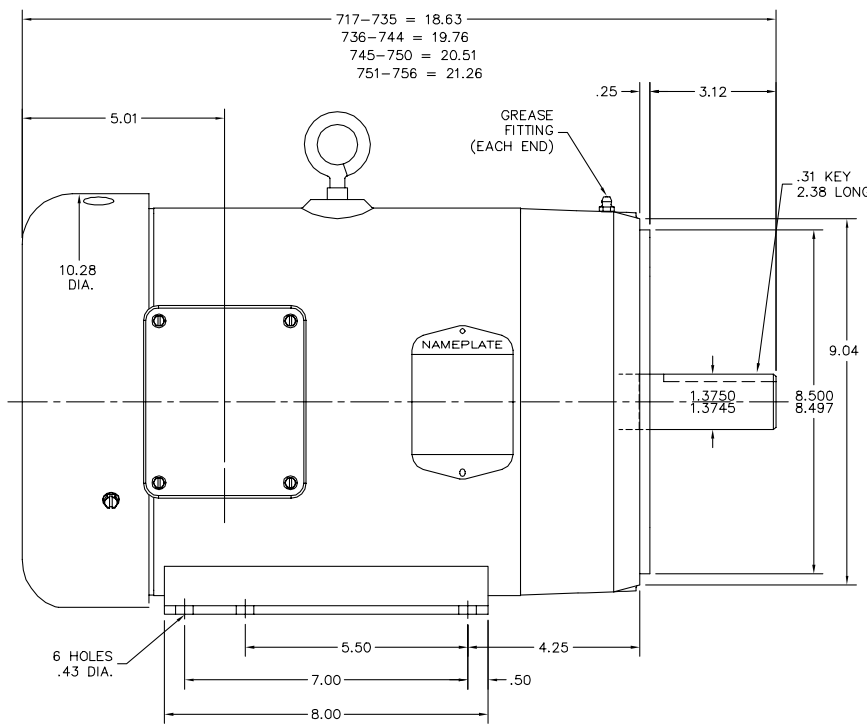
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 41   | 65   | 78   | 85   | 83   | 87   | 84   |
| Efficiency      | 88.4 | 92   | 92.7 | 91.9 | 90.7 | 88.9 | 91.2 |
| Speed           | 1794 | 1787 | 1780 | 1772 | 1763 | 1753 | 1767 |
| Line amperes    | 5.03 | 6.21 | 7.76 | 9.59 | 12.4 | 14.5 | 11.3 |

Performance Graph at 575V, 60Hz, 10.0HP Typical performance - Not guaranteed values





37LYG814



37LYG814

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|  |                              |                   |
|--|------------------------------|-------------------|
| REV. DESC: UPDATE LAYOUT GRAPHICS - NO DIM CHANGES |                              |                   |
| REV. LTR: D  | VERSION: 01                  | TDR: 000000859468 |
| FILE: \AAA\00051\948                               | REVISED: 11:08:35 06/24/2014 | BY: ENBRAMO       |
| MTL: -   |                              |                   |

**BALDOR**

STD HORZ 213-5TC TEFC 37M W/EPACT SHOVE

SH 1 of 1

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                              |                   |
| REV. LTR: E                       | VERSION: 01                  | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO       |
| MTL: -                            |                              |                   |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1