

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **CEM3212T**

**5HP,3450RPM,3PH,60HZ,182TC,3623M,OPSB,F1**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | G     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 3623M | Elec. Spec: | 36WGS040 | CD Diagram:   | CD0005     |
| Enclosure:  | OPSB  | Mfg Plant:     |       | Mech. Spec: | 36B102   | Layout:       | 36LYB102   |
| Frame:      | 182TC | Mounting:      | F1    | Poles:      | 02       | Created Date: | 08-04-2010 |
| Base:       | RG    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 11-09-2016 |
| Leads:      | 9#16  |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP3553L

|                           |              |  |  |      |    |    |     |   |                |      |   |
|---------------------------|--------------|--|--|------|----|----|-----|---|----------------|------|---|
| CAT.NO.                   | CEM3212T     |  |  |      |    |    |     |   |                |      |   |
| SPEC.                     | 36B102S040G1 |  |  |      |    |    |     |   |                |      |   |
| HP                        | 5            |  |  |      |    |    |     |   |                |      |   |
| VOLTS                     | 230/460      |  |  |      |    |    |     |   |                |      |   |
| AMP                       | 12/6         |  |  |      |    |    |     |   |                |      |   |
| RPM                       | 3450         |  |  |      |    |    |     |   |                |      |   |
| FRAME                     | 182TC        |  |  |      |    | HZ | 60  |   |                | PH   | 3 |
| SER.F.                    | 1.15         |  |  | CODE | K  |    | DES | A |                | CL   | F |
| NEMA-NOM-EFF              | 86.5         |  |  |      | PF | 91 |     |   |                |      |   |
| RATING                    | 40C AMB-CONT |  |  |      |    |    |     |   |                |      |   |
| CC                        | 010A         |  |  |      |    |    |     |   | USABLE AT 208V | 12.8 |   |
| DE                        | 6206         |  |  |      |    |    |     |   | ODE            | 6205 |   |
| ENCL                      | OPSB         |  |  |      | SN |    |     |   |                |      |   |
| VPWM INVERTER READY       |              |  |  |      |    |    |     |   |                |      |   |
| CT30-60(2:1) VT3-60(20:1) |              |  |  |      |    |    |     |   |                |      |   |
|                           |              |  |  |      |    |    |     |   |                |      |   |

| Parts List  |                                          |          |
|-------------|------------------------------------------|----------|
| Part Number | Description                              | Quantity |
| SA200999    | SA 36B102S040G1                          | 1.000 EA |
| RA188304    | RA 36B102S040G1                          | 1.000 EA |
| 36CB3004    | 36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0 | 1.000 EA |
| 51XB1016A08 | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01   | BRASS CUP WASHER, FOR #8 SCREW           | 1.000 EA |
| 36EP3200A01 | FR ENDPLATE, ASSEMBLY FOR ROUTING        | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A05   | WVY WSHR F/205 & 304 BRGS                | 1.000 EA |
| 36EP3403A02 | PU ENDPLATE, MACH                        | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 10XN2520A28 | 1/4-20X 1 3/4 HEX HD                     | 4.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 36CB4516    | 36 LIPPED CB LID                         | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501E16   | 3KEY, 1/4 SQ X 1.750                     | 1.000 EA |
| HA7000A02   | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| MJ1000A02   | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1000Y03   | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.022 GA |
| HA3101A23   | THRUBOLT 1/4-20 X 9.625 DEMBY            | 4.000 EA |
| 36AD2004A01 | BAFFLE PLATE,MOD 36-SLTD BAND MTRS DELTA | 2.000 EA |
| LC0005E01   | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3553L     | ALUM SUPER-E VPWM INVERTER READY UL      | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| 36PA1000               | PKG GRP, PRINT    PK1016A06              | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 53354 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 36WGS040-R014 | <b>Type:</b> 3623M | <b>Enclosure:</b> OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 5            |              |    | Full Load Torque                         | 7.66 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 12/6         |              |    | Breakdown Torque                         | 30.5 LB-FT               |
| R.P.M.                | 3450         |              |    | Pull-up Torque                           | 18.1 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 22.5 LB-FT               |
| NEMA Design Code      | A            | KVA Code     | K  | Starting Current                         | 50.7 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.93 A                   |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 91 | Line-line Res. @ 25°C                    | 3.06 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 34°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 42°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 50                       |
|                       |              |              |    | Rotor inertia                            | 0.103 LB-FT <sup>2</sup> |

**Load Characteristics 460 V, 60 Hz, 5 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 62   | 81   | 88   | 91   | 92   | 93   | 92   |
| Efficiency      | 81.1 | 86.7 | 87.6 | 86.9 | 85.5 | 83.7 | 86.1 |
| Speed           | 3567 | 3537 | 3506 | 3469 | 3429 | 3387 | 3445 |
| Line amperes    | 2.45 | 3.44 | 4.64 | 6.02 | 7.51 | 9.09 | 6.91 |

## Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values





