

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **HM3112A**

**.75HP,1725RPM,3PH,60HZ,56,3420M,OPEN,F1**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | H     | Status:        | INA/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 3420M | Elec. Spec: | 34WG2100 | CD Diagram:   | CD0007     |
| Enclosure:  | OPEN  | Mfg Plant:     |       | Mech. Spec: | 34F494   | Layout:       | 34LYF494   |
| Frame:      | 56    | Mounting:      | F1    | Poles:      | 04       | Created Date: |            |
| Base:       | RG    | Rotation:      | R     | Insulation: | B        | Eff. Date:    | 04-16-2012 |
| Leads:      | 12#18 |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

|                   |              |                |  |      |     |   |    |   |  |
|-------------------|--------------|----------------|--|------|-----|---|----|---|--|
| Nameplate NP1257L |              |                |  |      |     |   |    |   |  |
| CAT.NO.           |              |                |  |      |     |   |    |   |  |
| SPEC.             | 34F494-2100  |                |  |      |     |   |    |   |  |
| HP                | .75          |                |  |      |     |   |    |   |  |
| VOLTS             | 230/460      |                |  |      |     |   |    |   |  |
| AMP               | 3/1.5        |                |  |      |     |   |    |   |  |
| RPM               | 1725         |                |  |      |     |   |    |   |  |
| FRAME             | 56           | HZ             |  | 60   | PH  | 3 |    |   |  |
| SER.F.            | 1.25         | CODE           |  | K    | DES | B | CL | B |  |
| NEMA-NOM-EFF      | 74           | PF             |  | 60   |     |   |    |   |  |
| RATING            | 40C AMB-CONT |                |  |      |     |   |    |   |  |
| CC                |              | USABLE AT 208V |  | 3.6  |     |   |    |   |  |
| DE                | 6203         | ODE            |  | 6203 |     |   |    |   |  |
| ENCL              | OPEN         | SN             |  |      |     |   |    |   |  |
|                   | SFA 3.4/1.7  |                |  |      |     |   |    |   |  |

| Parts List  |                                          |          |
|-------------|------------------------------------------|----------|
| Part Number | Description                              | Quantity |
| SA010390    | SA 34F494-2100                           | 1.000 EA |
| RA006769    | RA 34F494-2100                           | 1.000 EA |
| WD4100A01   | DP-875 HEYCO PLUG OR 62MP0875 MICRO PLAS | 1.000 EA |
| NS2512A01   | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 34CB3002A05 | CB W/.88 DIA @ 12 & .88 DIA @ 6          | 1.000 EA |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB              | 2.000 EA |
| SP1000A01   | TERM BOARD, MODEL 34 SW                  | 1.000 EA |
| 51XT0832A08 | 8-32 X 1/2 TY23 HXWS SLDSR               | 3.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW5100A03SP | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 34EP3212A02 | PU ENDPLATE, MODEL 34 OPEN               | 1.000 EA |
| XY1032A02   | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 EA |
| 34CB4517    | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| 34CB4501SP  | TERMINAL BOX LID, STAMPED X (PLATED)     | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| HW2501D13SP | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A04   | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |
| HA6001A03   | THERMAL RETAINER (PLATED)                | 1.000 EA |
| NS2500A01   | INSULATOR, AUTO THER PROT                | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| 34EP3202A56 | FR EP, MACH 34L OPEN W/NO LEAD HOLE      | 1.000 EA |
| MG1000G27   | MED CHARCOAL METALLIC GREY               | 0.014 GA |
| 10XF0440S02 | 04-40 X 1/8 TYPE F HEX HD STAINLESS STIC | 2.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| TPMYJ57KX              | THERMAL 3PH 0.75 AUT 120C                | 1.000 EA |
| HA3100A15              | THRUBOLT 10-32 X 8.375                   | 4.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA |
| LB1125C01              | STD (STOCK) CARTON LABEL BALDOR WITH FLA | 1.000 EA |
| LB1118                 | LABEL,WARNING (ROLL LABEL)               | 1.000 EA |
| LC0007                 | CONNECTION LABEL                         | 1.000 EA |
| NP1257L                | ALUM UL CSA CC THERMAL REV MTG           | 1.000 EA |
| 34PA1002               | PACKING GROUP, BALDOR                    | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 6636 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 34WG2100-R001 | <b>Type:</b> 3420M | <b>Enclosure:</b> OPEN |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                        |
|-----------------------|--------------|--------------|----|------------------------------------------|------------------------|
| Rated Output (HP)     | .75          |              |    | Full Load Torque                         | 2.25 LB-FT             |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line         |
| Full Load Amps        | 3/1.5        |              |    | Breakdown Torque                         | 10 LB-FT               |
| R.P.M.                | 1725         |              |    | Pull-up Torque                           | 8.5 LB-FT              |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 8.8 LB-FT              |
| NEMA Design Code      | B            | KVA Code     | K  | Starting Current                         | 10 A                   |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                          | 1.2 A                  |
| NEMA Nom. Eff.        | 74           | Power Factor | 60 | Line-line Res. @ 25°C                    | 17.68 Ω                |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 48°C                   |
| S.F. Amps             | 3.4/1.7      |              |    | Temp. Rise @ S.F. Load                   | 59°C                   |
|                       |              |              |    | Rotor inertia                            | 0.0476 LF <sup>2</sup> |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 28   | 42   | 55   | 64   | 71   | 76   | 71   |
| Efficiency      | 56.1 | 69.7 | 74.7 | 76.2 | 76.1 | 75.2 | 76.1 |
| Speed           | 1783 | 1766 | 1749 | 1731 | 1711 | 1693 | 1711 |
| Line amperes    | 1.2  | 1.2  | 1.3  | 1.5  | 1.6  | 1.8  | 1.6  |

## Performance Graph at 460V, 60Hz, 0.75HP Typical performance - Not guaranteed values





