

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **VM7034-I**

**1.5//1HP,1755//1460RPM,3PH,60//50HZ,56C**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | M    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3521M | Elec. Spec: | 35WGZ541 | CD Diagram:   | CD0005     |
| Enclosure:  | XPFC | Mfg Plant:     |       | Mech. Spec: | 35X748   | Layout:       | 35LYX748   |
| Frame:      | 56C  | Mounting:      | F1    | Poles:      | 04       | Created Date: | 10-15-2008 |
| Base:       | N    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 10-08-2013 |
| Leads:      | 9#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP0977XP |                  |              |            |      |   |       |     |  |
|--------------------|------------------|--------------|------------|------|---|-------|-----|--|
| NO.                |                  | TEMP CODE    | T3C        |      |   |       |     |  |
| SPEC.              | 35X748Z541H1     | DE BRG       | 6205       |      |   |       |     |  |
| CAT.NO.            | VM7034-I         | ODE BRG      | 6203       |      |   |       |     |  |
| HP                 | 1.5//1           | GREASE       | POLYREX EM |      |   |       |     |  |
| VOLTS              | 230/460//190/380 | MOTOR WEIGHT | 50 LBS     |      |   |       |     |  |
| AMPS               | 4.8/2.4//4.2/2.1 | NEMA-NOM-EFF | 84         |      |   |       |     |  |
| RPM                | 1755//1460       | FL PF        | 70         |      |   |       |     |  |
| CYCLE              | 60//50           | PH           | 3          | CL   | F | FRAME | 56C |  |
| SER.F.             | 1.15             | DES          | B          | CODE | M | CC    |     |  |
| SER.               |                  |              |            |      |   |       |     |  |
| RATING             | 40C AMB-CONT     |              |            |      |   |       |     |  |
| USABLE AT 208V     |                  |              |            |      |   |       |     |  |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA177128      | SA 35X748Z541H1                          | 1.000 EA |
| RA165180      | RA 35X748Z541H1                          | 1.000 EA |
| 34FN3002B01   | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| 35CB1005A01   | CONDUIT BOX,MACH - GROUP "C" MTRS        | 1.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01     | 003SS CUP WASHER, FOR #8 SCREW           | 1.000 EA |
| 35EP3700B07   | FR ENDPLATE, XPFC - GROUP C, W/ DRAIN    | 1.000 EA |
| HW4506A02     | BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI | 1.000 EA |
| HW3022E05     | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |
| HW5100A03SP   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP1704A39   | PUEP 205 BRG XP GRP C W/SLINGER, DRAIN   | 1.000 EA |
| HW4506A02     | BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI | 1.000 EA |
| HW3022E05     | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| HW4001A01     | 1/4 HX SOC PIPE PLG (F/S) ALLOY STEEL W/ | 2.000 EA |
| 60XN1032A07   | 10-32 X 1/2 TRUSS HEAD, TORX SERRATED ZN | 2.000 EA |
| XY3118A12     | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 35FH4005A01SP | IEC FH NO GREASER W/AUTOPHORETIC PRIMER  | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 35CB1501A01   | CONDUIT BOX LID, MACH. - GROUP "C" MTRS  | 1.000 EA |
| RM1020A41     | O-RING, -150 BUNA-N, .103 CS X 2.862 ID  | 1.000 EA |
| HA2071A02     | SLINGER ALUM (AUTO)                      | 1.000 EA |
| 80XN1032A04   | 10-32 X 1/4 SET SCREW                    | 1.000 EA |
| HW2501D13SP   | KEY, 3/16 SQ X 1.375                     | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HA7000A04              | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 6.000 EA |
| LB1359                 | ALUM XP CAUTION LABEL                    | 1.000 EA |
| MJ1000A75              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1025Z20              | ACTIVATOR WILKOFAS 060.32                | 0.010 GA |
| MG1025G29              | MUNSELL 4.5Y 5.3/0.7 DARK CHARCOAL GREY  | 0.017 GA |
| HA3104A08              | THRUBOLT-5/16-18X9.375 X X               | 4.000 EA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| LB1125C01              | STD (STOCK) CARTON LABEL BALDOR WITH FLA | 1.000 EA |
| LC0145B01              | CONNECTION LABEL                         | 1.000 EA |
| NP0977XP               | BR XP UL CSA CC CL-I GP-C&D              | 1.000 EA |
| 36PA1000               | PACK GROUP W/LB5001                      | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA |

**AC Induction Motor Performance Data**  
Record # 27934 - Preliminary Data Sheet

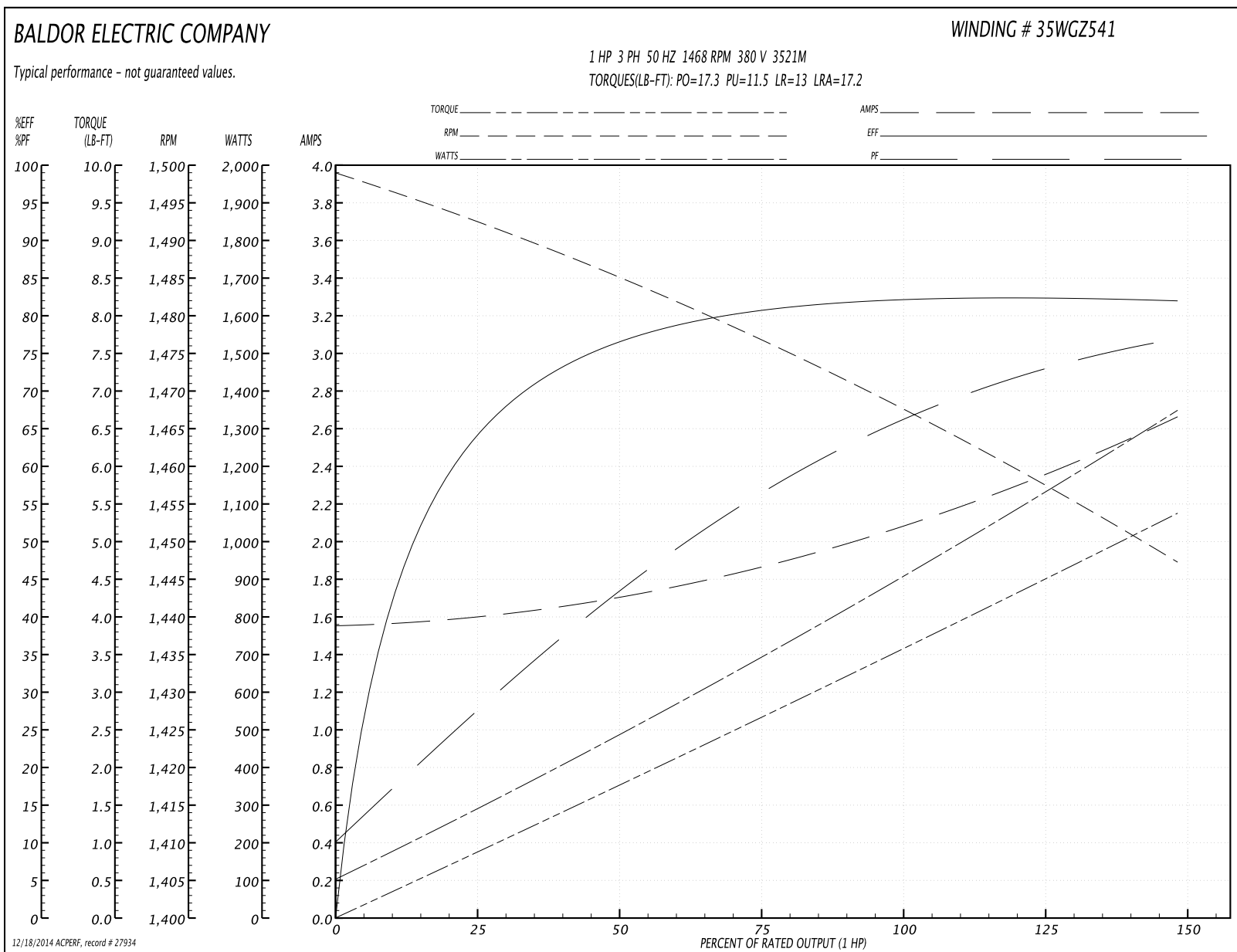
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGZ541-R016 | <b>Type:</b> 3521M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |                  |              |    | 380 V, 50 Hz:<br>High Voltage Connection |                       |
|-----------------------|------------------|--------------|----|------------------------------------------|-----------------------|
| Rated Output (HP)     | 1.5//1           |              |    | Full Load Torque                         | 3.55 LB-FT            |
| Volts                 | 230/460//190/380 |              |    | Start Configuration                      | direct on line        |
| Full Load Amps        | 4.8/2.4//4.2/2.1 |              |    | Breakdown Torque                         | 17.3 LB-FT            |
| R.P.M.                | 1755//1460       |              |    | Pull-up Torque                           | 11.5 LB-FT            |
| Hz                    | 60//50           | Phase        | 3  | Locked-rotor Torque                      | 13 LB-FT              |
| NEMA Design Code      | B                | KVA Code     | M  | Starting Current                         | 17.2 A                |
| Service Factor (S.F.) | 1.15             |              |    | No-load Current                          | 1.56 A                |
| NEMA Nom. Eff.        | 84               | Power Factor | 70 | Line-line Res. @ 25°C                    | 10.5 Ω                |
| Rating - Duty         | 40C AMB-CONT     |              |    | Temp. Rise @ Rated Load                  | 50°C                  |
| S.F. Amps             |                  |              |    | Temp. Rise @ S.F. Load                   | 57°C                  |
|                       |                  |              |    | Rotor inertia                            | 0.124 LF <sup>2</sup> |

**Load Characteristics 380 V, 50 Hz, 1 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 27   | 43   | 56   | 65   | 73   | 77   | 70   |
| Efficiency      | 63.3 | 75.7 | 80.6 | 82.3 | 82.5 | 81.8 | 82.4 |
| Speed           | 1493 | 1485 | 1477 | 1468 | 1458 | 1447 | 1462 |
| Line amperes    | 1.59 | 1.69 | 1.86 | 2.09 | 2.35 | 2.66 | 2.25 |

Performance Graph at 380V, 50Hz, 1.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 29109 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGZ541-R016 | <b>Type:</b> 3521M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |                  |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                       |
|-----------------------|------------------|--------------|----|------------------------------------------|-----------------------|
| Rated Output (HP)     | 1.5//1           |              |    | Full Load Torque                         | 4.43 LB-FT            |
| Volts                 | 230/460//190/380 |              |    | Start Configuration                      | direct on line        |
| Full Load Amps        | 4.8/2.4//4.2/2.1 |              |    | Breakdown Torque                         | 19.4 LB-FT            |
| R.P.M.                | 1755//1460       |              |    | Pull-up Torque                           | 10.5 LB-FT            |
| Hz                    | 60//50           | Phase        | 3  | Locked-rotor Torque                      | 13.8 LB-FT            |
| NEMA Design Code      | B                | KVA Code     | M  | Starting Current                         | 19 A                  |
| Service Factor (S.F.) | 1.15             |              |    | No-load Current                          | 1.59 A                |
| NEMA Nom. Eff.        | 84               | Power Factor | 70 | Line-line Res. @ 25°C                    | 10.1 Ω                |
| Rating - Duty         | 40C AMB-CONT     |              |    | Temp. Rise @ Rated Load                  | 56°C                  |
| S.F. Amps             |                  |              |    | Temp. Rise @ S.F. Load                   | 65°C                  |
|                       |                  |              |    | Rotor inertia                            | 0.124 LF <sup>2</sup> |

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 30   | 48   | 62   | 70   | 77   | 80   | 74   |
| Efficiency      | 68.2 | 79.4 | 83   | 84   | 83.9 | 83   | 83.9 |
| Speed           | 1792 | 1782 | 1772 | 1761 | 1749 | 1735 | 1754 |
| Line amperes    | 1.64 | 1.8  | 2.04 | 2.35 | 2.71 | 3.12 | 2.57 |

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values

