

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM7034T-I**

**1.5//1HP,1760//1460 75CRISERPM,3PH,60//5**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | Q    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3526M | Elec. Spec: | 35WGM493 | CD Diagram:   | CD0005     |
| Enclosure:  | XPFC | Mfg Plant:     |       | Mech. Spec: | 35X081   | Layout:       | 35LYX081   |
| Frame:      | 145T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 09-27-2010 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 11-11-2016 |
| Leads:      | 9#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP0977XPSLEV

|                |                                |              |   |              |            |         |      |
|----------------|--------------------------------|--------------|---|--------------|------------|---------|------|
| NO.            |                                |              |   | CC           | 010A       |         |      |
| SER.           |                                |              |   | TEMP CODE    | T3C        |         |      |
| SPEC.          | 35X081M493G1                   |              |   |              |            |         |      |
| CAT.NO.        | EM7034T-I                      |              |   |              |            |         |      |
| HP             | 1.5//1                         |              |   |              |            |         |      |
| VOLTS          | 230/460//190/380               |              |   |              |            |         |      |
| AMPS           | 4.4/2.2//3.8/1.9               |              |   |              |            |         |      |
| RPM            | 1760//1460 75CRISE             |              |   | MOTOR WEIGHT | 61         |         |      |
| HERTZ          | 60//50                         | PH           | 3 | CL           | F          | DE BRG  | 6205 |
| SER.F.         | 1.15                           | DES          | B | CODE         | L          | ODE BRG | 6203 |
| FRAME          | 145T                           | GREASE       |   |              | POLYREX EM |         |      |
| RATING         | 40C AMB-CONT 55C AMB AT 1.0 SF |              |   |              |            |         |      |
| USABLE AT 208V | 4.5                            | NEMA-NOM-EFF |   |              | 86.5       | PF      | 73   |
|                | NEMA MG-1 PT 5,IP55            |              |   |              |            |         |      |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA203670      | SA 35X081M493G1                          | 1.000 EA |
| RA190930      | RA 35X081M493G1                          | 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     | BRASS CUP WASHER, FOR #8 SCREW           | 1.000 EA |
| 35EP1715A08   | FREP XPFC 203 BRG 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 |
| 35EP3701B05   | PUEP X-PROOF - 205 BRG GROUP C&E         | 1.000 EA |
| HA2009A86     | SLINGER FOR GROUP E MTRS - 205 BRG.      | 1.000 EA |
| 80XN0632J06   | SET SCREW, 6-32 X 3/8", HEX SOCKET, AS   | 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 |
| 35FH4005A01SP | IEC FH NO GREASER W/PRIMED               | 1.000 EA |
| XY3118A12     | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 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 |
| LB1359F       | ALUM XP CAUTION LABEL                    | 1.000 EA |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A01     | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 6.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| 51XB1214A16            | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| MG1025G29              | WILKOFAS, 789.229, DARK CHARCOAL GRAY    | 0.017 GA |
| HA3104A08              | THRUBOLT-5/16-18X9.375 X X               | 4.000 EA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| LC0145B01              | CONNECTION LABEL                         | 1.000 EA |
| NP0977XPSLEV           | SS XP UL CSA-EEV CC CL-I GP-C&D          | 1.000 EA |
| 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 # 34480 - Typical performance - not guaranteed values

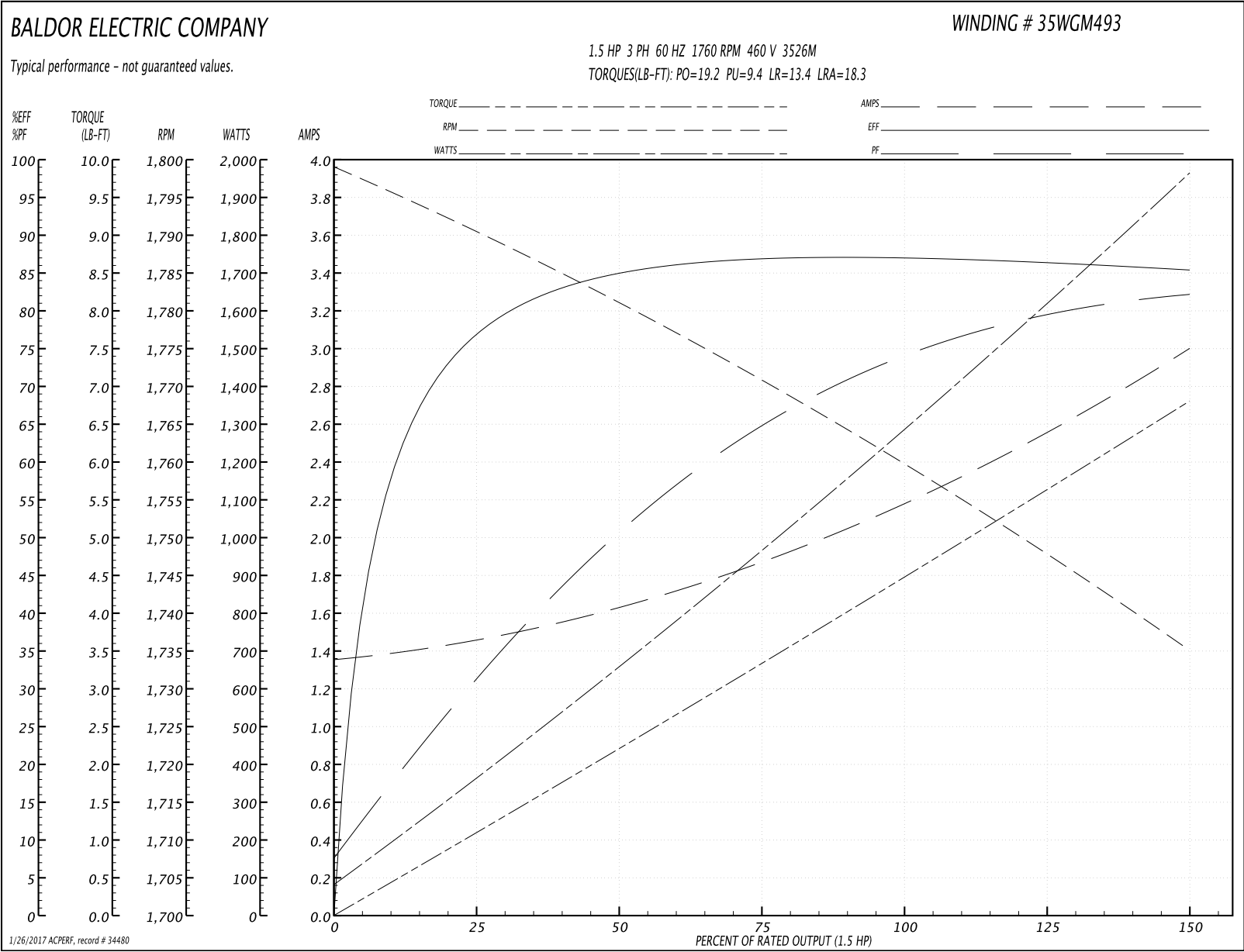
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM493-R005 | <b>Type:</b> 3526M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |                  |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|------------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 1.5//1           |              |    | Full Load Torque                         | 4.47 LB-FT               |
| Volts                 | 230/460//190/380 |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 4.4/2.2//3.8/1.9 |              |    | Breakdown Torque                         | 19.2 LB-FT               |
| R.P.M.                | 1760//1460       |              |    | Pull-up Torque                           | 9.4 LB-FT                |
| Hz                    | 60//50           | Phase        | 3  | Locked-rotor Torque                      | 13.4 LB-FT               |
| NEMA Design Code      | B                | KVA Code     | L  | Starting Current                         | 18.3 A                   |
| Service Factor (S.F.) | 1.15             |              |    | No-load Current                          | 1.37 A                   |
| NEMA Nom. Eff.        | 86.5             | Power Factor | 73 | Line-line Res. @ 25°C                    | 10.7 Ω                   |
| Rating - Duty         | 40C AMB-CONT     |              |    | Temp. Rise @ Rated Load                  | 44°C                     |
| S.F. Amps             |                  |              |    | Temp. Rise @ S.F. Load                   | 52°C                     |
|                       |                  |              |    | Locked-rotor Power Factor                | 52                       |
|                       |                  |              |    | Rotor inertia                            | 0.154 LB-FT <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    | 31   | 51   | 65   | 73   | 79   | 83   | 77   |
| Efficiency      | 76.2 | 84.5 | 86.9 | 87.2 | 86.5 | 85.3 | 86.8 |
| Speed           | 1791 | 1781 | 1771 | 1760 | 1748 | 1735 | 1753 |
| Line amperes    | 1.44 | 1.61 | 1.86 | 2.19 | 2.58 | 2.98 | 2.42 |

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



**AC Induction Motor Performance Data**

Record # 46474 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM493-R005 | <b>Type:</b> 3526M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |                  |              |    | 380 V, 50 Hz:<br>High Voltage Connection |                          |
|-----------------------|------------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 1.5//1           |              |    | Full Load Torque                         | 3.57 LB-FT               |
| Volts                 | 230/460//190/380 |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 4.4/2.2//3.8/1.9 |              |    | Breakdown Torque                         | 17.8 LB-FT               |
| R.P.M.                | 1760//1460       |              |    | Pull-up Torque                           | 9.36 LB-FT               |
| Hz                    | 60//50           | Phase        | 3  | Locked-rotor Torque                      | 13.3 LB-FT               |
| NEMA Design Code      | B                | KVA Code     | L  | Starting Current                         | 17.3 A                   |
| Service Factor (S.F.) | 1.15             |              |    | No-load Current                          | 1.34 A                   |
| NEMA Nom. Eff.        | 86.5             | Power Factor | 73 | Line-line Res. @ 25°C                    | 10.1 Ω                   |
| Rating - Duty         | 40C AMB-CONT     |              |    | Temp. Rise @ Rated Load                  | 35°C                     |
| S.F. Amps             |                  |              |    | Temp. Rise @ S.F. Load                   | 41°C                     |
|                       |                  |              |    | Locked-rotor Power Factor                | 57                       |
|                       |                  |              |    | Rotor inertia                            | 0.154 LB-FT <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   | 45   | 59   | 69   | 75   | 80   | 73   |
| Efficiency      | 72.8 | 82.3 | 85.4 | 86.2 | 85.9 | 84.9 | 86   |
| Speed           | 1492 | 1485 | 1476 | 1468 | 1458 | 1447 | 1462 |
| Line amperes    | 1.39 | 1.5  | 1.67 | 1.91 | 2.2  | 2.5  | 2.08 |



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

