

# **BALDOR® • RELIANCE**

**Product Information Packet**

**ELECTRIC MOTOR WHOLESAL.COM**

**EM7081T**

**50//40HP,3540//2940RPM,3PH,60//50HZ,326T**

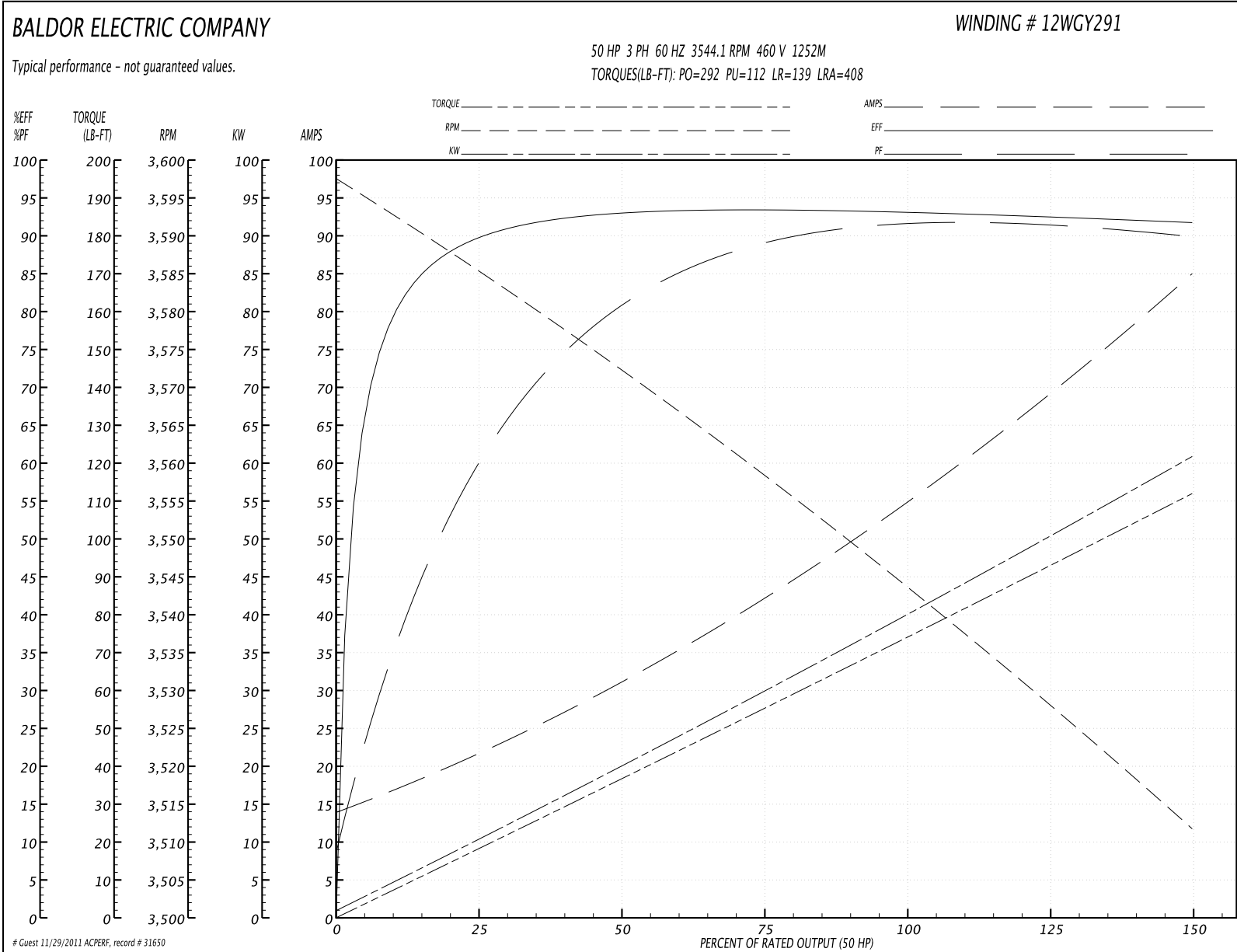
| Part Detail        |                  |              |       |                |          |               |            |
|--------------------|------------------|--------------|-------|----------------|----------|---------------|------------|
| Revision:          | -                | Status:      | PRD/A | Change #:      |          | Proprietary:  | No         |
| Type:              | AC               | Prod. Type:  | 1252M | Elec. Spec:    | 12WGY291 | CD Diagram:   |            |
| Enclosure:         | XPFC             | Mfg Plant:   |       | Mech. Spec:    | 12M049   | Layout:       |            |
| Frame:             | 326TS            | Mounting:    | F1    | Poles:         | 02       | Created Date: | 06-28-2010 |
| Base:              | RG               | Rotation:    | R     | Insulation:    | F        | Eff. Date:    | 06-30-2010 |
| Leads:             | 9#8              | Literature:  |       | Elec. Diagram: |          | Replaced By:  |            |
| Nameplate NP1426XP |                  |              |       |                |          |               |            |
| NO.                |                  | CC           |       |                |          | 010A          |            |
| SER.               |                  |              |       |                |          |               |            |
| SPEC.              | 12M049Y291G1     |              |       |                |          |               |            |
| CAT.NO.            | EM7081T          |              |       |                |          |               |            |
| HP                 | 50//40           | T. CODE      | T3C   |                |          |               |            |
| VOLTS              | 230/460//190/380 |              |       |                |          |               |            |
| AMPS               | 112/56//110/55   |              |       |                |          |               |            |
| RPM                | 3540//2940       |              |       |                |          |               |            |
| HZ                 | 60//50           | PH           | 3     | CL             | F        |               |            |
| SER.F.             | 1.00             | DES          | A     | CODE           | H        |               |            |
| RATING             | 40C AMB-CONT     |              |       |                |          |               |            |
| FRAME              | 326TS            | NEMA-NOM-EFF | 93    | PF             | 90       |               |            |
| USABLE AT 208V     | 122              |              |       |                |          |               |            |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA198989    | SA 12M049Y291G1                          | 1.000 EA |
| RA186340    | RA 12M049Y291G1                          | 1.000 EA |
| 37FN3002C04 | EXFN, PLASTIC, 6.00 OD, 2.000 ID         | 1.000 EA |
| 12CB1001A01 | K.O.BOX, MACH X-PROOF; 1.50 NPT HOLE     | 1.000 EA |
| 10XN3118K16 | 5/16-18 X 1" GRADE #5, STL, ZINC PLATE   | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| WD1000B16   | KPA-4C BURNDY TERMINAL                   | 1.000 EA |
| 10XN2520K06 | 1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P | 1.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 EA |
| 12EP1705A01 | ENDPLATE, MACH. 312 - EXPLOSION PROOF 31 | 1.000 EA |
| HA3051A03   | 1/2-13X2.75 BLT GR8 1.75 TO E NC F/S     | 4.000 EA |
| HW1001A50   | LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I | 4.000 EA |
| HW5100A13   | W4627-047 WVY WSHER                      | 1.000 EA |
| 12EP1706A01 | ENDPLATE, MACH. 312 - EXPLOSION PROOF 31 | 1.000 EA |
| 10XN3118K44 | 5/16-18 X 2.75" HEX HD, GRADE 5          | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| HA3051A03   | 1/2-13X2.75 BLT GR8 1.75 TO E NC F/S     | 4.000 EA |
| HW1001A50   | LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I | 4.000 EA |
| 12FH1001A01 | FAN HOUSING 312 EXPLOSION PROOF MOTORS   | 1.000 EA |
| 10XN3118K12 | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 3.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 3.000 EA |
| 12CB1501A01 | COND.BOX LID, MACH., X-PROOF, 310,312    | 1.000 EA |
| 10XN3816K20 | 3/8-16 X 1.25 HEX HD CAP GRADE 5         | 6.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 6.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| HW2501H18              | KEY, 1/2 SQ X 2.000                      | 1.000 EA |
| LB1115                 | LABEL,LIFTING DEVICE                     | 1.000 EA |
| HW4500A20              | 1/8NPT SL PIPE PLUG                      | 2.000 EA |
| MJ1000A75              | GREASE, POLYREX EM EXXON                 | 0.200 LB |
| HW4500A20              | 1/8NPT SL PIPE PLUG                      | 2.000 EA |
| HW2500A25              | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| 51XB1214A20            | 12-14X1.25 HWSSLD SERTYB                 | 1.000 EA |
| MG1025G05              | PAINT 789.201 (WILCO) DARK GRAY METALLIC | 0.080 GA |
| 85XU0407A04            | #4-7 X 1/4 DRIVE PIN                     | 6.000 EA |
| LB1073                 | LABEL, UL/CSA "XP"                       | 1.000 EA |
| LB5040                 | INSTRUCTION TAG, AC & DC                 | 1.000 EA |
| LB1119                 | WARNING LABEL                            | 1.000 EA |
| LB1125C04              | STD-E (STOCK CTN LABEL STD-E WITH FLAG)  | 4.000 EA |
| LB1357                 | ENERGY GUIDE LABEL (BOX LABEL)           | 1.000 SH |
| LC0181                 | CONNECTION LABEL                         | 1.000 EA |
| NP1426XP               | UL/CSA, CLI GP-D,CLII GP-F&G,CC          | 1.000 EA |
| 14PA1036               | PKGP 314 CUSTOM NO CARTON                | 1.000 EA |

| Performance Data at 460V, 60Hz, 50.0HP (Typical performance - Not guaranteed values) |                                   |        |        |                      |             |        |      |
|--|-----------------------------------|--------|--------|----------------------|-------------|--------|------|
| General Characteristics  |                                   |        |        |                      |             |        |      |
| Full Load Torque:  | 74.4 LB-FT                        |        |        | Start Configuration: | DOL         |        |      |
| No-Load Current:   | 14.9 Amps                         |        |        | Break-Down Torque:   | 292.0 LB-FT |        |      |
| Line-line Res. @ 25°C.:  | 0.11257 Ohms A Ph / 0.0 Ohms B Ph |        |        | Pull-Up Torque:      | 112.0 LB-FT |        |      |
| Temp. Rise @ Rated Load:   | 77 C                              |        |        | Locked-Rotor Torque: | 139.0 LB-FT |        |      |
| Temp. Rise @ S.F. Load:  |                                   |        |        | Starting Current:    | 408.0 Amps  |        |      |
| Load Characteristics   |                                   |        |        |                      |             |        |      |
| % of Rated Load  | 25                                | 50     | 75     | 100                  | 125         | 150    | S.F. |
| Power Factor:  | 66.0                              | 82.0   | 88.0   | 90.0                 | 91.0        | 90.0   | 0.0  |
| Efficiency:  | 91.1                              | 93.8   | 94.2   | 93.9                 | 93.2        | 92.3   | 0.0  |
| Speed:   | 3584.1                            | 3571.8 | 3558.2 | 3544.1               | 3528.2      | 3511.2 | 0.0  |
| Line Amperes:  | 20.4                              | 30.8   | 42.9   | 55.8                 | 69.5        | 84.6   | 0.0  |

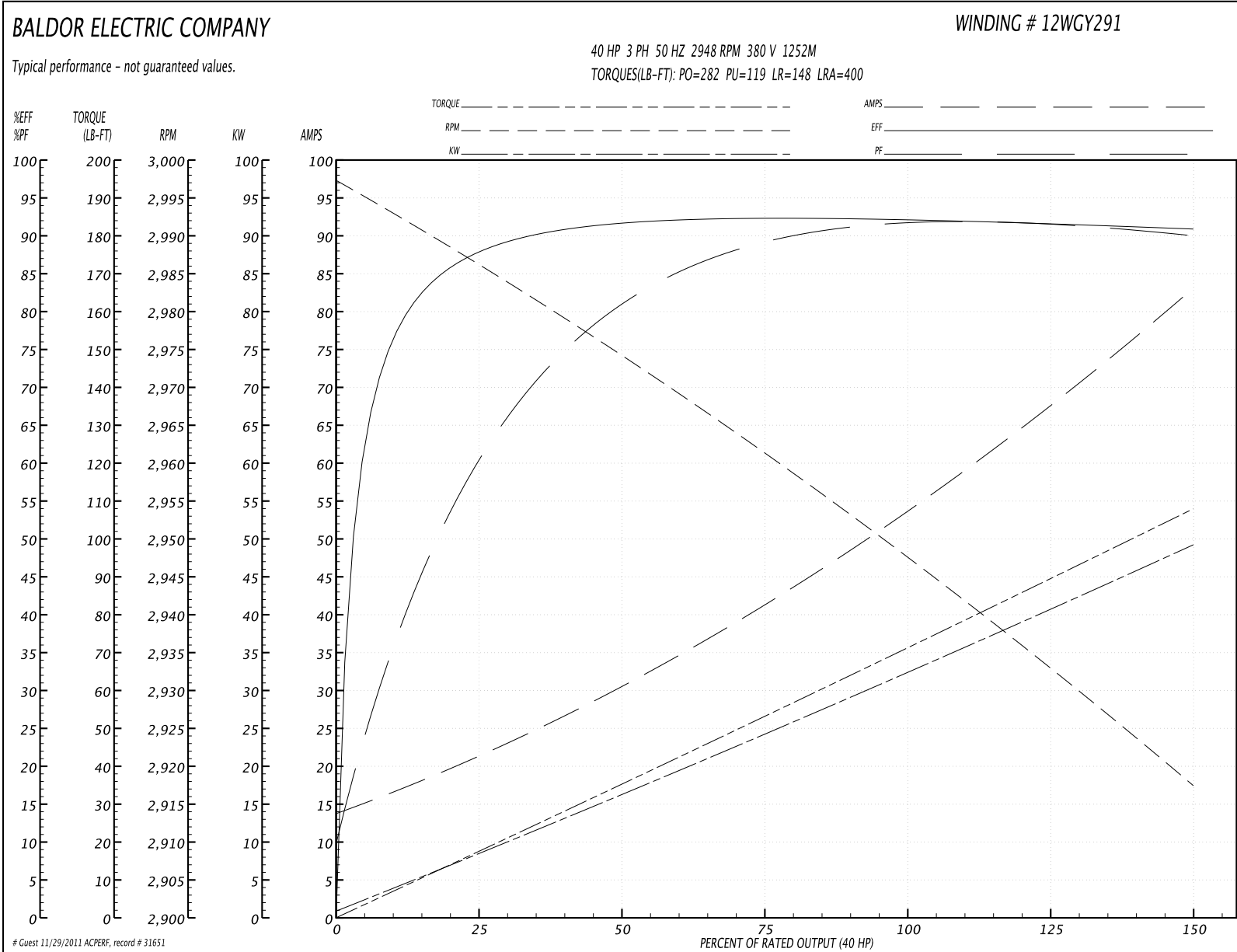
Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values

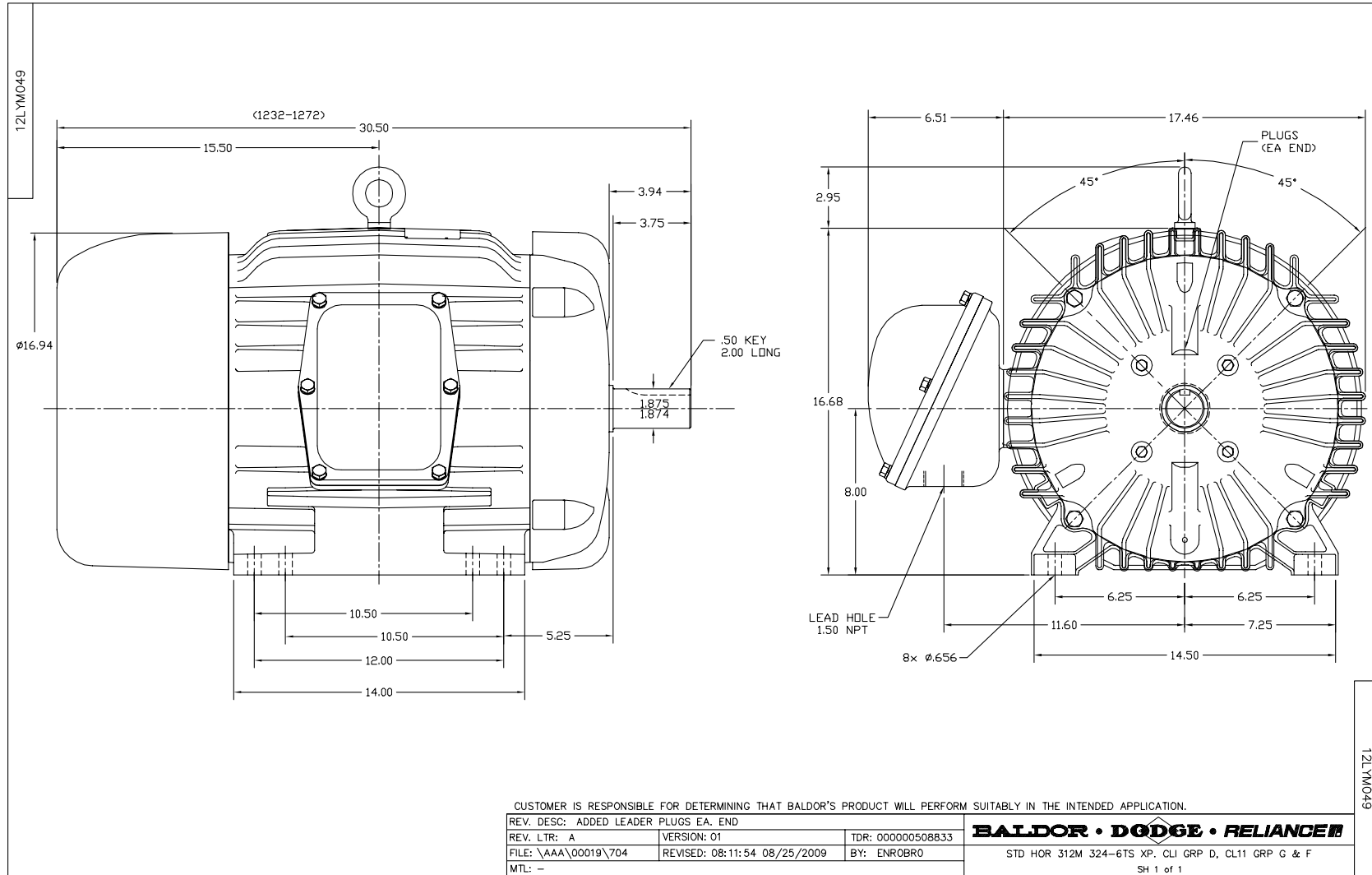


**Performance Data at 380V, 50Hz, 40.0HP (Typical performance - Not guaranteed values)**

| General Characteristics  |                                 |        |        |                      |             |        |      |
|--------------------------|---------------------------------|--------|--------|----------------------|-------------|--------|------|
| Full Load Torque:        | 71.6 LB-FT                      |        |        | Start Configuration: | DOL         |        |      |
| No-Load Current:         | 14.7 Amps                       |        |        | Break-Down Torque:   | 282.0 LB-FT |        |      |
| Line-line Res. @ 25°C.:  | 0.104 Ohms A Ph / 0.0 Ohms B Ph |        |        | Pull-Up Torque:      | 119.0 LB-FT |        |      |
| Temp. Rise @ Rated Load: | 73 C                            |        |        | Locked-Rotor Torque: | 148.0 LB-FT |        |      |
| Temp. Rise @ S.F. Load:  | 89 C                            |        |        | Starting Current:    | 400.0 Amps  |        |      |
| Load Characteristics     |                                 |        |        |                      |             |        |      |
| % of Rated Load          | 25                              | 50     | 75     | 100                  | 125         | 150    | S.F. |
| Power Factor:            | 66.0                            | 82.0   | 88.0   | 90.0                 | 91.0        | 91.0   | 0.0  |
| Efficiency:              | 86.4                            | 91.5   | 92.4   | 92.3                 | 91.7        | 90.8   | 0.0  |
| Speed:                   | 2985.0                          | 2974.0 | 2961.0 | 2948.0               | 2933.0      | 2917.0 | 0.0  |
| Line Amperes:            | 20.1                            | 30.2   | 42.0   | 54.6                 | 67.9        | 82.7   | 0.0  |

Performance Graph at 380V, 50Hz, 40.0HP Typical performance - Not guaranteed values

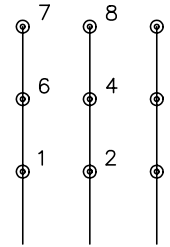




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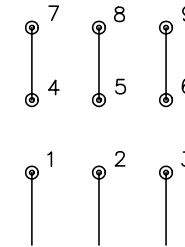


LOW VOLTAGE  
(2D)



LINE

HIGH VOLTAGE  
(1D)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|   |         |                        |              |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: C                               | BY: JLP | REVISED: 01/21/99 2:28 | TDR: 0171435 |
| 0810D0                                    |         | FILE: AAA00005148      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

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