

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **M2504T**

**5HP,880RPM,3PH,60HZ,254T,3944M,OPSB,F1,N**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | D    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3944M | Elec. Spec: | 39WGX339 | CD Diagram:   | CD0005     |
| Enclosure:  | OPSB | Mfg Plant:     |       | Mech. Spec: | 39D101   | Layout:       | 39LYD101   |
| Frame:      | 254T | Mounting:      | F1    | Poles:      | 08       | Created Date: | 11-09-2011 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 12-15-2014 |
| Leads:      | 9#12 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

|                   |              |                |  |  |      |     |  |   |       |   |
|-------------------|--------------|----------------|--|--|------|-----|--|---|-------|---|
| Nameplate NP1256L |              |                |  |  |      |     |  |   |       |   |
| CAT.NO.           | M2504T       |                |  |  |      |     |  |   |       |   |
| SPEC.             | 39D101X339H2 |                |  |  |      |     |  |   |       |   |
| HP                | 5            |                |  |  |      |     |  |   |       |   |
| VOLTS             | 230/460      |                |  |  |      |     |  |   |       |   |
| AMP               | 16/8         |                |  |  |      |     |  |   |       |   |
| RPM               | 880          |                |  |  |      |     |  |   |       |   |
| FRAME             | 254T         | HZ             |  |  | 60   | PH  |  | 3 |       |   |
| SER.F.            | 1.15         | CODE           |  |  | H    | DES |  | B | CLASS | F |
| NEMA-NOM-EFF      | 87.5         | PF             |  |  | 67   |     |  |   |       |   |
| RATING            | 40C AMB-CONT |                |  |  |      |     |  |   |       |   |
| CC                | 010A         | USABLE AT 208V |  |  | 16.2 |     |  |   |       |   |
| DE                | 6309         | ODE            |  |  | 6208 |     |  |   |       |   |
| ENCL              | OPSB         | SN             |  |  |      |     |  |   |       |   |
|                   |              |                |  |  |      |     |  |   |       |   |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA233961      | SA 39D101X339H2                          | 1.000 EA |
| RA220939      | RA 39D101X339H2                          | 1.000 EA |
| HA6361A01     | LIFTING LUG FOR 37, 39 & 40 FRAME (AUTOP | 2.000 EA |
| HA6016        | ADAPTER, CAST CONDUIT BOX                | 1.000 EA |
| 09CB3002SP    | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 51XW2520A12   | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| WD1000B17     | T&B CX35TN TERMINAL                      | 1.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 39EP3200A01SP | FR/PU ENDPLATE, MACH                     | 1.000 EA |
| HA4051A00     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| HW5100A08     | W3118-035 WVY WSHR (WB)                  | 1.000 EA |
| 39EP3201A13   | PU ENDPLATE, MACH                        | 1.000 EA |
| HA4051A00     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| XY3816A12     | 3/8-16 FINISHED NUT                      | 8.000 EA |
| 09CB3501SP    | CONDUIT BOX LID FOR 09CB3001 & 09CB3002  | 1.000 EA |
| 51XW2520A12   | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| HW2501G25     | KEY, 3/8 SQ X 2.875                      | 1.000 EA |
| LB1115N       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| MN416A01      | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA |
| HW4500A03     | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A20     | 1/8NPT SL PIPE PLUG                      | 1.000 EA |
| MJ1000A75     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.030 LB |
| HW4500A03     | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HW4500A20              | 1/8NPT SL PIPE PLUG                      | 1.000 EA |
| MG1000G27              | MED CHARCOAL METALLIC GREY               | 0.050 GA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| 39AD2002A01            | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS  | 1.000 EA |
| 39AD2002A01            | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS  | 1.000 EA |
| HA3154A09              | TB STUD 3/8-16 X 16.25                   | 4.000 EA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| LB1125C01              | STD (STOCK) CARTON LABEL BALDOR WITH FLA | 4.000 EA |
| LC0005                 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 EA |
| NP1256L                | ALUM UL CSA CC                           | 1.000 EA |
| 39PA1000               | PACKAGING GROUP 39 PRINT                 | 1.000 EA |
| LB1506                 | LABEL "AMERICAN MADE" 1.50 X 1.00        | 1.000 EA |

| Accessories |             |            |
|-------------|-------------|------------|
| Part Number | Description | Multiplier |
| 37-1402     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 16898 - Typical performance - not guaranteed values

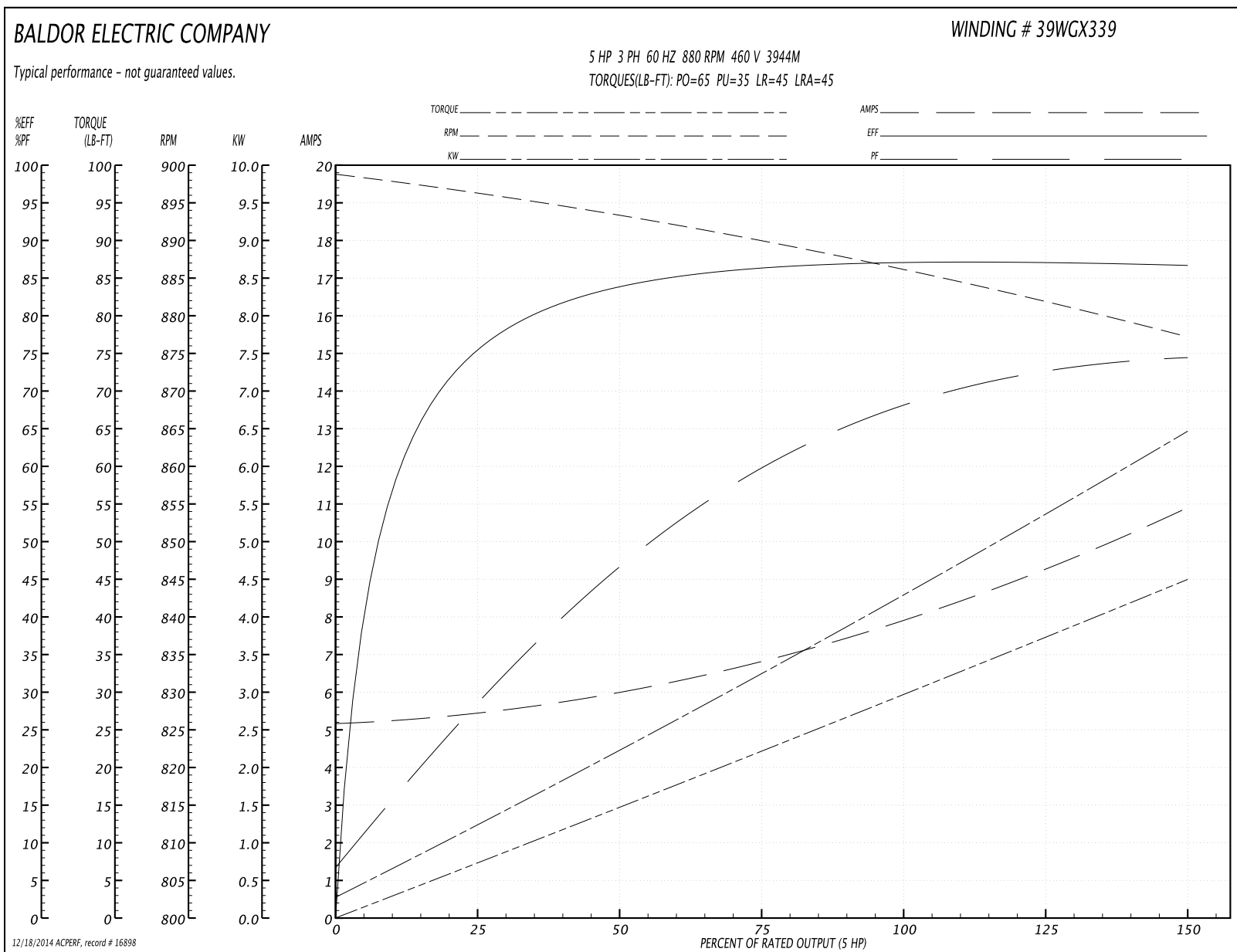
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 39WGX339-R001 | <b>Type:</b> 3944M | <b>Enclosure:</b> OPEN |
|-------------------------------|--------------------|------------------------|

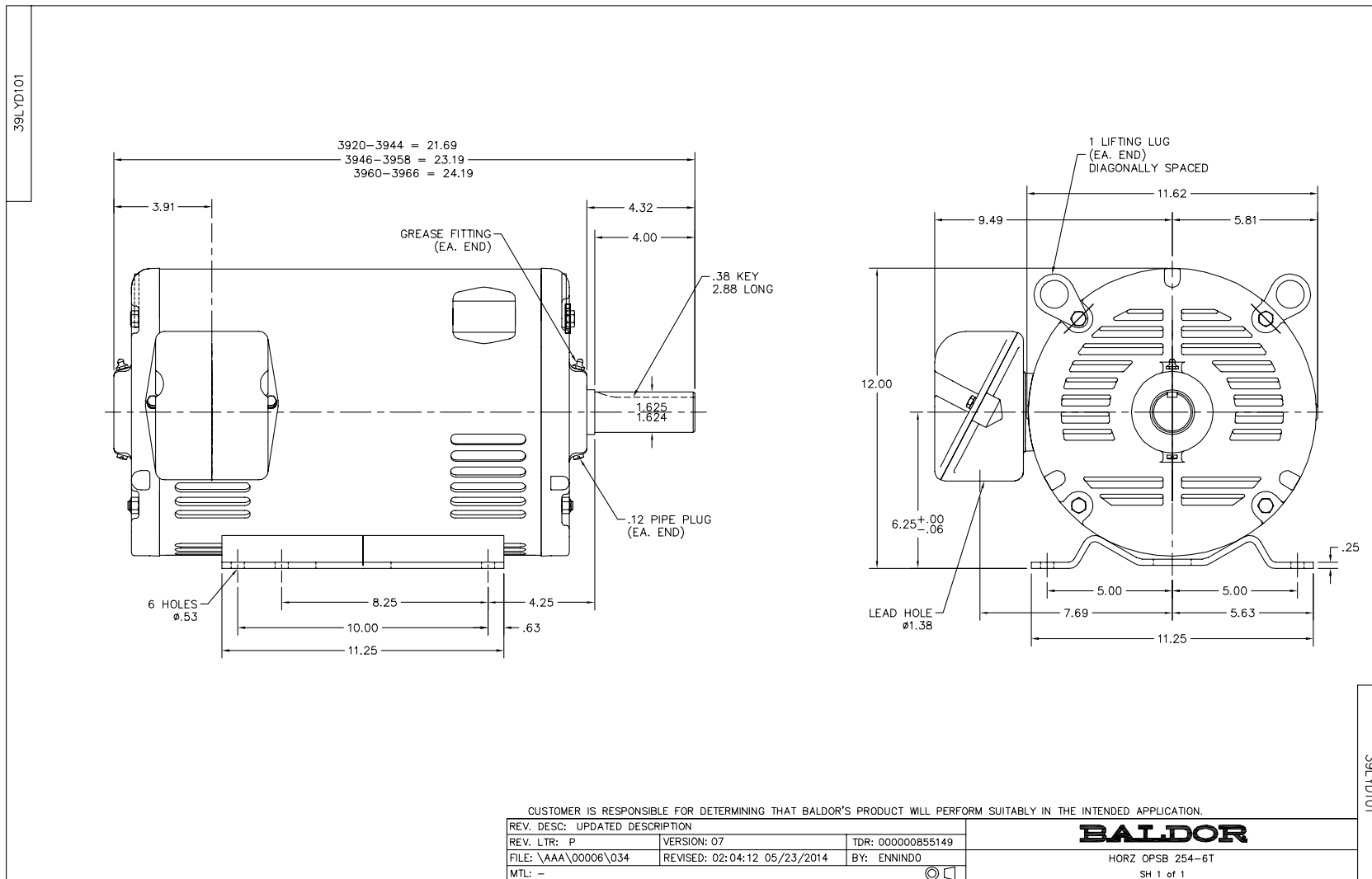
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                      |
|-----------------------|--------------|--------------|----|------------------------------------------|----------------------|
| Rated Output (HP)     | 5            |              |    | Full Load Torque                         | 30 LB-FT             |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line       |
| Full Load Amps        | 16/8         |              |    | Breakdown Torque                         | 65 LB-FT             |
| R.P.M.                | 880          |              |    | Pull-up Torque                           | 35 LB-FT             |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 45 LB-FT             |
| NEMA Design Code      | B            | KVA Code     | H  | Starting Current                         | 45 A                 |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 5.2 A                |
| NEMA Nom. Eff.        | 87.5         | Power Factor | 67 | Line-line Res. @ 25°C                    | 1.95 Ω               |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 55°C                 |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 64°C                 |
|                       |              |              |    | Rotor inertia                            | 3.54 LF <sup>2</sup> |

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

|                 |     |      |      |      |      |      |      |
|-----------------|-----|------|------|------|------|------|------|
| % of Rated Load | 25  | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 32  | 47   | 60   | 68   | 73   | 75   | 71   |
| Efficiency      | 75  | 85.2 | 87   | 87.5 | 87.2 | 86.4 | 87.3 |
| Speed           | 896 | 893  | 890  | 886  | 882  | 877  | 884  |
| Line amperes    | 5.4 | 6    | 6.89 | 7.99 | 9.29 | 10.9 | 8.77 |

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

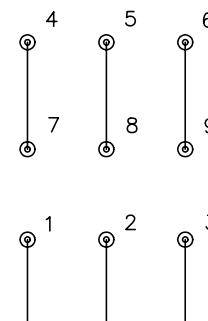




CD0005


 LOW VOLTAGE  
(2Y)


LINE

 HIGH VOLTAGE  
(1Y)


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: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005