

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM2539T**

**40HP,1770RPM,3PH,60HZ,324T,4064M,OPSB,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | Q    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 4064M | Elec. Spec: | 40WGX166 | CD Diagram:   | CD0005     |
| Enclosure:  | OPSB | Mfg Plant:     |       | Mech. Spec: | 40J002   | Layout:       | 40LYJ002   |
| Frame:      | 324T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 10-22-2010 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 12-29-2014 |
| Leads:      | 9#8  |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP2138L |              |                |            |                         |      |        |      |
|-------------------|--------------|----------------|------------|-------------------------|------|--------|------|
| CAT.NO.           | EM2539T      | P/N            |            | ENCLOSURE               | OPSB |        |      |
| SPEC.             | 40J002X166G1 | CC             | 010A       | FRAME                   | 324T | S/N    |      |
| HP                | 40           | CLASS          | F          | HZ                      | 60   |        |      |
| RPM               | 1770         | PH             | 3          | DES                     | A    |        |      |
| VOLT              | 230/460      | KVA-CODE       | H          | ODE BRG                 | 6309 | DE BRG | 6312 |
| AMP               | 98/49        | USABLE AT 208V | 99         |                         |      |        |      |
| RATING            | 40C AMB-CONT | GREASE         | POLYREX EM |                         |      |        |      |
| NEMA-NOM-EFF      | 94.1         | PF             | 82         | SER.F.                  | 1.15 |        |      |
|                   |              |                |            |                         |      |        |      |
| HTR-VOLTS         |              | HTR-AMPS       |            | MAX. SPACE HEATER TEMP. |      |        |      |

**AC Induction Motor Performance Data**

Record # 31313 - Typical performance - not guaranteed values

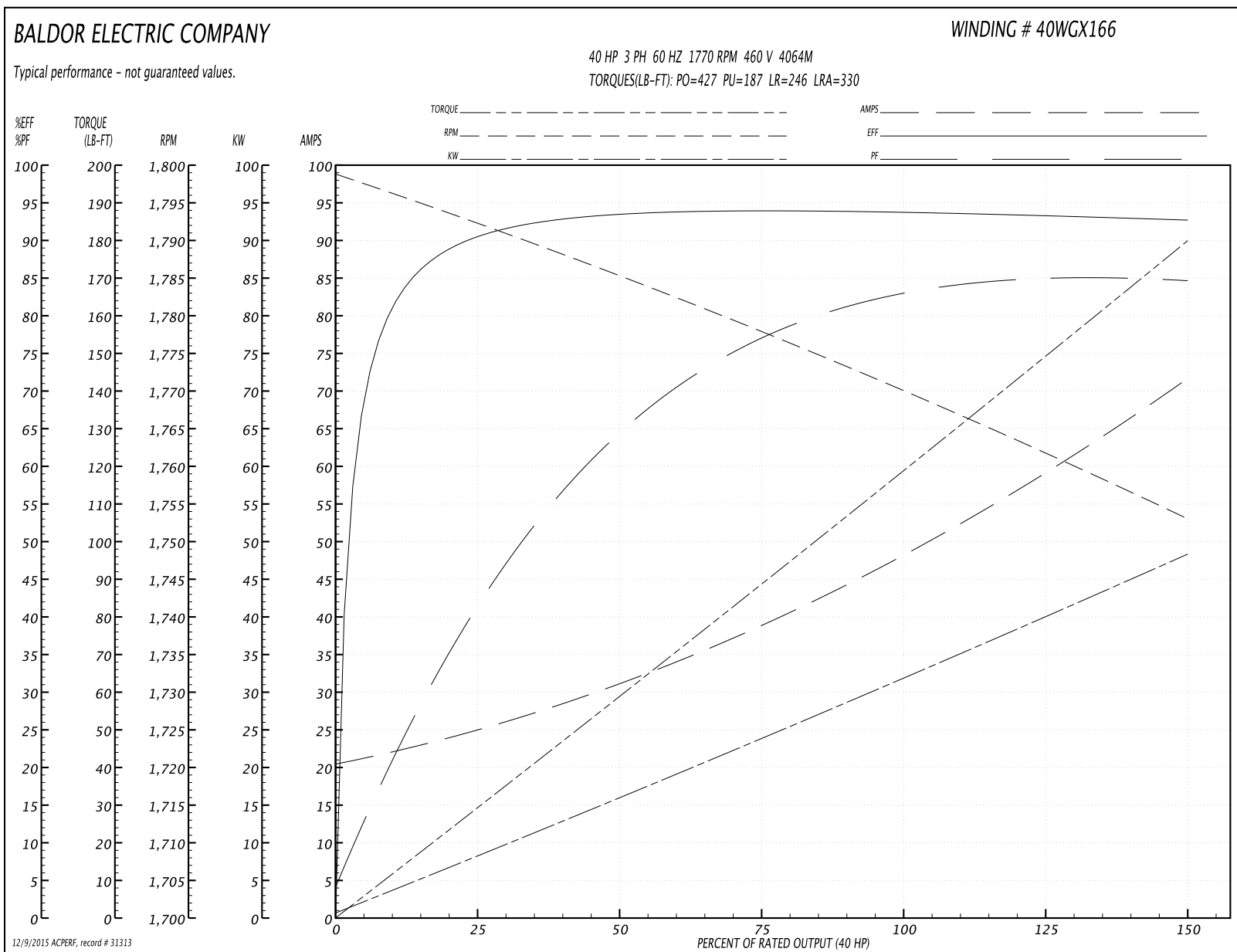
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 40WGX166-R002 | <b>Type:</b> 4064M | <b>Enclosure:</b> OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                         |
|-----------------------|--------------|--------------|----|------------------------------------------|-------------------------|
| Rated Output (HP)     | 40           |              |    | Full Load Torque                         | 119 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line          |
| Full Load Amps        | 98/49        |              |    | Breakdown Torque                         | 427 LB-FT               |
| R.P.M.                | 1770         |              |    | Pull-up Torque                           | 187 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 246 LB-FT               |
| NEMA Design Code      | A            | KVA Code     | H  | Starting Current                         | 330 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 21.1 A                  |
| NEMA Nom. Eff.        | 94.1         | Power Factor | 82 | Line-line Res. @ 25°C                    | 0.16236 Ω               |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 41°C                    |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 51°C                    |
|                       |              |              |    | Rotor inertia                            | 5.09 LB-FT <sup>2</sup> |

**Load Characteristics 460 V, 60 Hz, 40 HP**

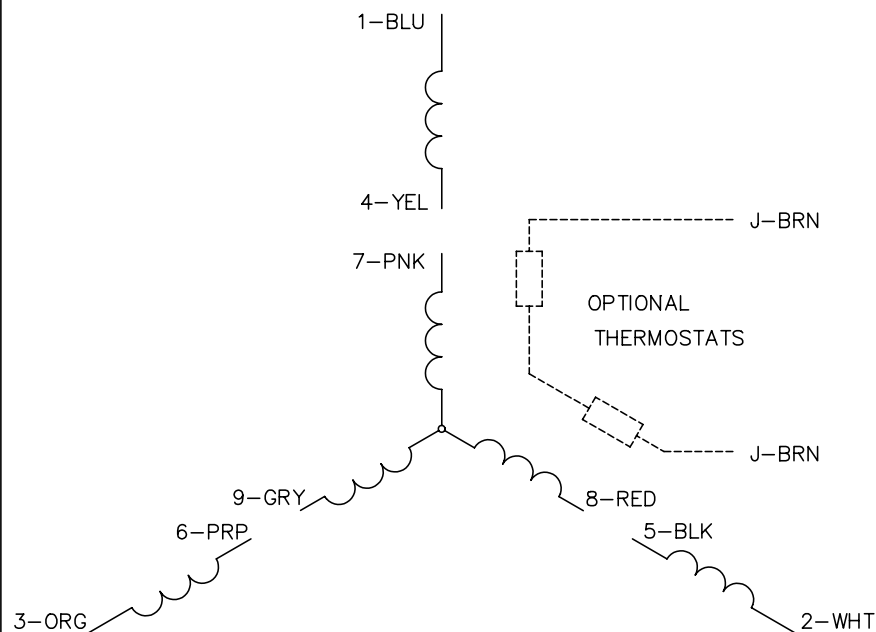
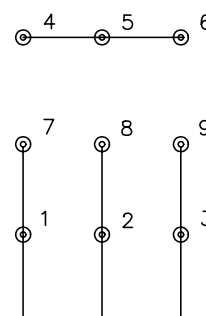
|                 |        |      |        |        |        |        |      |
|-----------------|--------|------|--------|--------|--------|--------|------|
| % of Rated Load | 25     | 50   | 75     | 100    | 125    | 150    | S.F. |
| Power Factor    | 43     | 65   | 76     | 82     | 85     | 85     | 84   |
| Efficiency      | 91.1   | 94   | 94.5   | 94.2   | 93.6   | 92.8   | 93.8 |
| Speed           | 1792.4 | 1785 | 1777.8 | 1770.2 | 1762.1 | 1752.8 | 1765 |
| Line amperes    | 24.1   | 30.7 | 39.2   | 48.7   | 59.3   | 71.3   | 55.1 |

## Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values

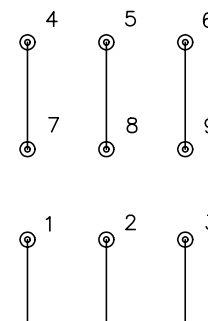




CD0005

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