

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **CEM3584T**

**1.5HP,1765RPM,3PH,60HZ,145TC,0526M,TEFC**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | C     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 0526M | Elec. Spec: | 05WGX163 | CD Diagram:   | CD0005     |
| Enclosure:  | TEFC  | Mfg Plant:     |       | Mech. Spec: | 05C052   | Layout:       | 05LYC052   |
| Frame:      | 145TC | Mounting:      | F1    | Poles:      | 04       | Created Date: | 06-01-2011 |
| Base:       | RG    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 07-24-2014 |
| Leads:      | 9#18  |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

|                   |              |                |  |  |      |     |  |   |    |   |
|-------------------|--------------|----------------|--|--|------|-----|--|---|----|---|
| Nameplate NP1259L |              |                |  |  |      |     |  |   |    |   |
| CAT.NO.           | CEM3584T     |                |  |  |      |     |  |   |    |   |
| SPEC.             | 05C052X163G1 |                |  |  |      |     |  |   |    |   |
| HP                | 1.5          |                |  |  |      |     |  |   |    |   |
| VOLTS             | 208-230/460  |                |  |  |      |     |  |   |    |   |
| AMP               | 4.6/2.3      |                |  |  |      |     |  |   |    |   |
| RPM               | 1765         |                |  |  |      |     |  |   |    |   |
| FRAME             | 145TC        | HZ             |  |  | 60   | PH  |  | 3 |    |   |
| SER.F.            | 1.15         | CODE           |  |  | M    | DES |  | B | CL | F |
| NEMA-NOM-EFF      | 86.5         | PF             |  |  | 71   |     |  |   |    |   |
| RATING            | 40C AMB-CONT |                |  |  |      |     |  |   |    |   |
| CC                | 010A         | USABLE AT 208V |  |  |      |     |  |   |    |   |
| DE                | 6205         | ODE            |  |  | 6203 |     |  |   |    |   |
| ENCL              | TEFC         | SN             |  |  |      |     |  |   |    |   |
|                   |              |                |  |  |      |     |  |   |    |   |

| Parts List     |                                          |          |
|----------------|------------------------------------------|----------|
| Part Number    | Description                              | Quantity |
| SA224426       | SA 05C052X163G1                          | 1.000 EA |
| RA211537       | RA 05C052X163G1                          | 1.000 EA |
| 34FN3002B01    | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| S/P107-000-001 | SUPER E PROC'S-FS, WS & CK PLTS          | 1.000 EA |
| 06CB3000       | BALDOR CONDUIT BOX CAST                  | 1.000 EA |
| 06GS1000       | GASKET,CONDUIT BOX                       | 1.000 EA |
| 51XW2520A12    | SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75  | 2.000 EA |
| 51XW2520A12    | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 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 |
| 35EP1100A02    | FR ENDPLATE, TEFC W/GREASER              | 1.000 EA |
| HW4500A01      | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A03SP    | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP1329A01    | PU EP ENCL 143-5TC 205 BRG W/GRSR & STD  | 1.000 EA |
| HW4500A01      | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 51XN1032A20    | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| HA3100A28      | THRUBOLT 10-32 X 8.187                   | 4.000 EA |
| 51XB1214A16    | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| 35FH4005A02SP  | IEC FH W/GREASER - W/AUTOPHERETIC PRIMER | 1.000 EA |
| 51XW1032A06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 06CB3500       | BALDOR CONDUIT BOX LID                   | 1.000 EA |
| 06GS1001       | BALDOR CONDUIT BOX GASKET                | 1.000 EA |
| HW2501D13SP    | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A01      | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| MJ1000A75              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.022 GA |
| LB1125C02              | SUPER-E (STOCK CTN LABEL SUPER-E WITH FL | 1.000 EA |
| LC0005E01              | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP1259L                | ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM  | 1.000 EA |
| 36PA1000               | PACK GROUP W/LB5001                      | 1.000 EA |
| LB1506                 | LABEL "AMERICAN MADE" 1.50 X 1.00        | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 34336 - Typical performance - not guaranteed values

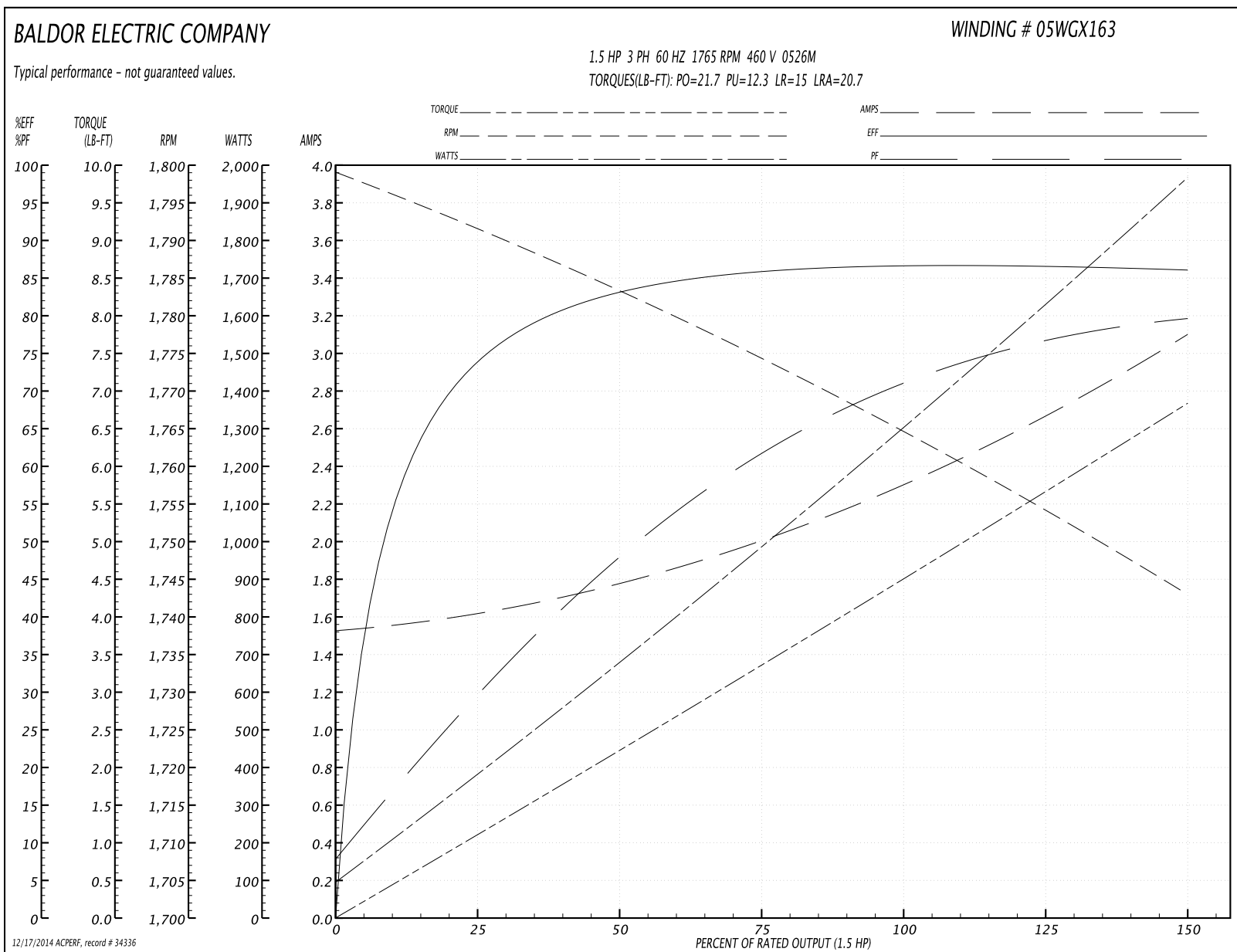
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 05WGX163-R001 | <b>Type:</b> 0526M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                |
|-----------------------|--------------|--------------|----|------------------------------------------|----------------|
| Rated Output (HP)     | 1.5          |              |    | Full Load Torque                         | 4.54 LB-FT     |
| Volts                 | 208-230/460  |              |    | Start Configuration                      | direct on line |
| Full Load Amps        | 4.6/2.3      |              |    | Breakdown Torque                         | 21.7 LB-FT     |
| R.P.M.                | 1765         |              |    | Pull-up Torque                           | 12.3 LB-FT     |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 15 LB-FT       |
| NEMA Design Code      | B            | KVA Code     | M  | Starting Current                         | 20.7 A         |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.54 A         |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 71 | Line-line Res. @ 25°C                    | 9.0571 Ω       |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 34°C           |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 40°C           |

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

|                 |        |        |      |        |        |      |      |
|-----------------|--------|--------|------|--------|--------|------|------|
| % of Rated Load | 25     | 50     | 75   | 100    | 125    | 150  | S.F. |
| Power Factor    | 31     | 49     | 62   | 71     | 77     | 80   | 75   |
| Efficiency      | 75.4   | 83.8   | 86.4 | 87     | 86.9   | 86.1 | 86.9 |
| Speed           | 1791.5 | 1782.7 | 1774 | 1764.1 | 1753.9 | 1743 | 1758 |
| Line amperes    | 1.61   | 1.77   | 2.03 | 2.32   | 2.69   | 3.09 | 2.54 |

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



**AC Induction Motor Performance Data**

Record # 45945 - Typical performance - not guaranteed values

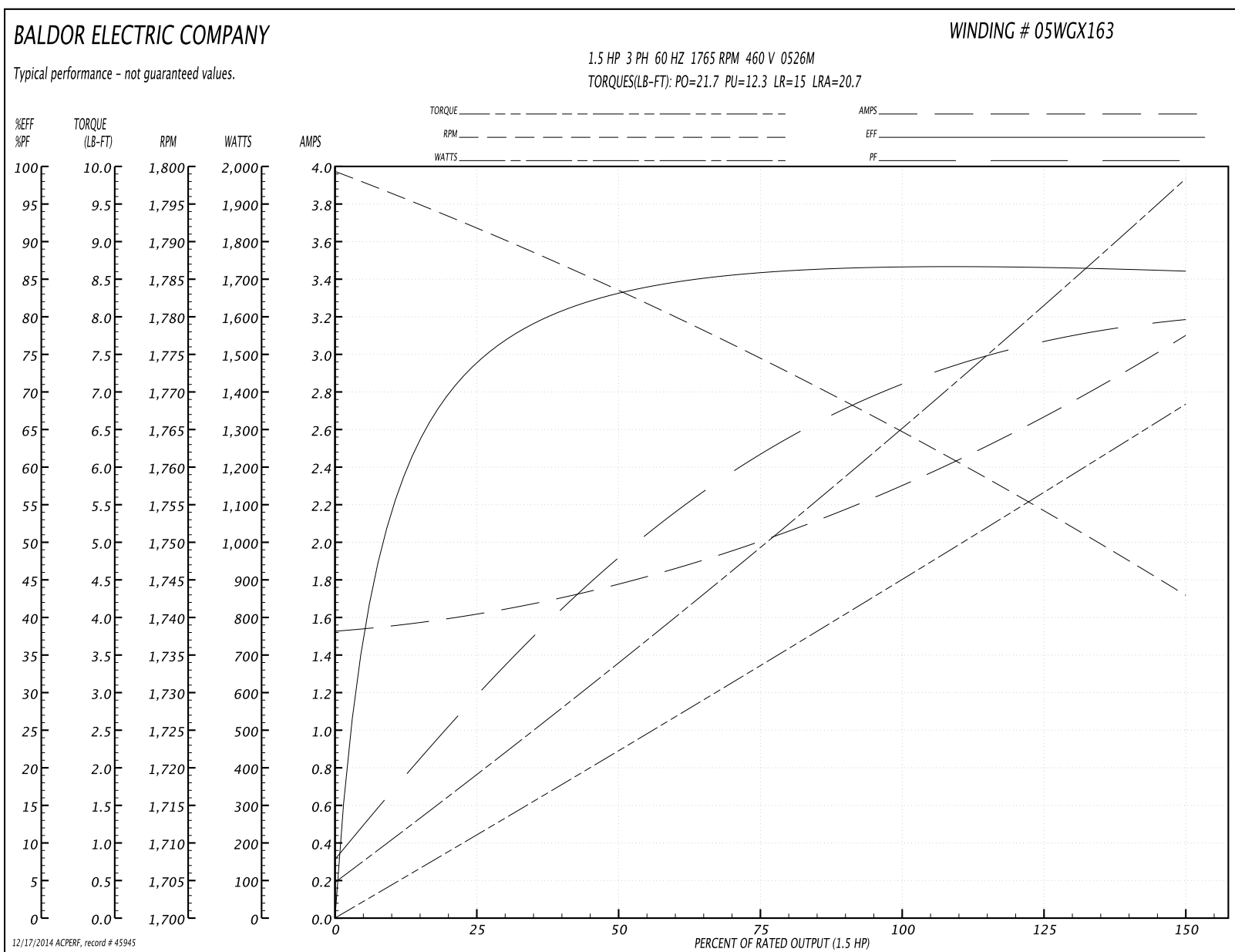
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 05WGX163-RXXX | <b>Type:</b> 0526M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

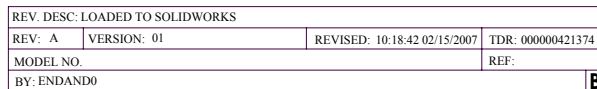
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                       |
|-----------------------|--------------|--------------|----|------------------------------------------|-----------------------|
| Rated Output (HP)     | 1.5          |              |    | Full Load Torque                         | 4.54 LB-FT            |
| Volts                 | 208-230/460  |              |    | Start Configuration                      | direct on line        |
| Full Load Amps        | 4.6/2.3      |              |    | Breakdown Torque                         | 21.7 LB-FT            |
| R.P.M.                | 1765         |              |    | Pull-up Torque                           | 12.3 LB-FT            |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 15 LB-FT              |
| NEMA Design Code      | B            | KVA Code     | M  | Starting Current                         | 20.7 A                |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.54 A                |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 71 | Line-line Res. @ 25°C                    | 8.63 Ω                |
| Rating - Duty         | 50C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 34°C                  |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 40°C                  |
|                       |              |              |    | Rotor inertia                            | 0.154 LF <sup>2</sup> |

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

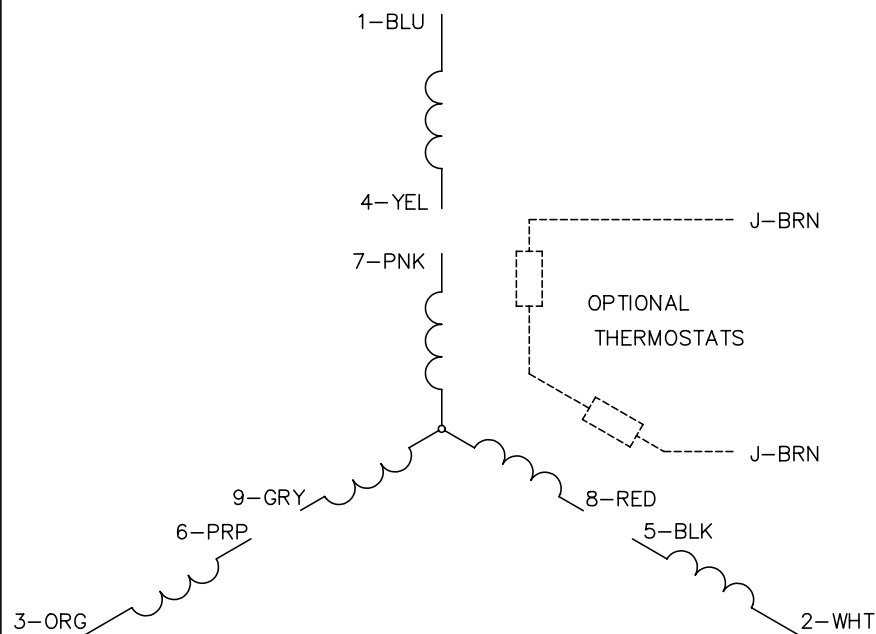
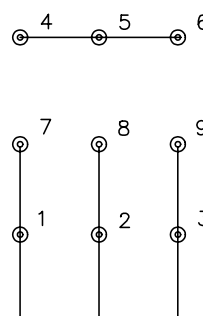
|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 31   | 49   | 62   | 71   | 77   | 80   | 75   |
| Efficiency      | 74.5 | 83.1 | 85.9 | 87   | 86.6 | 86   | 86.8 |
| Speed           | 1792 | 1783 | 1774 | 1764 | 1754 | 1743 | 1758 |
| Line amperes    | 1.61 | 1.77 | 2.03 | 2.32 | 2.69 | 3.09 | 2.54 |

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

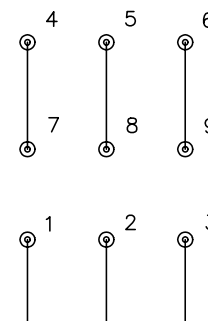




CD0005

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