

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **ECP4115T-5**

**50HP,1770RPM,3PH,60HZ,326T,1272M,TEFC,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | L    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 1272M | Elec. Spec: | 12WGY613 | CD Diagram:   | CD0006     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 12F904   | Layout:       | 12LYF904   |
| Frame:      | 326T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 10-31-2013 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 10-24-2016 |
| Leads:      | 3#8  |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP3241

|            |              |                         |            |            |      |
|------------|--------------|-------------------------|------------|------------|------|
| CAT.NO.    | ECP4115T-5   | P/N                     |            | ENCLOSURE  | TEFC |
| SPEC.      | 12F904Y613   | CC                      | 010A       | FRAME      | 326T |
| HP         | 50           | CLASS                   | F          | HZ         | 60   |
| RPM        | 1770         | DES                     | B          | KVA-CODE   | F    |
| VOLT       | 575          | RPM MAX                 | 2700       | PH         | 3    |
| AMP        | 45           | MOTOR WEIGHT            | 700        | ODE BRG    | 6312 |
| RATING     | 40C AMB-CONT | SER.F.                  | 1.15       | PF         | 87   |
|            |              | NEMA-NOM-EFF            | 94.5       | DE BRG     | 6312 |
|            |              | GREASE                  | POLYREX EM |            |      |
|            |              | INV.TYPE                | PWM        |            |      |
| TEMP CODE  | T3           | INVERTER-TEMP-CODE      | 200        |            |      |
| TEMP =     | 200          | C HP FR                 | 60         | C HP TO    | 90   |
| CT HZ FROM | 1.3          | CT HZ TO                | 60         |            |      |
| HTR-VOLTS  |              | HTR-AMPS                |            | HTR-WATTS  |      |
|            |              | MAX. SPACE HEATER TEMP. |            | VT HZ FROM | 0    |
|            |              |                         |            | VT HZ TO   | 60   |

| Parts List   |                                          |          |
|--------------|------------------------------------------|----------|
| Part Number  | Description                              | Quantity |
| SA271692     | SA 12F904Y613                            | 1.000 EA |
| RA258317     | RA 12F904Y613                            | 1.000 EA |
| 09FN3001C03  | EXTERNAL FAN, PLASTIC                    | 1.000 EA |
| 10CB1000A04P | CONDUIT BOX, MACH W/EPOXY PRIMER         | 1.000 EA |
| 09GS1010     | GASKET, DWG, LEADWIRE SEPERATOR          | 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    | T&B CX70TN TERMINAL                      | 1.000 EA |
| 10XN2520K08  | 1/4-20 X .50 GRADE #5, STL, ZINC PLATE   | 1.000 EA |
| HW1001A25    | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 EA |
| HA4017A10    | 1/8X1.25 GREASE EXT (F/S)                | 1.000 EA |
| HW4019A01    | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING | 1.000 EA |
| HA4017A01    | 1/8 X 4 GREASE EXT (F/S)                 | 1.000 EA |
| HA3400A13    | STUD, 1/2-13 X 7" WELKER                 | 4.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I | 4.000 EA |
| HA1005A04    | SLINGER, OD 3.620, ID 1.98,              | 1.000 EA |
| HW5100A15    | W4997-050 WVY WSHR (WB)                  | 1.000 EA |
| HW4500A20    | 1/8NPT SL PIPE PLUG                      | 1.000 EA |
| 10XN3118K40  | 5/16-18 X 2.50" HEX HD, GRADE 5          | 4.000 EA |
| 12EP1111A30P | SPL PUEP 312 BRG W/EPOXY                 | 1.000 EA |
| 12FH1002A33P | FAN COVER, MACH ,EPOXY PRIMER            | 1.000 EA |
| 10XN5013K28  | 1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD   | 4.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I | 4.000 EA |
| HW4500A20    | 1/8NPT SL PIPE PLUG                      | 1.000 EA |

| Parts List (continued) |                                            |          |
|------------------------|--------------------------------------------|----------|
| Part Number            | Description                                | Quantity |
| HW4600B41              | V-RING SLINGER 2.125 X 2.880 X 0.280       | 1.000 EA |
| 10XN3118K40            | 5/16-18 X 2.50" HEX HD, GRADE 5            | 4.000 EA |
| XY5013A12              | NUT, 1/2-13, HEX, STEEL, ZINC PLATED       | 4.000 EA |
| HW1001A50              | LOCKWASHER 1/2, ZINC PLT., .879 OD, .509 I | 4.000 EA |
| 10CB1503A01P           | CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR   | 1.000 EA |
| 14GS1003               | GASKET CONDUIT BOX LID, NEOP               | 1.000 EA |
| 10XN2520K16            | 1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P     | 4.000 EA |
| HW1001A25              | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I   | 4.000 EA |
| HW2501H34              | KEY, 1/2 SQ X 4.00                         | 1.000 EA |
| MJ5001A27              | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL    | 0.031 QT |
| MJ5001A14              | DYNAPRO SEAL, CP MOTORS VC#2508050 (603    | 0.033 EA |
| MJ5002A01              | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU   | 0.025 EA |
| LB1115N                | LABEL, LIFTING DEVICE (ON ROLLS)           | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1000/bx) 11/14   | 1.000 EA |
| LB1002N                | LABEL, MARINE DUTY (ON ROLLS)              | 1.000 EA |
| 12EP1111A35GP6         | FR ENDPLATE, MACH W/EPOXY PRIMER & RELIA   | 1.000 EA |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING             | 1.000 EA |
| HW4500A21              | 1618BALEMITE FITTING 825 UNIVERSAL         | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF               | 1.000 EA |
| HA4054                 | SHORT T-DRAIN FITTING, .125" N.P.T.        | 1.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (US# 4824-15A)    | 0.200 LB |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING             | 1.000 EA |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8   | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF               | 1.000 EA |

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|             |                                          |          |
|-------------|------------------------------------------|----------|
| HA4054      | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 EA |
| HW2500A25   | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| MG1025N19   | WILKOFAS, 778.50, RELIANCE BLUE-GREEN    | 0.080 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1119N     | WARNING LABEL                            | 1.000 EA |
| LC0006      | CONNECTION LABEL                         | 1.000 EA |
| NP3241      | SS SUPER-E INV UL CSA-EEV PREM CC        | 1.000 EA |
| 12PA1000    | PACKAGING GROUP PRINT PK1024A06          | 1.000 EA |
| LB1449      | DIV-2/NEC WARNING LABEL                  | 1.000 EA |

| Accessories |             |            |
|-------------|-------------|------------|
| Part Number | Description | Multiplier |
| 12-1105     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 47188 - Typical performance - not guaranteed values

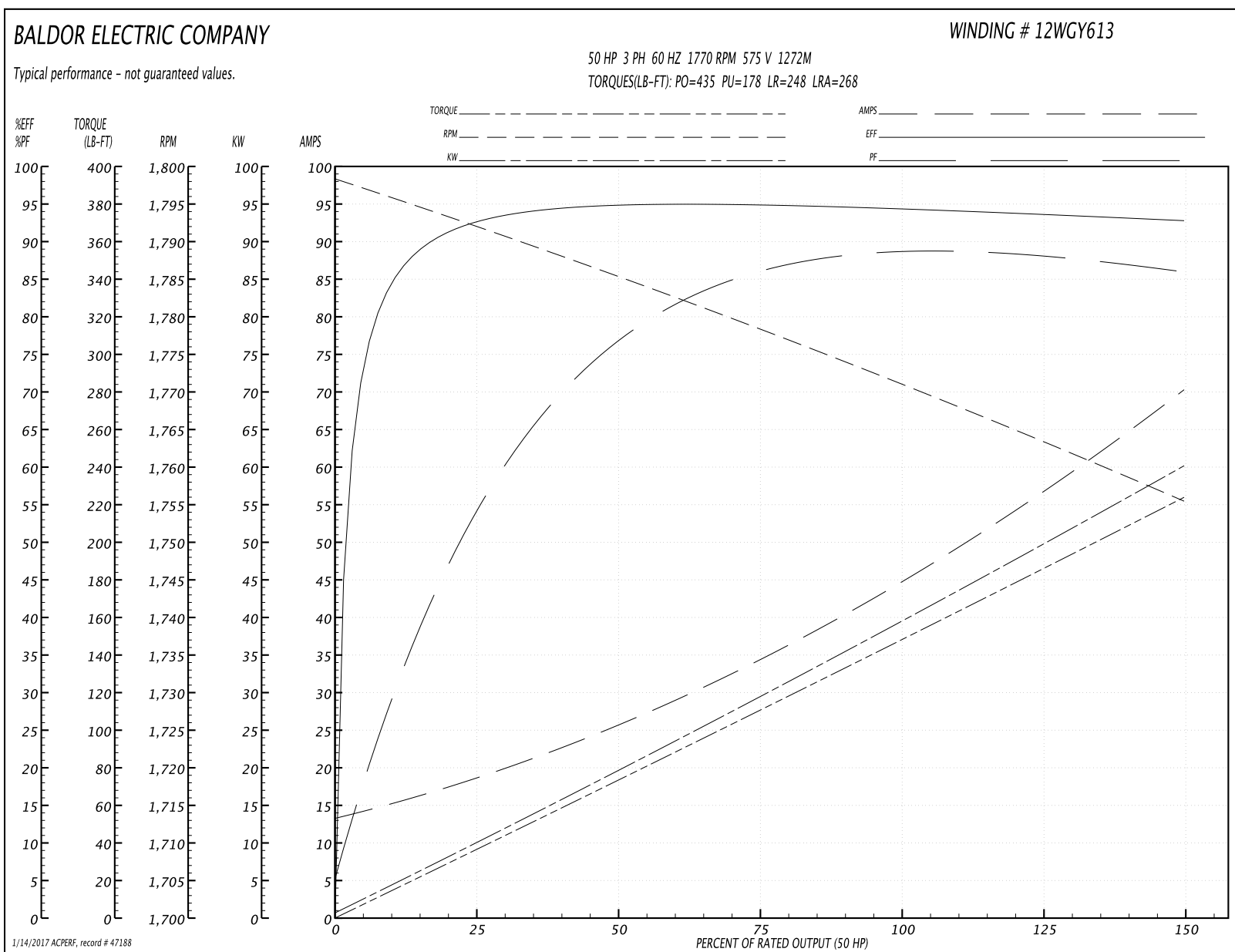
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 12WGY613-R006 | <b>Type:</b> 1272M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

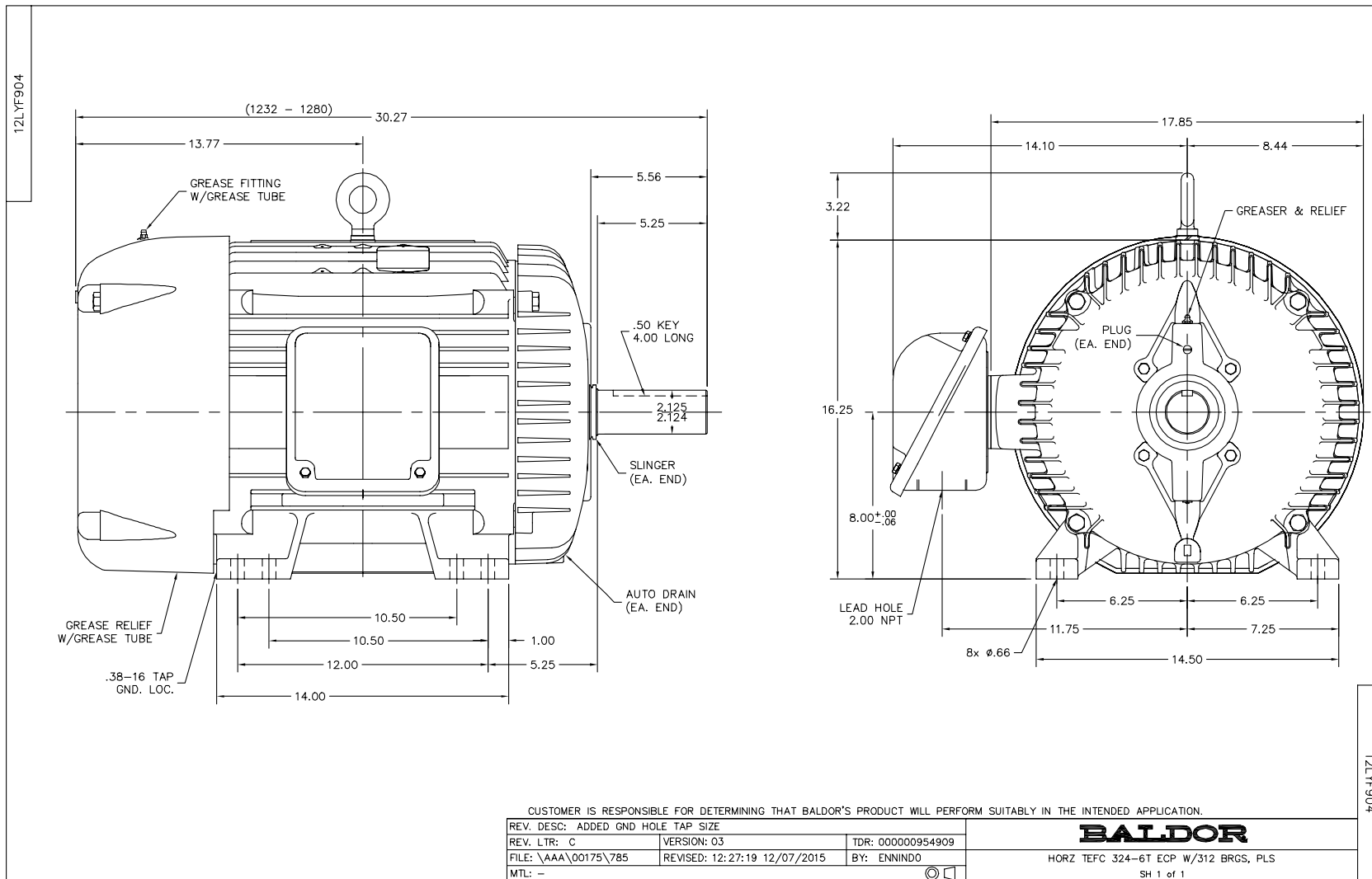
| Nameplate Data        |              |              |    | 575 V, 60 Hz:<br>Single Voltage Motor |                         |
|-----------------------|--------------|--------------|----|---------------------------------------|-------------------------|
| Rated Output (HP)     | 50           |              |    | Full Load Torque                      | 148 LB-FT               |
| Volts                 | 575          |              |    | Start Configuration                   | direct on line          |
| Full Load Amps        | 45           |              |    | Breakdown Torque                      | 435 LB-FT               |
| R.P.M.                | 1770         |              |    | Pull-up Torque                        | 178 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                   | 248 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | F  | Starting Current                      | 268 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                       | 14.2 A                  |
| NEMA Nom. Eff.        | 94.5         | Power Factor | 87 | Line-line Res. @ 25°C                 | 0.186 Ω                 |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 61°C                    |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                | 75°C                    |
|                       |              |              |    | Rotor inertia                         | 9.59 LB-FT <sup>2</sup> |

**Load Characteristics 575 V, 60 Hz, 50 HP**

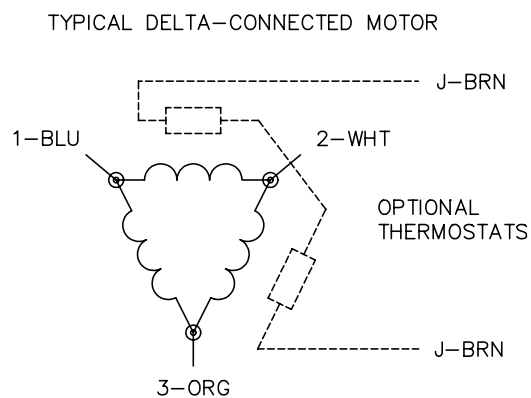
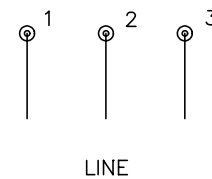
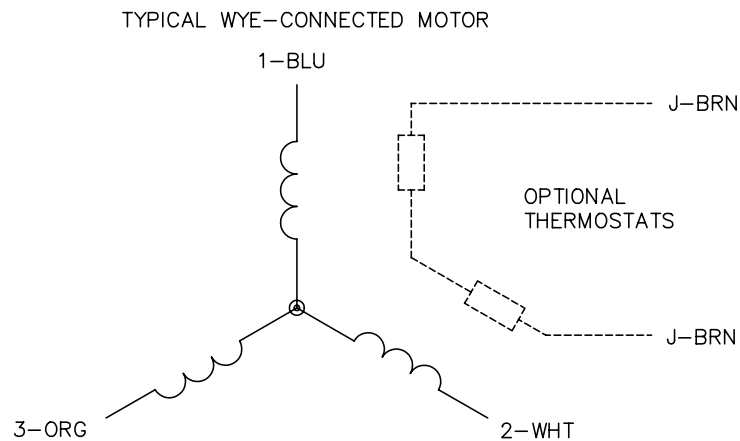
|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 59   | 79   | 85   | 87   | 88   | 87   | 88   |
| Efficiency      | 92.3 | 94.8 | 95   | 94.5 | 93.8 | 92.7 | 94   |
| Speed           | 1791 | 1785 | 1779 | 1771 | 1764 | 1755 | 1767 |
| Line amperes    | 17.4 | 25.3 | 34.6 | 45.4 | 57   | 69.8 | 52.4 |

## Performance Graph at 575V, 60Hz, 50.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: D

BY: JLP

REVISED: 01/21/99 4:02

TDR: 0171435

9000D

FILE: AAA00005141

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006