

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **ECP84111T-5**

**25HP,1180RPM,3PH,60HZ,324T,1264M,TEFC,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | L    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 1264M | Elec. Spec: | 12WGY446 | CD Diagram:   | CD0006     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 12E599   | Layout:       | 12LYE599   |
| Frame:      | 324T | Mounting:      | F1    | Poles:      | 06       | Created Date: | 06-08-2011 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 09-22-2014 |
| Leads:      | 3#8  |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP3190 |              |                    |      |             |            |                         |  |      |            |   |            |    |
|------------------|--------------|--------------------|------|-------------|------------|-------------------------|--|------|------------|---|------------|----|
| STK.NO.          | ECP84111T-5  | P/N                |      | ENCLOSURE   | TEFC       |                         |  |      |            |   |            |    |
| SPEC.            | 12E599Y446   | CC                 | 010A | FRAME       | 324T       | S/N                     |  |      |            |   |            |    |
| HP               | 25           | CLASS              | F    | HZ          | 60         | ODE BRG                 |  | 6312 | DE BRG     |   | 6312       |    |
| RPM              | 1180         | RPM MAX            | 1800 | PH          | 3          | DES                     |  | B    | D.E. BRG.  |   | 60BC03X30X |    |
| VOLT             | 575          | KVA-CODE           | G    | O.D.E. BRG. | 60BC03X30X |                         |  |      |            |   |            |    |
| AMP              | 25.4         | MOTOR WEIGHT       | 623  | GREASE      | POLYREX EM |                         |  |      |            |   |            |    |
| RATING           | 40C AMB-CONT | MAX. KVAR          | 8.5  | BLANK       |            |                         |  |      |            |   |            |    |
| NEMA-NOM-EFF     | 93           | # OF ROTOR BARS    | 42   | SER.F.      | 1.15       |                         |  |      |            |   |            |    |
| G.MIN.EFF        | 91.7         | # OF STATOR SLOTS  | 54   | PF          | 80         | INV.TYPE                |  | PWM  |            |   |            |    |
| TEMP CODE        | T3           | INVERTER-TEMP-CODE | 200  |             |            |                         |  |      |            |   |            |    |
| TEMP =           | 200          | C HP FR            | 60   | C HP TO     | 90         |                         |  |      |            |   |            |    |
| CT HZ FROM       | 1.0          | CT HZ TO           | 60   |             |            |                         |  |      |            |   |            |    |
| HTR-VOLTS        |              | HTR-AMPS           |      | HTR-WATTS   |            | MAX. SPACE HEATER TEMP. |  |      | VT HZ FROM | O | VT HZ TO   | 60 |

| Parts List   |                                           |          |
|--------------|-------------------------------------------|----------|
| Part Number  | Description                               | Quantity |
| SA224876     | SA 12E599Y446                             | 1.000 EA |
| RA211977     | RA 12E599Y446                             | 1.000 EA |
| 09FN3001B03  | EXTERNAL FAN, PLASTIC                     | 1.000 EA |
| WD1000B19    | TERMINAL BURNDY L250HP                    | 1.000 EA |
| 10XN3816K08  | 3/8-16 X .50 HEX HD CAP SCREW GRADE 5     | 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 |
| 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 |
| HA3400A32    | STUD, 1/2-13 X 7.38                       | 4.000 EA |
| HW4500A20    | 1/8NPT SL PIPE PLUG                       | 1.000 EA |
| HA4017A01    | 1/8 X 4 GREASE EXT (F/S)                  | 1.000 EA |
| HA4017A11    | 1/8 X 2.75 GREASE EXT (F/S)               | 1.000 EA |
| HW4019A01    | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING  | 1.000 EA |
| HA4002A01    | DRAIN PLUG STAINLESS STL                  | 1.000 EA |
| HW4601A55    | INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/  | 1.000 EA |
| HW5100A15    | W4997-050 WVY WSHR (WB)                   | 1.000 EA |
| 10XN3118K40  | 5/16-18 X 2.50" HEX HD, GRADE 5           | 4.000 EA |
| 12EP1111A01P | SPL PUEP 312 BRG FOR INPRO SEAL W/EPOXY   | 1.000 EA |
| HW4500A20    | 1/8NPT SL PIPE PLUG                       | 1.000 EA |
| 10XN5013K28  | 1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD    | 4.000 EA |

| Parts List (continued) |                                           |          |
|------------------------|-------------------------------------------|----------|
| Part Number            | Description                               | Quantity |
| HW1001A50              | LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I | 4.000 EA |
| HA4002A01              | DRAIN PLUG STAINLESS STL                  | 1.000 EA |
| HW4601A55              | INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/  | 1.000 EA |
| 10XN3118K40            | 5/16-18 X 2.50" HEX HD, GRADE 5           | 4.000 EA |
| 12FH1002A15P           | BALDOR MOTOR FAN COVER                    | 1.000 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 |
| 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 |
| MJ5004A59              | ADHESIVE LOCTITE #401 SURFACE INSENSITIV  | 0.010 EA |
| HW2501H33              | KEY, 1/2 SQ X 3.875                       | 1.000 EA |
| MJ5001A27              | 32220KN GRAY SEALER                       | 0.031 QT |
| MJ5001A14              | DYNAPRO SEAL, CP MOTORS VC#2508050 (603   | 0.029 EA |
| LB1115N                | LABEL, LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 10/13  | 1.000 EA |
| LB1002N                | LABEL, MARINE DUTY (ON ROLLS)             | 1.000 EA |
| WD1000B48              | T&B D73, RING TERMINAL 8 AWG 3/8 STUD     | 3.000 EA |
| 12EP1111A02GP6         | FR ENDPLATE, MACH W/EPOXY PRIMER & RELIA  | 1.000 EA |
| HW4500A21              | 1618BALEMITE FITTING 825 UNIVERSAL        | 1.000 EA |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING            | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF              | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| MJ1000A75              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.200 LB |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HW2500A25              | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| 51XB1214A20            | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| MG1025N19              | PAINT, 778.50 WILKO, RELIANCE ELEC GREEN | 0.080 GA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA |
| LB1449                 | DIV-2/NEC WARNING LABEL                  | 1.000 EA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| LB1125C02              | SUPER-E (STOCK CTN LABEL SUPER-E WITH FL | 4.000 EA |
| LC0006                 | CONNECTION LABEL                         | 1.000 EA |
| NP3190                 | SS IEEE841 INV DIV-2 UL CSA-C US EEV     | 1.000 EA |
| 12PA1000               | PACKAGING GROUP COMBINED PRINT PK1024A06 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 47218 - Typical performance - not guaranteed values

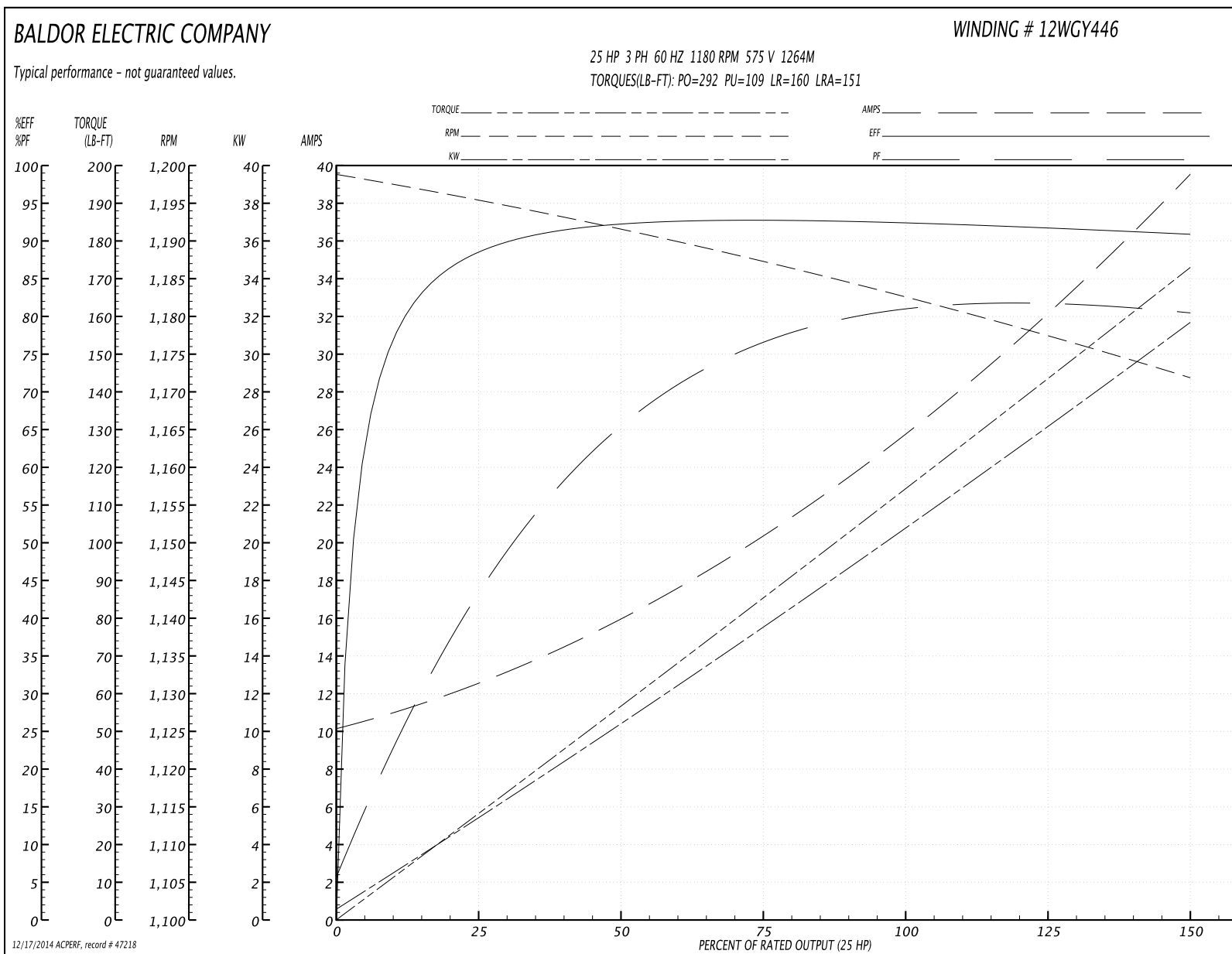
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 12WGY446-R004 | <b>Type:</b> 1264M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 575 V, 60 Hz:<br>Single Voltage Motor |                      |
|-----------------------|--------------|--------------|----|---------------------------------------|----------------------|
| Rated Output (HP)     | 25           |              |    | Full Load Torque                      | 111 LB-FT            |
| Volts                 | 575          |              |    | Start Configuration                   | direct on line       |
| Full Load Amps        | 25.4         |              |    | Breakdown Torque                      | 292 LB-FT            |
| R.P.M.                | 1180         |              |    | Pull-up Torque                        | 109 LB-FT            |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                   | 160 LB-FT            |
| NEMA Design Code      | B            | KVA Code     | G  | Starting Current                      | 151 A                |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                       | 10.5 A               |
| NEMA Nom. Eff.        | 93           | Power Factor | 80 | Line-line Res. @ 25°C                 | 0.443 Ω              |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 46°C                 |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                | 57°C                 |
|                       |              |              |    | Rotor inertia                         | 12.2 LF <sup>2</sup> |

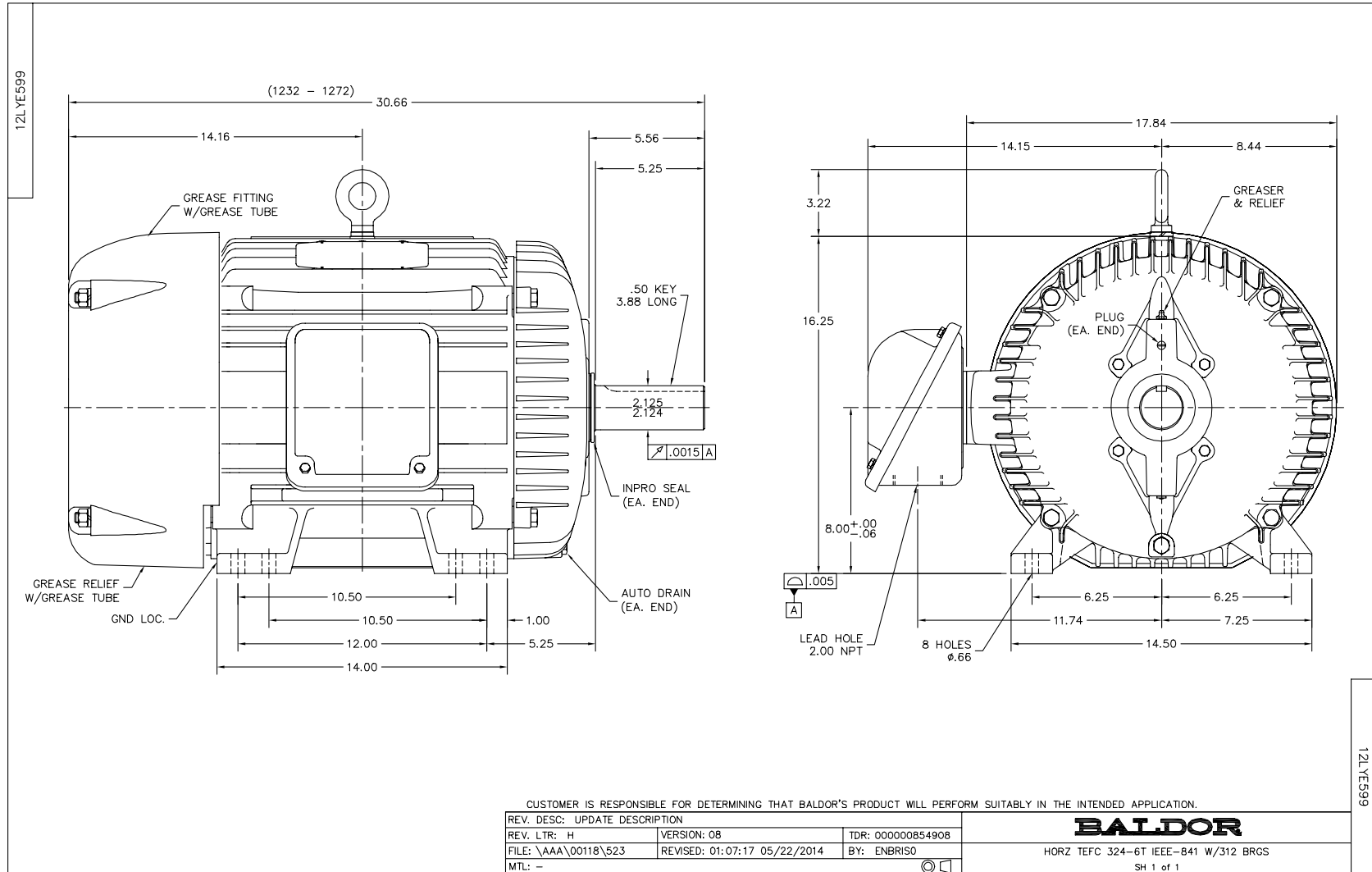
**Load Characteristics 575 V, 60 Hz, 25 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 45   | 66   | 76   | 80   | 81   | 81   | 81   |
| Efficiency      | 87.6 | 92.1 | 93   | 93   | 92.3 | 91.1 | 92.6 |
| Speed           | 1195 | 1192 | 1188 | 1183 | 1178 | 1172 | 1180 |
| Line amperes    | 12.1 | 15.4 | 20.1 | 25.4 | 31.3 | 39.3 | 28.9 |

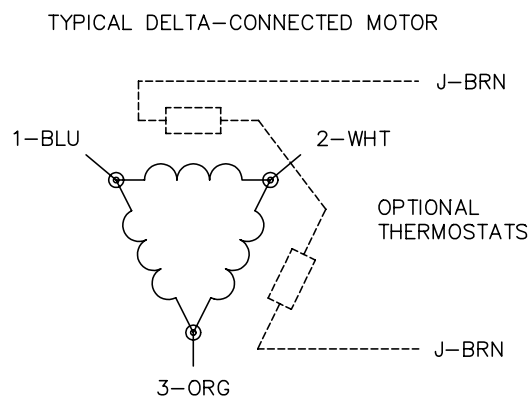
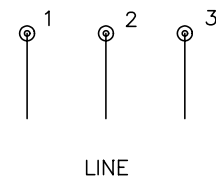
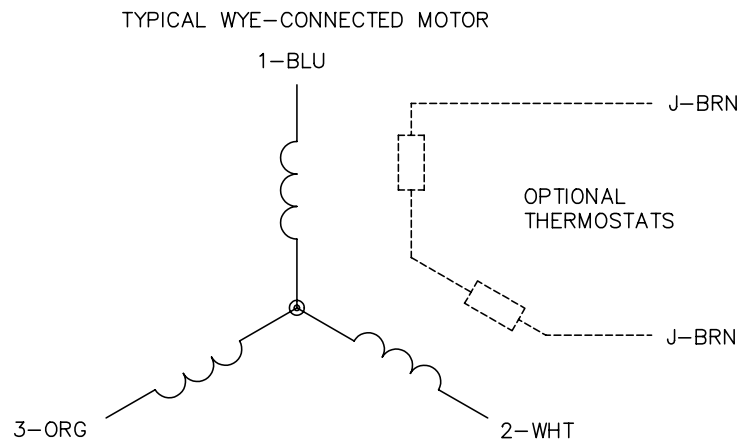
## Performance Graph at 575V, 60Hz, 25.0HP Typical performance - Not guaranteed values







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

900000

FILE: AAA00005141

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

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

CD0006