

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **ECP83660T-5**

**3HP,3450RPM,3PH,60HZ,182T,0632M,TEFC,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | R    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 0632M | Elec. Spec: | 06WGX185 | CD Diagram:   | CD0006     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 06H759   | Layout:       | 06LYH759   |
| Frame:      | 182T | Mounting:      | F1    | Poles:      | 02       | Created Date: | 05-17-2010 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 09-19-2016 |
| Leads:      | 3#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP3235E

|              |              |    |  |  |  |      |      |     |   |  |
|--------------|--------------|----|--|--|--|------|------|-----|---|--|
| CAT.NO.      | ECP83660T-5  |    |  |  |  |      |      |     |   |  |
| SPEC.        | 06H759X185G1 |    |  |  |  |      |      |     |   |  |
| HP           | 3            | TE |  |  |  |      | IP   | 56  |   |  |
| VOLTS        | 575          |    |  |  |  |      |      |     |   |  |
| AMP          | 2.7          |    |  |  |  |      |      |     |   |  |
| RPM          | 3450         |    |  |  |  |      |      |     |   |  |
| FRAME        | 182T         |    |  |  |  | HZ   | 60   |     |   |  |
| SER.F.       | 1.15         |    |  |  |  | CODE | K    | DES | B |  |
| RATING       | 40C AMB-CONT |    |  |  |  |      |      |     |   |  |
| SN           |              |    |  |  |  |      |      |     |   |  |
| DE           | 6206         |    |  |  |  | ODE  | 6206 |     |   |  |
| NEMA-NOM-EFF | 88.5         |    |  |  |  |      | PF   | 94  |   |  |
| G.MIN.EFF    | 86.5         |    |  |  |  | CC   | 010A |     |   |  |
| T. CODE      | T3C          |    |  |  |  | T=   | 160  |     |   |  |

PH

3

CL

F

**Nameplate NP3186E**

|                    |              |                                |     |
|--------------------|--------------|--------------------------------|-----|
| <b>SPEC.</b>       | 06H759X185G1 |                                |     |
| <b>D.E. BRG.</b>   | 30BC02X30X   |                                |     |
| <b>O.D.E. BRG.</b> | 30BC02X30X   |                                |     |
| <b>GREASE</b>      | POLYREX EM   |                                |     |
| <b>WEIGHT</b>      | 116          | <b># OF ROTOR BARS</b>         | 28  |
| <b>RPM MAX</b>     | 5400         | <b>MAX. KVAR</b>               | N/A |
| <b>BLANK</b>       |              |                                |     |
| <b>INV.TYPE</b>    | PWM          | <b># OF STATOR SLOTS</b>       | 36  |
| <b>T=</b>          | 160          |                                |     |
| <b>C HP FR</b>     | 60           | <b>C HP TO</b>                 | 90  |
| <b>CT HZ FROM</b>  | 6            | <b>CT HZ TO</b>                | 60  |
| <b>VT HZ FROM</b>  | 3            | <b>VT HZ TO</b>                | 60  |
| <b>HTR-VOLTS</b>   | N/A          | <b>HTR-AMPS</b>                | N/A |
| <b>HTR-WATTS</b>   |              | <b>MAX. SPACE HEATER TEMP.</b> | N/A |

| Parts List   |                                          |          |
|--------------|------------------------------------------|----------|
| Part Number  | Description                              | Quantity |
| SA198465     | SA 06H759X185G1                          | 1.000 EA |
| RA185832     | RA 06H759X185G1                          | 1.000 EA |
| HW3201A05    | 3/8-16 EYEBOLT                           | 1.000 EA |
| 06CB1001A01G | CONDUIT BOX, MACH GRAY                   | 1.000 EA |
| RM1016       | LEAD SEPARATOR GASKET - 305/306 C.P.MOTO | 1.000 EA |
| 51XW2520A12  | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| 10XN2520A12  | O1/4-20X 3/4 HEX HEAD CAP                | 2.000 EA |
| HW1001A25    | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| 11XW1032G06  | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01    | BRASS CUP WASHER, FOR #8 SCREW           | 1.000 EA |
| WD1000B16    | T&B CX70TN TERMINAL                      | 2.000 EA |
| 10XN2520G06  | 1/4 20X3/8 HX HD CAP, GREEN              | 2.000 EA |
| 06PE1132A02G | FREP ASSEMBLY FOR ROUTING PURPOSES       | 1.000 EA |
| HW4601B24    | INPRO SEAL, 206 BRG, MINI66              | 1.000 EA |
| HW4500A32    | FIT./EXT 1698-B (ALEMITE)GREASE FITTING  | 1.000 EA |
| HA4051A00    | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| 51XN1032A20  | 10-32 X 1 1/4 HX WS SL SR                | 4.000 EA |
| HW4500A17    | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HA4010A01    | DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .076 | 1.000 EA |
| HW5100A06    | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 06EP1132A01G | PUEP ENCL 206,BRG RET,GRSR,RLF,DRAIN FIT | 1.000 EA |
| HW4601B24    | INPRO SEAL, 206 BRG, MINI66              | 1.000 EA |
| HW4500A01    | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HA4051A00    | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HA4010A01              | DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .076 | 1.000 EA |
| 51XN1032A20            | 10-32 X 1 1/4 HX WS SL SR                | 4.000 EA |
| HA3101A34              | THRUBOLT- 1/4-20 X 10.375                | 4.000 EA |
| XY2520A12              | 1/4-20 HEX NUT, DIRECTIONAL SERRATIONS   | 4.000 EA |
| 06FH1004A01G           | FAN HOUSING MACH, W/GRAY EPOXY           | 1.000 EA |
| 10XN2520A24            | 1/4-20X 1 1/2 HEX HD X                   | 3.000 EA |
| WD4100A02              | DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL  | 1.000 EA |
| 06CB1503A01G           | LIPPED CONDUIT BOX LID, MACH GRAY EPOXY  | 1.000 EA |
| 06GS1009               | GASKET, KOBX LID, 1/8" THICK BLACK NEOPR | 1.000 EA |
| MJ5004A59              | ADHESIVE LOCTITE #401 SURFACE INSENSITIV | 0.010 EA |
| HW2501E16              | 3KEY, 1/4 SQ X 1.750                     | 1.000 EA |
| HA7000A02              | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 EA |
| MJ5001A27              | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 QT |
| MJ1000A73              | INPRO P-80 ASSEMBLY LUB./ 1 QT. CONTAIN  | 0.001 QT |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA |
| LB1115N                | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| LT0019A00              | MOTOR NO-LOAD PERFORMANCE DATA SHEET     | 1.000 EA |
| WD1000D21              | TRM,T&B #B71M,RING,18-14,.25,NON-INSL    | 3.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| 36FN3000C01            | EXFN, PLASTIC, 5.25 OD, .912 ID          | 1.000 EA |
| 51XB1214A16            | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| MG1025N19              | WILKOFASST, 778.50, RELIANCE BLUE-GREEN  | 0.028 GA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |

|          |                                          |          |
|----------|------------------------------------------|----------|
| LC0006   | CONNECTION LABEL                         | 1.000 EA |
| LB1449   | DIV-2/NEC WARNING LABEL                  | 1.000 EA |
| NP3235E  | SS IEEE841 DIV-2 UL CSA-C US EEV PREM    | 1.000 EA |
| NP3186E  | SS IEEE841 INV AUX DATA INFORMATION      | 1.000 EA |
| 36PA1001 | PKG GRP, PRINT      PK1017A06            | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 47359 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 06WGX185-R005 | <b>Type:</b> 0632M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

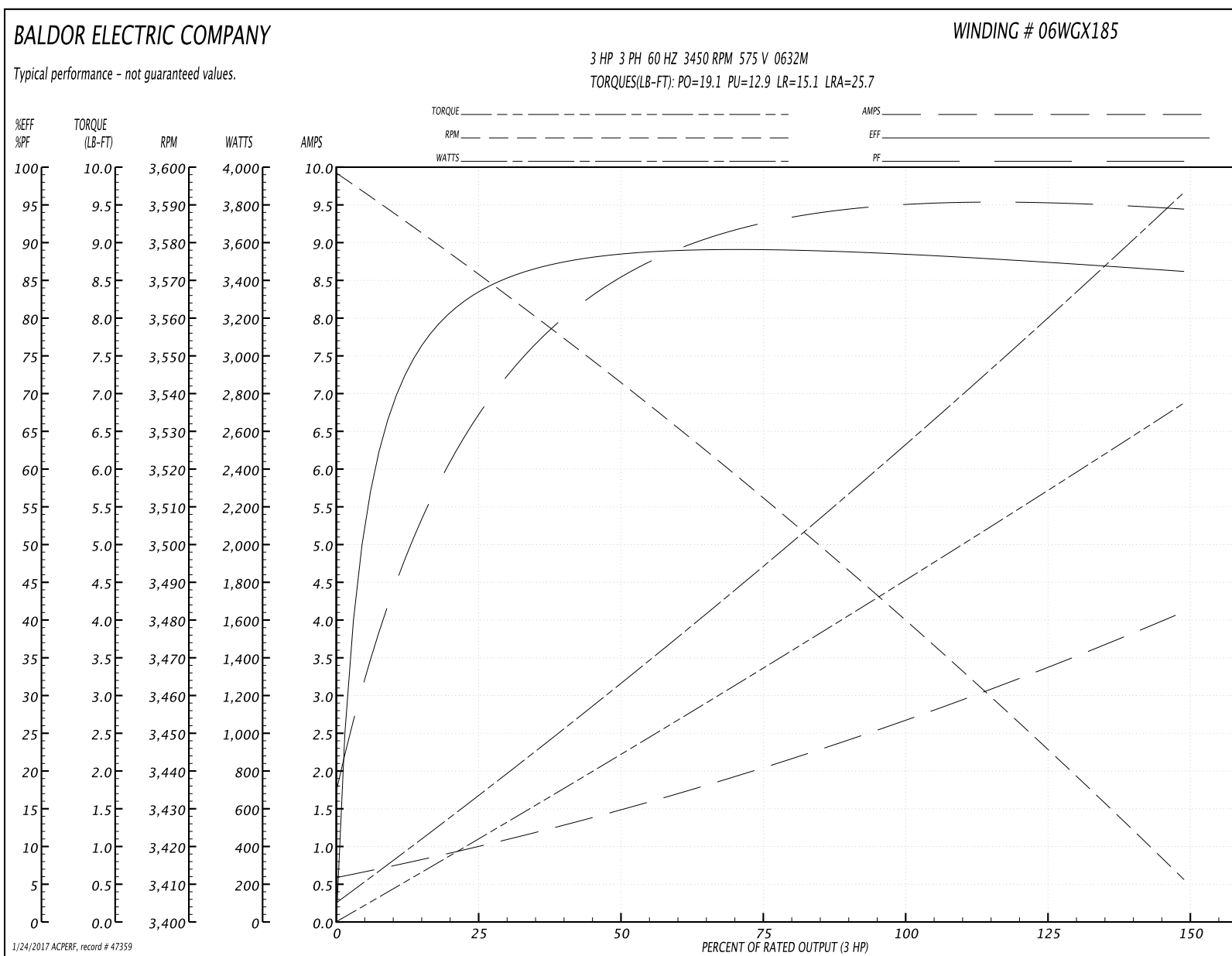
| Nameplate Data        |              |              |    | 575 V, 60 Hz:<br>Single Voltage Motor |                          |
|-----------------------|--------------|--------------|----|---------------------------------------|--------------------------|
| Rated Output (HP)     | 3            |              |    | Full Load Torque                      | 4.52 LB-FT               |
| Volts                 | 575          |              |    | Start Configuration                   | direct on line           |
| Full Load Amps        | 2.7          |              |    | Breakdown Torque                      | 19.1 LB-FT               |
| R.P.M.                | 3450         |              |    | Pull-up Torque                        | 12.9 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                   | 15.1 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | K  | Starting Current                      | 25.7 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                       | 0.634 A                  |
| NEMA Nom. Eff.        | 88.5         | Power Factor | 94 | Line-line Res. @ 25°C                 | 6.39 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 35°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                | 43°C                     |
|                       |              |              |    | Locked-rotor Power Factor             | 42                       |
|                       |              |              |    | Rotor inertia                         | 0.144 LB-FT <sup>2</sup> |

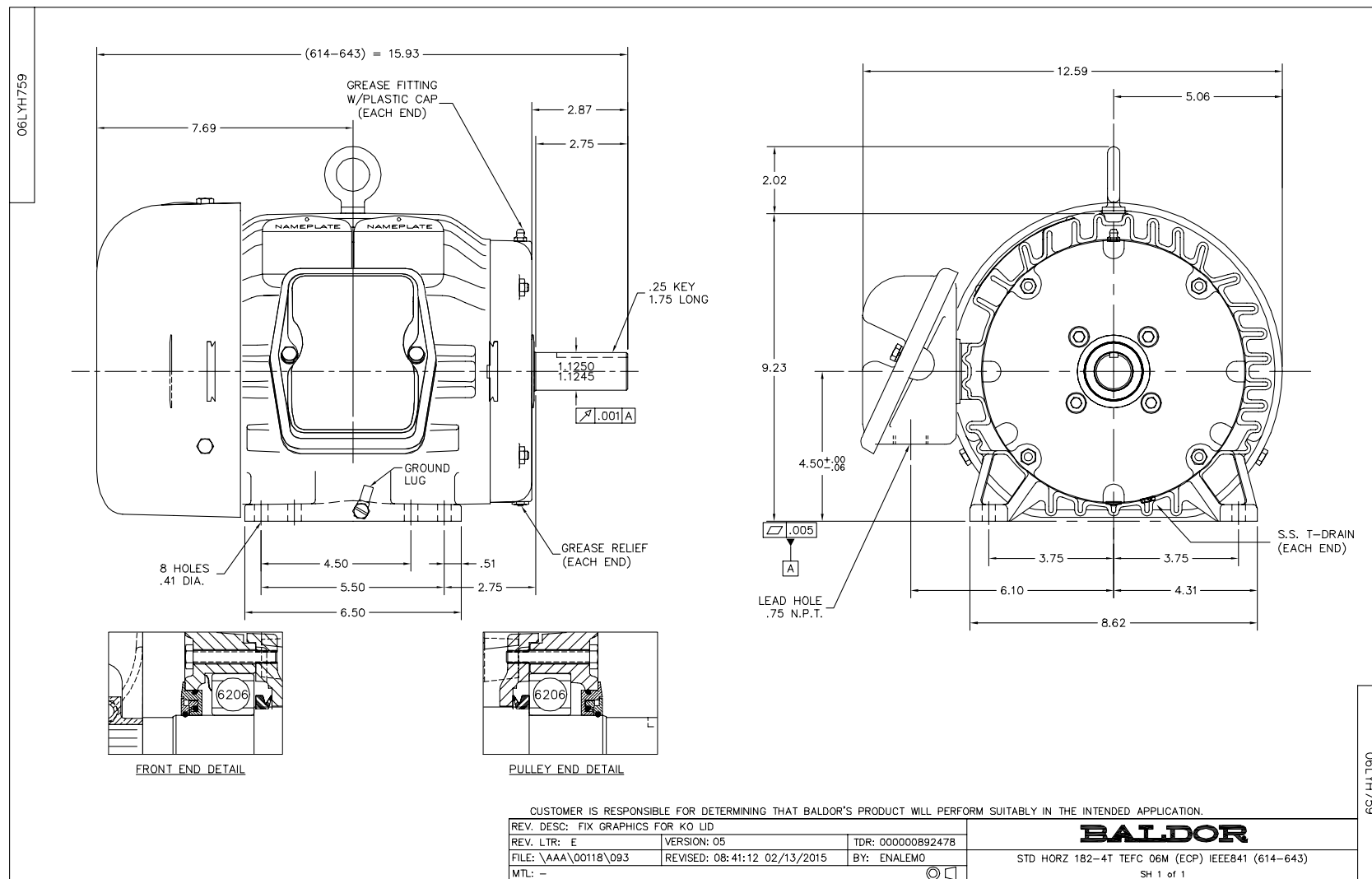
**Load Characteristics 575 V, 60 Hz, 3 HP**

|                 |       |      |      |      |      |      |      |
|-----------------|-------|------|------|------|------|------|------|
| % of Rated Load | 25    | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 72    | 86   | 92   | 94   | 95   | 95   | 95   |
| Efficiency      | 82.7  | 88.6 | 89.1 | 88.5 | 87.4 | 86.2 | 87.8 |
| Speed           | 3570  | 3543 | 3513 | 3481 | 3448 | 3410 | 3461 |
| Line amperes    | 0.929 | 1.46 | 2.04 | 2.7  | 3.38 | 4.08 | 3.11 |

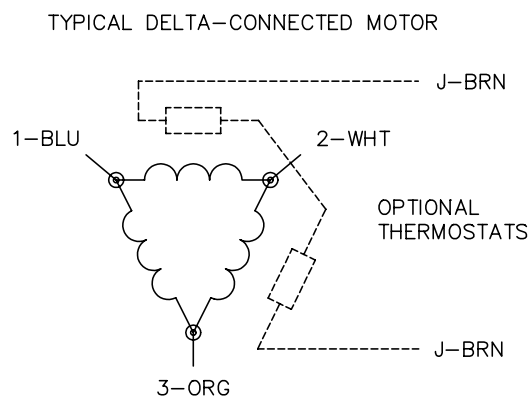
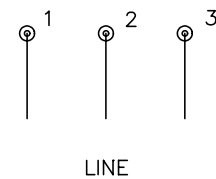
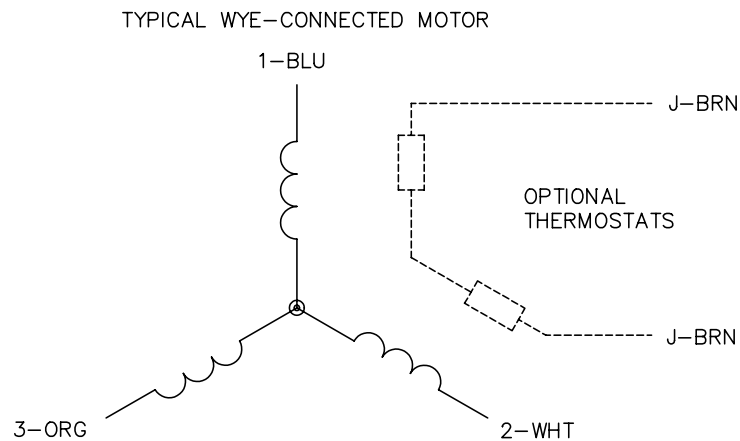


Performance Graph at 575V, 60Hz, 3.0HP Typical performance - Not guaranteed values





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