

# ABB BALDOR RELIANCE III

---

## Customer information packet

### CEM3664T

2HP, 1165RPM, 3PH, 60HZ, 184TC, 0642M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 184TC                                                       |
| <b>Frame Material</b>                 | Iron                                                        |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | None                                                        |
| <b>Haz Area Division</b>              | Not Applicable                                              |
| <b>Motor Letter Type</b>              | Three Phase                                                 |
| <b>Output @ Frequency</b>             | 2.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CURUSEEV<br>NEMA PREMIUM<br>NEMA PREMIUM (OLD LOGO)         |
| <b>Ambient Temperature</b>            | 40 °C                                                       |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                            |
| <b>Auxiliary Box Lead Termination</b> | None                                                        |
| <b>Base Indicator</b>                 | Rigid                                                       |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 6.300 A @ 230.0 V<br>6.600 A @ 208.0 V<br>3.150 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 88.5 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Face Code</b>                | Standard                                                    |
| <b>Front Shaft Indicator</b>          | None                                                        |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | N          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 06F057     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 06WGW970   |
| <b>Layout</b>       | 06LYF057   |
| <b>Eff. date</b>    | 02-26-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 10-17-2011 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 3.2 a                 |
| <b>Insulation Class</b>              | F                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>KVA Code</b>                      | K                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 16 AWG            |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 0642M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 6                     |
| <b>Overall Length</b>                | 15.98 IN              |
| <b>Power Factor</b>                  | 68                    |
| <b>Product Family</b>                | General Purpose       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | C-Face                |
| <b>Pulley Shaft Indicator</b>        | Standard              |
| <b>Rodent Screen</b>                 | None                  |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.125 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding    |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | No Slinger            |
| <b>Speed</b>                         | 1165 rpm              |
| <b>Speed Code</b>                    | Single Speed          |
| <b>Starting Method</b>               | Direct on line        |
| <b>Thermal Device - Bearing</b>      | None                  |
| <b>Thermal Device - Winding</b>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |
| <b>Winding Thermal 1</b>             | None                  |

Winding Thermal 2

None

---

**Nameplate**

| NP3441LUA                  |              |     |      |      |     |   |       |   |       |
|----------------------------|--------------|-----|------|------|-----|---|-------|---|-------|
| CAT.NO.                    | CEM3664T     |     |      |      |     |   |       |   |       |
| SPEC                       | 06F057W970G1 |     |      |      |     |   |       |   |       |
| HP                         | 2            |     |      |      |     |   |       |   |       |
| VOLTS                      | 230/460      |     |      |      |     |   |       |   |       |
| AMPS                       | 6.3/3.15     |     |      |      |     |   |       |   |       |
| RPM                        | 1165         |     |      |      |     |   |       |   |       |
| FRAME                      | 184TC        |     | HZ   | 60   |     |   | PH    | 3 |       |
| SF                         | 1.15         |     | CODE | K    | DES | B | CLASS | F |       |
| NEMA NOM. EFF              | 88.5         |     | PF   | 68   |     |   |       |   |       |
| RATING                     | 40C AMB-CONT |     |      |      |     |   |       |   |       |
| CC                         | 010A         |     |      |      |     |   |       |   |       |
| ENCL                       | TEFC         | SER |      |      |     |   |       |   |       |
| DE                         | 6206         |     | ODE  | 6205 |     |   |       |   |       |
| VPWM INVERTER READY        | SFA 7/3.5    |     |      |      |     |   |       |   |       |
| CT6-60H(10:1)VT3-60H(20:1  |              |     |      |      |     |   |       |   |       |
| 50HZ 2HP 190/380V 7.4/3.7A |              |     |      |      |     |   |       |   | SF1.0 |

**AC Induction Motor Performance Data**

Record # 53064

Typical performance - not guaranteed values

| Winding: 06WGW970-R023 |    |          | Type: 0642M                              |                     | Enclosure: TEFC         |            |              |
|------------------------|----|----------|------------------------------------------|---------------------|-------------------------|------------|--------------|
| Nameplate Data         |    |          | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |            |              |
| Rated Output (HP)      |    | 2        | Full Load Torque                         |                     | 9.05 LB-FT              |            |              |
| Volts                  |    | 230/460  | Start Configuration                      |                     | direct on line          |            |              |
| Full Load Amps         |    | 6.3/3.15 | Breakdown Torque                         |                     | 31.2 LB-FT              |            |              |
| R.P.M.                 |    | 1165     | Pull-up Torque                           |                     | 16.7 LB-FT              |            |              |
| Hz                     | 60 | Phase    | 3                                        | Locked-rotor Torque |                         | 19.9 LB-FT |              |
| NEMA Design Code       |    | B        | KVA Code                                 | K                   | Starting Current        |            | 20.9 A       |
| Service Factor (S.F.)  |    | 1.15     | No-load Current                          |                     | 1.84 A                  |            |              |
| NEMA Nom. Eff.         |    | 88.5     | Power Factor                             | 68                  | Line-line Res. @ 25°C   |            | 5.42 Ω       |
| Rating - Duty          |    | 40C      | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |            | 27°C         |
| S.F. Amps              |    |          |                                          |                     | Temp. Rise @ S.F. Load  |            | 33°C         |
|                        |    |          |                                          |                     | Rotor inertia           |            | 0.394 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| % of Rated Load | 25     | 50   | 75     | 100  | 125    | 150  | S.F. |
|-----------------|--------|------|--------|------|--------|------|------|
| Power Factor    | 31     | 48   | 60     | 68   | 73     | 75   | 71   |
| Efficiency      | 80.5   | 86.9 | 88.5   | 88.6 | 87.9   | 86.6 | 88.2 |
| Speed           | 1193.1 | 1186 | 1178.3 | 1170 | 1160.8 | 1150 | 1164 |
| Line amperes    | 1.97   | 2.26 | 2.67   | 3.14 | 3.68   | 4.33 | 3.46 |

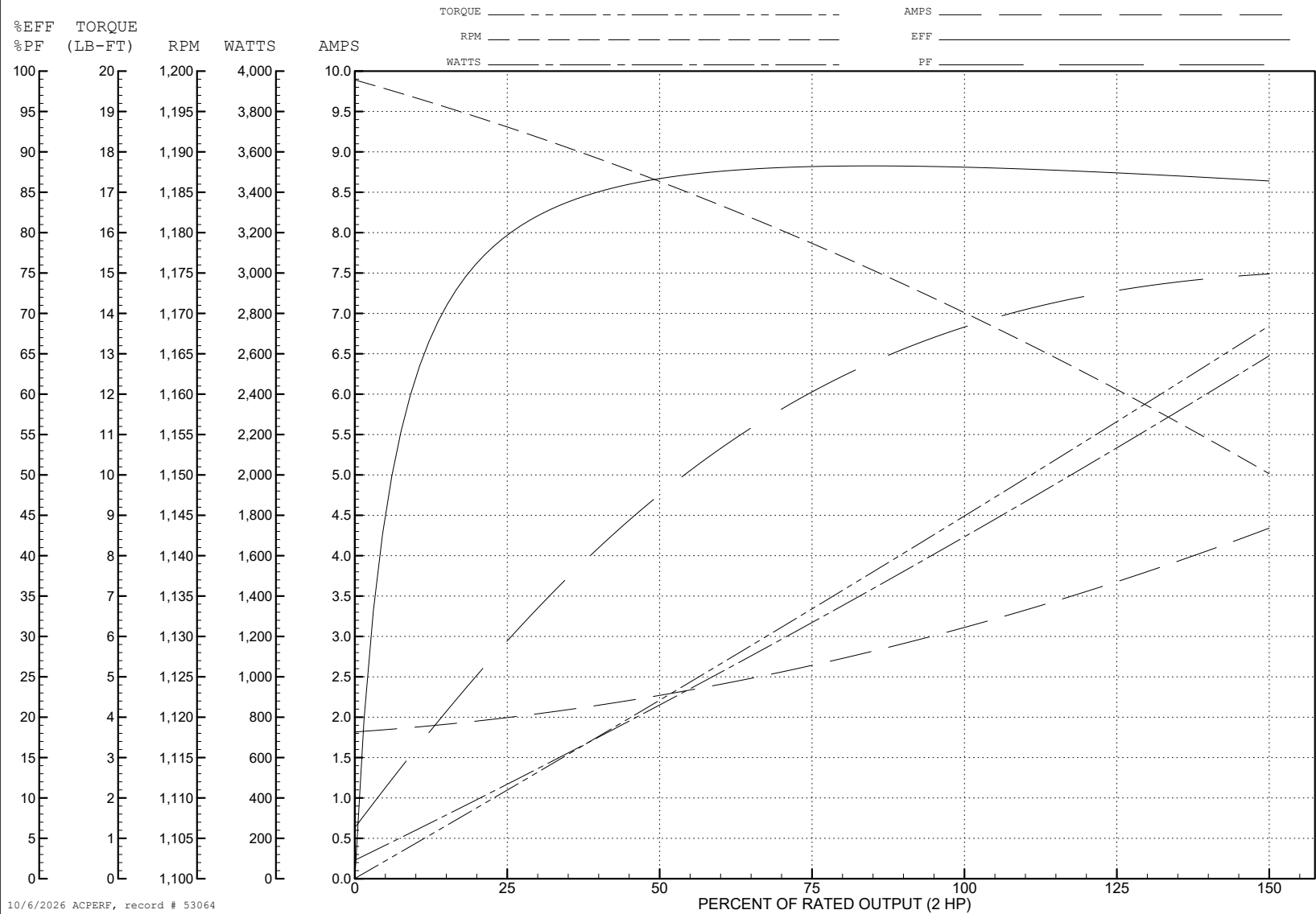
ABB Motors and Mechanical Inc.

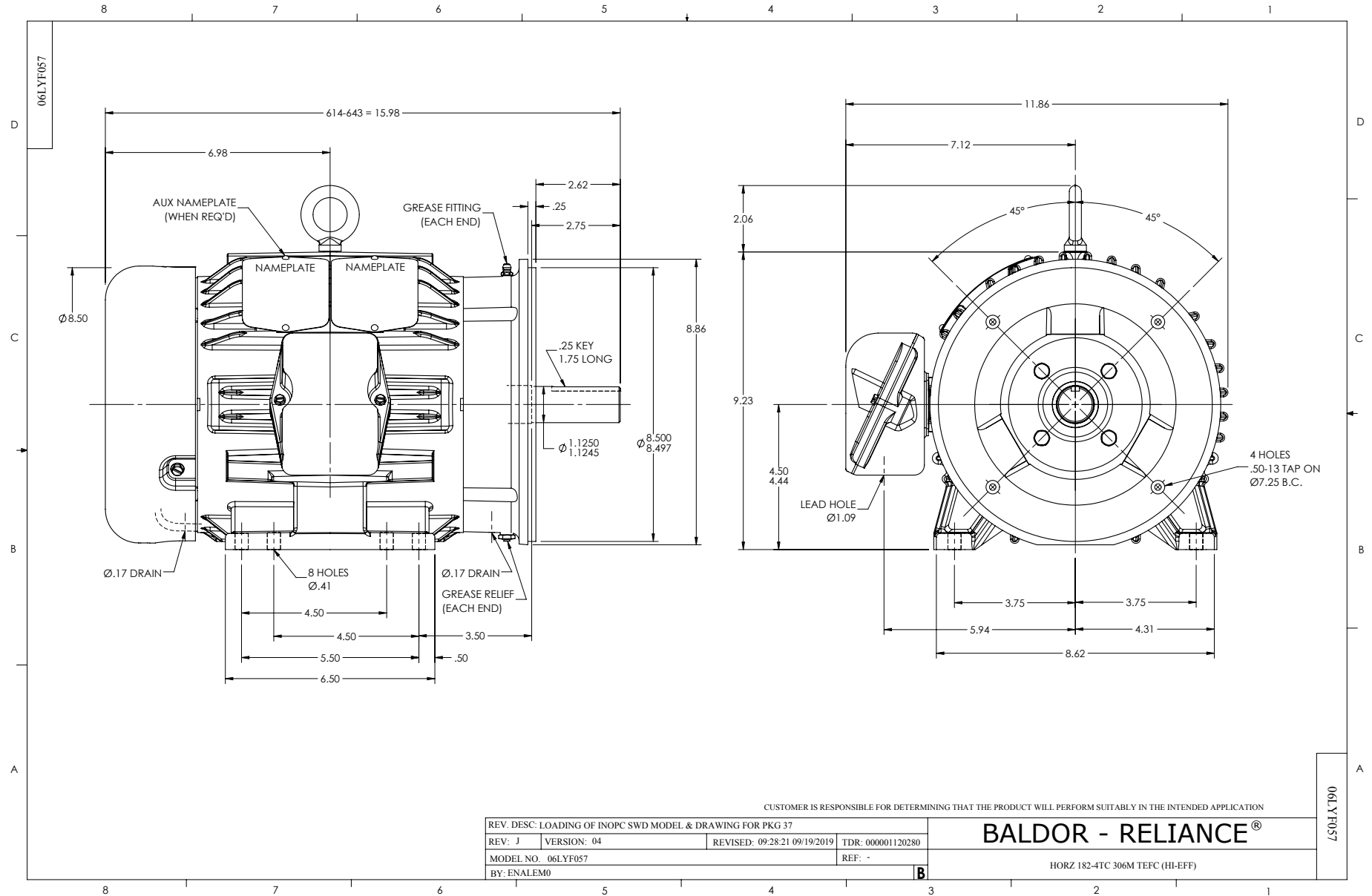
WINDING # 06WGW970

Typical performance - not guaranteed values.

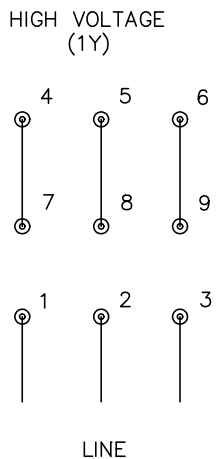
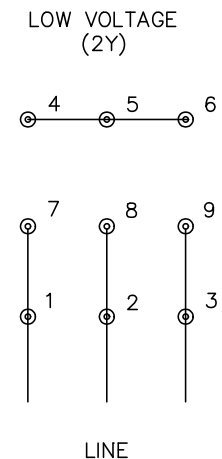
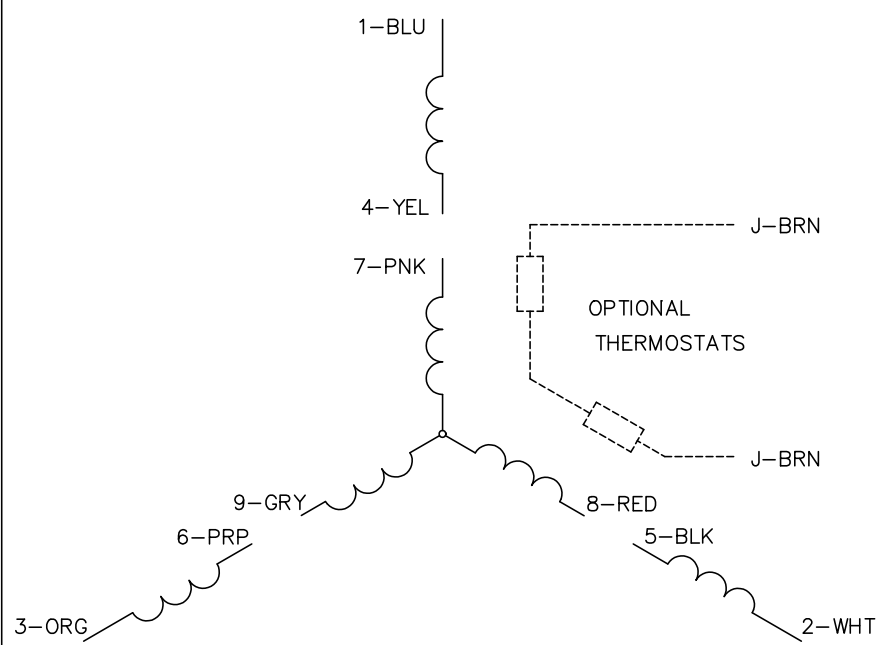
2 HP 3 PH 60 HZ 1165 RPM 460 V 0642M

TORQUES (LB-FT): PO=31.2 PU=16.7 LR=19.9 LRA=20.9





CD0005



- 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