

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM2333T

15HP, 1765RPM, 3PH, 60HZ, 254T, 0944M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                           |
| <b>Frame</b>                          | 254T                                                           |
| <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>             | 15.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                              |
| <b>Synchronous Speed @ Frequency</b>  | 1800 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>              | 36.200 A @ 230.0 V<br>38.000 A @ 208.0 V<br>18.100 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 92.4 %                                                         |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                      |
| <b>Feedback Device</b>                | NO FEEDBACK                                                    |
| <b>Front Shaft Indicator</b>          | None                                                           |
| <b>Heater Indicator</b>               | No Heater                                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | K          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 09P11      |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 09WGT597   |
| <b>Layout</b>       | 09LYP011   |
| <b>Eff. date</b>    | 03-19-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#12       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 11-11-2020 |

|                               |                       |
|-------------------------------|-----------------------|
| High Voltage Full Load Amps   | 18.1 a                |
| Insulation Class              | F                     |
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | H                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Quantity/Wire Size | 9 @ 12 AWG            |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 0944M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 4                     |
| Overall Length                | 23.36 IN              |
| Power Factor                  | 84                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | Standard              |
| Pulley Shaft Indicator        | Standard              |
| Rodent Screen                 | None                  |
| RoHS Status                   | ROHS COMPLIANT        |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.625 IN              |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 1765 rpm              |
| Speed Code                    | Single Speed          |
| Starting Method               | Direct on line        |
| Thermal Device - Bearing      | None                  |
| Thermal Device - Winding      | None                  |
| Vibration Sensor Indicator    | No Vibration Sensor   |
| Winding Thermal 1             | None                  |
| Winding Thermal 2             | None                  |

**Nameplate**

| NP3441LUA                        |                               |             |            |            |   |              |   |       |  |
|----------------------------------|-------------------------------|-------------|------------|------------|---|--------------|---|-------|--|
| <b>CAT.NO.</b>                   | EM2333T                       |             |            |            |   |              |   |       |  |
| <b>SPEC</b>                      | 09P011T597G1                  |             |            |            |   |              |   |       |  |
| <b>HP</b>                        | 15                            |             |            |            |   |              |   |       |  |
| <b>VOLTS</b>                     | 230/460                       |             |            |            |   |              |   |       |  |
| <b>AMPS</b>                      | 36.2/18.1                     |             |            |            |   |              |   |       |  |
| <b>RPM</b>                       | 1765                          |             |            |            |   |              |   |       |  |
| <b>FRAME</b>                     | 254T                          |             | <b>HZ</b>  | 60         |   | <b>PH</b>    | 3 |       |  |
| <b>SF</b>                        | 1.15                          | <b>CODE</b> | H          | <b>DES</b> | A | <b>CLASS</b> | F |       |  |
| <b>NEMA NOM. EFF</b>             | 92.4                          | <b>PF</b>   | 84         |            |   |              |   |       |  |
| <b>RATING</b>                    | 40C AMB-CONT                  |             |            |            |   |              |   |       |  |
| <b>CC</b>                        | 010A                          |             |            |            |   |              |   |       |  |
| <b>ENCL</b>                      | TEFC                          | <b>SER</b>  |            |            |   |              |   |       |  |
| <b>DE</b>                        | 6309                          |             | <b>ODE</b> | 6208       |   |              |   |       |  |
| <b>VPWM INVERTER READY</b>       |                               | SFA 41/20.4 |            |            |   |              |   |       |  |
| <b>CT6-60H(10:1)VT3-60H(20:1</b> |                               |             |            |            |   |              |   |       |  |
|                                  | 50HZ 15HP 190/380V 42.2/21.1A |             |            |            |   |              |   | SF1.0 |  |

**Accessories**

| Part number | Description | Multiplier |
|-------------|-------------|------------|
| 09-1309     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 93306

Typical performance - not guaranteed values

| Winding: 09WGT597-R001 |    |           | Type: 0944M            |                                          | Enclosure: TEFC         |                  |       |
|------------------------|----|-----------|------------------------|------------------------------------------|-------------------------|------------------|-------|
| Nameplate Data         |    |           |                        | 460 V, 60 Hz:<br>High Voltage Connection |                         |                  |       |
| Rated Output (HP)      |    | 15        | Full Load Torque       |                                          | 44.59 LB-FT             |                  |       |
| Volts                  |    | 230/460   | Start Configuration    |                                          | direct on line          |                  |       |
| Full Load Amps         |    | 36.2/18.1 | Breakdown Torque       |                                          | 151 LB-FT               |                  |       |
| R.P.M.                 |    | 1765      | Pull-up Torque         |                                          | 76.5 LB-FT              |                  |       |
| Hz                     | 60 | Phase     | 3                      | Locked-rotor Torque                      |                         | 84.9 LB-FT       |       |
| NEMA Design Code       |    | A         | KVA Code               | H                                        |                         | Starting Current | 131 A |
| Service Factor (S.F.)  |    | 1.15      | No-load Current        |                                          | 7.72 A                  |                  |       |
| NEMA Nom. Eff.         |    | 92.4      | Power Factor           |                                          | 84                      |                  |       |
| Rating - Duty          |    | 40C       | AMB-CONT               |                                          | Temp. Rise @ Rated Load |                  | 50°C  |
| S.F. Amps              |    | 41/20.4   | Temp. Rise @ S.F. Load |                                          | 61°C                    |                  |       |
|                        |    |           |                        | Locked-rotor Power Factor                |                         | 33.3             |       |

**Load Characteristics 460 V, 60 Hz, 15 HP**

| % of Rated Load | 25     | 50     | 75   | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|------|--------|--------|--------|------|
| Power Factor    | 46     | 68     | 78   | 83     | 85     | 86     | 84   |
| Efficiency      | 87.5   | 91.8   | 92.6 | 92.4   | 91.8   | 90.8   | 92   |
| Speed           | 1791.8 | 1784.7 | 1777 | 1768.8 | 1759.2 | 1749.3 | 1763 |
| Line amperes    | 8.82   | 11.3   | 14.6 | 18.3   | 22.4   | 26.9   | 20.8 |

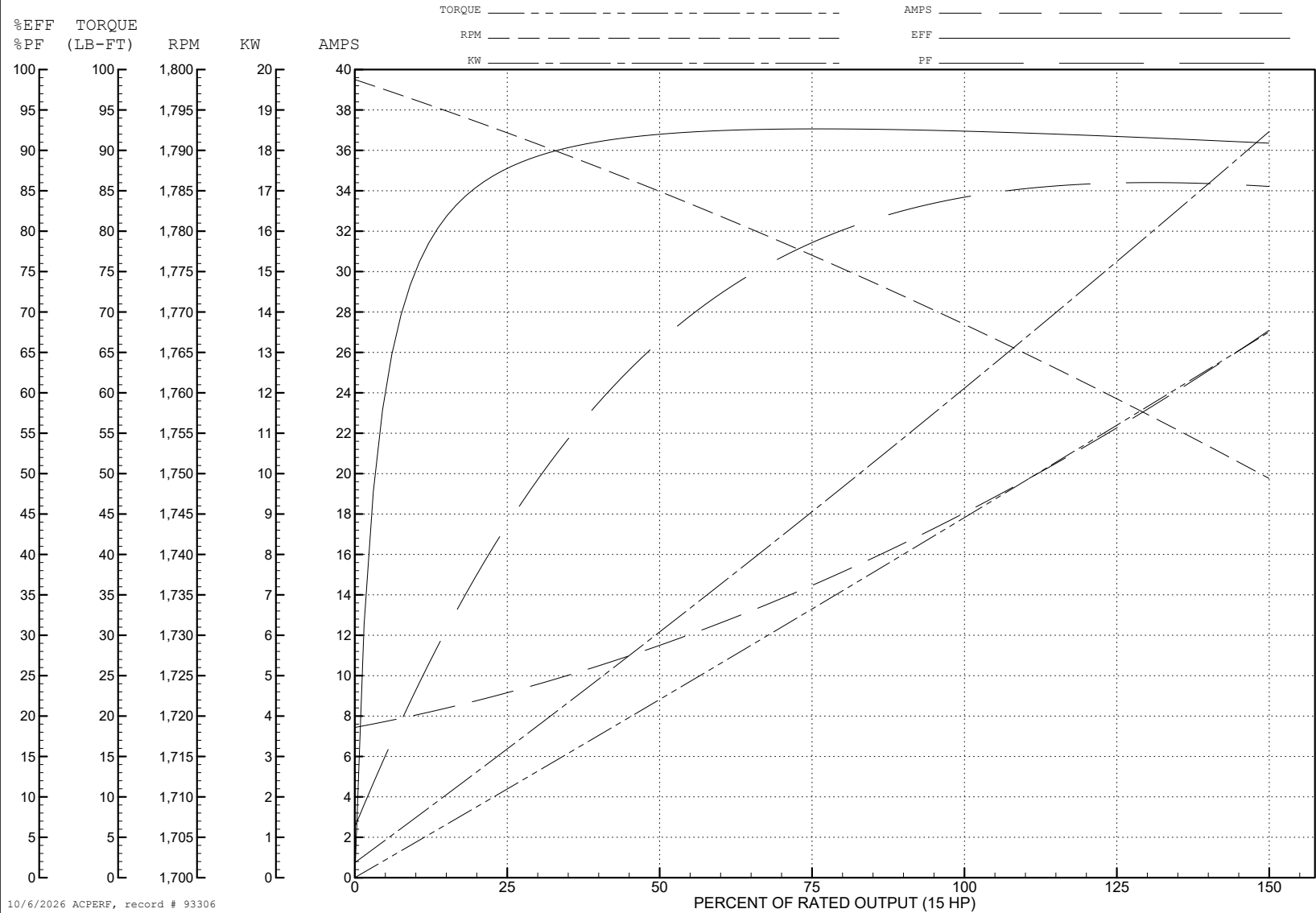
ABB Motors and Mechanical Inc.

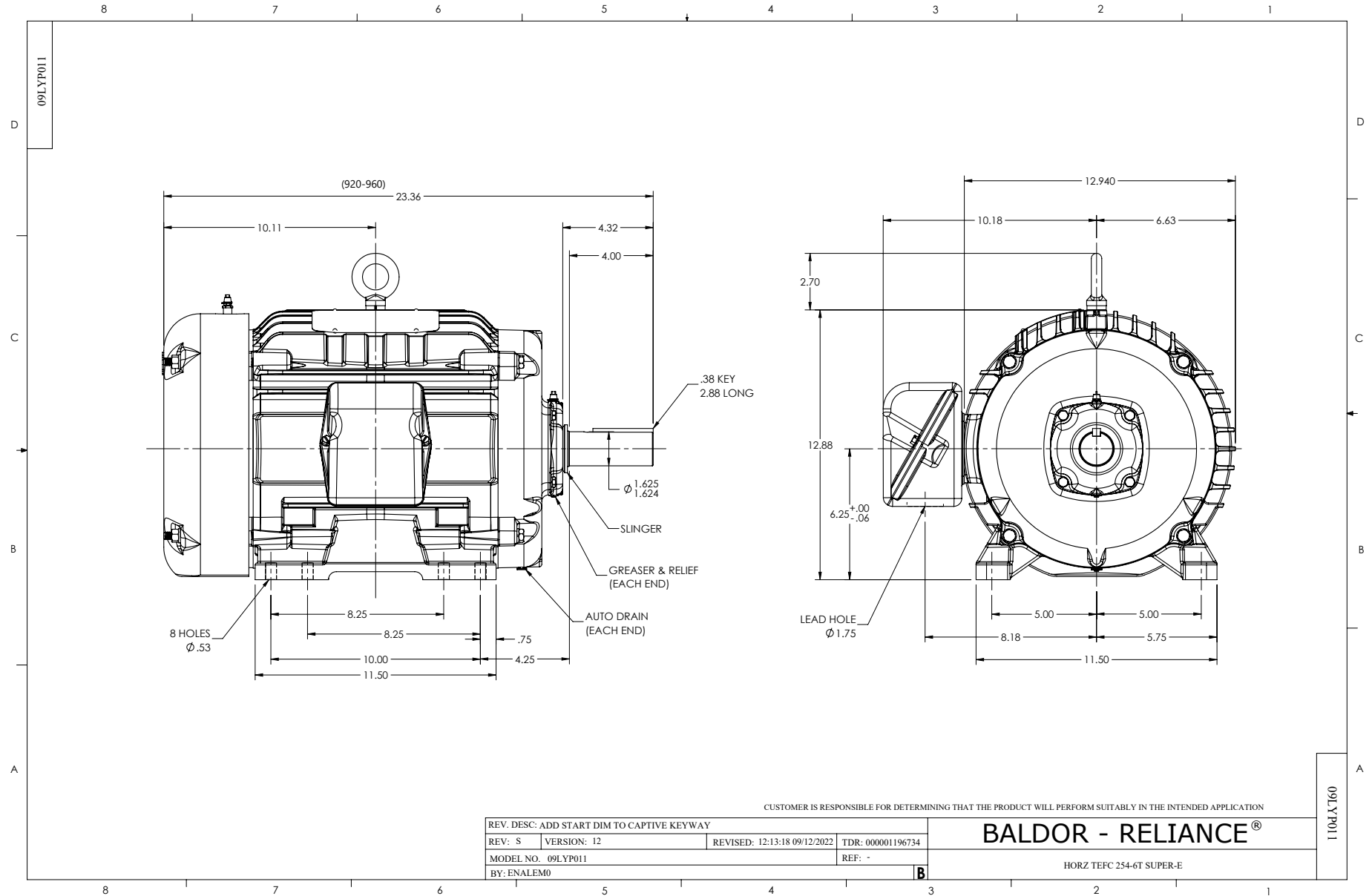
WINDING # 09WGT597

Typical performance - not guaranteed values.

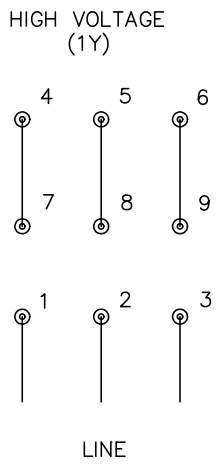
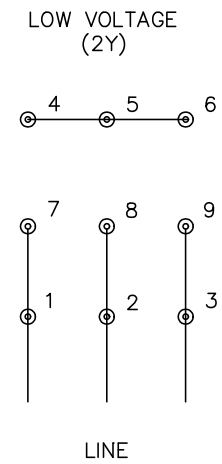
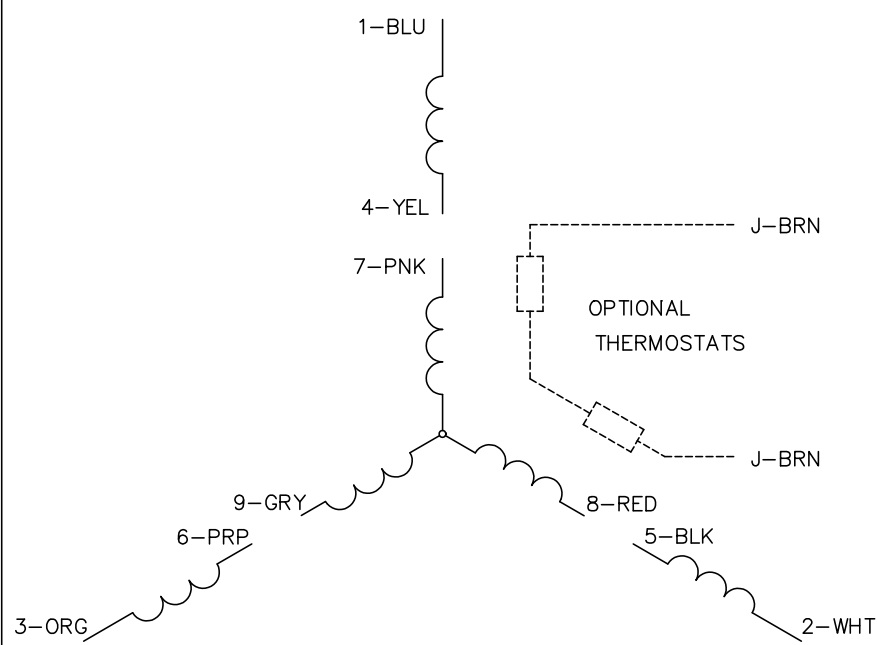
15 HP 3 PH 60 HZ 1765 RPM 460 V 0944M

TORQUES (LB-FT): PO=151 PU=76.5 LR=84.9 LRA=131





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