

# ABB BALDOR RELIANCE III

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## Customer information packet

### GNEM3313T

10HP//7.5KW, 1770//1470 1/MINRPM, 3PH, 60//

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                                                             |
|---------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Enclosure</b>                      | OPSB                                                                                        |
| <b>Frame</b>                          | 215T                                                                                        |
| <b>Frame Material</b>                 | Steel                                                                                       |
| <b>Frequency</b>                      | 50.00 Hz<br>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>             | 7.500 KW @ 50 HZ<br>10.000 HP @ 60 HZ                                                       |
| <b>Phase</b>                          | 3                                                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                                                            |
| <b>Voltage @ Frequency</b>            | 208.0 V @ 60 HZ<br>190.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>380.0 V @ 50 HZ<br>460.0 V @ 60 HZ |
| <b>Agency Approvals</b>               | WEEE<br>UKCA<br>NEMA PREMIUM (OLD LOGO)<br>NEMA PREMIUM<br>IE3<br>CURUS<br>CE               |
| <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>              | 32.000 A @ 190.0 V<br>28.000 A @ 208.0 V                                                    |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | H          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 37F614     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 37WGZ674   |
| <b>Layout</b>       | 37LYF614   |
| <b>Eff. date</b>    | 01-22-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#14       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-12-2023 |

26.800 A @ 230.0 V

16.000 A @ 380.0 V

13.400 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>        | 91.7 %                    |
| <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                 |
| <b>High Voltage Full Load Amps</b>   | 13.4 a                    |
| <b>Insulation Class</b>              | F                         |
| <b>Inverter Code</b>                 | Inverter Duty             |
| <b>KVA Code</b>                      | L                         |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing         |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 14 AWG                |
| <b>Motor Lead Termination</b>        | Flying Leads              |
| <b>Motor Standards</b>               | NEMA                      |
| <b>Motor Type</b>                    | 3748M                     |
| <b>Mounting Arrangement</b>          | F1                        |
| <b>Number of Poles</b>               | 4                         |
| <b>Overall Length</b>                | 18.20 IN                  |
| <b>Power Factor</b>                  | 76                        |
| <b>Product Family</b>                | General Purpose           |
| <b>Pulley End Bearing Type</b>       | Ball                      |
| <b>Pulley Face Code</b>              | Standard                  |
| <b>Pulley Shaft Indicator</b>        | Standard                  |
| <b>Rodent Screen</b>                 | None                      |
| <b>RoHS Status</b>                   | ROHS COMPLIANT            |
| <b>Service Factor</b>                | 1.15                      |
| <b>Shaft Diameter</b>                | 1.375 IN                  |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding        |

|                            |                     |
|----------------------------|---------------------|
| Shaft Rotation             | Reversible          |
| Shaft Slinger Indicator    | No Slinger          |
| Speed                      | 1470 rpm            |
|                            | 1770 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**

| NP4304L        |                             |               |          |        |    |       |      |      |    |
|----------------|-----------------------------|---------------|----------|--------|----|-------|------|------|----|
| CAT.NO.        | GNEM3313T                   |               |          |        |    |       |      |      |    |
| SPEC.          | 37F614Z674G1                |               |          |        |    |       |      |      |    |
| HP             | 10HP/7.5KW                  |               |          |        |    |       | PH   | 3    |    |
| VOLTS          | 208-230/460//190/380        |               |          |        |    |       |      |      |    |
| AMPS           | 28-26.8/13.4//32/16         |               |          |        |    |       |      |      |    |
| R.P.M. (1/MIN) | 1770//1470                  |               |          |        |    |       | WT.  | 65KG | KG |
| FRAME          | 215T                        |               | HZ       | 60//50 |    |       | I.P. | 22   |    |
| SER.F.         | 1.15                        | CODE          | L        | DES.   | A  | CLASS | F    |      |    |
| NOM.EFF.       | 91.7//90.4                  |               | % (100%) |        |    |       |      |      |    |
| P.F.           | 76                          | IC01, 10:1 VT |          |        |    |       |      |      |    |
| RATING         | 40C AMB-S1 CONT             |               |          |        | CC | 010A  |      |      |    |
| DE             | 6307                        |               | ODE      | 6206   |    |       |      |      |    |
| ENCL           | OPSB                        | SN            |          |        |    |       |      |      |    |
|                | IE3-60HZ-92.5(75%)91.5(50%) |               |          |        |    |       |      |      |    |
|                | IE3-50HZ-91.7(75%)91.6(50%) |               |          |        |    |       |      |      |    |
|                | SFA 31-30/15//34/17         |               |          |        |    |       |      |      |    |

**AC Induction Motor Performance Data**

Record # 102535

Typical performance - not guaranteed values

| Winding: 37WGZ674-R001 |        |                      |              | Type: 3748M                              |                       | Enclosure: OPSB |           |
|------------------------|--------|----------------------|--------------|------------------------------------------|-----------------------|-----------------|-----------|
| Nameplate Data         |        |                      |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                 |           |
| Rated Output (HP)      |        | 10HP//7.5KW          |              | Full Load Torque                         |                       | 29.7 LB-FT      |           |
| Volts                  |        | 208-230/460//190/380 |              | Start Configuration                      |                       | direct on line  |           |
| Full Load Amps         |        | 28-26.8/13.4//32/16  |              | Breakdown Torque                         |                       | 131 LB-FT       |           |
| R.P.M.                 |        | 1770//1470           |              | Pull-up Torque                           |                       | 58.7 LB-FT      |           |
| Hz                     | 60//50 | Phase                | 3            | Locked-rotor Torque                      |                       | 77.9 LB-FT      |           |
| NEMA Design Code       |        | A                    | KVA Code     | L                                        | Starting Current      |                 | 119 A     |
| Service Factor (S.F.)  |        | 1.15                 |              | No-load Current                          |                       | 7.22 A          |           |
| NEMA Nom. Eff.         |        | 91.7                 | Power Factor | 76                                       | Line-line Res. @ 25°C |                 | 0.85311 Ω |
| Rating - Duty          |        | 40C AMB-CONT         |              | Temp. Rise @ Rated Load                  |                       | 33°C            |           |
| S.F. Amps              |        | 31-30/15//34/17      |              | Temp. Rise @ S.F. Load                   |                       | 40°C            |           |
|                        |        |                      |              | Locked-rotor Power Factor                |                       | 36.5            |           |
|                        |        |                      |              | Rotor inertia                            |                       | 1.18 lb-ft²     |           |

**Load Characteristics 460 V, 60 Hz, 10 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 35     | 56     | 69     | 76     | 80     | 82     | 78   |
| Efficiency      | 86.5   | 91.5   | 92.5   | 92.5   | 92     | 91.2   | 92.2 |
| Speed           | 1793.9 | 1788.5 | 1782.5 | 1776.1 | 1769.6 | 1762.5 | 1772 |
| Line amperes    | 7.79   | 9.19   | 11.1   | 13.4   | 16     | 18.8   | 15   |

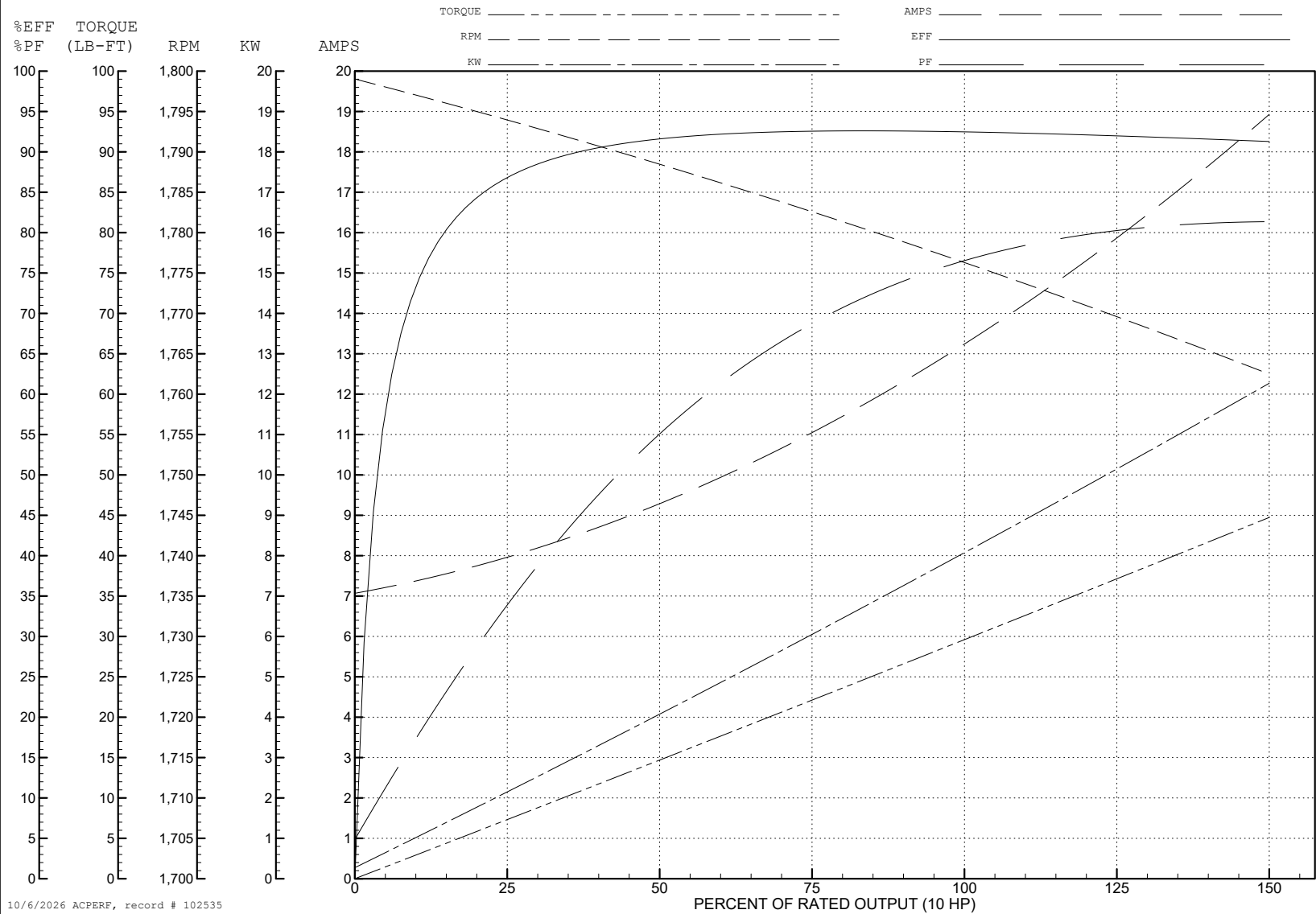
ABB Motors and Mechanical Inc.

WINDING # 37WGZ674

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1776.1 RPM 460 V 3748M

TORQUES (LB-FT): PO=131 PU=58.7 LR=77.9 LRA=119



**AC Induction Motor Performance Data**

Record # 102536

Typical performance - not guaranteed values

| Winding: 37WGZ674-R001 |  |                      |  | Type: 3748M                              |  | Enclosure: OPSB         |  |
|------------------------|--|----------------------|--|------------------------------------------|--|-------------------------|--|
| Nameplate Data         |  |                      |  | 380 V, 50 Hz:<br>High Voltage Connection |  |                         |  |
| Rated Output (HP)      |  | 10HP//7.5KW          |  | Full Load Torque                         |  | 35.86 LB-FT             |  |
| Volts                  |  | 208-230/460//190/380 |  | Start Configuration                      |  | direct on line          |  |
| Full Load Amps         |  | 28-26.8/13.4//32/16  |  | Breakdown Torque                         |  | 113 LB-FT               |  |
| R.P.M.                 |  | 1770//1470           |  | Pull-up Torque                           |  | 53.7 LB-FT              |  |
| Hz                     |  | 60//50               |  | Phase                                    |  | 3                       |  |
| NEMA Design Code       |  | A                    |  | KVA Code                                 |  | L                       |  |
| Service Factor (S.F.)  |  | 1.15                 |  | No-load Current                          |  | 6.92 A                  |  |
| NEMA Nom. Eff.         |  | 91.7                 |  | Power Factor                             |  | 76                      |  |
| Rating - Duty          |  | 40C                  |  | AMB-CONT                                 |  | Temp. Rise @ Rated Load |  |
| S.F. Amps              |  | 31-30/15//34/17      |  | Temp. Rise @ S.F. Load                   |  | 54°C                    |  |
|                        |  |                      |  | Locked-rotor Power Factor                |  | 36.5                    |  |
|                        |  |                      |  | Rotor inertia                            |  | 1.18 lb-ft²             |  |

**Load Characteristics 380 V, 50 Hz, 10 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 42     | 64     | 75     | 80     | 82     | 83     | 81   |
| Efficiency      | 88.2   | 91.6   | 91.7   | 90.9   | 90.2   | 89.6   | 90.5 |
| Speed           | 1492.1 | 1484.7 | 1476.6 | 1468.1 | 1462.5 | 1457.9 | 1465 |
| Line amperes    | 7.8    | 9.74   | 12.4   | 15.5   | 17.6   | 19.1   | 16.8 |

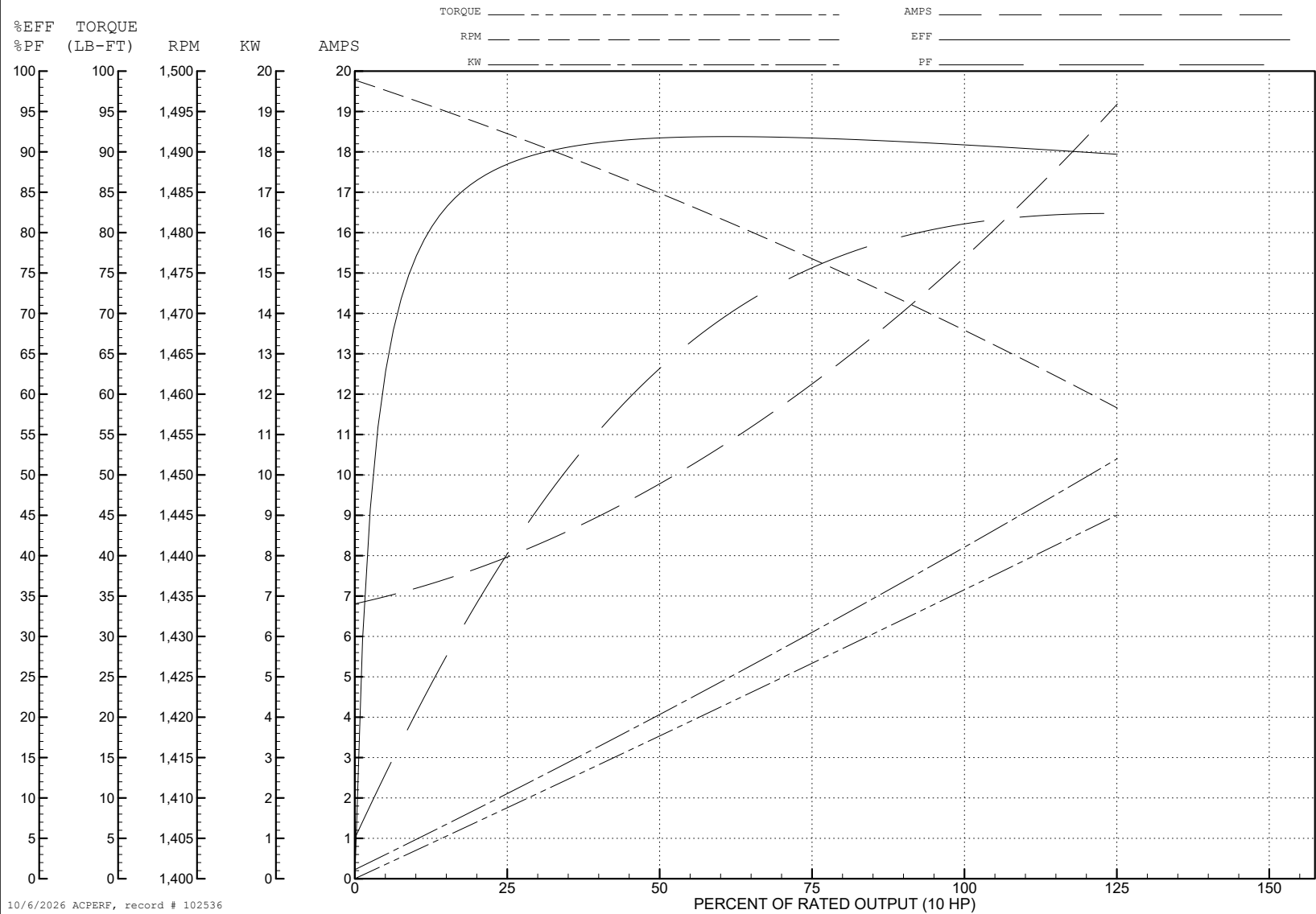
ABB Motors and Mechanical Inc.

WINDING # 37WGZ674

Typical performance - not guaranteed values.

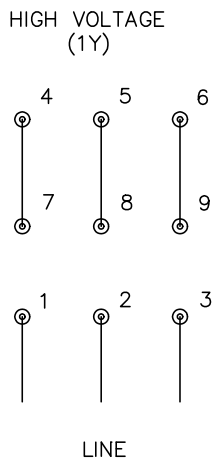
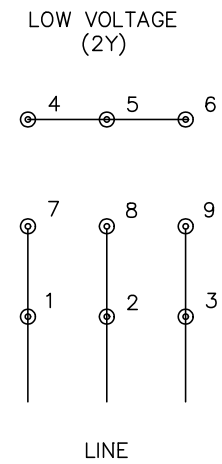
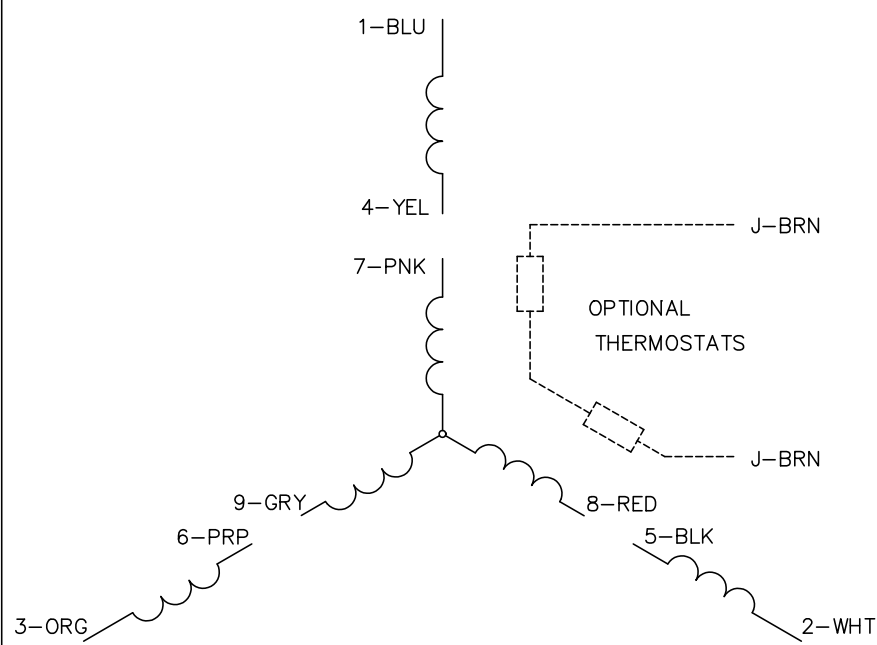
10 HP 3 PH 50 HZ 1468.1 RPM 380 V 3748M

TORQUES (LB-FT): PO=113 PU=53.7 LR=77.9 LRA=109





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