

# ABB BALDOR RELIANCE III

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## Customer information packet

### M1713T

25/13HP, 1760/870RPM, 3PH, 60HZ, 286T, 1048M

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                        |
|---------------------------------------|----------------------------------------|
| <b>Enclosure</b>                      | TEFC                                   |
| <b>Frame</b>                          | 286T                                   |
| <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>             | 25.000 HP @ 60 HZ<br>13.000 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                        |
| <b>Agency Approvals</b>               | UR<br>CSA                              |
| <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>              | 29.000 A @ 460.0 V                     |
| <b>Design Code</b>                    | B                                      |
| <b>Drip Cover</b>                     | No Drip Cover                          |
| <b>Duty Rating</b>                    | CONT                                   |
| <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                                   |
| <b>Heater Indicator</b>               | No Heater                              |
| <b>High Voltage Full Load Amps</b>    | 27.0 a                                 |
| <b>Insulation Class</b>               | F                                      |
| <b>Inverter Code</b>                  | Not Inverter                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | AG         |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 10C151     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 10WGW425   |
| <b>Layout</b>       | 10LYC151   |
| <b>Eff. date</b>    | 01-07-2026 |
| <b>CD Diagram</b>   | CD0011     |
| <b>Poles</b>        | 04/08      |
| <b>Leads</b>        | 6#10       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-01-0001 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>KVA Code</b>                      | <b>F</b>                     |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>        |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>                |
| <b>Motor Lead Quantity/Wire Size</b> | <b>6 @ 10 AWG</b>            |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>          |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>1048M</b>                 |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>4</b>                     |
|                                      | <b>8</b>                     |
| <b>Overall Length</b>                | <b>27.76 IN</b>              |
| <b>Product Family</b>                | <b>General Purpose</b>       |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                  |
| <b>Pulley Face Code</b>              | <b>Standard</b>              |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>              |
| <b>Rodent Screen</b>                 | <b>None</b>                  |
| <b>Service Factor</b>                | <b>1.15</b>                  |
| <b>Shaft Diameter</b>                | <b>1.875 IN</b>              |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>            |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>                | <b>Reversible</b>            |
| <b>Shaft Slinger Indicator</b>       | <b>Shaft Slinger</b>         |
| <b>Speed</b>                         | <b>1760 rpm</b>              |
|                                      | <b>880 rpm</b>               |
| <b>Speed Code</b>                    | <b>2S-1W-CT</b>              |
| <b>Starting Method</b>               | <b>Direct on line</b>        |
| <b>Thermal Device - Bearing</b>      | <b>NONE (OLD)</b>            |
| <b>Thermal Device - Winding</b>      | <b>None</b>                  |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b>   |
| <b>Winding Thermal 1</b>             | <b>None</b>                  |
| <b>Winding Thermal 2</b>             | <b>None</b>                  |

**Nameplate**

| NP1256L      |              |      |     |      |   |       |    |   |  |
|--------------|--------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | M1713T       |      |     |      |   |       |    |   |  |
| SPEC.        | 10C151W425   |      |     |      |   |       |    |   |  |
| HP           | 25/13        |      |     |      |   |       |    |   |  |
| VOLTS        | 460          |      |     |      |   |       |    |   |  |
| AMP          | 29/27        |      |     |      |   |       |    |   |  |
| RPM          | 1760/880     |      |     |      |   |       |    |   |  |
| FRAME        | 286T         |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15         | CODE | F   | DES  | B | CLASS | F  |   |  |
| NEMA-NOM-EFF |              | PF   |     |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |       |    |   |  |
| CC           |              |      |     |      |   |       |    |   |  |
| DE           | 6311         |      | ODE | 6309 |   |       |    |   |  |
| ENCL         | TEFC         | SN   |     |      |   |       |    |   |  |

**Accessories**

| Part number   | Description  | Multiplier |
|---------------|--------------|------------|
| 10-1305       | C FACE KIT   | A8         |
| 10EP1502A01SP | D-FLANGE KIT | A8         |

**AC Induction Motor Performance Data**

Record # 30626

Typical performance - not guaranteed values

| Winding: 10WGW425-R003 |    |          | Type: 1048M                            |                     | Enclosure: TEFC           |                       |             |         |
|------------------------|----|----------|----------------------------------------|---------------------|---------------------------|-----------------------|-------------|---------|
| Nameplate Data         |    |          | 460 V, 60 Hz:<br>High Speed Connection |                     |                           |                       |             |         |
| Rated Output (HP)      |    | 25/13    | Full Load Torque                       |                     | 74.44 LB-FT               |                       |             |         |
| Volts                  |    | 460      | Start Configuration                    |                     | direct on line            |                       |             |         |
| Full Load Amps         |    | 29/27    | Breakdown Torque                       |                     | 184 LB-FT                 |                       |             |         |
| R.P.M.                 |    | 1760/880 | Pull-up Torque                         |                     | 100 LB-FT                 |                       |             |         |
| Hz                     | 60 | Phase    | 3                                      | Locked-rotor Torque |                           | 123 LB-FT             |             |         |
| NEMA Design Code       |    | B        | KVA Code                               | F                   | Starting Current          |                       | 171 A       |         |
| Service Factor (S.F.)  |    | 1.15     | No-load Current                        |                     | 9.05 A                    |                       |             |         |
| NEMA Nom. Eff.         |    | 0        | Power Factor                           |                     | 0                         | Line-line Res. @ 25°C |             | 0.504 Ω |
| Rating - Duty          |    | 40C      | AMB-CONT                               |                     | Temp. Rise @ Rated Load   |                       | 71°C        |         |
| S.F. Amps              |    |          |                                        |                     | Temp. Rise @ S.F. Load    |                       | 90°C        |         |
|                        |    |          |                                        |                     | Locked-rotor Power Factor |                       | 39.6        |         |
|                        |    |          |                                        |                     | Rotor inertia             |                       | 3.86 LB-FT2 |         |

**Load Characteristics 460 V, 60 Hz, 25 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|------|
| Power Factor    | 60    | 80    | 86    | 89    | 90    | 90    | 87   |
| Efficiency      | 86.9  | 91    | 91.4  | 90.5  | 89.5  | 87.2  | 89.6 |
| Speed           | 1791  | 1783  | 1773  | 1761  | 1750  | 1737  | 1750 |
| Line amperes    | 11.41 | 16.26 | 22.37 | 28.87 | 35.83 | 43.95 | 33.1 |

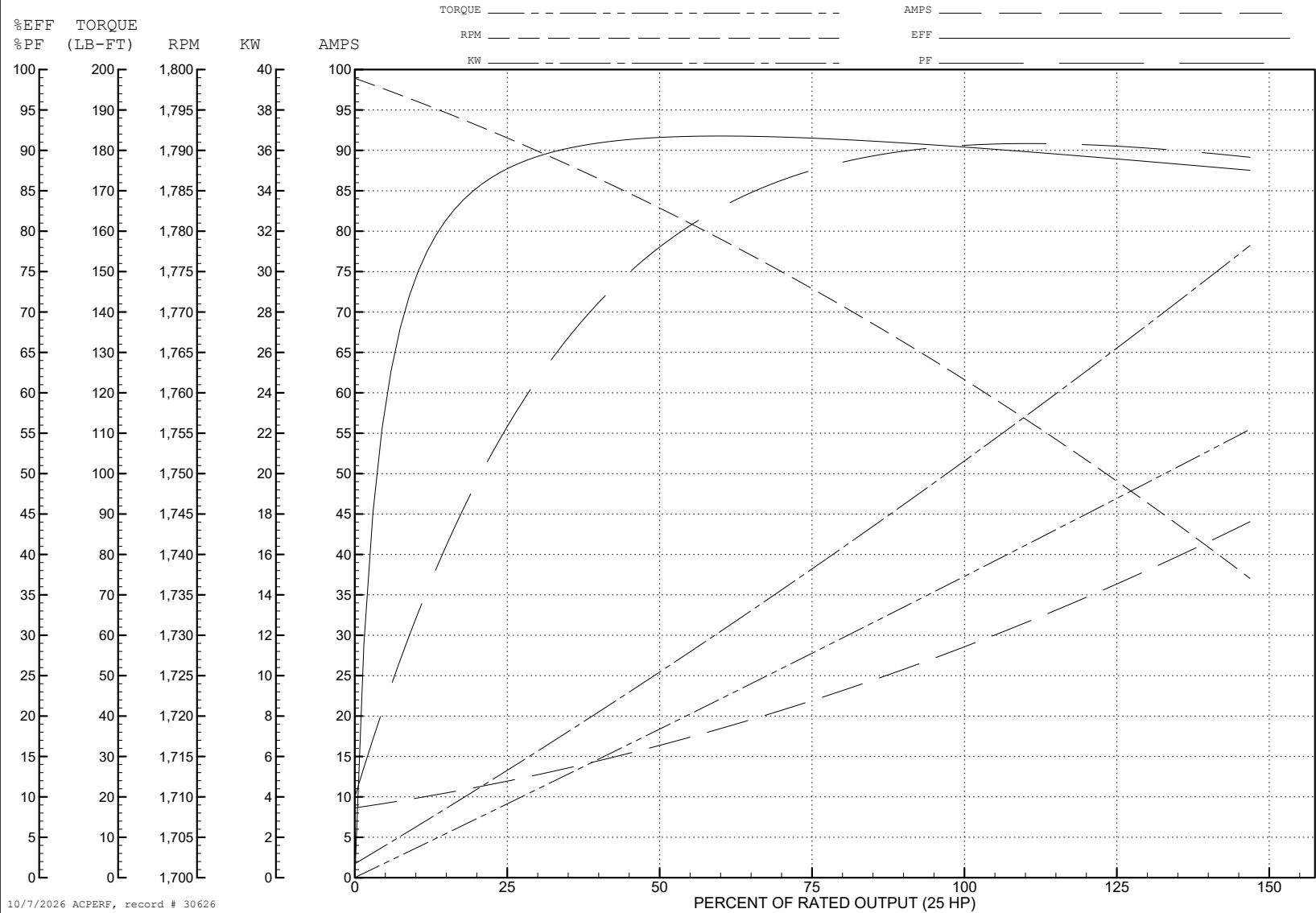
ABB Motors and Mechanical Inc.

WINDING # 10GW425

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1761 RPM 460 V 1048M

TORQUES (LB-FT): PO=184 PU=100 LR=123 LRA=171



**AC Induction Motor Performance Data**

Record # 30627

Typical performance - not guaranteed values

| Winding: 10WGW425-R003 |    |              | Type: 1048M                           | Enclosure: TEFC           |                       |             |        |
|------------------------|----|--------------|---------------------------------------|---------------------------|-----------------------|-------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>Low Speed Connection |                           |                       |             |        |
| Rated Output (HP)      |    | 25/13        | Full Load Torque                      |                           | 81.41 LB-FT           |             |        |
| Volts                  |    | 460          | Start Configuration                   |                           | direct on line        |             |        |
| Full Load Amps         |    | 29/27        | Breakdown Torque                      |                           | 138 LB-FT             |             |        |
| R.P.M.                 |    | 1760/880     | Pull-up Torque                        |                           | 137 LB-FT             |             |        |
| Hz                     | 60 | Phase        | 3                                     | Locked-rotor Torque       |                       | 196 LB-FT   |        |
| NEMA Design Code       |    | B            | KVA Code                              | F                         | Starting Current      |             | 107 A  |
| Service Factor (S.F.)  |    | 1.15         |                                       | No-load Current           |                       | 20.59 A     |        |
| NEMA Nom. Eff.         |    | 0            | Power Factor                          | 0                         | Line-line Res. @ 25°C |             | 0.69 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                       | Temp. Rise @ Rated Load   |                       | 72°C        |        |
| S.F. Amps              |    |              |                                       | Temp. Rise @ S.F. Load    |                       | 77°C        |        |
|                        |    |              |                                       | Locked-rotor Power Factor |                       | 34.9        |        |
|                        |    |              |                                       | Rotor inertia             |                       | 3.86 LB-FT2 |        |

**Load Characteristics 460 V, 60 Hz, 13 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|------|
| Power Factor    | 21    | 35    | 46    | 55    | 60    | 64    | 59   |
| Efficiency      | 73.9  | 83.2  | 86.3  | 87.1  | 87.2  | 86.2  | 87.5 |
| Speed           | 895   | 890   | 886   | 880   | 875   | 868   | 875  |
| Line amperes    | 21.02 | 22.31 | 24.24 | 26.82 | 30.25 | 34.02 | 26.3 |

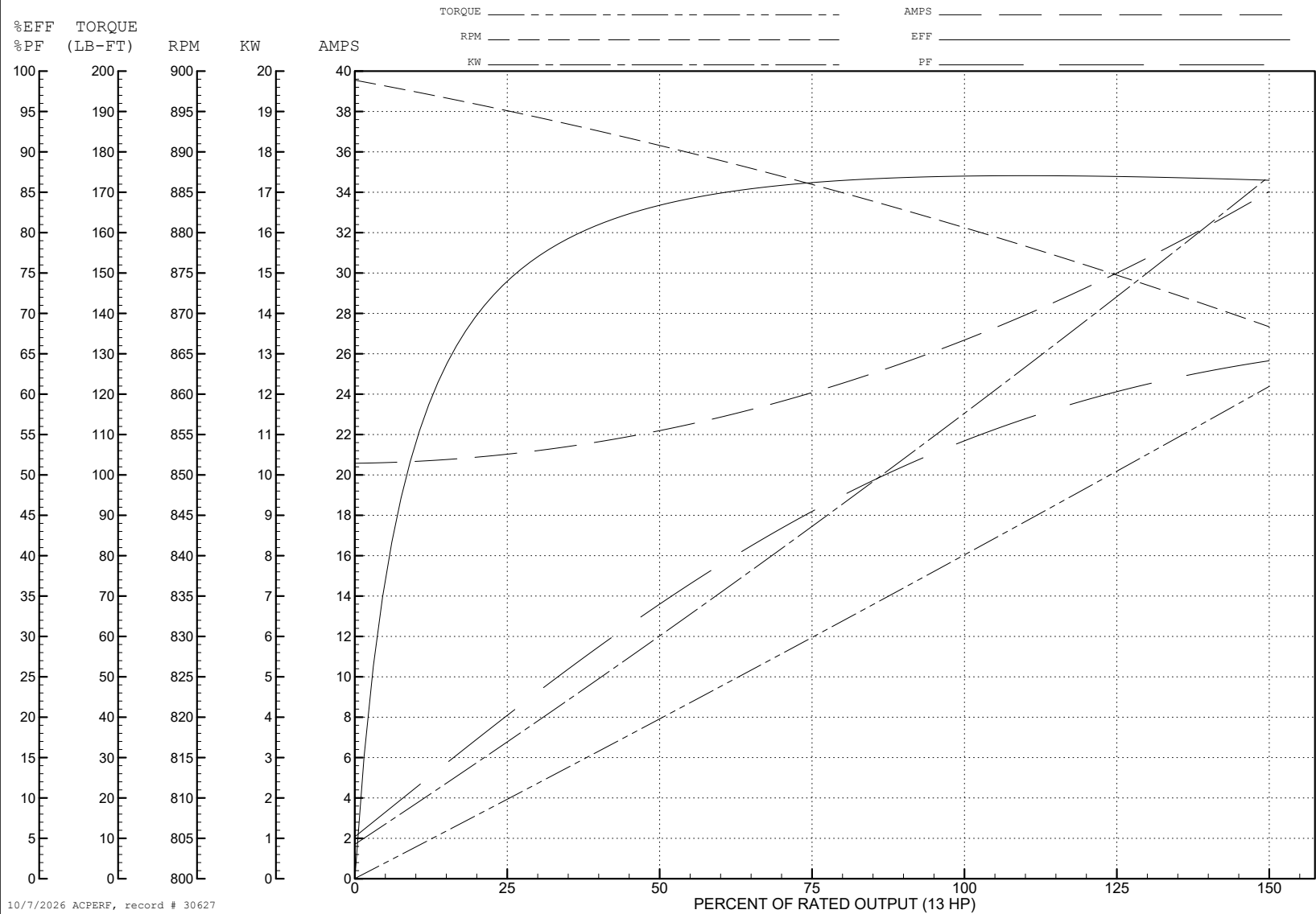
ABB Motors and Mechanical Inc.

WINDING # 10GW425

Typical performance - not guaranteed values.

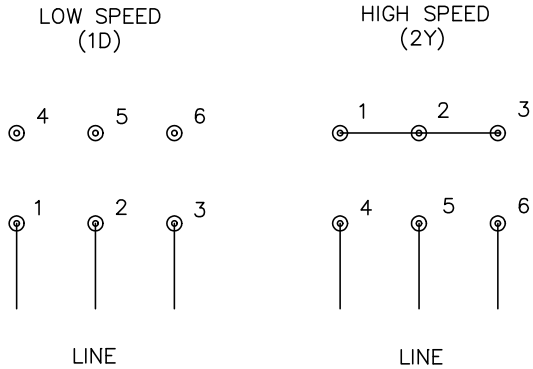
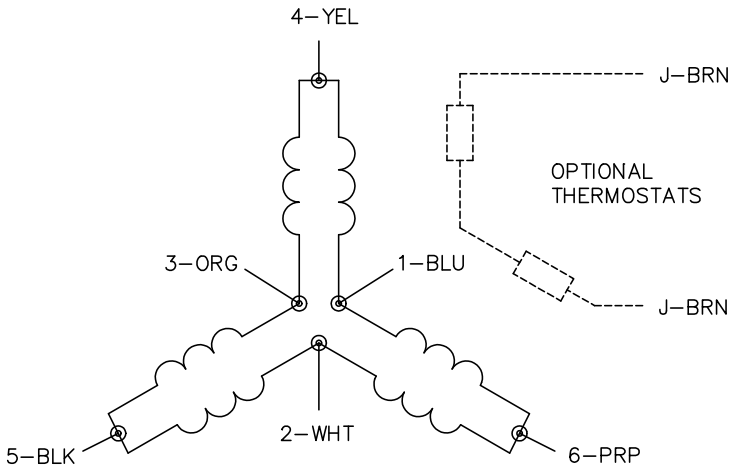
13 HP 3 PH 60 HZ 880 RPM 460 V 1048M

TORQUES (LB-FT): PO=138 PU=137 LR=196 LRA=107





CD0011



- 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: F                               | BY: JLP | REVISED: 01/21/99 5:04 | TDR: 0171435 |
| 110000                                    |         | FILE: DWG\142.wg       | MDL: -       |
|                                           |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING CONSTANT TORQUE

CD0011