

# ABB BALDOR RELIANCE III

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## Customer information packet

### CCPX251526T

15HP, 3530//2940RPM, 3PH, 60HZ, 254TC, XPFC, F

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

**Specifications**

|                                       |                                                                                                            |
|---------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Enclosure</b>                      | XPFC                                                                                                       |
| <b>Frame</b>                          | 254TC                                                                                                      |
| <b>Frame Material</b>                 | Iron                                                                                                       |
| <b>Frequency</b>                      | 60.00 Hz                                                                                                   |
| <b>Haz Area Class and Group</b>       | CLI GP C,D; CLII GP E,F,G                                                                                  |
| <b>Haz Area Division</b>              | Division I                                                                                                 |
| <b>Motor Letter Type</b>              | Three Phase                                                                                                |
| <b>Output @ Frequency</b>             | 10.000 HP @ 50 HZ<br>15.000 HP @ 60 HZ                                                                     |
| <b>Phase</b>                          | 3                                                                                                          |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                                                                                           |
| <b>Voltage @ Frequency</b>            | 380.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>460.0 V @ 60 HZ<br>190.0 V @ 50 HZ                                   |
| <b>Agency Approvals</b>               | CSA EEV<br>UL                                                                                              |
| <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>Constant Torque Speed Range</b>    | 6                                                                                                          |
| <b>Current @ Voltage</b>              | 37.000 A @ 208.0 V<br>34.400 A @ 230.0 V<br>29.000 A @ 190.0 V<br>17.200 A @ 460.0 V<br>14.500 A @ 380.0 V |
| <b>Design Code</b>                    | A                                                                                                          |
| <b>Drip Cover</b>                     | No Drip Cover                                                                                              |
| <b>Duty Rating</b>                    | CONT                                                                                                       |

**Part Detail**

|                     |              |
|---------------------|--------------|
| <b>Revision</b>     | H            |
| <b>Type</b>         | AC           |
| <b>Mech. spec.</b>  |              |
| <b>Base</b>         |              |
| <b>Status</b>       | PRD/A        |
| <b>Elec. spec.</b>  | 09WGZ864     |
| <b>Layout</b>       | 09LY-000-321 |
| <b>Eff. date</b>    | 05-02-2024   |
| <b>CD Diagram</b>   | CD0180       |
| <b>Poles</b>        | 02           |
| <b>Leads</b>        | 9#12         |
| <b>Proprietary</b>  | False        |
| <b>Created date</b> | 04-20-2019   |

|                               |                            |
|-------------------------------|----------------------------|
| Efficiency @ 100% Load        | 91.0 %                     |
| Electrically Isolated Bearing | Not Electrically Isolated  |
| Enclosure Modification        | Severe Duty Features       |
| Feedback Device               | NO FEEDBACK                |
| Haz Area Temp Code            | T3C                        |
| Heater Indicator              | No Heater                  |
| High Voltage Full Load Amps   | 14.5 a                     |
| Insulation Class              | F                          |
| Inverter Code                 | Inverter Duty              |
| IP Rating                     | IP55                       |
| KVA Code                      | H                          |
| Lifting Lugs                  | Standard Lifting Lugs      |
| Locked Bearing Indicator      | Locked Bearing             |
| Max Speed                     | 5400 rpm                   |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 0934M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 2                          |
| Overall Length                | 25.94 IN                   |
| Power Factor                  | 88                         |
| Product Family                | Chemical Process Features  |
| Pulley Face Code              | C-Face                     |
| Rodent Screen                 | None                       |
| RoHS Status                   | ROHS NON-COMPLIANT         |
| Service Factor                | 1.00                       |
| Shaft Diameter                | 1.625 IN                   |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Speed                         | 3530 rpm                   |
| Speed Code                    | Single Speed               |
| Starting Method               | Direct on line             |
| Thermal Device - Bearing      | None                       |
| Thermal Device - Winding      | Normally Closed Thermostat |

| Vibration Sensor Indicator | No Vibration Sensor |
|----------------------------|---------------------|
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

**Nameplate**

| NP2033XPSLEV |                            |        |   |              |         |                     |      |          |    |  |  |
|--------------|----------------------------|--------|---|--------------|---------|---------------------|------|----------|----|--|--|
| NO.          |                            |        |   |              |         | CC                  | 010A |          |    |  |  |
| S/N          |                            |        |   |              |         | TEMP CODE           |      | T3C      |    |  |  |
| SPEC.        | 09-0000-1333               |        |   |              |         | INV.TYPE            |      | PWM      |    |  |  |
| CAT.NO.      | CCPX251526T                |        |   |              |         | C HP FR             | 60   | C HP TO  | 90 |  |  |
| HP           | 15//10                     |        |   |              |         | CT HZ FROM          | 6    | CT HZ TO | 60 |  |  |
| VOLTS        | 230/460//190/380           |        |   |              |         | VT HZ FROM          | 6    | VT HZ TO | 60 |  |  |
| AMPS         | 34.4/17.2//29/14.5         |        |   |              | MAG CUR | 11.8/5.9            |      |          |    |  |  |
| RPM          | 3530//2940                 |        |   |              | MX RPM  | 5400                |      |          |    |  |  |
| HZ           | 60//50                     | PH     | 3 | CL           | F       | NOM.EFF.            | 91   |          |    |  |  |
| SER.F.       | 1.00                       | DES    | A | SL HZ        | 1.2     | WK2                 | 0.87 |          |    |  |  |
| FRAME        | 254TC                      | RATING |   | 40C AMB-CONT |         |                     |      |          |    |  |  |
| BLANK        | 55C AMB @ 1.0 SF, 60C RISE |        |   |              |         |                     |      |          |    |  |  |
|              | 1.15SF ON SINEWAVE         |        |   |              |         | NEMA MG-1 PT.5,IP55 |      |          |    |  |  |

**AC Induction Motor Performance Data**

Record # 66211

Typical performance - not guaranteed values

| Winding: 09WGZ864-R003 |          |              | Type: 0934M                              |                           | Enclosure: XPFC  |                       |       |         |
|------------------------|----------|--------------|------------------------------------------|---------------------------|------------------|-----------------------|-------|---------|
|                        |          |              |                                          |                           |                  |                       |       |         |
| Nameplate Data         |          |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                  |                       |       |         |
| Rated Output (HP)      |          | 15           | Full Load Torque                         |                           | 22.2 LB-FT       |                       |       |         |
| Volts                  |          | 230/460      | Start Configuration                      |                           | direct on line   |                       |       |         |
| Full Load Amps         |          | 34.4/17.2    | Breakdown Torque                         |                           | 102 LB-FT        |                       |       |         |
| R.P.M.                 |          | 3530         | Pull-up Torque                           |                           | 32.9 LB-FT       |                       |       |         |
| Hz                     | 60 Phase | 3            | Locked-rotor Torque                      |                           | 40.8 LB-FT       |                       |       |         |
| NEMA Design Code       |          | A            | KVA Code                                 | H                         | Starting Current |                       | 128 A |         |
| Service Factor (S.F.)  |          | 1            | No-load Current                          |                           | 5.9 A            |                       |       |         |
| NEMA Nom. Eff.         |          | 91           | Power Factor                             |                           | 88               | Line-line Res. @ 25°C |       | 0.591 Ω |
| Rating - Duty          |          | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                  | 56°C                  |       |         |
|                        |          |              |                                          | Locked-rotor Power Factor |                  | 29.4                  |       |         |
|                        |          |              |                                          | Rotor inertia             |                  | 0.868 LB-FT2          |       |         |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 57   | 78   | 86   | 89   | 90   | 90   |
| Efficiency      | 86.2 | 90.8 | 91.7 | 91.6 | 91.3 | 90.5 |
| Speed           | 3583 | 3567 | 3550 | 3533 | 3514 | 3493 |
| Line amperes    | 7.2  | 10   | 13.4 | 17.2 | 21.2 | 25.6 |

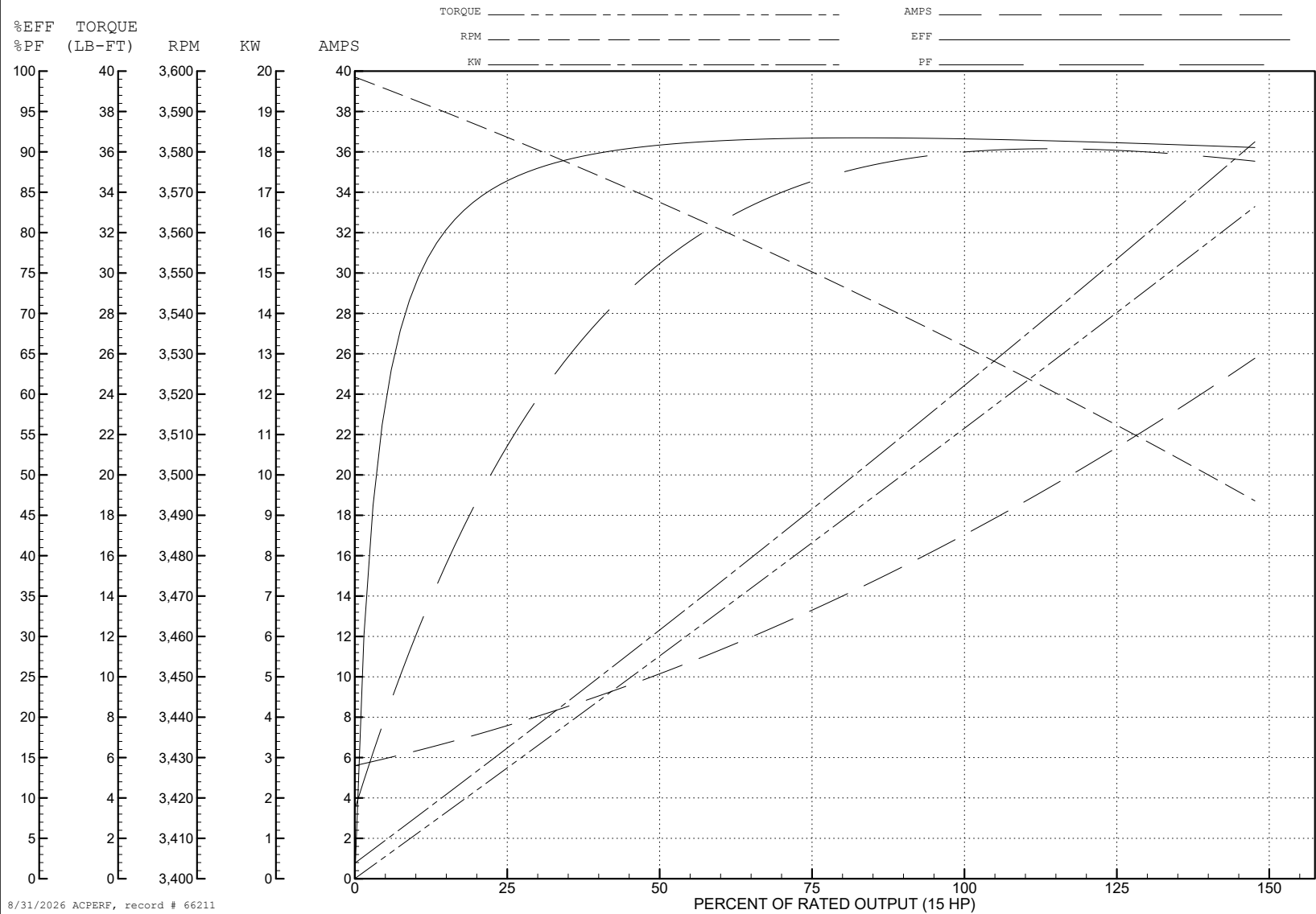
ABB Motors and Mechanical Inc.

WINDING # 09WGZ864

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3530 RPM 460 V 0934M

TORQUES (LB-FT): PO=102 PU=32.9 LR=40.8 LRA=128



**AC Induction Motor Performance Data**

Record # 75707

Typical performance - not guaranteed values

| Winding: 09WGZ864-R004 |        |                    | Type: 0934M  |                                          | Enclosure: XPFC       |                |         |
|------------------------|--------|--------------------|--------------|------------------------------------------|-----------------------|----------------|---------|
| Nameplate Data         |        |                    |              | 380 V, 50 Hz:<br>High Voltage Connection |                       |                |         |
| Rated Output (HP)      |        | 15//10             |              | Full Load Torque                         |                       | 17.74 LB-FT    |         |
| Volts                  |        | 230/460//190/380   |              | Start Configuration                      |                       | direct on line |         |
| Full Load Amps         |        | 34.4/17.2//29/14.5 |              | Breakdown Torque                         |                       | 97.77 LB-FT    |         |
| R.P.M.                 |        | 3530//2940         |              | Pull-up Torque                           |                       | 34.86 LB-FT    |         |
| Hz                     | 60//50 | Phase              | 3            | Locked-rotor Torque                      |                       | 43.23 LB-FT    |         |
| NEMA Design Code       |        | A                  | KVA Code     | H                                        | Starting Current      |                | 125 A   |
| Service Factor (S.F.)  |        | 1                  |              | No-load Current                          |                       | 5.79 A         |         |
| NEMA Nom. Eff.         |        | 91                 | Power Factor | 88                                       | Line-line Res. @ 25°C |                | 0.591 Ω |
| Rating - Duty          |        | 40C AMB-CONT       |              | Temp. Rise @ Rated Load                  |                       | 42°C           |         |
| S.F. Amps              |        |                    |              | Temp. Rise @ S.F. Load                   |                       | 51°C           |         |
|                        |        |                    |              | Locked-rotor Power Factor                |                       | 33.3           |         |
|                        |        |                    |              | Rotor inertia                            |                       | 0.868 LB-FT2   |         |

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

| % of Rated Load | 25   | 50   | 75    | 100   | 125   | 150   |
|-----------------|------|------|-------|-------|-------|-------|
| Power Factor    | 51   | 73   | 83    | 87    | 89    | 89    |
| Efficiency      | 84.8 | 90.1 | 91.1  | 91.4  | 91    | 90.4  |
| Speed           | 2986 | 2973 | 2959  | 2946  | 2931  | 2914  |
| Line amperes    | 6.62 | 8.7  | 11.27 | 14.19 | 17.29 | 20.69 |



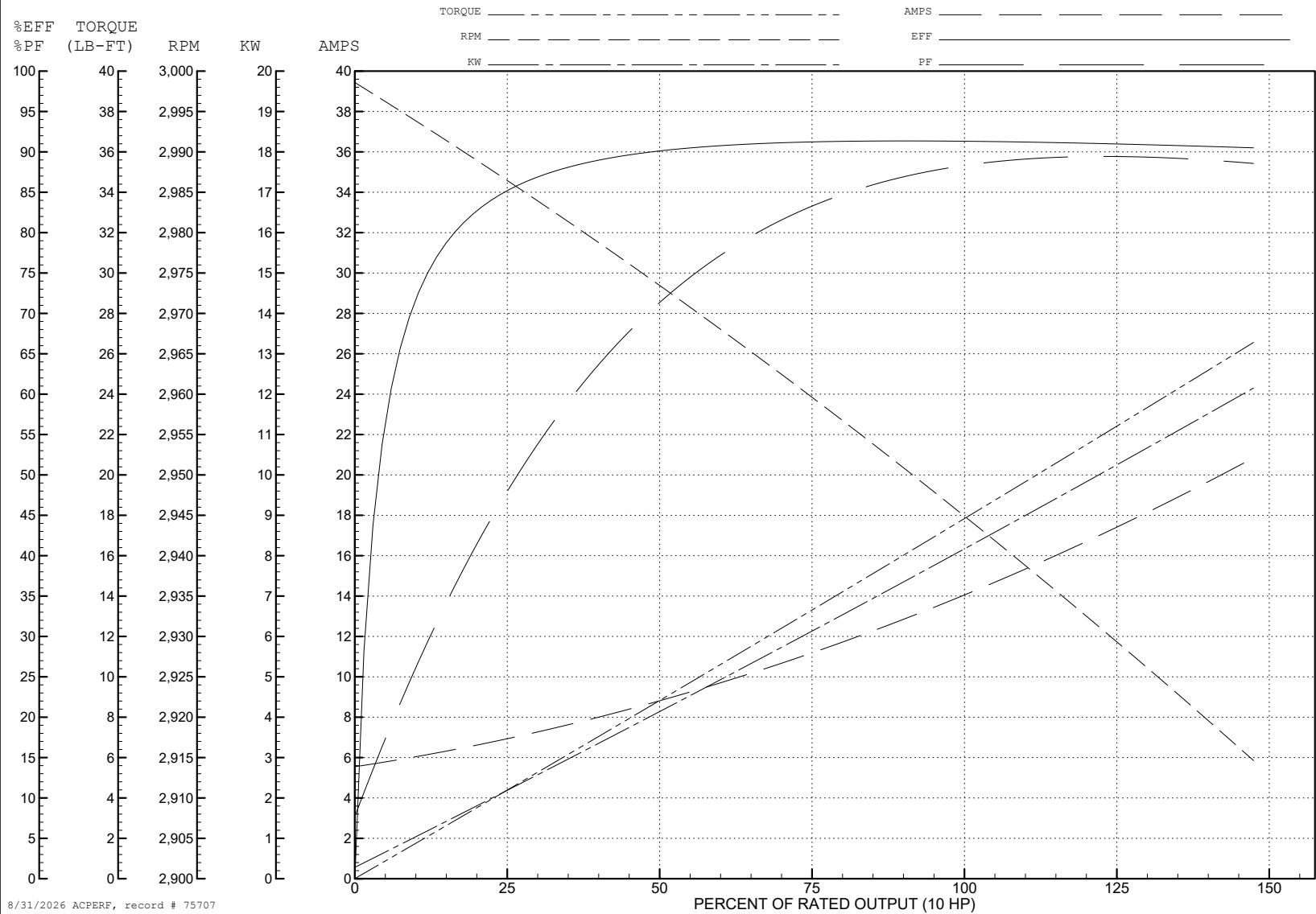
ABB Motors and Mechanical Inc.

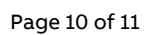
WINDING # 09WGZ864

Typical performance - not guaranteed values.

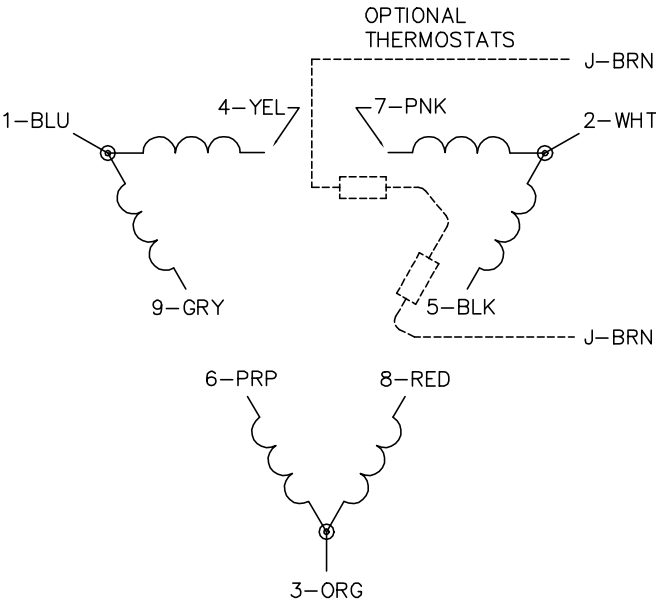
10 HP 3 PH 50 HZ 2946 RPM 380 V 0934M

TORQUES (LB-FT) : PO=97.77 PU=34.86 LR=43.23 LRA=125

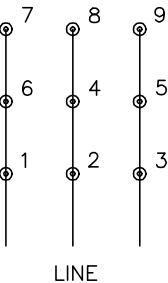




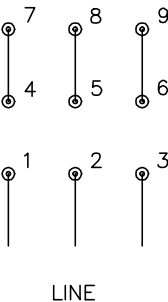
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



- 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.

CD0180

|                                   |                                |                   |
|-----------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                                |                   |
| REV. LTR: D                       | VERSION: 01                    | TDR: 000001099922 |
| FILE: \AAA\00005\148              | REVISED: 10: 25: 29 02/19/2019 | BY: ENBRIRO       |
| MTL: —                            |                                |                   |

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION  
SH 1 of 1