

# ABB BALDOR RELIANCE III

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## Customer information packet

M1711T

15-7.5HP, 1760/875RPM, 3PH, 60HZ, 256T, 0944M

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>Enclosure</b>                      | TEFC                                  |
| <b>Frame</b>                          | 256T                                  |
| <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>             | 7.500 HP @ 60 HZ<br>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                       |
| <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>              | 19.200 A @ 460.0 V                    |
| <b>Design Code</b>                    | A                                     |
| <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>    | 16.8 a                                |
| <b>Insulation Class</b>               | F                                     |
| <b>Inverter Code</b>                  | Not Inverter                          |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | AV         |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 09C101     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 09WGX235   |
| <b>Layout</b>       | 09LYC101   |
| <b>Eff. date</b>    | 10-07-2024 |
| <b>CD Diagram</b>   | CD0011     |
| <b>Poles</b>        | 04/08      |
| <b>Leads</b>        | 6#12       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-01-0001 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>KVA Code</b>                      | <b>H</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 @ 12 AWG</b>            |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>          |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>0944M</b>                 |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>4</b>                     |
|                                      | <b>8</b>                     |
| <b>Overall Length</b>                | <b>23.28 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>1.625 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>875 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</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.      | M1711T       |      |     |      |   |       |    |   |  |
| SPEC.        | 09C101X235   |      |     |      |   |       |    |   |  |
| HP           | 15-7.5       |      |     |      |   |       |    |   |  |
| VOLTS        | 460          |      |     |      |   |       |    |   |  |
| AMP          | 19.2/16.8    |      |     |      |   |       |    |   |  |
| RPM          | 1760/875     |      |     |      |   |       |    |   |  |
| FRAME        | 256T         |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15         | CODE | H   | DES  | A | CLASS | F  |   |  |
| NEMA-NOM-EFF |              | PF   |     |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |       |    |   |  |
| CC           |              |      |     |      |   |       |    |   |  |
| DE           | 6309         |      | ODE | 6208 |   |       |    |   |  |
| ENCL         | TEFC         | SN   |     |      |   |       |    |   |  |

**Parts List**

| Part number  | Description                              | Quantity |
|--------------|------------------------------------------|----------|
| SA011442     | SA 09C101X235                            | 1.000 ea |
| RA007642     | RA 09C101X235                            | 1.000 ea |
| HW1002A63    | WASHER, 5/8 HI-COLLAR SPRLCKWASHER       | 1.000 ea |
| 09GS1000     | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE    | 1.000 ea |
| 09CB3003     | CB W/1.75" DIA LD HL - 37, 39, 307 & 309 | 1.000 ea |
| 51XW2520A12  | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 4.000 ea |
| 09EP1101A136 | PU ENDPLATE, MACH                        | 1.000 ea |
| 10XN3816K28  | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 ea |
| WD1000B16    | T&B CX70TN OR L70P TERMINAL LUG          | 1.000 ea |
| 59XW2520G07  | .25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN  | 1.000 ea |
| HW4500A05    | 1669B ALEM/UNIV860 GR FTG X              | 1.000 ea |
| HW4500A17    | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| 09EP1100A208 | ENDPLATE, MACH                           | 1.000 ea |
| HA3400A33    | STUD- 3/8-16 X 4.96 HEX                  | 4.000 ea |
| HW4600B44    | V-RING SLINGER 1.500 X 1.810 X .28 VITON | 1.000 ea |
| HW1001A38    | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| XY3816A12    | 3/8-16 FINISHED NUT W/SERRATIONS         | 4.000 ea |
| HW1001A38    | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| HW5100A08    | W3118-035 WVY WSHR (WB)                  | 1.000 ea |
| 10XN2520K36  | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 ea |
| HW1001A25    | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 ea |
| HW1001A38    | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| 09FH4000SP   | 309 FH - BLACK PRIMER                    | 1.000 ea |
| 09CB3501SP   | CONDUIT BOX LID FOR 09CB3001 & 09CB3002  | 1.000 ea |
| 09GS1013SP   | GS FOR 09CB3501, 12CB1500 & 12CB1503 LID | 1.000 ea |
| 51XW2520A12  | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 ea |
| HW2501G25    | KEY, 3/8 SQ X 2.875                      | 1.000 ea |
| MN416A01     | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| LD7020D06    | LEAD SET, 12AWG, 6 LEAD, 20" LONG LEADS  | 1.000 ea |
| HA4051A00    | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| HW4500A03    | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 ea |

|               |                                          |          |
|---------------|------------------------------------------|----------|
| HW4500A17     | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| HA4066A01     | PUSH IN T-DRAIN FITTING (BLACK)          | 1.000 ea |
| MG1050G01     | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.070 ga |
| HA4066A01     | PUSH IN T-DRAIN FITTING (BLACK)          | 1.000 ea |
| MJ1000A02     | GREASE, POLYREX EM EXXON                 | 0.080 lb |
| HA4051A00     | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| 09FN3001A01SP | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO | 1.000 ea |
| HW2500A25     | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 ea |
| LB1624        | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0032        | CONNECTION LABEL                         | 1.000 ea |
| NP1256L       | ALUM UL CC INDUSTRIAL MOTOR A60          | 1.000 ea |
| 09PA1000      | PACKAGING GROUP COMBINED PRINT           | 1.000 ea |
| PE-0000003    | ZRTG PE ASSEMBLY                         | 1.000 ea |
| FE-0000013    | ZRTG FE ASSEMBLY                         | 1.000 ea |

**Accessories**

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

**AC Induction Motor Performance Data**

Record # 36433

Typical performance - not guaranteed values

| Winding: 09WGX235-R002 |    |              | Type: 0944M  |                                        | Enclosure: TEFC |                |
|------------------------|----|--------------|--------------|----------------------------------------|-----------------|----------------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Speed Connection |                 |                |
| Rated Output (HP)      |    | 15/7.5       |              | Full Load Torque                       |                 | 45 LB-FT       |
| Volts                  |    | 460          |              | Start Configuration                    |                 | direct on line |
| Full Load Amps         |    | 19.2/16.8    |              | Breakdown Torque                       |                 | 135 LB-FT      |
| R.P.M.                 |    | 1760/875     |              | Pull-up Torque                         |                 | 49.6 LB-FT     |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                    |                 | 73.6 LB-FT     |
| NEMA Design Code       |    | A            | KVA Code     | Starting Current                       |                 | 129 A          |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                        |                 | 8.41 A         |
| NEMA Nom. Eff.         |    | 0            | Power Factor | Line-line Res. @ 25°C                  |                 | 1.1904 Ω       |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                |                 | 69°C           |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                 |                 | 84°C           |
|                        |    |              |              | Locked-rotor Power Factor              |                 | 55.3           |

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

| % of Rated Load | 25   | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|------|-------|-------|-------|-------|-------|------|
| Power Factor    | 46   | 68    | 78    | 84    | 87    | 88    | 86   |
| Efficiency      | 80.5 | 86.7  | 87.8  | 87.4  | 86.2  | 84.7  | 86.7 |
| Speed           | 1793 | 1786  | 1779  | 1771  | 1762  | 1751  | 1766 |
| Line amperes    | 9.74 | 12.18 | 15.42 | 19.17 | 23.54 | 28.14 | 21.8 |



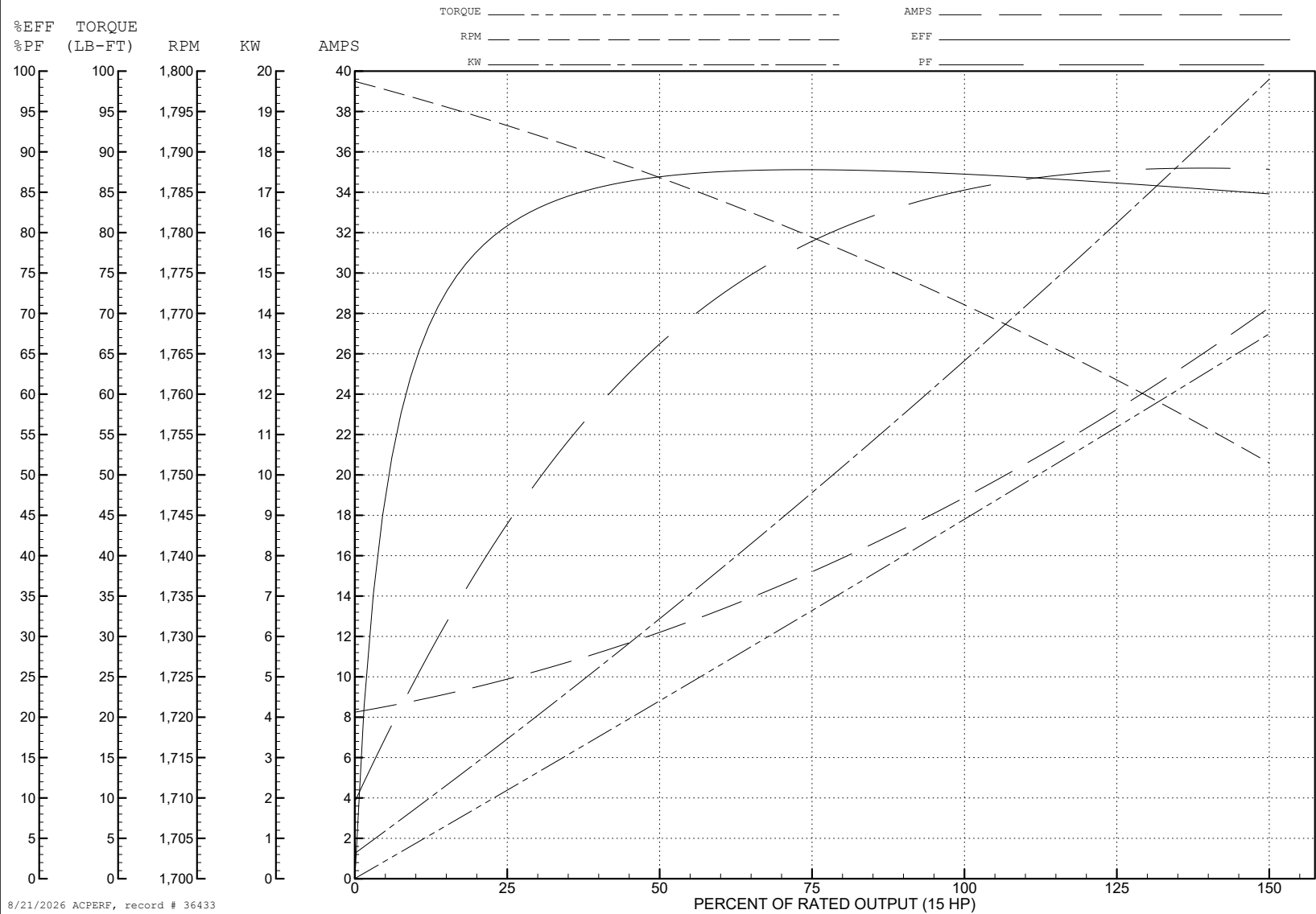
ABB Motors and Mechanical Inc.

WINDING # 09WGX235

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1771 RPM 460 V 0944M

TORQUES (LB-FT): PO=135 PU=49.6 LR=73.6 LRA=129



**AC Induction Motor Performance Data**

Record # 36434

Typical performance - not guaranteed values

| Winding: 09WGX235-R002 |    |              | Type: 0944M                           |                           | Enclosure: TEFC       |            |         |
|------------------------|----|--------------|---------------------------------------|---------------------------|-----------------------|------------|---------|
|                        |    |              |                                       |                           |                       |            |         |
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>Low Speed Connection |                           |                       |            |         |
| Rated Output (HP)      |    | 15/7.5       | Full Load Torque                      |                           | 45 LB-FT              |            |         |
| Volts                  |    | 460          | Start Configuration                   |                           | direct on line        |            |         |
| Full Load Amps         |    | 19.2/16.8    | Breakdown Torque                      |                           | 122.2 LB-FT           |            |         |
| R.P.M.                 |    | 1760/875     | Pull-up Torque                        |                           | 49.9 LB-FT            |            |         |
| Hz                     | 60 | Phase        | 3                                     | Locked-rotor Torque       |                       | 57.2 LB-FT |         |
| NEMA Design Code       |    | A            | KVA Code                              | H                         | Starting Current      |            | 67.1 A  |
| Service Factor (S.F.)  |    | 1.15         |                                       | No-load Current           |                       | 13.84 A    |         |
| NEMA Nom. Eff.         |    | 0            | Power Factor                          | 0                         | Line-line Res. @ 25°C |            | 1.585 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                       | Temp. Rise @ Rated Load   |                       | 84°C       |         |
| S.F. Amps              |    |              |                                       | Temp. Rise @ S.F. Load    |                       | 95°C       |         |
|                        |    |              |                                       | Locked-rotor Power Factor |                       | 42.2       |         |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25   | 50    | 75    | 100  | 125   | 150   | S.F. |
|-----------------|------|-------|-------|------|-------|-------|------|
| Power Factor    | 21   | 33    | 44    | 52   | 59    | 63    | 56   |
| Efficiency      | 59.6 | 73.3  | 78.3  | 80.3 | 80.7  | 80.2  | 80.5 |
| Speed           | 896  | 892   | 887   | 882  | 876   | 870   | 878  |
| Line amperes    | 14   | 14.59 | 15.52 | 16.8 | 18.57 | 20.59 | 17.9 |

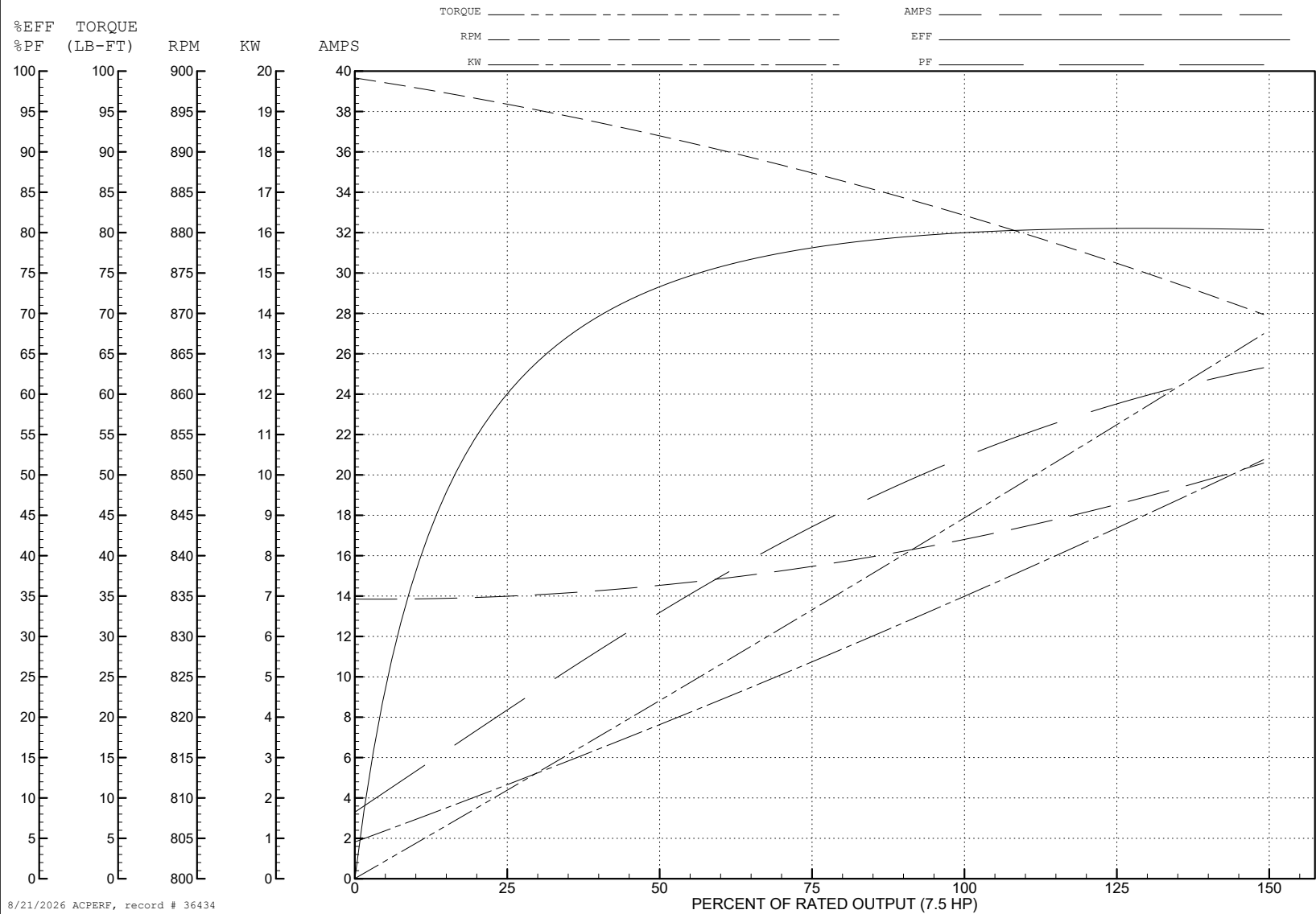
ABB Motors and Mechanical Inc.

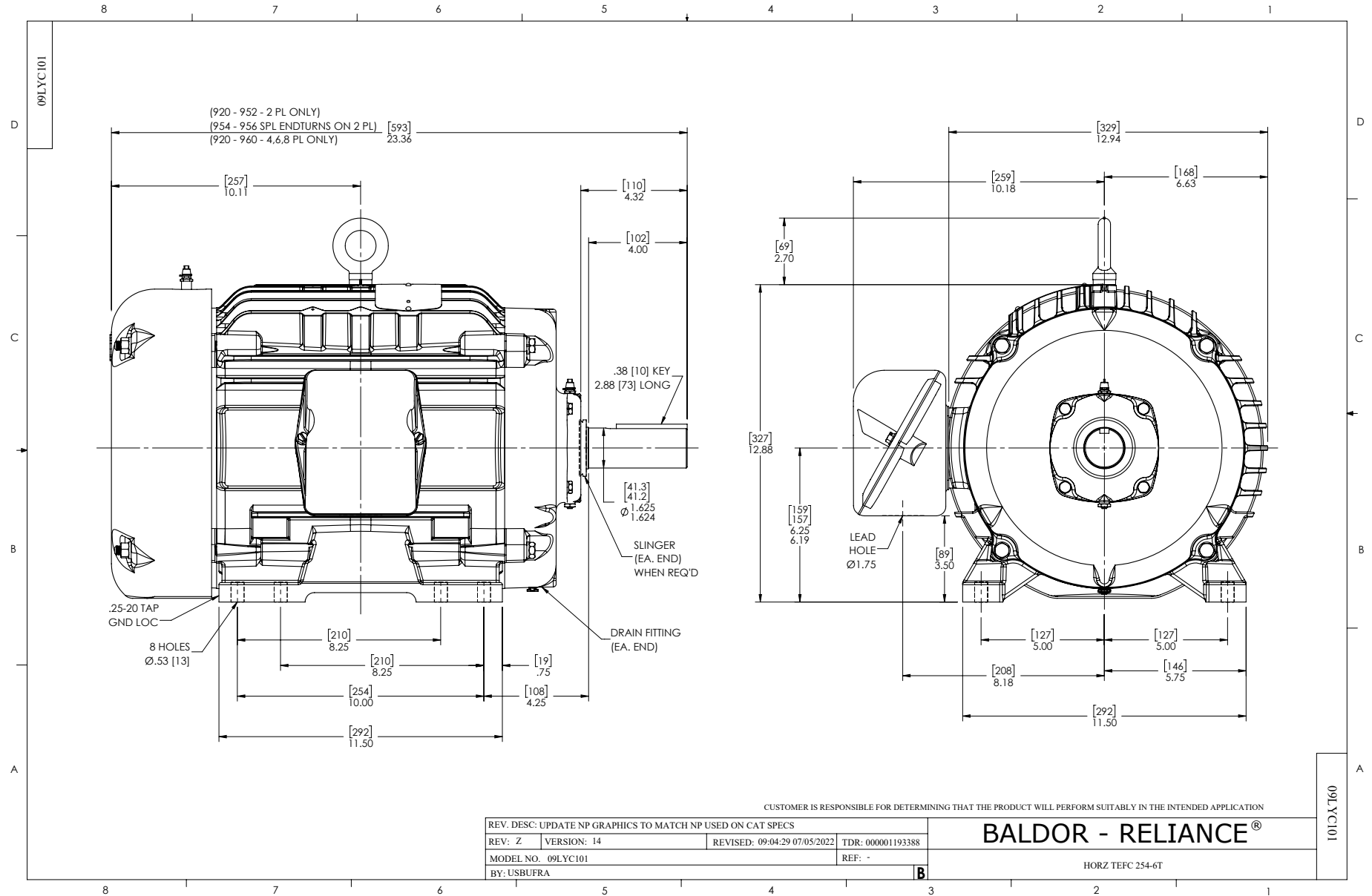
WINDING # 09WGX235

Typical performance - not guaranteed values.

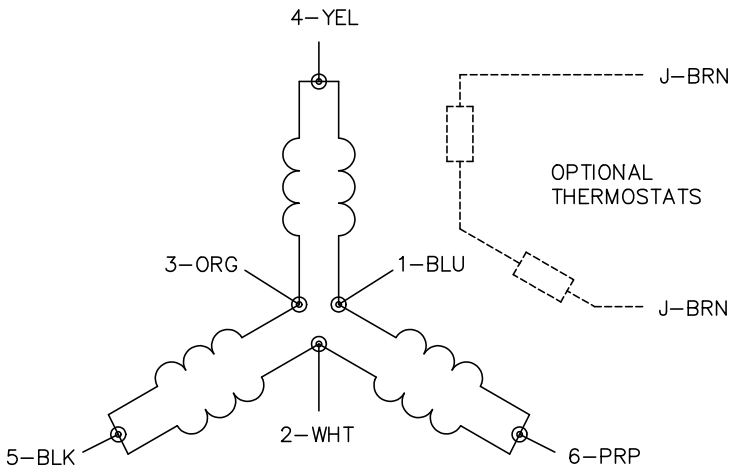
7.5 HP 3 PH 60 HZ 882 RPM 460 V 0944M

TORQUES (LB-FT): PO=122.2 PU=49.9 LR=57.2 LRA=67.1

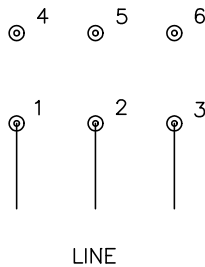




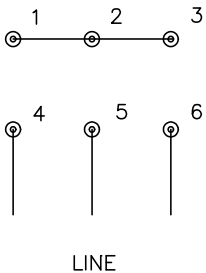
CD0011



LOW SPEED  
(1D)



HIGH SPEED  
(2Y)



- 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