

# ABB BALDOR RELIANCE III

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## Customer information packet

### CECP82333T-5

15HP, 1760RPM, 3PH, 60HZ, 254TC, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                                       |                                                          |
|---------------------------------------|----------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                     |
| <b>Frame</b>                          | 254TC                                                    |
| <b>Frame Material</b>                 | Iron                                                     |
| <b>Frequency</b>                      | 60.00 Hz                                                 |
| <b>Haz Area Class and Group</b>       | CLI GP A,B,C,D                                           |
| <b>Haz Area Division</b>              | Division II                                              |
| <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>            | 575.0 V @ 60 HZ                                          |
| <b>Agency Approvals</b>               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR |
| <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>    | 1.3                                                      |
| <b>Current @ Voltage</b>              | 14.100 A @ 575.0 V                                       |
| <b>Design Code</b>                    | B                                                        |
| <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>Enclosure Modification</b>         | 841                                                      |
| <b>Feedback Device</b>                | NO FEEDBACK                                              |
| <b>Haz Area Temp Code</b>             | T3C                                                      |

**Part Detail**

|                     |              |
|---------------------|--------------|
| <b>Revision</b>     | L            |
| <b>Type</b>         | AC           |
| <b>Mech. spec.</b>  |              |
| <b>Base</b>         |              |
| <b>Status</b>       | PRD/A        |
| <b>Elec. spec.</b>  | 09WZ985      |
| <b>Layout</b>       | 09LY-000-401 |
| <b>Eff. date</b>    | 11-14-2023   |
| <b>CD Diagram</b>   | CD0006       |
| <b>Poles</b>        | 04           |
| <b>Leads</b>        | 3#12         |
| <b>Proprietary</b>  | False        |
| <b>Created date</b> | 01-27-2019   |

|                             |                                |
|-----------------------------|--------------------------------|
| Heater Indicator            | No Heater                      |
| High Voltage Full Load Amps | 14.1 a                         |
| Insulation Class            | F                              |
| Inverter Code               | Inverter Duty                  |
| IP Rating                   | IP56                           |
| KVA Code                    | G                              |
| Lifting Lugs                | Standard Lifting Lugs          |
| Locked Bearing Indicator    | Locked Bearing                 |
| Max Speed                   | 2700 rpm                       |
| Motor Lead Termination      | Ring Terminals                 |
| Motor Standards             | NEMA                           |
| Motor Type                  | 0944M                          |
| Mounting Arrangement        | F1                             |
| Number of Poles             | 4                              |
| Overall Length              | 25.28 IN                       |
| Power Factor                | 85                             |
| Product Family              | Chem Process S/P 32-8 IEEE 841 |
| Pulley Face Code            | C-Face                         |
| Rodent Screen               | None                           |
| Service Factor              | 1.15                           |
| Shaft Diameter              | 1.625 IN                       |
| Shaft Ground Indicator      | No Shaft Grounding             |
| Shaft Rotation              | Reversible                     |
| Speed                       | 1760 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**
**NP4332**

|              |              |                    |      |              |      |        |                         |           |            |            |            |   |          |    |
|--------------|--------------|--------------------|------|--------------|------|--------|-------------------------|-----------|------------|------------|------------|---|----------|----|
| CAT.NO.      | CECP82333T-5 |                    |      | P/N          |      |        | ENCLOSURE               |           |            | TEFC       |            |   |          |    |
| SPEC.        | 09-0000-0979 |                    |      | CC           | 010A | FRAME  | 254TC                   |           | S/N        |            |            |   |          |    |
| HP           | 15           |                    |      | CLASS        | F    | HZ     | 60                      | ODE BRG   | 6309       | DE BRG     | 6309       |   |          |    |
| RPM          | 1760         | RPM MAX            | 2700 | PH           | 3    | DES    | B                       | D.E. BRG. |            | 45BC03X30X |            |   |          |    |
| VOLT         | 575          |                    |      | KVA-CODE     |      | G      | O.D.E. BRG.             |           | 45BC03X30X |            |            |   |          |    |
| AMP          | 14.1         |                    |      | MOTOR WEIGHT |      |        | 309                     | GREASE    | POLYREX EM |            |            |   |          |    |
| RATING       | 40C AMB-CONT |                    |      | MAX. KVAR    |      |        | 3.5                     | BLANK     |            |            |            |   |          |    |
| NEMA-NOM-EFF | 92.4         | # OF ROTOR BARS    |      |              | 40   | SER.F. | 1.15                    | IP        | 56         |            |            |   |          |    |
| G.MIN.EFF    | 91           | # OF STATOR SLOTS  |      |              | 48   | PF     | 85                      | INV.TYPE  | PWM        |            |            |   |          |    |
| TEMP CODE    | T3C          | INVERTER-TEMP-CODE |      |              | 180  |        |                         |           |            |            |            |   |          |    |
| TEMP =       | 160          | C HP FR            | 60   | C HP TO      | 90   |        |                         |           |            |            |            |   |          |    |
| CT HZ FROM   | 1.3          | CT HZ TO           | 60   |              |      |        |                         |           |            |            |            |   |          |    |
| HTR-VOLTS    |              | HTR-AMPS           |      | HTR-WATTS    |      |        | MAX. SPACE HEATER TEMP. |           |            |            | VT HZ FROM | O | VT HZ TO | 60 |

**Parts List**

| Part number    | Description                              | Quantity |
|----------------|------------------------------------------|----------|
| SA365487       | SA 09-0000-0979                          | 1.000 ea |
| RA354879       | RA 09-0000-0979                          | 1.000 ea |
| LB1624         | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0006         | CONNECTION LABEL                         | 1.000 ea |
| LB1449         | DIV-2/NEC WARNING LABEL                  | 1.000 ea |
| NP4332         | SS IEEE841-2021 INV DIV-2 UL CSA-C US EE | 1.000 ea |
| 85XU0407S04    | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 ea |
| MN416A01       | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| WD1000B49      | T&B C73,RING TERMINAL 10-12 AWG 3/8 STUD | 3.000 ea |
| HW3201A01      | 1/2-13 EYEBOLT                           | 1.000 ea |
| HW1002A63      | WASHER, 5/8 HI-COLLAR SPRLOCKWASHER      | 1.000 ea |
| WD1000B16      | T&B CX70TN OR L70P TERMINAL LUG          | 1.000 ea |
| HW1001A25      | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 ea |
| 09FH1000LP5    | FAN COVER, CAST W/EPOXY PRIMER & PAINT   | 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 |
| 37FN3002B02    | EXFN, PLASTIC, 7.50 OD, 1.503 ID         | 1.000 ea |
| HW2500A25      | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 ea |
| MJ1000A02      | GREASE, POLYREX EM EXXON                 | 0.080 lb |
| 10XN2520K06    | 1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P | 1.000 ea |
| 80XN3118J10    | 5/16-18 X 5/8 SET SCREW, HEX SOC, CUP PT | 4.000 ea |
| 09EP1118A02LP5 | FREP MACH, 309 BRG. EPOXY PRIMER & BLACK | 1.000 ea |
| HA3400A39      | STUD- 3/8-16 X 6.44 OAL HEX              | 4.000 ea |
| HW1001A38      | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| HW4601A61      | INPRO SEAL #1698-A-17120-0, VBXX 309 BRG | 1.000 ea |
| HW5100A11      | W3917-042 WVY WSHR (WB)                  | 1.000 ea |
| HA4017A02      | .125X2.50 GREASER EXTENS.F/S             | 1.000 ea |
| HA4017A08      | .125 X 3.50 LGTH GREASER EXTEN.          | 1.000 ea |
| HW4019A01      | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING | 1.000 ea |
| 10XN2520K36    | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 ea |
| HA4051A00      | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |

|              |                                          |          |
|--------------|------------------------------------------|----------|
| HW4500A21    | 1618BALEMITE FITTING 825 UNIVERSAL       | 1.000 ea |
| HW4500A17    | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| HW4500A20    | 1/8NPT SL PIPE PLUG                      | 1.000 ea |
| HA4002A03    | #304 S.S. DRAIN FITTING, .125 NPT (.44 H | 1.000 ea |
| 09EP1318A01P | ENDPLATE, MACH EPOXY PRIMER              | 1.000 ea |
| HW1001A38    | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| 10XN3816K28  | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 ea |
| HW4601A61    | INPRO SEAL #1698-A-17120-0, VBXX 309 BRG | 1.000 ea |
| 10XN2520K36  | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 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 |
| HW4500A20    | 1/8NPT SL PIPE PLUG                      | 1.000 ea |
| HA4002A03    | #304 S.S. DRAIN FITTING, .125 NPT (.44 H | 1.000 ea |
| 09CB1002A12P | KOBX W/1.25 NPT LEAD HOLE & 2.38 MTG HOL | 1.000 ea |
| 09GS1010     | GASKET, DWG, LEADWIRE SEPERATOR          | 1.000 ea |
| 51XW2520A12  | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 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 |
| 12CB1503P    | CONDUIT BOX LID, CAST W/EPOXY PRIMER     | 1.000 ea |
| 12GS1002     | GASKET, CONDUIT BOX LID, NEOP            | 1.000 ea |
| 10XN3118K16  | 5/16-18 X 1' GRADE #5, STL, ZINC PLATE   | 2.000 ea |
| HW1001A31    | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 2.000 ea |
| MG1025N19    | WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8  | 0.070 ga |
| MJ5001A27    | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.031 qt |
| MJ5002A01    | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.033 ea |
| MJ5002A01    | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.025 ea |
| 40PA1005     | PACKAGING GROUP, 09 STD                  | 1.000 ea |
| HW2501G25    | KEY, 3/8 SQ X 2.875                      | 1.000 ea |
| MJ5004A59    | ADHESIVE LOCTITE #401 MSC #88545264      | 0.010 ea |

**AC Induction Motor Performance Data**

Record # 47085

Typical performance - not guaranteed values

| Winding: 09WGZ985-R007 |    |       |   | Type: 0944M                           |  | Enclosure: TEFC           |  |
|------------------------|----|-------|---|---------------------------------------|--|---------------------------|--|
| Nameplate Data         |    |       |   | 575 V, 60 Hz:<br>Single Voltage Motor |  |                           |  |
| Rated Output (HP)      |    | 15    |   | Full Load Torque                      |  | 44.6 LB-FT                |  |
| Volts                  |    | 575   |   | Start Configuration                   |  | direct on line            |  |
| Full Load Amps         |    | 14.1  |   | Breakdown Torque                      |  | 167 LB-FT                 |  |
| R.P.M.                 |    | 1760  |   | Pull-up Torque                        |  | 54.6 LB-FT                |  |
| Hz                     | 60 | Phase | 3 | Locked-rotor Torque                   |  | 75 LB-FT                  |  |
| NEMA Design Code       |    | B     |   | KVA Code                              |  | G                         |  |
| Service Factor (S.F.)  |    | 1.15  |   | Starting Current                      |  | 88.5 A                    |  |
| NEMA Nom. Eff.         |    | 92.4  |   | Power Factor                          |  | 85                        |  |
| Rating - Duty          |    | 40C   |   | AMB-CONT                              |  | Temp. Rise @ Rated Load   |  |
| S.F. Amps              |    |       |   |                                       |  | Temp. Rise @ S.F. Load    |  |
|                        |    |       |   |                                       |  | Locked-rotor Power Factor |  |
|                        |    |       |   |                                       |  | Rotor inertia             |  |

**Load Characteristics 575 V, 60 Hz, 15 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 51   | 73   | 83   | 86   | 87   | 87   | 87   |
| Efficiency      | 89   | 92.4 | 92.9 | 92.5 | 91.4 | 90.2 | 92   |
| Speed           | 1792 | 1783 | 1774 | 1763 | 1753 | 1740 | 1757 |
| Line amperes    | 6.09 | 8.32 | 10.9 | 14.1 | 17.6 | 21.3 | 16.2 |

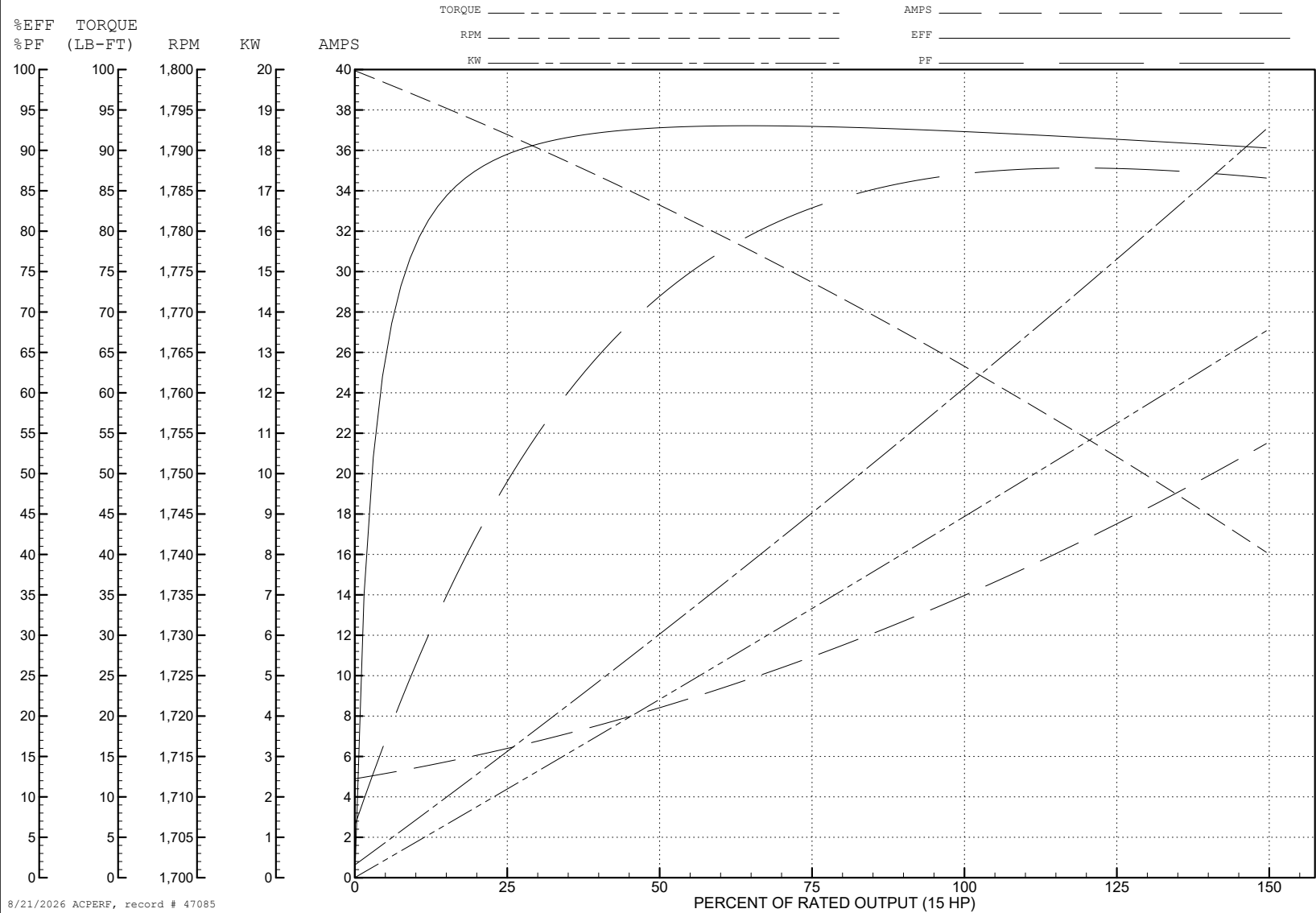
ABB Motors and Mechanical Inc.

WINDING # 09WGZ985

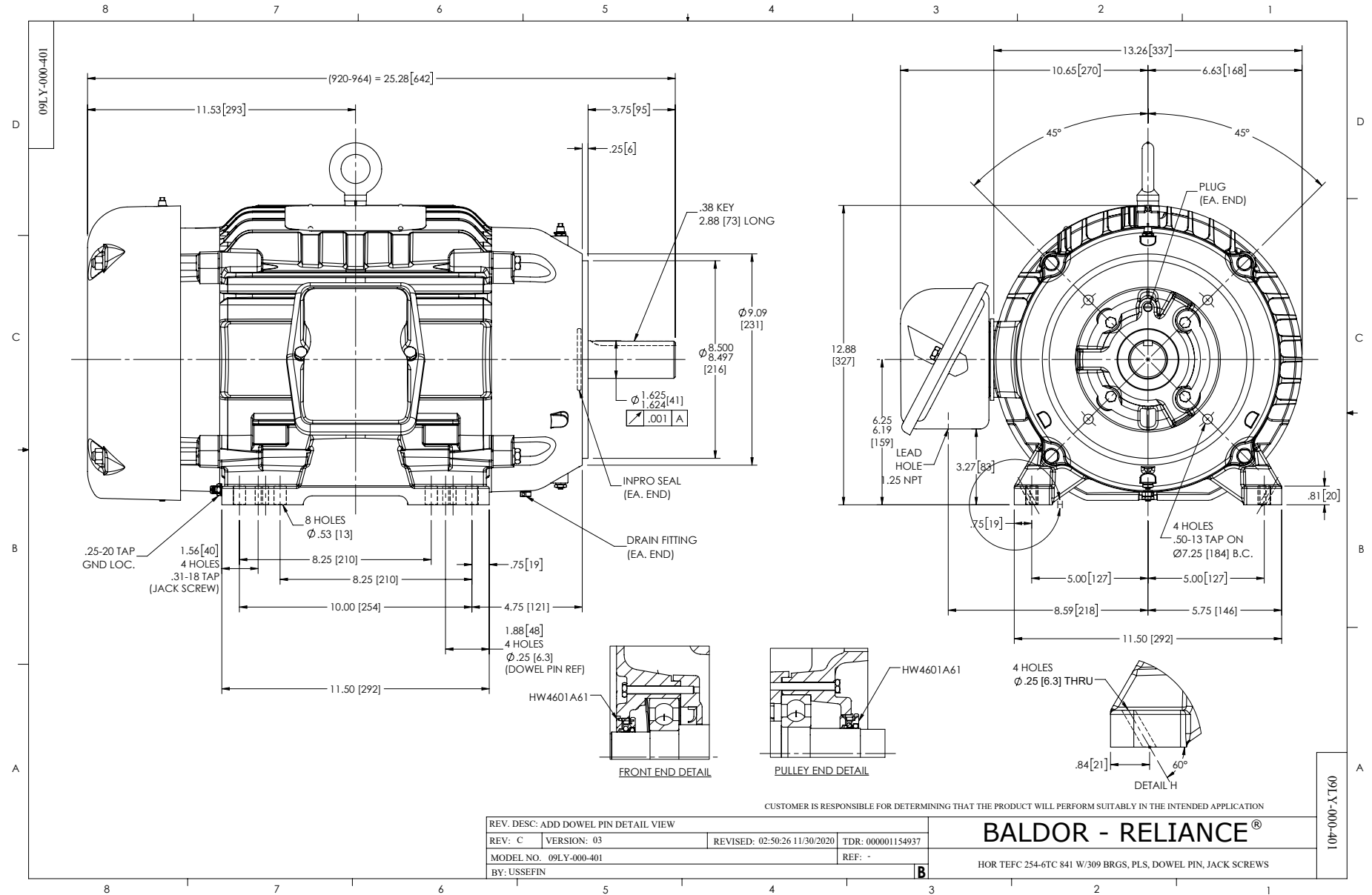
Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1760 RPM 575 V 0944M

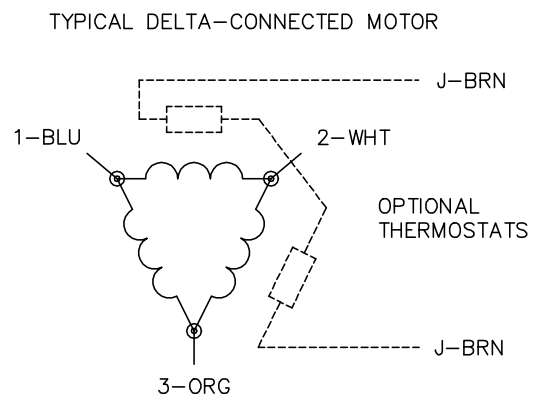
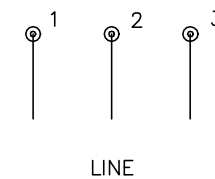
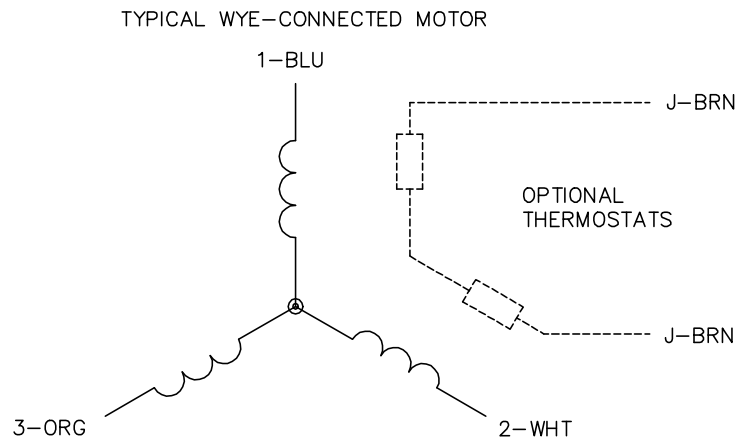
TORQUES (LB-FT): PO=167 PU=54.6 LR=75 LRA=88.5







CD0006


**NOTES:**

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: —


**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1