

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM3661T-8

32M 4P TEFC HOR 182T SUPER E

Class - None

Division - Not Applicable

**Specifications**

|                                       |                           |
|---------------------------------------|---------------------------|
| <b>Enclosure</b>                      | TEFC                      |
| <b>Frame</b>                          | 182T                      |
| <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>             | 3.000 HP @ 60 HZ          |
| <b>Phase</b>                          | 3                         |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ          |
| <b>Voltage @ Frequency</b>            | 200.0 V @ 60 HZ           |
| <b>Agency Approvals</b>               | NEMA PREMIUM<br>CURUSEEV  |
| <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>              | 9.500 A @ 200.0 V         |
| <b>Design Code</b>                    | B                         |
| <b>Drip Cover</b>                     | No Drip Cover             |
| <b>Duty Rating</b>                    | CONT                      |
| <b>Efficiency @ 100% Load</b>         | 89.5 %                    |
| <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>    | 9.5 a                     |
| <b>Insulation Class</b>               | F                         |
| <b>Inverter Code</b>                  | Inverter Ready            |
| <b>IP Rating</b>                      | NONE                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | D          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 06C101     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 06WGX323   |
| <b>Layout</b>       | 06LYC101   |
| <b>Eff. date</b>    | 08-05-2024 |
| <b>CD Diagram</b>   | CD0006     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 3#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 12-14-2018 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>KVA Code</b>                      | <b>J</b>                     |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Locked Bearing Indicator</b>      | <b>No Locked Bearing</b>     |
| <b>Motor Lead Quantity/Wire Size</b> | <b>3 @ 16 AWG</b>            |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>          |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>0632M</b>                 |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>4</b>                     |
| <b>Overall Length</b>                | <b>15.24 IN</b>              |
| <b>Power Factor</b>                  | <b>77</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>RoHS Status</b>                   | <b>ROHS COMPLIANT</b>        |
| <b>Service Factor</b>                | <b>1.15</b>                  |
| <b>Shaft Diameter</b>                | <b>1.125 IN</b>              |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>                | <b>Reversible</b>            |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>            |
| <b>Speed</b>                         | <b>1755 rpm</b>              |
| <b>Speed Code</b>                    | <b>Single Speed</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

| NP3441L                   |              |      |     |      |   |    |   |    |   |  |  |
|---------------------------|--------------|------|-----|------|---|----|---|----|---|--|--|
| CAT.NO.                   | EM3661T-8    |      |     |      |   |    |   |    |   |  |  |
| SPEC.                     | 06C101X323G1 |      |     |      |   |    |   |    |   |  |  |
| HP                        | 3            |      |     |      |   |    |   |    |   |  |  |
| VOLTS                     | 200          |      |     |      |   |    |   |    |   |  |  |
| AMP                       | 9.5          |      |     |      |   |    |   |    |   |  |  |
| RPM                       | 1755         |      |     |      |   |    |   |    |   |  |  |
| FRAME                     | 182T         |      | HZ  | 60   |   |    |   | PH | 3 |  |  |
| SER.F.                    | 1.15         | CODE | J   | DES  | B | CL | F |    |   |  |  |
| NEMA-NOM-EFF              | 89.5         | PF   | 77  |      |   |    |   |    |   |  |  |
| RATING                    | 40C AMB-CONT |      |     |      |   |    |   |    |   |  |  |
| CC                        | 010A         |      |     |      |   |    |   |    |   |  |  |
| DE                        | 6206         |      | ODE | 6205 |   |    |   |    |   |  |  |
| ENCL                      | TEFC         | SN   |     |      |   |    |   |    |   |  |  |
| VPWM INVERTER READY       |              |      |     |      |   |    |   |    |   |  |  |
| CT6-60H(10:1)VT3-60H(20:1 |              |      |     |      |   |    |   |    |   |  |  |
|                           |              |      |     |      |   |    |   |    |   |  |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA364075      | SA 06C101X323G1                          | 1.000 ea |
| RA353385      | RA 06C101X323G1                          | 1.000 ea |
| 36FN3000C01SP | EXFN, PLASTIC, 5.25 OD, .912 ID          | 1.000 ea |
| HW3201A05     | 3/8-16 EYEBOLT                           | 1.000 ea |
| 06CB3000      | BALDOR CONDUIT BOX CAST                  | 1.000 ea |
| 06GS1000      | GASKET, CONDUIT BOX                      | 1.000 ea |
| 51XW2520A12   | SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75  | 2.000 ea |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| HW3001B02     | BRASS CUP WASHER W/GROUND SYMBOL TAB,    | 1.000 ea |
| 36FE1101B47   | FREP ASSEMBLY FOR ROUTING PURPOSES       | 1.000 ea |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 ea |
| HW5100A05     | WVY WSHR F/205 & 304 BRGS                | 1.000 ea |
| 36PE1100A01   | PUEP ASSEMBLY FOR ROUTING PURPOSES       | 1.000 ea |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 ea |
| HA3101A34     | THRUBOLT- 1/4-20 X 10.375                | 4.000 ea |
| XY2520A12     | 1/4-20 HEX NUT, DIRECTIONAL SERRATIONS   | 4.000 ea |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 ea |
| 36FH4009A03SP | IEC FH , W/ PRIMER                       | 1.000 ea |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea |
| 06CB3500      | BALDOR CONDUIT BOX LID                   | 1.000 ea |
| 06GS1001      | BALDOR CONDUIT BOX GASKET                | 1.000 ea |
| 51XW2520A12   | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 ea |
| HW2501E16     | KEY, 1/4 SQ X 1.750                      | 1.000 ea |
| MG1050Y01     | CELEROL BALDOR GOLD *5 GALLON BUCKET*    | 0.026 ga |
| HA7000A02     | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 ea |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| LB1624        | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| MJ1000A02     | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| LC0006        | CONNECTION LABEL                         | 1.000 ea |
| NP3441L       | ALUM SUPER-E VPWM INVERTER READY UL EEV  | 1.000 ea |
| 36PA1001      | PKG GRP, PRINT PK1017A07                 | 1.000 ea |

|          |                                         |          |
|----------|-----------------------------------------|----------|
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
|----------|-----------------------------------------|----------|

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**Accessories**

| Part number | Description | Multiplier |
|-------------|-------------|------------|
| 36-1749     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 35620

Typical performance - not guaranteed values

| Winding: 06WGX323-R001 |    |              | Type: 0632M                           |                           | Enclosure: TEFC       |              |         |
|------------------------|----|--------------|---------------------------------------|---------------------------|-----------------------|--------------|---------|
| Nameplate Data         |    |              | 200 V, 60 Hz:<br>Single Voltage Motor |                           |                       |              |         |
| Rated Output (HP)      |    | 3            | Full Load Torque                      |                           | 9.07 LB-FT            |              |         |
| Volts                  |    | 200          | Start Configuration                   |                           | direct on line        |              |         |
| Full Load Amps         |    | 9.5          | Breakdown Torque                      |                           | 33.13 LB-FT           |              |         |
| R.P.M.                 |    | 1755         | Pull-up Torque                        |                           | 18.25 LB-FT           |              |         |
| Hz                     | 60 | Phase        | 3                                     | Locked-rotor Torque       |                       | 20.45 LB-FT  |         |
| NEMA Design Code       |    | B            | KVA Code                              | J                         | Starting Current      |              | 68.91 A |
| Service Factor (S.F.)  |    | 1.15         | No-load Current                       |                           | 4.98 A                |              |         |
| NEMA Nom. Eff.         |    | 89.5         | Power Factor                          | 77                        | Line-line Res. @ 25°C |              | 0.764 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                       | Temp. Rise @ Rated Load   |                       | 35°C         |         |
| S.F. Amps              |    |              |                                       | Temp. Rise @ S.F. Load    |                       | 43°C         |         |
|                        |    |              |                                       | Locked-rotor Power Factor |                       | 42           |         |
|                        |    |              |                                       | Rotor inertia             |                       | 0.298 LB-FT2 |         |

**Load Characteristics 200 V, 60 Hz, 3 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125   | 150  | S.F. |
|-----------------|------|------|------|------|-------|------|------|
| Power Factor    | 38   | 58   | 70   | 77   | 81    | 83   | 79   |
| Efficiency      | 83.2 | 88.7 | 89.9 | 89.6 | 89    | 87.5 | 89.2 |
| Speed           | 1790 | 1780 | 1769 | 1757 | 1745  | 1730 | 1750 |
| Line amperes    | 5.43 | 6.45 | 7.84 | 9.46 | 11.33 | 13.5 | 10.6 |

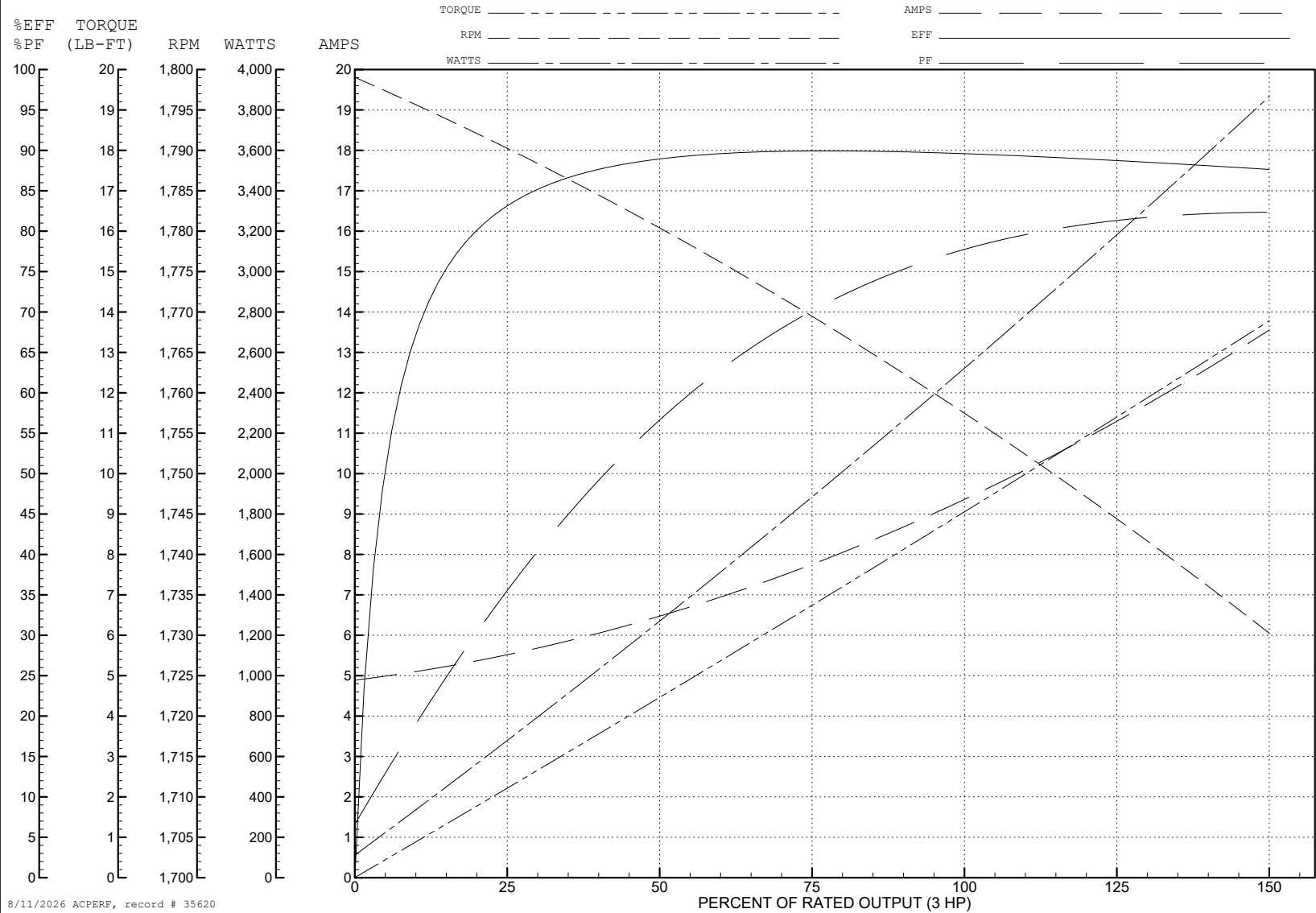
ABB Motors and Mechanical Inc.

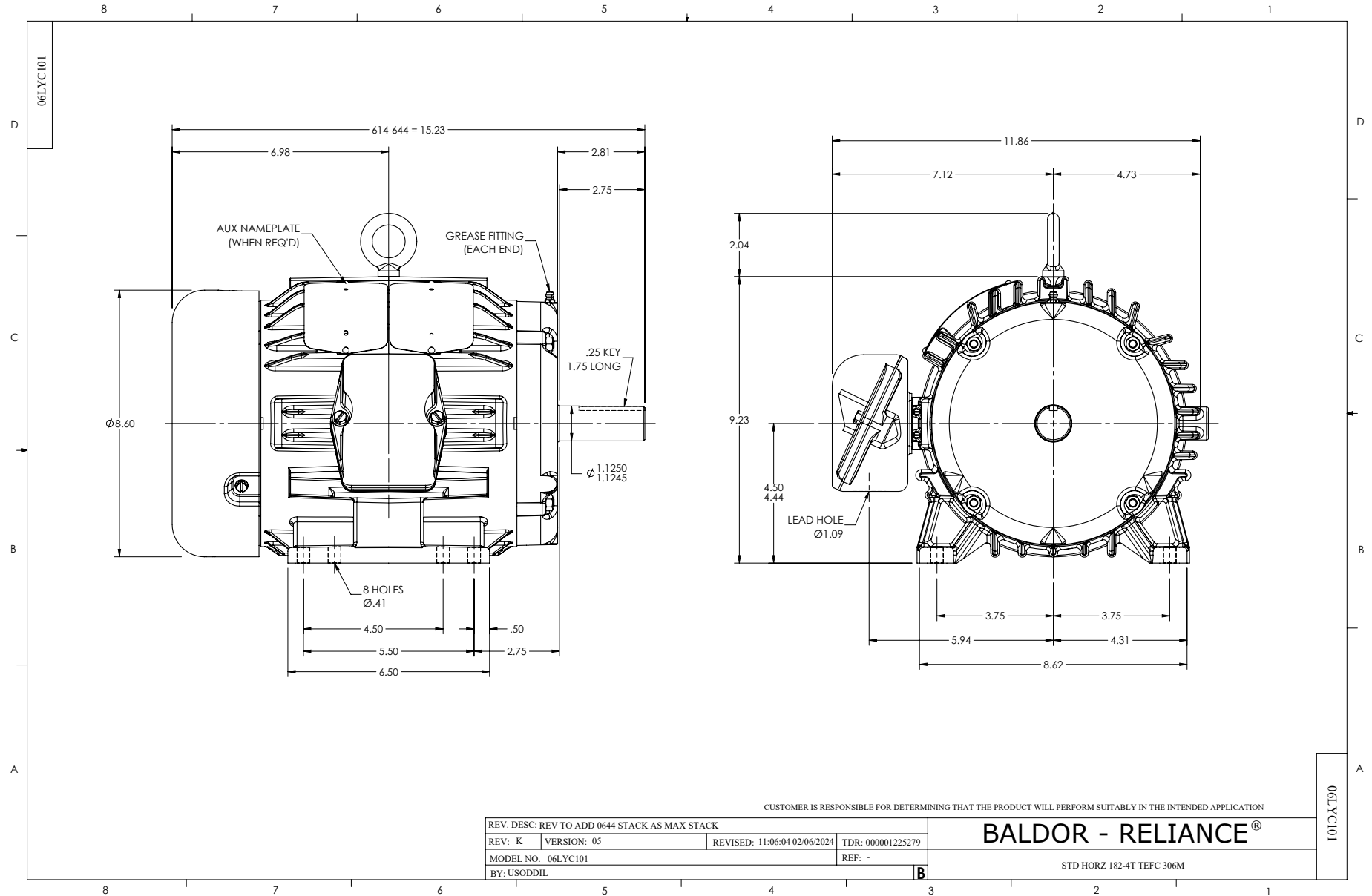
WINDING # 06WGX323

Typical performance - not guaranteed values.

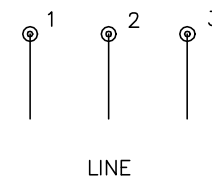
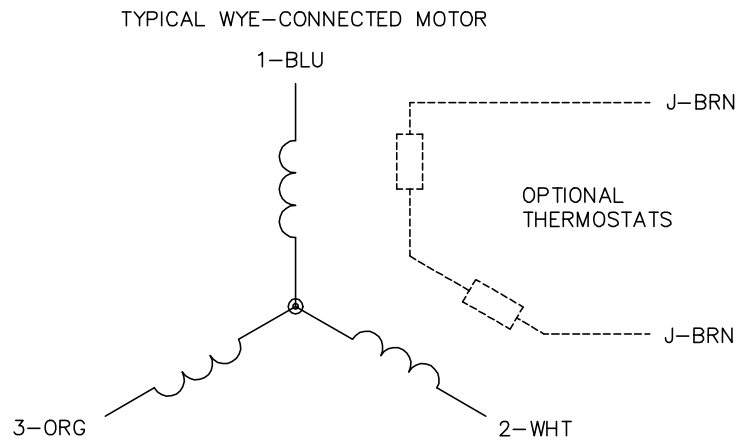
3 HP 3 PH 60 HZ 1755 RPM 200 V 0632M

TORQUES (LB-FT): PO=33.13 PU=18.25 LR=20.45 LRA=68.91





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