

# ABB BALDOR RELIANCE III

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## Customer information packet

EBM4104TY

30HP, 1760RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F1

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>             | 30.000 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<br>230.0 V @ 60 HZ                             |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<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>Current @ Voltage</b>              | 76.000 A @ 230.0 V<br>78.000 A @ 208.0 V<br>38.000 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 93.6 %                                                         |
| <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                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | T          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 10E507     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 10WGY538   |
| <b>Layout</b>       | 10LYE507   |
| <b>Eff. date</b>    | 06-05-2026 |
| <b>CD Diagram</b>   | CD0180     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#8        |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 03-09-2015 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 38.0 a                |
| <b>Insulation Class</b>              | F                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>KVA Code</b>                      | J                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 8 AWG             |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 1056M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 4                     |
| <b>Overall Length</b>                | 39.13 IN              |
| <b>Power Factor</b>                  | 80                    |
| <b>Product Family</b>                | General Purpose       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | Standard              |
| <b>Pulley Shaft Indicator</b>        | Standard              |
| <b>Rodent Screen</b>                 | None                  |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.875 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding    |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | No Slinger            |
| <b>Speed</b>                         | 1760 rpm              |
| <b>Speed Code</b>                    | Single Speed          |
| <b>Starting Method</b>               | Direct on line        |
| <b>Thermal Device - Bearing</b>      | NONE (OLD)            |
| <b>Thermal Device - Winding</b>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |
| <b>Winding Thermal 1</b>             | None                  |

**Winding Thermal 2**

**None**

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### Nameplate

| NP2138L      |               |    |    |        |       |      |        |  |            |  |           |  |         |  |      |        |      |
|--------------|---------------|----|----|--------|-------|------|--------|--|------------|--|-----------|--|---------|--|------|--------|------|
| CAT.NO.      | EBM4104TY     |    |    |        | P/N   |      |        |  |            |  | ENCLOSURE |  | TEFC    |  |      |        |      |
| SPEC.        | 10E507Y538G1  |    |    | CC     | 010A  |      | FRAME  |  | 286T       |  | S/N       |  |         |  |      |        |      |
| HP           | 30            |    |    |        | CLASS |      | F      |  | HZ         |  | 60        |  |         |  |      |        |      |
| RPM          | 1760          |    |    |        | PH    |      | 3      |  | DES        |  | A         |  |         |  |      |        |      |
| VOLT         | 230/460       |    |    |        |       |      |        |  | KVA-CODE   |  | J         |  | ODE BRG |  | 6211 | DE BRG | 6312 |
| AMP          | 76/38         |    |    |        |       |      |        |  |            |  |           |  |         |  |      |        |      |
| RATING       | 40C AMB-CONT  |    |    |        |       |      | GREASE |  | POLYREX EM |  |           |  |         |  |      |        |      |
| NEMA-NOM-EFF | 93.6          | PF | 80 | SER.F. |       | 1.15 |        |  |            |  |           |  |         |  |      |        |      |
|              | SFA 84.8/42.4 |    |    |        |       |      |        |  |            |  |           |  |         |  |      |        |      |
| HTR-VOLTS    | HTR-AMPS      |    |    |        |       |      |        |  |            |  |           |  |         |  |      |        |      |

**Parts List**

| Part number | Description                              | Quantity |
|-------------|------------------------------------------|----------|
| SA295069    | SA 10E507Y538G1                          | 1.000 ea |
| RA281141    | RA 10E507Y538G1                          | 1.000 ea |
| 10CB3000SP  | KOBX, CAST W/2.00 LEAD HOLE              | 1.000 ea |
| 09GS1000    | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE    | 1.000 ea |
| 10XN3118K12 | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 4.000 ea |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 ea |
| WD1000B25   | GND LUG, BURNDY L125HP OR T&B L125HP-BB  | 1.000 ea |
| 19XW3118G08 | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN   | 1.000 ea |
| 10EP1106A11 | FR ENDPLATE, MACH                        | 1.000 ea |
| 10XN3816K32 | BOLT, 3/8-16X2 HH YZ(5)                  | 4.000 ea |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| HW5100A11   | W3917-042 WVY WSHR (WB)                  | 1.000 ea |
| 10XN3118K40 | 5/16-18 X 2.75" HEX HD, GRADE 5          | 4.000 ea |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 ea |
| 10EP1304A01 | PU ENDPLATE, MACH                        | 1.000 ea |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 ea |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 ea |
| 84XN6311J16 | 5/8 11X1 HEX SOCK, BK OX                 | 4.000 ea |
| HW2501G15   | KEY 3/8 X 1.625 LONG                     | 1.000 ea |
| 10FH4000A01 | FAN HSG STAMPED, DBL SH                  | 1.000 ea |
| 51XF2520A08 | SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L | 4.000 ea |
| 10CB3500SP  | CONDUIT BOX LID, CAST                    | 1.000 ea |
| 10GS1000    | GASKET, CONDUIT BOX LID                  | 1.000 ea |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 4.000 ea |
| HW2501H28   | KEY, 1/2 SQ X 3.250                      | 1.000 ea |
| HW4500A21   | 1618BALEMITE FITTING 825 UNIVERSAL       | 1.000 ea |
| HA4017A01   | 1/8 X 4 GREASE EXT (F/S)                 | 1.000 ea |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| HA4054      | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 ea |
| HA4051A00   | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| MJ1000A02   | GREASE, POLYREX EM EXXON                 | 0.130 lb |

|             |                                          |          |
|-------------|------------------------------------------|----------|
| HW4500A03   | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 ea |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF             | 1.000 ea |
| HA4054      | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 ea |
| HA4051A00   | PLASTIC CAP FOR GREASE FITTING           | 1.000 ea |
| 09FN3001C03 | XTERNAL FAN, PLASTIC (COMES W/SCREW FRO  | 1.000 ea |
| HW2500A25   | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 ea |
| MG1050Y01   | CELEROL BALDOR GOLD *5 GALLON BUCKET*    | 0.125 ga |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 ea |
| 81BK1100FQF | 1-081-011-02-FQF BRAKE                   | 1.000 ea |
| LB1624      | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0181      | CONNECTION LABEL                         | 1.000 ea |
| NP2138L     | ALUM SUPER-E UL PREM CC (300             | 1.000 ea |
| 10PA1052    | PACKAGING GROUP, PRINT PK1151A06         | 1.000 ea |
| MN416A01    | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |

ABB Motors and Mechanical Inc.

WINDING # 10WGY538

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270

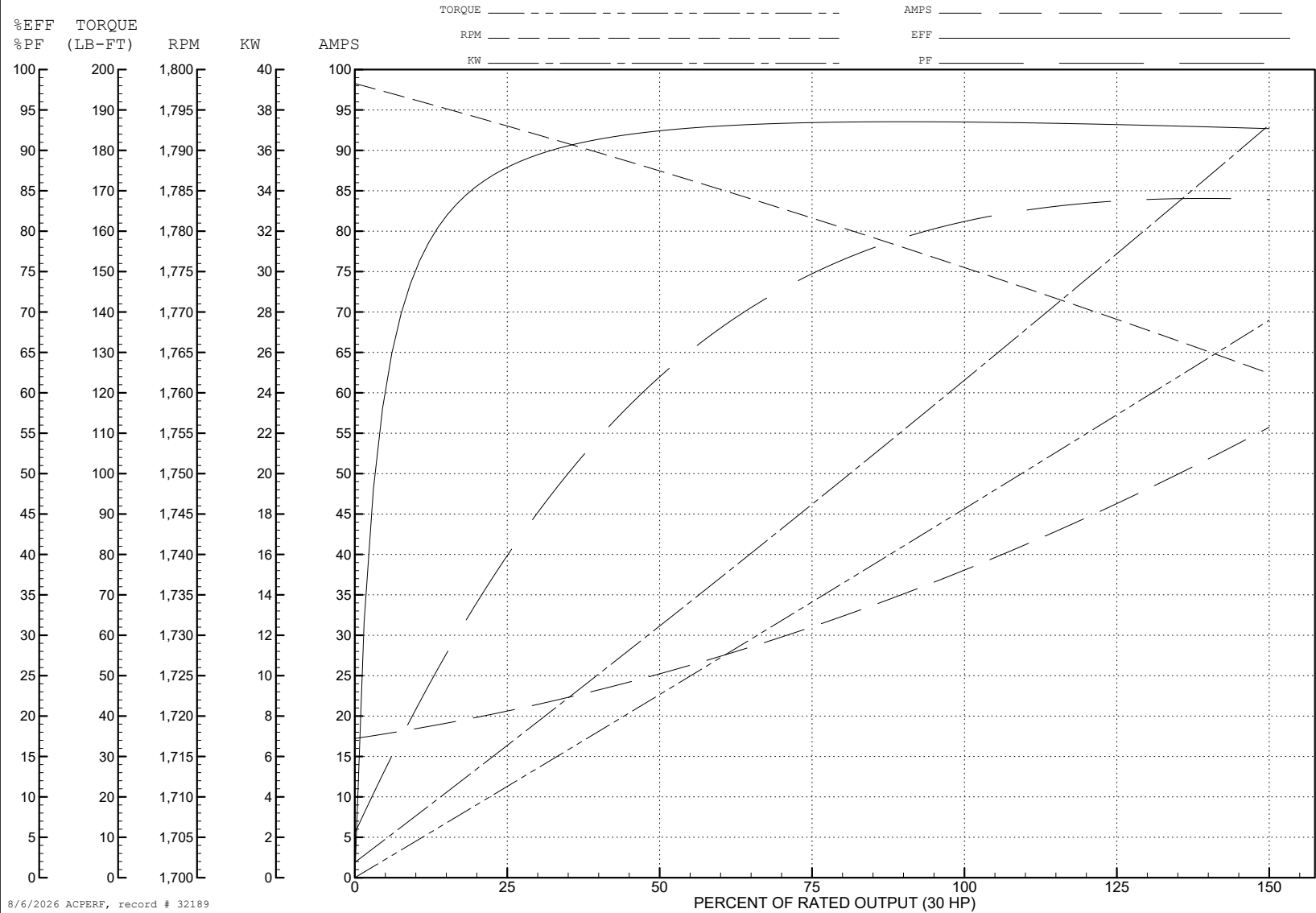


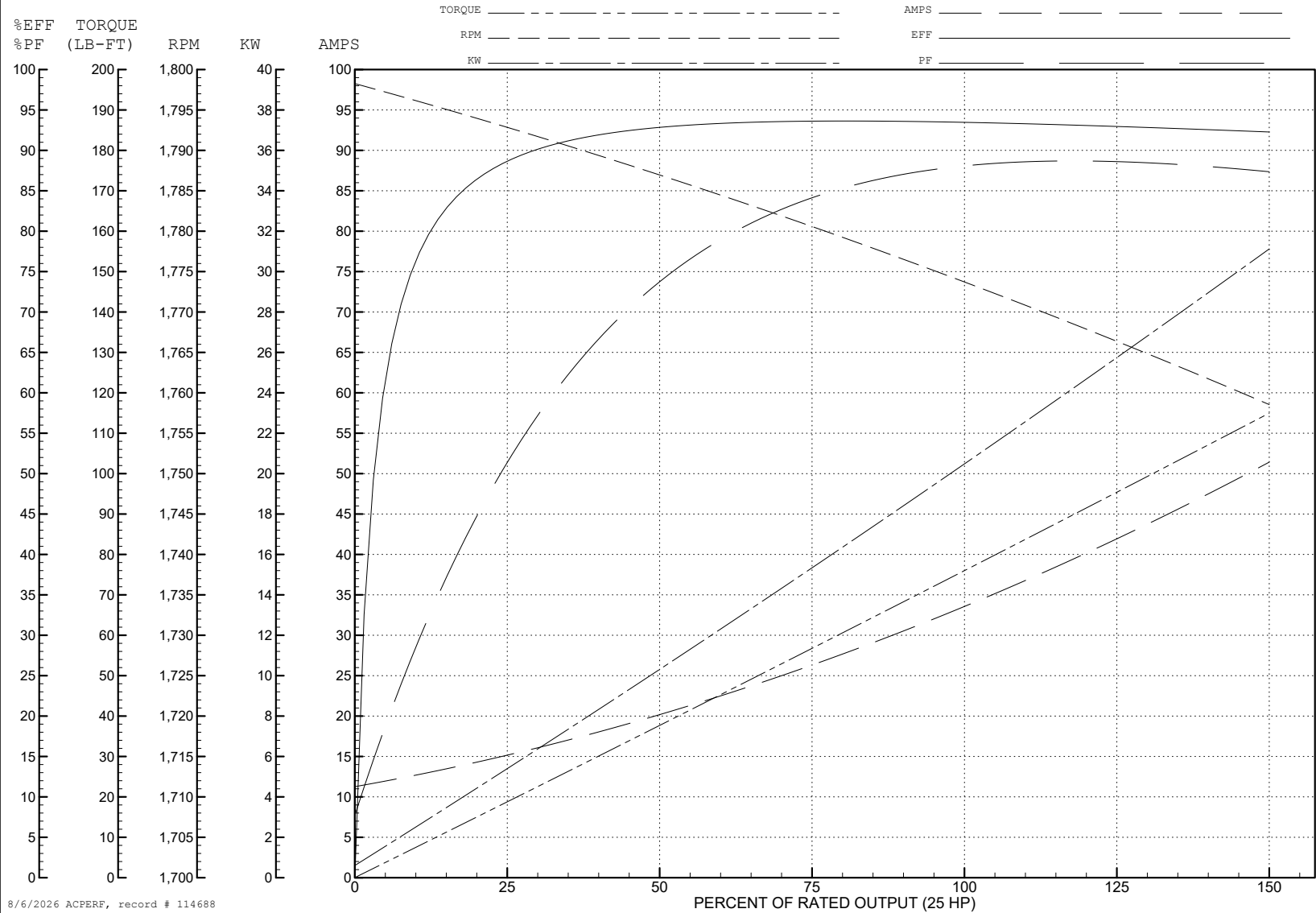
ABB Motors and Mechanical Inc.

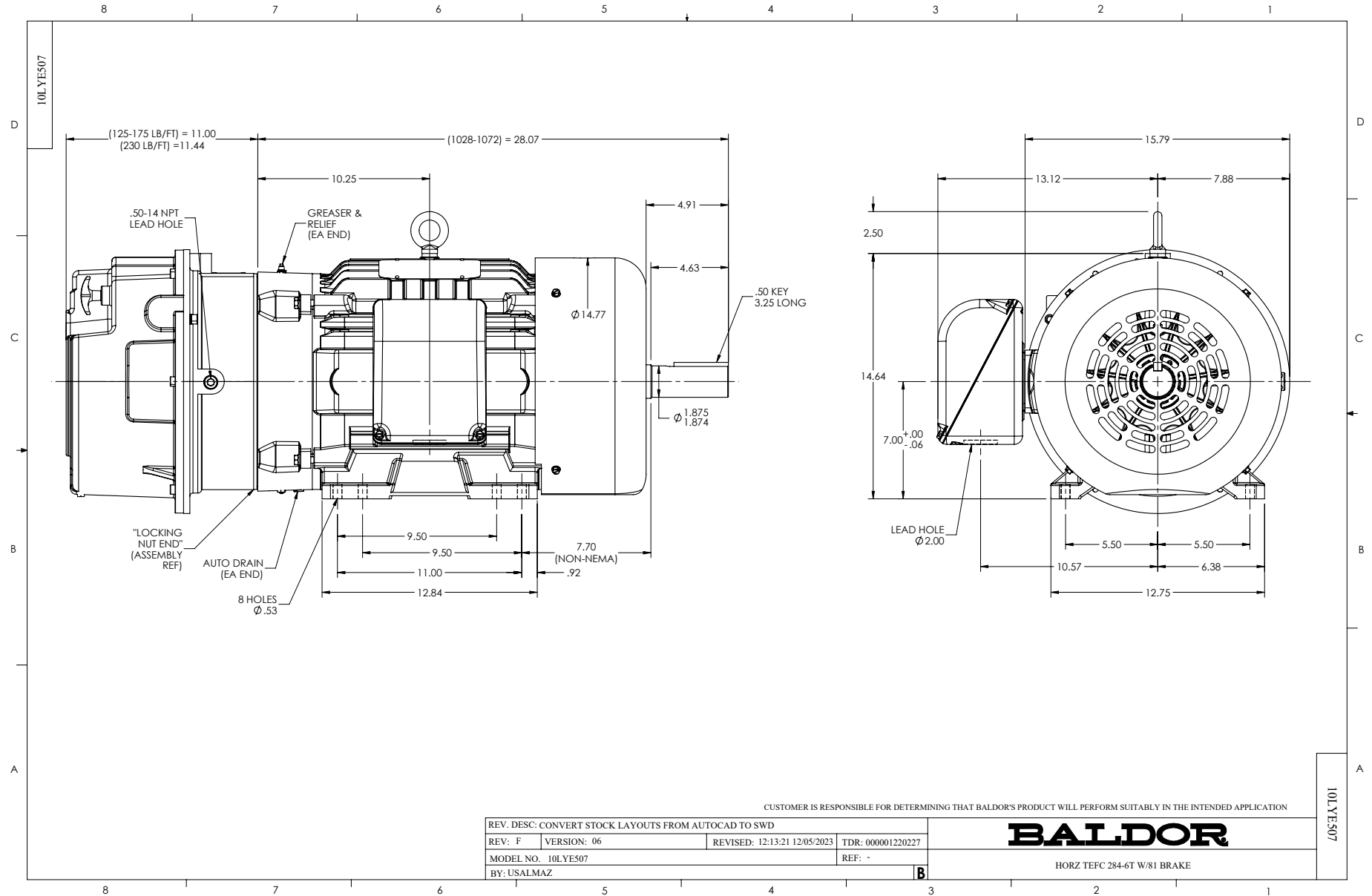
WINDING # 10WGY538

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1760 RPM 400 V 1056M

TORQUES (LB-FT): PO=248 PU=103 LR=129 LRA=228





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.

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

CD0180