

**BALDOR • RELIANCE**

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# Customer information packet

## VFSWDM3713T-E

15HP, 3500RPM, 3PH, 60HZ, 215TC, 3756M, TEFC, F

Class - None

Division - Not Applicable

## Specifications

|                                |  |
|--------------------------------|--|
| Enclosure                      | TEFC   |
| Frame                          | 215TC  |
| Frame Material                 | Stainless Steel  |
| Frequency                      | 60.00 Hz   |
| Motor Letter Type              | Three Phase  |
| Output @ Frequency             | 15.000 HP @ 60 HZ  |
| Phase                          | 3  |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ   |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                             |
| XP Class and Group             | None   |
| XP Division                    | Not Applicable   |
| Agency Approvals               | CSA<br>CSA EEV<br>NEMA PREMIUM<br>UR                           |
| Ambient Temperature            | 40 °C  |
| Auxillary Box                  | No Auxillary Box   |
| Auxillary Box Lead Termination | None   |
| Base Indicator                 | No Mounting  |
| Bearing Grease Type            | Polyrex EM (-20F +300F)  |
| Blower                         | None   |
| Current @ Voltage              | 37.000 A @ 208.0 V<br>34.000 A @ 230.0 V<br>17.000 A @ 460.0 V |
| Design Code                    | A  |
| Drip Cover                     | No Drip Cover  |
| Duty Rating                    | CONT   |
| Efficiency @ 100% Load         | 91.7 %   |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK  |
| Front Face Code                | Standard   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | M          |
| Type         | AC         |
| Mech. spec.  | 37Q227     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 37WGR515   |
| Layout       | 37LYQ227   |
| Eff. date    | 09-22-2023 |
| CD Diagram   | CD0180     |
| Poles        | 02         |
| Leads        | 9#14       |
| Proprietary  | False      |
| Created date | 06-30-2017 |

|                               |                        |
|-------------------------------|------------------------|
| Front Shaft Indicator         | None                   |
| Heater Indicator              | No Heater              |
| High Voltage Full Load Amps   | 17.0 a                 |
| Insulation Class              | H                      |
| Inverter Code                 | Not Inverter           |
| KVA Code                      | L                      |
| Lifting Lugs                  | Standard Lifting Lugs  |
| Locked Bearing Indicator      | Locked Bearing         |
| Motor Lead Exit               | Ko Box                 |
| Motor Lead Quantity/Wire Size | 9 @ 14 AWG             |
| Motor Lead Termination        | Flying Leads           |
| Motor Standards               | NEMA                   |
| Motor Type                    | 3756M                  |
| Mounting Arrangement          | F1                     |
| Number of Poles               | 2                      |
| Overall Length                | 22.12 IN               |
| Power Factor                  | 90                     |
| Product Family                | WD All SS Encapsulated |
| Pulley End Bearing Type       | Sealed Bearing         |
| Pulley Face Code              | C-Face                 |
| Pulley Shaft Indicator        | Standard               |
| Rodent Screen                 | None                   |
| RoHS Status                   | ROHS COMPLIANT         |
| Service Factor                | 1.15                   |
| Shaft Diameter                | 1.375 IN               |
| Shaft Extension Location      | Pulley End             |
| Shaft Ground Indicator        | No Shaft Grounding     |
| Shaft Rotation                | Reversible             |
| Shaft Slinger Indicator       | No Slinger             |
| Speed                         | 3500 rpm               |
| Speed Code                    | Single Speed           |
| Starting Method               | Direct on line         |
| Thermal Device - Bearing      | None                   |
| Thermal Device - Winding      | None                   |

| <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**

| <b>NP4427AAA05</b> |               |               |                |             |           |                      |      |            |    |  |  |
|--------------------|---------------|---------------|----------------|-------------|-----------|----------------------|------|------------|----|--|--|
| <b>CAT #</b>       | VFSWDM3713T-E |               |                |             |           | <b>LBS</b>           |      |            |    |  |  |
| <b>SPEC</b>        | 37Q227R515G1  |               |                |             |           | <b>ENCL</b>          | TEFC |            |    |  |  |
| <b>SER #</b>       |               |               |                |             |           | <b>CC</b>            | 010A | <b>IP</b>  | 69 |  |  |
| <b>HP</b>          | 15            |               | <b>MAG CUR</b> | 11/5.5      |           |                      |      |            |    |  |  |
| <b>VOLTS</b>       | 230/460       |               |                |             |           | <b>NEMA NOM. EFF</b> | 91.7 |            |    |  |  |
| <b>AMPS</b>        | 34/17         |               |                |             |           | <b>PF</b>            | 90   |            |    |  |  |
| <b>RATING</b>      | 40C AMB-CONT  |               |                |             |           |                      |      |            |    |  |  |
| <b>RPM</b>         | 3500          |               |                |             |           | <b>MAX RPM</b>       | 5400 |            |    |  |  |
| <b>FRAME</b>       | 215TC         | <b>HZ</b>     | 60             | <b>CODE</b> | L         | <b>CLASS</b>         | H    |            |    |  |  |
| <b>SER.F.</b>      | 1.15          | <b>SF AMP</b> |                |             |           | <b>PH</b>            | 3    | <b>DES</b> | A  |  |  |
| <b>DE</b>          | 6307          |               | <b>ODE</b>     | 6307        |           |                      |      |            |    |  |  |
| <b>LUBRICATION</b> | POLYREX EM    |               |                |             |           |                      |      |            |    |  |  |
| <b>ID LOGO</b>     | <b>VPWM</b>   | <b>CHP</b>    | 60             | <b>TO</b>   | 90        | 1.5:1                |      |            |    |  |  |
| <b>ID LOGO</b>     | <b>WK2</b>    | 0.512         | <b>CT</b>      | 15          | <b>TO</b> | 60                   | 4:1  |            |    |  |  |
| <b>ID LOGO</b>     | <b>SL HZ</b>  | 1.7           | <b>VT</b>      | 6           | <b>TO</b> | 60                   | 10:1 |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
|                    |               |               |                |             |           |                      |      |            |    |  |  |
| <b>YR</b>          |               |               |                |             |           | <b>QR</b>            |      |            |    |  |  |

## Parts list

| Part number   | Description                              | Quantity |
|---------------|--|----------|
| SA343382      | SA 37Q227R515G1                          | 1.000 ea |
| RA331835      | RA 37Q227R515G1                          | 1.000 ea |
| 36FN3000A02SP | EXFN, PLASTIC, 7.00 OD, 1.175 ID         | 1.000 ea |
| 35CB1017B01   | 37 MID SECT - 3 PC. CONDUIT BOX 1.00 NPT | 1.000 ea |
| 11XW1032G08   | 10-32 X .50, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| HW3001B01     | BRASS CUP WASHER, FOR #10 SCREW          | 1.000 ea |
| 37EP1920A03   | FREP, TEFC MACH - 307 BRG WD11/12 (STAIN | 1.000 ea |
| RM1070A48     | O-RING, .070 C.S. X 8.656 ID, VITON      | 1.000 ea |
| HW4600F35     | 35 X 52 X 8 LIP SEAL, GRAPHITE INFUSED V | 1.000 ea |
| HW4600F34     | 35 X 53 X 4.5 AFX SEAL, GRAPHITE INFUSED | 1.000 ea |
| HW4500S33     | 1/8 NPT STAINLESS #304 SS PLUG           | 4.000 ea |
| HW4500S33     | 1/8 NPT STAINLESS #304 SS PLUG           | 4.000 ea |
| HW4600F34     | 35 X 53 X 4.5 AFX SEAL, GRAPHITE INFUSED | 1.000 ea |
| HW5100A08     | W3118-035 WVY WSHR (WB)                  | 1.000 ea |
| 37EP1925A01   | PUEP, MACH - 307 BRG WD11/12 (STAINLESS) | 1.000 ea |
| RM1070A48     | O-RING, .070 C.S. X 8.656 ID, VITON      | 1.000 ea |
| HW4600F35     | 35 X 52 X 8 LIP SEAL, GRAPHITE INFUSED V | 1.000 ea |
| RM1070A47     | O-RING, -011 VITON/FKM .070CS X .301ID   | 4.000 ea |
| 11XB1214S16   | 12-14X1.00 HXWSSLD TYP B STAINLESS       | 1.000 ea |
| 37FH4000A45   | STAINLESS FAN COVER, NO GREASER SLOT (FO | 1.000 ea |
| 10XN1032FS06  | HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF | 3.000 ea |
| 35CB1513A01   | 35-36-37 MACH. LID - 3 PC. CONDUIT BOX   | 1.000 ea |
| RM1070A81     | O-RING, -043 VITON/FKM .070CS X 3.489ID  | 1.000 ea |
| HA3424S64     | STUD - M6X1.0 THDS X 4.00"               | 1.000 ea |
| RM1070A81     | O-RING, -043 VITON/FKM .070CS X 3.489ID  | 1.000 ea |
| HW2502F21     | #303 SS,SQ KEY 5/16 X 2.375              | 1.000 ea |
| HA7000A02     | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 ea |
| MJ5001A27     | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.005 qt |
| MJ5004A93     | FOOD GRADE (H1 RATED) ANTISEIZE THRD COM | 0.005 ea |
| HA1025A21     | WSHR,FELT .125" THK                      | 1.000 ea |
| HA5027A09     | DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL    | 1.000 ea |

|            |   |          |
|------------|---|----------|
| MJ1000A02  | GREASE, POLYREX EM EXXON                | 0.050 lb |
| WD5603A01  | KIT, CLOSED-END LEAD SPLICE (18-14GA)   | 1.000 ea |
| HA3104FS31 | THRUBOLT, 5/16-18 X 15.875 SS FOOD SAFE | 4.000 ea |
| 37PA1074   | PALLET PACK GRP, PRINT BOX PK1026A06    | 1.000 ea |
| PK3082     | STYROFOAM CRADLE                        | 2.000 ea |
| MN416A01   | TAG-INSTAL-MAINT no wire (2100bx)4/22   | 1.000 ea |
| FE-0000016 | ZTRG FE ASSEMBLY                        | 1.000 ea |
| PE-0000016 | ZRTG PE ASSEMBLY                        | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 43026

Typical performance - not guaranteed values

| Winding: 37WGR515-R001 |                   | Type: 3756M                                      | Enclosure: TEFC          |
|------------------------|-------------------|--|--------------------------|
| <b>Nameplate Data</b>  |                   | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                          |
| Rated Output (HP)      | 15                | Full Load Torque                                 | 22.4 LB-FT               |
| Volts                  | 230/460           | Start Configuration                              | direct on line           |
| Full Load Amps         | 34/17             | Breakdown Torque                                 | 129 LB-FT                |
| R.P.M.                 | 3500              | Pull-up Torque                                   | 62.1 LB-FT               |
| Hz                     | 60 Phase          | Locked-rotor Torque                              | 81.4 LB-FT               |
| NEMA Design Code       | A KVA Code        | Starting Current                                 | 187 A                    |
| Service Factor (S.F.)  | 1.15              | No-load Current                                  | 5.43 A                   |
| NEMA Nom. Eff.         | 91.7 Power Factor | Line-line Res. @ 25°C                            | 0.42167 Ω                |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                          | 78°C                     |
| S.F. Amps              |                   | Temp. Rise @ S.F. Load                           | 96°C                     |
|                        |                   | Locked-rotor Power Factor                        | 30                       |
|                        |                   | Rotor inertia                                    | 0.512 LB-FT <sup>2</sup> |

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

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 59     | 82     | 87     | 90     | 92     | 93     | 91   |
| Efficiency      | 88.1   | 92     | 92.4   | 91.9   | 91.1   | 89.9   | 91.4 |
| Speed           | 3575.6 | 3551.4 | 3525.1 | 3498.7 | 3469.7 | 3437.4 | 3481 |
| Line amperes    | 6.71   | 9.36   | 13.1   | 16.9   | 20.8   | 25.3   | 19.2 |



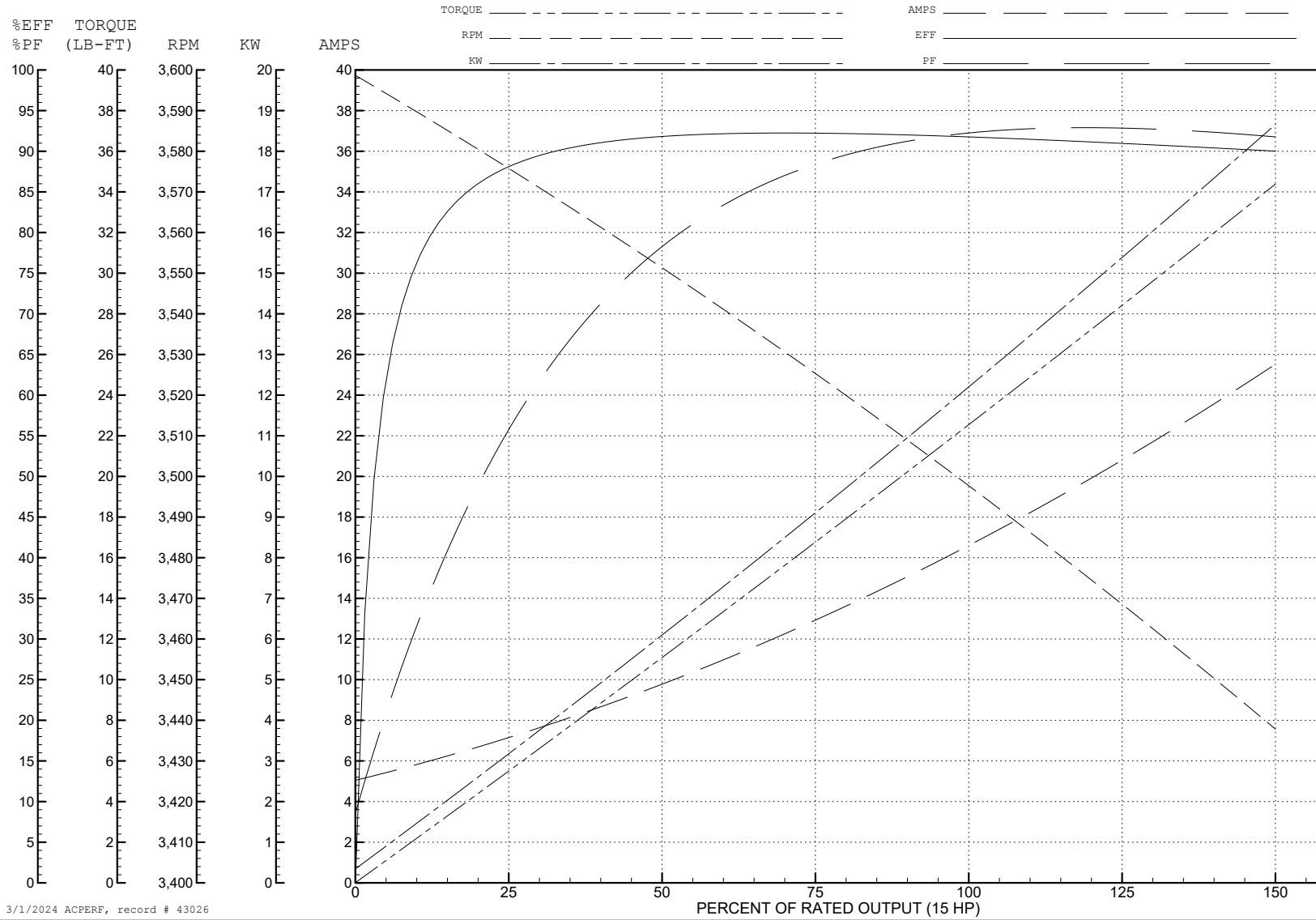
ABB Motors and Mechanical Inc.

WINDING # 37WGR515

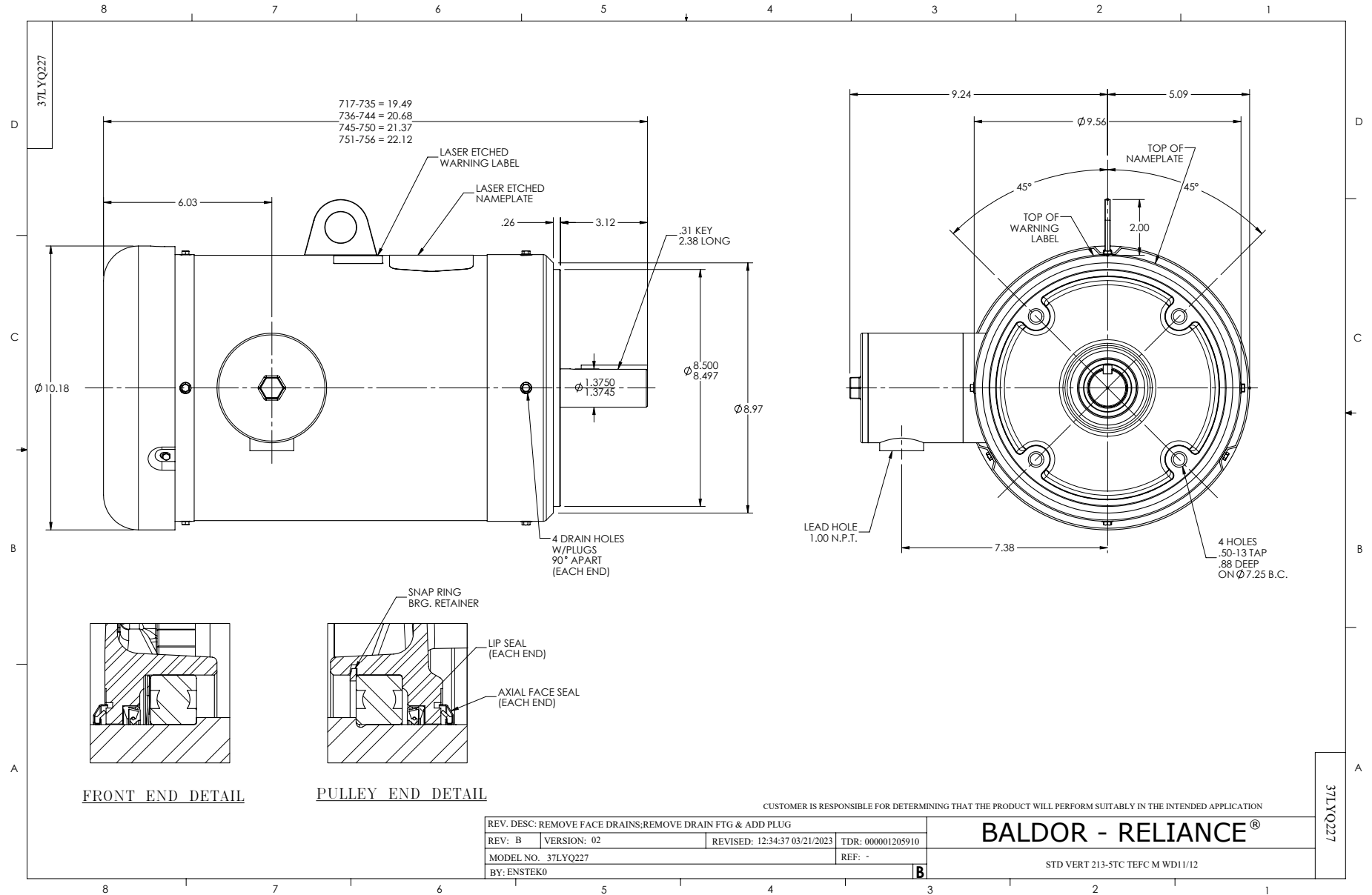
15 HP 3 PH 60 HZ 3500 RPM 460 V 3756M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=129 PU=62.1 LR=81.4 LRA=187



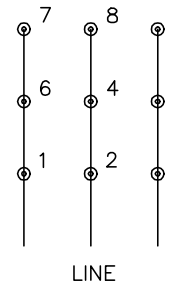
3/1/2024 ACPERF, record # 43026



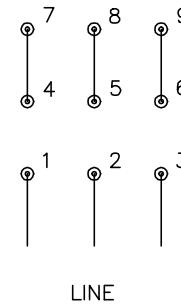
CD0180



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