

# ABB BALDOR RELIANCE III

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## Customer information packet

### FDL3732M

7.5HP, 1730RPM, 1PH, 60HZ, 213, 3740LC, TEFC, F

Class - None

Division - Not Applicable

**Specifications**

|                                |                           |
|--------------------------------|---------------------------|
| Enclosure                      | TEFC                      |
| Frame                          | 213                       |
| Frame Material                 | Steel                     |
| Frequency                      | 60.00 Hz                  |
| Haz Area Class and Group       | None                      |
| Haz Area Division              | Not Applicable            |
| Motor Letter Type              | Cap Start, Cap Run        |
| Output @ Frequency             | 7.500 HP @ 60 HZ          |
| Phase                          | 1                         |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ          |
| Voltage @ Frequency            | 230.0 V @ 60 HZ           |
| Agency Approvals               | UR<br>CSA                 |
| Ambient Temperature            | 40 °C                     |
| Auxiliary Box                  | NO AUXILLARY BOX          |
| Auxiliary Box Lead Termination | None                      |
| Base Indicator                 | Rigid                     |
| Bearing Grease Type            | Polyrex EM (-20F +300F)   |
| Blower                         | None                      |
| Current @ Voltage              | 30.000 A @ 230.0 V        |
| Design Code                    | L                         |
| Drip Cover                     | No Drip Cover             |
| Duty Rating                    | CONT                      |
| Efficiency @ 100% Load         | 84.0 %                    |
| Electrically Isolated Bearing  | Not Electrically Isolated |
| Feedback Device                | NO FEEDBACK               |
| Front Face Code                | Standard                  |
| Front Shaft Indicator          | None                      |
| Heater Indicator               | No Heater                 |
| High Voltage Full Load Amps    | 30.0 a                    |
| Insulation Class               | F                         |
| Inverter Code                  | Not Inverter              |

**Part Detail**

|              |                    |
|--------------|--------------------|
| Revision     | M                  |
| Type         | AC                 |
| Mech. spec.  | 37N373             |
| Base         |                    |
| Status       | PRD/A              |
| Elec. spec.  | 37WGT879           |
| Layout       | 37LYN373           |
| Eff. date    | 07-25-2024         |
| CD Diagram   | CD0152             |
| Poles        | 04                 |
| Leads        | 2#10 A PH,3#14 B&J |
| Proprietary  | False              |
| Created date | 12-11-2013         |

|                                      |                                |
|--------------------------------------|--------------------------------|
| <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>Cap Box</b>                 |
| <b>Motor Lead Quantity/Wire Size</b> | <b>2 @ 10 AWG, A PH</b>        |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>            |
| <b>Motor Standards</b>               | <b>NEMA</b>                    |
| <b>Motor Type</b>                    | <b>3740LC</b>                  |
| <b>Mounting Arrangement</b>          | <b>F1</b>                      |
| <b>Number of Poles</b>               | <b>4</b>                       |
| <b>Overall Length</b>                | <b>18.65 IN</b>                |
| <b>Power Factor</b>                  | <b>97</b>                      |
| <b>Product Family</b>                | <b>General Purpose</b>         |
| <b>Pulley End Bearing Type</b>       | <b>Sealed Bearing</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>1.00</b>                    |
| <b>Shaft Diameter</b>                | <b>1.125 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>1730 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>Do Not Use</b>              |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b>     |
| <b>Winding Thermal 1</b>             | <b>Manual Thermal Overload</b> |
| <b>Winding Thermal 1 Location</b>    | <b>KO</b>                      |
| <b>Winding Thermal 2</b>             | <b>None</b>                    |

**Nameplate**

| NP1280L      |              |      |  |      |     |    |   |    |   |
|--------------|--------------|------|--|------|-----|----|---|----|---|
| CAT.NO.      | FDL3732M     |      |  |      |     |    |   |    |   |
| SPEC.        | 37N373T879G1 |      |  |      |     |    |   |    |   |
| HP           | 7.5          |      |  |      |     |    |   |    |   |
| VOLTS        | 230          |      |  |      |     |    |   |    |   |
| AMP          | 30           |      |  |      |     |    |   |    |   |
| RPM          | 1730         |      |  |      |     |    |   |    |   |
| FRAME        | 213          | HZ   |  | 60   |     | PH |   | 1  |   |
| SER.F.       | 1.00         | CODE |  | H    | DES |    | L | CL | F |
| NEMA-NOM-EFF | 84           | PF   |  | 97   |     |    |   |    |   |
| RATING       | 40C AMB-CONT |      |  |      |     |    |   |    |   |
| CC           |              |      |  |      |     |    |   |    |   |
| DE           | 6307         | ODE  |  | 6206 |     |    |   |    |   |
| ENCL         | TEFC         | SN   |  |      |     |    |   |    |   |
|              |              |      |  |      |     |    |   |    |   |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA274237      | SA 37N373T879G1                          | 1.000 ea |
| RA260824      | RA 37N373T879G1                          | 1.000 ea |
| OC3050F09SP   | CAPACITOR 50 MFD 370 VAC                 | 1.000 ea |
| OC3040F18SP   | 7YL OIL CAP 40MFD/370V                   | 1.000 ea |
| TPLED1024SP   | THERMAL 1PH 1.5 MAN REF LED945 TDR #5817 | 1.000 ea |
| EC1189C06SP   | ELEC CAP, 189-227 MFD, 250V, 2.06D X 4.  | 2.000 ea |
| EC1161C06SP   | ELEC CAP, 161-193 MFD, 250V, 2.06D X 4.  | 2.000 ea |
| 37FN3002A01SP | EXFN, PLASTIC, 9.00 OD, 1.155 ID         | 1.000 ea |
| HW3200A01     | 3/8-16X3/4 EYEBOLT WELDED F/S            | 1.000 ea |
| 37CB3804A04   | CAPAC BOX MACH                           | 1.000 ea |
| 37GS3015      | GASKET, CAPAC BOX                        | 1.000 ea |
| 51XW2520A10   | .25-20 X .62, TAPTITE II, HEX WSHR SLTD  | 4.000 ea |
| 37CB4509      | CAPAC BOX LID, STAMPED                   | 1.000 ea |
| 37GS3016      | GASKET, CAPAC BOX LID                    | 1.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 6.000 ea |
| HA6003A47     | CAPAC CLAMP                              | 1.000 ea |
| HA6003A45     | CAPAC CLAMP - CLIP (WHITE ZINC PLATED)   | 2.000 ea |
| 51XB1016A07   | 10-16 X 7/16 HXWSSLD SERTYB              | 4.000 ea |
| HA2001A09     | SPACER, .218 ID X .937 LG                | 2.000 ea |
| RM1015        | BOOT FOR 1.50 MANUAL THERMALS            | 1.000 ea |
| 51XN1032A28   | 10-32 X 1 3/4 HX WS SL SR                | 2.000 ea |
| XY1032A02     | 10-32 HEX NUT DIRECTIONAL SERRATION      | 2.000 ea |
| HW1000A10     | #10 FLAT WASHER (SAE)                    | 2.000 ea |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| HW3001B01     | BRASS CUP WASHER, FOR #10 SCREW          | 1.000 ea |
| 37EP3101A04   | FR ENDPLATE, MACH                        | 1.000 ea |
| 13XF0832A08   | 8-32 X.50 PAN HD,SLTD, TYPE F SCREW, ZIN | 2.000 ea |
| HW5100A06     | W2420-025 WVY WSHR (WB)                  | 1.000 ea |
| 37PE3100A42   | 37 PUEP ASSEMBLY FOR SEAL                | 1.000 ea |
| HW4600H13     | SEAL 1.375 X 2.125 X 0.313 SINGLE LIP DB | 1.000 ea |
| XY3118A12     | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 ea |

|             |                                          |           |
|-------------|------------------------------------------|-----------|
| 07FH4007A33 | IEC FAN CVR W/NOTCH FOR 37CB3804 CAPAC B | 1.000 ea  |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea  |
| 51XB1214A20 | 12-14X1.25 HWSSLD SERTYB                 | 1.000 ea  |
| HA1005A02   | SLINGER, OD 2.00, ID 1.14, 206 BRG,      | 1.000 ea  |
| HW4600B33   | V-RING SLINGER 1.375 X 1.890 X .35 VITON | 1.000 ea  |
| HW2501E18   | KEY, 1/4 SQ X 2.000                      | 1.000 ea  |
| 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  |
| LB1087      | LABEL,MANUAL RESET (ROLL LABEL)          | 1.000 ea  |
| LB1624      | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea  |
| MJ5001A27   | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 qt  |
| NS2605      | INSULATOR FOR 37 FRAMESWITCH (MH1011A10) | 1.000 ea  |
| MJ1000A02   | GREASE, POLYREX EM EXXON                 | 0.050 lb  |
| MG1025C02   | WILKOFASST SG, 787.105, TAN              | 0.028 ga  |
| HA3104A17   | 5/16-18X13.250 T-BLT/OHIO                | 4.000 ea  |
| TP5059      | GENERIC WELDED THERMAL, 7" LEAD KIT      | 1.000 ea  |
| SP5172A03   | 37 TYPE L TORQ STAT SWITCH LEAD ASSEMBLY | 1.000 ea  |
| LD5000A23   | LEAD ASSY, ML1400DF10 W/#10 RING 12"     | 1.000 ea  |
| WD1000A03   | 41531 AMP FLG.TERM,4M/REEL(2.5MIL)       | 12.000 ea |
| LC0002      | CONNECTION LABEL                         | 1.000 ea  |
| MN416A01    | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea  |
| NP1280L     | ALUM FARM DUTY UL CC THERMAL             | 1.000 ea  |
| 37PA1074    | PALLET PACK GRP, PRINT BOX PK1026A06     | 1.000 ea  |
| FE-0000001  | ZRTG FE ASSEMBLY                         | 1.000 ea  |

**Accessories**

| Part number | Description                              | Multiplier |
|-------------|------------------------------------------|------------|
| 37-3301FD   | C FACE KIT FARM DUTY 213-5TC, ENCL, 6307 | A8         |

**AC Induction Motor Performance Data**

Record # 18791

Typical performance - not guaranteed values

| Winding: 37WGT879-R001 |    |              | Type: 3740LC                          |                         | Enclosure: TEFC  |                       |         |                              |
|------------------------|----|--------------|---------------------------------------|-------------------------|------------------|-----------------------|---------|------------------------------|
| Nameplate Data         |    |              | 230 V, 60 Hz:<br>Single Voltage Motor |                         |                  |                       |         |                              |
| Rated Output (HP)      |    | 7.5          | Full Load Torque                      |                         | 22.6 LB-FT       |                       |         |                              |
| Volts                  |    | 230          | Start Configuration                   |                         | direct on line   |                       |         |                              |
| Full Load Amps         |    | 30           | Breakdown Torque                      |                         | 81.3 LB-FT       |                       |         |                              |
| R.P.M.                 |    | 1730         | Pull-up Torque                        |                         | 60 LB-FT         |                       |         |                              |
| Hz                     | 60 | Phase        | 1                                     | Locked-rotor Torque     |                  | 88.4 LB-FT            |         |                              |
| NEMA Design Code       |    | L            | KVA Code                              | H                       | Starting Current |                       | 222.4 A |                              |
| Service Factor (S.F.)  |    | 1            | No-load Current                       |                         | 8.67 A           |                       |         |                              |
| NEMA Nom. Eff.         |    | 84           | Power Factor                          |                         | 97               | Line-line Res. @ 25°C |         | 0.199 Ω A Ph<br>0.516 Ω B Ph |
| Rating - Duty          |    | 40C AMB-CONT |                                       | Temp. Rise @ Rated Load |                  | 87°C                  |         |                              |

**Load Characteristics 230 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 79   | 90   | 94   | 96   | 96   | 96   |
| Efficiency      | 68   | 81.1 | 84.7 | 85.2 | 83.8 | 80.6 |
| Speed           | 1782 | 1767 | 1750 | 1731 | 1708 | 1680 |
| Line amperes    | 11.3 | 16.5 | 22.6 | 29.6 | 37.5 | 46.9 |



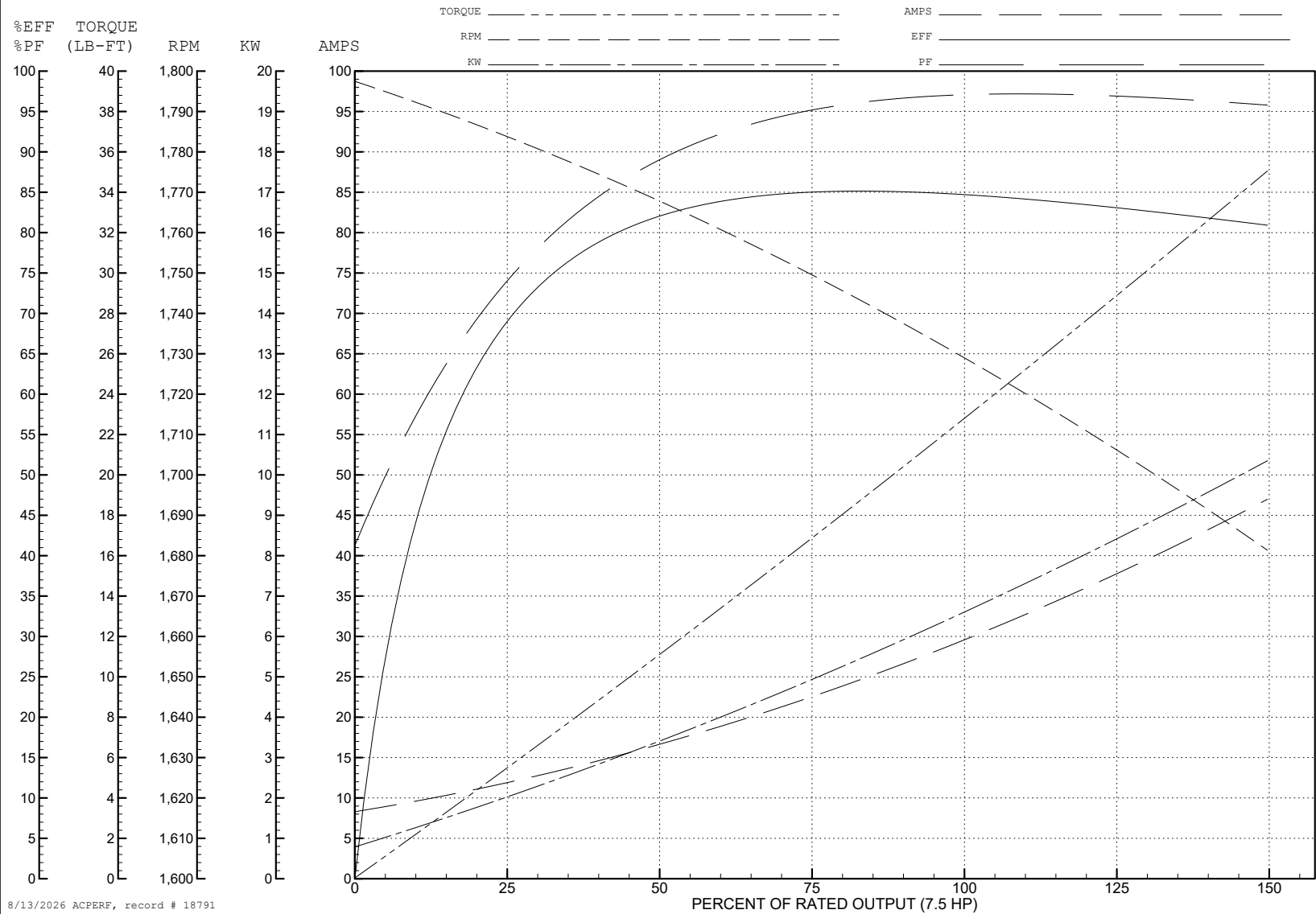
ABB Motors and Mechanical Inc.

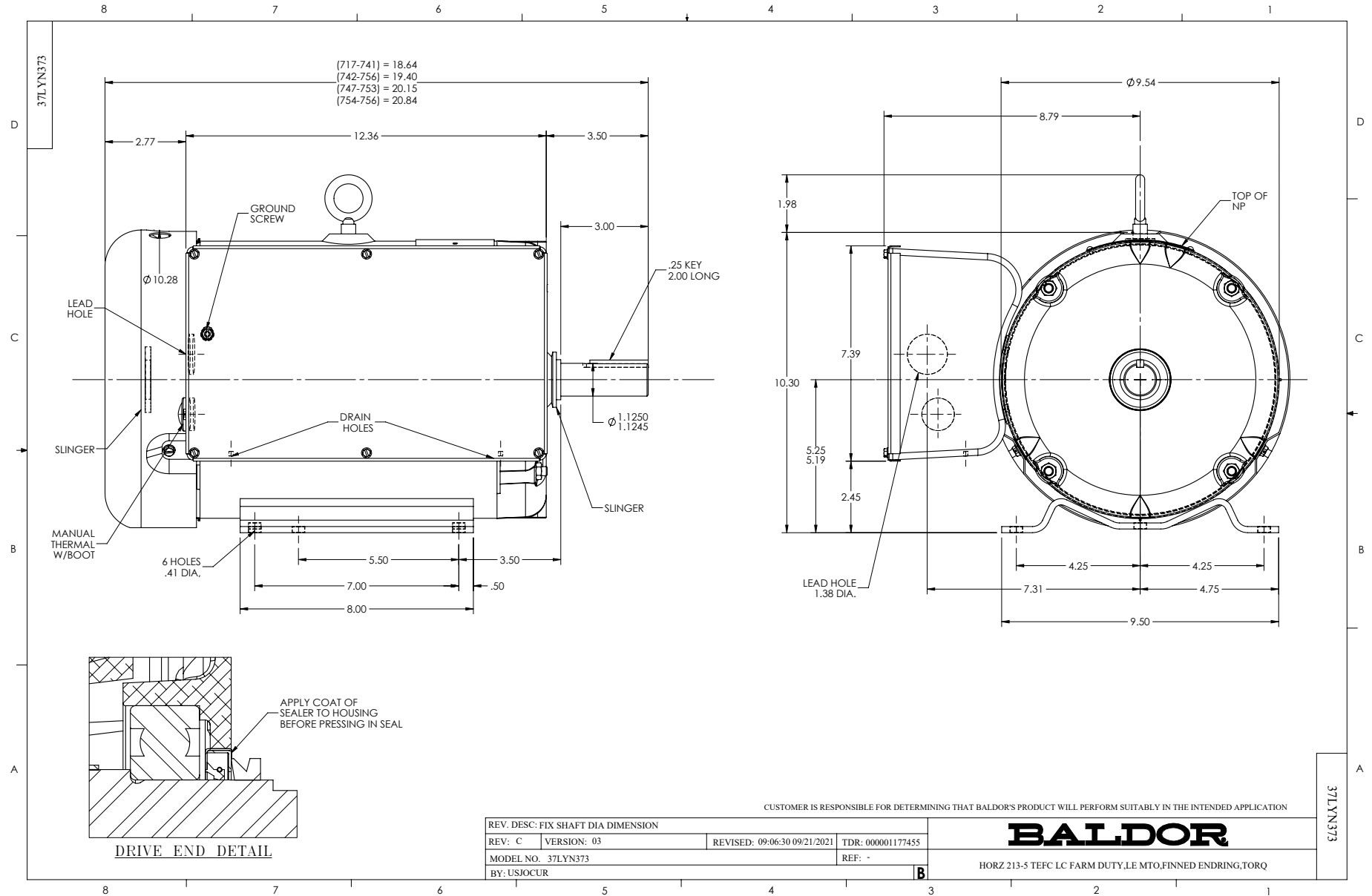
WINDING # 37WGT879

Typical performance - not guaranteed values.

7.5 HP 1 PH 60 HZ 1730 RPM 230 V 3740LC

TORQUES (LB-FT): PO=81.3 PU=60 LR=88.4 LRA=222.4





|     |        |        |      |
|-----|--------|--------|------|
|     | LINE A | LINE B | JOIN |
| STD | 1,8    | 4      | J,5  |
| OPP | 1,5    | 4      | J,8  |

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. OPTIONAL OIL CAPACITOR IS PROVIDED WHEN SPECIFIED.
4. CAPACITORS MAY BE SEPERATELY MOUNTED.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.