

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VFD FL3610TM**

**3HP, 1750RPM, 1PH, 60HZ, 184TC, 3640LC, TEFC, F**

| Part Detail |        |             |            |             |                    |               |            |
|-------------|--------|-------------|------------|-------------|--------------------|---------------|------------|
| Revision:   | C      | Status:     | PRD/A      | Change #:   |                    | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 36WGY739   | CD Diagram: | CD0002A02          | Mfg Plant:    |            |
| Mech. Spec: | 36Q454 | Layout:     | 36LYQ454   | Poles:      | 04                 | Created Date: | 03-07-2015 |
| Base:       | N      | Eff. Date:  | 08-26-2015 | Leads:      | 2#14 A PH,3#16 B&J |               |            |

| Specs                           |                         |                                |                    |
|---------------------------------|-------------------------|--------------------------------|--------------------|
| Catalog Number:                 | VFDFL3610TM             | KVA Code:                      | M                  |
| Enclosure:                      | TEFC                    | Lifting Lugs:                  | No Lifting Lugs    |
| Frame:                          | 184TC                   | Locked Bearing Indicator:      | Locked Bearing     |
| Frame Material:                 | Steel                   | Motor Lead Quantity/Wire Size: | 2 @ 14 AWG, A PH   |
| Output @ Frequency:             | 3.000 HP @ 60 HZ        | Motor Lead Exit:               | Ko Box             |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Termination:        | Flying Leads       |
| Voltage @ Frequency:            | 230.0 V @ 60 HZ         | Motor Type:                    | 3640LC             |
| XP Class and Group:             | None                    | Mounting Arrangement:          | F2                 |
| XP Division:                    | Not Applicable          | Power Factor:                  | 76                 |
| Agency Approvals:               | UR                      | Product Family:                | General Purpose    |
|                                 | CSA                     | Pulley End Bearing Type:       | Sealed Bearing     |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | C-Face             |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Standard           |
| Base Indicator:                 | No Mounting             | Rodent Screen:                 | None               |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Extension Location:      | Pulley End         |
| Blower:                         | None                    | Shaft Ground Indicator:        | No Shaft Grounding |
| Current @ Voltage:              | 15.500 A @ 230.0 V      | Shaft Rotation:                | Reversible         |
| Design Code:                    | L                       | Shaft Slinger Indicator:       | Shaft Slinger      |

|                                       |                           |                                    |                         |
|---------------------------------------|---------------------------|------------------------------------|-------------------------|
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Speed Code:</b>                 | Single Speed            |
| <b>Duty Rating:</b>                   | CONT                      | <b>Motor Standards:</b>            | NEMA                    |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Starting Method:</b>            | Direct on line          |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Bearing:</b>   | None                    |
| <b>Front Face Code:</b>               | Standard                  | <b>Thermal Device - Winding:</b>   | None                    |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor     |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 1:</b>          | Manual Thermal Overload |
| <b>Insulation Class:</b>              | F                         | <b>Winding Thermal 1 Location:</b> | KO                      |
| <b>Inverter Code:</b>                 | Not Inverter              | <b>Winding Thermal 2:</b>          | None                    |

|                          |              |  |  |             |      |            |                       |   |           |   |
|--------------------------|--------------|--|--|-------------|------|------------|-----------------------|---|-----------|---|
| <b>Nameplate NP1280L</b> |              |  |  |             |      |            |                       |   |           |   |
| <b>CAT.NO.</b>           | VFDFL3610TM  |  |  |             |      |            |                       |   |           |   |
| <b>SPEC.</b>             | 36Q454Y739G1 |  |  |             |      |            |                       |   |           |   |
| <b>HP</b>                | 3            |  |  |             |      |            |                       |   |           |   |
| <b>VOLTS</b>             | 230          |  |  |             |      |            |                       |   |           |   |
| <b>AMP</b>               | 15.5         |  |  |             |      |            |                       |   |           |   |
| <b>RPM</b>               | 1750         |  |  |             |      |            |                       |   |           |   |
| <b>FRAME</b>             | 184TC        |  |  | <b>HZ</b>   | 60   |            | <b>PH</b>             | 1 |           |   |
| <b>SER.F.</b>            | 1.00         |  |  | <b>CODE</b> | M    | <b>DES</b> | L                     |   | <b>CL</b> | F |
| <b>NEMA-NOM-EFF</b>      | 80           |  |  | <b>PF</b>   | 76   |            |                       |   |           |   |
| <b>RATING</b>            | 40C AMB-CONT |  |  |             |      |            |                       |   |           |   |
| <b>CC</b>                |              |  |  |             |      |            | <b>USABLE AT 208V</b> |   |           |   |
| <b>DE</b>                | 6206         |  |  | <b>ODE</b>  | 6205 |            |                       |   |           |   |
| <b>ENCL</b>              | TEFC         |  |  | <b>SN</b>   |      |            |                       |   |           |   |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA295493    | SA 36Q454Y739G1                          | 1.000 EA |
| RA281555    | RA 36Q454Y739G1                          | 1.000 EA |
| TPBRD3929SP | THERMAL 1PH 1.25 MAN REF BRD2945 TDR #58 | 1.000 EA |
| 36CB1000A82 | KOBX, MACH LEAD HOLE @6, MTO @9          | 1.000 EA |
| 37GS1000SP  | GASKET, CONDUIT BOX STD., .06 THICK LEXI | 1.000 EA |
| 51XB1016A10 | 10-16X 5/8HXWSSLD SERTYB                 | 2.000 EA |
| NS2500A02   | INSULATOR, MAN THER PROT                 | 1.000 EA |
| HA6015A08   | THERMAL RETAINER (PLATED)                | 1.000 EA |
| RM1014A01SP | BUTYL RUB.THRM COV. (MENA)               | 1.000 EA |
| 51XB1214A10 | 12-14 X 5/8HX WS SL SR TYBX              | 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 |
| 36EP3104A01 | FREP MACH ASSEMBLY FOR ROUTING           | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 13XF0832A08 | 8-32 X.50 PAN HD,SLTD, TYPE F SCREW, ZIN | 2.000 EA |
| 36GS3000    | GASKET, CAPACITOR COVER LEXIDE           | 1.000 EA |
| 10XN2520A12 | O1/4-20X 3/4 HEX HEAD CAP                | 2.000 EA |
| HW5100A05   | WVY WSHR F/205 & 304 BRGS                | 1.000 EA |
| 36EP1300A44 | PULLEY 182-4TC ENCL 206 BRG W/O GRGR W/  | 1.000 EA |
| HW4600B50   | SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB | 1.000 EA |
| HW4600B36SP | V-RING SLINGER 1.188 X 1.690 X .24 VITON | 1.000 EA |
| 10XN2520A24 | 1/4-20X 1 1/2 HEX HD X                   | 4.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| XY2520A12   | 1/4-20 HEX NUT, DIRECTIONAL SERRATIONS   | 4.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| 51XB1214A16            | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| 36FH4009A102           | IEC FH GREASER PRIMED                    | 1.000 EA |
| 51XW1032A06            | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 36CB4516               | 36 LIPPED CB LID - GALVANNEAL            | 1.000 EA |
| 37GS1001SP             | GASKET, CONDUIT BOX LID, .06 THICK LEXID | 1.000 EA |
| 51XW0832A07            | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501E16              | KEY, 1/4 SQ X 1.750                      | 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 |
| MJ5001A27              | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 QT |
| 36CB5005A10            | CAPACITOR BOX KIT,36CB3800,EC1216C06     | 1.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| 36FN3000A01SP          | EXFN, PLASTIC, 7.00 OD, .912 ID          | 1.000 EA |
| MG1025C02              | WILKOFASST SG, 787.105, TAN              | 0.022 GA |
| HA3101A28              | THRUBOLT 1/4-20 X 12.500 OHIO ROD        | 4.000 EA |
| TP5059                 | GENERIC THERMAL KIT                      | 1.000 EA |
| SP5172A21              | 37 TYPE L TORQ STAT SWITCH LEAD ASSEMBLY | 1.000 EA |
| LC0002                 | CONNECTION LABEL                         | 1.000 EA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 5/18  | 1.000 EA |
| NP1280L                | ALUM FARM DUTY UL CSA CC THERMAL         | 1.000 EA |
| PK3082                 | STYROFOAM CRADLE                         | 1.000 EA |
| G7PA1000               | PKG GRP, PRINT PK1034A06                 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 11466 - Typical performance - not guaranteed values

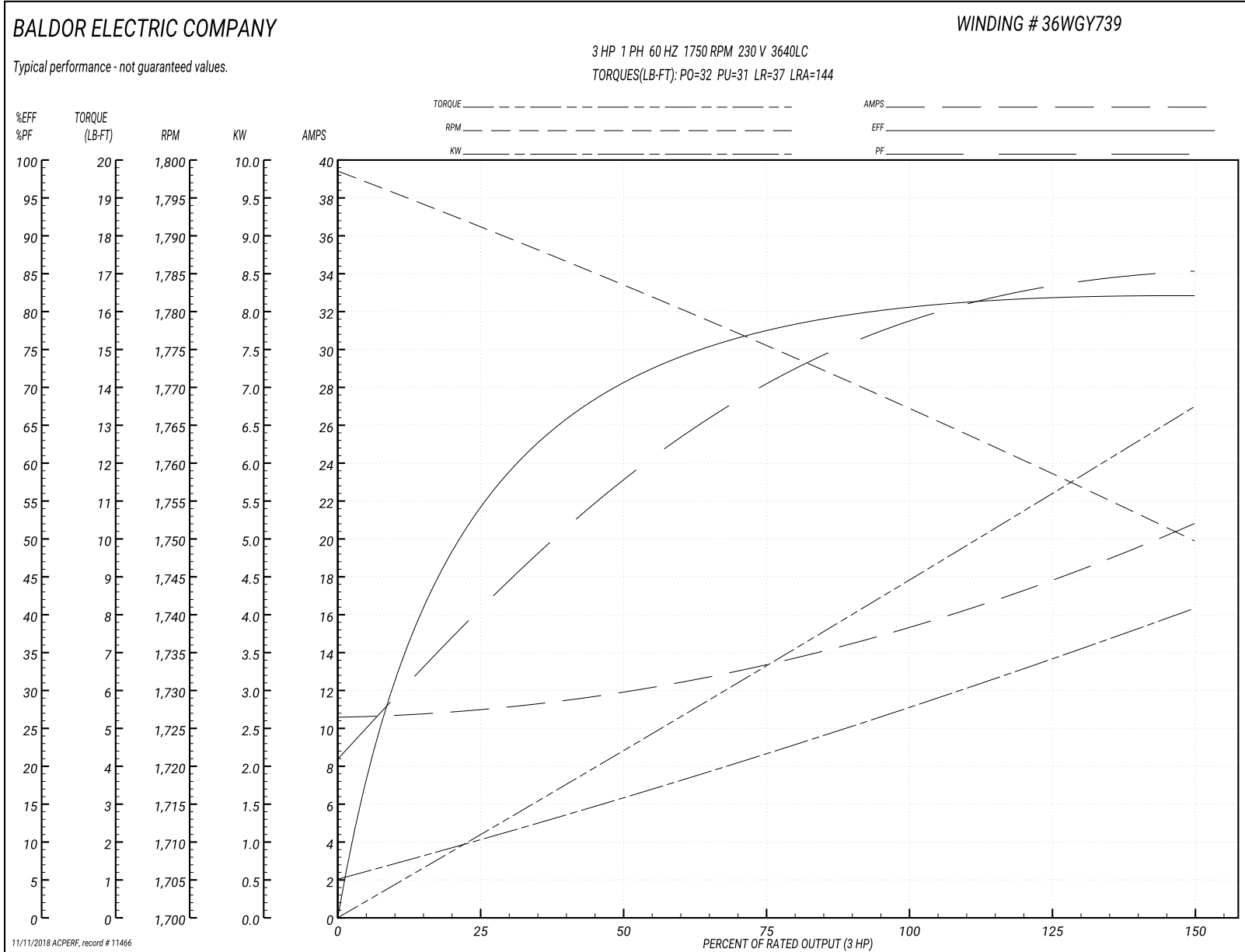
|                               |                     |                        |
|-------------------------------|---------------------|------------------------|
| <b>Winding:</b> 36WGY739-R001 | <b>Type:</b> 3640LC | <b>Enclosure:</b> TEFC |
|-------------------------------|---------------------|------------------------|

| Nameplate Data        |              |              |    | 230 V, 60 Hz:<br>Single Voltage Motor |                             |
|-----------------------|--------------|--------------|----|---------------------------------------|-----------------------------|
| Rated Output (HP)     | 3            |              |    | Full Load Torque                      | 9 LB-FT                     |
| Volts                 | 230          |              |    | Start Configuration                   | direct on line              |
| Full Load Amps        | 15.5         |              |    | Breakdown Torque                      | 32 LB-FT                    |
| R.P.M.                | 1750         |              |    | Pull-up Torque                        | 31 LB-FT                    |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                   | 37 LB-FT                    |
| NEMA Design Code      | L            | KVA Code     | M  | Starting Current                      | 144 A                       |
| Service Factor (S.F.) | 1            |              |    | No-load Current                       | 10.7 A                      |
| NEMA Nom. Eff.        | 80           | Power Factor | 76 | Line-line Res. @ 25°C                 | 0.472 Ω A Ph<br>1.53 Ω B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 85°C                        |

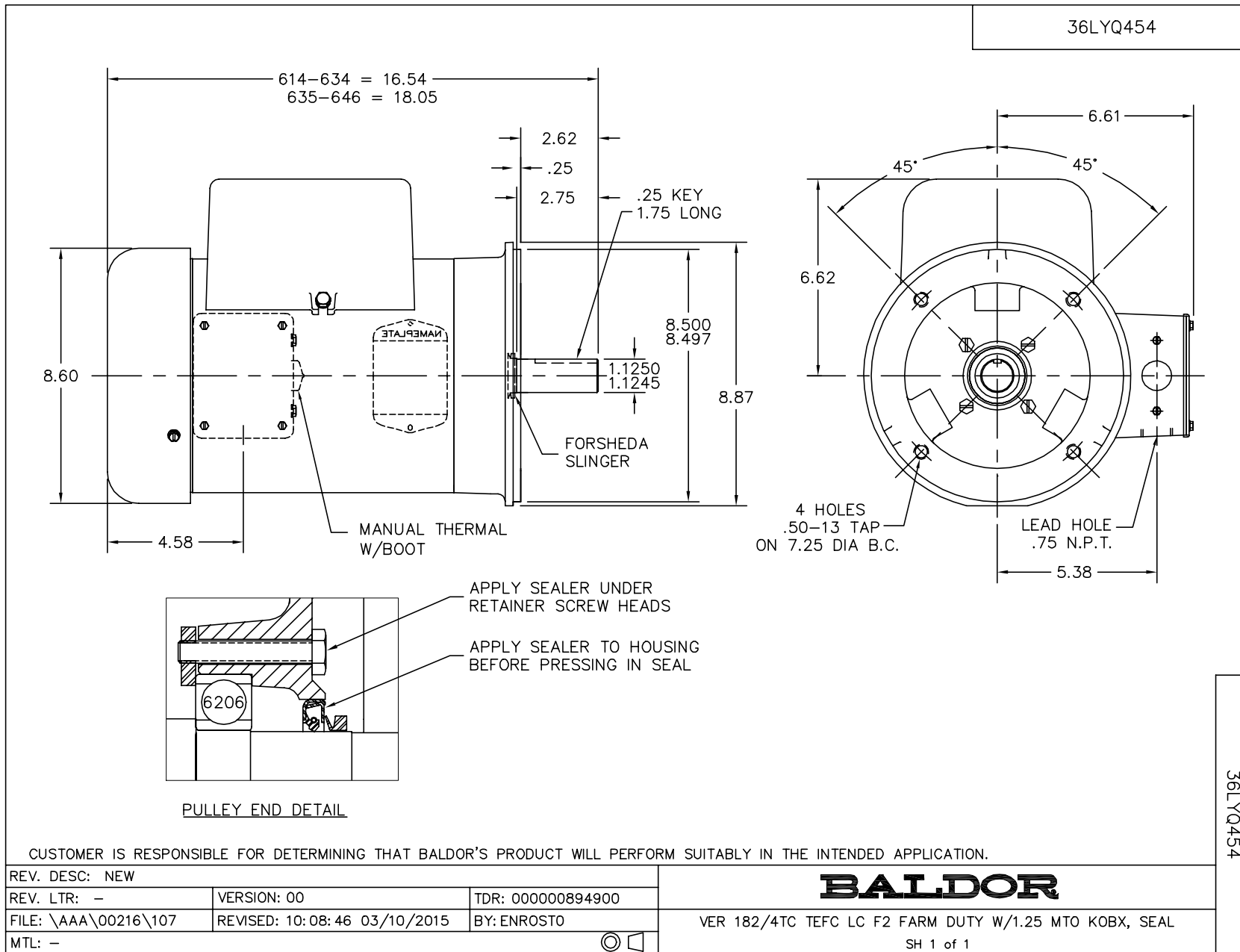
Load Characteristics 230 V, 60 Hz, 3 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 39   | 56   | 68   | 76   | 82   | 85   |
| Efficiency      | 53.4 | 70.8 | 77.9 | 81   | 82   | 81.9 |
| Speed           | 1791 | 1782 | 1775 | 1768 | 1759 | 1749 |
| Line amperes    | 10.9 | 11.8 | 13.5 | 15.5 | 18   | 20.7 |

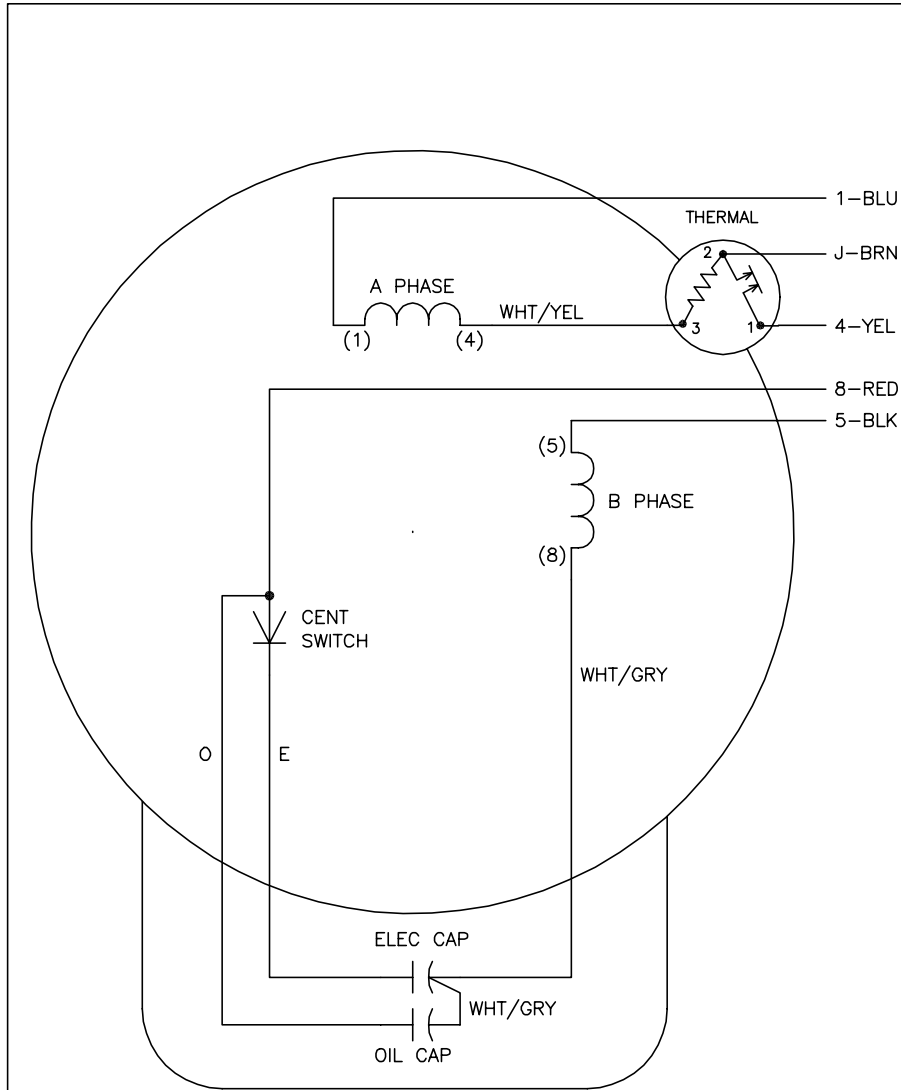
Performance Graph at 230V, 60Hz, 3.0HP Typical performance - Not guaranteed values







CD0002A02



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

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|  |                      |                              |
|--|----------------------|------------------------------|
| REV. DESC: REMOVE 2-TERMINAL THERMAL DETAIL, SEE CD0002A04 |                      |                              |
| REV. LTR: D  | VERSION: 01          | TDR: 000000360649            |
| Z0VZ00000<br>CD0002A02                                     | FILE: \AAA\00007\520 | REVISED: 17:11:40 04/15/2005 |
|  | MTL: -               | BY: ENJOEPO                  |

**BALDOR ELECTRIC Co.**

TYPE LC, SV, REV, THERMAL, 5 LEADS

CD0002A02