

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM3661T**

**3HP,1755RPM,3PH,60HZ,182TC,0632M,TEFC,F1**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | J      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 06WGX181   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 06H016 | Layout:     | 06LYH016   | Poles:      | 04     | Created Date: | 10-04-2011 |
| Base:       | N      | Eff. Date:  | 07-19-2017 | Leads:      | 9#16   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | VEM3661T                | Heater Indicator:              | No Heater             |
| Enclosure:                      | TEFC                    | Insulation Class:              | F                     |
| Frame:                          | 182TC                   | Inverter Code:                 | Inverter Ready        |
| Frame Material:                 | Iron                    | KVA Code:                      | J                     |
| Output @ Frequency:             | 3.000 HP @ 60 HZ        | Lifting Lugs:                  | Standard Lifting Lugs |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Locked Bearing Indicator:      | Locked Bearing        |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Quantity/Wire Size: | 9 @ 16 AWG            |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box                |
| XP Class and Group:             | None                    | Motor Lead Termination:        | Flying Leads          |
| XP Division:                    | Not Applicable          | Motor Type:                    | 0632M                 |
| Agency Approvals:               | UR                      | Mounting Arrangement:          | F1                    |
|                                 | CSA EEV                 | Power Factor:                  | 77                    |
|                                 | CSA                     | Product Family:                | General Purpose       |
| Auxillary Box:                  | No Auxillary Box        | Pulley End Bearing Type:       | Ball                  |
| Auxillary Box Lead Termination: | None                    | Pulley Face Code:              | C-Face                |
| Base Indicator:                 | No Mounting             | Pulley Shaft Indicator:        | Standard              |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Rodent Screen:                 | None                  |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End            |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Current @ Voltage:</b>             | 4.100 A @ 460.0 V         | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 8.200 A @ 230.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 8.600 A @ 208.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | B                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | NONE (OLD)          |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
|                                       |                           | <b>Winding Thermal 2:</b>          | None                |

|                                  |                            |  |             |                       |            |    |  |              |           |     |
|----------------------------------|----------------------------|--|-------------|-----------------------|------------|----|--|--------------|-----------|-----|
| <b>Nameplate NP3441LUA</b>       |                            |  |             |                       |            |    |  |              |           |     |
| <b>CAT.NO.</b>                   | VEM3661T                   |  |             |                       |            |    |  |              |           |     |
| <b>SPEC</b>                      | 06H016X181G1               |  |             |                       |            |    |  |              |           |     |
| <b>HP</b>                        | 3                          |  |             |                       |            |    |  |              |           |     |
| <b>VOLTS</b>                     | 230/460                    |  |             |                       |            |    |  |              |           |     |
| <b>AMPS</b>                      | 8.2/4.1                    |  |             |                       |            |    |  |              |           |     |
| <b>RPM</b>                       | 1755                       |  |             |                       |            |    |  |              |           |     |
| <b>FRAME</b>                     | 182TC                      |  |             |                       | <b>HZ</b>  | 60 |  |              | <b>PH</b> | 3   |
| <b>SF</b>                        | 1.15                       |  | <b>CODE</b> | J                     | <b>DES</b> | B  |  | <b>CLASS</b> | F         |     |
| <b>NEMA NOM. EFF</b>             | 89.5                       |  | <b>PF</b>   | 77                    |            |    |  |              |           |     |
| <b>RATING</b>                    | 40C AMB-CONT               |  |             |                       |            |    |  |              |           |     |
| <b>CC</b>                        | 010A                       |  |             | <b>USABLE AT 208V</b> |            |    |  |              |           | 8.6 |
| <b>ENCL</b>                      | TEFC                       |  | <b>SER</b>  |                       |            |    |  |              |           |     |
| <b>DE</b>                        | 6206                       |  |             | <b>ODE</b>            | 6205       |    |  |              |           |     |
| <b>VPWM INVERTER READY</b>       |                            |  |             |                       |            |    |  |              |           |     |
| <b>CT6-60H(10:1)VT3-60H(20:1</b> |                            |  |             |                       |            |    |  |              |           |     |
|                                  | 50Hz 3HP 190/380V 9.6/4.8A |  |             |                       |            |    |  |              | SF1.0     |     |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA231973      | SA 06H016X181G1                          | 1.000 EA |
| RA218983      | RA 06H016X181G1                          | 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 |
| 51XW2520A12   | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| WD1000B17     | T&B CX35TN TERMINAL                      | 1.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 36FE1101A21   | FREP ASSEMBLY FOR ROUTING PURPOSES       | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW4500A17     | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HW5100A05     | WVY WSHR F/205 & 304 BRGS                | 1.000 EA |
| 36PE1300A13   | PU ENDPLATE, FOR ROUTING PURPOSES        | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW4500A17     | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| 10XN2520A26   | 1/4-20X 1 5/8 HEX HD                     | 4.000 EA |
| HW1001A25     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HA3101A34     | THRUBOLT- 1/4-20 X 10.375                | 4.000 EA |
| 36FH4009A31   | IEC FH W/GREASER & SPL NOTCH, 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 |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| 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        |
| LB1115N                       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA        |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA        |
| MJ1000A02                     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB        |
| 51XB1214A16                   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA        |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.028 GA        |
| LC0005E01                     | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA        |
| NP3441LUA                     | ALUM SUPER-E VPWM INV READY UL CSA-EEV C | 1.000 EA        |
| 36PA1001                      | PKG GRP, PRINT PK1017A06                 | 1.000 EA        |
| PK3082                        | STYROFOAM CRADLE                         | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 5/18  | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 35861 - Typical performance - not guaranteed values

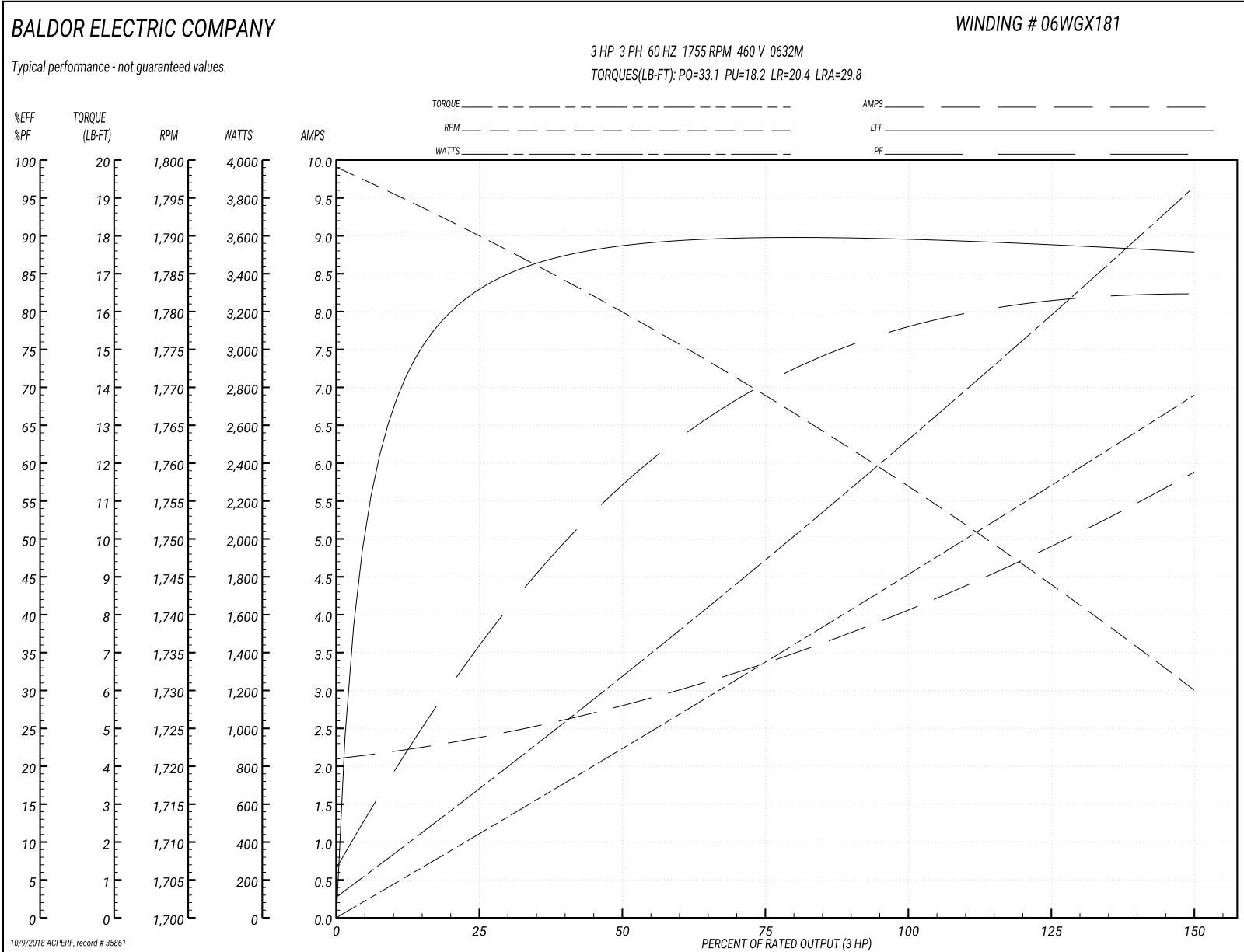
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 06WGX181-R006 | <b>Type:</b> 0632M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP)     | 3            |              |    | Full Load Torque                         | 9.06 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 8.2/4.1      |              |    | Breakdown Torque                         | 33.1 LB-FT               |
| R.P.M.                | 1755         |              |    | Pull-up Torque                           | 18.2 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 20.4 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | J  | Starting Current                         | 29.8 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 2.14 A                   |
| NEMA Nom. Eff.        | 89.5         | Power Factor | 77 | Line-line Res. @ 25°C                    | 3.94 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 35°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 42°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 41                       |
|                       |              |              |    | Rotor inertia                            | 0.298 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 3 HP

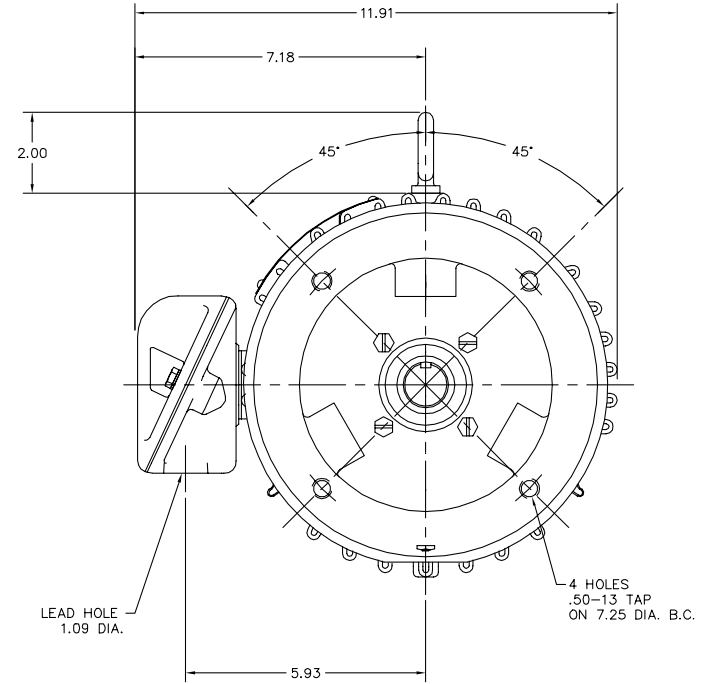
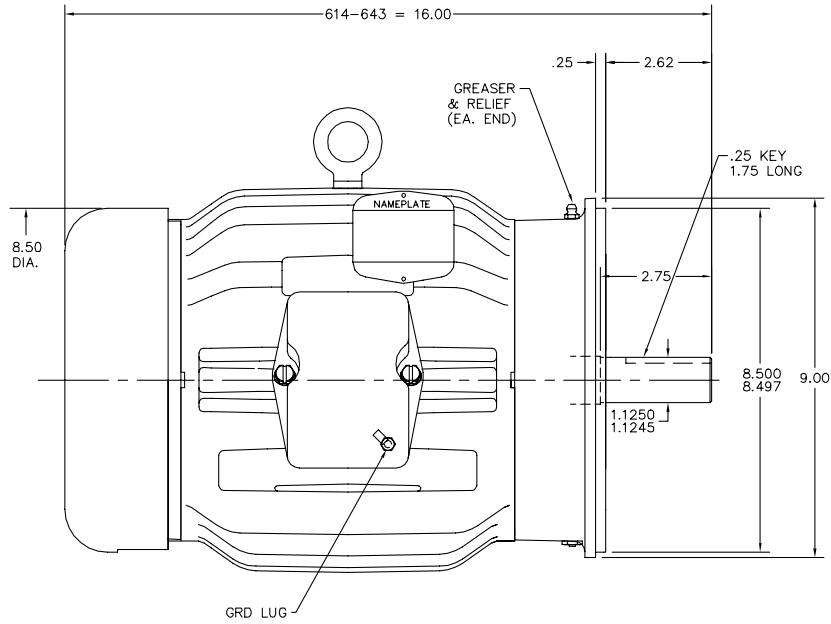
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 38   | 58   | 70   | 77   | 81   | 83   | 79   |
| Efficiency      | 83.2 | 88.3 | 89.8 | 89.7 | 89.1 | 87.7 | 89.3 |
| Speed           | 1790 | 1779 | 1769 | 1757 | 1744 | 1730 | 1749 |
| Line amperes    | 2.34 | 2.79 | 3.39 | 4.1  | 4.91 | 5.86 | 4.59 |

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values





06LYH016



910HA790

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|  |                              |                   |
|--|------------------------------|-------------------|
| REV. DESC: MOVE GRD LUG IN KOBX TO CORRECTION LOCATION | VERSION: 02                  | TDR: 000000980674 |
| REV. LTR: G  | REvised: 04:57:40 05/18/2016 | BY: ENALEMO       |
| FILE: \AAA\00014\126                                   |                              |                   |
| MTL: -   |                              |                   |

**BALDOR**  
VERT 182-4TC TEFC M, SUPER-E  
SH 1 of 1

CD0005

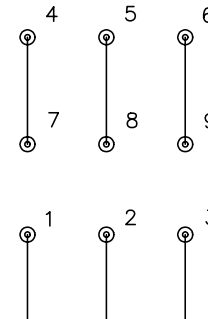


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005