

BALDOR® • RELIANCE 

Product Information Packet

VEM3613T-5

5HP,3450RPM,3PH,60HZ,184TC,3630M,TEFC,F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | K | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 36WGS505 | CD Diagram: | CD0006 | Mfg Plant: | |
| Mech. Spec: | 36A003 | Layout: | 36LYA003 | Poles: | 02 | Created Date: | 04-30-2010 |
| Base: | N | Eff. Date: | 11-16-2016 | Leads: | 3#16 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|--------------------|
| Catalog Number: | VEM3613T-5 | Inverter Code: | Inverter Ready |
| Enclosure: | TEFC | KVA Code: | L |
| Frame: | 184TC | Lifting Lugs: | No Lifting Lugs |
| Frame Material: | Steel | Locked Bearing Indicator: | Locked Bearing |
| Output @ Frequency: | 5.000 HP @ 60 HZ | Motor Lead Quantity/Wire Size: | 3 @ 16 AWG |
| Synchronous Speed @ Frequency: | 3600 RPM @ 60 HZ | Motor Lead Exit: | Ko Box |
| Voltage @ Frequency: | 575.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| XP Class and Group: | None | Motor Type: | 3630M |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | CSA | Power Factor: | 91 |
| | CSA EEV | Product Family: | General Purpose |
| | UR | Pulley End Bearing Type: | Ball |
| 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: | 4.700 A @ 575.0 V | Shaft Rotation: | Reversible |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Design Code: | A | Shaft Slinger Indicator: | No Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | Single Speed |
| Duty Rating: | CONT | Motor Standards: | NEMA |
| Electrically Isolated Bearing: | Not Electrically Isolated | Starting Method: | Direct on line |
| Feedback Device: | NO FEEDBACK | Thermal Device - Bearing: | None |
| Front Face Code: | Standard | Thermal Device - Winding: | None |
| Front Shaft Indicator: | None | Vibration Sensor Indicator: | No Vibration Sensor |
| Heater Indicator: | No Heater | Winding Thermal 1: | None |
| Insulation Class: | F | Winding Thermal 2: | None |

| | | | | | | | | | | |
|----------------------------|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| Nameplate NP3441L | | | | | | | | | | |
| CAT.NO. | VEM3613T-5 | | | | | | | | | |
| SPEC. | 36A003S505G1 | | | | | | | | | |
| HP | 5 | | | | | | | | | |
| VOLTS | 575 | | | | | | | | | |
| AMP | 4.7 | | | | | | | | | |
| RPM | 3450 | | | | | | | | | |
| FRAME | 184TC | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.15 | | CODE | L | DES | A | | CL | F | |
| NEMA-NOM-EFF | 88.5 | | PF | 91 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | 010A | | | | USABLE AT 208V | | | | | |
| DE | 6206 | | | | ODE | 6205 | | | | |
| ENCL | TEFC | | SN | | | | | | | |
| VPWM INVERTER READY | | | | | | | | | | |
| CT6-60H(10:1)VT3-60H(20:1) | | | | | | | | | | |
| | | | | | | | | | | |

| Parts List | | |
|--------------|--|----------|
| Part Number | Description | Quantity |
| SA194227 | SA 36A003S505G1 | 1.000 EA |
| RA181815 | RA 36A003S505G1 | 1.000 EA |
| 34FN3002B02 | EXTERNAL FAN, PLASTIC, .905/.907 HUB W/ | 1.000 EA |
| 36CB3004 | 36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0 | 1.000 EA |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 EA |
| 51XB1016A08 | 10-16X 1/2HXWSSLD SERTYB | 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 |
| HW5100A05 | WVY WSHR F/205 & 304 BRGS | 1.000 EA |
| 36PE3301A23 | PUEP ASSEMBLY FOR ROUTING PURPOSES | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| 10XN2520A28 | 1/4-20X 1 3/4 HEX HD | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| 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 |

| Parts List (continued) | | |
|-------------------------------|---|-----------------|
| Part Number | Description | Quantity |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.022 GA |
| HA3101A25 | THRUBOLT 1/4-20 X 11.000 OHIO ROD | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0006 | CONNECTION LABEL | 1.000 EA |
| NP3441L | ALUM SUPER-E VPWM INVERTER READY UL | 1.000 EA |
| 36PA1000 | PKG GRP, PRINT PK1016A06 | 1.000 EA |
| PK3082 | STYROFOAM CRADLE | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

AC Induction Motor Performance Data

Record # 31109 - Typical performance - not guaranteed values

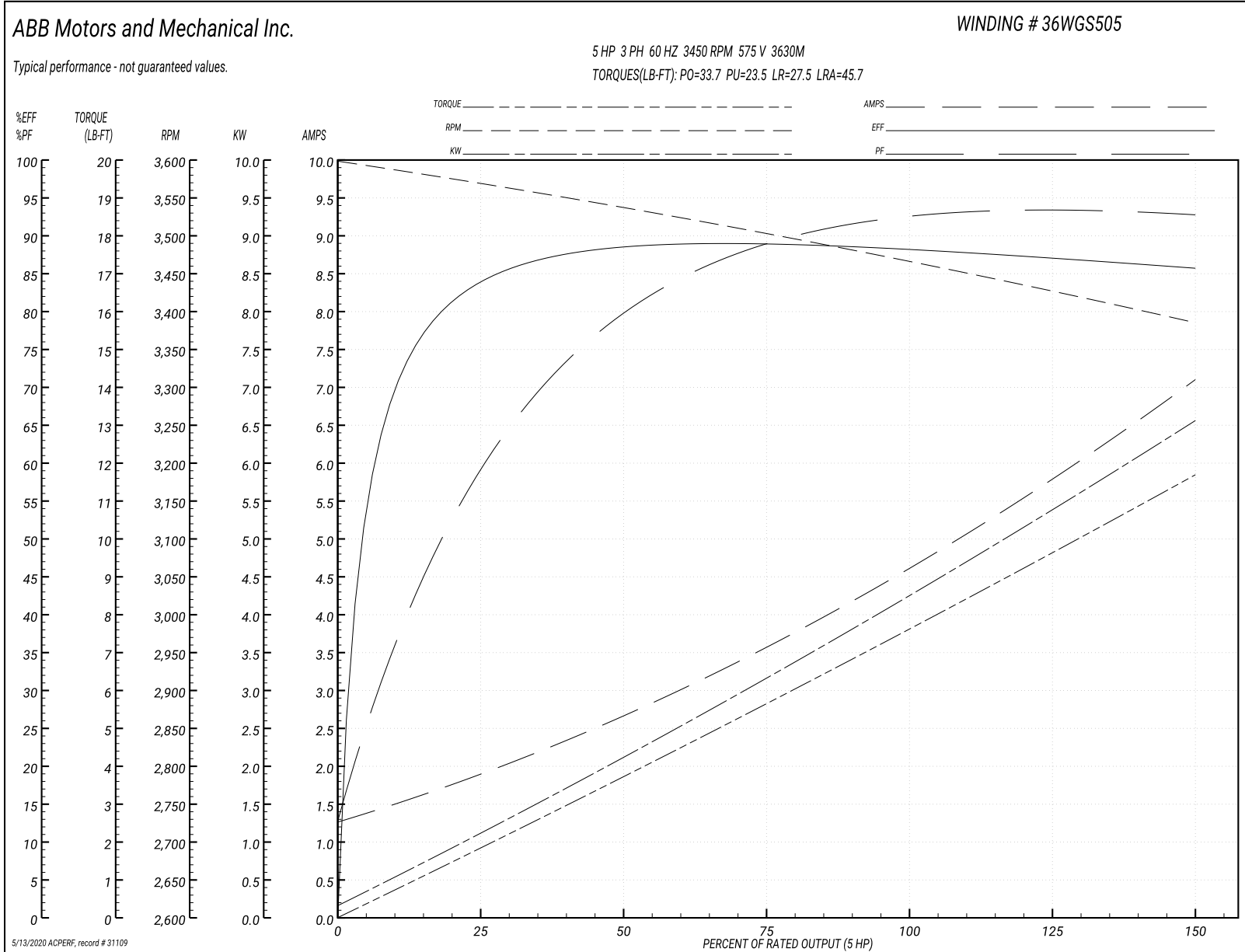
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 36WGS505-R001 | Type: 3630M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

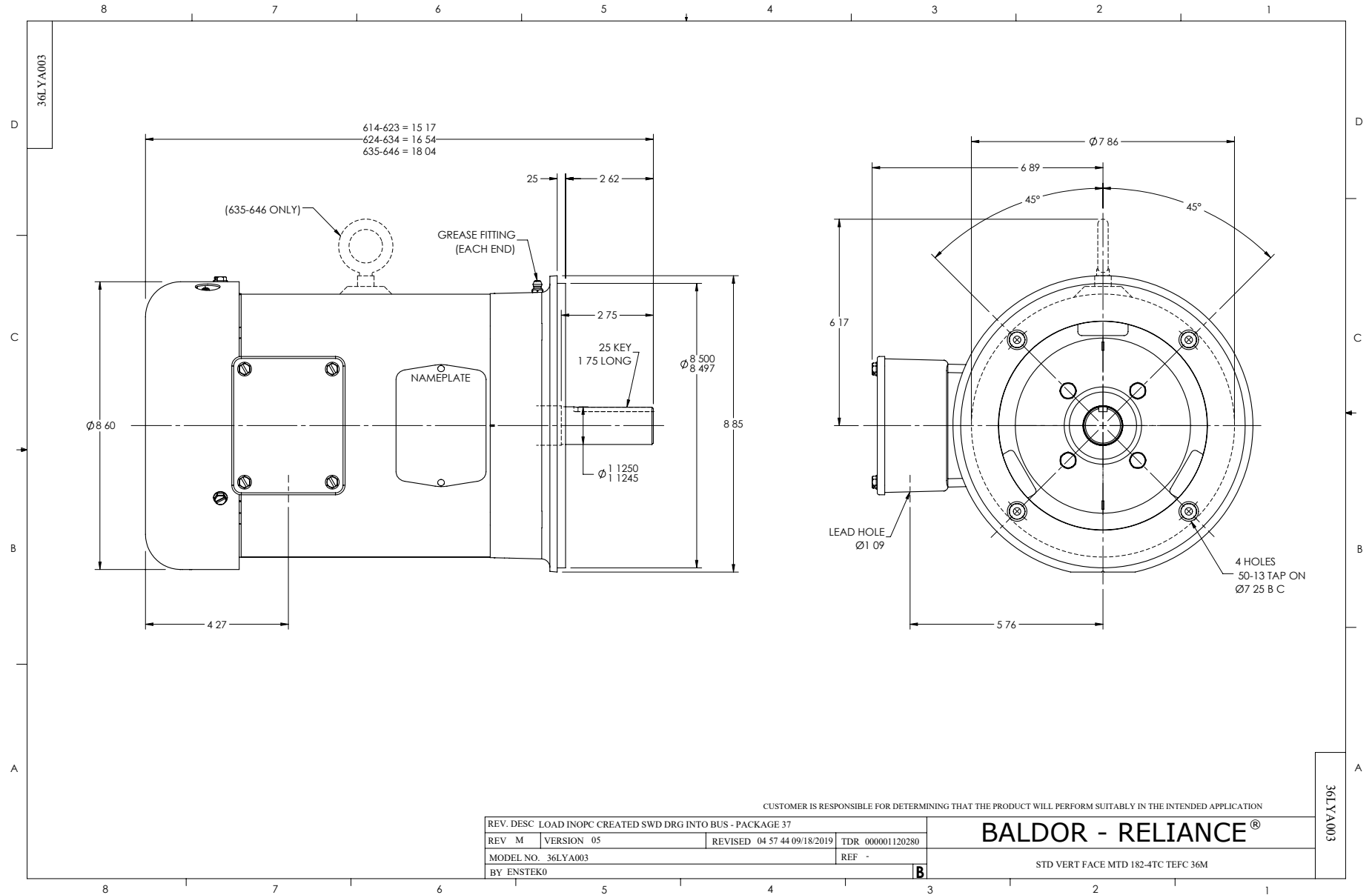
| Nameplate Data | | | | 575 V, 60 Hz: Single Voltage Motor | |
|-----------------------|--------------|--------------|----|---------------------------------------|--------------------------|
| Rated Output (HP) | 5 | | | Full Load Torque | 7.64 LB-FT |
| Volts | 575 | | | Start Configuration | direct on line |
| Full Load Amps | 4.7 | | | Breakdown Torque | 33.7 LB-FT |
| R.P.M. | 3450 | | | Pull-up Torque | 23.5 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 27.5 LB-FT |
| NEMA Design Code | A | KVA Code | L | Starting Current | 45.7 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 1.34 A |
| NEMA Nom. Eff. | 88.5 | Power Factor | 91 | Line-line Res. @ 25°C | 3.57 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 72°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 88°C |
| | | | | Locked-rotor Power Factor | 45 |
| | | | | Rotor inertia | 0.134 LB-FT ² |

Load Characteristics 575 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 63 | 81 | 88 | 91 | 93 | 93 | 92 |
| Efficiency | 83.2 | 88.4 | 89.1 | 88.5 | 87 | 85.7 | 87.5 |
| Speed | 3569 | 3537 | 3504 | 3466 | 3428 | 3385 | 3443 |
| Line amperes | 1.79 | 2.61 | 3.58 | 4.68 | 5.81 | 7.05 | 5.36 |

Performance Graph at 575V, 60Hz, 5.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\141 | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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