



## Product Information Packet

# VEM3554T

1.5HP,1760RPM,3PH,60HZ,145TC,3526M,TEFC

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | M      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 35WGM493   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 35A003 | Layout:     | 35LYA003   | Poles:      | 04     | Created Date: | 06-13-2011 |
| Base:       | N      | Eff. Date:  | 03-13-2018 | Leads:      | 9#18   |               |            |

| Specs                           |                         |                                |                 |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number:                 | VEM3554T                | Heater Indicator:              | No Heater       |
| Enclosure:                      | TEFC                    | Insulation Class:              | F               |
| Frame:                          | 145TC                   | Inverter Code:                 | Inverter Ready  |
| Frame Material:                 | Steel                   | KVA Code:                      | L               |
| Output @ Frequency:             | 1.500 HP @ 60 HZ        | Lifting Lugs:                  | No 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 @ 18 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:                    | 3526M           |
| Agency Approvals:               | UR                      | Mounting Arrangement:          | F1              |
|                                 | CSA EEV                 | Power Factor:                  | 73              |
|                                 | 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>             | 2.200 A @ 460.0 V         | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 4.400 A @ 230.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 4.500 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                |

## Nameplate NP3441LUA

|                           |                            |  |  |                |     |      |  |     |       |    |       |  |
|---------------------------|----------------------------|--|--|----------------|-----|------|--|-----|-------|----|-------|--|
| CAT.NO.                   | VEM3554T                   |  |  |                |     |      |  |     |       |    |       |  |
| SPEC                      | 35A003M493G1               |  |  |                |     |      |  |     |       |    |       |  |
| HP                        | 1.5                        |  |  |                |     |      |  |     |       |    |       |  |
| VOLTS                     | 230/460                    |  |  |                |     |      |  |     |       |    |       |  |
| AMPS                      | 4.4/2.2                    |  |  |                |     |      |  |     |       |    |       |  |
| RPM                       | 1760                       |  |  |                |     |      |  |     |       |    |       |  |
| FRAME                     | 145TC                      |  |  |                | HZ  | 60   |  |     |       | PH | 3     |  |
| SF                        | 1.15                       |  |  | CODE           | L   | DES  |  | B   | CLASS | F  |       |  |
| NEMA NOM. EFF             | 86.5                       |  |  | PF             | 73  |      |  |     |       |    |       |  |
| RATING                    | 40C AMB-CONT               |  |  |                |     |      |  |     |       |    |       |  |
| CC                        | 010A                       |  |  | USABLE AT 208V |     |      |  | 4.5 |       |    |       |  |
| ENCL                      | TEFC                       |  |  | SER            |     |      |  |     |       |    |       |  |
| DE                        | 6205                       |  |  |                | ODE | 6203 |  |     |       |    |       |  |
| VPWM INVERTER READY       |                            |  |  |                |     |      |  |     |       |    |       |  |
| CT6-60H(10:1)VT3-60H(20:1 |                            |  |  |                |     |      |  |     |       |    | SF1.0 |  |
|                           | 50Hz 1.5HP 190/380V 5/2.5A |  |  |                |     |      |  |     |       |    |       |  |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA225470      | SA 35A003M493G1                          | 1.000 EA |
| RA212566      | RA 35A003M493G1                          | 1.000 EA |
| 34FN3002B01   | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3007      | 35 CB CASTING W/.88 DIA. LEAD HOLE       | 1.000 EA |
| 36GS1000SP    | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 EA |
| 51XB1016A07   | 10-16 X 7/16 HXWSSLD SERTYB              | 2.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 35EP3122A00   | MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3307D00   | MASTER DE,205 BRG,.998SH,#26 DRN,GRSR    | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| 35FH4005A84SP | IEC FH W/GRSR, NO DIMPLES PRIMED         | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 35CB4521GX    | CONDUIT BOX LID KIT **ORDER INDIV PARTS  | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A01     | KEY RETAINER 7/8" DIA SHAFT              | 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,      | 0.017 GA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HA3100A15              | THRUBOLT 10-32 X 8.375                   | 4.000 EA |
| LC0005E01              | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3441LUA              | ALUM SUPER-E VPWM INV READY UL CSA-EEV C | 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) 5/18  | 1.000 EA |
| PE-0000001             | ZRTG PE ASSEMBLY                         | 1.000 EA |
| FE-0000001             | ZRTG FE ASSEMBLY                         | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 64659 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM493-R078 | <b>Type:</b> 3526M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 1.5          |              |    | Full Load Torque                         | 4.47 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 4.4/2.2      |              |    | Breakdown Torque                         | 19.2 LB-FT               |
| R.P.M.                | 1760         |              |    | Pull-up Torque                           | 9.4 LB-FT                |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 13.4 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | L  | Starting Current                         | 18.3 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.37 A                   |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 73 | Line-line Res. @ 25°C                    | 10.1 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 44°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 52°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 51.5                     |
|                       |              |              |    | Rotor inertia                            | 0.154 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 1.5 HP

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 31   | 51   | 65   | 73   | 79   | 83   | 77   |
| Efficiency      | 76.2 | 84.4 | 86.9 | 87.1 | 86.4 | 85.3 | 86.7 |
| Speed           | 1791 | 1781 | 1771 | 1760 | 1748 | 1735 | 1753 |
| Line amperes    | 1.44 | 1.61 | 1.86 | 2.19 | 2.58 | 2.98 | 2.42 |

## Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values

**BALDOR ELECTRIC COMPANY**

WINDING # 35WGM493

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1760 RPM 460 V 3526M

TORQUES(LB-FT): PO=19.2 PU=9.4 LR=13.4 LRA=18.3





