



---

# Customer information packet

## VESWDM3554T

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3530M, TENV

Class - None

Division - Not Applicable

## Specifications

|                                |                                               |
|--------------------------------|-----------------------------------------------|
| Enclosure                      | TENV                                          |
| Frame                          | 145TC                                         |
| Frame Material                 | Stainless Steel                               |
| Frequency                      | 60.00 Hz                                      |
| Haz Area Class and Group       | None                                          |
| Haz Area Division              | Not Applicable                                |
| Motor Letter Type              | Three Phase                                   |
| Output @ Frequency             | 1.500 HP @ 60 HZ                              |
| Phase                          | 3                                             |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                              |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ            |
| Agency Approvals               | NEMA PREMIUM<br>NEMA_PREMIUM<br>UR<br>CSA EEV |
| Ambient Temperature            | 40 °C                                         |
| Auxiliary Box                  | NO AUXILLARY BOX                              |
| Auxiliary Box Lead Termination | None                                          |
| Base Indicator                 | No Mounting                                   |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                       |
| Blower                         | None                                          |
| Current @ Voltage              | 2.300 A @ 460.0 V<br>4.600 A @ 230.0 V        |
| Design Code                    | B                                             |
| Drip Cover                     | No Drip Cover                                 |
| Duty Rating                    | CONT                                          |
| Efficiency @ 100% Load         | 86.5 %                                        |
| Electrically Isolated Bearing  | Not Electrically Isolated                     |
| Feedback Device                | NO FEEDBACK                                   |
| Front Shaft Indicator          | None                                          |
| Heater Indicator               | No Heater                                     |

## Part detail

|              |            |
|--------------|------------|
| Revision     | F          |
| Type         | AC         |
| Mech. spec.  | 35SS620    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG178   |
| Layout       | 35LYSS620  |
| Eff. date    | 02-14-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 01-10-2022 |

|                               |                      |
|-------------------------------|----------------------|
| High Voltage Full Load Amps   | 2.3 a                |
| Insulation Class              | H                    |
| Inverter Code                 | Not Inverter         |
| KVA Code                      | M                    |
| Lifting Lugs                  | No Lifting Lugs      |
| Locked Bearing Indicator      | Locked Bearing       |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG           |
| Motor Lead Termination        | Flying Leads         |
| Motor Standards               | NEMA                 |
| Motor Type                    | 3530M                |
| Mounting Arrangement          | F1                   |
| Number of Poles               | 4                    |
| Overall Length                | 12.12 IN             |
| Power Factor                  | 72                   |
| Product Family                | Wash Down Paint Free |
| Pulley End Bearing Type       | Sealed Bearing       |
| Pulley Face Code              | C-Face               |
| Pulley Shaft Indicator        | Standard             |
| Rodent Screen                 | None                 |
| Service Factor                | 1.00                 |
| Shaft Diameter                | 0.875 IN             |
| Shaft Ground Indicator        | No Shaft Grounding   |
| Shaft Rotation                | Reversible           |
| Shaft Slinger Indicator       | No Slinger           |
| Speed                         | 1770 rpm             |
| Speed Code                    | Single Speed         |
| Starting Method               | Direct on line       |
| Thermal Device - Bearing      | None                 |
| Thermal Device - Winding      | None                 |
| Vibration Sensor Indicator    | No Vibration Sensor  |
| Winding Thermal 1             | None                 |
| Winding Thermal 2             | None                 |

## Nameplate

| NP1669L      |               |      |     |      |   |       |    |   |  |
|--------------|---------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | VESWDM3554T   |      |     |      |   |       |    |   |  |
| SPEC.        | 35SS620G178G1 |      |     |      |   |       |    |   |  |
| HP           | 1.5           |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460       |      |     |      |   |       |    |   |  |
| AMP          | 4.6/2.3       |      |     |      |   |       |    |   |  |
| RPM          | 1770          |      |     |      |   |       |    |   |  |
| FRAME        | 145TC         |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15          | CODE | M   | DES  | B | CLASS | H  |   |  |
| NEMA-NOM-EFF | 86.5          | PF   | 72  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT  |      |     |      |   |       |    |   |  |
| CC           | 010A          |      |     |      |   |       |    |   |  |
| DE           | 6205          |      | ODE | 6203 |   |       |    |   |  |
| ENCL         | TENV          | SN   |     |      |   |       |    |   |  |
| BLANK        |               |      |     |      |   |       |    |   |  |

**AC Induction Motor Performance Data**

Record # 87056

Typical performance - not guaranteed values

| Winding: 35WGG178-R003 |    |         | Type: 3530M                              |                     | Enclosure: TENV           |            |              |
|------------------------|----|---------|------------------------------------------|---------------------|---------------------------|------------|--------------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |              |
| Rated Output (HP)      |    | 1.5     | Full Load Torque                         |                     | 4.48 LB-FT                |            |              |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line            |            |              |
| Full Load Amps         |    | 4.6/2.3 | Breakdown Torque                         |                     | 21.02 LB-FT               |            |              |
| R.P.M.                 |    | 1770    | Pull-up Torque                           |                     | 12.29 LB-FT               |            |              |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                           | 14.9 LB-FT |              |
| NEMA Design Code       |    | B       | KVA Code                                 | M                   | Starting Current          |            | 21.32 A      |
| Service Factor (S.F.)  |    | 1       | No-load Current                          |                     | 1.29 A                    |            |              |
| NEMA Nom. Eff.         |    | 86.5    | Power Factor                             | 72                  | Line-line Res. @ 25°C     |            | 10.1 Ω       |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            | 80°C         |
|                        |    |         |                                          |                     | Locked-rotor Power Factor |            | 55.5         |
|                        |    |         |                                          |                     | Rotor inertia             |            | 0.217 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 33   | 54   | 68   | 76   | 81   | 84   |
| Efficiency      | 79.1 | 86.3 | 88.1 | 88.3 | 87.6 | 86.6 |
| Speed           | 1790 | 1783 | 1776 | 1769 | 1761 | 1752 |
| Line amperes    | 1.35 | 1.52 | 1.78 | 2.11 | 2.47 | 2.89 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG178

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3530M

TORQUES (LB-FT): PO=21.02 PU=12.29 LR=14.9 LRA=21.32





