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# Customer information packet

## VL3510T

1HP, 1750RPM, 1PH, 60HZ, 143TC, 3528L, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Enclosure                      | TEFC                                    |
| Frame                          | 143TC                                   |
| Frame Material                 | Steel                                   |
| Frequency                      | 60.00 Hz                                |
| Haz Area Class and Group       | None                                    |
| Haz Area Division              | Not Applicable                          |
| Motor Letter Type              | Cap Start, Induction Run                |
| Output @ Frequency             | 1.000 HP @ 60 HZ                        |
| Phase                          | 1                                       |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                        |
| Voltage @ Frequency            | 115.0 V @ 60 HZ<br>230.0 V @ 60 HZ      |
| Agency Approvals               | CSA<br>UR                               |
| 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              | 6.300 A @ 230.0 V<br>12.500 A @ 115.0 V |
| Design Code                    | L                                       |
| Drip Cover                     | No Drip Cover                           |
| Duty Rating                    | CONT                                    |
| Efficiency @ 100% Load         | 74.0 %                                  |
| Electrically Isolated Bearing  | Not Electrically Isolated               |
| Feedback Device                | NO FEEDBACK                             |
| Front Shaft Indicator          | None                                    |
| Heater Indicator               | No Heater                               |
| High Voltage Full Load Amps    | 6.3 a                                   |
| Insulation Class               | F                                       |

## Part detail

|              |            |
|--------------|------------|
| Revision     | C          |
| Type         | AC         |
| Mech. spec.  | 35CC003    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG376   |
| Layout       | 35LYCC003  |
| Eff. date    | 06-28-2024 |
| CD Diagram   | CD0001     |
| Poles        | 04         |
| Leads        | 6#18 Y     |
| Proprietary  | False      |
| Created date | 02-23-2023 |

|                               |                     |
|-------------------------------|---------------------|
| Inverter Code                 | Not Inverter        |
| KVA Code                      | L                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Quantity/Wire Size | 6 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3528L               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 13.29 IN            |
| Power Factor                  | 69                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| Service Factor                | 1.15                |
| Shaft Diameter                | 0.875 IN            |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1750 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

| NP1256L      |               |      |     |      |   |       |    |   |  |
|--------------|---------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | VL3510T       |      |     |      |   |       |    |   |  |
| SPEC.        | 35CC003G376   |      |     |      |   |       |    |   |  |
| HP           | 1             |      |     |      |   |       |    |   |  |
| VOLTS        | 115/230       |      |     |      |   |       |    |   |  |
| AMP          | 12.5/6.3      |      |     |      |   |       |    |   |  |
| RPM          | 1750          |      |     |      |   |       |    |   |  |
| FRAME        | 143TC         |      | HZ  | 60   |   |       | PH | 1 |  |
| SER.F.       | 1.15          | CODE | L   | DES  | L | CLASS | F  |   |  |
| NEMA-NOM-EFF | 74            | PF   | 69  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT  |      |     |      |   |       |    |   |  |
| CC           |               |      |     |      |   |       |    |   |  |
| DE           | 6205          |      | ODE | 6203 |   |       |    |   |  |
| ENCL         | TEFC          | SN   |     |      |   |       |    |   |  |
|              | SFA 13.9/6.95 |      |     |      |   |       |    |   |  |

## AC Induction Motor Performance Data

Record # 94946

Typical performance - not guaranteed values

| Winding: 35WGG376-R001 |  |              |  | Type: 3528L                             |  | Enclosure: TEFC     |  |                       |                             |
|------------------------|--|--------------|--|-----------------------------------------|--|---------------------|--|-----------------------|-----------------------------|
| Nameplate Data         |  |              |  | 115 V, 60 Hz:<br>Low Voltage Connection |  |                     |  |                       |                             |
| Rated Output (HP)      |  | 1            |  | Full Load Torque                        |  | 3.01 LB-FT          |  |                       |                             |
| Volts                  |  | 115/230      |  | Start Configuration                     |  | direct on line      |  |                       |                             |
| Full Load Amps         |  | 12.5/6.3     |  | Breakdown Torque                        |  | 9.7 LB-FT           |  |                       |                             |
| R.P.M.                 |  | 1750         |  | Pull-up Torque                          |  | 7.8 LB-FT           |  |                       |                             |
| Hz                     |  | 60 Phase     |  | 1                                       |  | Locked-rotor Torque |  | 13.9 LB-FT            |                             |
| NEMA Design Code       |  | L            |  | KVA Code                                |  | L                   |  | Starting Current      | 85.3 A                      |
| Service Factor (S.F.)  |  | 1.15         |  | No-load Current                         |  | 9.53 A              |  |                       |                             |
| NEMA Nom. Eff.         |  | 74           |  | Power Factor                            |  | 69                  |  | Line-line Res. @ 25°C | 0.525 Ω A Ph<br>1.17 Ω B Ph |
| Rating - Duty          |  | 40C AMB-CONT |  | Temp. Rise @ Rated Load                 |  | 62°C                |  |                       |                             |
| S.F. Amps              |  | 13.9/6.95    |  | Temp. Rise @ S.F. Load                  |  | 70°C                |  |                       |                             |
|                        |  |              |  | Locked-rotor Power Factor               |  | 94.8                |  |                       |                             |
|                        |  |              |  | Rotor inertia                           |  | 0.203 lb-ft²        |  |                       |                             |

## Load Characteristics 115 V, 60 Hz, 1 HP

| % of Rated Load | 25   | 50   | 75    | 100   | 125   | 150   | S.F. |
|-----------------|------|------|-------|-------|-------|-------|------|
| Power Factor    | 33   | 48   | 60    | 69    | 76    | 80    | 80   |
| Efficiency      | 53.5 | 67.3 | 72.9  | 74.9  | 74.6  | 72.8  | 67.2 |
| Speed           | 1786 | 1775 | 1763  | 1750  | 1735  | 1714  | 1704 |
| Line amperes    | 9.3  | 9.98 | 11.06 | 12.51 | 14.28 | 16.82 | 13.9 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG376

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 1750 RPM 115 V 3528L

TORQUES (LB-FT): PO=9.7 PU=7.8 LR=13.9 LRA=85.3





