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# Customer information packet

## CESSWDM3545-H

1HP, 3450RPM, 3PH, 60HZ, 56HC, TENV, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Enclosure                      | TENV                                                        |
| Frame                          | 56HC                                                        |
| 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             | 1.000 HP @ 60 HZ                                            |
| Phase                          | 3                                                           |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                            |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| Agency Approvals               | UR<br>CSA                                                   |
| Ambient Temperature            | 40 °C                                                       |
| Auxiliary Box                  | NO AUXILLARY BOX                                            |
| Auxiliary Box Lead Termination | None                                                        |
| Base Indicator                 | Rigid                                                       |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None                                                        |
| Current @ Voltage              | 1.300 A @ 460.0 V<br>2.600 A @ 230.0 V<br>2.800 A @ 208.0 V |
| Design Code                    | B                                                           |
| Drip Cover                     | No Drip Cover                                               |
| Duty Rating                    | CONT                                                        |
| Efficiency @ 100% Load         | 84.0 %                                                      |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK                                                 |
| Heater Indicator               | No Heater                                                   |
| High Voltage Full Load Amps    | 1.3 a                                                       |
| Insulation Class               | F                                                           |

## Part detail

|              |              |
|--------------|--------------|
| Revision     | B            |
| Type         | AC           |
| Mech. spec.  |              |
| Base         |              |
| Status       | PRD/A        |
| Elec. spec.  | 35WGR090     |
| Layout       | 35LY-000-350 |
| Eff. date    | 06-14-2024   |
| CD Diagram   | CD0005       |
| Poles        | 02           |
| Leads        | 9#18         |
| Proprietary  | False        |
| Created date | 05-26-2020   |

|                            |                               |
|----------------------------|-------------------------------|
| Inverter Code              | Not Inverter                  |
| KVA Code                   | L                             |
| Lifting Lugs               | No Lifting Lugs               |
| Locked Bearing Indicator   | Locked Bearing                |
| Motor Finish               | UNPAINTED                     |
| Motor Lead Termination     | Flying Leads                  |
| Motor Standards            | NEMA                          |
| Motor Type                 | 3520M                         |
| Mounting Arrangement       | F1                            |
| Number of Poles            | 2                             |
| Overall Length             | 11.97 IN                      |
| Power Factor               | 88                            |
| Product Family             | Wash Down All Stainless Steel |
| Pulley Face Code           | C-Face                        |
| Rodent Screen              | None                          |
| Service Factor             | 1.25                          |
| Shaft Diameter             | 0.625 IN                      |
| Shaft Ground Indicator     | No Shaft Grounding            |
| Shaft Rotation             | Reversible                    |
| Speed                      | 3450 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

## NP1953A01

|              |                |    |      |  |     |     |      |   |       |  |   |
|--------------|----------------|----|------|--|-----|-----|------|---|-------|--|---|
| CAT.NO.      | CESSWDM3545-H  |    |      |  |     |     |      |   |       |  |   |
| SPEC.        | 35-0000-0796   |    |      |  |     |     |      |   |       |  |   |
| HP           | 1              |    |      |  |     |     |      |   |       |  |   |
| VOLTS        | 230/460        |    |      |  |     |     |      |   |       |  |   |
| AMP          | 2.6/1.3        |    |      |  |     |     |      |   |       |  |   |
| RPM          | 3450 SFA 3/1.5 |    |      |  |     |     |      |   |       |  |   |
| FRAME        | 56HC           |    |      |  | HZ  |     | 60   |   | PH    |  | 3 |
| SER.F.       | 1.25           |    | CODE |  | L   | DES |      | B | CLASS |  | F |
| NEMA-NOM-EFF | 84             |    |      |  | PF  |     | 88   |   |       |  |   |
| RATING       | 40C AMB-CONT   |    |      |  |     |     |      |   |       |  |   |
| CC           | 010A           |    |      |  |     |     |      |   |       |  |   |
| DE           | 6205           |    |      |  | ODE |     | 6203 |   |       |  |   |
| ENCL         | TENV           | SN |      |  |     |     |      |   |       |  |   |
|              | 4:1CT 20:1VT   |    |      |  |     |     |      |   |       |  |   |

**AC Induction Motor Performance Data**

Record # 51814

Typical performance - not guaranteed values

| Winding: 35WGL314-R001 |      |              | Type: 3520M                              |                         | Enclosure: TENV  |            |        |
|------------------------|------|--------------|------------------------------------------|-------------------------|------------------|------------|--------|
| Nameplate Data         |      |              | 460 V, 60 Hz:<br>High Voltage Connection |                         |                  |            |        |
| Rated Output (HP)      |      | 1            | Full Load Torque                         |                         | 1.52 LB-FT       |            |        |
| Volts                  |      | 230/460      | Start Configuration                      |                         | direct on line   |            |        |
| Full Load Amps         |      | 2.8/1.4      | Breakdown Torque                         |                         | 8.51 LB-FT       |            |        |
| R.P.M.                 |      | 3450         | Pull-up Torque                           |                         | 6.16 LB-FT       |            |        |
| Hz                     | 60   | Phase        | 3                                        | Locked-rotor Torque     |                  | 8.01 LB-FT |        |
| NEMA Design Code       |      | B            | KVA Code                                 | N                       | Starting Current |            | 15.1 A |
| Service Factor (S.F.)  |      | 1.25         | No-load Current                          |                         | 0.722 A          |            |        |
| NEMA Nom. Eff.         | 82.5 | Power Factor | 82                                       | Line-line Res. @ 25°C   |                  | 10.85 Ω    |        |
| Rating - Duty          |      | 40C          | AMB-CONT                                 | Temp. Rise @ Rated Load |                  | 91°C       |        |
| S.F. Amps              |      | 3.2/1.6      | Temp. Rise @ S.F. Load                   |                         | 108°C            |            |        |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150  | S.F.  |
|-----------------|--------|--------|--------|--------|--------|------|-------|
| Power Factor    | 44     | 64     | 76     | 82     | 86     | 88   | 86    |
| Efficiency      | 67.8   | 79     | 82.4   | 83.4   | 83.4   | 82.5 | 84.5  |
| Speed           | 3566.5 | 3536.9 | 3507.4 | 3477.1 | 3442.7 | 3405 | 3439  |
| Line amperes    | 0.791  | 0.953  | 1.15   | 1.38   | 1.63   | 1.93 | 1.585 |

ABB Motors and Mechanical Inc.

WINDING # 35WGL314

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3520M

TORQUES (LB-FT): PO=8.51 PU=6.16 LR=8.01 LRA=15.1





