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# Customer information packet

## CEM3211T-G

3HP, 1765RPM, 3PH, 60HZ, 182TC, OPSB, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                        |
|--------------------------------|----------------------------------------|
| Enclosure                      | OPSB                                   |
| Frame                          | 182TC                                  |
| Frame Material                 | Steel                                  |
| Frequency                      | 60.00 Hz                               |
| Haz Area Class and Group       | None                                   |
| Haz Area Division              | Not Applicable                         |
| Motor Letter Type              | Three Phase                            |
| Output @ Frequency             | 3.000 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               | CSA<br>CSA EEV<br>NEMA PREMIUM<br>UR   |
| Ambient Temperature            | 40 °C                                  |
| Auxillary Box                  | No Auxillary Box                       |
| Auxillary Box Lead Termination | None                                   |
| Base Indicator                 | Rigid                                  |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                |
| Blower                         | None                                   |
| Current @ Voltage              | 8.400 A @ 230.0 V<br>4.200 A @ 460.0 V |
| Design Code                    | B                                      |
| Drip Cover                     | No Drip Cover                          |
| Duty Rating                    | CONT                                   |
| Efficiency @ 100% Load         | 89.5 %                                 |
| Electrically Isolated Bearing  | Not Electrically Isolated              |
| Feedback Device                | NO FEEDBACK                            |
| Heater Indicator               | No Heater                              |
| High Voltage Full Load Amps    | 4.2 a                                  |

## Part detail

|              |              |
|--------------|--------------|
| Revision     | C            |
| Type         | AC           |
| Mech. spec.  |              |
| Base         |              |
| Status       | PRD/A        |
| Elec. spec.  | 36WGS658     |
| Layout       | 36LY-000-161 |
| Eff. date    | 06-11-2024   |
| CD Diagram   | CD0005       |
| Poles        | 04           |
| Leads        | 9#16         |
| Proprietary  | False        |
| Created date | 04-30-2020   |

|                                   |                     |
|-----------------------------------|---------------------|
| <b>Insulation Class</b>           | H                   |
| <b>Inverter Code</b>              | Inverter Ready      |
| <b>IP Rating</b>                  | NONE                |
| <b>KVA Code</b>                   | K                   |
| <b>Lifting Lugs</b>               | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>   | Locked Bearing      |
| <b>Motor Lead Termination</b>     | Flying Leads        |
| <b>Motor Standards</b>            | NEMA                |
| <b>Motor Type</b>                 | 3630M               |
| <b>Mounting Arrangement</b>       | F1                  |
| <b>Number of Poles</b>            | 4                   |
| <b>Overall Length</b>             | 15.00 IN            |
| <b>Power Factor</b>               | 74                  |
| <b>Product Family</b>             | General Purpose     |
| <b>Pulley Face Code</b>           | C-Face              |
| <b>Rodent Screen</b>              | None                |
| <b>Service Factor</b>             | 1.15                |
| <b>Shaft Diameter</b>             | 1.125 IN            |
| <b>Shaft Ground Indicator</b>     | Shaft Grounding     |
| <b>Shaft Rotation</b>             | Reversible          |
| <b>Speed</b>                      | 1765 rpm            |
| <b>Speed Code</b>                 | Single Speed        |
| <b>Starting Method</b>            | Direct on line      |
| <b>Thermal Device - Bearing</b>   | None                |
| <b>Thermal Device - Winding</b>   | None                |
| <b>Vibration Sensor Indicator</b> | No Vibration Sensor |
| <b>Winding Thermal 1</b>          | None                |
| <b>Winding Thermal 2</b>          | None                |

## Nameplate

| NP3553L                   |              |      |     |      |   |  |       |   |  |
|---------------------------|--------------|------|-----|------|---|--|-------|---|--|
| CAT.NO.                   | CEM3211T-G   |      |     |      |   |  |       |   |  |
| SPEC                      | 36-0000-0349 |      |     |      |   |  |       |   |  |
| HP                        | 3            |      |     |      |   |  |       |   |  |
| VOLTS                     | 230/460      |      |     |      |   |  |       |   |  |
| AMPS                      | 8.4/4.2      |      |     |      |   |  |       |   |  |
| RPM                       | 1765         |      |     |      |   |  |       |   |  |
| FRAME                     | 182TC        |      | HZ  | 60   |   |  | PH    | 3 |  |
| SF                        | 1.15         | CODE | K   | DES  | B |  | CLASS | H |  |
| NEMA NOM. EFF             | 89.5         | PF   | 74  |      |   |  |       |   |  |
| RATING                    | 40C AMB-CONT |      |     |      |   |  |       |   |  |
| CC                        | 010A         |      |     |      |   |  |       |   |  |
| ENCL                      | OPSB         | SER  |     |      |   |  |       |   |  |
| DE                        | 6206         |      | ODE | 6205 |   |  |       |   |  |
| VPWM INVERTER READY       |              |      |     |      |   |  |       |   |  |
| CT30-60(2:1) VT3-60(20:1) |              |      |     |      |   |  |       |   |  |

## AC Induction Motor Performance Data

Record # 35737

Typical performance - not guaranteed values

| Winding: 36WGS658-R003 |    |              | Type: 3630M                              |                           | Enclosure: OPSB       |              |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|--------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |              |        |
| Rated Output (HP)      |    | 3            | Full Load Torque                         |                           | 8.87 LB-FT            |              |        |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |              |        |
| Full Load Amps         |    | 8.4/4.2      | Breakdown Torque                         |                           | 37.4 LB-FT            |              |        |
| R.P.M.                 |    | 1765         | Pull-up Torque                           |                           | 17.3 LB-FT            |              |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 21.2 LB-FT   |        |
| NEMA Design Code       |    | B            | KVA Code                                 | K                         | Starting Current      |              | 32.3 A |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                       | 2.43 A       |        |
| NEMA Nom. Eff.         |    | 89.5         | Power Factor                             | 74                        | Line-line Res. @ 25°C |              | 3.78 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 24°C         |        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                       | 29°C         |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 43           |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.279 LB-FT2 |        |

## Load Characteristics 460 V, 60 Hz, 3 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 33   | 53   | 66   | 73   | 79   | 81   | 77   |
| Efficiency      | 80.1 | 87.6 | 89.6 | 89.9 | 89.7 | 88.5 | 89.8 |
| Speed           | 1791 | 1783 | 1775 | 1766 | 1756 | 1745 | 1760 |
| Line amperes    | 2.6  | 2.99 | 3.54 | 4.25 | 4.97 | 5.83 | 4.68 |

ABB Motors and Mechanical Inc.

WINDING # 36WGS658

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1765 RPM 460 V 3630M

TORQUES (LB-FT): PO=37.4 PU=17.3 LR=21.2 LRA=32.3





