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# Customer information packet

## EM3313T-G

10HP, 1770RPM, 3PH, 60HZ, 215T, 3742M, OPSB, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | OPSB                                                           |
| Frame                          | 215T                                                           |
| 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             | 10.000 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                                                          |
| Auxiliary Box                  | NO AUXILLARY BOX                                               |
| Auxiliary Box Lead Termination | None                                                           |
| Base Indicator                 | Rigid                                                          |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                        |
| Blower                         | None                                                           |
| Current @ Voltage              | 26.400 A @ 208.0 V<br>25.000 A @ 230.0 V<br>12.500 A @ 460.0 V |
| Design Code                    | B                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 91.7 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK                                                    |
| Front Shaft Indicator          | None                                                           |

## Part detail

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  | 37J839     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 37WGL868   |
| Layout       | 37LYJ839   |
| Eff. date    | 06-26-2025 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#14       |
| Proprietary  | False      |
| Created date | 11-11-2020 |

|                               |                       |
|-------------------------------|-----------------------|
| Heater Indicator              | No Heater             |
| High Voltage Full Load Amps   | 12.5 a                |
| Insulation Class              | H                     |
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | H                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Quantity/Wire Size | 9 @ 14 AWG            |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 3742M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 4                     |
| Overall Length                | 17.45 IN              |
| Power Factor                  | 82                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | Standard              |
| Pulley Shaft Indicator        | Standard              |
| Rodent Screen                 | None                  |
| RoHS Status                   | ROHS COMPLIANT        |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.375 IN              |
| Shaft Ground Indicator        | 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

## NP3553LUA

|                           |                                |      |     |      |   |       |       |  |  |  |
|---------------------------|--------------------------------|------|-----|------|---|-------|-------|--|--|--|
| CAT.NO.                   | EM3313T-G                      |      |     |      |   |       |       |  |  |  |
| SPEC.                     | 37J839L868G1                   |      |     |      |   |       |       |  |  |  |
| HP                        | 10                             |      |     |      |   |       |       |  |  |  |
| VOLTS                     | 230/460                        |      |     |      |   |       |       |  |  |  |
| AMPS                      | 25/12.5                        |      |     |      |   |       |       |  |  |  |
| RPM                       | 1770                           |      |     |      |   |       |       |  |  |  |
| FRAME                     | 215T                           |      | HZ  | 60   |   | PH    | 3     |  |  |  |
| SF                        | 1.15                           | CODE | H   | DES  | B | CLASS | H     |  |  |  |
| NEMA NOM. EFF             | 91.7                           | PF   | 82  |      |   |       |       |  |  |  |
| RATING                    | 40C AMB-CONT                   |      |     |      |   |       |       |  |  |  |
| CC                        | 010A                           |      |     |      |   |       |       |  |  |  |
| ENCL                      | OPSB                           | SN   |     |      |   |       |       |  |  |  |
| DE                        | 6307                           |      | ODE | 6206 |   |       |       |  |  |  |
| VPWM INVERTER READY       |                                |      |     |      |   |       |       |  |  |  |
| CT30-60(2:1) VT3-60(20:1) |                                |      |     |      |   |       |       |  |  |  |
| USABLE AT                 | 50HZ 7.5HP 190/380V 23.4/11.7A |      |     |      |   |       | SF1.0 |  |  |  |

## AC Induction Motor Performance Data

Record # 85454

Preliminary Data Sheet

| Winding: 37WGL868-RXXX |    |           | Type: 3742M |                                          | Enclosure: OPSB |                         |      |
|------------------------|----|-----------|-------------|------------------------------------------|-----------------|-------------------------|------|
| Nameplate Data         |    |           |             | 460 V, 60 Hz:<br>High Voltage Connection |                 |                         |      |
| Rated Output (HP)      |    | 10        |             | Full Load Torque                         |                 | 29.8 LB-FT              |      |
| Volts                  |    | 230/460   |             | Start Configuration                      |                 | direct on line          |      |
| Full Load Amps         |    | 25.0/12.5 |             | Breakdown Torque                         |                 | 101 LB-FT               |      |
| R.P.M.                 |    | 1770      |             | Pull-up Torque                           |                 | 44.9 LB-FT              |      |
| Hz                     | 60 | Phase     | 3           | Locked-rotor Torque                      |                 | 56 LB-FT                |      |
| NEMA Design Code       |    | B         |             | KVA Code                                 | H               |                         |      |
| Service Factor (S.F.)  |    | 1.15      |             | Starting Current                         |                 | 88.6 A                  |      |
| NEMA Nom. Eff.         |    | 91.7      |             | Power Factor                             | 82              |                         |      |
| Rating - Duty          |    | 40C       |             | AMB-CONT                                 |                 | Temp. Rise @ Rated Load | 35°C |
| S.F. Amps              |    | 28.0/14.0 |             | Temp. Rise @ S.F. Load                   |                 | 44°C                    |      |
|                        |    |           |             | Locked-rotor Power Factor                |                 | 42.6                    |      |
|                        |    |           |             | Rotor inertia                            |                 | 1.03 lb-ft²             |      |

## Load Characteristics 460 V, 60 Hz, 10 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 45   | 67   | 77   | 82   | 84   | 85   | 84   |
| Efficiency      | 86.7 | 91.3 | 92.1 | 91.7 | 90.9 | 89.6 | 91.1 |
| Speed           | 1792 | 1785 | 1777 | 1769 | 1760 | 1750 | 1762 |
| Line amperes    | 6.04 | 7.69 | 9.84 | 12.4 | 15.3 | 18.4 | 14.1 |

ABB Motors and Mechanical Inc.

WINDING # 37WGL868

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1770 RPM 460 V 3742M

TORQUES (LB-FT): PO=101 PU=44.9 LR=56 LRA=88.6





