



---

# Customer information packet

## EM3615T-G

5HP, 1755RPM, 3PH, 60HZ, 184T, 3642M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                                               |
|--------------------------------|---------------------------------------------------------------|
| Enclosure                      | TEFC                                                          |
| Frame                          | 184T                                                          |
| 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             | 5.000 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              | 6.700 A @ 460.0 V<br>14.000 A @ 208.0 V<br>13.400 A @ 230.0 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                                                   |
| Front Shaft Indicator          | None                                                          |

## Part detail

|              |            |
|--------------|------------|
| Revision     | G          |
| Type         | AC         |
| Mech. spec.  | 36M524     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 36WGQ032   |
| Layout       | 36LYM524   |
| Eff. date    | 04-25-2025 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#16       |
| Proprietary  | False      |
| Created date | 12-04-2020 |

|                               |                     |
|-------------------------------|---------------------|
| Heater Indicator              | No Heater           |
| High Voltage Full Load Amps   | 6.7 a               |
| Insulation Class              | H                   |
| Inverter Code                 | Inverter Ready      |
| KVA Code                      | J                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3642M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 18.04 IN            |
| Power Factor                  | 78                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | Standard            |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| Service Factor                | 1.15                |
| Shaft Diameter                | 1.125 IN            |
| Shaft Ground Indicator        | Shaft Grounding     |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1755 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

## NP3441LUA

|                           |                             |            |     |      |   |       |       |  |  |  |
|---------------------------|-----------------------------|------------|-----|------|---|-------|-------|--|--|--|
| CAT.NO.                   | EM3615T-G                   |            |     |      |   |       |       |  |  |  |
| SPEC                      | 36M524Q032G1                |            |     |      |   |       |       |  |  |  |
| HP                        | 5                           |            |     |      |   |       |       |  |  |  |
| VOLTS                     | 230/460                     |            |     |      |   |       |       |  |  |  |
| AMPS                      | 13.4/6.7                    |            |     |      |   |       |       |  |  |  |
| RPM                       | 1755                        |            |     |      |   |       |       |  |  |  |
| FRAME                     | 184T                        |            | HZ  | 60   |   | PH    | 3     |  |  |  |
| SF                        | 1.15                        | CODE       | J   | DES  | B | CLASS | H     |  |  |  |
| NEMA NOM. EFF             | 89.5                        | PF         | 78  |      |   |       |       |  |  |  |
| RATING                    | 40C AMB-CONT                |            |     |      |   |       |       |  |  |  |
| CC                        | 010A                        |            |     |      |   |       |       |  |  |  |
| ENCL                      | TEFC                        | SER        |     |      |   |       |       |  |  |  |
| DE                        | 6206                        |            | ODE | 6205 |   |       |       |  |  |  |
| VPWM INVERTER READY       |                             | SFA 15/7.5 |     |      |   |       |       |  |  |  |
| CT6-60H(10:1)VT3-60H(20:1 |                             |            |     |      |   |       |       |  |  |  |
|                           | 50HZ 5HP 190/380V 15.6/7.8A |            |     |      |   |       | SF1.0 |  |  |  |

## AC Induction Motor Performance Data

Record # 85675

Preliminary Data Sheet

| Winding: 36WGQ032-RXXX |  |          |  | Type: 3642M                              |  | Enclosure: TEFC         |  |
|------------------------|--|----------|--|------------------------------------------|--|-------------------------|--|
| Nameplate Data         |  |          |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                         |  |
| Rated Output (HP)      |  | 5        |  | Full Load Torque                         |  | 15 LB-FT                |  |
| Volts                  |  | 230/460  |  | Start Configuration                      |  | direct on line          |  |
| Full Load Amps         |  | 13.4/6.7 |  | Breakdown Torque                         |  | 53.1 LB-FT              |  |
| R.P.M.                 |  | 1755     |  | Pull-up Torque                           |  | 23.4 LB-FT              |  |
| Hz                     |  | 60       |  | Phase                                    |  | 3                       |  |
| NEMA Design Code       |  | B        |  | KVA Code                                 |  | J                       |  |
| Service Factor (S.F.)  |  | 1.15     |  | No-load Current                          |  | 49.8 A                  |  |
| NEMA Nom. Eff.         |  | 89.5     |  | Power Factor                             |  | 78                      |  |
| Rating - Duty          |  | 40C      |  | AMB-CONT                                 |  | Temp. Rise @ Rated Load |  |
| S.F. Amps              |  | 15/7.5   |  | Temp. Rise @ S.F. Load                   |  | 92°C                    |  |
|                        |  |          |  | Locked-rotor Power Factor                |  | 49                      |  |
|                        |  |          |  | Rotor inertia                            |  | 0.391 lb-ft²            |  |

## Load Characteristics 460 V, 60 Hz, 5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 39   | 60   | 72   | 79   | 82   | 84   | 81   |
| Efficiency      | 84.4 | 89.4 | 90.1 | 89.6 | 88.4 | 86.8 | 88.5 |
| Speed           | 1789 | 1778 | 1766 | 1753 | 1738 | 1722 | 1741 |
| Line amperes    | 3.64 | 4.39 | 5.45 | 6.66 | 8.08 | 9.67 | 7.52 |

ABB Motors and Mechanical Inc.

WINDING # 36WGQ032

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3642M

TORQUES (LB-FT): PO=53.1 PU=23.4 LR=34.7 LRA=49.8





