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# Customer information packet

## CFSWDM3709T-5E

7.5HP, 3500RPM, 3PH, 60HZ, 213TC, 3734M, TEFC

Class - None

Division - Not Applicable

## Specifications

|                                |                                      |
|--------------------------------|--------------------------------------|
| Enclosure                      | TEFC                                 |
| Frame                          | 213TC                                |
| 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             | 7.500 HP @ 60 HZ                     |
| Phase                          | 3                                    |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                     |
| Voltage @ Frequency            | 575.0 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              | 6.600 A @ 575.0 V                    |
| Design Code                    | A                                    |
| Drip Cover                     | No Drip Cover                        |
| Duty Rating                    | CONT                                 |
| Efficiency @ 100% Load         | 91.0 %                               |
| Electrically Isolated Bearing  | Not Electrically Isolated            |
| Feedback Device                | NO FEEDBACK                          |
| Front Shaft Indicator          | None                                 |
| Heater Indicator               | No Heater                            |
| High Voltage Full Load Amps    | 6.6 a                                |
| Insulation Class               | H                                    |

## Part detail

|              |            |
|--------------|------------|
| Revision     | L          |
| Type         | AC         |
| Mech. spec.  | 37Q242     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 37WGS610   |
| Layout       | 37LYQ242   |
| Eff. date    | 09-22-2023 |
| CD Diagram   | CD0006     |
| Poles        | 02         |
| Leads        | 3#14       |
| Proprietary  | False      |
| Created date | 10-11-2018 |

|                               |                        |
|-------------------------------|------------------------|
| Inverter Code                 | Inverter Ready         |
| KVA Code                      | K                      |
| Lifting Lugs                  | Standard Lifting Lugs  |
| Locked Bearing Indicator      | Locked Bearing         |
| Motor Lead Quantity/Wire Size | 3 @ 14 AWG             |
| Motor Lead Termination        | Flying Leads           |
| Motor Standards               | NEMA                   |
| Motor Type                    | 3734M                  |
| Mounting Arrangement          | F1                     |
| Number of Poles               | 2                      |
| Overall Length                | 19.50 IN               |
| Power Factor                  | 93                     |
| Product Family                | WD All SS Encapsulated |
| Pulley End Bearing Type       | Sealed Bearing         |
| Pulley Face Code              | C-Face                 |
| Pulley Shaft Indicator        | Standard               |
| Rodent Screen                 | None                   |
| RoHS Status                   | ROHS COMPLIANT         |
| Service Factor                | 1.15                   |
| Shaft Diameter                | 1.375 IN               |
| Shaft Ground Indicator        | No Shaft Grounding     |
| Shaft Rotation                | Reversible             |
| Shaft Slinger Indicator       | No Slinger             |
| Speed                         | 3500 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                   |



**AC Induction Motor Performance Data**

Record # 69846

Typical performance - not guaranteed values

| <b>Winding: 37WGS610-R001</b> |              | <b>Type: 3734M</b>         |   | <b>Enclosure: TEFC</b>       |            |
|-------------------------------|--------------|----------------------------|---|------------------------------|------------|
| <b>Nameplate Data</b>         |              |                            | <b>575 V, 60 Hz:<br/>Single Voltage Motor</b> |                              |            |
| <b>Rated Output (HP)</b>      | 7.5          | <b>Full Load Torque</b>    | 11.5 LB-FT                                    |                              |            |
| <b>Volts</b>                  | 575          | <b>Start Configuration</b> | direct on line                                |                              |            |
| <b>Full Load Amps</b>         | 6.6          | <b>Breakdown Torque</b>    | 64.3 LB-FT                                    |                              |            |
| <b>R.P.M.</b>                 | 3500         | <b>Pull-up Torque</b>      | 24.9 LB-FT                                    |                              |            |
| <b>Hz</b>                     | 60           | <b>Phase</b>               | 3   | <b>Locked-rotor Torque</b>   | 35.4 LB-FT |
| <b>NEMA Design Code</b>       | A            | <b>KVA Code</b>            | K   | <b>Starting Current</b>      | 66.7 A     |
| <b>Service Factor (S.F.)</b>  | 1.15         | <b>No-load Current</b>     | 2.47 A  |                              |            |
| <b>NEMA Nom. Eff.</b>         | 91           | <b>Power Factor</b>        | 93  | <b>Line-line Res. @ 25°C</b> | 1.46 Ω     |
| <b>Rating - Duty</b>          | 40C AMB-CONT |                            | <b>Temp. Rise @ Rated Load</b>                | 48°C                         |            |
| <b>S.F. Amps</b>              |              |                            | <b>Temp. Rise @ S.F. Load</b>                 | 59°C                         |            |
|                               |              |                            | <b>Locked-rotor Power Factor</b>              | 32.3                         |            |
|                               |              |                            | <b>Rotor inertia</b>                          | 0.311 LB-FT <sup>2</sup>     |            |

**Load Characteristics 575 V, 60 Hz, 7.5 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 64        | 86        | 90        | 95         | 96         | 100        | 96          |
| <b>Efficiency</b>      | 84.5      | 91        | 92.1      | 91.7       | 91.1       | 90.5       | 91.3        |
| <b>Speed</b>           | 3583      | 3563      | 3540      | 3518       | 3495       | 3478       | 3504        |
| <b>Line amperes</b>    | 2.74      | 3.7       | 5.24      | 6.62       | 8.23       | 9.45       | 7.59        |

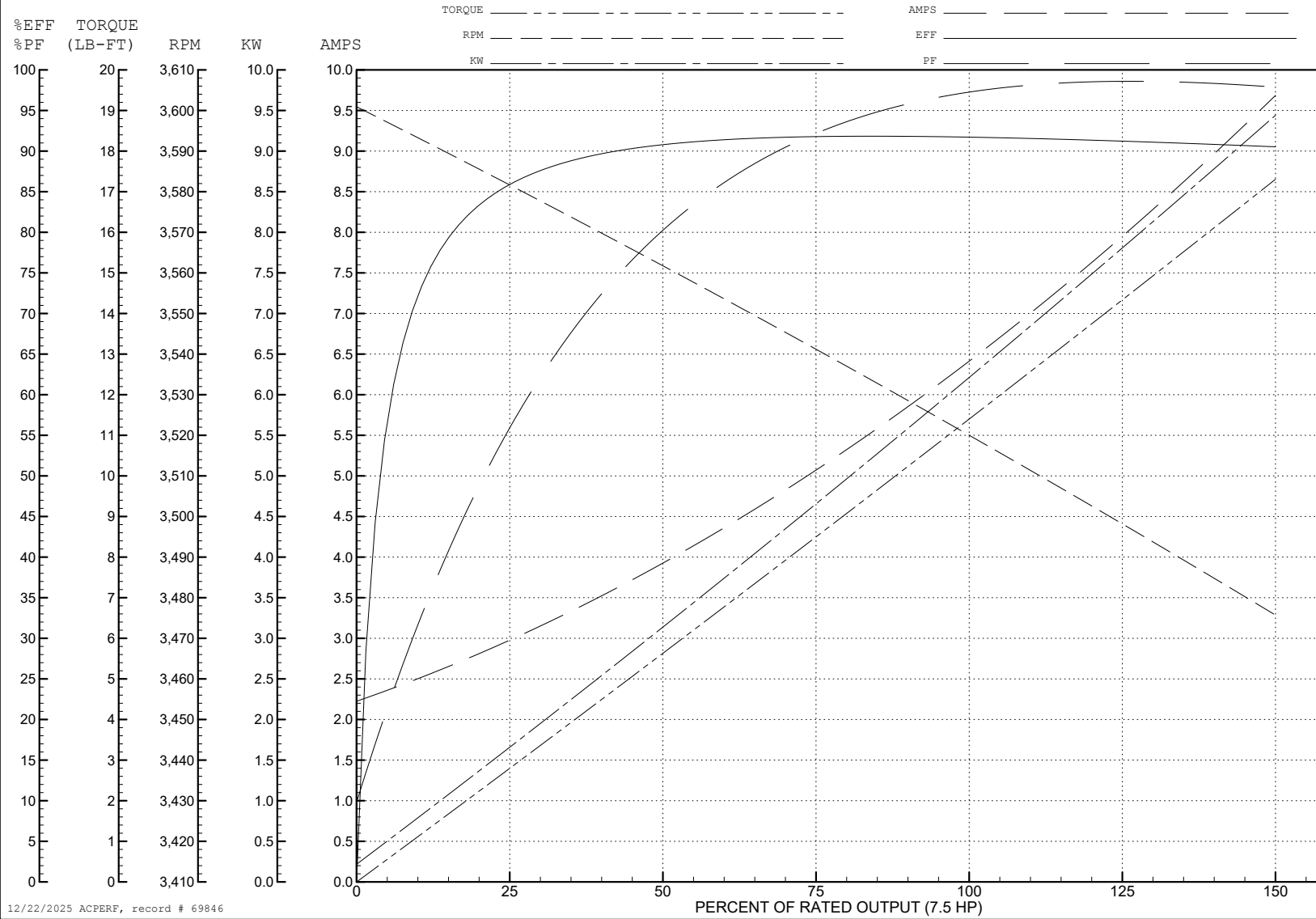
ABB Motors and Mechanical Inc.

WINDING # 37WGS610

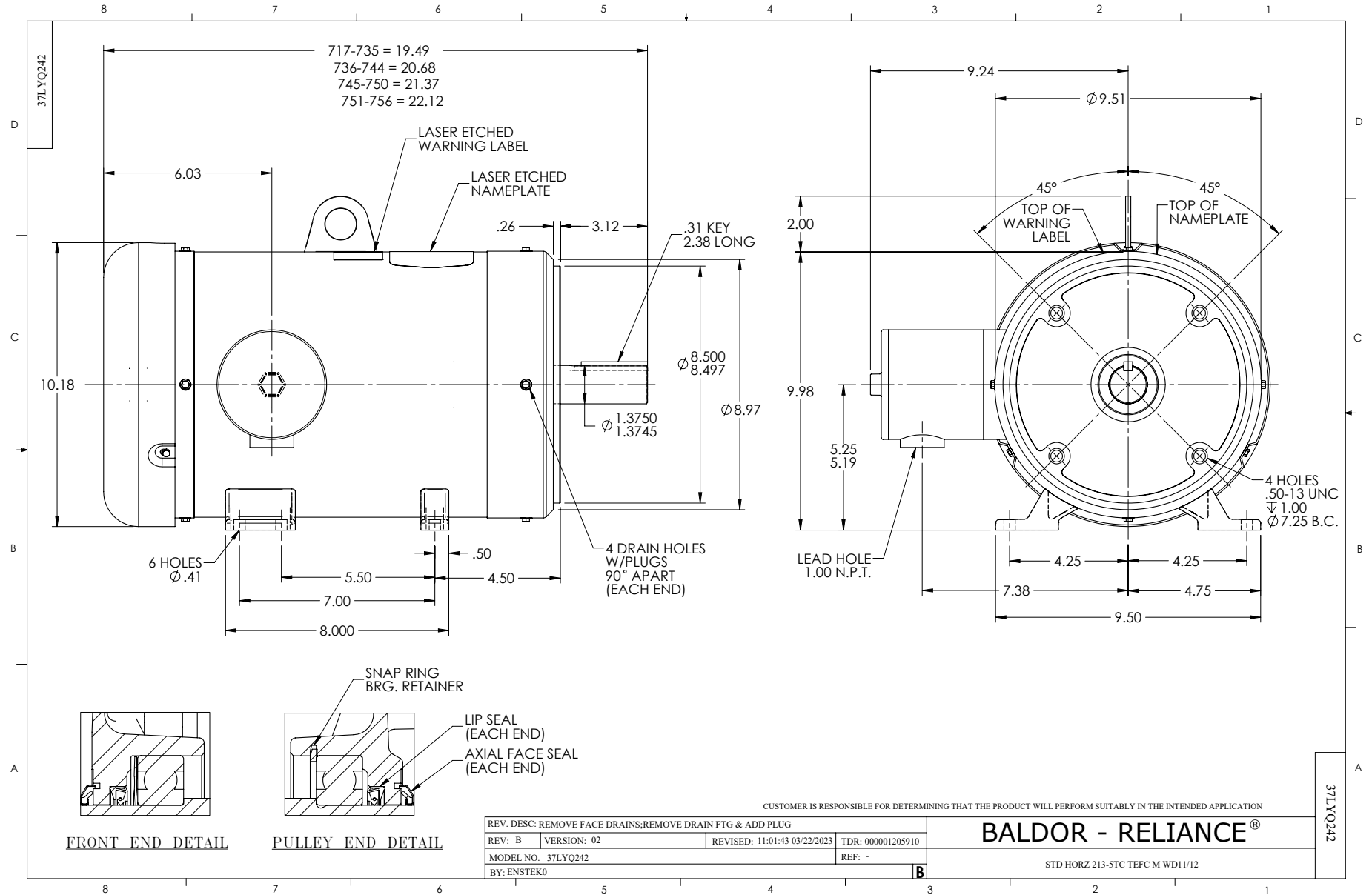
7.5 HP 3 PH 60 HZ 3500 RPM 575 V 3734M

Typical performance - not guaranteed values.

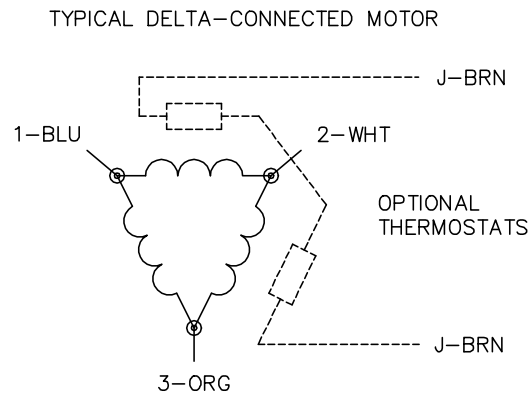
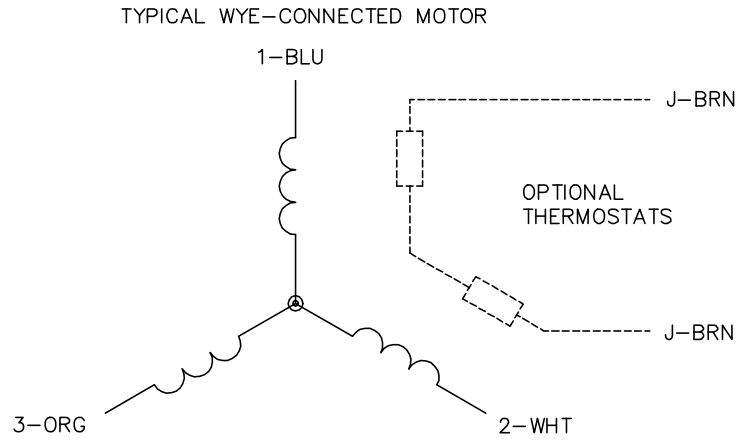
TORQUES (LB-FT): PO=64.3 PU=24.9 LR=35.4 LRA=66.7



12/22/2025 ACPERF, record # 69846



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                              |                   |
| REV. LTR: E                       | VERSION: 01                  | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO       |
| MTL: -                            | © □                          |                   |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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