

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEWWDM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3736M, TEFC

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                               |
|---------------------------------------|---------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                          |
| <b>Frame</b>                          | 213TC                                                         |
| <b>Frame Material</b>                 | Steel                                                         |
| <b>Frequency</b>                      | 60.00 Hz                                                      |
| <b>Haz Area Class and Group</b>       | None                                                          |
| <b>Haz Area Division</b>              | Not Applicable                                                |
| <b>Motor Letter Type</b>              | Three Phase                                                   |
| <b>Output @ Frequency</b>             | 7.500 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                             |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                              |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                            |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<br>UR                                          |
| <b>Ambient Temperature</b>            | 40 °C                                                         |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                              |
| <b>Auxiliary Box Lead Termination</b> | None                                                          |
| <b>Base Indicator</b>                 | Rigid                                                         |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                       |
| <b>Blower</b>                         | None                                                          |
| <b>Current @ Voltage</b>              | 21.000 A @ 208.0 V<br>9.400 A @ 460.0 V<br>18.800 A @ 230.0 V |
| <b>Design Code</b>                    | A                                                             |
| <b>Drip Cover</b>                     | No Drip Cover                                                 |
| <b>Duty Rating</b>                    | CONT                                                          |
| <b>Efficiency @ 100% Load</b>         | 91.7 %                                                        |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                     |
| <b>Feedback Device</b>                | NO FEEDBACK                                                   |
| <b>Front Face Code</b>                | Standard                                                      |
| <b>Front Shaft Indicator</b>          | None                                                          |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | M          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 37M881     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 37WGT859   |
| <b>Layout</b>       | 37LYM881   |
| <b>Eff. date</b>    | 02-14-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#14       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 12-14-2012 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 9.4 a                 |
| <b>Insulation Class</b>              | F                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>KVA Code</b>                      | J                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 14 AWG            |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 3736M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 4                     |
| <b>Overall Length</b>                | 19.78 IN              |
| <b>Power Factor</b>                  | 81                    |
| <b>Product Family</b>                | Super White Washdown  |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing        |
| <b>Pulley Face Code</b>              | C-Face                |
| <b>Pulley Shaft Indicator</b>        | Standard              |
| <b>Rodent Screen</b>                 | None                  |
| <b>RoHS Status</b>                   | ROHS COMPLIANT        |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.375 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding    |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger         |
| <b>Speed</b>                         | 1770 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   |

|                   |      |
|-------------------|------|
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

Nameplate

| NP1669L      |              |      |     |      |   |       |    |   |  |
|--------------|--------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | CEWWDM3710T  |      |     |      |   |       |    |   |  |
| SPEC.        | 37M881T859G1 |      |     |      |   |       |    |   |  |
| HP           | 7.5          |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460      |      |     |      |   |       |    |   |  |
| AMP          | 18.8/9.4     |      |     |      |   |       |    |   |  |
| RPM          | 1770         |      |     |      |   |       |    |   |  |
| FRAME        | 213TC        |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15         | CODE | J   | DES  | A | CLASS |    | F |  |
| NEMA-NOM-EFF | 91.7         | PF   | 81  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |       |    |   |  |
| CC           | 010A         |      |     |      |   |       |    |   |  |
| DE           | 6307         |      | ODE | 6307 |   |       |    |   |  |
| ENCL         | TEFC         | SN   |     |      |   |       |    |   |  |
| BLANK        |              |      |     |      |   |       |    |   |  |

**AC Induction Motor Performance Data**

Record # 17797

Typical performance - not guaranteed values

| Winding: 37WGT859-R001 |    |          | Type: 3736M                              |                     | Enclosure: TEFC           |            |              |
|------------------------|----|----------|------------------------------------------|---------------------|---------------------------|------------|--------------|
| Nameplate Data         |    |          | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |              |
| Rated Output (HP)      |    | 7.5      | Full Load Torque                         |                     | 22.4 LB-FT                |            |              |
| Volts                  |    | 230/460  | Start Configuration                      |                     | direct on line            |            |              |
| Full Load Amps         |    | 18.8/9.4 | Breakdown Torque                         |                     | 69.2 LB-FT                |            |              |
| R.P.M.                 |    | 1770     | Pull-up Torque                           |                     | 36.1 LB-FT                |            |              |
| Hz                     | 60 | Phase    | 3                                        | Locked-rotor Torque |                           | 41.1 LB-FT |              |
| NEMA Design Code       |    | A        | KVA Code                                 | J                   | Starting Current          |            | 70.1 A       |
| Service Factor (S.F.)  |    | 1.15     | No-load Current                          |                     | 4.4 A                     |            |              |
| NEMA Nom. Eff.         |    | 91.7     | Power Factor                             | 81                  | Line-line Res. @ 25°C     |            | 1.37 Ω       |
| Rating - Duty          |    | 40C      | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            | 53°C         |
| S.F. Amps              |    |          |                                          |                     | Temp. Rise @ S.F. Load    |            | 65°C         |
|                        |    |          |                                          |                     | Locked-rotor Power Factor |            | 37           |
|                        |    |          |                                          |                     | Rotor inertia             |            | 0.885 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 41   | 63   | 75   | 81   | 84   | 85   | 83   |
| Efficiency      | 88.6 | 92.2 | 92.7 | 92.2 | 91.3 | 90.1 | 91.7 |
| Speed           | 1793 | 1786 | 1778 | 1770 | 1761 | 1751 | 1765 |
| Line amperes    | 4.88 | 6.08 | 7.59 | 9.49 | 11.5 | 13.8 | 10.7 |

ABB Motors and Mechanical Inc.

WINDING # 37WGT859

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3736M

TORQUES (LB-FT): PO=69.2 PU=36.1 LR=41.1 LRA=70.1







