

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEDM3708T

5HP, 1165RPM, 3PH, 60HZ, 215TC, 3752M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                               |
|---------------------------------------|---------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                          |
| <b>Frame</b>                          | 215TC                                                         |
| <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>             | 5.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                             |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                              |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                            |
| <b>Agency Approvals</b>               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<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>Constant Torque Speed Range</b>    | 6                                                             |
| <b>Current @ Voltage</b>              | 7.200 A @ 460.0 V<br>15.600 A @ 208.0 V<br>14.400 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>         | 89.5 %                                                        |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                     |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | F          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 37N854     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 37WGQ067   |
| <b>Layout</b>       | 37LYN854   |
| <b>Eff. date</b>    | 07-28-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#14 Y     |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-21-2017 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>Feedback Device</b>               | <b>NO FEEDBACK</b>           |
| <b>Front Face Code</b>               | <b>Standard</b>              |
| <b>Front Shaft Indicator</b>         | <b>None</b>                  |
| <b>Heater Indicator</b>              | <b>No Heater</b>             |
| <b>High Voltage Full Load Amps</b>   | <b>7.2 a</b>                 |
| <b>Insulation Class</b>              | <b>F</b>                     |
| <b>Inverter Code</b>                 | <b>Inverter Ready</b>        |
| <b>KVA Code</b>                      | <b>K</b>                     |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>        |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>                |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 14 AWG</b>            |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>          |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>3752M</b>                 |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>6</b>                     |
| <b>Overall Length</b>                | <b>21.26 IN</b>              |
| <b>Power Factor</b>                  | <b>71</b>                    |
| <b>Product Family</b>                | <b>Dirty Duty Plus</b>       |
| <b>Pulley End Bearing Type</b>       | <b>Sealed Bearing</b>        |
| <b>Pulley Face Code</b>              | <b>C-Face</b>                |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>              |
| <b>Rodent Screen</b>                 | <b>None</b>                  |
| <b>RoHS Status</b>                   | <b>ROHS COMPLIANT</b>        |
| <b>Service Factor</b>                | <b>1.15</b>                  |
| <b>Shaft Diameter</b>                | <b>1.375 IN</b>              |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>            |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>                | <b>Reversible</b>            |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>            |
| <b>Speed</b>                         | <b>1165 rpm</b>              |
| <b>Speed Code</b>                    | <b>Single Speed</b>          |
| <b>Starting Method</b>               | <b>Direct on line</b>        |

|                            |                     |
|----------------------------|---------------------|
| Thermal Device - Bearing   | None                |
| Thermal Device - Winding   | None                |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

**Nameplate**

| NP3504       |                |          |   |       |      |            |      |    |          |  |    |
|--------------|----------------|----------|---|-------|------|------------|------|----|----------|--|----|
| CAT NO       | CEDM3708T      |          |   |       |      |            |      |    |          |  |    |
| SPEC.        | 37N854Q067G1   |          |   |       |      | ENCL       | TEFC |    |          |  |    |
| FRAME        | 215TC          | HP       | 5 |       |      |            |      |    |          |  |    |
| VOLTS        | 230/460        |          |   |       |      |            |      |    |          |  |    |
| FLA          | 14.4/7.2       |          |   |       | I.P. | 56         |      |    |          |  |    |
| RPM          | 1165           | RPM MAX  |   |       |      | 1800       |      |    |          |  |    |
| HZ           | 60             | PH       | 3 | CLASS |      |            | F    |    |          |  |    |
| SER.F.       | 1.15           | DES      | A | CC    | 010A |            |      |    |          |  |    |
| NEMA-NOM-EFF | 89.5           |          |   |       |      |            |      |    |          |  |    |
| RATING       | 40C AMB-CONT   |          |   |       |      |            |      |    |          |  |    |
| DE BRG       | 6307           | ODE BRG  |   |       |      | 6206       |      |    |          |  |    |
| GREASE       | POLYREX EM     |          |   |       |      |            |      |    |          |  |    |
| INV.TYPE     |                | C HP FR  |   |       | 60   | C HP TO    |      | 90 |          |  |    |
| CT HZ FROM   | 6              | CT HZ TO |   |       | 60   | VT HZ FROM |      | 6  | VT HZ TO |  | 60 |
| SER.NO       | SFA 16.66/8.33 |          |   |       |      |            |      |    |          |  |    |

**AC Induction Motor Performance Data**

Record # 67641

Typical performance - not guaranteed values

| Winding: 37WGQ067-R001 |    |          | Type: 3752M                              |                     | Enclosure: TEFC           |            |          |
|------------------------|----|----------|------------------------------------------|---------------------|---------------------------|------------|----------|
| Nameplate Data         |    |          | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |          |
| Rated Output (HP)      |    | 5        | Full Load Torque                         |                     | 22.48 LB-FT               |            |          |
| Volts                  |    | 230/460  | Start Configuration                      |                     | direct on line            |            |          |
| Full Load Amps         |    | 14.4/7.2 | Breakdown Torque                         |                     | 80.1 LB-FT                |            |          |
| R.P.M.                 |    | 1165     | Pull-up Torque                           |                     | 51.2 LB-FT                |            |          |
| Hz                     | 60 | Phase    | 3                                        | Locked-rotor Torque |                           | 55.8 LB-FT |          |
| NEMA Design Code       |    | A        | KVA Code                                 | K                   | Starting Current          |            | 54.4 A   |
| Service Factor (S.F.)  |    | 1.15     | No-load Current                          |                     | 3.98 A                    |            |          |
| NEMA Nom. Eff.         |    | 89.5     | Power Factor                             | 71                  | Line-line Res. @ 25°C     |            | 3.6757 Ω |
| Rating - Duty          |    | 40C      | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            | 59°C     |
| S.F. Amps              |    |          |                                          |                     | Temp. Rise @ S.F. Load    |            | 73°C     |
|                        |    |          |                                          |                     | Locked-rotor Power Factor |            | 21.9     |

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

| % of Rated Load | 25     | 50     | 75     | 100    | 125  | 150    | S.F. |
|-----------------|--------|--------|--------|--------|------|--------|------|
| Power Factor    | 33     | 52     | 64     | 70     | 74   | 76     | 72   |
| Efficiency      | 84.4   | 89.3   | 90.2   | 89.7   | 88.6 | 87.1   | 89   |
| Speed           | 1191.6 | 1183.1 | 1174.9 | 1164.8 | 1154 | 1141.3 | 1158 |
| Line amperes    | 4.28   | 5.07   | 6.08   | 7.39   | 8.87 | 10.6   | 8.28 |

ABB Motors and Mechanical Inc.

WINDING # 37WGQ067

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1165 RPM 460 V 3752M

TORQUES (LB-FT): PO=80.1 PU=51.2 LR=55.8 LRA=54.4





