

# ABB BALDOR RELIANCE III

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## Customer information packet

### EWCM3212T

5HP, 3450RPM, 3PH, 60HZ, 182TCZ, 3622M, OPSB, F

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                               |
|---------------------------------------|---------------------------------------------------------------|
| <b>Enclosure</b>                      | OPSB                                                          |
| <b>Frame</b>                          | 182TCZ                                                        |
| <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>  | 3600 RPM @ 60 HZ                                              |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                            |
| <b>Agency Approvals</b>               | NEMA PREMIUM<br>CURUSEEV                                      |
| <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>              | 12.000 A @ 230.0 V<br>12.800 A @ 208.0 V<br>6.000 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                             |
| <b>Drip Cover</b>                     | No Drip Cover                                                 |
| <b>Duty Rating</b>                    | CONT                                                          |
| <b>Efficiency @ 100% Load</b>         | 86.5 %                                                        |
| <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                                                          |
| <b>Heater Indicator</b>               | No Heater                                                     |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | K          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 36J678     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 36WGS040   |
| <b>Layout</b>       | 36LYJ678   |
| <b>Eff. date</b>    | 01-07-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 05-28-2015 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 6.0 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Ready      |
| KVA Code                      | K                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Exit               | Ko Box              |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3622M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 2                   |
| Overall Length                | 18.32 IN            |
| Power Factor                  | 91                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Tapped & Key        |
| Rodent Screen                 | Included            |
| RoHS Status                   | ROHS COMPLIANT      |
| Service Factor                | 1.15                |
| Shaft Diameter                | 0.875 IN            |
| Shaft Extension Location      | Pulley End          |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | Shaft Slinger       |
| Speed                         | 3450 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

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**Nameplate**

| NP1259L      |              |      |     |      |   |    |    |   |  |
|--------------|--------------|------|-----|------|---|----|----|---|--|
| CAT.NO.      | EWCM3212T    |      |     |      |   |    |    |   |  |
| SPEC.        | 36J678S040G1 |      |     |      |   |    |    |   |  |
| HP           | 5            |      |     |      |   |    |    |   |  |
| VOLTS        | 230/460      |      |     |      |   |    |    |   |  |
| AMP          | 12/6         |      |     |      |   |    |    |   |  |
| RPM          | 3450         |      |     |      |   |    |    |   |  |
| FRAME        | 182TCZ       |      | HZ  | 60   |   |    | PH | 3 |  |
| SER.F.       | 1.15         | CODE | K   | DES  | A | CL | F  |   |  |
| NEMA-NOM-EFF | 86.5         | PF   | 91  |      |   |    |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |    |    |   |  |
| CC           | 010A         |      |     |      |   |    |    |   |  |
| DE           | 6207         |      | ODE | 6205 |   |    |    |   |  |
| ENCL         | OPSB         | SN   |     |      |   |    |    |   |  |

**AC Induction Motor Performance Data**

Record # 53354

Typical performance - not guaranteed values

| Winding: 36WGS040-R014 |    |         | Type: 3622M                              |                     | Enclosure: OPSB           |             |               |
|------------------------|----|---------|------------------------------------------|---------------------|---------------------------|-------------|---------------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |             |               |
| Rated Output (HP)      |    | 5       | Full Load Torque                         |                     | 7.66 LB-FT                |             |               |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line            |             |               |
| Full Load Amps         |    | 12/6    | Breakdown Torque                         |                     | 29.99 LB-FT               |             |               |
| R.P.M.                 |    | 3450    | Pull-up Torque                           |                     | 17.89 LB-FT               |             |               |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                           | 22.24 LB-FT |               |
| NEMA Design Code       |    | A       | KVA Code                                 | K                   | Starting Current          |             | 49.63 A       |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                          |                     | 1.99 A                    |             |               |
| NEMA Nom. Eff.         |    | 86.5    | Power Factor                             | 91                  | Line-line Res. @ 25°C     |             | 3.07 Ω        |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |             | 34°C          |
| S.F. Amps              |    |         |                                          |                     | Temp. Rise @ S.F. Load    |             | 42°C          |
|                        |    |         |                                          |                     | Locked-rotor Power Factor |             | 49.2          |
|                        |    |         |                                          |                     | Rotor inertia             |             | 0.0988 LB-FT2 |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 61   | 79   | 87   | 90   | 92   | 93   | 92   |
| Efficiency      | 81.4 | 86.5 | 87.6 | 86.6 | 85.3 | 83.5 | 86.1 |
| Speed           | 3566 | 3535 | 3503 | 3465 | 3423 | 3379 | 3445 |
| Line amperes    | 2.5  | 3.49 | 4.68 | 6.06 | 7.56 | 9.15 | 6.91 |

ABB Motors and Mechanical Inc.

WINDING # 36WGS040

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 460 V 3622M

TORQUES (LB-FT) : PO=29.99 PU=17.89 LR=22.24 LRA=49.63







