

# ABB BALDOR RELIANCE III

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## Customer information packet

### IDM3587T

2HP, 1760RPM, 3PH, 60HZ, 145TC, 0526M, TEBC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEBC                                                        |
| <b>Frame</b>                          | 145TC                                                       |
| <b>Frame Material</b>                 | Iron                                                        |
| <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>             | 2.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CSA<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>                         | BLOWER                                                      |
| <b>Current @ Voltage</b>              | 2.800 A @ 460.0 V<br>5.600 A @ 230.0 V<br>5.800 A @ 208.0 V |
| <b>Design Code</b>                    | B                                                           |
| <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 Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |
| <b>High Voltage Full Load Amps</b>    | 2.8 a                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | E          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 05E535     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 05WGX509   |
| <b>Layout</b>       | 05LYE535   |
| <b>Eff. date</b>    | 09-30-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 03-11-2022 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Insulation Class</b>              | H                          |
| <b>Inverter Code</b>                 | Inverter Ready             |
| <b>KVA Code</b>                      | L                          |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs      |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Max Speed</b>                     | 2700 rpm                   |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 18 AWG                 |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 0526M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 4                          |
| <b>Overall Length</b>                | 19.15 IN                   |
| <b>Power Factor</b>                  | 76                         |
| <b>Product Family</b>                | General Purpose            |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <b>Pulley Face Code</b>              | C-Face                     |
| <b>Pulley Shaft Indicator</b>        | Standard                   |
| <b>Rodent Screen</b>                 | None                       |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 0.875 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger              |
| <b>Speed</b>                         | 1760 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>      | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor        |
| <b>Winding Thermal 1</b>             | None                       |
| <b>Winding Thermal 2</b>             | None                       |

**Nameplate**

| NP4009L        |              |  |      |            |           |       |       |         |      |  |    |      |     |
|----------------|--------------|--|------|------------|-----------|-------|-------|---------|------|--|----|------|-----|
| CAT.NO.        | IDM3587T     |  |      |            |           |       |       |         |      |  |    |      |     |
| SPEC.          | 05E535X509G1 |  |      |            |           |       |       |         |      |  |    |      |     |
| FRAME          | 145TC        |  |      | H.P.       | 2 TE      |       |       |         |      |  |    |      |     |
| VOLTS          | 230/460      |  |      |            |           |       |       |         |      |  |    |      |     |
| MAG. CUR.      | 3.4/1.7      |  |      |            | F.L. AMPS |       |       | 5.6/2.8 |      |  |    |      |     |
| R.P.M.         | 1760         |  |      | R.P.M. MAX |           |       | 2700  |         |      |  |    |      |     |
| HZ.            | 60           |  | PH.  | 3          |           | CLASS |       | H       |      |  |    |      |     |
| SER.F.         | 1.00         |  | DES. |            | B         |       | SL HZ |         | 1.33 |  |    |      |     |
| NEMA NOM. EFF. | 86.5         |  | WK2  |            | 0.189     |       |       |         |      |  |    |      |     |
| BLOWER         | V            |  | 115  |            | PH        |       | 1     |         | HZ   |  | 60 | AMPS | 0.5 |
| RATING         | 40C AMB-CONT |  |      |            |           |       |       |         |      |  |    |      |     |
| DE             | 6205         |  | ODE  |            | 6203      |       |       |         |      |  |    |      |     |
| CC             | 010A         |  | SN   |            |           |       |       |         |      |  |    |      |     |
|                | 1000:1 CT/VT |  |      |            |           |       |       |         |      |  |    |      |     |

**AC Induction Motor Performance Data**

Record # 81962

Typical performance - not guaranteed values

| Winding: 05WGX509-R003 |    |         | Type: 0526M  |                                          | Enclosure: TEBC       |                           |
|------------------------|----|---------|--------------|------------------------------------------|-----------------------|---------------------------|
|                        |    |         |              |                                          |                       |                           |
| Nameplate Data         |    |         |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                           |
| Rated Output (HP)      |    | 2       |              | Full Load Torque                         |                       | 5.976 LB-FT               |
| Volts                  |    | 230/460 |              | Start Configuration                      |                       | direct on line            |
| Full Load Amps         |    | 5.6/2.8 |              | Breakdown Torque                         |                       | 23.5 LB-FT                |
| R.P.M.                 |    | 1760    |              | Pull-up Torque                           |                       | 11.5 LB-FT                |
| Hz                     | 60 | Phase   | 3            | Locked-rotor Torque                      |                       | 15.6 LB-FT                |
| NEMA Design Code       |    | B       | KVA Code     | L                                        | Starting Current      |                           |
| Service Factor (S.F.)  |    | 1       |              | No-load Current                          |                       | 1.69 A                    |
| NEMA Nom. Eff.         |    | 86.5    | Power Factor | 76                                       | Line-line Res. @ 25°C |                           |
| Rating - Duty          |    | 40C     |              | AMB-CONT                                 |                       | Temp. Rise @ Rated Load   |
|                        |    |         |              |                                          |                       | 40°C                      |
|                        |    |         |              |                                          |                       | Locked-rotor Power Factor |
|                        |    |         |              |                                          |                       | 58.1                      |
|                        |    |         |              |                                          |                       | Rotor inertia             |
|                        |    |         |              |                                          |                       | 0.188 lb-ft²              |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    |
|-----------------|--------|--------|--------|--------|--------|--------|
| Power Factor    | 34     | 55     | 68     | 77     | 81     | 84     |
| Efficiency      | 77.5   | 85.2   | 86.9   | 86.8   | 85.8   | 84.3   |
| Speed           | 1789.9 | 1781.4 | 1772.2 | 1762.2 | 1751.3 | 1739.3 |
| Line amperes    | 1.75   | 1.99   | 2.37   | 2.83   | 3.36   | 3.96   |

ABB Motors and Mechanical Inc.

WINDING # 05WGX509

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 0526M

TORQUES (LB-FT): PO=23.5 PU=11.5 LR=15.6 LRA=22.7





