

# ABB BALDOR RELIANCE III

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## Customer information packet

### ZDM3587T

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

Class - None

Division - Not Applicable

**Specifications**

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Enclosure                      | TEBC                                                        |
| Frame                          | 145TC                                                       |
| Frame Material                 | Iron                                                        |
| Frequency                      | 60.00 Hz                                                    |
| Haz Area Class and Group       | None                                                        |
| Haz Area Division              | Not Applicable                                              |
| Motor Letter Type              | Three Phase                                                 |
| Output @ Frequency             | 2.000 HP @ 60 HZ                                            |
| Phase                          | 3                                                           |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                            |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| Agency Approvals               | CSA<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                         | BLOWER                                                      |
| Current @ Voltage              | 2.800 A @ 460.0 V<br>5.600 A @ 230.0 V<br>5.800 A @ 208.0 V |
| Design Code                    | B                                                           |
| Drip Cover                     | No Drip Cover                                               |
| Duty Rating                    | CONT                                                        |
| Efficiency @ 100% Load         | 86.5 %                                                      |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | ENCODER                                                     |
| Front Shaft Indicator          | None                                                        |
| Heater Indicator               | No Heater                                                   |
| High Voltage Full Load Amps    | 2.8 a                                                       |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | G          |
| Type         | AC         |
| Mech. spec.  | 05E535     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 05WGX509   |
| Layout       | 05LYE535   |
| Eff. date    | 06-16-2026 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 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>                | 19.02 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**

| NP4539L        |              |     |      |            |       |      |      |         |  |
|----------------|--------------|-----|------|------------|-------|------|------|---------|--|
| CAT.NO.        | ZDM3587T     |     |      |            |       |      |      |         |  |
| SPEC.          | 05E535X509G2 |     |      |            |       |      |      |         |  |
| 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      |       |      |      |         |  |
| BLWR 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   |            |
|                        |    |         |                     |                                          | Locked-rotor Power Factor |            |
|                        |    |         |                     |                                          | Rotor inertia             |            |

**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





