

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECTM3665T-G

5HP, 1750RPM, 3PH, 60HZ, 184T, 0642M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                               |
|---------------------------------------|---------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                          |
| <b>Frame</b>                          | 184T                                                          |
| <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>             | 5.000 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 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>Current @ Voltage</b>              | 6.600 A @ 460.0 V<br>14.000 A @ 208.0 V<br>13.200 A @ 230.0 V |
| <b>Design Code</b>                    | B                                                             |
| <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                                     |
| <b>Feedback Device</b>                | NO FEEDBACK                                                   |
| <b>Front Shaft Indicator</b>          | None                                                          |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | E          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 06J518     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 06WGX182   |
| <b>Layout</b>       | 06LYJ518   |
| <b>Eff. date</b>    | 08-06-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-20-2022 |

|                               |                              |
|-------------------------------|------------------------------|
| Heater Indicator              | Heater Included, 115 V       |
| High Voltage Full Load Amps   | 6.6 a                        |
| Insulation Class              | F                            |
| Inverter Code                 | Inverter Ready               |
| KVA Code                      | J                            |
| Lifting Lugs                  | Standard Lifting Lugs        |
| Locked Bearing Indicator      | Locked Bearing               |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG                   |
| Motor Lead Termination        | Flying Leads                 |
| Motor Standards               | NEMA                         |
| Motor Type                    | 0642M                        |
| Mounting Arrangement          | F1                           |
| Number of Poles               | 4                            |
| Overall Length                | 15.93 IN                     |
| Power Factor                  | 80                           |
| Product Family                | Chemical Processing (Not DC) |
| Pulley End Bearing Type       | Sealed Bearing               |
| Pulley Face Code              | Standard                     |
| Pulley Shaft Indicator        | Tapped & Key                 |
| Rodent Screen                 | None                         |
| RoHS Status                   | ROHS COMPLIANT               |
| Service Factor                | 1.15                         |
| Shaft Diameter                | 1.125 IN                     |
| Shaft Ground Indicator        | Shaft Grounding              |
| Shaft Rotation                | Reversible                   |
| Shaft Slinger Indicator       | Shaft Slinger                |
| Speed                         | 1750 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                         |

**Nameplate**

| NP1260       |                  |      |  |      |     |    |   |    |   |
|--------------|------------------|------|--|------|-----|----|---|----|---|
| CAT.NO.      | ECTM3665T-G      |      |  |      |     |    |   |    |   |
| SPEC.        | 06J518X182G1     |      |  |      |     |    |   |    |   |
| HP           | 5                |      |  |      |     |    |   |    |   |
| VOLTS        | 230/460          |      |  |      |     |    |   |    |   |
| AMP          | 13.2/6.6         |      |  |      |     |    |   |    |   |
| RPM          | 1750             |      |  |      |     |    |   |    |   |
| FRAME        | 184T             | HZ   |  | 60   |     | PH |   | 3  |   |
| SER.F.       | 1.15             | CODE |  | J    | DES |    | B | CL | F |
| NEMA-NOM-EFF | 89.5             | PF   |  | 80   |     |    |   |    |   |
| RATING       | 40C AMB-CONT     |      |  |      |     |    |   |    |   |
| CC           |                  |      |  |      |     |    |   |    |   |
| DE           | 6206             | ODE  |  | 6205 |     |    |   |    |   |
| ENCL         | TEFC             | SN   |  |      |     |    |   |    |   |
|              | INV DUTY 20:1 VT |      |  |      |     |    |   |    |   |

**AC Induction Motor Performance Data**

Record # 34381

Typical performance - not guaranteed values

| Winding: 06WGX182-R004 |    |         | Type: 0642M                              |                     | Enclosure: TEFC           |            |
|------------------------|----|---------|------------------------------------------|---------------------|---------------------------|------------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |
| Rated Output (HP)      |    | 5       | Full Load Torque                         |                     | 15 LB-FT                  |            |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line            |            |
| Full Load Amps         |    | 13.2/6  | Breakdown Torque                         |                     | 53.9 LB-FT                |            |
| R.P.M.                 |    | 1750    | Pull-up Torque                           |                     | 22.4 LB-FT                |            |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                           | 31.8 LB-FT |
| NEMA Design Code       |    | B       | KVA Code                                 | J                   | Starting Current          |            |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                          |                     | 3.02 A                    |            |
| NEMA Nom. Eff.         |    | 89.5    | Power Factor                             | 80                  | Line-line Res. @ 25°C     |            |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            |
| S.F. Amps              |    |         |                                          |                     | Temp. Rise @ S.F. Load    |            |
|                        |    |         |                                          |                     | Locked-rotor Power Factor |            |
|                        |    |         |                                          |                     | Rotor inertia             |            |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 41   | 63   | 75   | 81   | 84   | 85   | 81   |
| Efficiency      | 85.2 | 89.8 | 90.4 | 89.8 | 88.4 | 86.9 | 88.7 |
| Speed           | 1789 | 1777 | 1765 | 1752 | 1737 | 1721 | 1739 |
| Line amperes    | 3.35 | 4.14 | 5.21 | 6.45 | 7.91 | 9.47 | 7.52 |

ABB Motors and Mechanical Inc.

WINDING # 06WGX182

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 0642M

TORQUES (LB-FT): PO=53.9 PU=22.4 LR=31.8 LRA=46.6





