

# ABB BALDOR RELIANCE III

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## Customer information packet

### XM21362T

3HP, 1160//960RPM, 3PH, 60HZ, 213T, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

**Specifications**

|                                       |                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------|
| <b>Enclosure</b>                      | XPFC                                                                             |
| <b>Frame</b>                          | 213T                                                                             |
| <b>Frame Material</b>                 | Steel                                                                            |
| <b>Frequency</b>                      | 60.00 Hz                                                                         |
| <b>Haz Area Class and Group</b>       | CLI GP D; CLII GP F,G                                                            |
| <b>Haz Area Division</b>              | Division I                                                                       |
| <b>Motor Letter Type</b>              | Three Phase                                                                      |
| <b>Output @ Frequency</b>             | 3.000 HP @ 60 HZ<br>2.000 HP @ 50 HZ                                             |
| <b>Phase</b>                          | 3                                                                                |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                                                 |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>190.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>380.0 V @ 50 HZ         |
| <b>Agency Approvals</b>               | UL<br>CSA EEV                                                                    |
| <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>              | 4.000 A @ 380.0 V<br>4.600 A @ 460.0 V<br>8.000 A @ 190.0 V<br>9.200 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 %                                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | G          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 37WGS519   |
| <b>Layout</b>       | 37LYN517   |
| <b>Eff. date</b>    | 10-13-2022 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#14       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-04-2019 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Electrically Isolated Bearing</b> | Not Electrically Isolated  |
| <b>Feedback Device</b>               | NO FEEDBACK                |
| <b>Haz Area Temp Code</b>            | T3C                        |
| <b>Heater Indicator</b>              | No Heater                  |
| <b>High Voltage Full Load Amps</b>   | 4.0 a                      |
| <b>Insulation Class</b>              | F                          |
| <b>Inverter Code</b>                 | Inverter Duty              |
| <b>IP Rating</b>                     | NONE                       |
| <b>KVA Code</b>                      | L                          |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs      |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Max Speed</b>                     | 1800 rpm                   |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 3738M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 6                          |
| <b>Overall Length</b>                | 19.32 IN                   |
| <b>Power Factor</b>                  | 68                         |
| <b>Product Family</b>                | General Purpose            |
| <b>Pulley Face Code</b>              | Standard                   |
| <b>Rodent Screen</b>                 | None                       |
| <b>RoHS Status</b>                   | ROHS NON-COMPLIANT         |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 1.375 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Speed</b>                         | 1160 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                       |

Winding Thermal 2

None

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**Nameplate**

| NP0887XPSLEV |                  |        |   |              |         |                     |         |       |          |  |    |
|--------------|------------------|--------|---|--------------|---------|---------------------|---------|-------|----------|--|----|
| NO.          |                  |        |   |              |         | CC                  | 010A    |       |          |  |    |
| S/N          |                  |        |   |              |         | TEMP CODE           |         | T3C   |          |  |    |
| SPEC.        | 37-0000-0041     |        |   |              |         | INV.TYPE            |         | PWM   |          |  |    |
| CAT.NO.      | XM21362T         |        |   |              |         | C HP FR             |         | 60    | C HP TO  |  | 90 |
| HP           | 3//2             |        |   |              |         | CT HZ FROM          |         | 6     | CT HZ TO |  | 60 |
| VOLTS        | 230/460//190/380 |        |   |              |         | VT HZ FROM          |         | 6     | VT HZ TO |  | 60 |
| AMPS         | 9.2/4.6//8/4     |        |   |              | MAG CUR |                     | 5.2/2.6 |       |          |  |    |
| RPM          | 1160//960        |        |   |              | MX RPM  |                     | 1800    |       |          |  |    |
| HZ           | 60//50           | PH     | 3 | CL           | F       | NOM.EFF.            |         | 89.5  |          |  |    |
| SER.F.       | 1.00             | DES    | A | SL HZ        |         | 2                   | WK2     | 0.945 |          |  |    |
| FRAME        | 213T             | RATING |   | 40C AMB-CONT |         |                     |         |       |          |  |    |
|              | 55C AMB @ 1.0 SF |        |   |              |         |                     |         |       |          |  |    |
|              | 1.15 SF SINEWAVE |        |   |              |         | NEMA MG-1 PT 5,IP54 |         |       |          |  |    |

**AC Induction Motor Performance Data**

Record # 73672

Typical performance - not guaranteed values

| Winding: 37WGS519-R048 |  |                  | Type: 3738M  |                     | Enclosure: XPFC                          |                           |            |              |
|------------------------|--|------------------|--------------|---------------------|------------------------------------------|---------------------------|------------|--------------|
| Nameplate Data         |  |                  |              |                     | 460 V, 60 Hz:<br>High Voltage Connection |                           |            |              |
| Rated Output (HP)      |  | 3//2             |              | Full Load Torque    |                                          | 13.4 LB-FT                |            |              |
| Volts                  |  | 230/460//190/380 |              | Start Configuration |                                          | direct on line            |            |              |
| Full Load Amps         |  | 9.2/4.6//8/4     |              | Breakdown Torque    |                                          | 50.17 LB-FT               |            |              |
| R.P.M.                 |  | 1160//960        |              | Pull-up Torque      |                                          | 31.8 LB-FT                |            |              |
| Hz                     |  | 60//50           | Phase        | 3                   | Locked-rotor Torque                      |                           | 33.9 LB-FT |              |
| NEMA Design Code       |  | A                |              | KVA Code            | L                                        | Starting Current          |            | 34 A         |
| Service Factor (S.F.)  |  |                  |              |                     |                                          | No-load Current           |            | 2.56 A       |
| NEMA Nom. Eff.         |  | 89.5             | Power Factor |                     | 68                                       | Line-line Res. @ 25°C     |            | 2.67 Ω       |
| Rating - Duty          |  | 40C              |              | AMB-CONT            |                                          | Temp. Rise @ Rated Load   |            | 39°C         |
|                        |  |                  |              |                     |                                          | Locked-rotor Power Factor |            | 22.9         |
|                        |  |                  |              |                     |                                          | Rotor inertia             |            | 0.945 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 3 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 32   | 51   | 63   | 69   | 73   | 75   |
| Efficiency      | 78.5 | 86.3 | 87.9 | 88.5 | 88.1 | 86.7 |
| Speed           | 1193 | 1186 | 1178 | 1170 | 1160 | 1148 |
| Line amperes    | 2.75 | 3.22 | 3.86 | 4.57 | 5.49 | 6.47 |

ABB Motors and Mechanical Inc.

WINDING # 37WGS519

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1170 RPM 460 V 3738M

TORQUES (LB-FT): PO=50.17 PU=31.8 LR=33.9 LRA=34





