

# ABB BALDOR RELIANCE III

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## Customer information packet

### CSPM3614T

2HP, 1175RPM, 3PH, 60HZ, 184TC, 3648M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 184TC                                                       |
| <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>             | 2.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | NEMA PREMIUM 4<br>WEEE                                      |
| <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>              | 3.300 A @ 460.0 V<br>6.600 A @ 230.0 V<br>7.000 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>         | 89.5 %                                                      |
| <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>    | 3.3 a                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | B          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 36P427     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 36WGM001   |
| <b>Layout</b>       | 36LYP427   |
| <b>Eff. date</b>    | 11-19-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-02-2024 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>Insulation Class</b>              | <b>F</b>                     |
| <b>Inverter Code</b>                 | <b>Inverter Duty</b>         |
| <b>KVA Code</b>                      | <b>M</b>                     |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>        |
| <b>Max Speed</b>                     | <b>1800 rpm</b>              |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 16 AWG</b>            |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>          |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>3648M</b>                 |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>6</b>                     |
| <b>Overall Length</b>                | <b>18.48 IN</b>              |
| <b>Power Factor</b>                  | <b>64</b>                    |
| <b>Product Family</b>                | <b>General Purpose</b>       |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                  |
| <b>Pulley Face Code</b>              | <b>C-Face</b>                |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>              |
| <b>Rodent Screen</b>                 | <b>None</b>                  |
| <b>RoHS Status</b>                   | <b>ROHS COMPLIANT</b>        |
| <b>Service Factor</b>                | <b>1.15</b>                  |
| <b>Shaft Diameter</b>                | <b>1.125 IN</b>              |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>                | <b>Reversible</b>            |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>            |
| <b>Speed</b>                         | <b>1175 rpm</b>              |
| <b>Speed Code</b>                    | <b>Single Speed</b>          |
| <b>Starting Method</b>               | <b>Direct on line</b>        |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                  |
| <b>Thermal Device - Winding</b>      | <b>None</b>                  |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b>   |
| <b>Winding Thermal 1</b>             | <b>None</b>                  |
| <b>Winding Thermal 2</b>             | <b>None</b>                  |

**Nameplate**

| NP4423A01A01L |               |         |         |      |      |               |       |      |     |      |       |  |
|---------------|---------------|---------|---------|------|------|---------------|-------|------|-----|------|-------|--|
| CAT #         | CSPM3614T     |         |         |      |      | WGT           | 101   | LBS  |     |      |       |  |
| SPEC          | 36P427M001    |         |         |      |      | ENCL          | TEFC  |      |     |      |       |  |
| SER #         |               |         |         |      |      | CC            | 010A  | IP   | 54  |      |       |  |
| HP            | 2             | MAG CUR |         |      |      | 4.3/2.15      |       |      |     |      |       |  |
| VOLTS         | 230/460       |         |         |      |      | NEMA NOM. EFF |       |      |     | 89.5 |       |  |
| AMPS          | 6.6/3.3       |         |         |      |      | PF            | 64    |      |     |      |       |  |
| RATING        | 40C AMB-CONT  |         |         |      |      |               |       |      |     |      |       |  |
| RPM           | 1175          |         |         |      |      | MAX RPM       |       | 1800 |     |      |       |  |
| FRAME         | 184TC         | HZ      | 60      | CODE |      | M             | CLASS |      | F   |      |       |  |
| SER.F.        | 1.15          | SF AMP  | 7.2/3.6 |      |      |               | PH    | 3    | DES | B    |       |  |
| DE            | 6206          |         | ODE     |      | 6205 |               |       |      |     |      |       |  |
| LUBRICATION   | POLYREX EM    |         |         |      |      |               |       |      |     |      |       |  |
| ID LOGO       | INVERTER TYPE |         |         | VPWM |      | CHP           | 60    | TO   |     | 90   | 1.5:1 |  |
| ID LOGO       | WK2           | 0.451   | CT      | 6    | TO   | 60            | 10:1  |      |     |      |       |  |
| ID LOGO       | SL HZ         | 1.25    | VT      | 3    | TO   | 60            | 20:1  |      |     |      |       |  |
|               |               |         |         |      |      |               |       |      |     |      |       |  |
|               |               |         |         |      |      |               |       |      |     |      |       |  |
|               |               |         |         |      |      |               |       |      |     |      |       |  |
|               |               |         |         |      |      |               |       |      |     |      |       |  |
|               |               |         |         |      |      |               | QR    |      |     |      |       |  |
| YR            |               |         |         |      |      |               |       |      |     |      |       |  |

**AC Induction Motor Performance Data**

Record # 100904

Preliminary Data Sheet

| Winding: 36WGM001-R001 |    |         | Type: 3648M                              |                     | Enclosure: TEFC           |            |              |
|------------------------|----|---------|------------------------------------------|---------------------|---------------------------|------------|--------------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |              |
| Rated Output (HP)      |    | 2       | Full Load Torque                         |                     | 8.92 LB-FT                |            |              |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line            |            |              |
| Full Load Amps         |    | 6.6/3.3 | Breakdown Torque                         |                     | 36.7 LB-FT                |            |              |
| R.P.M.                 |    | 1175    | Pull-up Torque                           |                     | 19.4 LB-FT                |            |              |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                           | 25.3 LB-FT |              |
| NEMA Design Code       |    | B       | KVA Code                                 |                     | M                         |            |              |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                          |                     | 2.14 A                    |            |              |
| NEMA Nom. Eff.         |    | 89.5    | Power Factor                             |                     | 64                        |            |              |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            | 32°C         |
| S.F. Amps              |    | 7.2/3.6 |                                          |                     | Temp. Rise @ S.F. Load    |            | 37°C         |
|                        |    |         |                                          |                     | Locked-rotor Power Factor |            | 27.9         |
|                        |    |         |                                          |                     | Rotor inertia             |            | 0.451 lb-ft² |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 26   | 44   | 55   | 64   | 69   | 73   | 67   |
| Efficiency      | 79.2 | 87   | 89   | 89.5 | 89.3 | 88.3 | 89.4 |
| Speed           | 1196 | 1191 | 1184 | 1178 | 1170 | 1162 | 1173 |
| Line amperes    | 2.23 | 2.49 | 2.84 | 3.28 | 3.79 | 4.38 | 3.59 |

ABB Motors and Mechanical Inc.

WINDING # 36WGM001

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1175 RPM 460 V 3648M

TORQUES (LB-FT) : PO=36.7 PU=19.4 LR=25.3 LRA=24.9





