

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM3617T

1HP, 850RPM, 3PH, 60HZ, 182T, 3628M, TEFC, F1, N

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 182T                                                        |
| <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>             | 1.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 900 RPM @ 60 HZ                                             |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | C UR US                                                     |
| <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>              | 2.300 A @ 460.0 V<br>4.600 A @ 208.0 V<br>4.600 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>         | 75.5 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Face Code</b>                | Standard                                                    |
| <b>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |
| <b>High Voltage Full Load Amps</b>    | 2.3 a                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | H          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 36A001     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 36WGR622   |
| <b>Layout</b>       | 36LYA001   |
| <b>Eff. date</b>    | 01-05-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 08         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-07-2015 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Insulation Class</b>              | <b>F</b>                   |
| <b>Inverter Code</b>                 | <b>Not Inverter</b>        |
| <b>IP Rating</b>                     | <b>NONE</b>                |
| <b>KVA Code</b>                      | <b>L</b>                   |
| <b>Lifting Lugs</b>                  | <b>No Lifting Lugs</b>     |
| <b>Locked Bearing Indicator</b>      | <b>No Locked Bearing</b>   |
| <b>Motor Lead Exit</b>               | <b>Ko Box</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>3628M</b>               |
| <b>Mounting Arrangement</b>          | <b>F1</b>                  |
| <b>Number of Poles</b>               | <b>8</b>                   |
| <b>Overall Length</b>                | <b>16.54 IN</b>            |
| <b>Power Factor</b>                  | <b>52</b>                  |
| <b>Product Family</b>                | <b>General Purpose</b>     |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                |
| <b>Pulley Face Code</b>              | <b>Standard</b>            |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>            |
| <b>Rodent Screen</b>                 | <b>None</b>                |
| <b>Service Factor</b>                | <b>1.15</b>                |
| <b>Shaft Diameter</b>                | <b>1.125 IN</b>            |
| <b>Shaft Extension Location</b>      | <b>Pulley End</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>850 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**

| NP2116L      |              |      |      |     |    |    |    |   |  |
|--------------|--------------|------|------|-----|----|----|----|---|--|
| CAT.NO.      | EM3617T      |      |      |     |    |    |    |   |  |
| SPEC.        | 36A001R622G1 |      |      |     |    |    |    |   |  |
| HP           | 1            |      |      |     |    |    |    |   |  |
| VOLTS        | 230/460      |      |      |     |    |    |    |   |  |
| AMP          | 4.6/2.3      |      |      |     |    |    |    |   |  |
| RPM          | 850          |      |      |     |    |    |    |   |  |
| FRAME        | 182T         |      |      | HZ  | 60 |    | PH | 3 |  |
| SER.F.       | 1.15         | CODE | L    | DES | B  | CL | F  |   |  |
| NEMA-NOM-EFF | 75.5         | PF   | 52   |     |    |    |    |   |  |
| RATING       | 40C AMB-CONT |      |      |     |    |    |    |   |  |
| CC           | 010A         |      |      |     |    |    |    |   |  |
| DE           | 6206         | ODE  | 6205 |     |    |    |    |   |  |
| ENCL         | TEFC         | SN   |      |     |    |    |    |   |  |

**AC Induction Motor Performance Data**

Record # 53137

Typical performance - not guaranteed values

| Winding: 36WGR622-R002 |  |             | Type: 3628M                              |  | Enclosure: TEFC         |                       |            |
|------------------------|--|-------------|------------------------------------------|--|-------------------------|-----------------------|------------|
| Nameplate Data         |  |             | 460 V, 60 Hz:<br>High Voltage Connection |  |                         |                       |            |
| Rated Output (HP)      |  | 1           | Full Load Torque                         |  | 6.26 LB-FT              |                       |            |
| Volts                  |  | 230/460     | Start Configuration                      |  | direct on line          |                       |            |
| Full Load Amps         |  | 4.6/2.3/2.3 | Breakdown Torque                         |  | 19.8 LB-FT              |                       |            |
| R.P.M.                 |  | 850         | Pull-up Torque                           |  | 12.1 LB-FT              |                       |            |
| Hz                     |  | 60          | Phase                                    |  | 3                       | Locked-rotor Torque   | 15.7 LB-FT |
| NEMA Design Code       |  | B           | KVA Code                                 |  | L                       | Starting Current      | 9.52 A     |
| Service Factor (S.F.)  |  | 1.15        | No-load Current                          |  | 1.55 A                  |                       |            |
| NEMA Nom. Eff.         |  | 75.5        | Power Factor                             |  | 52                      | Line-line Res. @ 25°C | 16.051 Ω   |
| Rating - Duty          |  | 40C         | AMB-CONT                                 |  | Temp. Rise @ Rated Load |                       | 62°C       |
| S.F. Amps              |  |             | Temp. Rise @ S.F. Load                   |  | 74°C                    |                       |            |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25    | 50    | 75    | 100  | 125  | 150   | S.F. |
|-----------------|-------|-------|-------|------|------|-------|------|
| Power Factor    | 26    | 40    | 51    | 60   | 66   | 71    | 64   |
| Efficiency      | 60.2  | 71.8  | 75.3  | 75.9 | 74.6 | 72.1  | 75.1 |
| Speed           | 889.5 | 879.2 | 868.1 | 855  | 840  | 821.8 | 846  |
| Line amperes    | 1.57  | 1.69  | 1.87  | 2.09 | 2.39 | 2.77  | 2.27 |

ABB Motors and Mechanical Inc.

WINDING # 36WGR622

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 850 RPM 460 V 3628M

TORQUES (LB-FT): PO=19.8 PU=12.1 LR=15.7 LRA=9.52





