

# ABB BALDOR RELIANCE III

---

## Customer information packet

### EWDM4116T

25HP, 880RPM, 3PH, 60HZ, 326T, 1272M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                               |
|---------------------------------------|-----------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                          |
| <b>Frame</b>                          | 326T                                          |
| <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>             | 25.000 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>               | NEMA PREMIUM<br>NEMA_PREMIUM<br>UR<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>Current @ Voltage</b>              | 38.000 A @ 460.0 V<br>76.000 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>         | 90.2 %                                        |
| <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                                     |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | B          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 12P064     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 12WGZ325   |
| <b>Layout</b>       | 12LYP064   |
| <b>Eff. date</b>    | 02-14-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 08         |
| <b>Leads</b>        | 9#10       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-18-2023 |

|                               |                       |
|-------------------------------|-----------------------|
| High Voltage Full Load Amps   | 38.0 a                |
| Insulation Class              | F                     |
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | G                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG            |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 1272M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 8                     |
| Overall Length                | 30.28 IN              |
| Power Factor                  | 67                    |
| Product Family                | Washdown Features     |
| Pulley End Bearing Type       | Sealed Bearing        |
| Pulley Face Code              | Standard              |
| Pulley Shaft Indicator        | Standard              |
| Rodent Screen                 | None                  |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 2.125 IN              |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 880 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**

| NP1669L      |              |      |     |      |   |       |  |    |   |  |  |
|--------------|--------------|------|-----|------|---|-------|--|----|---|--|--|
| CAT.NO.      | EWDM4116T    |      |     |      |   |       |  |    |   |  |  |
| SPEC.        | 12P064Z325   |      |     |      |   |       |  |    |   |  |  |
| HP           | 25           |      |     |      |   |       |  |    |   |  |  |
| VOLTS        | 230/460      |      |     |      |   |       |  |    |   |  |  |
| AMP          | 76/38        |      |     |      |   |       |  |    |   |  |  |
| RPM          | 880          |      |     |      |   |       |  |    |   |  |  |
| FRAME        | 326T         |      | HZ  | 60   |   |       |  | PH | 3 |  |  |
| SER.F.       | 1.15         | CODE | G   | DES  | B | CLASS |  | F  |   |  |  |
| NEMA-NOM-EFF | 90.2         | PF   | 67  |      |   |       |  |    |   |  |  |
| RATING       | 40C AMB-CONT |      |     |      |   |       |  |    |   |  |  |
| CC           | 010A         |      |     |      |   |       |  |    |   |  |  |
| DE           | 6312         |      | ODE | 6311 |   |       |  |    |   |  |  |
| ENCL         | TEFC         | SN   |     |      |   |       |  |    |   |  |  |
| BLANK        | 10:1 CT/VT   |      |     |      |   |       |  |    |   |  |  |

**AC Induction Motor Performance Data**

Record # 95264

Typical performance - not guaranteed values

| Winding: 12WGZ325-R001 |    |              | Type: 1272M                              |                           | Enclosure: TEFC |             |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------|-------------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                 |             |
| Rated Output (HP)      |    | 25           | Full Load Torque                         |                           | 149 LB-FT       |             |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line  |             |
| Full Load Amps         |    | 76/38        | Breakdown Torque                         |                           | 352 LB-FT       |             |
| R.P.M.                 |    | 880          | Pull-up Torque                           |                           | 183 LB-FT       |             |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                 | 210 LB-FT   |
| NEMA Design Code       |    | B            | KVA Code                                 | Starting Current          |                 | 180 A       |
| Service Factor (S.F.)  |    | 1.15         | No-load Current                          |                           | 22.59 A         |             |
| NEMA Nom. Eff.         |    | 90.2         | Power Factor                             | Line-line Res. @ 25°C     |                 | 0.263 Ω     |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                 | 59°C        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                 | 72°C        |
|                        |    |              |                                          | Locked-rotor Power Factor |                 | 32.8        |
|                        |    |              |                                          | Rotor inertia             |                 | 9.59 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 25 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|------|
| Power Factor    | 29    | 48    | 60    | 67    | 71    | 72    | 69   |
| Efficiency      | 86    | 90.6  | 91.3  | 91    | 90    | 88.4  | 90.4 |
| Speed           | 895   | 890   | 885   | 879   | 873   | 865   | 875  |
| Line amperes    | 23.64 | 26.97 | 31.98 | 38.33 | 45.98 | 55.16 | 42.9 |

ABB Motors and Mechanical Inc.

WINDING # 12WGZ325

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 880 RPM 460 V 1272M

TORQUES (LB-FT): PO=352 PU=183 LR=210 LRA=180





