

# ABB BALDOR RELIANCE III

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## Customer information packet

### EJPM4104T

30HP, 1770RPM, 3PH, 60HZ, 286JP, 1056M, TEFC, F

Class - None

Division - Not Applicable

**Specifications**

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | TEFC                                                           |
| Frame                          | 286JP                                                          |
| Frame Material                 | Iron                                                           |
| Frequency                      | 60.00 Hz                                                       |
| Haz Area Class and Group       | None                                                           |
| Haz Area Division              | Not Applicable                                                 |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 30.000 HP @ 60 HZ                                              |
| Phase                          | 3                                                              |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                               |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| Agency Approvals               | CSA<br>CSA EEV<br>UR                                           |
| Ambient Temperature            | 40 °C                                                          |
| Auxiliary Box                  | NO AUXILLARY BOX                                               |
| Auxiliary Box Lead Termination | None                                                           |
| Base Indicator                 | Rigid                                                          |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                        |
| Blower                         | None                                                           |
| Current @ Voltage              | 72.000 A @ 230.0 V<br>76.000 A @ 208.0 V<br>36.000 A @ 460.0 V |
| Design Code                    | A                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 93.6 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK                                                    |
| Front Face Code                | Standard                                                       |
| Front Shaft Indicator          | None                                                           |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | AA         |
| Type         | AC         |
| Mech. spec.  | 10E381     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 10WGY758   |
| Layout       | 10LYE381   |
| Eff. date    | 06-27-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#10       |
| Proprietary  | False      |
| Created date | 04-29-2010 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 36.0 a                |
| <b>Insulation Class</b>              | F                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>KVA Code</b>                      | G                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 10 AWG            |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 1056M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 4                     |
| <b>Overall Length</b>                | 31.51 IN              |
| <b>Power Factor</b>                  | 83                    |
| <b>Product Family</b>                | General Purpose       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | C-Face                |
| <b>Pulley Shaft Indicator</b>        | Pump Coupling Shaft   |
| <b>Rodent Screen</b>                 | None                  |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.250 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding    |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger         |
| <b>Speed</b>                         | 1770 rpm              |
| <b>Speed Code</b>                    | Single Speed          |
| <b>Starting Method</b>               | Direct on line        |
| <b>Thermal Device - Bearing</b>      | NONE (OLD)            |
| <b>Thermal Device - Winding</b>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |
| <b>Winding Thermal 1</b>             | None                  |

Winding Thermal 2

None

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**Nameplate**

| NP3443LUA |                           |                         |                |                           |           |         |        |        |            |  |  |  |      |
|-----------|---------------------------|-------------------------|----------------|---------------------------|-----------|---------|--------|--------|------------|--|--|--|------|
| CAT.NO.   | EJPM4104T                 |                         |                |                           | CUST. P/N |         |        |        | ENCL       |  |  |  | TEFC |
| SPEC.     | 10E381Y758G1              | CC                      | 010A           | FRAME                     | 286JP     | SER.NO. |        |        |            |  |  |  |      |
| HP        | 30                        |                         | CLASS          | F                         | HZ        | 60      |        |        |            |  |  |  |      |
| R.P.M.    | 1770                      |                         | PH.            | 3                         | DES.      | A       |        |        |            |  |  |  |      |
| VOLTS     | 230/460                   |                         |                | CODE                      | G         | ODE BRG | 6309   | DE BRG | 6312       |  |  |  |      |
| AMPS      | 72/36                     |                         |                |                           |           |         |        |        |            |  |  |  |      |
| RATING    | 40C AMB-CONT              |                         | NEMA NOM. EFF. |                           |           | 93.6    | GREASE |        | POLYREX EM |  |  |  |      |
| P.F.      | 83                        | SER.F.                  | 1.15           | CT6-60H(10:1)VT3-60H(20:1 |           |         |        |        |            |  |  |  |      |
| USABLE AT | 50HZ 30HP 190/380V 88/44A |                         |                | SF1.0                     |           |         |        |        |            |  |  |  |      |
| VOLTS     | AMPS                      | MAX. SPACE HEATER TEMP. |                |                           |           |         |        |        |            |  |  |  |      |

**AC Induction Motor Performance Data**

Record # 30986

Typical performance - not guaranteed values

| Winding: 10WGY758-R001 |    |              | Type: 1056M  |                                          | Enclosure: TEFC |                |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------|----------------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                 |                |
| Rated Output (HP)      |    | 30           |              | Full Load Torque                         |                 | 89.1 LB-FT     |
| Volts                  |    | 230/460      |              | Start Configuration                      |                 | direct on line |
| Full Load Amps         |    | 72/36        |              | Breakdown Torque                         |                 | 270 LB-FT      |
| R.P.M.                 |    | 1770         |              | Pull-up Torque                           |                 | 128 LB-FT      |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                 | 145 LB-FT      |
| NEMA Design Code       |    | B            | KVA Code     | Starting Current                         |                 | 235 A          |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                          |                 | 15.9 A         |
| NEMA Nom. Eff.         |    | 93.6         | Power Factor | Line-line Res. @ 25°C                    |                 | 0.226 Ω        |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                 | 57°C           |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                   |                 | 70°C           |
|                        |    |              |              | Locked-rotor Power Factor                |                 | 32             |
|                        |    |              |              | Rotor inertia                            |                 | 4.45 LB-FT2    |

**Load Characteristics 460 V, 60 Hz, 30 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 44   | 66   | 75   | 83   | 83   | 83   | 83   |
| Efficiency      | 90.6 | 93.7 | 94.3 | 94   | 93.2 | 93   | 93.6 |
| Speed           | 1794 | 1787 | 1781 | 1774 | 1766 | 1757 | 1769 |
| Line amperes    | 17.9 | 23   | 30.1 | 36.2 | 45.3 | 54.5 | 41.7 |

ABB Motors and Mechanical Inc.

WINDING # 10WGY758

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1770 RPM 460 V 1056M

TORQUES (LB-FT): PO=270 PU=128 LR=145 LRA=235





