

# ABB BALDOR RELIANCE III

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## Customer information packet

### EJMM3312T-G

10HP, 3500RPM, 3PH, 60HZ, 213JM, 3728M, OPSB, F

Class - None

Division - Not Applicable

**Specifications**

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | OPSB                                                           |
| Frame                          | 213JM                                                          |
| Frame Material                 | Steel                                                          |
| Frequency                      | 60.00 Hz                                                       |
| Haz Area Class and Group       | None                                                           |
| Haz Area Division              | Not Applicable                                                 |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 10.000 HP @ 60 HZ                                              |
| Phase                          | 3                                                              |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                               |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                             |
| Agency Approvals               | CSA<br>CSA EEV<br>NEMA PREMIUM<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              | 26.000 A @ 208.0 V<br>24.000 A @ 230.0 V<br>12.000 A @ 460.0 V |
| Design Code                    | B                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 90.2 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK                                                    |
| Front Shaft Indicator          | None                                                           |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  | 37M556     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 37WGL866   |
| Layout       | 37LYM556   |
| Eff. date    | 07-27-2024 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#14       |
| Proprietary  | False      |
| Created date | 02-02-2021 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 12.0 a                |
| <b>Insulation Class</b>              | H                     |
| <b>Inverter Code</b>                 | Not Inverter          |
| <b>KVA Code</b>                      | H                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 14 AWG            |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 3728M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 2                     |
| <b>Overall Length</b>                | 18.19 IN              |
| <b>Power Factor</b>                  | 85                    |
| <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>        | Tapped & Key          |
| <b>Rodent Screen</b>                 | Included              |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 0.875 IN              |
| <b>Shaft Ground Indicator</b>        | Shaft Grounding       |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger         |
| <b>Speed</b>                         | 3500 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>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |
| <b>Winding Thermal 1</b>             | None                  |
| <b>Winding Thermal 2</b>             | None                  |

**Nameplate**

| NP3553LUA                 |                               |      |     |      |   |       |    |       |  |
|---------------------------|-------------------------------|------|-----|------|---|-------|----|-------|--|
| CAT.NO.                   | EJMM3312T-G                   |      |     |      |   |       |    |       |  |
| SPEC.                     | 37M556L866G1                  |      |     |      |   |       |    |       |  |
| HP                        | 10                            |      |     |      |   |       |    |       |  |
| VOLTS                     | 230/460                       |      |     |      |   |       |    |       |  |
| AMPS                      | 24/12                         |      |     |      |   |       |    |       |  |
| RPM                       | 3500                          |      |     |      |   |       |    |       |  |
| FRAME                     | 213JM                         |      | HZ  | 60   |   |       | PH | 3     |  |
| SF                        | 1.15                          | CODE | H   | DES  | B | CLASS | H  |       |  |
| NEMA NOM. EFF             | 90.2                          | PF   | 85  |      |   |       |    |       |  |
| RATING                    | 40C AMB-CONT                  |      |     |      |   |       |    |       |  |
| CC                        | 010A                          |      |     |      |   |       |    |       |  |
| ENCL                      | OPSB                          | SN   |     |      |   |       |    |       |  |
| DE                        | 6309                          |      | ODE | 6206 |   |       |    |       |  |
| VPWM INVERTER READY       |                               |      |     |      |   |       |    |       |  |
| CT30-60(2:1) VT3-60(20:1) |                               |      |     |      |   |       |    |       |  |
| USABLE AT                 | 50HZ 10HP 190/380V 28.4/14.2A |      |     |      |   |       |    | SF1.0 |  |

**AC Induction Motor Performance Data**

Record # 86648

Preliminary Data Sheet

| Winding: 37WGL866-R003 |    |              | Type: 3728M  |                                          | Enclosure: OPSB |                |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------|----------------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                 |                |
| Rated Output (HP)      |    | 10           |              | Full Load Torque                         |                 | 15 LB-FT       |
| Volts                  |    | 230/460      |              | Start Configuration                      |                 | direct on line |
| Full Load Amps         |    | 24/12        |              | Breakdown Torque                         |                 | 50.8 LB-FT     |
| R.P.M.                 |    | 3475         |              | Pull-up Torque                           |                 | 23.7 LB-FT     |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                 | 29 LB-FT       |
| NEMA Design Code       |    | B            | KVA Code     | Starting Current                         |                 | 81.5 A         |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                          |                 | 4.72 A         |
| NEMA Nom. Eff.         |    | 89.5         | Power Factor | Line-line Res. @ 25°C                    |                 | 0.991 Ω        |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                 | 33°C           |
| S.F. Amps              |    | 27.6/13.8    |              | Temp. Rise @ S.F. Load                   |                 | 41°C           |
|                        |    |              |              | Locked-rotor Power Factor                |                 | 39.9           |
|                        |    |              |              | Rotor inertia                            |                 | 0.255 lb-ft²   |

**Load Characteristics 460 V, 60 Hz, 10 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 49   | 71   | 81   | 85   | 87   | 88   | 87   |
| Efficiency      | 85   | 90   | 90.8 | 90.3 | 89.2 | 87.8 | 89.6 |
| Speed           | 3576 | 3552 | 3527 | 3499 | 3469 | 3436 | 3479 |
| Line amperes    | 5.5  | 7.27 | 9.53 | 12.1 | 15   | 18.2 | 13.8 |

ABB Motors and Mechanical Inc.

WINDING # 37WGL866

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3475 RPM 460 V 3728M

TORQUES (LB-FT): PO=50.8 PU=23.7 LR=29 LRA=81.5





