

# ABB BALDOR RELIANCE III

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## Customer information packet

### EJMM2524T

15HP, 1180RPM, 3PH, 60HZ, 284JM, 4038M, OPSB, F

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | OPSB                                                           |
| <b>Frame</b>                          | 284JM                                                          |
| <b>Frame Material</b>                 | Steel                                                          |
| <b>Frequency</b>                      | 60.00 Hz                                                       |
| <b>Motor Letter Type</b>              | Three Phase                                                    |
| <b>Output @ Frequency</b>             | 15.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                              |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                               |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| <b>Agency Approvals</b>               | CSA<br>CSA EEV<br>NEMA PREMIUM<br>UR                           |
| <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>              | 42.000 A @ 208.0 V<br>41.000 A @ 230.0 V<br>20.500 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 91.7 %                                                         |
| <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                                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | L          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 40E211     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 40WGX775   |
| <b>Layout</b>       | 40LYE211   |
| <b>Eff. date</b>    | 01-31-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#10       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 06-05-2015 |

|                               |                       |
|-------------------------------|-----------------------|
| High Voltage Full Load Amps   | 20.5 a                |
| Insulation Class              | F                     |
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | G                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Exit               | Ko Box                |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG            |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 4038M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 6                     |
| Overall Length                | 24.69 IN              |
| Power Factor                  | 75                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | C-Face                |
| Pulley Shaft Indicator        | Tapped & Key          |
| Rodent Screen                 | Included              |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.250 IN              |
| Shaft Extension Location      | Pulley End            |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 1180 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**

| NP2138LUA    |                           |    |    |        |          |       |            |       |         |           |        |      |
|--------------|---------------------------|----|----|--------|----------|-------|------------|-------|---------|-----------|--------|------|
| CAT.NO.      | EJMM2524T                 |    |    |        | P/N      |       |            |       |         | ENCLOSURE |        | OPSB |
| SPEC.        | 40E211X775                |    |    | CC     | 010A     | FRAME |            | 284JM | S/N     |           |        |      |
| HP           | 15                        |    |    |        | CLASS    |       | F          | HZ    | 60      |           |        |      |
| RPM          | 1180                      |    |    |        | PH       | 3     | DES        |       | B       |           |        |      |
| VOLT         | 230/460                   |    |    |        | KVA-CODE |       |            | G     | ODE BRG | 6309      | DE BRG | 6312 |
| AMP          | 41/20.5                   |    |    |        |          |       |            |       |         |           |        |      |
| RATING       | 40C AMB-CONT              |    |    |        | GREASE   |       | POLYREX EM |       |         |           |        |      |
| NEMA-NOM-EFF | 91.7                      | PF | 75 | SER.F. | 1.15     |       |            |       |         |           |        |      |
|              | 50HZ 15HP 190/380V 48/24A |    |    |        |          |       | SF1.0      |       |         |           |        |      |
| HTR-VOLTS    | HTR-AMPS                  |    |    |        |          |       |            |       |         |           |        |      |

**AC Induction Motor Performance Data**

Record # 30818

Typical performance - not guaranteed values

| Winding: 40WGX775-R001 |    |              |              | Type: 4038M                              |                       | Enclosure: OPSB |           |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------------|-----------------|-----------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                 |           |
| Rated Output (HP)      |    | 15           |              | Full Load Torque                         |                       | 66.8 LB-FT      |           |
| Volts                  |    | 230/460      |              | Start Configuration                      |                       | direct on line  |           |
| Full Load Amps         |    | 41/20.5      |              | Breakdown Torque                         |                       | 185 LB-FT       |           |
| R.P.M.                 |    | 1180         |              | Pull-up Torque                           |                       | 87.7 LB-FT      |           |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                       | 105 LB-FT       |           |
| NEMA Design Code       |    | B            | KVA Code     | G                                        | Starting Current      |                 | 116 A     |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                          |                       | 10.1 A          |           |
| NEMA Nom. Eff.         |    | 91.7         | Power Factor | 75                                       | Line-line Res. @ 25°C |                 | 0.67748 Ω |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                       | 26°C            |           |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                   |                       | 31°C            |           |
|                        |    |              |              | Locked-rotor Power Factor                |                       | 34              |           |
|                        |    |              |              | Rotor inertia                            |                       | 4.65 LB-FT2     |           |

**Load Characteristics 460 V, 60 Hz, 15 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 37     | 58     | 69     | 75     | 78     | 79     | 77   |
| Efficiency      | 85.5   | 90.7   | 91.8   | 91.8   | 91.2   | 89.9   | 91.4 |
| Speed           | 1195.6 | 1191.7 | 1187.6 | 1182.8 | 1177.5 | 1169.8 | 1180 |
| Line amperes    | 11.1   | 13.4   | 16.6   | 20.4   | 24.8   | 30.7   | 23   |

ABB Motors and Mechanical Inc.

WINDING # 40WGX775

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1180 RPM 460 V 4038M

TORQUES (LB-FT): PO=185 PU=87.7 LR=105 LRA=116





