

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM2276

7.5HP, 1180RPM, 3PH, 60HZ, 256U, 0954M, TEFC, F

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                           |
| <b>Frame</b>                          | 256U                                                           |
| <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>             | 7.500 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>               | CURUSEEV<br>NEMA PREMIUM<br>NEMA PREMIUM (OLD LOGO)            |
| <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>              | 21.400 A @ 230.0 V<br>25.000 A @ 208.0 V<br>10.700 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 91.0 %                                                         |
| <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                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | S          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 09C111     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 09WGX827   |
| <b>Layout</b>       | 09LYC111   |
| <b>Eff. date</b>    | 11-14-2023 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#12       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 05-29-2015 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 10.7 a                |
| <b>Insulation Class</b>              | F                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>IP Rating</b>                     | NONE                  |
| <b>KVA Code</b>                      | J                     |
| <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 @ 12 AWG            |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 0954M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 6                     |
| <b>Overall Length</b>                | 23.11 IN              |
| <b>Power Factor</b>                  | 71                    |
| <b>Product Family</b>                | General Purpose       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | Standard              |
| <b>Pulley Shaft Indicator</b>        | Standard              |
| <b>Rodent Screen</b>                 | None                  |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.375 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>                         | 1180 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   |



|                   |      |
|-------------------|------|
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

**Nameplate**

| NP1259L      |              |      |     |      |   |    |    |   |  |
|--------------|--------------|------|-----|------|---|----|----|---|--|
| CAT.NO.      | EM2276       |      |     |      |   |    |    |   |  |
| SPEC.        | 09C111X827G1 |      |     |      |   |    |    |   |  |
| HP           | 7.5          |      |     |      |   |    |    |   |  |
| VOLTS        | 230/460      |      |     |      |   |    |    |   |  |
| AMP          | 21.4/10.7    |      |     |      |   |    |    |   |  |
| RPM          | 1180         |      |     |      |   |    |    |   |  |
| FRAME        | 256U         |      | HZ  | 60   |   |    | PH | 3 |  |
| SER.F.       | 1.15         | CODE | J   | DES  | A | CL | F  |   |  |
| NEMA-NOM-EFF | 91           | PF   | 71  |      |   |    |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |    |    |   |  |
| CC           | 010A         |      |     |      |   |    |    |   |  |
| DE           | 6309         |      | ODE | 6208 |   |    |    |   |  |
| ENCL         | TEFC         | SN   |     |      |   |    |    |   |  |

**AC Induction Motor Performance Data**

Record # 1770

Typical performance - not guaranteed values

| Winding: 09WGX827-R001 |    |              | Type: 0954M                              |                           | Enclosure: TEFC       |             |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|-------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |             |        |
| Rated Output (HP)      |    | 7.5          | Full Load Torque                         |                           | 32.4 LB-FT            |             |        |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |             |        |
| Full Load Amps         |    | 21.4/10.7    | Breakdown Torque                         |                           | 99.2 LB-FT            |             |        |
| R.P.M.                 |    | 1180         | Pull-up Torque                           |                           | 39.4 LB-FT            |             |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 57.8 LB-FT  |        |
| NEMA Design Code       |    | A            | KVA Code                                 | J                         | Starting Current      |             | 72.5 A |
| Service Factor (S.F.)  |    | 1.15         | No-load Current                          |                           | 5.84 A                |             |        |
| NEMA Nom. Eff.         |    | 91           | Power Factor                             | 71                        | Line-line Res. @ 25°C |             | 0.89 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 31°C        |        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                       | 36°C        |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 25.8        |        |
|                        |    |              |                                          | Rotor inertia             |                       | 4.34 LB-FT2 |        |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 32   | 52   | 63   | 71   | 73   | 75   | 72   |
| Efficiency      | 83   | 89.7 | 91.5 | 91.5 | 91.8 | 91.2 | 91.9 |
| Speed           | 1196 | 1192 | 1189 | 1184 | 1179 | 1173 | 1181 |
| Line amperes    | 6.34 | 7.49 | 8.87 | 10.7 | 12.9 | 15.7 | 12   |

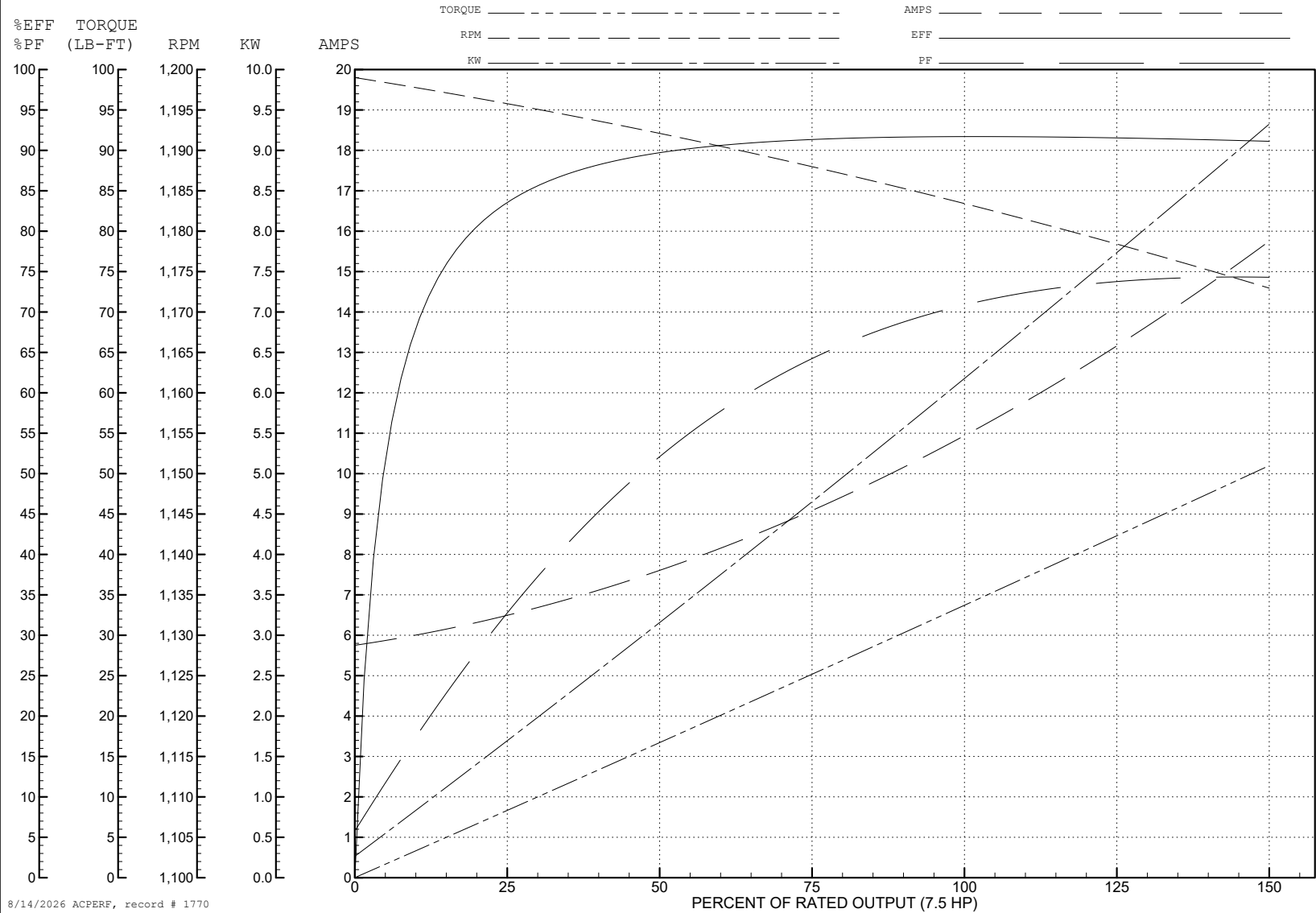
ABB Motors and Mechanical Inc.

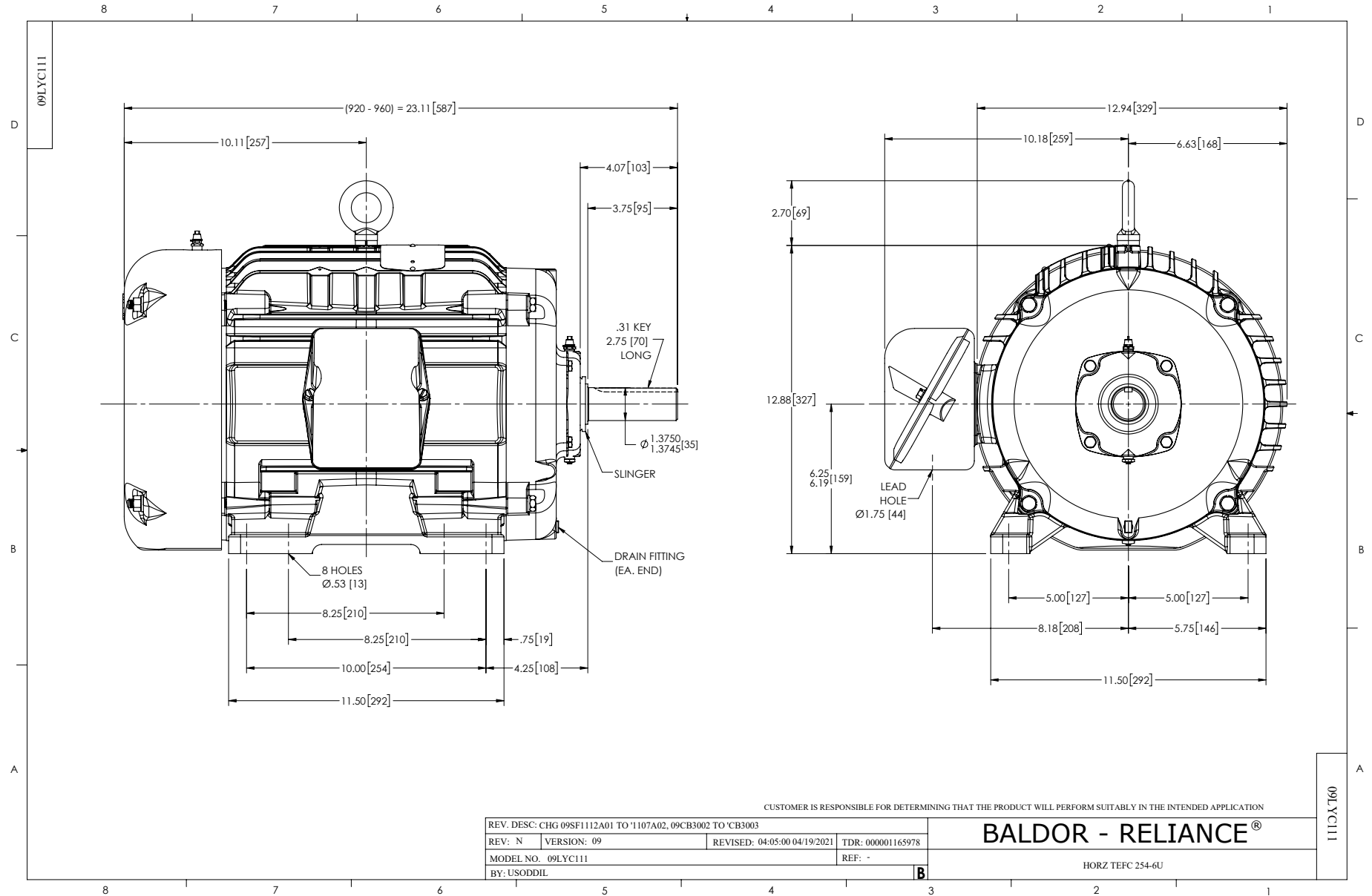
WINDING # 09WGX827

Typical performance - not guaranteed values.

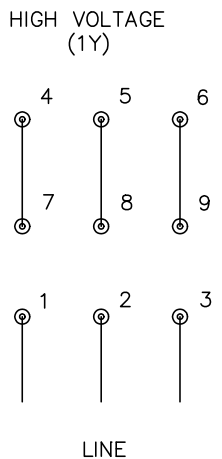
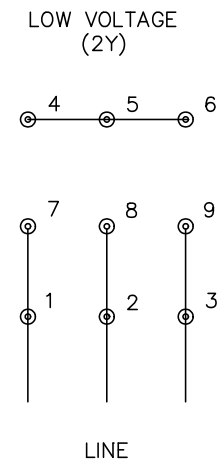
7.5 HP 3 PH 60 HZ 1180 RPM 460 V 0954M

TORQUES (LB-FT): PO=99.2 PU=39.4 LR=57.8 LRA=72.5





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
  - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|                                           |         |                         |              |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005