



1. GENERAL

1. SECTION INCLUDES

A. REDD™ (RENLITA ELECTRIC DIRECT DRIVE) MOTOR SYSTEM:

1. Direct shaft mounted motor w/ gearbox assembly and control panel for Renlita brand products.

2. RELATED SECTIONS

- A. Section 16050 - Basic Electrical Materials and Methods: Installation and requirements for electrical connections.
- B. National Electrical Manufacturers Association (NEMA): NEMA ICS 4 - Industrial Control and Systems: Enclosures.

1. QUALITY ASSURANCE

- A. REDD™ Motor System shall be warranted against manufacturing defects for a period of 2 years.

2. DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly indicating manufacturer, material, and location of installation.
- B. Storage: Store materials in a dry area indoor and protected from damage and in accordance with manufacturer's instructions.
- C. Handling: Handle and lift all items carefully during installation to prevent damage and protect finishes.

D. PRODUCTS

1. MANUFACTURER

- A. Renlita Doors North America, LLC; www.renlitadoors.com; 2430 Albert Broadfoot St. Bonham, TX 75418
- B. Substitutions: Not Permitted

3. **REMOTE OPERATED BALANCING DAMPERS**

- A. Model: REDD™ (Renlita Electric Direct Drive), 1HP AC motor with 1:10 gear ratiion gearbox direct mounted to 1" door drive shaft. Motor is provided with control panel (mounted separately) and is controlled by a touch screen control station, photo eyes, and hardware necessary for installation of motor and control panel.
1. Primary Speed Reduction: Worm gear-in-oil-bath reducer. Gear ratio is 10:1 with shaft speed of 34 RPM.
 2. Motor Travel: Motor up and down travel is set digitally in the control panel and door position is established by integrated shaft position encoder.
 3. Control Station: Touch screen control station provided as standard and is capable of being mounted into single gang electrical box (not provided by Renlita). Minimum dimensions of the electrical box are 3"x2"x2 1/2" and the box shall be square corner welded construction.
 4. Primary Entrapment Device: NEMA 4 Monitored Photo Sensors mounted maximum of 6 inches above the finished floor at each side of the door opening interior.
 5. Secondary Entrapment Device: REDD ALERT™ obstruction sensing technology. Door controls shall monitor the door operation for obstruction during the close cycle. If amperage increases above set limit, the motor shall stop and reverse direction. The sensitivity is set by a qualified installer during initial commissioning and shall be checked and adjusted annually.
 - 6.
- B. Temperature Rating: -15°F to 125°F.
1. 100% duty cycle. Unlimited number of operations per hour.
- C. Construction:
1. Frame: 18.52" x 4.31" x 8.425"
 2. Frame Color: RAL 9005 Black
 3. Gearbox Oil Type: CLP VG680 Mineral Oil
 4. Bearings: Sealed Bearings - pre lubricated from factory
 5. Mounting: M4 - Vertical Orientation or M3 Horizontal Orientation.
 6. Power Requirements: 110 volt AC, Single Phase, 6 amps.

4. **Accessories:**

- A. Universal Radio Receiver: Manufactured by Liftmaster™ model 850 LM.
1. Capable of 310 Mhz, 315 Mhz, or 390 Mhz radio transmitters with Security + 2.0 Remotes.

2. Direct wires into Renlita REDD™ control panel. Power and controls are administered by REDD™ Control panel.

5. **QUALITY CONTROL**

A. Factory Tests:

1. Cycle each REDD™ motor head and gearbox before packaging to insure proper operation.
2. Bench test each touch screen control panel prior to packaging for proper operation and configuration.

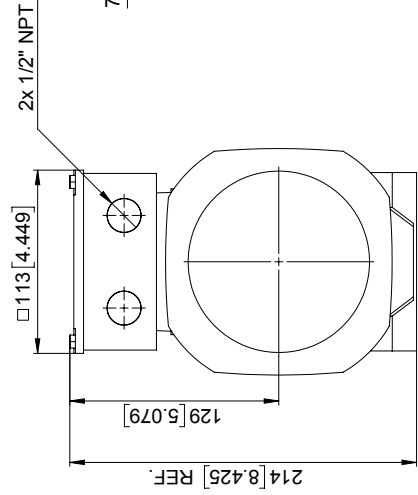
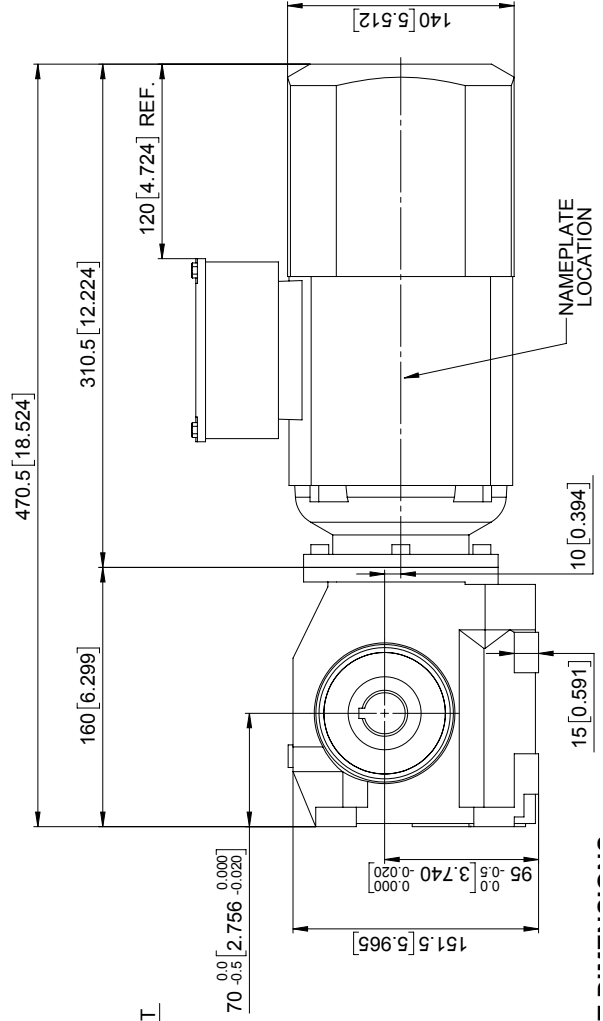
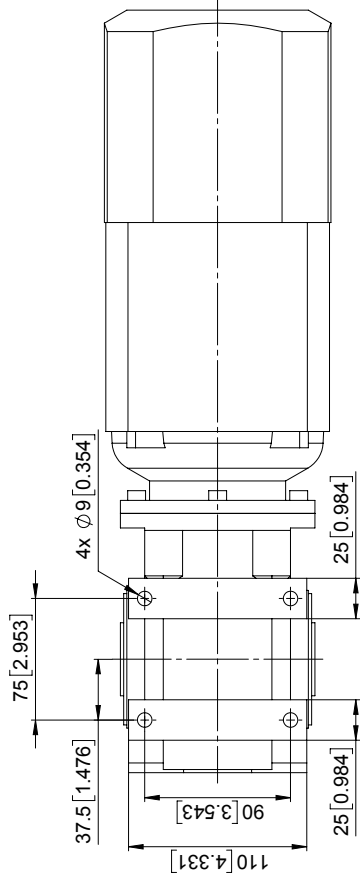
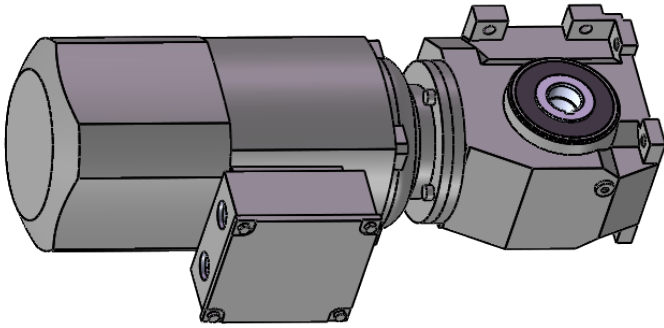
6. **EXECUTION**

- A. Notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result under the project conditions. Commencement of installation constitutes acceptance of conditions.
- B. Complete installation and wiring in accordance with Renlita installation manual for REDD motor system. Ensure proper orientation for motor system in accordance with written instructions.

7. **INSTALLATION**

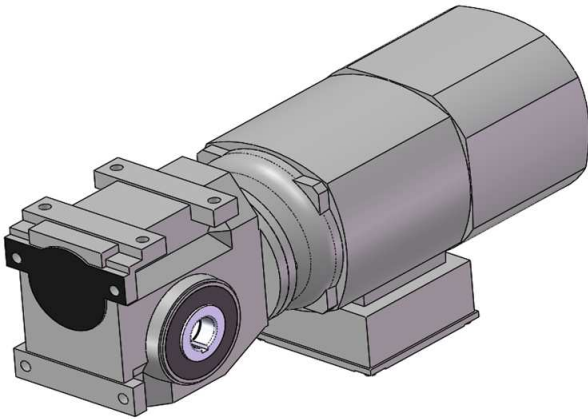
- A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction. Test for proper operation and adjust until satisfactory results are obtained. Demonstrate operation to owner's personnel.

END OF SECTION

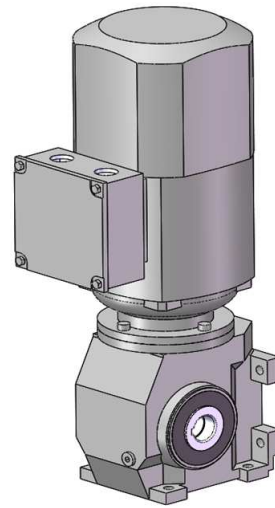


Acceptable Orientation for Installation:

M3



M4



M2

