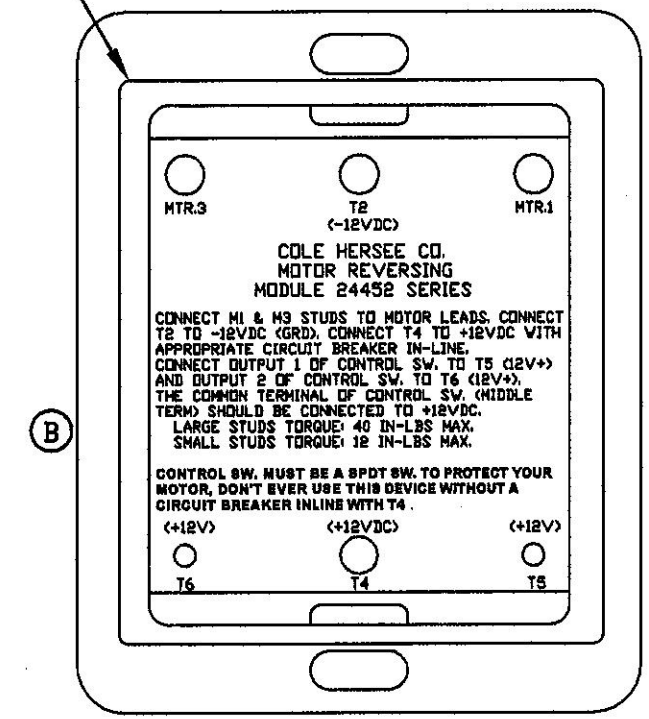
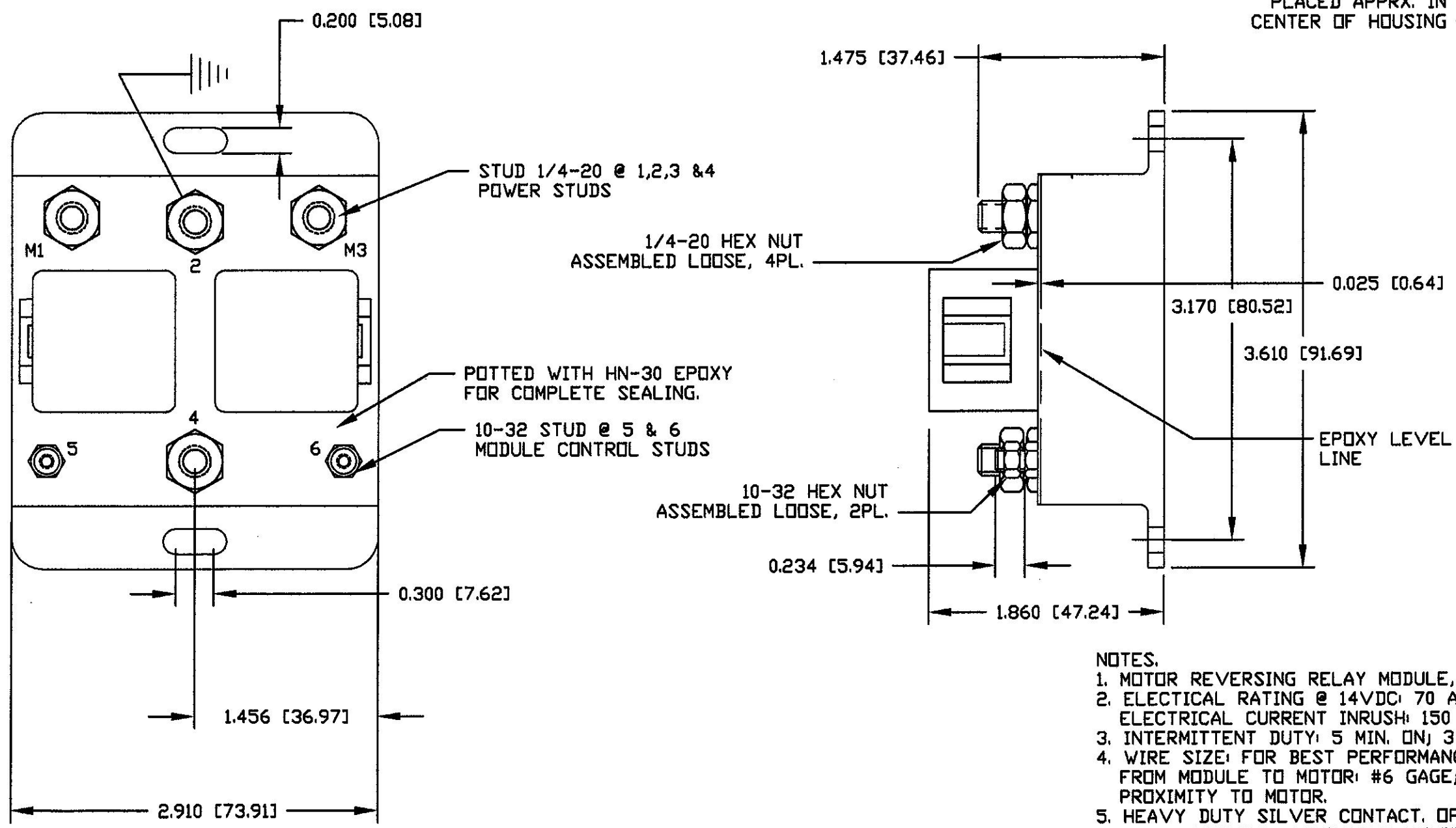


**Revision Control Record**

Rev.	Description of Change	ECN No.	Date
A	PRODUCT RELEASE	06212	5/15/06
B	LABEL ADDED	06371	11/15/06



- NOTES.**
1. MOTOR REVERSING RELAY MODULE, WITH DYNAMIC BRAKE CAPABILITY.
  2. ELECTRICAL RATING @ 14VDC: 70 AMP INTERMITTENT; 50A CONTINUOUS. ELECTRICAL CURRENT INRUSH: 150 AMPS.
  3. INTERMITTENT DUTY: 5 MIN. ON; 3 MIN. OFF. RELAY PULL-IN VOLTAGE: 7.8VDC MIN.
  4. WIRE SIZE: FOR BEST PERFORMANCE, RECOMMENDED WIRE SIZE FOR CONNECTION FROM MODULE TO MOTOR: #6 GAGE; #8 GAGE MIN. WHEN MOUNTING MODULE IN CLOSE PROXIMITY TO MOTOR.
  5. HEAVY DUTY SILVER CONTACT. OPERATIONAL LIFE: 25,000 CYCLES MINIMUM.
  6. ENVIRONMENTAL: VIBRATION RESISTANCE: 10-55HZ, DOUBLE AMPLITUDE 1.5MM. IP 67 FOR COMPLETE PROTECTION AGAINST DIRT AND MOISTURE PENETRATION.
  7. OPERATING TEMP: -40°C TO 85°C.
  8. IGNITION PROTECTED.
  9. ALL HARDWARE TIN PLATED TO PREVENT CORROSION.
  10. STUD WIRING TORQUE: 1/4-20 STUDS, 40 IN-LBS MAX. 10/32 STUDS: 12 IN-LBS MAX.
  11. ALL DIMENSIONS ARE REFERENCE.

**MODULE WIRING CHART**

STUDS	FUNCTION
M1 & M3	MOTOR LEADS
2	GROUND (B-, 12VDC)
4	POSITIVE (B+, 12VDC)
5	FORWARD (CONT. OR MOM. B+)
6	REVERSE (CONT. OR MOM. B+)

<p><b>Tolerances:</b> Unless otherwise specifically noted, the following are default tolerances:</p> <ul style="list-style-type: none"> <li>• 2-place Decimal Dimensions <math>\pm .02"</math></li> <li>• 3-place Decimal Dimensions <math>\pm .005"</math></li> <li>• Angular Dimensions <math>\pm 1.0</math> Deg.</li> <li>• Metric: Refer to equivalent English Dimension Tolerance</li> </ul> <p>»» NOTE: All tolerances are Non-Cumulative. ««</p> <p><b>Dimensional Units:</b> All dimensions are expressed in inches except those shown in brackets (mm) are expressed in millimeters</p> <p>"REF" or an Asterisk (*) = Non-Toleranced Reference Dimension, shown for clarification purposes only.</p>	<p><b>PROPRIETARY INFORMATION:</b> This Engineering Drawing, and the information contained herein, is proprietary to Cole Hersee Company and may not be disclosed, re-produced, or in any other way transmitted or communicated to any other party without the express written consent of an authorized representative of Cole Hersee Company.</p> <p><b>DESIGN CONTROL:</b> It is the responsibility of the individual using/referencing this drawing to ensure that the noted design revision level agrees with the revision level of the Controlled Document (Master Drawing). This is a NON-CONTROLLED DOCUMENT unless otherwise specifically noted.</p> <p>DO NOT SCALE - Dimensional variation may occur during printing/reproduction.</p>	<p><b>Special Characteristics:</b></p> <ul style="list-style-type: none"> <li>⊠ Critical Characteristic, relating to Safety and/or Regulatory Compliance</li> <li>ⓧ Significant Characteristic relating to Process Control (SPC)</li> <li>Ⓚ Control Dimension relating to Form - Fit - Function as defined by Cole Hersee Company and/or the Customer</li> </ul> <p>(Note that the identification of any Characteristic as being "Special" does not alter the requirement that ALL specified dimensions &amp; tolerances must be met.)</p>	<p><b>Cole Hersee Co.</b></p> <p>20 Old Colony Ave., South Boston, MA, 02127 Phn: 617-268-2100 Web: www.colehersee.com</p> <p><b>REVERSING RELAY MODULE</b></p>		
<p>Used On or Ref: <b>EX28178</b></p>	<p>Scale: <b>1:1</b></p>	<p>Drawn By: <b>G. AUGUSTE</b></p>	<p>Date Drawn: <b>10/16/06</b></p>	<p>Responsible Engineer: <b>G. AUGUSTE</b></p>	<p><b>Pg. 1</b></p>
<p>Description: <b>REVERSING RELAY MODULE</b></p>					<p>Current Rev. <b>B</b></p>
<p>Drawing / Part No.: <b>24452</b></p>					