ELECTRICAL REQUIREMENTS:

(1) COIL CURRENT: MUST OPERATE (EITHER DIRECTION) IN ACCORDANCE WITH TABLE 1.

(2) COIL RESISTANCE: IN ACCORDANCE WITH TABLE 1.

(3) CONTACT RESISTANCE: SHALL BE 1.0 MILLIOMH WITH TESTED INTO A 3 MILLIAMPERE DC CURRENT.

(4) DIELECTRIC STRENGTH:

(a) AT SEA LEVEL: 1000 VOLTS RMS MINIMUM FOR 5 SECONDS WITHOUT DAMAGE,ARCING OR BREAKDOWN BETWEEN EACH SWITCHING CIRCUIT AND OTHER CIRCUITS.

(b) CONTACTS AND FRAME.

(5) INSULATION RESISTANCE: 1,000 MEGOHMS MINIMUM AT 500 VOLTS DC BETWEEN MUTUALLY INSULATED TERMINALS, OPEN SWITCHING CONTACTS ENERGIZED OR NOT, COIL AND CASE AT PLUS 25 DEGREES CENTIGRADE (1000 MEGOHMS AT 125 DEGREES CENTIGRADE), CONTACTS AND FRAME.

(6) OPERATE TIME, BOTH DIRECTIONS: EACH 3 MILLISECONDS MAXIMUM AT 1000 VOLTS RMS MINIMUM AT 500 VOLTS DC BETWEEN CONTACTS AND FRAME.

(7) TRANSFER TIME: 1.0 MILLISECOND MAXIMUM.

(8) CONTACT BOUNCE: 2.0 MILLISECONDS MAXIMUM.

(9) CONTACT CHATTER: 10.0 MICROSECONDS MAXIMUM DURING VIBRATION AND SHOCK AS SPECIFIED IN ND 1002046.

MARKING:

(1) UNITS SHALL BE MARKED IN ACCORDANCE WITH MIL-R-5757.

(a) AT SEA LEVEL: 1000 VOLTS RMS MINIMUM FOR 5 SECONDS WITHOUT DAMAGE,ARCING OR BREAKDOWN BETWEEN EACH SWITCHING CIRCUIT AND OTHER CIRCUITS.

(b) CONTACTS AND FRAME.

(5) INSULATION RESISTANCE: 1,000 MEGOHMS MINIMUM AT 500 VOLTS DC BETWEEN MUTUALLY INSULATED TERMINALS, OPEN SWITCHING CONTACTS ENERGIZED OR NOT, COIL AND CASE AT PLUS 25 DEGREES CENTIGRADE (1000 MEGOHMS AT 125 DEGREES CENTIGRADE), CONTACTS AND FRAME.

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(1) UNITS SHALL BE MARKED IN ACCORDANCE WITH MIL-R-5757.

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(6) OPERATE TIME, BOTH DIRECTIONS: EACH 3 MILLISECONDS MAXIMUM AT 1000 VOLTS RMS MINIMUM AT 500 VOLTS DC BETWEEN CONTACTS AND FRAME.

(7) TRANSFER TIME: 1.0 MILLISECOND MAXIMUM.

(8) CONTACT BOUNCE: 2.0 MILLISECONDS MAXIMUM.

(9) CONTACT CHATTER: 10.0 MICROSECONDS MAXIMUM DURING VIBRATION AND SHOCK AS SPECIFIED IN ND 1002046.
(3) EACH RELAY SHALL OPERATE FOR 5,000 CYCLES.
(4) EACH RELAY SHALL BE MONITORED FOR OPENS, SHORTS, AND CONTACT RESISTANCE WHICH SHALL NOT EXCEED 1000 OHMS.
(5) OCCURRENCE OF ANY OF THESE EVENTS SHALL CONSTITUTE A MISS AND SHALL BE CAUSE FOR REJECTION OF RELAY.
(6) CERTIFICATION OF THESE MEASUREMENTS SHALL ACCOMPANY EACH SHIPMENT. ONE COPY OF A TABULATION SHOWING THE NUMBER OF RELAYS SATISFYING THE 5,000 CYCLE TESTS, THE NUMBER OF RELAYS FAILING THE 5,000 CYCLE TESTS, AND THE TIME OF FAILURE SHALL ACCOMPANY EACH SHIPMENT.
(7) INSTALLATION REQUIREMENTS SPECIFIED IN NOTES 2C1, 3, 6, 7, 8 FOR EACH RELAY TAKEN BEFORE AND AFTER BURN-IN SHALL BE SUBMITTED WITH EACH LOT.

TABLE 1

<table>
<thead>
<tr>
<th>NO.</th>
<th>RESISTANCE AT 25°C</th>
<th>MUST OPERATE MAXIMUM AMPLITUDE (EITHER DIRECTION)</th>
<th>MAX CURRENT CONTINUOUS</th>
<th>SUGGESTED MAXIMUM OPERATING VOLTAGE, VOLTS AC MAX.</th>
<th>MINIMUM RESISTANCE OPEN CRIRCUIT</th>
<th>MINIMUM PULL-IN POWER (SENSITIVITY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>190</td>
<td>30</td>
<td>10</td>
<td>12</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>2</td>
<td>850</td>
<td>15</td>
<td>20</td>
<td>26</td>
<td>175</td>
<td>210/190</td>
</tr>
</tbody>
</table>

C. QUALIFICATION REQUIREMENTS:

(1) LIFE: LIFE OF THIS RELAY SHALL BE 100,000 CYCLES MINIMUM WHEN TESTED PER 100,000 CYCLES. FOR THE LIFE TESTS, THE CLASSIFICATION OF THIS RELAY MAY BE SPECIFIED IN A LIFE TEST REPORT.
(2) ENVIRONMENTAL REQUIREMENTS:

(a) HUMIDITY (MOISTURE RESISTANCE): UNITS SHALL BE CAPABLE OF WITHSTANDING RELATIVE HUMIDITY UP TO 98 PERCENT.
(b) OPERATING TEMPERATURE RANGE: UNITS SHALL BE CAPABLE OF OPERATING WITHIN THE ELECTRICAL REQUIREMENTS OF THIS SPECIFICATION WHEN EXPOSED TO AMBIENT TEMPERATURES FROM MINUS 65 DEGREES CENTIGRADE TO PLUS 125 DEGREES CENTIGRADE.
(c) THERMAL SHOCK: UNITS SHALL BE CAPABLE OF WITHSTANDING THERMAL SHOCK FROM MINUS 65 DEGREES CENTIGRADE TO PLUS 125 DEGREES CENTIGRADE.
(d) THE SALT SPRAY TEST PER MIL-R-5757 IS NOT APPLICABLE.

A. SPECIAL CONDITIONING:

(1) THE MANUFACTURER SHALL SUBJECT EACH RELAY TO THE MISS TEST AS FOLLOWS:
(a) LOAD SHALL BE 20 MICROAMPERES MAXIMUM (RESISTIVE) AT 20 VOLTS MAXIMUM OPEN CIRCUIT VOLTAGE.
(b) TEST SPEED SHALL BE 5 CYCLES, OR LESS, PER SECOND.