All weld construction

Contact arrangement

1 PDT

Qualified to

MIL-PRF-83536/36

## PRINCIPLE TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Contacts rated at</th>
<th>115 Vac 60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>0.1 lbs. max</td>
</tr>
<tr>
<td>Dimensions</td>
<td>1.01in x 0.51in x 1in</td>
</tr>
</tbody>
</table>

Special models available upon request

Hermetically sealed, corrosion resistant metal can

## CONTACT ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Contact rating per pole and load type [1]</th>
<th>Load current in Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>115 Vac, 60 Hz, 1Ø (CASE GROUNDED)</td>
</tr>
<tr>
<td>Resistive</td>
<td>10</td>
</tr>
<tr>
<td>Inductive</td>
<td>10</td>
</tr>
<tr>
<td>Motor</td>
<td>8</td>
</tr>
<tr>
<td>Lamp</td>
<td>4</td>
</tr>
<tr>
<td>Overload</td>
<td>20</td>
</tr>
<tr>
<td>Rupture</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Applicable sockets:
SO-1063-9033/9034

Application Notes:
002
007
023
COIL CHARACTERISTICS (Vdc/Vac)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal operating voltage</td>
<td>28</td>
<td>12</td>
<td>6</td>
<td>48</td>
<td>28</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Maximum operating voltage</td>
<td>29</td>
<td>14.5</td>
<td>7.3</td>
<td>50</td>
<td>29</td>
<td>14.5</td>
<td>7.3</td>
</tr>
<tr>
<td>Maximum pickup voltage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Cold coil at +125°C</td>
<td>18</td>
<td>9</td>
<td>4.5</td>
<td>36</td>
<td>18</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td>- During high temp test at +125°C</td>
<td>19.8</td>
<td>9.9</td>
<td>5</td>
<td>38</td>
<td>19.8</td>
<td>9.9</td>
<td>5</td>
</tr>
<tr>
<td>- During continuous current test at +125°C</td>
<td>22.5</td>
<td>11.25</td>
<td>5.7</td>
<td>42</td>
<td>22.5</td>
<td>11.25</td>
<td>5.7</td>
</tr>
<tr>
<td>Maximum drop-out voltage</td>
<td>7</td>
<td>4.5</td>
<td>2.5</td>
<td>14</td>
<td>7</td>
<td>4.5</td>
<td>2.5</td>
</tr>
<tr>
<td>coil resistance Ω ±10% at +25°C or max coil current (AMPS) at +25°C</td>
<td>320 Ω</td>
<td>80 Ω</td>
<td>20 Ω</td>
<td>+20%</td>
<td>1000 Ω</td>
<td>320 Ω</td>
<td>80 Ω</td>
</tr>
</tbody>
</table>

GENERAL CHARACTERISTICS

- Temperature range: -70°C to +125°C
- Minimum operating cycles (life) at rated load: 25,000
- Minimum operating cycles (life) at 25% rated load: 100,000
- Dielectric strength at sea level: 1250 Vrms
- Dielectric strength at altitude 80,000 ft: 500 Vrms [2]
- Insulation resistance:
  - Initial (500 Vdc): 100 M Ω min
  - After environmental tests (500 Vdc): 50 M Ω min
- Sinusoidal vibration (A, D and J mounting): 0.12 d.a. / 10 to 70 Hz
- Random vibration:
  - Applicable specification: MIL-STD-202
  - Method: 214
  - Test condition - A, D and J mounting: 1G (0.4G²/Hz, 50 to 2000 Hz)
  - Duration: 15 minutes each plane
- Shock (A, D and J mounting): 200G / 6 ms
- Maximum contact opening time under vibration and shock: 10 µs
- Operate time at nominal voltage - Series JS @ 25°C: 10 ms max
- Release time at nominal voltage - Series JS @ 25°C: 10 ms max
- Contact make bounce at nominal voltage @ 25°C: 1 ms max
- Contact release break bounce at nominal voltage @ 25°C: 0.1 ms max
- Weight maximum: 0.1lbs

Unless otherwise noted, the specified temperature range applies to all relay characteristics.
MOUNTING STYLES

MOUNTING STYLE A

MOUNTING STYLE D

FOR USE WITH TRACK MOUNT SYSTEM. NOTE: TRACK SYSTEM NOT AVAILABLE FROM LEACH.

MOUNTING STYLE J

MOUNTING STYLE W

Dimensions in inches
Tolerances, unless otherwise specified, ±0.03 in
TERMINAL TYPES

TERMINAL TYPE 1
FINISH:
CASE—PAINTED LEACH BLUE
TERMINALS—TIN/LEAD

TERMINAL TYPE 2
FINISH:
CASE—PAINTED LEACH BLUE
TERMINALS—TIN/LEAD

TERMINAL TYPE 3
FINISH:
CASE—TIN PLATE
PINS—GOLD PLATE

Dimensions in inches
Tolerances, unless otherwise specified, ±0.03 in

CONTACT ROBISON ELECTRONICS, 5901 LASER ST, LAS VEGAS, NV 89121, For Insulator Part Number. Not included with relay.
DIAGRAMS

SCHEMATIC DIAGRAM

STANDARD TERMINAL LAYOUT

WIRING DIAGRAM

Bottom View

STANDARD TOLERANCE: \( \pm 0.010 \)

[1] COIL POLARITY NOT APPLICABLE TO AC VERSIONS.

NUMBERING SYSTEM

Basic series designation

1. Mounting styles (A, D, E, G, J)
2. Terminal types (1, 2, 4)
3. Coil voltage, see coil characteristics (A, B, C, M, N, R, V)
4. XXX Designators

Example: JS-D1A-XXX
JS-D1A (Commercial)
JS-D2A-300 L (MIL)
JS-D1A-123 (Customer Part)

NOTES

1. Standard Intermediate current test applicable.
2. 500 Vrms with silicone gasket compressed, 350 Vrms all other conditions.
3. Applicable military specification – MIL-PRF-83536/36
4. "N," "R" & "V" coils have back EMF suppression to 42 volts maximum.
5. Relay will not operate, but will not be damaged by application of reverse polarity to coil.

For any inquiries, please contact your local Esterline Power Systems representative