ENGINEERING DATA SHEET

SERIES KA
RELAY - NONLATCH - AC COIL
4 PDT, 10 AMP

APPLICATION NOTES:
102
007
023

APPLICABLE SOCKET:
SO-1048-8776/8779

PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at 28 Vdc; 115 Vac, 400 Hz, 1Ø and 115/200 Vac, 400 Hz 3Ø
Weight 0.155lb max
Dimensions 1.10in x 1.10in x 1.00in
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>@28 Vdc</td>
</tr>
<tr>
<td>Resistive</td>
<td>10</td>
</tr>
<tr>
<td>Inductive [3]</td>
<td>8</td>
</tr>
<tr>
<td>Motor</td>
<td>4</td>
</tr>
<tr>
<td>Lamp</td>
<td>2</td>
</tr>
<tr>
<td>Overload</td>
<td>40</td>
</tr>
<tr>
<td>Rupture</td>
<td>50</td>
</tr>
</tbody>
</table>

Contact rating per pole and load type [1]:
- Resistive
- Inductive [3]
- Motor
- Lamp
- Overload
- Rupture

Load current in Amps:
- @28 Vdc
- @115 Vac 400 Hz
- @115/200 Vac 400 Hz, 3Ø
- @115/200 Vac 60 Hz, 3Ø [2]
- @230/400 Vac 400 Hz, 3Ø [8]

Contact Esterline Power Systems prior to choosing a component.

Date of issue: 07/10
COIL CHARACTERISTICS (Vac)  

<table>
<thead>
<tr>
<th>CODE</th>
<th>Vac 400Hz</th>
<th>Vac 50 thru 400Hz</th>
<th>Vac 400Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>28</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>F</td>
<td>115</td>
<td>115</td>
<td>230</td>
</tr>
<tr>
<td>J</td>
<td>30</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>K</td>
<td>122</td>
<td>122</td>
<td>248</td>
</tr>
<tr>
<td>T [8]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nominal operating voltage
Maximum operating voltage@+125°C
Maximum pickup voltage
- Cold coil at +125°C
- During high temp test at +125°C
- During continuous current test at +125°C
Maximum drop-out voltage
Coil current maximum milliAmperes at +25°C

GENERAL CHARACTERISTICS

Temperature range
Minimum operating cycles (life) at rated load
Minimum operating cycles (life) at 25% rated load
Dielectric strength at sea level - All circuits to ground and circuit to circuit
Dielectric strength at sea level - Coil to ground
Dielectric strength at altitude 80,000 ft
Insulation resistance - Initial (500 Vdc)
Insulation resistance - After environmental tests (500 Vdc)
Sinusoidal vibration (A and D mounting)
Sinusoidal vibration (G and J mounting)
Random vibration
- Applicable specification
- Method
- Test condition - A and D mounting
- Test condition - G and J mounting
- Duration
Shock (A, D and W mounting)
Shock (G and J mounting)
Maximum contact opening time under vibration and shock
Operate time at nominal voltage@25°C
Release time at nominal voltage@25°C
Contact make bounce at nominal voltage@25°C
Contact release break bounce at nominal voltage@25°C
Weight maximum

Unless otherwise noted, the specified temperature range applies to all relay characteristics.
1. Standard Intermediate current test applicable.
2. 500 Vrms with silicone gasket compressed, 350 Vrms all other conditions.
4. Special models available: dry circuit, established reliability testing, etc.
5. Inductive load life, 20,000 cycles for AC and 10,000 cycles for DC.
6. 60 Hz load life, 10,000 cycles.
7. Time current relay characteristics per MIL-PRF-83536.
8. Temperature range:
   Non-operating -62° C to +95° C
   Operating -54° C to +71° C

### NUMBERING SYSTEM

<table>
<thead>
<tr>
<th>KA - A l F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic series designation</td>
</tr>
<tr>
<td>1-Mounting Style (A,D,G,J,W)</td>
</tr>
<tr>
<td>2-Terminal Types (1,2,4)</td>
</tr>
<tr>
<td>3-Coil Voltage see coil characteristics (E,F,J,K or T)</td>
</tr>
</tbody>
</table>

### MOUNTING STYLES

- **MOUNTING STYLE A**
- **MOUNTING STYLE D**
- **MOUNTING STYLE G**
- **MOUNTING STYLE J**
- **MOUNTING STYLE W**

For use with track mount system. Note: Track system not available from Leach.
TERMINAL TYPES

SERIES KA

TERMINAL TYPE 1
FINISH: TIN/LEAD PLATE

TERMINAL TYPE 2
FINISH: TIN/LEAD PLATE

TERMINAL TYPE 4
FINISH:
CASE: TIN/LEAD PLATE
PINS: COLD PLATE

Standard Tolerance: .xx ± .03; .xxx ± .010

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