CS Series — Heavy Duty Cam Switches

Key features:
• Wide variety of heavy-duty oiltight cam switches
• Operators available up to 12 positions
• Switches made with a double circuit contact block
• Contact blocks rated 600V, 10A
• Ideal for ammeter/voltmeter applications
• Built to order — not available in subcomponents
• UL listed and CSA certified
• Type 4, 13

Contact Ratings

<table>
<thead>
<tr>
<th>Rated Thermal Current</th>
<th>10A</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Break Current</td>
<td></td>
</tr>
<tr>
<td>120V/5A</td>
<td></td>
</tr>
<tr>
<td>240V/3A</td>
<td></td>
</tr>
<tr>
<td>480V/2A</td>
<td></td>
</tr>
<tr>
<td>600V/1A</td>
<td></td>
</tr>
<tr>
<td>DC Resistive Break Current</td>
<td></td>
</tr>
<tr>
<td>24V/8A</td>
<td></td>
</tr>
<tr>
<td>110V/3A</td>
<td></td>
</tr>
<tr>
<td>220V/1A</td>
<td></td>
</tr>
<tr>
<td>440V/0.45A</td>
<td></td>
</tr>
<tr>
<td>DC Inductive Break Current</td>
<td></td>
</tr>
<tr>
<td>24V/5A</td>
<td></td>
</tr>
<tr>
<td>110V/1.2A</td>
<td></td>
</tr>
<tr>
<td>220V/0.45A</td>
<td></td>
</tr>
<tr>
<td>440V/0.20A</td>
<td></td>
</tr>
</tbody>
</table>

Make Current (A): Rated amperage x 1.1

Electrical Life: 500,000 operations minimum (at full rated load)
Mechanical Life: 5,000,000 (at no load)

CS Series

<table>
<thead>
<tr>
<th>Operator</th>
<th>Cam Angle</th>
<th>Maximum Contacts To Be Mounted</th>
<th>Handle Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSNO</td>
<td>30º</td>
<td>Up to 12</td>
<td>YB, SB, PB, FB</td>
</tr>
<tr>
<td></td>
<td>45º</td>
<td>Up to 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60º</td>
<td>Up to 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90º</td>
<td>Up to 4</td>
<td></td>
</tr>
<tr>
<td>ACSNK</td>
<td>30º</td>
<td>Up to 12</td>
<td>HB or standard key</td>
</tr>
<tr>
<td></td>
<td>45º</td>
<td>Up to 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60º</td>
<td>Up to 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90º</td>
<td>Up to 4</td>
<td></td>
</tr>
<tr>
<td>UCSQQ</td>
<td>30º</td>
<td>Up to 12</td>
<td>YB, SB, PB, FB</td>
</tr>
<tr>
<td></td>
<td>45º</td>
<td>Up to 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60º</td>
<td>Up to 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90º</td>
<td>Up to 4</td>
<td></td>
</tr>
<tr>
<td>UCSQM</td>
<td>45º</td>
<td>Spring return</td>
<td>YB, SB, PB, FB</td>
</tr>
<tr>
<td></td>
<td>Only 3</td>
<td>1 to 3 decks;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Up to 6 contacts</td>
<td></td>
</tr>
</tbody>
</table>

1. Do not use spring return (SR) for more than six contacts.
2. Two identical keys come with ACSNK unit. Specify “H” for handle key option.
## Selector Switches (Assembled)

### Assembled Selector Switches

<table>
<thead>
<tr>
<th>Series</th>
<th>ACSNO</th>
<th>3</th>
<th>6</th>
<th>6</th>
<th>SB</th>
<th>C3013</th>
</tr>
</thead>
</table>

**Contact Arrangement**

1. For standard contact arrangements, use designations on page 642.
2. For custom contact arrangements, omit contact arrangement designation and complete the blank order form on page 777.

**Handle**

- **YB** = Knob, Small
- **SB** = Lever, Small
- **PB** = Lever, Large
- **FB** = Knob, Large
- **HB** = Handle Key (ACSNK only)
- **Blank** = Standard Key (ACSNK only)

**Spring Return Action**

- **Blank**: Maintained
- **RO** = Spring return from left (3 or 4 position, 45° only)
- **OR** = Spring return from right (3 or 4 position, 45° only)
- **RR** = Return from right and left (3 pos, 45° only)

### Specifications

- **Number of Levels (Decks)**
  - 1 through 10
  - Note: One level contains two independent contacts.*

- **Number of Positions**
  - 2 through 12

- **Angle**
  - **3** = 30° (12 position max)
  - **4** = 45° (8 position max)
  - **6** = 60° (6 position max)
  - **9** = 90° (4 position max)

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1. *Contact blocks may contain two independent contacts. (a four position switch with four independent contacts only requires two contact blocks).
2. *Caution: switches with 180° or more of rotation may require separate blocks for each contact due to cam overlapping.
Contact Arrangements

Standard Arrangements

Terminal Numbers

Position Numbers

C-1001

C-1002

C-1005

C-1008

C-2001

C-2002

C-2006

C-2004

C-2008

C-2009

C-2027

C-2013

C-3001

C-3002

C-3005

C-3013

C-3016

C-3018

C-3020

C-3022

C-4001

C-4002

C-4004

C-4006

C-5001

C-6001

C-6002
Contact Arrangements continued

Ammeter Switching

C-1012

C-4003

C-4007

C-6003

Voltmeter Switching

C-2022

C-3009

C-3008

C-3007
### Order Form (Custom Contact Arrangement)

**Series**
- ACSNO
- ACSNK
- UCSQQ
- UCSQM

*Note: One Deck can drive two independent contacts.*

**Number of Positions**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Angle</th>
<th>Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSNO</td>
<td>30°</td>
<td>9, 10, 11, 12</td>
</tr>
<tr>
<td>ACSNK, UCSQQ</td>
<td>30° or 45°</td>
<td>7 or 8</td>
</tr>
<tr>
<td></td>
<td>30°, 45° or 60°</td>
<td>5 or 6</td>
</tr>
<tr>
<td>UCSQM</td>
<td>45°</td>
<td>2, 3, or 4</td>
</tr>
</tbody>
</table>

**Contact Arrangement Table**

<table>
<thead>
<tr>
<th>cams</th>
<th>Terminal Numbers</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck 1</td>
<td>1 and 2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3 and 4</td>
<td>2</td>
</tr>
<tr>
<td>Deck 2</td>
<td>5 and 6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7 and 8</td>
<td>4</td>
</tr>
<tr>
<td>Deck 3</td>
<td>9 and 10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>11 and 12</td>
<td>6</td>
</tr>
<tr>
<td>Deck 4</td>
<td>13 and 14</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>15 and 16</td>
<td>8</td>
</tr>
<tr>
<td>Deck 5</td>
<td>17 and 18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>19 and 20</td>
<td>10</td>
</tr>
<tr>
<td>Deck 6</td>
<td>21 and 22</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>23 and 24</td>
<td>12</td>
</tr>
<tr>
<td>Deck 7</td>
<td>25 and 26</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>27 and 28</td>
<td>14</td>
</tr>
<tr>
<td>Deck 8</td>
<td>29 and 30</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>31 and 32</td>
<td>16</td>
</tr>
<tr>
<td>Deck 9</td>
<td>33 and 34</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>35 and 36</td>
<td>18</td>
</tr>
<tr>
<td>Deck 10</td>
<td>37 and 38</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>39 and 40</td>
<td>20</td>
</tr>
</tbody>
</table>

To specify non-standard arrangements (designation not on preceding pages), fill in this table using the following symbols.

- **X** = Closed contact (break before make)
- **O** = Open contact
- **X X** = Overlapping contact (remain on when switch is moved between two positions)

### Specifying Nameplate (Optional)

- **30°**
  - Position 1
  - Position 2
  - Position 3
  - Position 4
  - Position 5
  - Position 6

- **45°**
  - Position 1
  - Position 2
  - Position 3
  - Position 4
  - Position 5
  - Position 6

- **60°**
  - Position 1
  - Position 2
  - Position 3
  - Position 4
  - Position 5
  - Position 6

- **90°**
  - Position 1
  - Position 2
  - Position 3
  - Position 4
  - Position 5
  - Position 6

### Specifying Legends

<table>
<thead>
<tr>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

If no engraving information is provided, a blank nameplate will be supplied.

**Spring Return**
- **Blank** = Maintained
- **RO** = Spring return from left (3 or 4 position, 45°)
- **OR** = Spring return from right (3 or 4 position, 45°)
- **RR** = Return from right and left (3 position, 45°)

**UCSQM** is available in spring-return version only.

**Handle**
- ACSNO, UCSQQ, UCSQM:
  - **YB** = Knob, Small
  - **SB** = Lever, Small
  - **PB** = Lever, Large
  - **FB** = Knob, Large

- ACSNK:
  - **HB** = Handle Key (option)
  - **Blank** = Standard Key

For handle styles, see page 778.
**Accessories — CS Series**

### Replacement Handles

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Dimensions</th>
<th>Applicable Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH-YB</td>
<td>0.79”D x 1.61”H</td>
<td>ACSNO, UCSOO, UCSQM</td>
</tr>
<tr>
<td>CSH-SB</td>
<td>0.79”D x 1.97”H</td>
<td></td>
</tr>
<tr>
<td>CSH-PB</td>
<td>1.58”D x 1.97”H</td>
<td></td>
</tr>
<tr>
<td>CSH-FB</td>
<td>1.58”D x Ø 1.97”</td>
<td>ACSNK</td>
</tr>
<tr>
<td>CSH-H2B</td>
<td>0.95”D x 2.28”H</td>
<td></td>
</tr>
</tbody>
</table>

### Replacement Nameplates

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Size &amp; Shape</th>
<th>Applicable Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQ</td>
<td>2.52” (64mm)</td>
<td>UCSQO</td>
</tr>
<tr>
<td>COM</td>
<td>Black Aluminum</td>
<td>UCSQM</td>
</tr>
<tr>
<td>CON</td>
<td></td>
<td>ACSNO, ACSNK</td>
</tr>
</tbody>
</table>

1. Extra cost for engraving, 3/16” min. letter height, Legends maximum ten characters.
2. Blank nameplates are supplied with all cam switches (they need not be ordered separately).

### Wiring Clips

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Contact Block Jumpers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ-1</td>
<td>Between decks</td>
</tr>
<tr>
<td>CJ-2</td>
<td>Same deck</td>
</tr>
</tbody>
</table>

### Replacement Keys

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K301</td>
<td>Pair of keys (#301)</td>
</tr>
</tbody>
</table>
Dimensions/Terminal Arrangements/Mounting Holes

ACSNO

ACSNO

ACSNK

ACSNK

UCSQO

UCSQO

UCSQM

UCSQM

Terminal Arrangement

Mounting Holes

UCSQO

UCSQM

UCSQQ

UCSQM

UCSOQ

UCSQM

UCSQQ

UCSQM

UCSQQ

UCSQM

UCSQQ

UCSQM

UCSQQ

UCSQM

UCSQQ

UCSQM

UCSQQ

UCSQM

UCSQQ

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