The V-Series switches are well known for their cutting edge design, high quality, maximum performance and unmatched reliability. These snap-in rocker switches offer countless options for ratings, circuits, colors, illuminations and symbols. These single or double pole switches feature removable actuators in a choice of actuator styles and colors, which may be purchased and stocked separately. An optional plug-in terminal connector enables pre-wiring of wire harness.

### Specifications

<table>
<thead>
<tr>
<th>Poles</th>
<th>Amps</th>
<th>VDC</th>
<th>VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>.4-20</td>
<td>125-250</td>
<td>12-24</td>
</tr>
</tbody>
</table>

### Typical Applications

- On/Off-Highway
- Marine
- Armored Vehicles
- Industrial Automation
- Commercial Food
- Medical Equipment
- Any Application Requiring Sealing Protection
INTERCHANGEABLE ACTUATORS
Panel redesign is a snap with our wide range of rocker styles. Achieve maximum design variety with minimum inventory. Simply swap rockers to create an entirely new look for your panel.

DUAL SEAL PROTECTION
Seals out water, dust, debris, and sealed to IP66/68 for above-panel components.

CLEAN CONNECTIONS
Options for both eight and ten terminal base styles with AMP & Packard compatible connectors affords myriad circuit options while providing ease of assembly.

OPTIONAL PANEL SEAL
Helps prevent water/dust ingress behind panel.

MULTIPLE LIGHTING OPTIONS
In addition to Incandescent lamps, our LED illumination is offered in a wide array of light intensities, colors, as well as dual level, tri-color, and flashing options.

BRASS ROLLER PIN
Robust mechanism eliminates the need for lubricants. Enables switch to withstand -40°C to +85°C temperatures.

SILVER PLATED BUTT CONTACT MECHANISM
Providing 50k to 100k electrical cycles, circuit and load dependent.
### Electrical

<table>
<thead>
<tr>
<th>Contact Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>4VA @ 24VDC (MAX) resistive</td>
</tr>
<tr>
<td>16 amps, 125VAC</td>
</tr>
<tr>
<td>10 amps, 250VAC</td>
</tr>
<tr>
<td>1/2 HP 125-250VAC</td>
</tr>
<tr>
<td>20 amps, 4-14VDC</td>
</tr>
<tr>
<td>15 amps, 15-28VDC</td>
</tr>
<tr>
<td>10A, 14VT</td>
</tr>
<tr>
<td>6A, 125VAC L</td>
</tr>
</tbody>
</table>

Dielectric Strength: 1500 Volts RMS
Insulation Resistance: 50 Megohms
Initial Contact Resistance: 10 milliohms max. @ 4VDC
Life: Up to 100,000 cycles, circuit and load dependent
Contacts: Silver alloy, silver tin-oxide, fine silver
Terminals: Brass or copper/silver plate 1/4" (6.3mm) Quick Connect terminations standard. Solder lug, Wire Lead

### Environmental

Sealing: IP66/68, for above-panel components of actual switch only.
Corrosion: Mixed Flowing Gas (MFG) Class III 3 year accelerated exposure per ASTM B-827, B-845 Silver and gold contacts
Operating Temp: ~40°C to +85°C
Vibration 1: Per Mil-Std 202F, Method 204D Test Condition A 0.06 DA or 10G’s 10-500 Hz. Tested with VCH connector. Test criteria – No loss of circuit during test, pre and post test contact existence.
Vibration 2: Resonance search24–50 Hz 0.40 DA50–2000 Hz ±10 G’s peak Horizontal Axis 3-5 G’s max. Random 24 Hz 0.06 PSD-Gsq/Hz 60 Hz 0.50 100 Hz 0.025 2000 Hz 0.025 No loss of circuit during test; <10μ seconds chatter.
Shock: Per Mil-Std 202F, Method 213B, Test Condition K @ 30G’s. Tested with VCH connector. Test criteria – No loss of circuit during test, pre and post test contact resistance.
Salt Spray: Per Mil-Std 202F, Method 101D, Test Condition A, 96 Hrs. Sealed version only.
Dust: Mil STD 810, Method 510.2 Air Velocity 300 Ft/Min Duration 16Hr
Thermal Shock: Per Mil-Std 202F, Method 107F, Test Cond. A, ~55°C to +85°C. Test criteria –pre and post test contact resistance
Moisture Resistance: Per Mil-Std 202F, Method 106F, Test Criteria – pre and post test contact resistance
Ignition Protection: All Contura switches with sealed construction meet the requirements of UL1500/ISO8846 for ignition protection, in addition to conformance with EC directive 94/25/EC for marine products.

### Physical

Lighted: Incandescent – rated 10,000 hours Neon – rated 25,000 hours LED – rated 100,000 hours 1/2 life (LED is internally ballasted for voltages to 24VDC)
Seals: Internal Optional external gasket panel seal
Base: Polyester blend rated to 125°C with a UL flammability rating of 94V0.
Contura X, XI, XII Actuator, VP: Nylon 66 Reinforced rated to 105°C
Lens: Polycarbonate rated at 100°C
Contura XIV: Polycarbonate lens/sub-rocker with ABS shell

### Mounting Specifications

<table>
<thead>
<tr>
<th>Panel Thickness Range</th>
<th>Acceptable Panel Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to .030</td>
<td>.030 to .250 (.76 to 6.35mm)</td>
</tr>
<tr>
<td>1 to .030</td>
<td>.030 to .109 &amp; .147 to .157 (.76 to 2.77mm &amp; 3.73 to 3.98mm)</td>
</tr>
</tbody>
</table>

Recommended: No gasket with panel thickness of .032, .062, .093, 125,167 or 250

*Manufacturer reserves the right to change product specification without prior notice.*
Ordering Scheme

Sample Part Number

| V | I | D | A | B | T | O | B | A | R | B | 00 | 0 | 00 |

Selection

1. SERIES

V V-Series

2. CIRCUIT

Terminal Connections as viewed ( ) – momentary from bottom of switch: SP – single pole: terminals 1, 2, 3, 4, 5, 6.
8 terminal 10 terminal DP – double pole: terminals 1, 2, 3, 4, 5 & 6.
8 – 7 8 – 6 8 – 7 8 – 6
1 – 4 1 – 4 1 – 4 1 – 4
2 – 5 2 – 5 2 – 5 2 – 5
3 – 6 3 – 6 3 – 6 3 – 6
10 – 9

Position:

1 2 3 4 5 6 7 8
A ON ON ON OFF OFF OFF OFF
B (ON) NONE NONE OFF OFF OFF OFF
C ON OFF OFF OFF ON ON ON
D ON OFF OFF OFF ON ON ON
F ON NONE NONE (ON)
J ON OFF OFF ON
K ON OFF ON ON
L (ON) OFF OFF (ON)
M (ON) OFF ON (ON)

Special Circuits

H* 2 & 3 2 & 3 5 & 4 5 & 4
O* 2 & 3, 5 & 6 2 & 3 2 & 3 2 & 3
S* 2 & 3 2 & 3, 5 & 6 2 & 3 2 & 3
M* 2 & 3, 5 & 6 2 & 3 2 & 3 2 & 3
R* 5 & 6 5 & 3 5 & 1 5 & 1
E* 5 & 6 5 & 3 5 & 1 5 & 1

Jumper between terminals 2 & 5 for circuits H, G & M are specified in selection 6. External jumper between terminals 2 & 4 for circuit E are provided by customer. Circuit E may be used for SP OFF – ON – ON circuit.

3. RATING

1 .4VA @ 28VDC Resistive
B 15A 12V
C 20A 12V
D 20A 12V
E 120V, 10A 14VT (circuit 1, 4, A & D only)
F 6VDC
G 20A 24V
H 2VA @ 28VDC Resistive
I 14VDC
J 12VDC
K 6VDC
L 2VDC
M 15A 24V
N .4VA @ 28VDC Resistive
O .250 TAB (QC) with barriers No
P .250 TAB (QC) no barriers Yes T2 to 5
Q .250 TAB (QC) no barriers No
R .250 TAB (QC) with barriers No
S .250 TAB (QC) no barriers Yes T2 to 5
T .250 TAB (QC) with barriers Yes T2 to 5
U .250 TAB (QC) no barriers Yes T2 to 5
V .250 TAB (QC) with barriers Yes T2 to 5
W .250 TAB (QC) no barriers Yes T2 to 5
X .250 TAB (QC) with barriers Yes T2 to 5
Y .250 TAB (QC) no barriers Yes T2 to 5
Z .250 TAB (QC) with barriers Yes T2 to 5

4. TERMINATION / BASE STYLE

8 term 10 Term Termination Jumper
1 2 3 4 5 6 7 8 9 10
A 3 4 5 6 7 8 9 10
B 3 4 5 6 7 8 9 10
C 3 4 5 6 7 8 9 10
D 3 4 5 6 7 8 9 10
E 3 4 5 6 7 8 9 10
F 3 4 5 6 7 8 9 10
G 3 4 5 6 7 8 9 10
H 3 4 5 6 7 8 9 10
I 3 4 5 6 7 8 9 10
J 3 4 5 6 7 8 9 10
K 3 4 5 6 7 8 9 10
L 3 4 5 6 7 8 9 10
M 3 4 5 6 7 8 9 10
N 3 4 5 6 7 8 9 10
O 3 4 5 6 7 8 9 10
P 3 4 5 6 7 8 9 10
Q 3 4 5 6 7 8 9 10
R 3 4 5 6 7 8 9 10
S 3 4 5 6 7 8 9 10
T 3 4 5 6 7 8 9 10
U 3 4 5 6 7 8 9 10
V 3 4 5 6 7 8 9 10
W 3 4 5 6 7 8 9 10
X 3 4 5 6 7 8 9 10
Y 3 4 5 6 7 8 9 10
Z 3 4 5 6 7 8 9 10

Note: Codes J & K for circuits H, G & M. Do not use silicone based lubricants to reduce terminal insertion forces during connector assembly, as it is detrimental to function and performance.

5. ILLUMINATION

Lamp #1 above terminals 1 & 4 end of switch; Lamp #2 above terminals 3 & 6 end of switch. Positive (+) and negative (–) symbols apply to LED lamps only.

| S | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| NONE | INDEPENDENT | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP | DOWN | UP |

6.7. LAMP (SAME CODING FOR BOTH SELECTIONS)

Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6

No lamp

1 2 3 4 5 6 7 8 9 10

Neon* 125VAC 120VAC 250VAC 56V 612V 718V 824V

LED* Red Amber Green Red Amber Green Red

2VDC A L F R

6VDC B M G S

12VDC C N H T

24VDC D P J V

* Consult factory for “daylight bright” LED options. Typical current draw for LED is 20ma.

8. FLUSH BRACKET COLOR, PANEL SEAL

<table>
<thead>
<tr>
<th>No Seal</th>
<th>B</th>
<th>W</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Y</td>
<td>H</td>
<td></td>
</tr>
</tbody>
</table>

9. ACTUATOR

0 No Actuator

A, B Contura II

C, D Contura III

Actuator thick end over terminals: 1, 4, 3, 6

0 – No Actuator

Z – No Lens

Clear White Amber Green Red Blue

1 6 2 5 7 4 3 8 9 10

Square lens options only available for Contura II.

0 – No Actuator

Z – No Lens

Green or blue lenses are not recommended with Neon lamps.

10. LENS

1

11. ACTUATOR COLOR AND TEXTURE

0 – No Actuator

Soft Surface Black Gray Red White

Hard Surface C H S Y

12. ACTUATOR LENS OR BODY LEGENDS

For additional legend options & codes, visit us at www.carlingtech.com.

13. LEGENDS ORIENTATION

0 No legend (used with codes 11-18 in selection 12)

1 Orientation I

2 Orientation II

3 Orientation III

4 Orientation IV

For legend options & codes, visit us at www.carlingtech.com.

14. ACTUATOR LENS LEGENDS

00 No legend this location / no actuator (used with codes 11-18 in selection 12) Selection 14 required when switch requires two legends. If the two legends consist of one lens legend and one body legend, lens legend must be specified in selection 12, body legend specified in selection 14.

For legend options & codes, visit us at www.carlingtech.com.

Notes:

1 Custom colors are available. Consult factory.

2 Body legends not available on Soft surface actuators; White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators. Custom colors are available, consult factory.

3 Additional ratings available. See V-Series Switch Accessories page.

4 Contura II available with two square lenses. Consult factory for details.

5 Consult factory to verify horsepower rating for your particular circuit choice.

6 For legend options & codes, visit us at www.carlingtech.com.
## Ordering Scheme

### Contura II & III locking

#### 1. SERIES

<table>
<thead>
<tr>
<th>Part Number</th>
<th>V</th>
<th>I</th>
<th>D</th>
<th>A</th>
<th>S</th>
<th>W</th>
<th>O</th>
<th>B</th>
<th>A</th>
<th>Z</th>
<th>E</th>
<th>00-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 2. CIRCUIT

Terminal Connections as viewed ( ) - momentary
- 8 terminal: 1, 2, 3, 4, 5, 6, 7, 10
- 10 terminal: 1, 2, 3, 4, 5, 6, 7, 8
- DP - double pole: terminals 1, 2, 3, 4, 5, & 6
- SP - single pole: terminals 1, 2, 3.

**Position:**
- 1A: ON
- 1B: OFF
- 2A: ON
- 2B: OFF
- 3A: ON
- 3B: OFF

**Special Circuits:**
- DP: 2 & 3, 5 & 6 Connected Terminals 1 & 2, 4 & 5
- SP: 2 & 3, 5 & 6 Connected Terminals 1, 2, 3, 4, 5 & 6

#### 3. RATING

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>125VAC</td>
<td>4.4VA</td>
</tr>
<tr>
<td>250VAC</td>
<td>4.4VA</td>
</tr>
</tbody>
</table>

#### 4. TERMINATION / BASE STYLE

<table>
<thead>
<tr>
<th>8 Terminal</th>
<th>10 Terminal</th>
<th>Termination</th>
<th>Jumper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>.250 TAB (QC)</td>
<td>no barriers</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>.250 TAB (QC)</td>
<td>with barriers</td>
</tr>
<tr>
<td>J</td>
<td>K</td>
<td>.250 TAB (QC)</td>
<td>no barriers</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Solder Lug</td>
<td>no barriers</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>Solder Lug</td>
<td>No</td>
</tr>
<tr>
<td>G</td>
<td>L</td>
<td>Wire Leads</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>Wire Leads</td>
<td>No</td>
</tr>
</tbody>
</table>

**Note:** Codes J & K for circuits H, G & M. Do not use silicone based lubricants to reduce terminal insertion forces during connector assembly, as it is detrimental to function and performance.

#### 5. ILLUMINATION & SWITCH SEALING

<table>
<thead>
<tr>
<th>LED Type</th>
<th>Lamp Wire</th>
<th>Illumination Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED*</td>
<td>12V DC</td>
<td>3 (+) 6 (-)</td>
</tr>
<tr>
<td>Incandescent</td>
<td>12V DC</td>
<td>3 (+) 6 (-)</td>
</tr>
<tr>
<td>Neon</td>
<td>12V DC</td>
<td>3 (+) 6 (-)</td>
</tr>
</tbody>
</table>

#### 6. LOCK

Lock above terminals 1 & 4 end of switch
- W - lock

#### 7. LAMP

Lamp above terminals 3 & 6 end of switch
- No lamp
- Neon
- Incandescent

**Note:** Jumper between terminals 2 & 5 for circuits H, G, M, R & S are specified in selection 4. External jumper between terminals 2 & 4 for circuit E are provided by customer. Circuit may be used for SP OFF-ON-ON circuit.

#### 8. FLUSH BRACKET COLOR, PANEL SEAL

<table>
<thead>
<tr>
<th>Colour</th>
<th>Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>No</td>
</tr>
<tr>
<td>White</td>
<td>Seal</td>
</tr>
<tr>
<td>Gray</td>
<td>Seal</td>
</tr>
</tbody>
</table>

#### 9. HARD SURFACE ACTUATOR

<table>
<thead>
<tr>
<th>Actuator</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contura II</td>
<td>Black</td>
</tr>
<tr>
<td>Contura III</td>
<td>White</td>
</tr>
</tbody>
</table>

#### 10. LENS

<table>
<thead>
<tr>
<th>Lens Type</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>White</td>
</tr>
<tr>
<td>Amber</td>
<td>Red</td>
</tr>
<tr>
<td>Green</td>
<td>Blue</td>
</tr>
<tr>
<td>Red</td>
<td>Black</td>
</tr>
</tbody>
</table>

#### 11. ACTUATOR LOCK FUNCTION AND COLOR

<table>
<thead>
<tr>
<th>Match Actuator</th>
<th>Lock Color</th>
<th>Up</th>
<th>Down</th>
<th>Up &amp; Down</th>
<th>Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>H</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>J</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>K</td>
<td>T</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>L</td>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 12. ACTUATOR LENS OR BODY LEGENDS

<table>
<thead>
<tr>
<th>Legend Options</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>1</td>
</tr>
<tr>
<td>Orientation 2</td>
<td>2</td>
</tr>
<tr>
<td>Orientation 3</td>
<td>3</td>
</tr>
<tr>
<td>Orientation 4</td>
<td>4</td>
</tr>
</tbody>
</table>

For additional legend options & codes, visit us at www.carlingtech.com

#### 13. LEGEND ORIENTATION

<table>
<thead>
<tr>
<th>Orientation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation 1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Orientation 2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Orientation 3</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Orientation 4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Notes:** Consult factory to verify horsepower rating for your particular circuit choice.
- Custom colors are available. Contact factory.
- White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators. Custom colors are available, contact factory.
- Only available with 3 position circuits. Center OFF and special circuits only available with center position lock function.
- Additional ratings available. See V-Series Switch Accessories page.
Dimensional Specs
inches [millimeters]

CONTURA II
SHOWN WITH
SQUARE LENS

CONTURA III

8 TERMINAL BASE
W/BARRIERS

8 TERMINAL BASE
W/O BARRIERS

10 TERMINAL BASE
W/BARRIERS

SWITCH SHOWN WITH
VCH CONNECTOR 8
TERMINAL

BOTTOM VIEW
TERMINAL
ARRANGEMENT
8 TERMINAL BASE
## Circuit Diagrams:

<table>
<thead>
<tr>
<th>CIRCUIT CODE</th>
<th>CIRCUIT DIAGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><img src="image" alt="Circuit Diagram A" /></td>
</tr>
<tr>
<td>2</td>
<td><img src="image" alt="Circuit Diagram B" /></td>
</tr>
<tr>
<td>3</td>
<td><img src="image" alt="Circuit Diagram C" /></td>
</tr>
<tr>
<td>4</td>
<td><img src="image" alt="Circuit Diagram D" /></td>
</tr>
<tr>
<td>5</td>
<td><img src="image" alt="Circuit Diagram E" /></td>
</tr>
<tr>
<td>6</td>
<td><img src="image" alt="Circuit Diagram F" /></td>
</tr>
<tr>
<td>7</td>
<td><img src="image" alt="Circuit Diagram G" /></td>
</tr>
<tr>
<td>8</td>
<td><img src="image" alt="Circuit Diagram H" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CIRCUIT CODE</th>
<th>CIRCUIT DIAGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><img src="image" alt="Circuit Diagram J" /></td>
</tr>
<tr>
<td>B</td>
<td><img src="image" alt="Circuit Diagram K" /></td>
</tr>
<tr>
<td>C</td>
<td><img src="image" alt="Circuit Diagram L" /></td>
</tr>
<tr>
<td>D</td>
<td><img src="image" alt="Circuit Diagram M" /></td>
</tr>
<tr>
<td>E</td>
<td><img src="image" alt="Circuit Diagram R" /></td>
</tr>
<tr>
<td>F</td>
<td><img src="image" alt="Circuit Diagram S" /></td>
</tr>
</tbody>
</table>

### SYMBOL LEGEND

<table>
<thead>
<tr>
<th>SYM.</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>DESIGNATES TERMINALS AND CONTACTS</td>
</tr>
<tr>
<td></td>
<td>DESIGNATES MAINTAINED CIRCUITS</td>
</tr>
<tr>
<td></td>
<td>DESIGNATES OTHER POSITION</td>
</tr>
<tr>
<td></td>
<td>DESIGNATES MOMENTARY CIRCUITS</td>
</tr>
<tr>
<td></td>
<td>DESIGNATES TWO POSITION CONNECTION</td>
</tr>
<tr>
<td></td>
<td>DESIGNATES EXTERNAL JUMPER PROVIDED BY CUSTOMER</td>
</tr>
</tbody>
</table>
## Lamp Circuit Diagrams:

<table>
<thead>
<tr>
<th>LAMP CIRCUIT CODE</th>
<th>CIRCUIT DIAGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>A / 1</td>
<td>![A Circuit Diagram]</td>
</tr>
<tr>
<td>B / 2</td>
<td>![B Circuit Diagram]</td>
</tr>
<tr>
<td>C / 3</td>
<td>![C Circuit Diagram]</td>
</tr>
<tr>
<td>D / 4</td>
<td>![D Circuit Diagram]</td>
</tr>
<tr>
<td>E / 5</td>
<td>![E Circuit Diagram]</td>
</tr>
<tr>
<td>F / 6</td>
<td>![F Circuit Diagram]</td>
</tr>
<tr>
<td>G / 7</td>
<td>![G Circuit Diagram]</td>
</tr>
<tr>
<td>H / Z</td>
<td>![H Circuit Diagram]</td>
</tr>
<tr>
<td>J / 8</td>
<td>![J Circuit Diagram]</td>
</tr>
<tr>
<td>K / W</td>
<td>![K Circuit Diagram]</td>
</tr>
<tr>
<td>L / 9</td>
<td>![L Circuit Diagram]</td>
</tr>
<tr>
<td>SPECIAL #1</td>
<td>![Special #1 Diagram]</td>
</tr>
<tr>
<td>SPECIAL #3</td>
<td>![Special #3 Diagram]</td>
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<tr>
<td>SPECIAL #4</td>
<td>![Special #4 Diagram]</td>
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</table>

### J-Series Hazard Warning Circuit Diagrams:

<table>
<thead>
<tr>
<th>CIRCUIT CODE</th>
<th>CIRCUIT DIAGRAM</th>
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<tbody>
<tr>
<td>J1</td>
<td>![J1 Circuit Diagram]</td>
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<tr>
<td>J2</td>
<td>![J2 Circuit Diagram]</td>
</tr>
<tr>
<td>J3</td>
<td>![J3 Circuit Diagram]</td>
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<tr>
<td>J4</td>
<td>![J4 Circuit Diagram]</td>
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<td>J5</td>
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<td>![JJ Circuit Diagram]</td>
</tr>
<tr>
<td>JK</td>
<td>![JK Circuit Diagram]</td>
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</table>

**NOTE:**
J circuits are available for all non-locking V-Series styles. Consult factory for part number details.

### SYMBOL LEGEND

<table>
<thead>
<tr>
<th>SYM</th>
<th>DEFINITION</th>
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<tbody>
<tr>
<td>O</td>
<td>DESIGNATES TERMINALS AND CONTACTS</td>
</tr>
<tr>
<td>O</td>
<td>DESIGNATES LAMP LOCATION</td>
</tr>
</tbody>
</table>
Contura II, III, IV, V Actuator only: VV with code A or C for selection 9, & with selections 10–14 in the ordering schemes.
Contura VI Actuator with lenses and inserts only: VT with code selections 9–16
Contura X, XI, XII, XIV actuators with lenses separately: VV with code selections 9–14 in the ordering schemes.

Contura X & XI actuators without lenses separately

VVR 6 1 00 1

1. CONTURA X & XI ACTUATOR SEPARATELY
VVR

2. ACTUATOR STYLE & COLOR
Contura X Contura XI
Black 1 6 Gray 2 7 White 3 8 Red 4 9

3. LENS OPENING FOR 1
1 One bar lens
2 Two bar lenses
3 One square lens
4 Two square lens
5 square lens on top/ bar lens on bottom (Contura X only)

4. ACTUATOR LENS OR BODY LEGEND
00 - No Legend this location
11 ON 12 OFF 13 I 14 O
15 O O 16 O O 17 O I 18 I O
F F N F F F F

5. LEGEND ORIENTATION 1
0 No legend
1 Orientation 1
2 Orientation 2
3 Orientation 3
4 Orientation 4

Contura XII actuators without lenses separately

VVP J 1 Z 21 1 00

1. CONTURA XII ACTUATOR SEPARATELY
VVP

2. ACTUATOR STYLE & COLOR
J Black K Gray N White M Red

3.4 LENS OPENING FOR 1
1 No lens 2 Bar lens 2 Square lens

5, 7 LENS OR BODY LEGEND 2
00 - No Legend 21 OFF 22 ON 23 O 24 I
25 O O 26 O O 27 O I 28 I O
F F N F F F F

6 LEGEND ORIENTATION 3
0 No legend
1 Orientation 1
2 Orientation 2

Contura X, XI & XII top piece of 2-piece lens separately

VVT 1

1 TOP OF LENS SEPARATELY
VVT

2 COLOR
1 Clear 2 Smoke 3 White

Contura X, XI & XII actuator lens assembly separately

VVL 2 1 00 0

1. CONTURA X, XI & XII ACTUATOR SEPARATELY
VVL

2 LENS STYLE 3
1 Bar lens
2 One Piece Square lens
3 Bottom of Two-Piece Square lens

3 TRANSLUCENT LENS COLOR
1 Clear 2 White 3 Amber 4 Green 5 Red 6 Blue

4 LENS OR BODY LEGEND 2
00 - No Legend 21 OFF 22 ON 23 O 24 I
25 O O 26 O O 27 O I 28 I O
F F N F F F F

5 LEGEND ORIENTATION 3
0 No legend
1 Orientation 1
2 Orientation 2

Notes:
1. If actuator lens opening for 2 bar or 2 square lenses, legend orientation 0, or 2 must be chosen.
2. Center of actuator marking not available for Contura XII.
3. Legend is not available for bar style lens.
4. Not recommended with neon lamps.
5. Must also order top piece of 2 piece square lens separately.
Accessories
Easily integrate Contura products into your system, with Contura Accessories

Contura Connectors

<table>
<thead>
<tr>
<th>Q.C. SELECTION GUIDE</th>
<th>PART NO</th>
<th>WIRE RANGE</th>
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<tr>
<td><strong>COMPANY SERIES</strong></td>
<td><strong>PLAIN BRASS</strong></td>
<td><strong>TIN PLATED BRASS</strong></td>
<td><strong>AWG</strong></td>
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<td>16-24</td>
<td>1.0-2.0</td>
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<td>02965469</td>
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<td>12015870</td>
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<td>22-30</td>
<td>1.3-3.0</td>
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</tbody>
</table>

**NOTE:** Consult Delphi Packard and/or Amp on actual part numbers and availability. AMP is a registered trademark of AMP Inc. Harrisburg, PA. Delphi Packard is a registered trademark of Delphi-Packard Electrical Systems Warr.

**Contura X Boot (P/N VB1-01)**

**Contura II, III, IV, V, VI & VII Actuator Removal Tool (P/N VRT)**

**Additional V-Series Ratings**

1. .4VA @ 28VDC Resistive
2. 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, UL Recognized, CSA Certified
3. 10A 250VAC 1/2 HP, UL Recognized, CSA Certified
4. 15A 24V
5. 20A 18V
6. 20A 12V
7. 20A 14V, 10A 14VT (circuits 1, 4, A, & D only)
8. 10A 14V, 6A, 14VT (circuit G only)
9. 20A 6V
10. 20A 3V
11. 15A 125 VAC, 10A 250VAC, 1/2 HP 125-250 VAC; 6A 125 VAC L
12. .4VA/20A 12V (combi-contact)
13. .4VA/15A 24V (combi-contact)

**NOTES**

Consult factory to determine availability for individual circuits and their HP rating.
1. Not available with Contura 7 or 14 rocker styles.
2. Rating L available with circuits 1, 4, A, & D only.
Contura Mounting Panels

Contura Hole Plug

Dimensional Specifications: in. [mm]
About Carling

Founded in 1920, Carling Technologies is a leading manufacturer of electrical and electronic switches and assemblies, circuit breakers, electronic controls, power distribution units, and multiplexed power distribution systems. With six ISO9001 and IATF16949 registered manufacturing facilities and technical sales offices worldwide, Carling Technologies Sales, Service and Engineering teams do much more than manufacture electrical components, they engineer powerful solutions! To learn more about Carling please visit www.carlingtech.com/company-profile.

To view all of Carling’s environmental, quality, health & safety certifications please visit www.carlingtech.com/environmental-certifications.

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