Carling Technologies’ fully sealed V-Series Contura switches are well known for their cutting edge design, high quality, maximum performance and unmatched reliability. These switches are a staple in the marine and transportation industries and have passed a range of environmental, corrosion, temperature, vibration, shock and sealing tests including MIL Std 202F, MIL Std 810C, UL 1500, ISO 8846, IEC 60529 and BS 5490 among others, making them one of the most rugged and reliable switches ever manufactured.

Product Highlights:
• Maximum sealing protection with dual seals around lamps and rocker stem, certified to IP66 & IP68. Optional panel seals for additional protection.
• Silver plated butt contact mechanism provides 50 to 100 thousand electrical cycles and a variety of different electrical ratings.
• Roller pin mechanism does not require lubricants and allows the switch to withstand extreme temperatures.
• The switch base accommodates up to 10 terminals and a large variety of switch and lighting circuits.
• The multi-step mounting wings provide a secure fit for panel thicknesses of 0.032” thru 0.250” in an industry standard 0.830” x 1.450” mounting hole.
• The switch connector allows the user to preload FQC terminals for easy assembly to switch base.
• Numerous choices of removable rockers allow for style change without having to retest or re-qualify the switch base.
• Illumination options are endless with bar, oval, and square lenses available with choices of incandescent, neon and a wide variety of LEDs including superbrite, megabrite, flashing and bicolor lighting.
• Available with a variety of complimentary mounting panels, hole plugs, illuminated indicators and boots to accommodate most any design need.
V-Series Switch

DESIGN FEATURES

**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 enables switch certification to IP66/IP68 for front 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.

**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.

**OPTIONAL PANEL SEAL**
Prevents water/dust ingress behind panel.

**SILVER PLATED BUTT CONTACT MECHANISM**
Providing 50k to 100k electrical cycles and a variety of different electrical ratings.
Contura II & III
The Contura II & III actuators are constructed of thermoplastic polycarbonate and are offered with a hard nylon overlay or a "soft-touch" elastomer overlay. These models incorporate aesthetic designs on the top and bottom of the rocker featuring two rows of raised "bumps" on the Contura II and three "Indented" lines on the Contura III.

Contura IV
The Contura IV's "Shape to create a Shape" actuator works with the curves, contours & advanced styling of the latest panel designs, flowing with these advanced curves & radii. This actuator style fits on the Contura flush bracket/bezel.

Contura V
The symmetrically curved Contura V actuator provides the perfect complement to the Contura IV's "Shape to create a Shape" design concept. With its flush style mounting bracket, Contura V can be mounted in between two Contura IV's, by itself, or in groups.

Contura VI (WAVE)
The Contura VI WAVE sealed rocker switches, when used in a row, create an uniquely appealing "wave" design on your panel. A variety of colors and finishes are available for both rocker and wave insert. Contura VI features bar and oval lenses.

Contura VII
Contura VII featuring gently curved corners and edges assuring compatibility with most any panel design. Intuitive feel is maximized by the use of 2 embossed circular pads located at opposite ends of the rocker. Any combination of Bar or Oval style lenses can be located in the pads providing a truly unique look, exclusive to Contura VII.

Contura X
The raised bracket/bezel on the Contura X helps prevent inadvertent actuation of the rocker, as well as preventing debris from being trapped under the actuator. This curved rocker style is available with a variety of lenses and legends.

Contura XI
The raised bracket/bezel on the Contura XI helps prevent inadvertent actuation of the rocker, as well as preventing debris from being trapped under the actuator. This convex style rocker is available with a wide variety of lenses and legends.

Contura XII
The Contura XII version features a paddle style actuator with the raised bracket/bezel of Contura X and XI. The contoured handle design provides intuitive recognition and ease of operation and is available with all Contura X and XI lens and legend offerings.

Contura XIV
The Contura XIV represents a sleek new crossover rocker design which should appeal to Trucks, Buses and Heavy Vehicles as well as the Marine Industry. Intuitive feel is provided by recessed ridges along with a Center Groove which effectively defines the boundary between top and bottom switch functions.

V-Series Illuminated Indicators & Accessories
Alert operator of systems functions or malfunctions, are offered with removable/replaceable lamps in Contura II, II, V or X styles. Accessories include connectors, mounting panels, hole plugs, panel seals, and actuator removal tools. Refer to accessories page for full details.
### V-Series Contura Sealed Rocker Switches - General Specifications

<table>
<thead>
<tr>
<th><strong>Electrical</strong></th>
<th><strong>Agency Certifications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Rating</td>
<td></td>
</tr>
<tr>
<td>.4VA @ 24VDC (MAX) resistive</td>
<td></td>
</tr>
<tr>
<td>15 amps, 125VAC</td>
<td></td>
</tr>
<tr>
<td>10 amps, 250VAC</td>
<td></td>
</tr>
<tr>
<td>1/2 HP 125-250VAC</td>
<td></td>
</tr>
<tr>
<td>20 amps, 4-14VDC</td>
<td></td>
</tr>
<tr>
<td>15 amps, 15-28VDC</td>
<td></td>
</tr>
<tr>
<td>10A, 14V</td>
<td></td>
</tr>
<tr>
<td>6A, 125VAC L</td>
<td></td>
</tr>
<tr>
<td><strong>Dielectric Strength</strong></td>
<td></td>
</tr>
<tr>
<td>1500 Volts RMS</td>
<td></td>
</tr>
<tr>
<td><strong>Insulation Resistance</strong></td>
<td></td>
</tr>
<tr>
<td>50 Megohms</td>
<td></td>
</tr>
<tr>
<td><strong>Initial Contact Resistance</strong></td>
<td></td>
</tr>
<tr>
<td>10 milliohms max. @ 4VDC</td>
<td></td>
</tr>
<tr>
<td><strong>Life</strong></td>
<td></td>
</tr>
<tr>
<td>50,000-100,000 cycles circuit dependent</td>
<td></td>
</tr>
<tr>
<td><strong>Contacts</strong></td>
<td></td>
</tr>
<tr>
<td>Silver alloy, silver tin-oxide, fine silver</td>
<td></td>
</tr>
<tr>
<td><strong>Terminals</strong></td>
<td></td>
</tr>
<tr>
<td>Brass or copper/silver plate 1/4&quot; (6.3mm) Quick Connect terminations standard. Solder lug, Wire Lead</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
</tr>
<tr>
<td>Endurance</td>
<td></td>
</tr>
<tr>
<td>150,000 cycles minimum circuit dependent</td>
<td></td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
<tr>
<td>Lighted</td>
<td></td>
</tr>
<tr>
<td>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)</td>
<td></td>
</tr>
<tr>
<td><strong>Seals</strong></td>
<td></td>
</tr>
<tr>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td>Optional external gasket panel seal</td>
<td></td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td></td>
</tr>
<tr>
<td>Polyester blend rated to 125°C with a UL flammability rating of 94V0.</td>
<td></td>
</tr>
<tr>
<td><strong>Contura II,III,IV,V, VI, VII Actuator</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hard Surface:</strong> Basic actuator structure molded of thermoplastic polycarbonate with a hard Nylon 66 thermoplastic surface overlay.</td>
<td></td>
</tr>
<tr>
<td><strong>Soft Surface:</strong> Basic actuator structure molded of thermoplastic polycarbonate with an elastomer overlay.</td>
<td></td>
</tr>
<tr>
<td><strong>Contura XXI,XII Actuator,VP</strong></td>
<td></td>
</tr>
<tr>
<td>Nylon 66 Reinforced rated to 105°C Polycarbonate rated at 100°C</td>
<td></td>
</tr>
<tr>
<td><strong>Contura XIV</strong></td>
<td></td>
</tr>
<tr>
<td>Polycarbonate lens/subrocker with ABS shell</td>
<td></td>
</tr>
<tr>
<td><strong>Actuator Travel (Angular Displacement)</strong></td>
<td></td>
</tr>
<tr>
<td>2 position</td>
<td>18°</td>
</tr>
<tr>
<td>3 positions</td>
<td>9&quot; from center</td>
</tr>
<tr>
<td><strong>Mounting Specifications</strong></td>
<td></td>
</tr>
<tr>
<td>Panel Thickness Range</td>
<td></td>
</tr>
<tr>
<td>Gaskets</td>
<td>Acceptable Panel Thickness</td>
</tr>
<tr>
<td>0</td>
<td>.030 to .250 (.76mm to 6.35mm)</td>
</tr>
<tr>
<td>1</td>
<td>.030 to .109 &amp; .147 to .157 (.76 to 2.77mm &amp; 3.73 to 3.98mm)</td>
</tr>
<tr>
<td>Recommended: No gasket with panel thickness of .032, .062, .093, .125, .187 or .250</td>
<td></td>
</tr>
</tbody>
</table>

**Agency Certifications**

Sealed version: IP68, in accordance with IEC 60529, BS 5490, DIN 40050 & NFC 20 010. This rating applies to front panel components of the actual switch only, and signifies protection against dust and the prolonged effects of immersion under pressure. The standard test for immersion under pressure requires submersion under one meter of water for 30 min. The V-Series switch has exceeded these parameters, having been actuated and illuminated during submersion.

Mixed Flowing Gas (MFG) Class III 3 year accelerated exposure per ASTM B-827, B-845 Silver and gold contacts

**Environmental**

- **Sealing**
  - Operating Temp.
    - Vibration 1
      - 40°C to + 85°C
    - Vibration 2
      - 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 resistance.
      - Resonance search
        - 24-50 Hz 0.40 DA
        - 50-2000 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 0.50
        - 200 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**
  - Per Mil-Std 810C, Method 510.2 Air Velocity 300 ±200 Feet/Min, Test Duration 16 Hrs.

- **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**
  - 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.
Dimensional Specifications: in. [mm]

**CONTURA II STYLE**
- Shown with Square Lens
- 8 Terminal Base W/BARRIERS

**CONTURA III STYLE**
- 8 Terminal Base W/O BARRIERS

**CONTURA IV STYLE**
- Shown with Bar Lens
- 10 Terminal Base W/BARRIERS

8 Terminal Base W/BARRIERS
- .940 [23.87]
- .505 [12.83]
- .250 [6.35]
- .031 [0.78]
- .390 [9.90]
- .960 [24.38]

10 Terminal Base W/BARRIERS
- .940 [23.87]
- .505 [12.82]
- .250 [6.35]
- .031 [0.78]
- .820 [20.82]
- .960 [24.38]

10 Terminal Base W/O BARRIERS
- 1.050 [26.67]
- .250 [6.35]
- .031 [0.78]
- .820 [20.82]
- .960 [24.38]

Switch shown with VCH connector 8 terminal

Bottom View Terminal Arrangement
- 8 Terminal Base

Bottom View Terminal Arrangement
- 10 Terminal Base

Switch shown with VCH connector 10 terminal
**Dimensional Specifications: in. [mm]**

**CONTURA V**
- Shown with bar lens

**CONTURA VI**
- Shown with oval lens

**CONTURA VII**
- Shown with large lens and bar lens

8 TERMINAL BASE
- W/BARRIERS
- W/O BARRIERS

10 TERMINAL BASE
- W/BARRIER AND LAMP TERMINAL
- W/O BARRIERS

**REFERENCES**
- 8 TERMINAL BASE,
- 10 TERMINAL BASE,
- Bottom view terminal arrangement,
- Switch shown with VCH connector
- Bottom view terminal arrangement,
- Switch shown with VC1 connector
- Dimensions: in. [mm]
Dimensional Specifications: in. [mm]

**CONTURA X STYLE**
- Shown with raised bracket

**CONTURA XI STYLE**
- Shown with raised bracket and two square lenses

**CONTURA XII STYLE**
- Shown with paddle actuator

**CONTURA XIV STYLE**
- Shown with large lens

---

Switch shown with VC1 connector 8 terminal

8 terminal base W/BARRIERS

8 terminal base W/BARRIERS

8 terminal base W/BARRIERS

8 terminal base W/BARRIERS

---

Bottom View Terminal Arrangement 8 terminal base

Bottom View Terminal Arrangement 10 terminal base

Bottom View Terminal Arrangement 8 terminal base

---

Switches shown with VC1 connector 10 terminal

10 terminal base W/O BARRIERS

10 terminal base W/O BARRIERS

10 terminal base W/O BARRIERS

10 terminal base W/O BARRIERS

---

10 terminal base W/O BARRIERS

10 terminal base W/O BARRIERS

10 terminal base W/O BARRIERS

10 terminal base W/O BARRIERS

---

Dimensional Specifications: in. [mm]
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 LAMP LOCATION</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>
NOTE:
J circuits are available for all non-locking V-Series styles. Consult factory for p/n details.
2 CIRCUIT

8 terminal 10 terminal
8 - 7 8 - 7
2 - 5 2 - 5
3 - 6 3 - 6
10 - 9 10 - 9

Terminal Connections as viewed from bottom of switch:
SP - single pole - uses terminals 1, 2 & 3.
DP - double pole uses terminals 1, 2, 3, 4 & 5.

Position:
1 A
2 B
3 C
4 D
5 F
6 J
7 K
8 L

2, 4 & 5
ON
OFF
ON
OFF
1 & 2

SPECIAL CIRCUITS

H* 2 x 3 2 x 3 5 & 4
G* 2 x 3, 5 & 6 2 x 3 1 & 2
S* 2 x 3, 5 & 6 2 x 3 1 & 2
M* 2 x 3, 5 & 6 2 x 3 2 & 6
E* 5 & 6 2 x 3 5 & 1

* 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 E may be used for SP OFF-ON-ON circuit.

3 RATING

1 .4VA @ 28VDC Resistive
2 .15A 24V
3 .20A 18V
4 .20A 12V
5 .20A 14V, 10A 14V
6 .4VA 15A 24V
7 .10A 14V, 6A 14V
8 Terminals 7, 8, 9 for lamp circuit only.

4 TERMINATION/BASE STYLE

Legend Options & Codes:
- **Legend Type**: 
  - Orientation
  - Orientation 1
  - Orientation 2
  - Orientation 3
  - Orientation 4
- **Legend Options**: 
  - No legend
  - No actuator
  - Actuator color or body legend specified in selection 14
- **Legend Textures**: 
  - Soft surface
  - Hard surface
- **Orientation**: 
  - Orientation
  - Orientation 1
  - Orientation 2
  - Orientation 3
  - Orientation 4
- **Legend Options & Codes**: 
  - For additional legend options & codes, visit us at www.carlingtech.com.

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.

Sealed: 
- Lamp #1: INDEPENDENT 8 (+) 7 (-)
- Lamp #2: INDEPENDENT 8 (+) 7 (-)

Unsealed: 
- Lamp #1: INDEPENDENT 8 (+) 7 (-)
- Lamp #2: INDEPENDENT 8 (+) 7 (-)

Lamps: 
- Lamp #1: INDEPENDENT 8 (+) 7 (-)
- Lamp #2: INDEPENDENT 8 (+) 7 (-)

6.7 LAMP (SAME CODING FOR BOTH SELECTIONS)

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

No lamp
- Neon
  - 125VAC
- 250VAC
- Incandescent
  - 3V
  - 5V
- 6V
- 12V
- 18V
- 24V
- LED
  - Red
  - Amber
  - Green

- Superbright
  - Red
  - Amber
  - Green

- Jumper between terminals 2 & 4 for circuit E are provided by customer. Circuit E may be used for SP OFF-ON-ON circuit.

7 LAMP (SAME CODING FOR BOTH SELECTIONS)

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

No lamp
- Neon
  - 125VAC
- 250VAC
- Incandescent
  - 3V
  - 5V
- 6V
- 12V
- 18V
- 24V
- LED
  - Red
  - Amber
  - Green

- Superbright
  - Red
  - Amber
  - Green

- Jumper between terminals 2 & 4 for circuit E are provided by customer. Circuit E may be used for SP OFF-ON-ON circuit.

8 FLUSH BRACKET COLOR, PANEL SEAL

Black
- White
- Gray
- Red
- Blue
- Lens color for LEDs must be clear, white, or match color of LED.
- Green or blue lenses are not recommended with Neon lamps.

9 ACTUATOR

No actuator
- Contura II
- Contura III

Actuator orientation above terminals: 3, 6, 1, 4

10 LENS

Clear
- White
- Amber
- Green
- Red
- Blue

11 ACTUATOR COLOR AND TEXTURE

Black
- Gray
- Red
- White

12 ACTUATOR LENS OR BODY LEGENDS

11 ON
- 12 OFF
- 13 I
- 14 O
- 15 OFF
- 16 ON
- 17 I
- 18 O
- F
- N
- F
- E

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

13 LEGEND ORIENTATION

Orientation 1
- Orientation 2
- Orientation 3
- Orientation 4

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

14 ACTUATOR LENS LEGEND

No legend this location / no actuator

(used with codes 11-18 in selection 12)
- Selection 14 required when switch requires two legends. In the two legends consist of one lens and one body legend, lens legend must be specified in selection 12; body legend specified in selection 14.

Notes:
- Consult factory to verify horsepower rating for your particular circuit choice.
- Custom colors are available. Consult factory.
- 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.
- Additional ratings available. See V-Series Switch Accessories page.
- Contura II available with two square lenses. Consult factory for details.
### V1DASW0B-AZE00-0

#### Series

1. **1**
2. **2**
3. **3**
4. **4**
5. **5**
6. **6**
7. **7**
8. **8**
9. **9**
10. **10**
11. **11**
12. **12**
13. **13**

#### Circuit

1. **1**
2. **2**
3. **3**
4. **4**
5. **5**
6. **6**
7. **7**
8. **8**
9. **9**
10. **10**
11. **11**
12. **12**
13. **13**

#### Termination/Base Style

<table>
<thead>
<tr>
<th>1st Term</th>
<th>2nd Term</th>
<th>Termination</th>
<th>Jumper</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td>250 TAB (QC) no barriers</td>
<td>No</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td>250 TAB (QC) with barriers</td>
<td>No</td>
</tr>
<tr>
<td><strong>J</strong></td>
<td><strong>K</strong></td>
<td>250 TAB (QC) no barriers</td>
<td>Yes T2 to 5</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><strong>5</strong></td>
<td>Soldier Lug no barriers</td>
<td>No</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
<td>Soldier Lug</td>
<td>No</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
<td>Wire Leads no barriers</td>
<td>No</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td><strong>F</strong></td>
<td>Wire Leads</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Notes:
1. Custom colors are available. Consult factory.
2. 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.

#### 7 Lamp

- Lamp above terminals 3 & 6 end of switch
- No lamp
- Neon
  - 1 - 12VAC
  - 2 - 250VAC
  - 3 - 5V
  - 4 - 6V
  - 5 - 12V
  - 6 - 18V
  - 7 - 24V
- LED
  - Red Superbright
  - Green Superbright
  - Amber Superbright
  - Black Superbright
- Jumper between terminals 2 & 5 for circuits E, J, R & S are specified in selection 4.

#### 8 Flush Bracket Color, Panel Seal

- No Seal
- B: White
- W: Gray

#### 9 Hard Surface Actuator

- Contura II
  - Black
  - Gray
  - Red
  - White
- Contura III
  - C: Black
  - D: Gray
  - E: Red
  - F: White

#### 10 Lens

- Z: No Lens
- Clear: White
- Amber: Green
- Red: Red
- Blue: Blue

#### 11 Actuator Lock Function and Color

- Matching Actuator: A: H
- Black: J
- White: K
- Red: L
- D: V
- Safety Orange: E
- M: W
- N: S
- P: T
- 1: 2
- 2: 3
- 3: 4
- 4: 5
- 5: 6
- 6: 7
- 7: 8
- 8: 9
- 9: 10
- 10: 11
- 11: 12
- 12: 13

#### 12 Actuator Lens or Body Legend

- 0 - No Legend
- 1 - Orientation 1
- 2 - Orientation 2
- 3 - Orientation 3
- 4 - Orientation 4

#### Legend Orientation

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

---

**Notes:**
- Consult factory to verify horsepower rating for your particular circuit choice.
- Custom colors are available. Consult factory.
- White imprinting is standard on black actuators. Black imprinting is standard on white, red and gray actuators. Custom colors are available, consult 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.
1 SERIES
V

2 CIRCUIT
Terminal Connections as viewed from bottom of switch:
8 terminal 10 terminal
8 • 7 • 6 • 5 • 4 • 3 • 2 • 1
1 • 4 • 7 • 8 • 5 • 6 • 3 • 2
3 • 6 • 3 • 6
10 • 9

Position:
1 2 3 4 5 6 7 8 9
SP DP Connected Terminals 1 & 2 & 5 & 6 & 7 & 8 & 9
1 A ON NONE OFF
2 B ON OFF
3 C ON OFF
4 D ON NONE ON
5 F ON NONE ON
6 J ON OFF ON
7 K ON OFF ON
8 L OFF OFF

SPECIAL CIRCUITS
H* 2 • 3 2 • 3 • 5 • 6 5 • 4
O* 2 • 3 • 5 • 6 2 • 3 OFF
S* (2 • 3 • 5 • 6) 2 • 3 OFF
M* (2 • 3 • 5 • 6) 2 • 3 OFF
R* (2 • 3 • 5 • 6) 2 • 3 OFF
E* 5 • 6 5 • 6 OFF

3 RATING 1 2 3 4 5 6 7 8 9
1 A 0.4VA @ 28VDC Resistive
B 15A 24VDC
C 20A 18VDC
D 20A 12VDC
E 20A 14VDC, 10A 14VDC (circuit 1, 4, A & D only)
F 10A 14V, 6A 14V (circuit G only)
M .4VA/20A 12VDC
N .4VA/15A 24VDC

4 TERMINATION/BASE STYLE
8 term 10 Term Terminal Jumper
I 2 .250 TAB (QC) no barriers No
A B .250 TAB (QC) with barriers No
J K .250 TAB (QC) no barriers Yes T2 to 5
3 5 Solder Lug no barriers No
C D Solder Lug No
5 6 Wire Leads no barriers No
E F Wire Leads No

5 ILLUMINATION & SWITCH SEALING
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
Seal Seat Lines Lamps Type Lamp wired to Terminals
B 1 1 INDEPENDENT 8 (7)
B 1 1 INDEPENDENT 8 (7)
C 2 2 DOWN 3 (7)
D 4 1 DOWN 3 (7)
E 5 1 UP 1 (7)
F 6 1 INDEPENDENT 8 (7)
G 7 1 UP 3 (6)
H 2 3 INDEPENDENT 8 (7)
U 1 2 INDEPENDENT 8 (7)
10 1 (9)

SINGLE POLE SWITCHES ONLY
J 8 1 DOWN 3 (7)
K 2 2 INDEPENDENT 6 (7)

DOUBLE POLE SWITCHES ONLY
L 9 1 DOWN 3 (7)
M 1 1 UP 3 (6)
N 2 2 DOWN 3 (6)
P 2 2 DOWN 1 (4)
Q 2 2 DOWN 1 (4)
R 2 2 DOWN 3 (6)
S 2 2 DOWN 1 (4)
T 2 2 DOWN 3 (6)

6.7 LAMP (SAME CODING FOR BOTH SELECTIONS)
Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6
No lamp 0
Neutral 1 125VAC
Inclined 2 250VAC
LED 3 43V
Superbright 4 56V
Superbright 5 67V
Superbright 6 78V
Superbright 7 89V
Superbright 8 90V

8 FLUSH BRACKET COLOR*, PANEL SEAL
No Seal Black White Gray
One Seal C Y H

9 ACTUATOR
0 No Actuator
E Contura IV, left orientation
T Contura IV, left orientation, laser etched
F Contura IV, right orientation
R Contura IV, right orientation, laser etched
Actuator orientation above terminals:

10 LENS
0 - No Actuator Z - No Lens
Clear White Amber Green Red Blue
1 6 8 G M T
2 7 C H N U
3 8 D J V
4 9 E K R W
5 A F L S Y

Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps.

11 ACTUATOR COLOR 1.5.5
0 No Actuator
Black C Gray H Red S
White Y Nickel D Pewter E

12 ACTUATOR LENS OR BODY LEGENDS
11 ON 12 OFF 13 14 O
Off ON I
15 O I O I 17 O I 18 O I
F N F F F F

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

13 LEGEND ORIENTATION
0 No legend (used with codes 11-18 in selection 12)
1 Orientation 1
2 Orientation 2
3 Orientation 3
4 Orientation 4

14 ACTUATOR LENS LEGEND
0 No legend
1 Orientation (used with codes 11-18 in selection 12)
Selection 14 required when switch requires two legends. If the two legends consist of one lens 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:
Consult factory to verify horsepower rating for your particular circuit choice.
1 Custom colors are available. Consult factory.
2 White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators. Custom colors are available, consult factory.
3 Gloss bow is on left side of E actuator and right side of F actuator.
4 Additional ratings available. See V-Series Switch Accessories page.
5 Laser etched rocker only available with lens code Z & actuator colors black, nickel or pewter.
6 Pewter and nickel colors only available with laser etched actuator.

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### 1 SERIES

V

### 2 CIRCUIT

Terminal Connections as viewed from bottom of switch:
- SP: single pole - uses terminals 1, 2 & 3
- DP: double pole uses terminals 1, 2, 3, 4 & 5
- 8 terminal 10 terminal

<table>
<thead>
<tr>
<th>Position</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP DP</td>
<td>2 &amp; 3</td>
<td>5 &amp; 6</td>
<td>Connected Terminals 1 &amp; 2 &amp; 3</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>(ON)</td>
<td>OFF</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>(ON)</td>
<td>OFF</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>(ON)</td>
<td>(ON)</td>
</tr>
</tbody>
</table>

**SPECIAL CIRCUITS**
- Jumper between terminals 2 & 4 for circuit E are provided by customer.
- Jumper between terminals 2 & 5 for circuits H, G, M, R & S are specified in selection 4.
- Jumper between terminals 2 & 4 for circuit E are specified in selection 4.
- 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

<table>
<thead>
<tr>
<th>No.</th>
<th>4VA @ 28VDC Resitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>G</td>
</tr>
<tr>
<td>7</td>
<td>H</td>
</tr>
<tr>
<td>8</td>
<td>L</td>
</tr>
</tbody>
</table>

### 4 TERMINATION/BASE STYLE

<table>
<thead>
<tr>
<th>Term</th>
<th>10 Term</th>
<th>Terminal Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>250 TAB (QC) no barriers</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>250 TAB (QC) with barriers</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Solder Lug</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Wire Leads No barriers</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>E</td>
</tr>
</tbody>
</table>

**Notes:**
- Codes J & K for circuits H, G & M.

### 5 ILLUMINATION & SWITCH SEALING

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.

**Sealed:**
- Unsealed:

<table>
<thead>
<tr>
<th>Lamp Type</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND</td>
<td>1</td>
<td>1</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>DOWN</td>
<td>2</td>
<td>1</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>UP</td>
<td>3</td>
<td>2</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>DOWN</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>UP</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>DOWN</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>UP</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>DOWN</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>UP</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>DOWN</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>UP</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>DOWN</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>UP</td>
<td>INDEPENDENT</td>
<td></td>
</tr>
</tbody>
</table>

### 6.7 LAMP (SAME CODING FOR BOTH SELECTIONS)

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

- No lamp
- Neutral
- 125VAC
- 250VAC
- 56V
- 126V
- 718V
- 824V

**LED**
- Red
- Amber
- Green
- Red

**2VDC**
- A
- 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>Color</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Panel Seal</td>
</tr>
<tr>
<td>White</td>
<td>Gray</td>
</tr>
</tbody>
</table>

### 9 ACTUATOR COLOR

<table>
<thead>
<tr>
<th>No.</th>
<th>0</th>
<th>Actuator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Actuator</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Contura V</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Laser etched</td>
<td></td>
</tr>
</tbody>
</table>

### 11 ACTUATOR LENS OR BODY LEGENDS

<table>
<thead>
<tr>
<th>Lens Code</th>
<th>Body Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3, 3</td>
<td>Nickel</td>
</tr>
<tr>
<td>4, 5, 6</td>
<td>Pewter</td>
</tr>
</tbody>
</table>

### 12 ACTUATOR LENS OR BODY LEGENDS

<table>
<thead>
<tr>
<th>Lens Code</th>
<th>Body Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3, 3</td>
<td>Nickel</td>
</tr>
<tr>
<td>4, 5, 6</td>
<td>Pewter</td>
</tr>
</tbody>
</table>

### 14 ACTUATOR LENS LEGEND

<table>
<thead>
<tr>
<th>Lens Code</th>
<th>Actuator Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Black</td>
</tr>
<tr>
<td>1</td>
<td>Gray</td>
</tr>
<tr>
<td>2</td>
<td>Red</td>
</tr>
<tr>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>4</td>
<td>Nickel</td>
</tr>
<tr>
<td>5</td>
<td>Pewter</td>
</tr>
</tbody>
</table>

### 13 LEGEND ORIENTATION

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

### 14 ACTUATOR LENS LEGEND

<table>
<thead>
<tr>
<th>Lens Code</th>
<th>Actuator Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Black</td>
</tr>
<tr>
<td>1</td>
<td>Gray</td>
</tr>
<tr>
<td>2</td>
<td>Red</td>
</tr>
<tr>
<td>3</td>
<td>White</td>
</tr>
<tr>
<td>4</td>
<td>Nickel</td>
</tr>
<tr>
<td>5</td>
<td>Pewter</td>
</tr>
</tbody>
</table>

Notes:
- Consult factory to verify horsepower rating for your particular circuit choice.
- Custom colors are available. Consult factory.
- White printing is standard on black actuators. Black printing is standard on white, red and gray actuators. Custom colors are available. Consult factory.
- Laser Etched rocker only available with lens code 2 & actuator colors black, nickel or pewter.
- Additional ratings available. See V-Series Switch Accessories page.
- Nickel and Pewter colors are only available with laser etched actuator.
- Consult factory for laser etched lens callout.
### V-Series Contura IV & V Locking Sealed Rocker Switches - Ordering Scheme

#### 1 SERIES

<table>
<thead>
<tr>
<th>V1DASW0B-JZE00-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Series</td>
</tr>
</tbody>
</table>

#### 2 CIRCUIT

Terminal Connections as viewed from bottom of switch:
- **SP**: single pole uses terminals 1, 2 & 3.
- **DP**: double pole uses terminals 1, 2, 3, 4, 5 & 6.
- **Terminals**: 7, 8, 9 & 10 for lamp circuit only.

#### 3 RATING

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4VA/28VDC Resistive</td>
<td>20A 12V</td>
<td>10A 14V, 10A 14VT (circuit 1, 4, A &amp; D only)</td>
</tr>
<tr>
<td>15A 24V</td>
<td>20A 14V</td>
<td>6A 14VT (circuit G only)</td>
</tr>
<tr>
<td>4VA/15A 24V</td>
<td>20A 14V, 10A 14VT (circuit 1, 4, A &amp; D only)</td>
<td></td>
</tr>
<tr>
<td>15A 24V</td>
<td>20A 14V</td>
<td>6A 14VT (circuit G only)</td>
</tr>
</tbody>
</table>

#### 4 TERMINATION/BASE STYLE

<table>
<thead>
<tr>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>No barriers</td>
<td>Solder Lug no barriers</td>
<td>Solder Lug no barriers</td>
<td>Wire Leads no barriers</td>
<td>Wire Leads no barriers</td>
</tr>
<tr>
<td>No</td>
<td>Yes T2 to 5</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

#### 5 ILLUMINATION & SWITCH SEALING

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.

#### 6 LOCK

Lock above terminals 1 & 4 end of switch.

#### 7 LAMP

Lamp above terminals 3 & 6 end of switch:
- No lamp
- Neon: 125VAC, 250VAC
- Incandescent: 4.3V, 5.6V
- LED: 6.12V, 7.18V, 8.24V

#### 8 FLUSH BRACKET COLOR, PANEL SEAL

- Black, White, Gray
- One Seal: C, Y, H

#### 9 HARD SURFACE ACTUATOR

**CONTURA IV**
- Orientation: Black, Gray, Red, White
- Left: J, K, L, M
- Right: N, R, P, S

**CONTURA V**
- Actuator orientation above terminals: 3, 6, 1, 4

#### 10 LENS

- Z: No Lens
- Clear, White, Amber, Green, Red, Blue
- Bar lens: A, B, C, D, E, F
- Oval lens: G, H, J, K, L, M

Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps.

#### 11 ACTUATOR LOCK FUNCTION AND COLOR

Lock Color: A, H, R, 1
- Match Actuator: A, H, R, 1
- Black: B, J, S, 2
- White: C, K, T, 3
- Red: D, L, V, 4
- Safety Orange: E, M, W, 5
- Gray: F, G, N, 6

#### 12 ACTUATOR LENS OR BODY LEGEND

- 00: No Legend
- OFF: ON: O, I

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

#### 13 LEGEND ORIENTATION

- 0: No legend
- 1: Orientation 1
- 2: Orientation 2
- 3: Orientation 3
- 4: Orientation 4

Notes:
- Consult factory to verify horse power rating for your particular circuit choice.
- Custom colors are available. Consult factory.
- White imprinting is standard on black actuators. Black imprinting is standard on white, red and gray actuators. Custom colors are available, consult 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.
- Located at T3-6 end of switch.
- Contura V style only.

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### 1 Series

<table>
<thead>
<tr>
<th>V1 DBGNTB-HA7CBAC-100</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>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>13</td>
</tr>
</tbody>
</table>

#### 2 Circuit

**Terminal Connections as viewed from bottom of switch:**
- **SP**: single pole - uses terminals 1, 2 & 3.
- **DP**: double pole uses terminals 1, 2, 3 & 6.

<table>
<thead>
<tr>
<th>Position</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ON</td>
<td>NONE</td>
<td>OFF</td>
</tr>
<tr>
<td>B</td>
<td>(ON)</td>
<td>NONE</td>
<td>OFF</td>
</tr>
<tr>
<td>C</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>D</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>E</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>F</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>G</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>H</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
</tbody>
</table>

**Special Circuits**
- **H**: 2, 3 & 5, 6 & 8 terminals, 7, 9 & 10 for lamp circuit only.
- **J**: jumper between terminals 2 & 4 for circuit E.

### 3 Rating
- **V1**: 15A 24VDC
- **B**: 20A 18V
- **C**: 20A 20V
- **D**: 20A 25V DC
- **E**: 20A 12V, 10A 14VDC
- **F**: 20A 12V
- **G**: 20A 15A 24VDC

### 4 Termination/Base Style
- **10 Term**: 10 Terminal
- **Jumpers**: No

### 5 Illumination & Switch Sealing
- **Sealed**: Unsealed
- **Lamps**: LED, Color
- **Illumination Type**: Light Emitting Diode
- **Lamp wired to Terminals**: LED

### 6 Legend Orientation
- **Legend Orientation**: None

### 7 Lamp
- **Lamp above terminals 3 & 6 end of switch**
  - **No lamp**: 0
  - **Neon**: 1
  - **Incandescent**: 4, 3V
  - **250VAC**: 5, 6V
  - **12V**: 6, 12V
  - **24V**: 7, 18V
  - **24VDC**: 8, 24V

### 8 Flush Bracket Color
- **Black**: W
- **White**: B
- **Gray**: G
- **Red**: Y
- **Blue**: R

### 9 Actuator Color
- **No Actuator**: 0
- **Actuator H**: High Insert
- **Actuator L**: Low Insert

### 10, 11 Lens
- **Lens Color**: Clear, White, Green, Red, Blue
- **Lens Color for LEDs**: Must be clear, white, or match color of LED.
- **Lens Color for Neon Lamps**: Black, White, Gray

### 12 Actuator Color
- **Black**: C
- **Gray**: H
- **Red**: S
- **White**: Y

### 13 Insert Color
- **Bright Nickel Plated**: N
- **Satin Chrome Plated**: Z
- **Bright Chrome Plated**: B
- **Satin Chrome Painted**: D
- **Din Chrome Painted**: C

### 14 Actuator Lens or Body Legends
- **OFF**: 0
- **ON**: 1
- **Orientation 1**: 2
- **Orientation 2**: 3
- **Orientation 3**: 4
- **Orientation 4**: 5

### 15 Legend Orientation
- **Legend Orientation**: None

### 16 Actuator Lens Legend
- **Legend Orientation**: None

Notes:
- **Consult factory to verify horsepower rating for your particular circuit choice.**
- **Custom colors are available. Consult factory.**
- **White imprinting is standard on black actuators. Black imprinting is standard on white, red and gray actuators. Custom colors are available, consult factory.**
- **Additional ratings available. See V-Series Switch Accessories page.**
1. **SERIES**

V

2. **CIRCUIT**

Terminal Connections as viewed from bottom of switch:

- SP - single pole - uses terminals 1, 2 & 3.
- DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.

Position:

- 1 A 2 B 3 C 4 D 5 E 6 F
- 7 G 8 H 9 I 10 J

3. **RATING**

- 4VA @ 28VDC Resistive
- 15A 24V
- 20A 18V
- 10A 14V, 10A 14VT (circuit 2, 4, A & D only)
- 12VDC C N H T
- 24VDC D P J V

4. **TERMINATION/BASE STYLE**

- 2, 4, 5 & 6 = Connected Terminals
- 1 & 2, 4 & 5

5. **ILLUMINATION & SWITCH SEALING**

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

Legend:

- No Legend (used with codes 11-18 in selection 12)
- Orientation 1
- Orientation 2
- Orientation 3
- Orientation 4

6. **LAMPS**

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Positive</th>
<th>Negative</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
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<td>4</td>
<td>6</td>
<td>7</td>
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</table>

7. **FLUSH BRACKET COLOR**

- Black
- White
- Gray

8. **ACTUATOR COLOR**

- Red
- Amber
- Green
- Red (for daylight bright LED options)

9. **ACTUATOR LENS LEGEND**

- Red
- Amber
- Green
- Red

10. **COLOR/THUMB PRINT COLOR**

- Blue
- Green
- Red

11. **LEGEND ORIENTATION**

- Orientation 1
- Orientation 2
- Orientation 3
- Orientation 4

12. **ACTUATOR LENS OR BODY LEGENDS**

- Orientation 1
- Orientation 2
- Orientation 3
- Orientation 4

13. **ACTUATOR LENS LEGEND**

- Orientation 1
- Orientation 2
- Orientation 3
- Orientation 4

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

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

#### V SERIES

1. **CIRCUIT**
   - Terminal Connections as viewed from bottom of switch:
     - 8 terminal - 10 terminal
   - Position:
     - Terminal 1 Connects to 2 & 3
     - Terminal 4 Connects to 5 & 6

2. **RATING**
   - 4VA@28VDC Resistive

3. **TERMINATION/BASE STYLE**
   - 1 2 3 4 5 6
   - Terminations: momentary

4. **ILLUMINATION & SWITCH SEALING**
   - Lamp #1 above terminals 1 & 4; Lamp #2 above terminals 3 & 6
   - Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6

### 6.7 LAMP (same coding for both selections)

- Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6
- No lamp: 0
- Neon: 125VAC 2, 250VAC
- LED: 1 3V 2 5V 3 6V 4 8V 5 12V 6 12V 7 18V 8 24V
- 24VDC: D P J V

### 8 BRACKET PANEL SEAL, PANEL SEAL, PANEL SEAL, PANEL SEAL

#### 9 ACTUATOR

- No Actuator: 0
- Contura: 1 2 3 4
- Contura: 6 7 8 9
- Contura: J K N M

### 10 LENS - ABOVE LAMP #1 TERMINALS

- Clear White Amber Green Red Blue
- Lens Style: 3 8 D J P V Bar
- One piece Square: 5 A F L S Y Two piece Square
- Two piece Square

### 12 ACTUATOR LENS OR BODY LEGEND

#### 13 LEGEND ORIENTATION

- No Legend: 0
- Legend options & codes: visit us at www.carlingtech.com

### 14 ACTUATOR LENS LEGEND

- No Legend: 0
- Legend options & codes: visit us at www.carlingtech.com

---

Notes:
- *All lens bodies are molded of opaque material. Consultant factory for other lens colors.
- Green or blue lenses are not recommended with Neon lamps.
- * Additional ratings available. See V-Series Switch Accessories page.

---

**Legend Orientation Options & Codes:**

1. White imprinting is standard on black actuators; Black imprinting is standard on white, red & gray actuators. Custom colors are available, consult factory.
2. With 2 square lenses, use sel. 12 for lens above lamp 1, & selection 14 for lens above lamp 2. 4 additional ratings available. See V-Series Switch Accessories page.
3. Not available with Contura XI rockers.

---

**ACTUATOR LENS LEGEND**

- No Legend: 0
- Legend options & codes: visit us at www.carlingtech.com
### V-Series Contura X Locking Sealed Rocker Switches - Ordering Scheme

#### 1 SERIES

<table>
<thead>
<tr>
<th>1</th>
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<tr>
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<td>D</td>
<td>A</td>
<td>S</td>
<td>W</td>
<td>0</td>
<td>1</td>
<td>P</td>
<td>B</td>
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</table>

#### 2 CIRCUIT

Terminal Connections as viewed from bottom of switch:
- SP - single pole - uses terminals 1, 2 & 3.
- DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.

- 1 - 4
- 2
- 3 - 6
- 10 - 9
- 8 - 7
- 6
- 5
- 2 - 5
- 3 - 4
- 1 - 2

Position:
- 1 - 2
- 3 - 6
- 10 - 9

Jumper between terminals 2 & 5 for circuits H, G, M, R & S are specified in selection 4.

#### 3 RATING

1. 1A @ 28VDC Resistive
2. 15A, 24V
3. 20A, 12V
4. 20A, 14V, 10A, 14VT (circuit 1, 4, A & D only)
5. 10A, 14V, 6A, 14VT (circuit G only)
6. 4VA/24V
7. 4VA/15A, 24V
8. 20A, 14V, 10A, 14VT (circuit G only)
9. 15A, 24V

#### 4 TERMINATION/BASE STYLE

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</tbody>
</table>

Jumper between terminals 2 & 5 for circuits H, G, M, R & S are specified in selection 4.

#### 5 ILLUMINATION & SWITCH SEALING

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

#### 6 LOCK

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

Notes:
- Custom colors are available. Consult factory.
- White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators; Custom colors are available, consult factory.
- Located over T1-4 end of switch.
- Additional ratings available. See V-Series Switch Accessories page.
- Located over T5-6 end of switch.

---

**6.7 LAMP (same coding for both selections)**

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

- No lamp
- Neon: 125vac, 250vac
- Incandescent: 43V, 56V, 612V, 718V, 824V

#### 8 FLUSH BRACKET COLOR, PANEL SEAL

Contura X: Black, Grey, Red, White

#### 9 HARD SURFACE ACTUATOR

Actuator orientation above terminals: 3.6, 1.4

#### 10 LENS - ABOVE LAMP #2 TERMINALS

Z - No Lens Clear White Amber Green Red Blue Lens Style
3 8 D J P V Bar
4 9 E K R W One piece Square
5 A F L S Y Two piece Square* (w/ clear top protective lens)
2 7 C H N U Two piece Square* (w/ smoke top protective lens)
1 6 B G M T Two piece Square* (w/ white top protective lens)

* All bottom lenses are molded of opaque material. Consult factory for other lens colors.

#### 11 ACTUATOR LOCK FUNCTION AND COLOR

Lock Color: Up, Down, Up & Down

- Match Actuator: A, H, R
- Black: B, J, S
- White: C, K, T
- Red: D, L, V
- Gray: E, M, W
- Safety Orange: F, N, Y

#### 12 ACTUATOR LEN OR BODY LEGEND

- 00 - No Legend
- 21 22 23 24
- OFF ON O I
- 25 O 26 O 27 28 I
- F N F

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

#### 13 LEGEND ORIENTATION

Orientation 1
Orientation 2
Orientation 3
Orientation 4

For additional legend options & codes, visit us at www.carlingtech.com.
V 1 D B B C O B - F A P C A B - 1 0 0

1 SERIES

V

2 CIRCUIT

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

Position: 1 2 3

SP DP 2 & 3, 5 & 6 Connected Terminals 1 & 2, 4 & 5

1 A ON None OFF
2 B ON None OFF
3 C ON None OFF
4 D ON None OFF
5 F ON OFF ON
6 J ON OFF OFF
7 K ON OFF OFF
8 L ON OFF OFF

SPECIAL CIRCUITS

H* 2 & 3 2 & 3, 5 & 4 5 & 4
G* 2 & 3, 5 & 4 2 & 3 OFF
E* 4 & 5 4 & 5 OFF
F* 2, 4 & 5 & 6 2 & 4 OFF

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 E may be used for SP OFF-ON circuit.

3 RATING

1 .4VA @ 28VDC Resistive
2 20A 12V
3 20A 18V
4 15A 24V

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

4 TERMINATION / BASE STYLE

8 term Terminations Jumper

A B C D E F G H

1 2 3 4 5 6 7 8

250 TAB (QC) no barriers No
250 TAB (QC) with barriers No
Solder Lug no barriers No
Solder Lug no barriers No
Wire Leads no barriers No
Wire Leads no barriers No

Note: Codes A, J, K for circuits H, G, M & S.

5 ILLUMINATION

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

Lamps Illumination Type Lamp wired to Terminals

S NONE
A 1 INDEPENDENT 8 (-) 7 (-)
B 1 DOWN 3 (+) 7 (-)
C 2 UP 3 (+) 7 (-)
D 1 DOWN 3 (-) 7 (-)
2 2 DOWN 1 (-) 7 (-)
E 1 UP 1 (+) 7 (-)
F 1 UP 3 (+) 7 (-)
G 1 INDEPENDENT 8 (+) 7 (-)
2 2 UP 3 (+) 7 (-)
H 2 INDEPENDENT 8 (-) 7 (-)

SINGLE POLE SWITCHES ONLY

J 1 DOWN 3 (+) 8 (-)
2 2 INDEPENDENT 6 (+) 7 (-)
K 1 INDEPENDENT 8 (+) 7 (-)
2 2 INDEPENDENT 6 (-) 7 (-)

DOUBLE POLE SWITCHES ONLY

L 1 DOWN 3 (+) 6 (-)
M 1 UP 3 (+) 6 (-)
N 1 DOWN 3 (-) 6 (-)
2 2 DOWN 1 (+) 4 (-)
P 1 UP 1 (+) 4 (-)
2 2 UP 3 (+) 6 (-)
U 1 INDEPENDENT 8 (+) 7 (-)
2 2 INDEPENDENT 10 (+) 9 (-)

6 & 7 LAMP

No lamp
Neon 1 125VAC 2 250VAC
Incandescent 4 3V 5 6V
Lamp* LED* superbright superbright
6VDC A L F R
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 BRACKET COLOR & PANEL SEAL

Color No Gasket 1 Gasket 2 Gasket
Black B C D
Gray G H J
White W Y Z

9 ACTUATOR STYLE

0 No Actuator - Furnished separately
00 Contura XIV
10 Contura XIV - Laser Etched

10 LENS COLOR / STYLE

Clear White Amber Green Red No lamp
Black B C D
Gray G H J
White W Y Z

11 ACTUATOR COLOR

0 N/A - No Actuator
1 Black
2 Red
3 Yellow
4 White

12 ACTUATOR LENS or BODY LEGEND

0 No legend
1 Orientation 1
2 Orientation 2
3 Orientation 3
4 Orientation 4

13 LEGEND ORIENTATION

0 No legend
1 Orientation 1
2 Orientation 2
3 Orientation 3
4 Orientation 4

14 ACTUATOR / LENS LEGEND

00 No legend this location / no actuator
01 1 Orientation 1
2 Orientation 2
3 Orientation 3
4 Orientation 4

Notes:
Consult factory to verify horsepower rating for your particular circuit choice.
1 Custom colors are available. Consult factory.
2 White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators.
3 Additional ratings available. See V-Series Switch Accessories page.
Reduce inventory levels and cost by stocking actuators and base switches separately.

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: VV with code selections 9-16
Contura II, III, IV, V, VII Actuator only: VV with code A, C, E, G, P or Z for selection 9 & with selections 10-14 in the ordering schemes.
Contura X, XI, XII, XIV actuators with lenses separately: VV with code selections 9-14 in the ordering schemes.
Panel Seal: VPS

Contura X & XI actuators without lenses separately:

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: VV with code selections 9-16
Contura II, III, IV, V, VII Actuator only: VV with code A, C, E, G, P or Z for selection 9 & with selections 10-14 in the ordering schemes.
Contura X, XI, XII, XIV actuators with lenses separately: VV with code selections 9-14 in the ordering schemes.
Panel Seal: VPS

Contura XII actuators without lenses separately:

Contura X, XI & XII actuators without lenses separately:

Contura XI & XII actuators without lenses separately:

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

Contura X, XI & XII actuators lens assembly separately:

Contura X, XI & XII actuators lens assembly separately:

Notes:
1. If actuator lens opening for 2 bar or 2 square lenses, legend orientation 0, 1, 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.

For additional legend options & codes, visit us at www.carlingtech.com.
Easily integrate Contura products into your system, with Contura Accessories

Contura Connectors

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<thead>
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<th>Q.C. SELECTION GUIDE</th>
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</tr>
<tr>
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NOTE: Consult Delphi Packard and/or Amp on actual part numbers and availability.
Delphi Packard is a registered trademark of Delphi-Packard Electrical Systems Warren, Ohio

AMP is a registered trademark of AMP Inc. Harrisburg, PA

Contura X Boot (P/N VB1-01)

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

Additional V-Series Ratings

1. 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, No Agency Listings
2. 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, UL Recognized, CSA Certified
3. 15A 125VAC 1/2 HP, 12(2)A 125 VAC μ T85
4. 15A 125VAC 1/2 HP, 12(6)A 125 VAC μ T85
5. 10A 250VAC, 15A 125VAC, 1/2 HP 125-250VAC, 12(2)A 250 VAC μ T85
6. 10A 250VAC, 15A 125VAC, 1/2 HP 125-250VAC, 12(6)A 250 VAC μ T85

NOTES: Consult factory to determine availability for individual circuits and their HP rating.
1. Not available with Contura 7 or 14 rocker styles.
2. Ratings 6 - 9 are UL, CSA & VDE certified, require terminations A or B for double pole circuits, & are not available with illumination circuits 4, 8, D, J, N, & T or with wire lead or solder lug terminations.

Circuits 1, 4, A, D, H, M & E are not available with rating 6 & 8. Rating 7 & 9 only available with circuits 1, 4, A & D. Circuits 2, 3, 5, 7, 8, K, L are 1/2 HP 250VAC only with rating 8. Ratings 6 & 7 must specify lamp code 1 (125VAC neon). Ratings 8 & 9 must specify lamp code 2 (250VAC neon). Rating L available with circuits 1, 4, A & D only.
Contura Mounting Panels
Dimensional Specifications: in. [mm]

Contura Hole Plug
Dimensional Specifications: in. [mm]