



V-Series

Sealed Rocker Switches

PRODUCT WEBPAGE

request sample, configure part, watch video





Contura® IP66/68 Snap-In Mounted Switches

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 510.1, UL 1500, ISO 8846, IEC 60529 and BS 5490 among others, making them one of the most rugged and reliable switches ever manufactured.

125-250 Poles **Amps**

Typical Applications

- · On/Off-Highway
- · Armoured Vehicles

Marine

- Mining Machinery
- · Any Application Requiring Sealing Protection







Design Features

INTERCHANGEABLE ACTUATORS

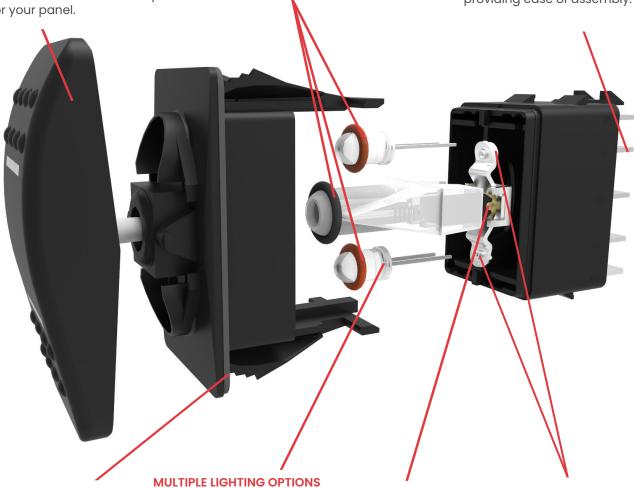
Panel redesign is a snap with our wide range of rocker styles. Achieve maximum design variety with minimum inventory. Simply swap rockers to create an entirely new look for your panel.

DUAL SEAL PROTECTION

Seals out water, dust, debris, and 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.

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

Actuator Options & Accessories



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 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 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 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 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 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 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 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.



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.



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

Tech Specs

Electrical

| Contact Rating | 4VA @ 24VDC (MAX) resistive 15 amps, 125VAC 10 amps, 250VAC 1/2 HP 125-250VAC 20 amps, 4-14VDC 15 amps, 15-28VDC 10A, 14VT 6A, 125VAC L | | | |
|----------------------------|--|--|--|--|
| 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 | | | |

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 II, III, IV, V, VI, VII Actuator | Hard Surface: Basic actuator structure molded of thermoplastic polycarbonate with a hard Nylon 66 thermoplastic surface overlay. Soft Surface: Basic actuator structure molded of thermoplastic polycarbonate with an elastomer overlay. | | |
| 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 | | |

Actuator Travel (Angular Displacement)

| 2 position | 18° |
|-------------|----------------|
| 3 positions | 9° from center |

Environmental

| Corrosion Mixed Flowing Gas (MFG) Class 3 year accelerated exposure per ASTM B-827, B-845 Silver and go contacts Operating Temp -40°C to +85°C Vibration 1 Per Mil-Std 202F, Method 204D Test Condition A 0.06 DA or 106's 10-500 Hz. Tested with VCH connector. Test criteria - No loss of circuit during test, pre and per test contact esistance. 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 0.50 200 Hz 0.06 | |
|--|-----------------|
| 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 pot test contact esistance. 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 | er |
| 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 potential test contact esistance. 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 | |
| 0.40 DA50-2000 Hz ±10 G's peak Horizontal Axis 3-5 G's max. Random 24 Hz 0.06 PSD-Gsq/Hz | |
| 2000 Hz 0.025 No loss of circuit during test; <10µ seconds chatte | <u>'</u> 125 |
| Shock Per Mil-Std 202F, Method 213B, To Condition K @ 30G's. Tested wit VCH connector. Test criteria - N loss of circuit during test, pre ar post test contact resistance. | h o |
| Salt Spray Per Mil-Std 202F, Method 101D, Test Condition A, 96 Hrs. Sealed version only. | ł |
| Dust Mil STD 810, Method 510.2 Air Velocity 300 Ft/Min Duration 16H | r |
| Thermal Shock Per Mil-Std 202F, Method 107F, Test Cond. A, -55°C to +85°C. Te criteria -pre and post test conto resistance | |
| Moisture Resistance Per Mil-Std 202F, Method 106F, Test Criteria - pre and post test contact resistance | |
| Ignition Protection All Contura switches with sealer construction meet the requirements of UL1500/ISO884 for ignition protection, in addition to conformance with EC direction 94/25/EC for marine products. | 6 on |

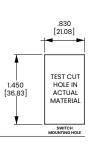
Mounting Specifications

Panel Thickness Range

Gaskets Acceptable Panel Thickness 0 .030 to .250 (.76 to 6.35mm) 1 .030 to .109 & .147 to .157

(.76 to 2.77mm & 3.73 to 3.98mm) Recommended: No gasket with panel thickness

of .032, .062, .093, .125, .187 or .250



Ordering Scheme contura || & ||

Sample Part Number Selection 2 3 4 5 6 10 11 12 13 14

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () – momentary from bottom of switch: SP – single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP – double pole: terminals 1, 2, 3, 4, 5 & 6.
8 – – 7 8 – – 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 1- -4 1- - 4 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10--9 Position: 2 & 3,5 & 6 Connected Terminals ON NONE (ON) NONE 1 & 2, 4 & 5 OFF SP DP 1234567 (OFF) NO. NONE Ď ON NONE ON (ON) ON (ON) NONE ON OFF ON OFF (ON) (ON) OFF SPECIAL CIRCUITS 2 & 3 2 & 3, 5 & 4 5 & 4 2 & 3, 5 & 6 2 & 3, 5 & 6 (2 & 3, 5 & 6) (2 & 3, 5 & 6) 2 & 3 2 & 3 OFF 1 & 2 OFF М* 2 & 3 2 & 3 5 & 3 2&1 5&1 5 & 6

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 3

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4, A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA/20A 12V .4VA/15A 24V 1 B

4. TERMINATION / BASE STYLE

| 8 term 10 Term 1 2 A B J K 3 4 | Termination .250 TAB (QC) no barriers .250 TAB (QC) with barriers .250 TAB (QC) no barriers Solder Lug no barriers | Jumper No No Yes T2 to 5 No | | | | |
|--|--|---|--|--|--|--|
| C D 5 6 | Solder Lug Wire Leads no barriers | No No | | | | |
| E F | Wire Leads | No | | | | |
| Note: Codes J & K for circuits H, G & M. Do not use silicone based lubricants to reduce terminal insertion forces during connector as- | | | | | | |

sembly, 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 Sedled Unsealed Lamps Illumination Type Lamp wired to Terminal Illumination Type Lamp wired to Terminals (+) 7 (-(+) 7 (-(+) 7 (-(+) 7 (-) (+) 7 (-) (+) 7 (-(+) 7 (-(+) 7 (-(+) 7 (-(+) 7 (-(+) 7 (-INDEPENDENT DOWN UP CD DOWN DOWN 4 Ε 5 F 6 INDEPENDENT 6 7 7 7 G 7 **INDEPENDENT** INDEPENDENT INDEPENDENT INDEPENDENT '9` SINGLE POLE SWITCHES ONL \ \ \ 7 \ \ 7 DOWN 8 INDEPENDENT INDEPENDENT w INDEPENDENT DOUBLE POLE SWITCHES ONLY DOWN 66 M DOWN DOWN UP ν

6,7. LAMP (SAME CODING FOR BOTH SELECTIONS)

Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6 No lamp Neon 0 1125VAC 2 250VAC Incandescent 43V **5** 6V 6 12V 7 18V superbright superbright Red Red Amber Green 2VDC 6VDC В G S 12VDC 24VDC D

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

8. FLUSH BRACKET COLOR, PANEL SEAL

9. ACTUATOR

| A, B Co | Actuator :: :: :: :: :: :: :: :: :: :: :: :: :: | | |
|----------------|---|---------|--|
| Actuator thick | end over terminals: | 1,4 3,6 | |

10. LENS 1

| | | tor Z – N | | | | | |
|------------------|-------------------|----------------------|-------------------|-------------------|--------------|-------------------------|------------------------------|
| Clear | Whi | te Amb | er Gree | en Red | Blu | Э | |
| 1 | 6 | 8 | G | М | Т | | |
| 2 | 7 | С | н | N | U | | |
| 3 | 8 | D | Ĵ | P | V | | |
| Square | e lens | options | only av | /ailable | e for C | Contura II. | |
| 4 | 9 | E | K | R | W | | |
| 5 | Α | F | L | S | Υ | | _ I . |
| Lens co Green | olor fo or blu | r LEDs m e lenses | nust be are no | clear, ot reco | white mme | , or match nded with | color of LED. Neon lamps. |

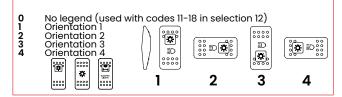
11. ACTUATOR COLOR AND TEXTURE 1

| 0 - No Actuator | | | | | |
|------------------------------|------------------------|-----------------------|----------------------|------------------------|--|
| Soft Surface Hard Surface | Black B C | Gray G H | Red R S | White W Y | |

12. ACTUATOR LENS OR BODY LEGENDS 2

| _ | | | | | | | |
|----|-----------------|--------------------|-----------------|-------------|--------------------|----------------|-----|
| 11 | ON OFF | 12 OFF ON | 13 | 14 O | Π | | |
| 15 | 0 0 F N F | 16 O O N F F | 17 OI | 18 | ° 🗀 | | |
| | For addit | ional leger | d options | & code | es, visit us at ww | w.carlingtech. | com |

13. LEGENDS ORIENTATION



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 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.

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.

Ordering Scheme contura II & III locking

Sample Part Number Selection

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () - momentary from bottom of switch: SP - single pole: terminals 1, 2 & 3. 8 terminal 10 terminal DP - double pole: terminals 1, 2, 3, 4, 5 & 6. 8 - - 7 1 - - 4 8 - - 7 1 - - 4 Terminals 7, 8, 9 & 10 for lamp circuit only. 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10--9 1 2 3 2 & 3, 5 & 6 Connected Terminals 1 & 2, 4 & 5 ON NONF Position: SP DP ON ON 4 6 7 8 9 D NONE OFF OFF (ON) (ON) OFF NONE SPECIAL CIRCUITS H* 2 & 3 2 & 3, 5 & 4 5 & 4 2 & 3, 5 & 6 2 & 3, 5 & 6 (2 & 3, 5 & 6) (2 & 3, 5 & 6) G* 2 & 3 2 & 3 2 & 3 OFF 1 & 2 М* OFF 2 & 3 2&1 5 & 6

*Jumper between terminals 2 & 5 for circuits HGMR & 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 4

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 14V, 10A 14VT (circuit 1, 4 , A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA/20A 12V .4VA/15A 24V

4. TERMINATION / BASE STYLE

| 8 term | 10 Term | Termination | Jumper |
|--------|---------|--|-------------|
| 1 | 2 | .250 TAB (QC) no barriers .250 TAB (QC) with barriers | No |
| Α | В | .250 TAB (QC) with barriers | No |
| J | K | .250 TAB (QC) no barriers | Yes T2 to 5 |
| 3 | 4 | Solder Lug nó barriers | No |
| С | D | Solder Lug | No |
| 5 | 6 | Wire Leads no barriers | No |
| E | F | Wire Leads | No |
| | | | |

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

| 3 & 6 end | d of switch. | Positive (| +) and negative | (-) symbols apply to |
|-----------|--------------|--------------|-------------------|-------------------------|
| Sealed | Unsealed | <u>Lamps</u> | Illumination Type | Lamp wired to Terminals |
| S | 0 | NONE | - " | i |
| С | 3 | 2 | UP | 3 (+) 7 (-) |
| Н | Z | 2 | INDEPENDENT | 8 (+) 7 (-) |
| DOUBLE F | OLE SWITCH | HES ONLY | | |
| М | R | 1 | UP | 3 (+) 6 (-) |
| | | 2 | DOWN | 1 (+) 4 (-) |
| P | V | 1 | UP | 1(+)4(-) |
| | | 2 | UP | 3 (+) 6 (-) |

6. LOCK

Lock above terminals 1 & 4 end of switch

7. LAMP

Lamp above terminals 3 & 6 end of switch No lamp 0 1125VAC 2 **250VAC** 5 **6V** Neon Incandescent LED* 4 3V 6 12V 7 18V 8 **24V** superbright superbright Red **Amber** Green Red 2VDC 6VDC В М 24VDC D * Consult factory for "daylight bright" LED options. Typical current draw for LED is 20ma.

8. FLUSH BRACKET COLOR, PANEL SEAL 1

| No Seal One Seal | Black \ B \ C \ | White W Y | Gray G H |
|---------------------|-----------------|------------------------|----------------|
|---------------------|-----------------|------------------------|----------------|

9. HARD SURFACE ACTUATOR 1

| Contura II | Black A | Gray B | Red G | White iii I |
|----------------|-------------------|------------------|-----------------|-------------|
| Contura III | С | D | E | F |
| Actuator orier | ntation c | | | |

10. LENS

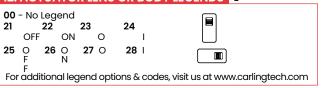
| l | | White | Amber D | | | | |
|---|--|-------|-------------------|--|--|--|--|
| l | Lens color for LEDs must be clear, white, or match color of LED. | | | | | | |

Green or blue lenses are not recommended with Neon lamps.

11. ACTUATOR LOCK FUNCTION AND COLOR 1

| Lock Color Match Actuator | Uр А | Down H | Up & Down R | Center ³ |
|------------------------------|----------------|------------------|-----------------------|---------------------|
| Black | В | J | S | 2 |
| White | С | K | T | 3 |
| Red | D | L | V | 4 |
| Safety Orange | Ε | М | W | 5 |

12. ACTUATOR LENS OR BODY LEGENDS 2



13. LEGEND ORIENTATION

| 0 1 2 3 4 | No legend (used w Orientation 1 Orientation 2 Orientation 3 Orientation 4 | vith codes | 21-28 in s | selec | tion 12) | |
|-----------------------|---|------------|------------|-------|----------|--|
| | | 1 | 2 | 3 | 4 | |

Notes: Consult factory to verify horsepower rating for your particular

- Cust 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.

© Configure Complete Part Number > © Browse Standard Parts >

Ordering Scheme contura IV

B-E P C Sample Part Number

Selection

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () – momentary from bottom of switch: SP – single pole: terminals 1, 2 & 3. 8 terminal 10 terminal DP – double pole: terminals 1, 2, 3, 4, 5 & 6. 8 - - 7 1 - - 4 Terminals 7, 8, 9 & 10 for lamp circuit only. 1- - 4 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10--9 Position: 2 & 3, 5 & 6 Connected Terminals 1 & 2, 4 & 5 ON NONE OFF ON NONE OFF ON NONE (OFF) SP 1 2 3 4 5 6 7 8 ABCDF NONE NONE OFF OFF OFF SPECIAL CIRCUITS 2 & 3 2 & 3, 5 & 6 2 & 3, 5 & 6 (2 & 3, 5 & 6) (2 & 3, 5 & 6) 2 & 3, 5 & 4 2 & 3 2 & 3 2 & 3 2 & 3 OFF 1 & 2 OFF 2 & 1 M* R* 5 & 6

*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 4

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4, A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA/20A 12V .4VA/15A 24V

4. TERMINATION / BASE STYLE

| <u>8 term</u> | 10 Term | Termination | <u>Jumper</u> |
|---------------|---------|-----------------------------|---------------|
| <u> </u> | _ | .250 TAB (QC) no barriers | No . |
| Α | В | .250 TAB (QC) with barriers | No |
| J | K | .250 TAB (QC) no barriers | Yes T2 to 5 |
| 3 | 4 | Solder Lug no barriers | No |
| С | D | Solder Lug | No |
| 5 | 6 | Wire Leads no barriers | No |
| E | F | Wire Leads | No |
| | | | 1 1 |

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

Lamp #1:above terminals 1 & 4 end of switch.; Lamp #2 above

| termin | als 3 & 6 en | d of swit | ch. Positive (+) an | d negative (-) symbols |
|---------|--------------|-----------|---------------------|---|
| Sealed | Unsealed | Lamps | Illumination Type | d negative (-) symbols <u>Lamp wired to Terminals</u> |
| S | 0 | NONE | | - |
| Α | 1 | 1 | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| В | 2 | 1 | DOWN | 3 (+) 7 (-) |
| С | 3 | 2 | UP | 3 (+) 7 (–) |
| D | 4 | 1 | DOWN | 3 (+) 7 (-) |
| | _ | 2 | DOWN | 1(+)7(-) |
| E | 5 |] | UP | 1 (+) 7 (-) |
| _ | _ | 2 | UP | 3 (+) 7 (-) |
| F | 6 | Į. | INDEPENDENT | 8 (+) 7 (-) 3 (+) 6 (-) |
| _ | _ | 2 | UP | 3 (+) 6 (-) |
| G | 7 | I | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| ١ | - | 2 2 | UP | 3 (+) 7 (-) |
| H | Z | 2 | INDEPENDENT | 8 (+) 7 (-) |
| U | Υ | 2 | INDEPENDENT | 8 (+) 7 (-) 10 (+) 9 (-) |
| CINICLE | POLE SWITC | | INDEPENDENT | 10 (+) 9 (-) |
| J | 8 | LLES OINT | DOWN | 3 (+) 8 (-) |
| J | 0 | 2 | INDEPENDENT | 6 (+) 7 (-) |
| к | w | ī | INDEPENDENT | 8 (+) 7 (-) |
| " | ** | 2 | INDEPENDENT | 6 (+) 7 (-) |
| DOUBLE | POLE SWIT | CHES ON | | 5(.,,() |
| L | 9 | 1 | DOWN | 3 (+) 6 (-) |
| M | Ř | i | UP | 3 (+) 6 (-) |
| N | Ϋ́ | i | DOWN | 3 (+) 6 (-) |
| | | 2 | DOWN | 1 (+) 4 (-) |
| P | V | 1 | UP | 1 (+) 4 (-) |
| | | 2 | LIP | 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 1 125VAC 2 250VAC 5 6V Neon Incandescent 43V LED* 6 12 V 7 18V 8 24V superbright superbright Green Red Red Amber 2VDC 6VDC В S м G 12VDC 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

| Black | White Gray |
|------------------|------------|
| o Seal B | W G |
| ne Seal C | Y H |

9. ACTUATOR

10. LENS

| 5 A F L S Y EF | | Clear 1 2 3 4 | Actuato White 6 7 8 9 A | rZ - No Amber 8 C D E F | | Red M N P R S | Blue T U V W | (C) (C) (C) (C) (C) (C) (C) |
|----------------|--|---------------|---|---|--|------------------------------|--------------------------|---|
|----------------|--|---------------|---|---|--|------------------------------|--------------------------|---|

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, 6

| 11. AO 10A | | | | | | |
|----------------------|--------|-----------------|----------------|--------|-----|---|
| No Actuator White | 0 Y | Black Nickel | Gray Pewter | H E | Red | s |

12. ACTUATOR LENS OR BODY LEGENDS 2

| 11 | ON OFF | 12 OFF ON | 13 I O | 14 O | | | | |
|--|-----------------|---------------------|--------------|-------------|--|--|--|--|
| 15 | 0 0 F N F | 16 O O N F F | 17 OI | 18 1 0 | | | | |
| For additional leaend options & codes, visit us at www.carlinatech.com | | | | | | | | |

13. LEGENDS ORIENTTATION

| 0 1 2 3 4 | No legend (used v Orientation 1 Orientation 2 Orientation 3 Orientation 4 | with codes 11-18 in selection 12) | |
|-----------------------|---|-----------------------------------|--|
| | | 1 2 3 4 | |

13. ACTUATOR LENS LEGENDS

90 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 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.

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.

Gloss brow is on left side of E actuator and right side of F actuator.

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

Laser etched rocker only available with lens code Z & actuator colors

black, nickel or pewter.

Pewter and nickel colors only available with laser etched actuator

Ordering Scheme contura v

Sample Part Number 6 Selection

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () - momentary from bottom of switch: SP – single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP – double pole: terminals 1, 2, 3, 4, 5 & 6.

8 – – 7 8 – – 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 8 - - 7 1 - - 4 8 - - 7 1 - - 4 2 - - 5 3 - - 6 3 - - 6 10--9 Position: SP DP 1 A 2 B 3 C 4 D 5 F 6 J 7 K 8 L 1 2 & 3,5 & 6 ON (ON) ON ON ON ON ON Connected Terminals NONE 1 & 2, 4 & 5 OFF NONE NONE OFF (OFF) NONE NONE OFF (ON, SPECIAL CIRCUITS H* 2&3 2 & 3, 5 & 4 2 & 3 2 & 3 2 & 3 2 & 3 2 & 3 5 & 3 2 & 3, 5 & 6, 2 & 3, 5 & 6, 2 & 3, 5 & 6, (2 & 3, 5 & 6, (2 & 3, 5 & 6 OFF 1 & 2 OFF 2 & 1 M* R* E*

*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 4

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4, A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA J20A 12V .4VA/15A 24V

4. TERMINATION / BASE STYLE

| 8 term | <u> 10 Term</u> | <u>Termination</u> (| <u>Jumper</u> |
|-----------|-----------------|--|---------------|
| 1 | 2 | .250 TAB (QC) no barriers | No · |
| Α | В | .250 TAB (QC) with barriers | No |
| J | K | .250 TAB (QC) no barriers | Yes T2 to 5 |
| 3 C | 4 | Solder Lug no barriers | No |
| С | D | Solder Luğ | No |
| 5 | 6 | Wire Leads no barriers | No |
| E | F | Wire Leads | No |
| Noto: Cod | on IS K for oil | rouite H. C. S. M. Do not use cilicone | based |

lubricants to reduce terminal insertion forces during connector assembly, as it is detrimental to function and performance.

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

| appiy t | o red latt | ips only | | |
|---------------|----------------------|--------------|-------------------|----------------------------|
| <u>Sealed</u> | <u>Unsealed</u> 0 | <u>Lamps</u> | Illumination Type | Lamp wired to Terminals |
| | 0 | NONE | _ | -,,,,, |
| Α | 1 | 1 | INDEPENDENT | 8 (+) 7 (-) |
| В | 2 | 1 | DOWN | 3 (+) 7 (–) |
| С | 3 | 2 | UP | 3 (+) 7 (–) |
| D | 4 | 1 | DOWN | 3 (+) 7 (-) |
| | | 2 | DOWN | 1 (`+)`7 (`-)` |
| E | 5 | 1 | UP | 1 (+) 7 (-) |
| | | 2 | UP | 3 (+) 7 (-) |
| F | 6 | 1 | INDEPENDENT | 8 (+) 7 (-) |
| | | 2 | UP | 3 (+) 6 (-) |
| G | 7 | 1 | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| | | 2 2 | UP | 3 (+) 7 (–) |
| Н | Z | 2 | INDEPENDENT | 8 (+) 7 (–) |
| U | Υ | 1 | INDEPENDENT | 8 (+),7 (-), |
| | | 2 | INDEPENDENT | 10 (+) 9 (-) |
| SINGLE | POLE SWI | TCHES OF | NLY | |
| J | 8 | 1 | DOWN | 3 (+) 8 (–) |
| | | 2 | INDEPENDENT | 6 (+) 7 (-) |
| K | W | 1 | INDEPENDENT | 8 (+) 7 (–) |
| | | 2 | INDEPENDENT | 6 (+) 7 (-) |
| DOUBLE | E POLE SW | /ITCHES C | | () () |
| L | 9 | 1 | DOWN | 3 (+) 6 (-) |
| М | R |] | UP | 3 (+) 6 (-) |
| N | T | 1 | DOWN | 3 (+) 6 (-) |
| | | 2 | DOWN | 1 (+) 4 (-) |
| P | V | 1 | UP | 1(+)4(-) |
| | | 2 | UP | 3 (+) 6 (-) |

6,7. LAMP

Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6 No lamp $oldsymbol{0}$ No lamp neon 1125VAC Incandescent 43V **2** 250VAC **5** 6V **7** 18V 8 24V superbright superbright Green Red Red Amber 2VDC 6VDC 12VDC Ν 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 1

| | No Seal One Seal |
|--|---------------------|
|--|---------------------|

9. ACTUATOR

| 0 | No Actuator |
|---|-------------------------|
| G | Contura V |
| P | Contura V, laser etched |

10. LENS

| 0 - No | Actuato | r Z – No | Lens | | style | & location: #1 / #2 |
|---------------|------------|-----------------|----------|--------|----------|------------------------|
| Clear | | | r Green | Red | Blue | a |
| • | _ | ^ | | | - | |
| | 6 | 8 | G | М | 1 | |
| 2 | 7 | С | н | N | U | $\overline{\Box}$ |
| _ | _ | | | | | \cong |
| 3 | 8 | D | J | Р | V | • |
| 4 | 9 | E | K | R | W | <u> </u> |
| 5 | Α | F | L | S | Υ | $\overline{\bullet}$ |
| Lens co | olor for I | FDs mi | ist he c | lear v | vhite d | or match color of LED. |
| Groop | or blue | longog | aro not | rocon | amon | ded with Neon lamps. |
| Green | oi bide | 1011303 | are mot | econ | IIIIeiic | dea with Neon Jamps. |

11. ACTUATOR COLOR 1, 3, 5

| No Actuator 0 White Y | Black C Nickel D | Gray H Pewter E | Red S | |
|--|-----------------------------------|----------------------------------|--------------|--|
|--|-----------------------------------|----------------------------------|--------------|--|

12. ACTUATOR LENS OR BODY LEGENDS 2,6

| 11 | ON OFF | 12 OFF ON | 13 | 14 O | | |
|--|-----------------|--------------------|-----------------|-------------|--|--|
| 15 | 0 0 F N F | 16 O O N F F | 17 01 | 18 0 | | |
| For additional legend options & codes, visit us at www.carlingtech.com | | | | | | |

12. LEGENDS ORIENTATION

| 0 | No legend (used with Orientation 1 Orientation 2 | codes 1 | 1-18 in selecti | on 12) | |
|--------|--|---------|-----------------|----------|---|
| 3 4 | Orientation 3 Orientation 4 | | | P | |
| | | ì | 2 | 3 | 4 |

13. 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. 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

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. Laser Etched rocker only available with lens code Z & actuator colors black, nickel or pewter.
- Additional ratings available. See V-Series Switch Accessories page. Nickel and Pewter colors only available with laser etched actuator. Consult factory for laser etched lens callout.

Ordering Scheme Contura IV & V Locking

Sample Part Number 10 Selection

1. SERIES

V V-Series

2. CIRCUIT 3

Terminal Connections as viewed () - momentary from bottom of switch: SP - single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP - double pole: terminals 1, 2, 3, 4, 5 & 6. 8 - - 7Terminals 7, 8, 9 & 10 for lamp circuit only. 1 - - 4 8 - - 7 1 - *-* 4 2 - - 5 3 - - 6 3 - - 6 10- - 9 2 Connected Terminals NONE NONE Position: SP 1 4 6 7 2 & 3, 5 & 6 ON ON DP A ÓFF ON OFF OFF OFF ON (ON) NONE

3. RATING 4

4. TERMINATION / BASE STYLE

| 8 term 1 A J 3 C 5 | 10 Term 2 B K 4 D 6 | Termination .250 TAB (QC) no barriers .250 TAB (QC) with barriers .250 TAB (QC) no barriers Solder Lug no barriers Solder Lug no barriers Wire Leads no barriers Wire Leads | Jumper No No Yes T2 to 5 No No No No |
|--------------------------------------|---------------------------------------|---|---|
| E | r | | |
| Note: Cod | des J & K fo | r 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

INDEPENDENT NLY UP DOUBLE POLE SWITCHES ONL 3 (+) 6 (-)

6. LOCK

| Lock o | above terminals 1 & 4 er | nd of switch. | |
|--------|--------------------------|---------------|-------------------|
| W | low profile lock | γ6 | high profile lock |

Notes: Consult factory to verify horsepower rating for your particular

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 Only available with 3 position circuits. Center OFF and special circuits only available with center position lock function.
4 Additional ratings available. See V-Series Switch Accessories page.
5 Located at T3-6 end of switch.
6 Contura V style only.

7. LAMP

| Lamp above terminals 3 & 6 end of switch No lamp 0 | | | | | | |
|--|------------------|------------------|--------------|---------------------------|--|--|
| Neon Incandescent | 1 125VAC 4 3V | 2 250VAC 5 6V | 6 12V | 7 18V 8 24V | | |
| LED* | 401 | 301 | | superbright | | |
| | Red | Amber | Green | Red | | |
| 2VDC | Α | L | F | R | | |
| 6VDC | В | М | G | S | | |
| 12VDC | С | N | H | Ť | | |
| 041/00 | | | | | | |
| 24VDC * Consult factory draw for LED is 21 | D | P | J | V | | |

8. FLUSH BRACKET COLOR, PANEL SEAL 1

9. HARD SURFACE ACTUATOR

| CONTURA IV: Orientation Left Right | Black J N | Gray K P | Red L R | White M S | |
|---|-------------------|------------------|-----------------|-------------------------------|---------|
| | | | Actuato | r orientation over terminals: | 3,6 1,4 |
| CONTURA V: | Black U | Gray V | Red W | White Y | |
| | | | Actuator | orientation over terminals: | 3,6 1,4 |

10. LENS 5

| Z - No L Clear A G | | С | D | E | F | e bar lens oval lens | |
|---|--|---|---|---|---|----------------------------|--|
| 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

| ı | II. ACTOATOR ECORTORION AND COLOR | | | | | | | |
|---|--|--|-------------------------------|------------------------------------|-------------------------------|--|--|--|
| | Lock Color Match Actuator Black White Red Safety Orange Gray | Up A B C D E | Down H J K L M | Up & Down R S T V W | Center ³ 1 2 3 4 5 | | | |
| ı | City | • | _ | | • | | | |

12 ACTUATOR LENS OR BODY LEGENDS 2

| | | | | - | | | | | | |
|----------|--------|--------------------|---|---|------|--|--|--|--|--|
| 00 21 | | Legen 22 | 23 | _ | 24 | | | | | |
| 25 | F F | 26 O N | 27 | _ | 28 I | | | | | |
| For | addi | tional I | F For additional legend options & codes, visit us at www.carlingtech.com | | | | | | | |

13. LEGENDS ORIENTTATION

| | LLOCIADO OKILIA | IIAIION | | | |
|-----------------------|---|---------|---|---|---|
| 0 1 2 3 4 | No legend Orientation 1 Orientation 2 Orientation 3 Orientation 4 | | | | |
| | | 1 | 2 | 3 | 4 |
| | | | | | |

Ordering Scheme contura VI Wave

4

3

8

V-Series

2. CIRCUIT

Terminal Connections as viewed () - momentary from bottom of switch: SP – single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP – double pole: terminals 1, 2, 3, 4, 5 & 6.

8 – 7 8 – 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 8 - - 7 1 - - 4 1--4 . 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10--9 2 Connected Terminals NONE NONE Position: 2 & 3, 5 & 6 ON (ON) 1 & 2, 4 & 5 OFF OFF NONE OFF OFF ŎFF 8 L SPECIAL CIRCUITS H* G* S* M* R* E* 2 & 3 2 & 3, 5 & 4 2 & 3, 5 & 6 2 & 3, 5 & 6 (2 & 3, 5 & 6) (2 & 3, 5 & 6) 2 & 3 2 & 3 2 & 3 OFF 1 & 2 OFF 2 & 1 5 & 1 2 & 3 5 & 3 5 & 6 *Jumper between terminals 2 & 5 for circuits H,G,M,R & S are specified inselec-

tion 4. External jumper between terminals 2 & 4 for circuit E are provided by

3. RATING 3

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4, A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA/20A 12V .4VA/15A 24V

customer. Circuit E may be used for SP OFF-ON-ON circuit.

4. TERMINATION / BASE STYLE

| 8 term I A J 3 C | 10 Term 2 B K 4 D | Termination 250 TAB (QC) no barriers 250 TAB (QC) with barriers 250 TAB (QC) no barriers Solder Lug no barriers Solder Lug Wire Leads no barriers | Jumper No No Yes T2 to 5 No No No |
|---------------------------------|----------------------------------|---|---|
| E | F | Wire Leads | No |

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

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

| to LFD | lamps only | / | roditivo (+) aria ri | ogativo () dyrribolo apply |
|---------|------------|---------|----------------------------|-----------------------------|
| Sealed | Unsealed | Lamps | Illumination Type | Lamp wired to Terminals |
| S | 0 | NONE | _ | -,, |
| Α | 1 | 1 | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| В | 2 3 | 1 | DOWN | 3 (+) 7 (-) |
| С | | 2 | UP | 3 (+) 7 (-) |
| D | 4 | 1 | DOWN | 3 (+) 7 (-) |
| | _ | 2 | DOWN | 1(+)7(-) |
| E | 5 | 1 | UP | 1(+)7(-) |
| _ | _ | 2 | UP | 3 (+) 7 (-) |
| F | 6 | ļ | INDEPENDENT | 8 (+) 7 (-) 3 (+) 6 (-) |
| _ | _ | 2 | UP | 3 (+) 6 (-) |
| G | 7 | Ĭ | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| | - | 2 | UP | 3 (+) 7 (-) |
| H | Z Y | 2 | INDEPENDENT | 8 (+) 7 (-) 8 (+) 7 (-) |
| U | Y | ı | INDEPENDENT INDEPENDENT | 8 (+) 7 (-) 10 (+) 9 (-) |
| CINICIE | POLE SWIT | CHEC O | | 10 (+) 9 (-) |
| J | 8 | CHES OI | DOWN | 3 (+) 8 (-) |
| J | 0 | 2 | INDEPENDENT | 6 (+) 7 (-) |
| К | w | ī | INDEPENDENT | 8 (+) 7 (-) |
| 1 | •• | 2 | INDEPENDENT | 6 (+) 7 (-) |
| DOUBL | E POLE SWI | TCHES C | | 0(1),() |
| L | 9 | 1 | DOWN | 3 (+) 6 (-) |
| м | Ř | i | UP | 3 (+) 6 (-) |
| N | Ϋ́ | i | DOWN | 3 (+) 6 (-) |
| | | 2 | DOWN | 1 (`+)´ 4 (`-)´ |
| P | V | 1 | UP | 1 (+) 4 (-) |

9 6.7. LAMP

Lamp above terminals 3 & 6 end of switch No lamp 0 1 125VAC 2 250VAC 4 3V 5 6V 6 12V Incandescent 43V 7 18V 8 24V superbright superbright Green Red Red Amber 2VDC 6VDC 12VDC A B C Ġ Ν *Consult factory for "daylight bright" LED options. Typical current draw for LED is 20ma.

8. FLUSH BRACKET COLOR, PANEL SEAL

| o Seal ene Seal |
|--------------------|
|--------------------|

| One Seal | č | Ÿ | Ĥ | |
|-----------|----|---|---|--|
| 9. ACTUAT | OR | | | |

H High Insert

(3)

L Low Insert

10.11. LENS

0 No Actuator

| 0 - No Actuator Clear White Amber | | Z - No Lens Green Red | | Blue | | |
|---|---|---------------------------------|---|------|---|-----------------------|
| _ | 7 | С | Н | N | U | Bar Lens Translucent |
| 3 | - | D | J | P | V | Bar Lens Transparent |
| 4 | - | E | K | R | W | Oval Lens Transparent |
| - | Α | F | L | S | Υ | Oval Lens Translucent |
| | | | | | | |

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

12. ACTUATOR COLOR

| С | Black | H Gray | S | Red | Υ | White | | |
|---|-------|---------------|---|-----|---|-------|--|--|
|---|-------|---------------|---|-----|---|-------|--|--|

13. INSERT COLOR

| D | Black Bright Chrome Plated Satin Chrome Painted Bright Nickel Plated | Ť | Satin Chrome Plated Satin Nickel Plated White | |
|---|---|---|---|--|
|---|---|---|---|--|

14. ACTUATOR LENS OR BODY LEGEND 2

| 00 | 00 - No Legend this location/No actuator | | | | | | | |
|-----|--|---------------|---------------|---------------|-----------|--|--|--|
| 11 | ON | 12 OFF | 13 | 14 0 | \square | | | |
| | OFF | ON | 0 | 1 | \vdash | | | |
| 15 | 00 | 16 0 0 | 17 O I | 18 I O | U | | | |
| | FΝ | ΝF | | | | | | |
| | F | F | | | | | | |
| For | For additional legend options & codes, visit us at www.carlingtech.com | | | | | | | |

15. ACTUATOR ORIENTATION

| 0 1 2 3 4 | No legend (used with coordination 1) Orientation 2 Orientation 3 Orientation 4 | des 11-18 | 3 in selectio | n 12) | |
|-----------------------|--|-----------|---------------|-------|---|
| | | 1 | 2 | 3 | 4 |

16. ACTUATOR LENS LEGEND

90 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 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

- Position of the control of the contr

Ordering Scheme contura VII

B - ZR Sample Part Number 6 Selection 4 5

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () - momentary from bottom of switch: SP – single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP – double pole: terminals 1, 2, 3, 4, 5 & 6.

8 – 7 8 – 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 8 - - 7 1 - - 4 8 - - 7 1 - - 4 2 - - 5 3 - - 6 3 - - 6 10--9 Position: POSITION SP DP 1 A 2 B C 4 D F 6 J K 2 & 3, 5 & 6 ON (ON) ON ON Connected Terminals NONE NONE 1 & 2, 4 of OFF OFF 4 & 5 NONE ON OFF OFF OFF 8 SPECIAL CIRCUITS
H*
G* 2 2 & 3 2 & 3, 5 & 4 2 & 3, 5 & 6 2 & 3, 5 & 6 (2 & 3, 5 & 6) (2 & 3, 5 & 6) 2 & 3 2 & 3 2 & 3 OFF 1 & 2 OFF 2 & 1 5 & 6 5 & 3

*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 4

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4 , A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA/20A 12V

4. TERMINATION / BASE STYLE

| 8 term | 10 Term | Termination .250 TAB (QC) no barriers .250 TAB (QC) with barriers .250 TAB (QC) no barriers Solder Lug no barriers Solder Lug no barriers Wire Leads no barriers | Jumper |
|--------|---------|--|-------------|
| 1 | 2 | | No |
| A | B | | No |
| J | K | | Yes T2 to 5 |
| 3 | 4 | | No |
| C | D | | No |
| 5 | 6 | Wire Leads no barriers | No |
| E | F | Wire Leads | No |

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

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

| Sealed | Unsealed | Lamps | Illumination Type | Lamp wired to Terminals |
|--------|-------------|---------|-------------------|--|
| | 0 | NONE | | _ ' |
| Α | 1 | 1 | INDEPENDENT | 8 (+) 7 (-) |
| В | 2 | 1 | DOWN | 3 (+) 7 (-) |
| С | 2 3 4 | 2 | UP | 3 (+) 7 (-) |
| D | 4 | 1 | DOWN | 3 (+) 7 (-) |
| | | 2 | DOWN | 1 (+) 7 (-) |
| E | 5 | 1 | UP | 1(+),7(-), |
| | | 2 | UP | 3 (+) 7 (-) |
| F | 6 | 1 | INDEPENDENT | 8 (+) 7 (-) |
| | | 2 1 | UP | 3 (+) 6 (-) |
| G | 7 | | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| | | 2 | UP | 3 (+) 7 (-) |
| Н | Z Y | 2 | INDEPENDENT | 8 (+) 7 (-) |
| U | Υ | 1 | INDEPENDENT | 8 (+),7 (-), |
| | | 2 | INDEPENDENT | 10 (+) 9 (-) |
| | POLE SWITC | CHES ON | | - () - () |
| J | 8 |] | DOWN | 3 (+) 8 (-) |
| | | 2 | INDEPENDENT | 6 (+) 7 (-) |
| K | W | 1 | INDEPENDENT | 8 (+) 7 (-) |
| | | 2 | INDEPENDENT | 6 (+) 7 (-) |
| | E POLE SWIT | CHES OF | | 2()2() |
| L. | 9 | ! | DOWN | 3 (+) 6 (-) |
| М | <u>R</u> | ļ. | UP | 3 (+) 6 (-) |
| N | Т | I | DOWN | 3 (+) 6 (-) |
| _ | | 2 | DOWN | ! \ + \ 4 \ - \ |
| P | V | ı | UP | 1(+)4(-) |
| | | 2 | UP | 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 1 125VAC **2** 250VAC **5** 6V Neon Incandescent **4** 3V 6 12V **7** 18V superbright **Red** superbright Green IFD* 2VDC 6VDC 12VDC A B R G Ν 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 1

9. ACTUATOR

| 0 Z | No Actuator Contura VII | |
|--------|---------------------------------|---------|
| Actua | tor orientation over terminals: | 3,6 1,4 |

10. LENS

Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps. **0** - No Actuator **Z** - No Lens Amber Green Blue Lens style & location Red 6 В G Т 7 С U 00 8 D 9 F Κ R w Α ٧ F S 1 2 3 5

11. ACTUATOR COLOR/THUMB PRINT COLOR

| O N/A - No Ac H Grey/Black Y White/Black | tuator C S | Black/Black Red/Black | |
|--|-----------------------------|--------------------------|--|
|--|-----------------------------|--------------------------|--|

12. ACTUATOR LENS OR BODY LEGENDS 2

| _ | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | |
|-----|---|-----------------|-------------------|---------------|--------------------------------|
| 11 | ON OFF | 12 OFF 1 | 1 3 O | 14 O | |
| 15 | 00 | 16 0 0 | 17 O I | 18 I O | |
| | F N F | N F | | | |
| For | addition | nal legend d | options | & codes, v | isit us at www.carlingtech.com |

13. ACTUATOR LENS OR BODY LEGENDS

| ISTAC I SATISM ELLING SIX DOD I ELGENDO | | | | | | | |
|---|-------------|---|----------|---|---|---|--|
| No legend (used with codes 11–18 in selection 12) Orientation 1 | | | | | | | |
| | 2 3 4 | Orientation 2 Orientation 3 Orientation 4 | ® | | | | |
| | | | 1 | 2 | 3 | 4 | |

16. ACTUATOR LENS LEGEND

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 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.

Consult factory to verify horsepower rating for your particular

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.
Legends available for lighted oval lens version only

Ordering Scheme contura X, XI & XII

Sample Part Number 10 Selection

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () - momentary from bottom of switch: SP - single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP - double pole: terminals 1, 2, 3, 4, 5 & 6.

8 - - 7 8 - - 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 8 - - 7 1 - - 4 1- - 4 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10--9 **3** ,4&5 1 ,5&6 Connected Terminals SP DP 2 & 3,5 8
1 A ON
2 B ON
3 C ON
5 F ON
7 K ON
6 J ON
5 PECIAL CIRCUITS
H* 2 & 3,5 8
6* 2 & 3,5 8
6* 2 & 3,5 8
8* 2 & 3,5 8
8* (2 & 3,5 8
8* (2 & 3,5 8
8* (2 & 3,5 8 2 & 3, 5 & 4 x 3, 5 6 2 3 2 4 8 3 2 2 8 3 5 8

*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 4

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 14V, 10A 14VT (circuit 1, 4, A & D only) 10A 14V, 6A 14VT (circuit G only) .4VA/20A 12V .4VA/15A 24V

4. TERMINATION / BASE STYLE

| 8 term | <u> 10 Term</u> | <u>Termination</u> | Jumper |
|-----------|------------------|--------------------------------------|-------------|
| 1 | 2 | .250 TAB (QC) no barriers | No · |
| Α | В | .250 TAB (QC) with barriers | No |
| J | K | .250 TAB (QC) no barriers | Yes T2 to 5 |
| 3 | 4 | Solder Lug nó barriers | No |
| С | D | Solder Lug | No |
| 5 | 6 | Wire Leads no barriers | No |
| E | F | Wire Leads | No |
| Note: Cod | les J & K for ci | rcuits H, G & M. Do not use silicone | based |
| 1 | | | |

lubricants to reduce terminal insertion forces during connector assembly, as it is detrimental to function and performance.

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

| ı | apply to | D LED lamps | only | | |
|---|--------------------|-----------------|--------------|-------------------|--|
| | <u>Sealed</u> S | <u>Unsealed</u> | <u>Lamps</u> | Illumination Type | Lamp wired to Terminal |
| | S | Ō | NONE | - | - |
| | Α | 1 | 1 | INDEPENDENT | 8 (+) 7 (-) 3 (+) 7 (-) |
| | В | 2 | 1 | DOWN | 3(+)7(-) |
| | С | 3 | 2 | UP | 3 (+) 7 (-) |
| | D | 4 | 1 | DOWN | 3 (+) 7 (-) |
| | | _ | 2 | DOWN | 1(+)7(-) |
| | E | 5 | 1 | UP | 1(+),7(-), |
| | _ | _ | 2 | UP | 3 (+) 7 (-) |
| | F | 6 | 1 | INDEPENDENT | 8 (+) 7 (-) |
| | _ | _ | 2 | UP | 3 (+) 6 (-) |
| | G | 7 | 1 | INDEPENDENT | 8 (+) 7 (-) 3 (+) 6 (-) 8 (+) 7 (-) 3 (+) 7 (-) |
| | | _ | 2 2 | UP | 3 (+) 7 (-) |
| | Н | Z | 2 | INDEPENDENT | 8 (+) 7 (-) |
| | U | Υ | I | INDEPENDENT | 8 (+) 7 (-) |
| | 0111015 | 0015 014/1501 | 2 | INDEPENDENT | 10 (+) 9 (-) |
| | | POLE SWITCH | IES ONLY | DOMM | 0(1)0() |
| | J | 8 | Ī | DOWN | 3 (+) 8 (-) 6 (+) 7 (-) |
| | 17 | 147 | 2 | INDEPENDENT | 8 (+) 7 (-) |
| | K | W | i | INDEPENDENT | 2) (_) (|
| | DOLIBLE | POLE SWITC | LIEC ONLV | INDEPENDENT | 6 (+) / (-) |
| | L | 9 | HES CINLY | DOWN | 3 (+) 6 (-) |
| | _ | R | ; | UP | |
| | M N | K T | ł | DOWN | 3 (+) 6 (-) 3 (+) 6 (-) |
| | 14 | • | 2 | DOWN | 1 () () () (|
| | P | V | 1 | UP | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| | F | v | 2 | UP | 3(+)6(-) |
| ı | | | 2 | OI . | 3(')0() |

6,7. LAMP (SAME CODING FOR BOTH SELECTIONS)

| Selection 6: ab | ove termin | als 1 & 4; Se | lection 7: abov | ve terminals 3 & 6 | | |
|--|------------|------------------|-----------------|--------------------------|----|--|
| Neon Incandescent | | 2 250VAC 5 6V | 6 12V | 7 18V 8 24 | ١V | |
| LED* | Red | Amber | | superbright Red | | |
| 2VDC 6VDC | A B | L M | F G | R | | |
| 12VDC 24VDC | Č | N D | H | Ť | | |
| *Consult factory for "daylight bright" LED. Typical current draw for LED is 20ma | | | | | | |

8. FLUSH BRACKET COLOR, PANEL SEAL

| X & XI with Flu | ush Bro | acket | X, XI, | XII with F | aised Bracke | et |
|-----------------|---------|-------|--------|------------|--------------|----|
| # of gaskets | 0 | 1 | 2 | 0 | 1 | |
| Black | В | С | D | 1 | 4 | |
| White | W | Ÿ | Ž | 2 | 5 | |
| Gray | G | Н | J | 3 | 6 | |

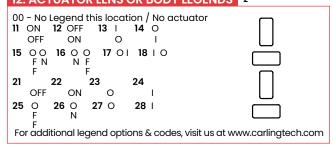
9. ACTUATOR

10. LENS – ABOVE LAMP #1 TERMINALS 1.4 11. LENS – ABOVE LAMP #2 TERMINALS 3.6

| | | | | | -11111 | ITALO | | |
|-----------------------------|-------|-------|-------|-----|--------|----------------------------------|--|--|
| 0 - No Actuator Z - No Lens | | | | | | | | |
| Clear | White | Amber | Green | Red | Blue | Lens Style | | |
| 3 | 8 | D | J | Р | V | Bar | | |
| 4 | 9 | E | K | R | W | One piece Square | | |
| 5 | Α | F | L | S | Υ | Two piece Square* | | |
| | | | | | | (With clear top protective lens) | | |
| 2 | 7 | С | Н | N | U | Two piece Square* | | |
| | | | | | | (With smoke top protective lens) | | |
| 1 | 6 | В | G | М | T | Two piece Square* | | |
| | | | | | | (With white top protective lens) | | |

All bottom lenses are molded of opaque material. Consult factory for other lens colors. Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps.

12. ACTUATOR LENS OR BODY LEGENDS



13. ACTUATOR LENS OR BODY LEGENDS (3)

| 0 1 2 3 4 | No legend (used Orientation 1 Orientation 2 Orientation 3 Orientation 4 | with codes | 11-18 in selection 11-18 in | ction 12) | |
|-----------------------|---|------------|---|-----------|---|
| | | 1 | 2 | 3 | 4 |

16. ACTUATOR LENS LEGEND

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 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.

- Custom colors are available. Consult factory.

 White imprinting is standard on black actuators; Black imprinting is standard on white, red & gray actuators. Custom colors are available, consult factory.

 With 2 square lenses, use selection 12 for lens above lamp 1, & selection 14 for lens above lamp 2.

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

 Not available with Contura XI rockers.

Ordering Scheme contura X locking

Sample Part Number Selection

1. SERIES

V-Series

2. CIRCUIT

Terminal Connections as viewed () - momentary form bottom of switch: SP - single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP - double pole: terminals 1, 2, 3, 4, 5 & 6.

8 - - 7 8 - - 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 2 - - 5 3 - - 6 3 - - 6 10--9 2 Connected Terminals NONE 2 & 3, 5 & 6 ON ON ON 1 & 2, 4 & 5 OFF DP NONE Ň NONE OFF ON SPECIAL CIRCUITS
H* 2 & 3 , 5 & 6

S* 2 & 3 , 5 & 6

E* 5 & 6 2 & 3, 5 & 4 2 & 3 2 & 3 5 & 3

*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 4

| 1 | .4VA @ 28VDC Resistive |
|-------------|--|
| 1 B C | 15A 24V |
| С | 20A 18V |
| D | 20A 12V |
| Е | 20A 14V, 10A 14VT. (circuit 1, 4 , A & D only) |
| D E F | 20A 14V, 10A 14VT (circuit 1, 4 , A & D only) 10A 14V, 6A 14VT (circuit G only) |
| М | .4VA/20A 12V |
| N | .4VA/15A 24V |

4. TERMINATION / BASE STYLE

| 8 term 1 A | 10 Term 2 B | Termination .250 TAB (QC) no barriers .250 TAB (QC) with barriers | Jumper No No Yes T2 to 5 |
|------------------|-------------------|---|-----------------------------------|
| 3 C 5 E | 4 D 6 F | .250 TAB (QC) no barriers Solder Lug no barriers Solder Lug Wire Leads no barriers Wire Leads | No No No No |

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

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 Illumination Type Lamp wired to Ter-Sealed <u>Unsealed</u> <u>Lamps</u> minals NONE

| С | 3 | 2 | UP | 3 (+) 7 (-) |
|-----------|------------|----------|-------------|-------------|
| Н | Z | 2 | INDEPENDENT | 8 (+) 7 (-) |
| DOUBLE PO | DLE SWITCH | HES ONL' | Y | |
| М | R | 1 | UP | 3 (+) 6 (-) |

6. LOCKS

Lock above terminals 1 & 4 end of switch.

Notes: Consult factory to verify horsepower rating for your particular

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 T3-6 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 1 125VAC **2** 250VAC **5** 6V Neon 6 12V Incandescent **4** 3V 7 18V 8 24V superbright LED* superbright Red **Amber** Green Red 2VDC 6VDC В G 12VDC N Н 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

| No Gasket | Black 1 | White 2 | Gray 3 |
|------------|------------|---------|-----------|
| One Gasket | 4 | 5 | 6 |

9. HARD SURFACE ACTUATOR

| | | | | | ~ |
|--------------|----------|------|---------|-------|---|
| Contura X | Black | Gray | Red | White | |
| | ı | 2 | 3 | 4 | |
| Actuator ori | entation | | 3,6 1,4 | | |

10. LENS - ABOVE LAMP #2 TERMINALS 5

| Z - No | Lens | | | | | |
|---------------|------|-------|-------|-----|------|----------------------------------|
| Clear | | Amber | Green | Red | Blue | Lens Style |
| 3 | 8 | D | J | Р | V | Bar |
| 4 | 9 | E | K | R | w | One piece Square |
| 5 | Α | F | L | S | Υ | Two piece Square* |
| | | | | | | (with clear top protective lens) |
| 2 | 7 | С | Н | N | U | Two piece Square* |
| | | | | | | (with smoke top protective lens) |
| 1 | 6 | В | G | М | T | Two piece Square* |
| | | | | | | (with white top protective lens) |

All bottom lenses are molded of opaque material. Consult factory for other lens colors. Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps.

12. ACTUATOR LOCK FUNCTION 3

| Lock Color Match Actuator Black White Red Gray Safety Orange | Up A B C D E F | Down H J K L M | Up & Down R S T V W Y | |
|--|----------------------------------|-------------------------------|-----------------------|--|
|--|----------------------------------|-------------------------------|-----------------------|--|

13. ACTUATOR LENS OR BODY LEGENDS 2

| 00 - 1 21 | lo Legend | 23 | 24 | |
|--------------|--------------|-------------|-------------|-------------------------------------|
| | FF ON | 23 | 24 | |
| Ŭ | | O | ' | |
| 25 C | 26 O | 27 O | 28 I | |
| <u> </u> | N | | | |
| For a | dditional le | gend opt | ions & code | es, visit us at www.carlingtech.com |

14. LEGEND ORIENTATION 3

| 0 1 2 3 4 | No legend (used wi Orientation 1 Orientation 2 Orientation 3 Orientation 4 | ith codes 11-18 i | in selection 12 |) \$ | |
|-----------------------|--|-------------------|-----------------|---------|---|
| | | 1 | 2 | 3 | 4 |

Ordering Scheme

Sample Part Number Selection

1. SERIES

V-Series

2. CIRCUIT

from bottom of switch: SP - single pole: terminals 1, 2 & 3.

8 terminal 10 terminal DP - double pole: terminals 1, 2, 3, 4, 5 & 6.

8 - - 7 8 - - 7 Terminals 7, 8, 9 & 10 for lamp circuit only. 8 - - 7 1 - - 4 1- -4 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10-Position: SP DP 1 A 2 B 3 C 4 D 5 F 6 J 7 K 2 & 3, 5 & 6 ON Connected Terminals NONE 1 & 2, 4 & 5 OFF NONE NONE ON ON OFF OFF OFF SPECIAL CIRCUITS 2 & 3 2 & 3, 5 & 4 2 & 3 2 & 3 2 & 3 2 & 3, 5 & 6 M* R* E* (2 & 3, 5 & 6) (2 & 3, 5 & 6) OFF 2 & 1 5 & 6 s* 2 & 3, 5 & 6 2 & 3 1&2

Terminal Connections as viewed () - momentary

*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 ³

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4 , A & D only) 10A 14V, 6A 14VT (circuit G only) BCDEF

4. TERMINATION / BASE STYLE

| 8 Term | 10 Term | Termination 250 TAB (QC) no barriers 250 TAB (QC) with barriers 250 TAB (QC) no barriers Solder Lug no barriers Solder Lug wire Leads no barriers | Jumper |
|--------|---------|---|-------------|
| 1 | 2 | | No |
| A | B | | No |
| J | K | | Yes T2 to 5 |
| 3 | 4 | | No |
| C | D | | No |
| 5 | 6 | | No |
| E | ь | Wire Leads no barriers | NO |
| | F | Wire Leads | No |

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

Lamp #1:above terminals 1 & 4 end of switch.; Lamp #2 above terminals 3 & 6 end of switch. Positive (+) and negative (-) symbols

| upply to | rep lamps o | ' ''.Y | |
|-----------|--------------|-------------------|----------------------------|
| _ | <u>Lamps</u> | Illumination Type | Lamp wired to Terminals |
| S | NONE | _ | - , , , , |
| Α | 1 | INDEPENDENT | 8 (+) 7 (-) |
| В | 1 | DOWN | 3 (+) 7 (-) |
| B C | 2 | UP | 3 (+) 7 (-) |
| D | 1 | DOWN | 3 (+) 7 (-) |
| | 2 | DOWN | 1 (+) 7 (-) |
| E | ī | UP | i (+) 7 (-) |
| _ | 2 | ÜP | 3 (+) 7 (-) |
| F | ī | INDEPENDENT | |
| - | 2 | UP | 8 (+) 7 (-) 3 (+) 6 (-) |
| G | ī | INDEPENDENT | 8 (+) 7 (-) |
| _ | 2 | UP | 3 (+) 7 (-) |
| Н | 2 | INDEPENDENT | 8 (+) 7 (-) |
| SINGLE PO | OLE SWITCHE | S ONLY | - () () |
| j | 1 | DOWN | 3 (+) 8 (-) |
| | 2 | INDEPENDENT | 6 (+) 7 (-) |
| K | 1 | INDEPENDENT | 8 (+) 7 (-) |
| | 2 | INDEPENDENT | 6 (+) 7 (-) |
| DOUBLE F | OLE SWITCH | ES ONLY | |
| L | 1 | DOWN | 3 (+) 6 (-) |
| М | 1 | UP | 3 (+) 6 (-) |
| N | 1 | DOWN | 3 (+) 6 (-) |
| | 2 | DOWN | 1 (`+)´ 4 (`-)´ |
| Р | 1 | UP | 1(+)4(-) |
| | 2 | ÜP | 3 (+) 6 (-) |
| U | 1 | INDEPENDENT | 8 (+) 7 (-) |
| | 2 | INDEPENDENT | 10 (+) 9 (-) |

6 & 7. LAMP

| | No lamp Neon Incandescent 24V | 0 1 125VAC 4 3V | 2 250VAC 5 6V | 6 12V | 7 18V | 8 |
|---|--|-----------------------|-------------------------|---------------|--------------|-----|
| ١ | LED* | | | superbright | superbrigh | nt |
| ١ | | Red | Amber | Green | Red | |
| ١ | 2VDC | Α | L | F | R | |
| ١ | 6VDC | В | M | Ġ | S | |
| ١ | 12VDC | č | Ň | Ĭ. | Ť | |
| ١ | 24VDC | Ď | P | ï | v | |
| | * Consult factory | for "dayligh | nt bright" LE | D options. Ty | /pical curre | ent |

8. BRACKET COLOR & PANEL SEAL

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

9. ACTUATOR STYLE

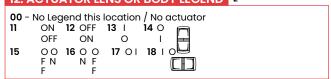
| 0 FA | No Actuator - Furnished separately Contura XIV | |
|---------|---|--|
| FB | Contura XIV - Laser Etched | |

10. LENS COLOR / STYLE

| П | | | | | | | |
|---|------------------------|-----------|------------|---------------|------|-------|--------------------------|
| | 0 - No <i>i</i> | Actuato | or | Z - No | Lens | | |
| | Clear | White | Amber | Green | Red | Blue | |
| | 1 | 6 | В | G | М | T | (Ti) |
| | 2 | 7 | С | Н | N | U | (III) |
| | 3 | 8 | D | J | P | ٧ | <u>C10</u> |
| | 4 | 9 | E | K | R | W | (TO |
| | 5 | Α | F | L | S | Υ | |
| | 5 | Α | N/A | N/A | N/A | N/A | Laser-Etched Actuator |
| | Only Ler | ns color | for LEDs I | must be | | | , or match color of LED. |
| | Green c | r blue le | enses are | not rec | omme | endec | with Neon lamps. |

11. ACTUATOR COLOR 1

12. ACTUATOR LENS OR BODY LEGEND 2



12. ACTUATOR LENS OR BODY LEGEND

| 0 1 2 3 | No legend Orientation 1 Orientation 2 Orientation 3 | R | | * | |
|------------------|--|----------|---|----------|---|
| 4 | Orientation 4 | 1 | 2 | 3 | 4 |

12. ACTUATOR LENS OR BODY LEGEND

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 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.

Custom colors are available. Consult factory.

White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators.

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

🕅 Configure Complete Part Number 🔻 🚳 Browse Standard Parts 🤊

Ordering Scheme

Sample Part Number 2 3 6 8 10 11 Selection

1. SERIES

V-Series

2. CIRCUIT

8 - - 7 1 - - 4 2 - - 5 8 - - 7 1 - - 4 2 - - 5 3 - - 6 3 - - 6 10 -- 9 Position: 2 & 3, 5 & 6 Connected Terminals 1 & 2, 4 & 5 SP DP NONE (ON) NONE OFF 4 D ON NONE ON 6 7 J K ON OFF ON ON OFF (ON) 8 (ON) OFF (ON) 9 NONE SPECIAL CIRCUITS 2 & 3 H* 2 & 3, 5 & 4 5 & 4 2 & 3, 5 & 6 (2 & 3, 5 & 6) G* 2 & 3 2 & 3 OFF М* OFF 2 & 3 (2 & 3, 5 & 6) 2 & 1 5 & 6 5 & 1 2 & 3, 5 & 6 *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 ³

.4VA @ 28VDC Resistive 15A 24V 20A 18V 20A 12V 20A 14V, 10A 14VT (circuit 1, 4, A & D only) 10A 14V, 6A 14VT (circuit G only)

4. TERMINATION / BASE STYLE

| 8 Term | <u>10 Term</u> | <u>Termination</u> | | <u>Jumper</u> |
|--------|----------------|--------------------|------------------|---------------|
| 1 | 2 | .250 TAB (QC |) no barriers | No . |
| Α | В | .250 TAB (QC | c) with barriers | No |
| J | K | .250 TAB (QC | c) no barriers | Yes T2 to 5 |

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

Lamp #1:above terminals 1 & 4 end of switch.; Lamp #2 above terminals 3 & 6 end of switch. Positive (+) and negative (-) symbols

| appl | apply to LED lamps only | | | | | | | |
|-------------|-------------------------|-----------------------------------|--|--|--|--|--|--|
| S C H | Lamps NONE 2 | Illumination Type UP INDEPENDENT | Lamp wired to Terminals - 3 (+) 7 (-) 8 (+) 7 (-) | | | | | |
| DOU! M | = BLE POLE S' 1 | WITCHES ONLY UP | 3 (+) 6 (-) | | | | | |

5. LOCK OPTION

Low Profile Lock

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

7. LAMP

| No lamp Neon | 0 1 125VAC | 2 250VAC | C 10) / | 7107 0047 |
|----------------------|---------------|-----------------|----------------|-------------------------|
| Incandescent LED* | 4 3V | 5 6V | 6 12V | 7 18V 8 24V superbright |
| LED. | | | | |
| | Red | Amber | Green | Red |
| 2VDC | Α | L | F | R |
| 6VDC | В | М | G | S |
| 12VDC | С | N | Н | T |
| 24VDC | D | P | J | V |
| * Consult factory | for "dayligh | nt bright" LE | D options. Ty | pical current |
| draw for LED is 20 | Oma. | • | | • |

8. BRACKET COLOR & PANEL SEAL

| White W Y Z | △ W V 7 | Color Black Gray White | No Gasket B G W | 1 Gasket C H | 2 Gasket D J |
|-------------|---------|---------------------------------|--------------------------|--------------------|--------------------|
|-------------|---------|---------------------------------|--------------------------|--------------------|--------------------|

9. ACTUATOR COLOR / STYLE

10. LENS COLOR / STYLE

| Z - No Clear 1 3 5 | | Amber B D N/A | G | M P | | Laser-Etched Only |
|---|--|------------------------|---|--------|--|-------------------|
| 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 COLOR / FUNCTION

| | | LOCK IN | POSITION | | |
|----------------|----|---------|-----------|--------|--|
| Lock Color | UP | DOWN | UP & DOWN | CENTER | |
| Match Actuator | Α | Н | R | 1 | |
| Black | В | J | S | 2 | |
| White | С | K | T | 3 | |
| Red | D | L | V | 4 | |
| Orange | Ε | М | W | 5 | |
| Gray | F | G | N | 6 | |
| • | | | | | |

12. ACTUATOR LENS OR BODY LEGENDS 2

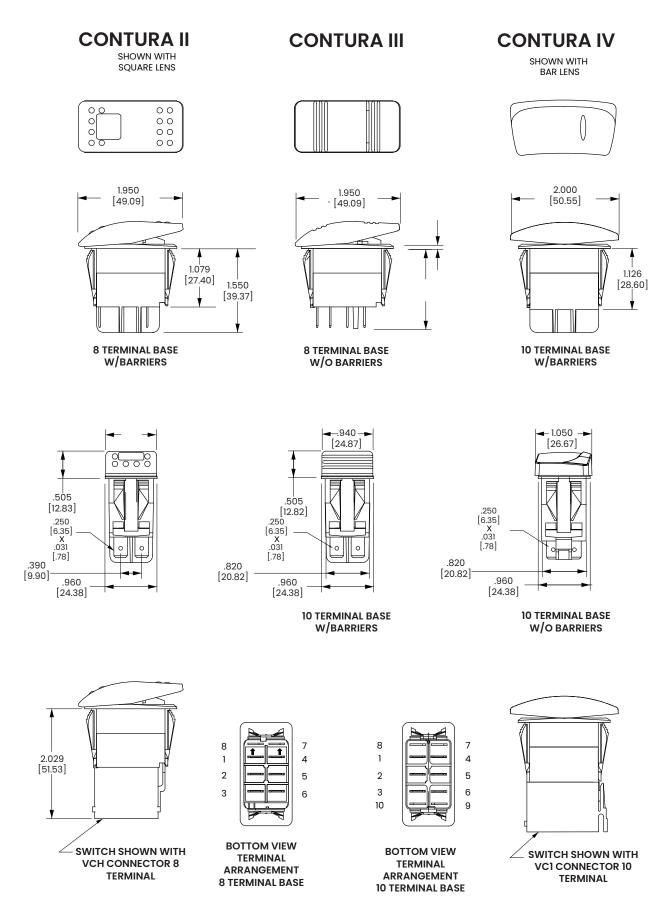
| | - No Legend 22 OFF ON | 23 | 24 | |
|----|------------------------------------|-------------|-----------|--|
| 25 | O 26 O F N F | 27 O | 28 | |

LECENID ODIENTATION

| 10. | LEGEND OKIEN I | ATION | | | | |
|-----------------------|---|-------|---|---|---|--|
| 0 1 2 3 4 | No legend Orientation 1 Orientation 2 Orientation 3 Orientation 4 | 1 | 2 | 3 | 4 | |

Dimensional Specs

inches [millimeters]

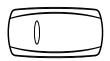


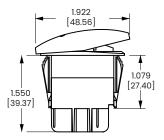
Dimensional Specs

inches [millimeters]

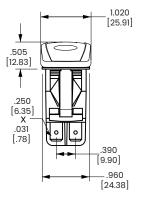


SHOWN WITH

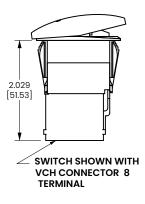




8 TERMINAL BASE W/BARRIERS



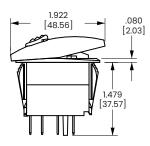
8 TERMINAL BASE W/BARRIERS



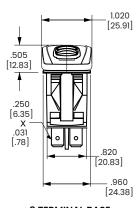
CONTURA V

SHOWN WITH LOW PROFILE LOCK

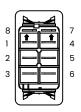




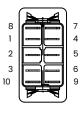
8 TERMINAL BASE W/O BARRIERS



8 TERMINAL BASE W/O BARRIERS



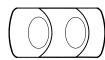
BOTTOM VIEW TERMINAL ARRANGEMENT 8 TERMINAL BASE

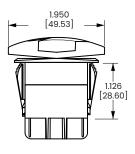


BOTTOM VIEW TERMINAL ARRANGEMENT 10 TERMINAL BASE

CONTURA VI

SHOWN WITH OVAL

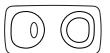




10 TERMINAL BASE W/BARRIER AND LAMP TERMINAL

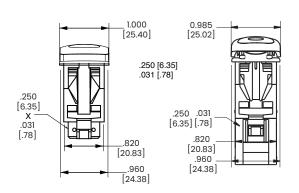
CONTURA VII

SHOWN WITH LARGE LENS AND BAR LENS





10 TERMINAL BASE W/O BARRIERS



10 TERMINAL BASE W/O BARRIERS

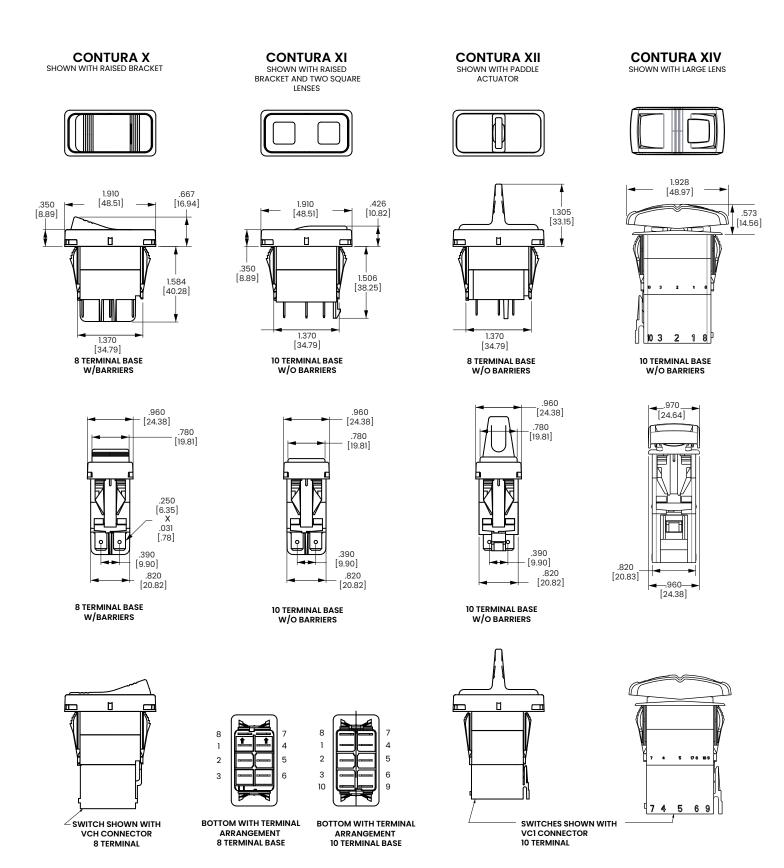
10 TERMINAL BASE W/O BARRIERS





Dimensional Specs

inches [millimeters]



Circuit Diagrams:

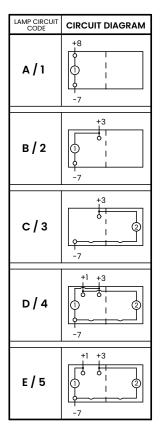
| CIRCUIT CODE | CIRCUIT DIAGRAM |
|-----------------|-----------------|
| 1 | 3 |
| 2 | 3 |
| 3 | 3 |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

| CIRCUIT CODE | CIRCUIT DIAGRAM |
|-----------------|-----------------|
| A | 3 6 |
| В | 3 6 |
| С | 3 6 |
| D | 1 3 4 6 |
| E | 1 3 4 6 |
| F | 2 5 |
| G | 3 6 |
| н | 3 4 |

| CIRCUIT CODE | CIRCUIT DIAGRAM |
|-----------------|--------------------------------------|
| J | 13 4 6 |
| к | 1 3 4 6 |
| L | 1 3 4 6 0 0 0 0 1 0 0 0 2 5 |
| М | 3 6 |
| R | 2 5 |
| s | 2 5 |

| | SYMBOL LEGEND |
|-------------|---|
| SYM. | DEFINITION |
| 0 | DESIGNATES TERMINALS AND CONTACTS |
| \bigcirc | DESIGNATES MAINTAINED CIRCUITS |
| | DESIGNATES OTHER POSITION |
| ○▼ ○ | DESIGNATES MOMENTARY CIRCUITS |
| | DESIGNATES TWO POSITION CONNECTION |
| | DESIGNATES EXTERNAL JUMPER PROVIDED BY CUSTOMER |

Lamp Circuit Diagrams:

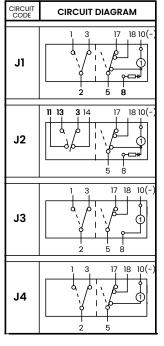


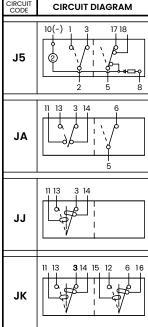
| LAMP CIRCUIT CODE | CIRCUIT DIAGRAM |
|----------------------|---|
| F/6 | +8 +3 -6 |
| G/7 | +8 +3 |
| H/Z | +8 |
| J/8 | -8 +3 +6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| κ/w | +8 +6 |

| LAMP CIRCUIT CODE | CIRCUIT DIAGRAM |
|----------------------|-----------------|
| L/9 | +3 -6 |
| M/R | +3 -6 |
| N/T | +1 +3 -4 -6 |
| P/V | +1 +3 -4 -6 |
| U/Y | +8 +10 |

| LAMP CIRCUIT CODE | CIRCUIT DIAGRAM |
|----------------------|-----------------|
| SPECIAL #1 | +3 +6 |
| SPECIAL #3 | +8 +6 |
| SPECIAL #4 | +8 +3 |
| | |
| | |

J-Series Hazard Warning Circuit Diagrams:





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

| SYMBOL LEGEND | | | | |
|---------------|-----------------------------------|--|--|--|
| SYM. | DEFINITION | | | |
| 0 | DESIGNATES TERMINALS AND CONTACTS | | | |
| Ō | DESIGNATES LAMP LOCATION | | | |

Stand-Alone Components

Reduce inventory levels and cost by stocking actuators and base switches separately.

Contura II, III, IV, V, VI, VII, X, XI, XIV, Base switches separately: specify V with code selections 2-8 in the ordering schemes.

Contura II, III, IV, V Actuator only: VV with code A or C for selection 9, & with selections 10-14 in the ordering schemes.

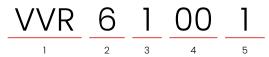
Contura VI Actuator with lenses and inserts only: VT with code selections 9-16

Contura 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



1. CONTURA X & XI ACTUATOR SEPARATELY

VVR

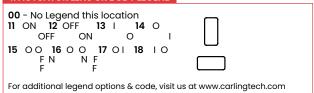
2. ACTUATOR STYLE & COLOR

| | Black | Gray | White | Red |
|------------|-------|------|-------|-----|
| Contura X | 1 | 2 ′ | 3 | 4 |
| Contura XI | 6 | 7 | 8 | 9 |

3. LENS OPENING FOR 1

| 1 | One bar lens | | |
|---|-----------------|---|---------------------|
| 2 | Two bar lenses | 5 | square lens on top/ |
| 3 | One square lens | | bar lens on bottom |
| 4 | Two square lens | | (Contura X only) |

4. ACTUATOR LENS OR BODY LEGEND



5. LEGEND ORIENTATION 1

| 2 Or | o legend rientation 1 rientation 2 rientation 3 | | | | |
|-------------|--|---|---|---|---|
| 4 Or | rientation 4 | 1 | 2 | 3 | 4 |

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



VVT

2 COLOR

1 Clear 2 Smoke 3 White

Contura X, XI & XII actuator lens assembly:



1 piece lens/bar lens are positioned the same as bottom lens for assembly, minus the top lens. Lenses snap in from bottom.

- If actuator lens opening for 2 bar or 2 square lenses, legend orientation 0,1, or 2 must be chosen.
- or z must be chosen. Center of actuator marking not available for Contura XII. Legend is not available for bar style lens. Not recommended with neon lamps.
- Must also order top piece of 2 piece square lens separately.

Contura XII actuators without lenses separately



1 CONTURA XII ACTUATOR SEPARATELY

VVP

2. ACTUATOR STYLE & COLOR

| J Black K Gray N Whit | e M Red |
|-----------------------|----------------|
|-----------------------|----------------|

3,4 LENS OPENING FOR 1

| 7 | No lens | 1 | Bar lens | 2 | Sauare lens | |
|---|---------|---|----------|---|-------------|--|
| | No lens | | Buriens | | Sauare iens | |

5, 7 LENS OR BODY LEGEND 2



6 LEGEND ORIENTATION 3

| O No legend Orientation 1 Orientation 2 1 2 |
|--|
|--|

Contura X, XI & XII actuator lens assembly separately



1 CONTURA X, XI & XII LENS SEPARATELY

2 LENS STYLE 3

- One Piece Square lens Bottom of Two-Piece Square lens ⁵

3 TRANSLUCENT LENS COLOR

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

4 LENS OR BODY LEGEND 2



5 LEGEND ORIENTATION 3

- No legend Orientation 1 Orientation 2 Orientation 3 Orientation 4
- **■**D 1
- ID ID 2
- <u>_</u> 3

Accessories

Easily integrate Contura products into your system, with Contura Accessories

Contura Connectors

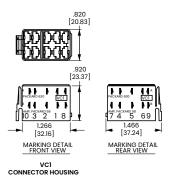
| Q.C. SELECTION GUIDE | | | | | | |
|----------------------|-----------------|------------------------|----------|--------------------------|------------------|--|
| | PART NO | | W RA | | | |
| COMPANY SERIES | PLAIN BRASS | TIN PLATED BRASS | AWG | MM ² (REF) | ORIEN- TATION | |
| | 02965580 | | 12 | 3.0 | | |
| | 02965471 | 12010601 | (2)16-14 | (2)1.0-2.0 | 1 | |
| PACKARD 58 SERIES | 02965470 | | 16-14 | 1.0-2.0 | В | |
| OO OEMEO | 02965469 | 06288318 | 20-18 | .58 | | |
| | | 12084590 | 105.0 | | | |
| | | 12052224 | 123.0 | | 1 | |
| PACKARD | | 12015870 | 16-14 | 1.0-2.0 | 1 | |
| METRI-PACK | | 12020035 | (2)22-18 | (2).58 | Α | |
| 630 SERIES | 12015832 | 12015869 | 20-18 | .58 | 1 | |
| | | 12052222 | 20-22 | .355 | | |
| | 60253-1 | 60253-2 | 16-12 | 1.3-3 | | |
| AMP 250 SERIES | 60253-1 60253-2 | 00253-2 | (2) 16 | (2) 1.3 | | |
| FASTIN-FASTON | 42100-1 | 42100-2 | 18-14 | .8-2 | В | |
| | 60295-1 | 60295-2 | 22-18 | .39 | | |

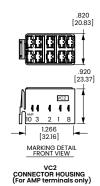
TANG TANG SYMBOL = SHOWS ORIENTATION OF TANG IN SLOT SYMBOL

NOTE: Consult Delphi Packard and/or Amp on actual part numbers and availability.

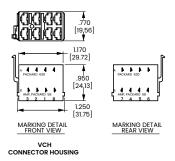
AMP is a registered trademark of AMP Inc. Harrisburg, PA

Delphi Packard is a registered trademark of Delphi-Packard Electrical Systems Warr





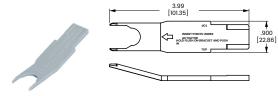




Contura X Boot (P/N VB1-01)



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



Additional V-Series Ratings

- .4VA @ 28VDC Resistive
- 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, No Agency Listings 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, UL Recognized, CSA Certified
- В 15A 24V 20A 18V
- С
- 20A 12V
- 20A 14V, 10A 14VT (circuits 1, 4, A, & D only) 10A 14V, 6A, 14VT (circuit G only)
- G 20A 6V
- 15A 125 VAC, 10A 250VAC, 1/2 HP 125-250 VAC; 6A 125 VAC L
- .4VA/20A 12V (combi-contact)
- (combination gold/silver contacts for borderline dry circuit applications)
- .4VA/15A 24V (combi-contact)
 - (combination gold/silver contacts for borderline dry circuit

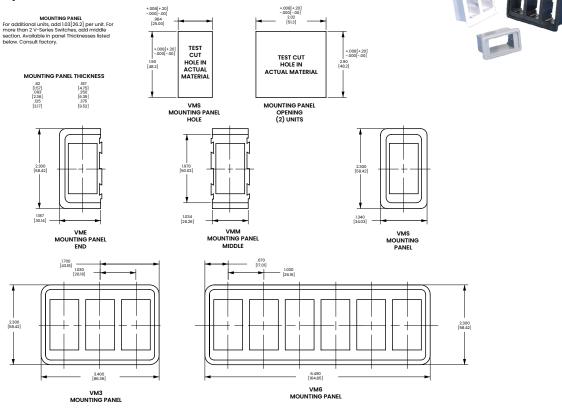
NOTES

Consult factory to determine availability for individual circuits and their HP rating. Not available with Contura 7 or 14 rocker styles.

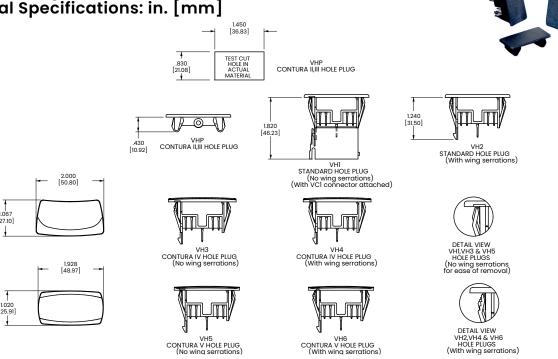
Rating L available with circuits 1, 4, A & D only.

Accessories

Contura Mounting Panels Dimensional Specifications: in. [mm]



Contura Hole Plug Dimensional Specifications: in. [mm]



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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.