

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.







Typical Applications

- On/Off-Highway
- Marine

- Armoured Vehicles
- 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.

MULTIPLE LIGHTING OPTIONS

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

BRASS ROLLER PIN

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

SILVER PLATED BUTT CONTACT MECHANISM

Providing 50k to 100k electrical cycles, circuit and load dependent

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 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 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 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 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.



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

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
1500 Volts RMS
50 Megohms
10 milliohms max. @ 4VDC
Up to 100,000 cycles, circuit and load dependent
Silver alloy, silver tin-oxide, fine silver
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

Environmental

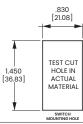
Sealing	IP66/68, for above-panel components of actual switch only.
Corrosion	Mixed Flowing Gas (MFG) Class III 3 year accelerated exposure per ASTM B-827, B-845 Silver and gold contacts
Operating Temp	-40°C to +85°C
Vibration 1	Per Mil-Std 202F, Method 204D Test Condition A 0.06 DA or 10G's 10-500 Hz.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

Mounting Specifications

Actuator Travel (Angular Displacement)

2 position	18°
3 positions	9º from center

	- ·	
Panel Thic	kness Range	
Gaskets	Acceptable Panel Thickness	+
0	.030 to .250 (.76 to 6.35mm)	
1	.030 to .109 & .147 to .157	1.450 [36.83]
	(.76 to 2.77mm & 3.73 to 3.98mm)	[00.00]
	nded: No gasket with panel thickness	Ļ
of .032, .06	62, .093, .125,.187 or .250	<u> </u>





1. SERIES

V-Series v

2. CIRCUIT

	vitch: SP - sing nal DP - dou	d () - momentary gle pole: terminals 1, 2 & Jble pole: terminals 1, 2, 3 Ils 7, 8, 9 & 10 for lamp ci	8, 4, 5 & 6.
Position:	,	2	3
	· · · · · · · ·		
SP DP	2&3,5&6	Connected Terminals	1&2,4&5
1 A	ON	NONE	OFF
	(ON)	NONE	OFF
3 C			
3 6	ON	NONE	(OFF)
4 D	ON	NONE	ON
2 B 3 C 4 D 5 F 6 J 7 K	ON	NONE	(ON)
6 J	ÖN	OFF	ON
7 1/			
	ON	OFF	(ON)
8 L	(ON)	OFF	(ON)
SPECIAL CIRCUITS			
H*	2&3	2 & 3, 5 & 4	5&4
G*	2&3,5&6	2 & 3	OFF
S*	2&3,5&6	2&3	1&2
M*	(2&3,5&6)	2&3	OFF
R*	(2 & 3, 5 & 6)	2&3	2&1
E*	5&6	5 & 3	5&1
-		circuits HGMP & S are spec	

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 B 15A 24V C 20A 18V D 20A 12V E 20A 14V, 10A 14VT (circuit 1, 4, A & D only) F 10A 14V, 6A 14VT (circuit G only) M .4VA/20A 12V N .4VA/15A 24V
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4. TERMINATION / BASE STYLE

.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 Wire Leads for circuits H, G & M. Do not us	Yes T2 to 5 No No No No e silicone based
ce terminal insertion forces du trimental to function and perf	

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 Unsealed Lamps Illumination Type Lamp wired to Termina			; Lamp #2 above d negative (-) symbols
Sealed Unse	ealed Lamps	Illumination Type	Lamp wired to Terminals
S O NONE -			
E !	2 5 1 2 6 1	UP UP	1(+)7(-) 3(+)7(-)
F (8 (+) 7 (-) 3 (+) 6 (-)
G	7 1 2 Z 2 Y 1	INDEPENDENT UP	3 (+) 7 (-) 8 (+) 7 (-) 3 (+) 6 (-) 8 (+) 7 (-) 3 (+) 7 (-) 8 (+) 7 (-) 8 (+) 7 (-)
H Z 2 INDEPENDENT 8 (+) 7 (-) U Y 1 INDEPENDENT 8 (+) 7 (-) 2 INDEPENDENT 10 (+) 9 (-)		8 (+) 7 (-) 8 (+) 7 (-) 10 (+) 9 (-)	
SINGLE POLE SWITCHES ONLY			
J 8 1 DOWN 3(+)8(-)		3 (+) 8 (-) 6 (+) 7 (-)	
	N 1 2	INDEPENDENT INDEPENDENT INDEPENDENT	8 (+) 7 (-) 6 (+) 7 (-)
DOUBLE POLE SWITCHES ONLY			
	9 1	DOWN	3 (+) 6 (-)
	R 1 T 1	UP DOWN	3 (+) 6 (-) 3 (+) 6 (-) 3 (+) 6 (-)
IN	1 2	DOWN	1(+) A(-)
P V	v 1 2	UP UP	1 (+) 4 (-) 3 (+) 6 (-)

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

Selection 6: at No lamp	0		lection 7: abov	ve terminals 3 & 6
Neon Incandescent		2 250VAC 5 6V	6 12V	7 18V 8 24V
LED*	4 3 V	300	superbright	
	Red	Amber	Green	Red
2VDC	Α	L	F	R
6VDC	В	М	G	S
12VDC	С	N	Н	т
24VDC	D	Р	J	V
* Consult fact	on for "day	uliabt bright	" LED options	

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

8. FLUSH BRACKET COLOR, PANEL SEAL

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9. ACTUATOR

0 No Actuator A, B C, D Contura II Contura III	$\left(\right)$
Actuator thick end over terminals:	1,4 3,6

10. LENS 1

0 - N Clear	o Actuat White		lo Lens er Gree	en Red	Blue		
1	6	8	G	М	T		
2	7	С	н	Ν	U		
3	8	D	J	Р	v		
Squa	re lens o	ptions	only av	/ailable	e for Cont	ura II.	
4	9	E	ĸ	R	w		
5	Α	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 AND TEXTURE

Sof	No Actuator	Black	Gray	Red	White
	t Surface	B	G	R	W
	d Surface	C	H	S	Y

12. ACTUATOR LENS OR BODY LEGENDS 2

11	ON OFF	12 OFF ON	13 O	14 O 	\square			
15	O O F N F	16 0 0 N F F	17 OI	18	° 🗀			
For additional legend options & codes, visit us at www.carlingtech.com								

13. LEGENDS ORIENTATION

0 1 2 3 4	No legend (used) Orientation 1 Orientation 3 Orientation 4	with codes II-	18 in selection	on 12)	4

14. ACTUATOR LENS LEGENDS

60 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. 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.

4

5

S Ε Sample В А W Ζ Part Number

6

Selection

1. SERIES

V-Series v

1

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 $8 - 7$ DP - double pole: terminals 1, 2, 3, 4, 5 & 6. 14 $142 - 5$ $2 - 53 - 6$ $3 - 610 - 9$							
Position: SP DP 1 A 4 D 6 J 7 K 8 L 9 N SPECIAL CIRCUITS	1 2 & 3, 5 & 6 Cc ON ON ON (ON) OFF	2 NONE NONE OFF OFF OFF NONE	3 1 & 2, 4 & 5 OFF ON ON (ON) (ON) ON				
H* G* S* M* R* E*	2 & 3 2 & 3,5 & 6 2 & 3,5 & 6 (2 & 3,5 & 6) (2 & 3,5 & 6) 5 & 6	2 & 3, 5 & 4 2 & 3 2 & 3 2 & 3 2 & 3 2 & 3 5 & 3	5 & 4 OFF 1 & 2 OFF 2 & 1 5 & 1				
*Jumper between terminals 2 & 5 for circuits H,G,M,R & S are specified in							

2

3

selection 4. External jumper between terminals 2 & 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 1
- B C
- Ď 20A 12V
- 20A 14V, 10A 14VT (circuit 1, 4 , A & D only) 10A 14V, 6A 14VT (circuit G only) E F
- М .4VA/20A 12V .4VA/15A 24V Ν

4. TERMINATION / BASE STYLE

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 LED lamps	of switch. s only	Positive (+) and negative	(-) symbols apply to
<u>Sealed</u>	Unsealed	<u>Lamps</u>	Illumination Type	Lamp wired to Terminals
S	0 0	NONE	-	-
Н	37	2	UP INDEPENDENT	3(+)/(-)
			INDEPENDENT	8(+)/(-)
M	R	1	UP	3 (+) 6 (-)
		2	DOWN	$1(+)^{2}4(-)^{2}$
Р	V	1	UP	1(+)4(-)
		2	UP	3 (+) 6 (-)

6. LOCK

Lock above terminals 1 & 4 end of switch Ŵ lock

8 7. LAMP

Lamp above t No lamp Neon Incandescent LED*	0 1 125VAC	& 6 end of 2 250VAC 5 6V	6 12V	7 18V 8 24V superbright		
	Red	Amber	Green	Red		
2VDC	Α	L	F	R		
6VDC	В	M	G	S		
12VDC	С	N	Н	т		
24VDC	D	P	J	V		
* Consult factory for "daylight bright" LED options. Typical current draw for LED is 20ma.						

11

12

8. FLUSH BRACKET COLOR, PANEL SEAL

10

9

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

9. HARD SURFACE ACTUATOR

Contura II	Black A	Gray B	Red G	White H	*** I	\bigcirc
Contura III	с	D	Е	F		\bigcirc
Actuator orie	ntation c	above te	erminal	s:	3,6	1,4

10. LENS

3

Z - No Lens Clear White Amber Green Red Blue 8 D Л Ρ v

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

12. ACTUATOR LENS OR BODY LEGENDS 2

00 21	- No	Leg 22	end	23		24		
	OFF		ON		0		L	
25	O F F	26	O N	27	0	28	I	
F For additional legend options & codes, visit us at www.carlingtech.com								

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 ∭≌∎	select	tion 12) 	
		1	2	3	4	

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

- cuit 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. 2
- 3
- 4

🗟 Configure Complete Part Number > 🛛 🕲 Browse Standard Parts >



8

6

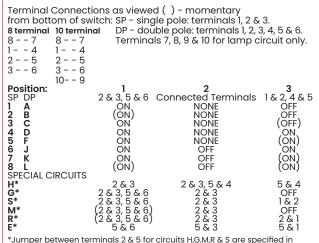
5

Selection

1. SERIES

v V-Series

2. CIRCUIT



2

3

4

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 BC DEF N	.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
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4. TERMINATION / BASE STYLE

8 term	<u>10 Term</u>	Termination	Jumper					
1	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	4	Solder Lug no barriers	No					
C	D	Solder Lug	No					
5	6	Wire Leads no barriers	No					
E	F	Wire Leads	No					
Note: Cod	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 ter terminals 3 & 6 en	rminals d of swit	l & 4 end of switch cch. Positive (+) an	.; Lamp #2 above d negative (-) symbols
<u>Sealea</u> <u>Unsealea</u>	<u>Lamps</u>	Illumination Type	Lamp wired to Terminals
S 0 A 1	NONE 1	– INDEPENDENT	_ 8 (+) 7 (-) 3 (+) 7 (-)
B 2 C 3	1	DOWN UP	3 (+) 7 (-) 3 (+) 7 (-)
D 4	2	DOWN	3(+)7(-) 3(+)7(-)
U 7	2	DOWN	i (+) 7 (-)
E 5	1	UP	1(+)7(-)
F 6	2	UP INDEPENDENT	3 (+) 7 (-) 8 (+) 7 (-) 3 (+) 6 (-)
	2	UP	3 (+) 6 (-)
G 7	1	INDEPENDENT UP	8 (+) 7 (-) 3 (+) 7 (-)
нz	2 2	INDEPENDENT	3 (+) 7 (-) 8 (+) 7 (-)
Ü Ÿ	1	INDEPENDENT	8 (+),7 (-),
SINGLE POLE SWITC			10 (+) 9 (-)
J 8			3 (+) 8 (-)
5 0	2	INDEPENDENT	6 (+) 7 (-)
K W	1	INDEPENDENT	8 (+) 7 (-)
	2	INDEPENDENT	6 (+) 7 (-)
DOUBLE POLE SWIT			3 (+) 6 (-)
M R	i	UP	3 (+) 6 (-)
N T	i	DOWN	3(+)6(-)
-	2	DOWN	1 (+) 4 (-)
P V	1	UP	1(+)4(-)
	2	UP	3 (+) 6 (-)

6,7. LAMP (SAME COE	DING FOR E	BOTH SELEC	TIONS)	
Selection 6: ab	ove termina	ıls 3 & 6			
Neon Incandescent		2 250VAC 5 6V	6 12V	7 18V	8 24V
LED*	Red	Amber	superbright Green	t superbrigh Red	it
2VDC 6VDC	A B	L M	F G	ş	R
12VDC 24VDC	C D	N P	H J	V	

12

13

Ĺ

3,6

Red S

14

11

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

8. FLUSH BRACKET COLOR, PANEL SEAL

No Seal B W G One Seal C Y H	Black No Seal B	White W	Gray G H	
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9. ACTUATOR

9

10

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 over terminals:

10. LENS

	Actuato White 6 7 8 9 A			Red M N P R S	Blue T U V W 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, 6						

Gray

Pewter E

н

No Actuator 0 White

/hite	Y	Nickel

12. ACTUATOR LENS OR BODY LEGENDS 2

Black

11	ON OFF	12 OFF ON	13 I O	14 O I	\bigcap		
15	O O F N F	16 O O N F F	17 OI	18 O			
For additional legend options & codes, visit us at www.carlingtech.com							

С

D

13. LEGENDS ORIENTTATION

0	No legend (used) Orientation 1	with codes	11-18 in :	selectior	n 12)	
2 3 4	Orientation 2 Orientation 3 Orientation 4	() 	® 2	8	e e 4	

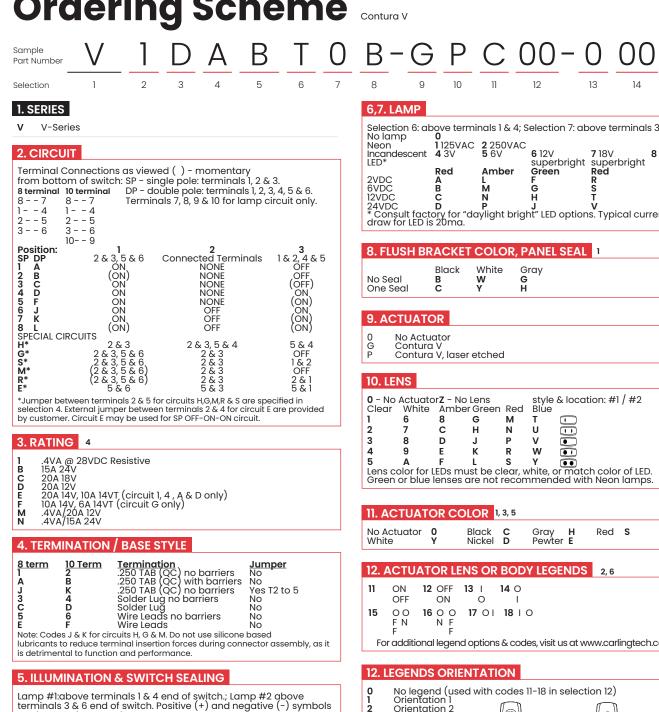
13. ACTUATOR LENS LEGENDS

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.

Notes:

- 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. consult factory.
- 3
- 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 5
- Pewter and nickel colors only available with laser etched actuator 6

Ordering Scheme contura V

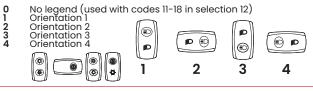


apply	to LED lam	nps only		o
	Unsealed	<u>Lamps</u>	Illumination Type	Lamp wired to Terminals
S	0	NOŃE	_	
Α	1	1	INDEPENDENT	8 (+) 7 (-)
В	2 3	1	DOWN	8 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-)
С	3	2	UP	3 (+) 7 (-)
D	4	1	DOWN	3(+)7(-)
_	_	2	DOWN	! (+) / (-)
E	5	1	UP	$\frac{1}{(+)}$
-	•	2 1	UP	3 (+) 7 (-) 8 (+) 7 (-) 3 (+) 6 (-)
F	6		INDEPENDENT	8 (+) / (-)
~	7	2	UP	3 (+) 6 (-)
G	/	I I	INDEPENDENT	8 (+) 7 (-) 3 (+) 7 (-)
	7	2 2		3 (+) 7 (-) 8 (+) 7 (-)
H U	Z	2	INDEPENDENT INDEPENDENT	8 (+) 7 (-)
U	Y	2	INDEPENDENT	(+) / (-) 10 (+) 9 (-)
	POLE SWI			10(1)9()
J	8	1	DOWN	3 (+) 8 (-)
5	0	2	INDEPENDENT	6 (+) 7 (-)
к	w	1	INDEPENDENT	8 (+) 7 (-)
i.		2	INDEPENDENT	6(+)7(-)
DOUBL	E POLE SW	ITCHES O		
L	9	1	DOWN	3 (+) 6 (-)
M	R	1	UP	3 (+) 6 (-) 3 (+) 6 (-)
N	Ť	1	DOWN	3 (+) 6 (-)
		2	DOWN	1 (`+)´ 4 (`-)´
Р	v	1	UP	1(+)4(-)
		2	UP	3 (+) 6 (-)

Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6 No lamp 0						
Neon Incandescent		2 250VAC 5 6V	6 12V	7 18V	8 24V	
LED*	Red	Amber	superbright Green	superbright Red		
2VDC 6VDC	A B	L M	F G	R S		
12VDC 24VDC	C D	N P	J	T V		
* Consult factory for "daylight bright" LED options. Typical current draw for LED is 20ma.						

0 - No Clear	Actuato White	or Z – No Ambe		Red		& location: #1 / #2
1	6	8	G	м	т	
2	7	С	н	Ν	U	
3	8	D	J	Р	V	$\overline{\bullet}$
4	9	E	К	R	w	
5	Α	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.						

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



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

Notes:

- 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.
 Laser Etched rocker only available with lens code Z & actuator colors black, picture of the construction.
- 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.
- 4 5 6

Ordering Scheme Contura IV & V Locking

4

3

2

9

10

В Sample S F . Part Number 7

6

5

1. SERIES

Selection

V V-Series

1

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 2 - - 5 3 - - 6 3 - - 6 10--9 Position: 2 Connected Terminals SP 1 4 6 7 2 & 3, 5 & 6 ON ON 1& 2.4&5 DP NONE A ÓFF ON ON ON (ON) OFF OFF ON (ON) K 89 Ĺ OFF (ON) NONE ON

3. RATING 4

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

4. TERMINATION / BASE STYLE

	8 tern	n 1	<u>0 Term</u>	Terminat			Jump	er	
1		2	2	.250 TAB	(OC)) no barriers	No '		
	A	E	3	.250 TAB	(OC)) with barriers	No		
	J	k	(.250 TAB	(QC)) no barriers	Yes T2	2 to 5	
	3	4	1	Solder Lu	ànố	barriers	No		
	С	0)	Solder Lu			No		
1	5	6	5	Wire Lead	ăs no	o barriers	No		
	E	F		Wire Lead	sk		No		
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 gbove terminals 3 & 6 end of switch. Positive (+) and negative (-) symbols apply to LED lamps only Sealed Unsealed Lamps Illumination Type Lamp wired to Terminals

s 0	NONE -	- · · · · ·
C 3	2 UP	3 (+) 7 (–)
H Z	2 INDEPENDEN	
DOUBLE POLE SWIT	CHES ONLY	
M R	1 UP	3 (+) 6 (-)

6. LOCK

Lock above	e terminals 1 & 4 enc	l of switch.	
	/ 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.
 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.

🛿 Configure Complete Part Number > 👘 🖗 Browse Standard Parts >

7. LAMP

8

Lamp above ter No lamp	minals 3 & 6 0	end of swi	tch		
Neon '	1125VAC	2 250VAC			
Incandescent	4 3V	5 6V	6 12V	7 18V	8 24V
LED*			superbright	superbria	ht
	Red	Amber	Green	Red	
2VDC	A	L	F	R	
6VDC	B	M	G	S	
12VDC	č	N	Ĥ	Ť	
24VDC	Ď	P	.i	v	
* Consult factor draw for LED is 2	y for "daylig! Oma.	nt bright" LE	D options. Ty	pical curr	ent

8. FLUSH BRACKET COLOR, PANEL SEAL

11

9. HARD SURFACE ACTUATOR

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

10. LENS 5

Z - No Lens Clear White Amber Green Red	
A B C D E G H J K L	F bar lens
G H J K L	M 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

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

12. ACTUATOR LENS OR BODY LEGENDS 2

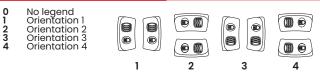
00 21		Legenc 22	23		24	
	OFF	ON		0		I
25	O F	26 O N	27	0	28	I

e 88

1

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

13. LEGENDS ORIENTTATION



Ordering Scheme Contura VI Wave B-AC 100 В Sample Part Number 7 2 3 4 5 6 8 9 10 11 12 13 14 15 16 Selection 1 1. SERIES 6.7. LAMP Lamp above terminals 3 & 6 end of switch No lamp 0 **V-Series** v 1125VAC 2250VAC 43V 56V Neon 6 12V 7 18V 8 24V 2. CIRCUIT Incandescent 4 3V LED* superbright superbright Green Red Red Amber Terminal Connections as viewed () - momentary 2VDC 6VDC R from bottom of switch: SP - single pole: terminals 1, 2 & 3. 8 terminal 10 terminal 8 - - 7 8 - - 7 B - - 7 DP - double pole: terminals 1, 2, 3, 4, 5 & 6. Terminals 7, 8, 9 & 10 for lamp circuit only. A B C Ġ M 12VDC N * Consult factory for "daylight bright" LED options. Typical current draw for LED is 20ma. 1 - - 4 1 - - 4 . 2 - - 5 2 - - 5 3 - - 6 3 - - 6 10 - - 98. FLUSH BRACKET COLOR, PANEL SEAL Position: 2 Connected Terminals 3 Positic SP DP 1 A 2 B 3 C 4 D 5 F 6 J 7 K 8 L 2 & 3, 5 & 6 ON (ON) 1 & 2, 4 & 5 OFF _____OFF Black White Gray NONE No Seal B w G NONE ē One Seal ON ON (OFF) NONE NONF ON ÕN NONE (ŎN) 9. ACTUATOR ON OFF OFF ON ON (ON) (ON) (ON) ۲ ۲ 0 No Actuator H High Insert L Low Insert SPECIAL CIRCUITS H* G* S* OFF 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, 5 & 6)2 & 3 2 & 3 2 & 3 2 & 3 OFF 1 & 2 OFF 10.11. LENS M* R* E* 2&3 0 - No Actuator Z - No Lens 2&1 Clear White Amber Green Red Blue 5 & 6 5&3 5&1 С н Ν 7 υ Bar Lens Translucent *Jumper between terminals 2 & 5 for circuits H.G.M.R & S are specified inselec-3 Ρ v tion 4. External jumper between terminals 2 & 4 for circuit E are provided by D J Bar Lens Transparent customer. Circuit E may be used for SP OFF-ON-ON circuit. 4 _ R Oval Lens Transparent Ε к w Α F L S Y **Oval Lens Translucent** 3. RATING 3 Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps .4VA @ 28VDC Resistive 15A 24V 20A 18V B C D 12. ACTUATOR COLOR 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 E С Black H Gray S Red Y White M N **13. INSERT COLOR** В Black S Satin Chrome Plated Bright Chrome Plated Satin Chrome Painted 4. TERMINATION / BASE STYLE С Satin Nickel Plated Ď w White Termination .250 TAB (QC) no barriers .250 TAB (QC) with barrier .250 TAB (QC) no barriers <u>10 Term</u> 2 B <u>8 term</u> Jumper Bright Nickel Plated Ν no barriers with barriers Α No 14. ACTUATOR LENS OR BODY LEGEND 2 K 4 D J 3 C 5 Yes T2 to 5 Solder Lug no barriers Solder Lug Wire Leads no barriers No - No Legend this location/No actuator 00 No 6 12 OFF 13 I No 11 ON **14** O Wire Leads No OFF 0 ON 1 Note: Codes J & K for circuits H, G & M. Do not use silicone based 15 00 16 0 0 17 OI 18 I O lubricants to reduce terminal insertion forces during connector assembly, as it F N F Ν is detrimental to function and performance. F For additional legend options & codes, visit us at www.carlingtech.com **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 **15. ACTUATOR ORIENTATION** No legend (used with codes 11-18 in selection 12) Orientation 1 to LED lamps only 0 Sealed Unsealed Lamps Illumination Type Lamp wired to Terminals 12 Orientation 2 8 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 1 (+) 7 (-) 1 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 3 (+) 7 (-) 4 (+) 7 (-) 5 (+) 7 (+) 7 (-) 5 (+) 7 (+) 7 (+) 7 (+) 5 (+) 7 (+) 7 (+) 7 (+) 5 (+) 7 (+) S 0 NONE 3 **Orientation 3** INDEPENDENT ١D Α ≣D) ()(∎⊃ Ā Orientation 4 В 2 DOWN UP 1D C D 3 2 1 ۲ ۲ ۲ 0 DOWN 4 ۲ DOWN UP 2 . 0 6 () 1 2 3 4 5 Е 1 2 UP F 8 3 6 INDEPENDENT **16. ACTUATOR LENS LEGEND** (+) 7 (+) 6 (+) 7 (+) 7 (+) 7 (+) 7 2 UP **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. G 7 INDEPENDENT 83 2 I IP 2 8 INDEPENDENT н Ζ U 8 INDEPENDENT 2 INDEPENDENT 10 9 SINGLE POLE SWITCHES ONLY DOWN 8 7 7 8 INDEPENDENT 6 2 Notes: Consult factory to verify horsepower rating for your Values: Consult activity to very 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. к w INDEPENDENT 8 INDEPENDENT DOUBLE POLE SWITCHES ONLY

10.

Ν

Ρ

DOWN

DOWN

DOWN

UP

UP

2

9

R

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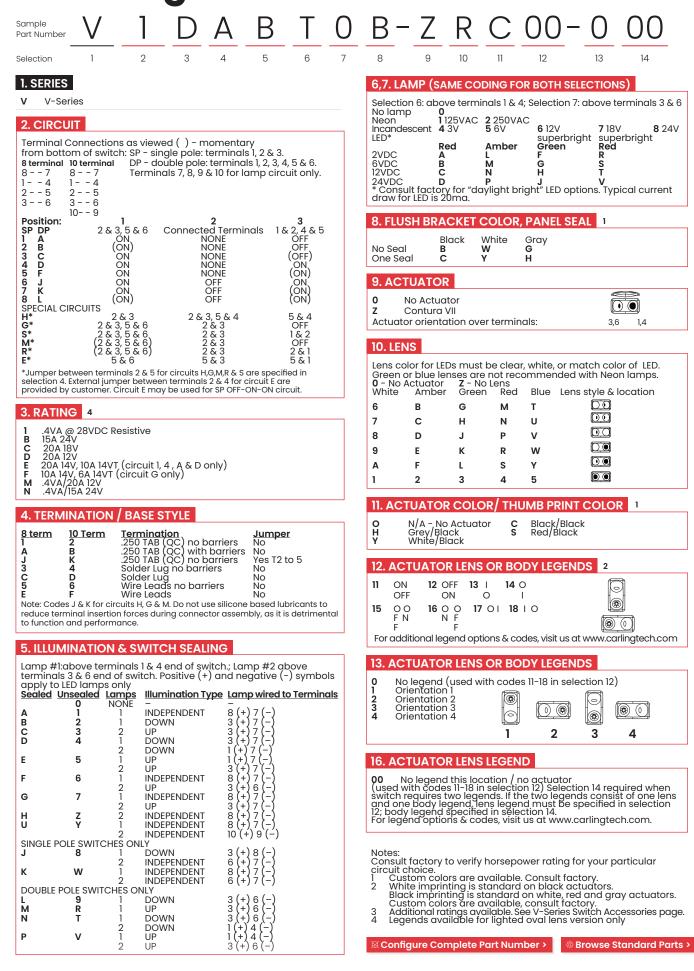
6

6

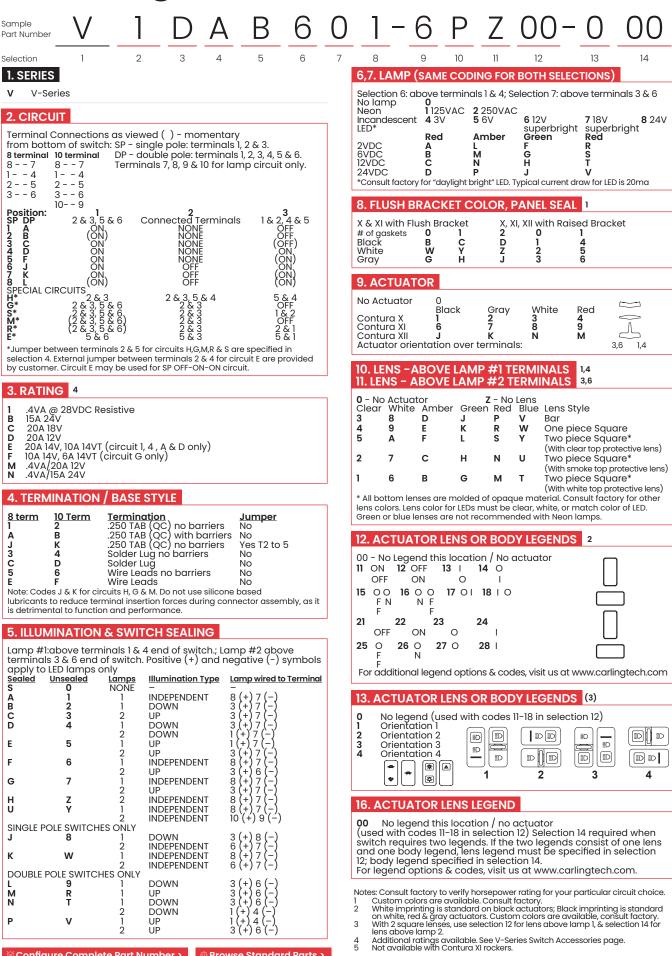
3

11.

8 24V



Ordering Scheme Contura X, XI & XII



Ordering Scheme Contura X locking



1. SERIES

V-Series ν

2. CIRCUIT

from bottor 8 terminal 10 8 7 8 1 4 1 2 5 2 3 6 3	n of switch: SP - D terminal DP - S 7 Tern 4	ewed () - momentary single pole: terminals 1, 2 double pole: terminals 1, 3 ninals 7, 8, 9 & 10 for lamp	2, 3, 4, 5 & 6.
Position: SP DP 1 A 4 D 6 J 9 N	1 2 & 3, 5 & 6 ON ON ON OFF	2 Connected Terminals NONE OFF NONE	3 1 & 2, 4 & 5 OFF ON ON ON
SPECIAL CIR H* G* S* E*	2 & 3 2 & 3, 5 & 6 2 & 3, 5 & 6 5 & 6	2 & 3, 5 & 4 2 & 3 2 & 3 5 & 3 5 for circuits H,G,M,R & S are s	5 & 4 OFF 1 & 2 5 & 1

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

- BCDEF
- .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
- M N

4. TERMINATION / BASE STYLE

4			-	
	8 term 1 A J 3 C 5 E	<u>10 Term</u> 2 B K 4 D 6 F	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 Wire Leads	Jumper No No Yes T2 to 5 No No No No
			r circuits H, G & M. Do not use	
	lubricant	to reduce	terminal insertion forces dur	ina connector as-

sembly, 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				
	Unsealed	Lamps	Illumination Type	Lamp wired to Ter-
<u>minals</u> S	0	NONE	-	-
Ċ	3	2	UP	3 (+) 7 (-) 8 (+) 7 (-)
	E POLE SWI	2		8 (+) / (-)
M	R	1	UP	3 (+) 6 (-)

6. LOCKS

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

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

- White imprinting is standard on black actuators; Black imprinting is standard on white, red and gray actuators; Black imprinting wailed a consult factor. 2 available, consult factory. Located over TI-4 end of switch. Additional ratings available. See V-Series Switch Accessories page. Located over T3-6 end of switch.
- 3 4 5

🕅 Configure Complete Part Number > Browse Standard Parts >

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

Selection 6: above terminals 1 & 4; Selection 7: above terminals 3 & 6 No lamp 0							
Neon	1 125VAC	2 250VAC					
Incandescent	4 3V	5 6V	6 12V	7 18V 8 24V			
LED*			superbright	superbright			
	Red	Amber	Green	Red			
2VDC	Α	L	F	R			
6VDC	В	М	G	S			
12VDC	С	Ν	н	т			
24VDC	D	Р	J	V			
* Consult factory for "daylight bright" LED options. Typical current							
draw for LED is	draw for LED is 20ma.						

1 8. FLUSH BRACKET COLOR, PANEL SEAL

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

9. HARD SURFACE ACTUATOR

	Contura X	Black	Gray	Red	White	
		1	2	3	4	
Actuator orientation over terminals:					3,6 1,4	

10. LENS - ABOVE LAMP #2 TERMINALS 5

z	- No	Lens					
С	lear	White	Amber	Green	Red	Blue	Lens Style
3		8	D	J	Р	v	Bar
4		9	E	К	R	w	One piece Square
5		Α	F	L	S	Y	Two piece Square*
							(with clear top protective lens)
2		7	С	н	Ν	U	Two piece Square*
							(with smoke top protective lens)
1		6	В	G	Μ	т	Two piece Square*
							(with white top protective lens)

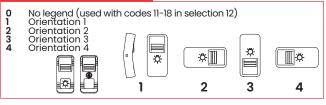
All bottom lenses are molded of opaque material. Consult factory for other lens colors. Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps.

12. ACTUATOR LOCK FUNCTION 3

13. ACTUATOR LENS OR BODY LEGENDS 2

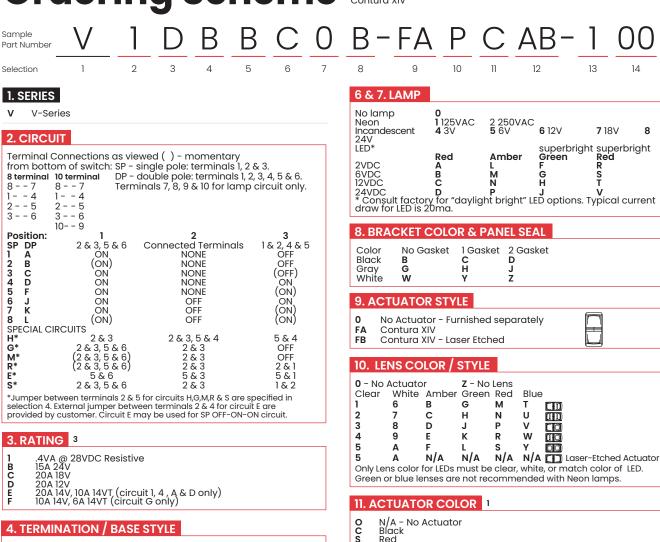


3 **14. LEGEND ORIENTATION**



Ordering Scheme

Contura XIV



5	Rea
Υ	White

12. ACTUATOR LENS OR BODY LEGEND 2

	00 -	No Leo	end this	location	/ No c	ictuator
	11	ON	12 OFF	13	14 O	
			ON	0	I	
	15	00	16 O O	17 O I	18	oLJ
		FΝ	ΝF			
l		F	F			

12. ACTUATOR LENS OR BODY LEGEND

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

12. ACTUATOR LENS OR BODY 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 and gray actuators. Additional ratings available. See V-Series Switch Accessories page. 2
- 3

<u>8 Term</u> 1 A J 3 C 5	<u>10 Term</u> 2 B K 4	Termination .250 TAB (QC) no barriers .250 TAB (QC) with barriers .250 TAB (QC) no barriers Solder Lua no barriers	Jumper No No Yes T2 to 5 No
č	Ď	Solder Lug	No
5	6	Wire Leads no barriers	No
E	F	Wire Leads	No
Note: Coc	les J & K fo	r circuits H, G & M. Do not use	silicone based
lubricant	s to reduce	terminal insertion forces dur	ing connector as-
sembly, c	ıs it is detrir	mental to function and perfo	rmance.

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 Lamps NONE Illumination Type Lamp wired to Terminals S A INDEPENDENT B C DOWN UP (-(-(-) 2 DOWN D 1 2 DOWN Е UP 2 **LIP** F INDEPENDENT 2 UP G INDEPENDENT 2 UP INDEPENDENT Ř 7 н SINGLE POLE SWITCHES ONLY (+) 8 (+) 7 (+) 7 DOWN J 3 2 INDEPENDENT 6

8

6

3 3 3 +) 6 (+) 6

(+) 6

1 (+) 4 (1 (+) 4 (3 (+) 6 (8 (+) 7 (

(+) 9 10

INDEPENDENT

INDEPENDENT

INDEPENDENT

INDEPENDENT

DOWN

DOWN

DOWN

UP

UP

IIP

κ

M Ν

Р

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DOUBLE POLE SWITCHES ONLY

2

2

2

Ordering Scheme Contura XIV Locking R Ζ Sample В Part Number 2 6 1 3 4 5 7 8 9 10 11 12 13 Selection

1. SERIES

v 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 $8 - 7$ DP - double pole: terminals 1, 2, 3, 4, 5 & 6. Terminals 7, 8, 9 & 10 for lamp circuit only. 1 - 4 $1 - 42 - 5$ $2 - 53 - 6$ $3 - 610 - 9$						
Position:	1	2	3			
	•	_	-			
SP DP	2 & 3, 5 & 6	Connected Terminals	1&2,4&5			
1 A	ON	NONE	OFF			
- B	(ON)	NONE	OFF			
4 D	ON	NONE	ON			
6 J	ON	OFF	ÓN			
7 K	ON	OFF	(ON)			
8 L	(ON)	OFF	(ON)			
9 N	OFF	NONE	ON			
3 11	OFF	NONE	ON			
SPECIAL CIRCU	JITS					
H*	2&3	2 & 3, 5 & 4	5&4			
G*	2 & 3, 5 & 6	2 & 3	OFF			
M*	(2&3,5&6)	2&3	OFF			
R*	(2 & 3, 5 & 6)	2&3	2&1			
E*	5 & 6	5&3	5&1			
S * 2&3,5&6 2&3 1&2						
*Jumper betwe	en terminals 2 &	5 for circuits H,G,M,R & S are s	specified in			
selection 4. Exte	rnal iumper betw	een terminals 2 & 4 for circu	it E are			
provided by customer. Circuit E may be used for SP OFF-ON-ON circuit.						

3. RATING ³

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

4. TERMINATION / BASE STYLE

<u>8 Term</u>	<u>10 Term</u>	<u>Termination</u>		Jumper
1	2	.250 TAB (QC) no barriers) with barriers	No
Α	В	.250 TAB (QC) with barriers	No
J	к	.250 TAB (QC) 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 apply to LED lamps only Lamps Illumination Type Lamp wired to Terminals

	Lamps	marmination type	Lump when to reminute
S 1	NONE	-	-
С	2	UP INDEPENDENT	3 (+) 7 (-) 8 (+) 7 (-)

DOUBLE POLE SWITCHES ONLY М UP 1

5. LOCK OPTION

w Low Profile Lock

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

3(+)6(-)

- Custom colors are available. Consult factory.
- White imprinting is standard on black actuators; Black 2
- imprinting is standard on white, red and gray actuators. Additional ratings available. See V-Series Switch Accessories page. 3

7. LAMP

No lamp	0				
Neon	1125VAC	2 250VAC			
Incandescent	4 3V	5 6V	6 12V	718V 824V	
IFD*	- 3V	300	•		
LED				ght superbright	
	Red	Amber	Green	Red	
2VDC	Α	L	F	R	
6VDC	В	М	G	S	
12VDC	С	N	н	Т	
24VDC	D	Р	J	V	
* Consult facto	ory for "daylic	ht bright" I	LED option:	s. Typical current	t
draw for LED is		. 0	,	<i>,</i> ,	

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 COLOR / STYLE

FC	Black - Standard Rocker
FD	Black - Laser Etched
FS	Red - Standard Rocker
FT	Red - Laser Etched

10. LENS COLOR / STYLE

[]

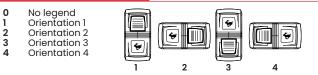
11. ACTUATOR LOCK COLOR / FUNCTION

LOCK IN POSITION						
Lock Color	UP	DOWN	UP & DOWN	CENTER		
Match Actuator	Α	н	R	1		
Black	В	J	S	2		
White	С	К	т	3		
Red	D	L	V	4		
Orange	E	м	W	5		
Gray	F	G	N	6		
•						

12. ACTUATOR LENS OR BODY LEGENDS 2

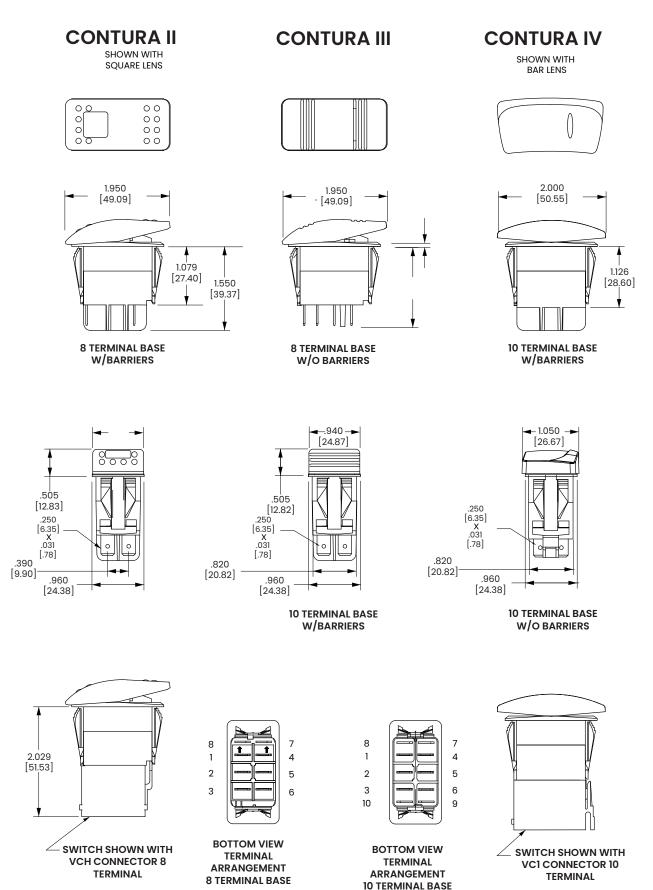
00 21	- No OFF	Legend 22 ON	23 O	24 I	
25	O F F	26 O N	27 O	28	

13. LEGEND ORIENTATION



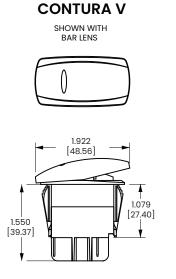
Dimensional Specs

inches [millimeters]

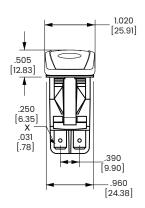


Dimensional Specs

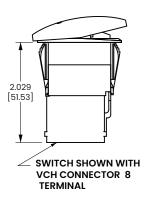
inches [millimeters]



8 TERMINAL BASE W/BARRIERS



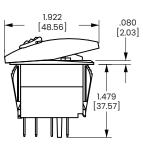
8 TERMINAL BASE W/BARRIERS



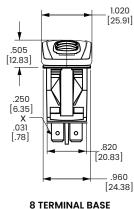
CONTURA V SHOWN WITH

LOW PROFILE LOCK





8 TERMINAL BASE W/O BARRIERS



8 TERMINAL BASE W/O BARRIERS

7

4

5

6

8

1

2

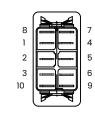
3

BOTTOM VIEW

TERMINAL

ARRANGEMENT

8 TERMINAL BASE

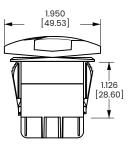


BOTTOM VIEW TERMINAL ARRANGEMENT 10 TERMINAL BASE

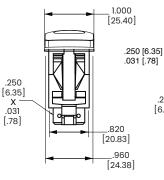
CONTURA VI

SHOWN WITH OVAL LENS





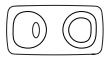
10 TERMINAL BASE W/BARRIER AND LAMP TERMINAL



10 TERMINAL BASE W/O BARRIERS

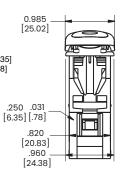


SHOWN WITH LARGE LENS AND BAR LENS





10 TERMINAL BASE W/O BARRIERS



10 TERMINAL BASE W/O BARRIERS



SWITCH SHOWN WITH VC1 CONNECTOR 10 TERMINAL

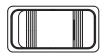


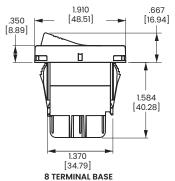
SWITCH SHOWN WITH VCI CONNECTOR 10 TERMINAL

Dimensional Specs

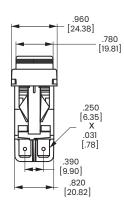
inches [millimeters]

CONTURA X SHOWN WITH RAISED BRACKET

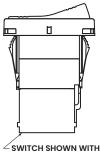




B TERMINAL BAS W/BARRIERS



8 TERMINAL BASE W/BARRIERS



8 1

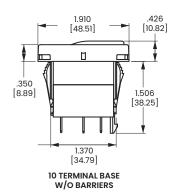
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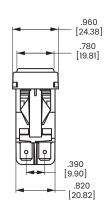
3

VCH CONNECTOR 8 TERMINAL

CONTURA XI SHOWN WITH RAISED BRACKET AND TWO SQUARE LENSES







10 TERMINAL BASE W/O BARRIERS

4

5

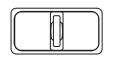
6

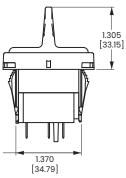
BOTTOM WITH TERMINAL

ARRANGEMENT 8 TERMINAL BASE

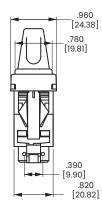


BOTTOM WITH TERMINAL ARRANGEMENT 10 TERMINAL BASE CONTURA XII SHOWN WITH PADDLE ACTUATOR



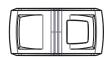


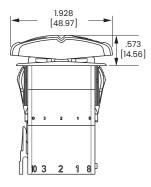
8 TERMINAL BASE W/O BARRIERS



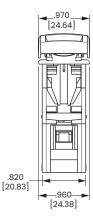
10 TERMINAL BASE W/O BARRIERS

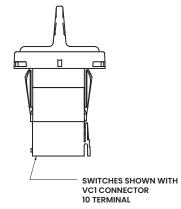
SHOWN WITH LARGE LENS

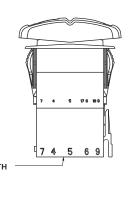




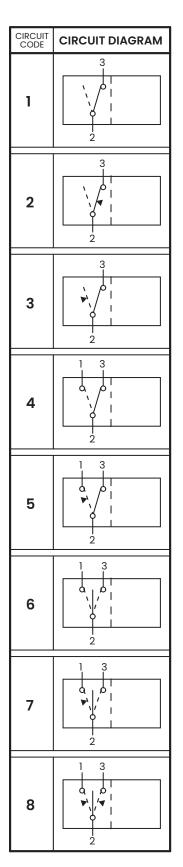
10 TERMINAL BASE W/O BARRIERS

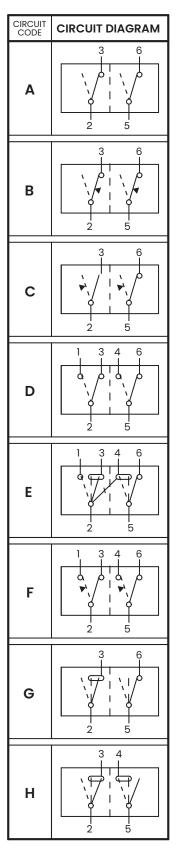


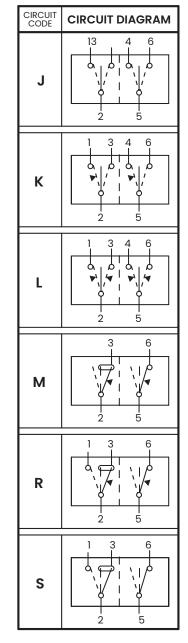




Circuit Diagrams:

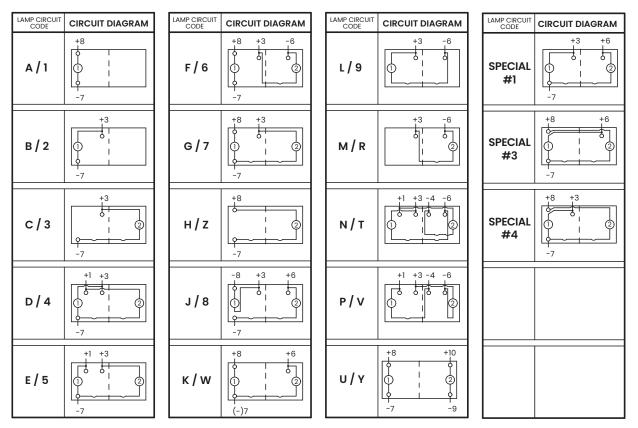




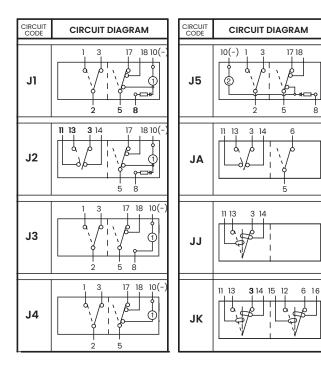


	SYMBOL LEGEND						
SYM. DEFINITION							
0	DESIGNATES TERMINALS AND CONTACTS						
° — 0	DESIGNATES MAINTAINED CIRCUITS						
	DESIGNATES OTHER POSITION						
○ ▼ 0	DESIGNATES MOMENTARY CIRCUITS						
\square	DESIGNATES TWO POSITION CONNECTION						
	DESIGNATES EXTERNAL JUMPER PROVIDED BY CUSTOMER						

Lamp Circuit Diagrams:



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
\Box	DESIGNATES LAMP LOCATION

Stand-Alone Components

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

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	Contura XII actuators without lenses separately
VVR 6 1 00 1	VVP J 1 Z 21 1 00
1 2 3 4 5	1 2 3 4 5 6 7
1. CONTURA X & XI ACTUATOR SEPARATELY	1 CONTURA XII ACTUATOR SEPARATELY
VVR	VVP
2. ACTUATOR STYLE & COLOR	2. ACTUATOR STYLE & COLOR
Black Gray White Red Contura X 1 2 3 4 Contura XI 6 7 8 9	J Black K Gray N White M Red
	3,4 LENS OPENING FOR 1
S. LENS OPENING FOR 1 One bar lens	Z No lens 1 Bar lens 2 Square lens
1 One bar lenses 2 Two bar lenses 3 One square lens bar lens on bottom	5, 7 LENS OR BODY LEGEND 2
4 Two square lens Data lens of Dottorn 4 Two square lens (Contura X only)	00 - No Legend 21 22 23 24 OFF ON O I
4. ACTUATOR LENS OR BODY LEGEND	
00 - No Legend this location	F N F
11 ON 12 OFF 13 I 14 O OFF ON O I	For additional legend options & codes, visit us at www.carlingtech.com
15 00 16 00 17 01 18 10	6 LEGEND ORIENTATION 3
	0 No legend
For additional legend options & code, visit us at www.carlingtech.com	2 Orientation 2
5. LEGEND ORIENTATION 1 1 0 No legend	
0 No legend 1 Orientation 1 2 Orientation 2 0 □ 1 □	Contura X, XI & XII actuator lens assembly separately
3 Orientation 3 4 Orientation 4 1 2 3 4	VVL 2 1 00 0
Contura X, XI & XII top piece of 2-piece lens separately	1 2 3 4 5
	1 CONTURA X, XI & XII LENS SEPARATELY
	VVL
1 2	2 LENS STYLE 3
1 TOP OF LENS SEPARATELY	Bar lens One Piece Square lens
VVT	3 Bottom of Two-Piece Square lens ⁵
2 COLOR	3 TRANSLUCENT LENS COLOR
1 Clear 2 Smoke 3 White	1 Clear 2 White 3 Amber 4 Green ⁴ 5 Red 6 Blue ⁴
	4 LENS OR BODY LEGEND 2
Contura X, XI & XII actuator lens assembly:	00 - No Legend 21 22 23 24 OFF ON O I
	25 0 26 0 27 0 28
actuator stem top lens top lens	F N F
posts mount toward actuator stem posts mount lens filens assembly	For additional legend options & codes, visit us at www.carlingtech.com.
1 piece lens/bar lens are positioned the same as bottom lens for assembly, minus the top lens. Lenses snap in from bottom.	5 LEGEND ORIENTATION 3
Notes: 1 If actuator lens opening for 2 bar or 2 square lenses, legend orientation 0.1.	0 No legend B B I D D D D D D D D D D D D D D D D D
or 2 must be chosen. 2 Center of actuator marking not available for Contura XII.	3 Orientation 3 4 Orientation 4 1 2 3 4
3 Legend is not available for bar style lens. Not recommended with neon lamps. Must also order top piece of 2 piece square lens separately.	

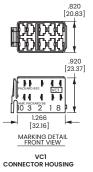
Accessories

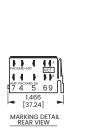
Easily integrate Contura products into your system, with Contura Accessories

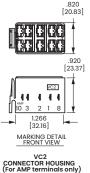
Contura Connectors

Q.C. SELECTION GUIDE					
	PART	NO	WIRE RANGE		
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	
PACKARD 58 SERIES	02965470		16-14	1.0-2.0	В
SO SERIES	02965469	06288318	20-18	.58	
		12084590	105.0		
		12052224	123.0		
PACKARD		12015870	16-14	1.0-2.0	
METRI-PACK		12020035	(2)22-18	(2).58	А
630 SERIES	12015832	12015869	20-18	.58	
		12052222	20-22	.355	
	60253-1	60253-2	16-12	1.3-3	
AMP 250 SERIES	00203-1	00203-2	(2) 16	(2) 1.3	
FASTIN-FASTON	42100-1	42100-2	18-14	.8-2	В
	60295-1	60295-2	22-18	.39	

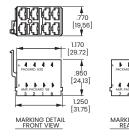
NOTE: Consult Delphi Packard and/or Amp on actual part numbers and availability. AMP is a registered trademark of AMP Inc. Harrisburg, PA Delphi Packard is a registered trademark of Delphi-Packard Electrical Systems Warr











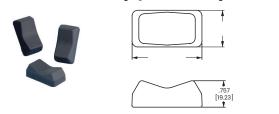
SHOWS ORIENTATION OF TANG IN SLOT



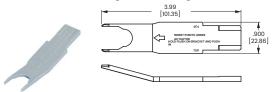
MARKING DETAIL REAR VIEW

VCH CONNECTOR HOUSING

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

TANG

TANG SYMBOL =

4 SYMBOL

- 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 51
- В 15A 24V 20A 18V С

1

4

F

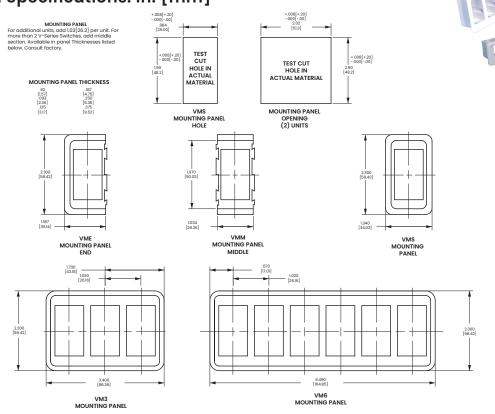
- 20A 12V D
- 20A 12V 20A 14V, 10A 14VT (circuits 1, 4, A, & D only) 10A 14V, 6A, 14VT (circuit G only) Е
- G 20A 6V
 - 20A 3V
- H L 2 15A 125 VAC, 10A 250VAC, 1/2 HP 125-250 VAC; 6A 125 VAC L .4VA/20A 12V (combi-contact) М
 - (combination gold/silver contacts for borderline dry circuit applications)
- Ν .4VA/15A 24V (combi-contact) (combination gold/silver contacts for borderline dry circuit applications)

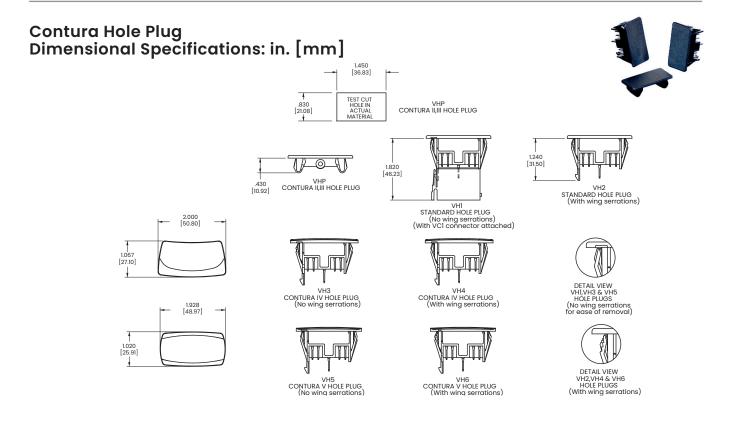
NOTES

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

Accessories

Contura Mounting Panels 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.

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Mouser Electronics

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Carling Technologies:

 VM3-01 SNAP-IN BRACKET BLACK
 VC2-01 CONNECTOR BLACK
 VCH-02 CONNECTOR HOUSING WHITE
 VMS

 08 SNAP-IN BRACKET GRAY
 VM3-02-XLT1
 VM3-02-XL