

V-Series Switch

Product Highlights:

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



CONTURA III



CONTURA II



CONTURA V



CONTURA VII

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



Carling Technologies®

Innovative Designs. Powerful Solutions.

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V-Series Switch

DESIGN FEATURES

MAXIMUM DESIGN OPTIONS WITH MINIMUM INVENTORIES

Panel redesign is a snap, requiring no tooling change, with our removable interchangeable actuators. A unique balance between aesthetics and functionality.

SEALS OUT WATER, DUST AND DEBRIS

Dual seal protection locks out elements. Certified to IP66/IP68 for front panel components.

CLEAN CONNECTIONS

Offered in both eight and ten terminal base options. AMP & Packard compatible connectors available.

SILVER PLATED BUTT

Contact mechanism provides 50 to 100 thousand electrical cycles and a variety of different electrical ratings.

WITHSTANDS EXTREME TEMPERATURES

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

MULTIPLE LIGHTING OPTIONS

Incandescent lamps & LED lighting. Our LED illumination is offered in a wide array of light intensities, colors, as well as dual level, tri-color, and flashing options.

OPTIONAL PANEL SEAL

Prevents water/dust egress behind panel.





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 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 Indicator

The Illuminated Indicator is offered with removable/ replaceable lamps and Contura II, III, V, or X styling. Illumination alerts the operator of essential system functions or malfunctions like: oil pressure, high temperature, fluid levels, parking brake, or general system malfunction.

V-Series Accessories/Options

Carling Technologies also offers many V-Series accessories including connectors, mounting panels, hole plugs, panel seals, and actuator removal tools.



Electrical

Contact Rating	4VA @ 28VDC (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	50,000- 100,000 cycles circuit 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

Mechanical

Endurance	150,000 cycles minimum circuit dependent
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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
Base	Optional external gasket panel seal Polyester blend rated to 125°C with a UL flammability rating of 94V0.
Contura II, III, IV, V, VI 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 Lens	Nylon 66 Reinforced rated to 105°C Polycarbonate rated at 100°C

Actuator Travel (Angular Displacement)

2 position	18°
3 positions	9° from center

Mounting Specifications

Panel Thickness Range	
# of gaskets	Acceptable Panel Thickness
0	.030 to .250 (.76mm 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	



Agency Certifications



Environmental

Environmental

Sealed version: IP68, in accordance with IEC 60529, BS 5490, DIN 40050 & NFC 20 010. This rating applies to front panel components of the actual switch only, and signifies protection against dust and the prolonged effects of immersion under pressure. The standard test for immersion under pressure requires submersion under one meter of water for 30 minutes. The V-Series switch has exceeded these parameters, having been actuated and illuminated during submersion.	
Corrosion	Flowing Mixed Gas (FMG) Class III 3 year accelerated exposure per ASTM B-827, B-845 Silver and gold contacts
Operating Temperature	-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 and pre and post test contact resistance.
Vibration 2	Resonance search 24-50 Hz 0.40 DA 50-2000 ±10 G's peak Results 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, 48 Hrs. Sealed version only.
Dust	Per Mil-Std 810C, Method 510.2 Air Velocity 300 ±200 Feet/Min, Test Duration 16 Hrs.
Thermal Shock	Per Mil-Std 202F, Method 107F, Test Cond. A, -55°C to 85°C. Test criteria - pre and post test contact resistance
Moisture Resistance	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.

Dimensional Specifications: in. [mm]

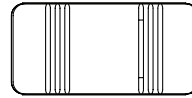
CONTURA II STYLE

SHOWN WITH
SQUARE LENS



**8 TERMINAL BASE
W/BARRIERS**

CONTURA III STYLE



**8 TERMINAL BASE
W/O BARRIERS**

CONTURA IV STYLE

SHOWN WITH
BAR LENS



**10 TERMINAL BASE
W/BARRIERS**



**8 TERMINAL BASE
W/BARRIERS**



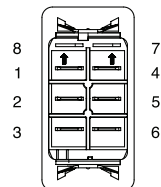
**10 TERMINAL BASE
W/BARRIERS**



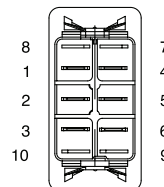
**10 TERMINAL BASE
W/O BARRIERS**



**SWITCH SHOWN WITH
VCH CONNECTOR 8
TERMINAL**



**BOTTOM VIEW
TERMINAL
ARRANGEMENT
8 TERMINAL BASE**



**BOTTOM VIEW
TERMINAL
ARRANGEMENT
10 TERMINAL BASE**



**SWITCH SHOWN WITH
VC1 CONNECTOR 10
TERMINAL**

Dimensional Specifications: in. [mm]

CONTURA V

SHOWN WITH
BAR LENS



8 TERMINAL BASE
W/BARRIERS



8 TERMINAL BASE
W/BARRIERS



SWITCH SHOWN WITH
VCH CONNECTOR 8
TERMINAL

CONTURA V

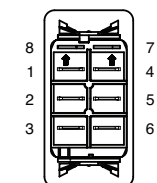
SHOWN WITH
LOW PROFILE LOCK



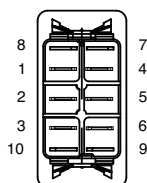
8 TERMINAL BASE
W/O BARRIERS



8 TERMINAL BASE
W/O BARRIERS



BOTTOM VIEW
TERMINAL
ARRANGEMENT
8 TERMINAL BASE



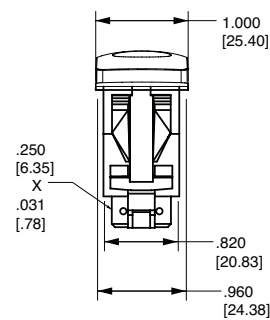
BOTTOM VIEW
TERMINAL
ARRANGEMENT
10 TERMINAL BASE

CONTURA VI

SHOWN WITH OVAL
LENS



10 TERMINAL BASE
W/BARRIER AND
LAMP TERMINAL



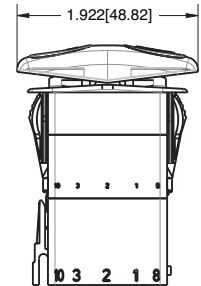
10 TERMINAL BASE
W/O BARRIERS



SWITCH SHOWN WITH
VC1 CONNECTOR 10
TERMINAL

CONTURA VII

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

Dimensional Specifications: in. [mm]

CONTURA X STOLE
 8 TERMINAL BASE WITH BARRIERS



**8 TERMINAL BASE
W/BARRIERS**

CONTURA XI STOLE
 10 TERMINAL BASE WITH BARRIERS



**10 TERMINAL BASE
W/O BARRIERS**

CONTURA XII STOLE
 8 TERMINAL BASE WITH BARRIERS



**8 TERMINAL BASE
W/O BARRIERS**



**8 TERMINAL BASE
W/BARRIERS**



**10 TERMINAL BASE
W/BARRIERS**



**10 TERMINAL
BASE
W/O BARRIERS**



CIRCUIT	CIRCUIT DIAGRAM
1	
2	
3	
4	
5	
6	
7	
8	

CIRCUIT	CIRCUIT DIAGRAM
A	
B	
C	
D	
E	
F	
G	
H	

CIRCUIT	CIRCUIT DIAGRAM
J	
K	
L	
M	
R	
S	

SYMBOL LEGEND	
SYM.	DEFINITION
	DESIGNATES TERMINALS AND CONTACTS
	DESIGNATES LAMP LOCATION
	DESIGNATES MAINTAINED CIRCUITS
	DESIGNATES OTHER POSITION
	DESIGNATES MOMENTARY CIRCUITS
	DESIGNATES TWO POSITION CONNECTION
	DESIGNATES EXTERNAL JUMPER PROVIDED BY CUSTOMER

LAMP CIRCUIT	CIRCUIT DIAGRAM	LAMP CIRCUIT	CIRCUIT DIAGRAM	LAMP CIRCUIT	CIRCUIT DIAGRAM	LAMP CIRCUIT	CIRCUIT DIAGRAM
A/1		F/6		L/9		SPECIAL #1	
B/2		G/7		M/R		SPECIAL #3	
C/3		H/Z		N/T		SPECIAL #4	
D/4		J/8		P/V			
E/5		K/W		U/Y			

CIRCUIT	CIRCUIT DIAGRAM	CIRCUIT	CIRCUIT DIAGRAM	CIRCUIT	CIRCUIT DIAGRAM
J1		J5		JA	
J2		JJ		JK	
J3					
J4					

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

SYMBOL LEGEND	
SYM.	DEFINITION
○	DESIGNATES TERMINALS AND CONTACTS
○	DESIGNATES LAMP LOCATION
□	DESIGNATES TWO POSITION CIRCUIT

CIRCUIT	CONNECTOR PART #
JA, JJ, JK	JC1-01
J1, J3, J4, J5	JC2-01
J2	JC3-01

V	1	D	A	B	T	O	B	—	A	R	B	00	—	0	00
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lamp	7 Lamp	8 Bracket	9 Actuator	10 Lens	11 Color	12 Legend	13 Legend	14 Actuator	15 Orientation	16 Lens Legend

1 SERIES

V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
 DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
 Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

	1	2	3
SP	2 & 3, 5 & 6	Connected Terminals	1 & 2, 4 & 5
1	ON	NONE	OFF
2	(ON)	NONE	OFF
3	ON	NONE	(OFF)
4	ON	NONE	ON
5	ON	NONE	(ON)
6	ON	OFF	ON
7	ON	OFF	(ON)
8	(ON)	OFF	(ON)

SPECIAL CIRCUITS

	2 & 3	2 & 3, 5 & 4	5 & 4
H*	2 & 3	2 & 3	OFF
G*	2 & 3, 5 & 6	2 & 3	1 & 2
S*	2 & 3, 5 & 6	2 & 3	OFF
M*	(2 & 3, 5 & 6)	2 & 3	1 & 2
E*	(2 & 3, 5 & 6)	5 & 6	5 & 1

*Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING³

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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: Codes J & K for circuits H, G & M.

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
A	1	# 1	Independent	8+ 7-
B	2	# 1	Down	3+ 7-
C	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-
		&# 2	Up	3+ 7-
H	Z	# 2	Independent	8+ 7-
U	Y	# 1	Independent	8+ 7-
		&# 2	Independent	10+ 9-
Selections for Single Pole Switches Only:				
J	8	# 1	Down	3+ 8-
		&# 2	Independent	6+ 7-
K	W	# 1	Independent	8+ 7-
		&# 2	Independent	6+ 7-
Selections for Double Pole Switches Only:				
L	9	# 1	Down	3+ 6-
M	R	# 2	Up	3+ 6-
N	T	# 1	Down	3+ 6-
		&# 2	Up	1+ 4-
P	V	# 1	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	2 250VAC	6 12V	7 18V	8 24V
Neon	1 125VAC	5 6V	superbright	superbright	
Incandescent	4 3V		Green	Red	
LED*					
	Red	Amber			
2VDC	A	L	F	R	
6VDC	B	M	G	S	
12VDC	C	N	H	T	
24VDC	D	P	J	V	

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

8 FLUSH BRACKET COLOR¹, PANEL SEAL

No Seal	Black	White	Gray
One Seal	B	W	H

9 ACTUATOR

No Actuator	0		
Contura II	A		
Contura III	B		
	C		
	D		

Actuator orientation above terminals:

3,6 1,4

10 LENS

0 - No Actuator	Z - No Lens	Green	Red	Blue
Clear	White	Amber		
1	6	B	G	M
2	7	C	H	N
3	8	D	J	P
Square lens options available only for Contura II:				
4	9	E	K	R
5	A	F	L	S
				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 COLOR¹ AND TEXTURE

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

12 ACTUATOR LENS OR BODY LEGENDS²

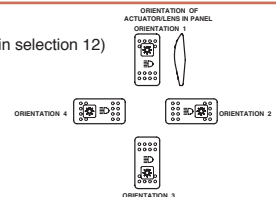
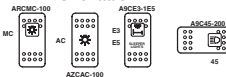
11 ON	12 OFF	13 I	14 O
OFF	ON	O	I
15 O O	16 O O	17 O I	18 I O
F N	F N		
F	F		

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

13 LEGEND ORIENTATION

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

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



14 ACTUATOR LENS LEGEND

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.

1 Custom colors are available. Consult factory.

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

3 Additional ratings available. See page 20.

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

V	1	D	A	S	W	O	B	—	A	Z	E	00	—	0
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lock	7 Lamp	8 Bracket		9 Actuator	10 Lens	11 Function	12 Legend		13 Legend Orientation

1 SERIES V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

	1	2	3
SP	2 & 3, 5 & 6	Connected Terminals	1 & 2, 4 & 5
1	ON	NONE	OFF
2	(ON)	NONE	OFF
3	ON	NONE	(OFF)
4	ON	NONE	ON
5	ON	NONE	(ON)
6	ON	OFF	ON
7	ON	OFF	(ON)
8	(ON)	OFF	(ON)

SPECIAL CIRCUITS

	2 & 3	2 & 3, 5 & 4	5 & 4
H*	2 & 3, 5 & 6	2 & 3	OFF
G*	2 & 3, 5 & 6	2 & 3	1 & 2
S*	(2 & 3, 5 & 6)	2 & 3	OFF
M*	(2 & 3, 5 & 6)	2 & 3	1 & 2
E*	5 & 6	5 & 3	5 & 1

*Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING⁴

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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: Codes J & K for circuits H, G & M.

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
C	3	# 2	Up	3+ 7-
H	Z	# 2	Independent	8+ 7-
Selections for Double Pole Switches Only:				
M	R	# 2	Up	3+ 6-

6 LOCK

Lock above terminals 1 & 4 end of switch.
W 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; 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 page 20.

7 LAMP

Lamp above terminals 3 & 6 end of switch

No lamp	0	2 250VAC	6 12V superbright Green	7 18V superbright Red	8 24V
Neon	1 125VAC	5 6V			
Incandescent	4 3V				
LED*		Amber			
	Red	L			
	Amber	M			
	Green	N			
	2VDC	P			
	6VDC				
	12VDC				
	24VDC				

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

8 FLUSH BRACKET COLOR¹, PANEL SEAL

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

9 HARD SURFACE ACTUATOR¹

Contura II	Black	Grey	Red	White
	A	B	G	H
Contura III	C	D	E	F

Actuator orientation above terminals:



10 LENS

Z - No Lens

Clear	White	Amber	Green	Red	Blue
3	8	D	J	P	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 COLOR¹

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

12 ACTUATOR LENS OR BODY LEGEND²

00 - No Legend

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



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

13 LEGEND ORIENTATION

0	No legend (used with codes 21-28 in selection 12)
1	Orientation 1
2	Orientation 2
3	Orientation 3
4	Orientation 4



ORIENTATION OF ACTUATOR/LENS IN PANEL

ORIENTATION 1

ORIENTATION 2

ORIENTATION 3

ORIENTATION 4

ORIENTATION 5

ORIENTATION 6

ORIENTATION 7

ORIENTATION 8

ORIENTATION 9

ORIENTATION 10

ORIENTATION 11

ORIENTATION 12

ORIENTATION 13

ORIENTATION 14

ORIENTATION 15

ORIENTATION 16

ORIENTATION 17

ORIENTATION 18

ORIENTATION 19

ORIENTATION 20

ORIENTATION 21

ORIENTATION 22

ORIENTATION 23

ORIENTATION 24

ORIENTATION 25

ORIENTATION 26

ORIENTATION 27

ORIENTATION 28

ORIENTATION 29

ORIENTATION 30

ORIENTATION 31

ORIENTATION 32

ORIENTATION 33

ORIENTATION 34

ORIENTATION 35

ORIENTATION 36

ORIENTATION 37

ORIENTATION 38

ORIENTATION 39

ORIENTATION 40

ORIENTATION 41

ORIENTATION 42

ORIENTATION 43

ORIENTATION 44

V	1	D	A	B	T	O	B	—	E	P	C	00	—	0	00
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lamp	7 Lamp	8 Bracket		9 Actuator	10 Lens	11 Color	12 Legend		13 Legend Orientation	14 Actuator Lens Legend

1 SERIES V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

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

SPECIAL CIRCUITS

	2 & 3	2 & 3, 5 & 4	5 & 4
H*	2 & 3	2 & 3	OFF
G*	2 & 3, 5 & 6	2 & 3	1 & 2
S	2 & 3, 5 & 6	2 & 3	OFF
M*	(2 & 3, 5 & 6)	2 & 3	1 & 2
R	(2 & 3, 5 & 6)	2 & 3	5 & 1
E*	5 & 6	5 & 3	5 & 1

*Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING⁴

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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: Codes J & K for circuits H, G & M.

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
A	1	#1	Independent	8+ 7-
B	2	#1	Down	3+ 7-
C	3	#2	Up	3+ 7-
D	4	#1	Down	3+ 7-
E	5	#1	Down	1+ 7-
		#2	Up	1+ 7-
F	6	#1	Independent	8+ 7-
		#2	Up	3+ 6-
G	7	#1	Independent	8+ 7-
		#2	Up	3+ 7-
H	Z	#2	Independent	8+ 7-
U	Y	#1	Independent	8+ 7-
		#2	Independent	10+ 9-

Selections for Single Pole Switches Only:

J	8	#1	Down	3+ 8-
		#2	Independent	6+ 7-
K	W	#1	Independent	8+ 7-
		#2	Independent	6+ 7-

Selections for Double Pole Switches Only:

L	9	#1	Down	3+ 6-
M	R	#2	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 (same coding for both selections)

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

No lamp	0	1 125VAC	2 250VAC	6 12V superbright Green	7 18V superbright Red	8 24V superbright Red
Neon	1	4 3V	5 6V			
Incandescent LED*		Red A	Amber L			
		B	M			
2VDC		C	N			
6VDC		D	P			
12VDC						
24VDC						

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

8 FLUSH BRACKET COLOR¹, PANEL SEAL

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

9 ACTUATOR

No Actuator	0
Contura IV, left orientation	E
Contura IV, left orientation, laser etched	T
Contura IV, right orientation	F
Contura IV, right orientation, laser etched	R

Actuator orientation above terminals:



10 LENS

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

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

11 ACTUATOR COLOR^{1,5,6}

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

12 ACTUATOR LENS OR BODY LEGENDS²

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

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

13 LEGEND ORIENTATION

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



14 ACTUATOR LENS LEGEND

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; 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 page 20.
- 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.

V	1	D	A	S	W	O	B	—	J	Z	E	00	—	0
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lock	7 Lamp	8 Bracket		9 Actuator	10 Lens	11 Function	12 Legend		13 Legend Orientation

1 SERIES V

2 CIRCUIT³

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
Terminals 7 & 8 for lamp circuit only.
Terminals 9 & 10 are not used with locking style switches.

Position:

SP	DP	2 & 3, 5 & 6	Connected Terminals	1 & 2, 4 & 5
1	A	ON	NONE	OFF
4	D	ON	NONE	ON
6	J	ON	OFF	ON
7	K	ON	OFF	(ON)
8	L	(ON)	OFF	(ON)
9	N	OFF	NONE	ON

3 RATING⁴

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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: Codes J & K for circuits H, G & M.

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
C	3	# 2	Up	3+ 7-
H	Z	# 2	Independent	8+ 7-
M	R	# 2	Up	3+ 6-

6 LOCK

Lock above terminals 1 & 4 end of switch.

W low profile lock Y⁶ high profile lock

7 LAMP

Lamp above terminals 3 & 6 end of switch

No lamp	0	1 125VAC	2 250VAC	6 12V superbright Green	7 18V superbright Red	8 24V
Neon	1	4 3V	5 6V			
Incandescent						
LED*		Red	Amber			
		A	L	F	R	
2VDC		B	M	G	S	
6VDC		C	N	H	T	
12VDC		D	P	J	V	
24VDC						

8 FLUSH BRACKET COLOR¹, PANEL SEAL

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

9 HARD SURFACE ACTUATOR

CONTURA IV:

Orientation	Black	Grey	Red	White
Left	J	K	L	M
Right	N	P	R	S

CONTURA V:	Black	Grey	Red	White
	U	V	W	Y

Actuator orientation above terminals: 3,6 1,4

10 LENS⁵

Z - No Lens

Clear	White	Amber	Green	Red	Blue
A	B	C	D	E	F
G	H	J	K	L	M

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

11 ACTUATOR LOCK FUNCTION AND COLOR¹

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

12 ACTUATOR LENS OR BODY LEGEND²

00 - No Legend

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

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

13 LEGEND ORIENTATION

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



Notes:

Consult factory to verify 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 page 20.
- Located at T3-6 end of switch.
- Contura V style only.

V	1	D	B	G	N	T	B	-	H	A	7	C	B	AC	-	1	00
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lamp	7 Lamp	8 Bracket		9 Actuator	10 Lens	11 Lens	12 Color	13 Insert Color	14 Actuator Lens		15 Legend Orientation	16 Actuator Lens Legend

1 SERIES

V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

8 terminal 10 terminal

8 - - 7 8 - - 7

1 - - 4 1 - - 4

2 - - 5 2 - - 5

3 - - 6 3 - - 6

10 - - 9

() - momentary

SP - single pole - uses terminals 1, 2 & 3.

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

Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

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

SPECIAL CIRCUITS

	2 & 3	2 & 3, 5 & 4	5 & 4
H*	2 & 3	2 & 3	OFF
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	1 & 2
E*	5 & 6	5 & 3	5 & 1

*Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING³

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
A	1	#1	Independent	8+ 7-
B	2	#1	Down	3+ 7-
C	3	#2	Up	3+ 7-
D	4	#1	Down	3+ 7-
E	5		Down	1+ 7-
F	6	#1	Up	1+ 7-
G	7		Up	3+ 7-
H	Z	#1	Independent	8+ 7-
U	Y	#2	Up	3+ 6-
			Independent	8+ 7-
			Independent	10+ 9-
Selections for Single Pole Switches Only:				
J	8	#1	Down	3+ 8-
			Independent	6+ 7-
K	W	#1	Independent	8+ 7-
			Independent	6+ 7-
Selections for Double Pole Switches Only:				
L	9	#1	Down	3+ 6-
M	R	#2	Up	3+ 6-
N	T	#1	Down	3+ 6-
			Down	1+ 4-
P	V	#1	Up	1+ 4-
			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				
Neon	1	125VAC	2	250VAC	
Incandescent	4	3V	5	6V	
LED*					
	Red		Amber		6 12V superbright
A			L		Green
B			M		7 18V superbright
C			N		Red
			P		R
					S
					T
					V

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

8 FLUSH BRACKET COLOR¹, PANEL SEAL

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

9 ACTUATOR

0 No Actuator

H High Insert

L Low Insert

**10,11 LENS⁴**

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

Clear	White	Amber	Green	Red	Blue	
-	7	C	H	N	U	Bar Lens Translucent
3	-	D	J	P	V	Bar Lens Transparent
4	-	E	K	R	W	Oval Lens Transparent
-	A	F	L	S	Y	Oval Lens Translucent

12 ACTUATOR COLOR

C Black H Gray S Red Y White

13 INSERT COLOR

B	Black	N	Bright Nickel Plated
C	Bright Chrome Plated	S	Satin Chrome Plated
D	Satin Chrome Painted	T	Satin Nickel Plated
		W	White

14 ACTUATOR LENS OR BODY LEGENDS²

00 - No Legend this location/No actuator

11 ON 12 OFF 13 I 14 O

OFF ON O I

15 O O 16 O O 17 O I 18 I O

F N F N F

F F F



For additional legend options & codes, see pages 54-65 of the Carling Transportation catalog

15 LEGEND ORIENTATION

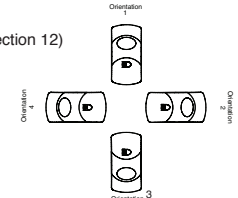
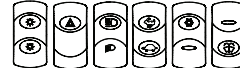
0 No legend (used with codes 11-18 in selection 12)

1 Orientation 1

2 Orientation 2

3 Orientation 3

4 Orientation 4

**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.

1 Custom colors are available. Consult factory.

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

3 Additional ratings available. See page 20.

V	1	D	A	B	T	0	B	—	Z	R	C	00	—	0	00
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Series	Circuit	Rating	Termination	Illumination	Lamp	Lamp	Bracket	Actuator	Lens	Color	Legend	Legend	Actuator		
												Orientation	Lens Legend		

1 SERIES**V****2 CIRCUIT**

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
 DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
 Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

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

SPECIAL CIRCUITS

	2 & 3	2 & 3, 5 & 4	5 & 4
H*	2 & 3	2 & 3	OFF
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	1 & 2
E*	5 & 6	5 & 3	5 & 1

*Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING⁴

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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: Codes J & K for circuits H, G & M.

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
A	1	# 1	Independent	8+ 7-
B	2	# 1	Down	3+ 7-
C	3	# 2	Up	3+ 7-
D	4	# 1	Down	3+ 7-
E	5	&# 2	Down	1+ 7-
		# 1	Up	1+ 7-
F	6	&# 2	Up	3+ 7-
		# 1	Independent	8+ 7-
G	7	&# 2	Up	3+ 6-
		# 1	Independent	8+ 7-
H	Z	&# 2	Up	3+ 7-
U	Y	# 1	Independent	8+ 7-
		&# 2	Independent	10+ 9-

Selections for Single Pole Switches Only:

J	8	# 1	Down	3+ 8-
		&# 2	Independent	6+ 7-
K	W	# 1	Independent	8+ 7-
		&# 2	Independent	6+ 7-

Selections for Double Pole Switches Only:

L	9	# 1	Down	3+ 6-
M	R	# 2	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 (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
LED*	6 12V 7 18V 8 24V
	superbright Red
2VDC	A Red L Amber F superbright Green
6VDC	B Red M Amber G superbright Red
12VDC	C Red N Amber H superbright Red
24VDC	D Red P Amber J superbright Red

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

8 FLUSH BRACKET COLOR¹, PANEL SEAL

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

9 ACTUATORNo Actuator
Contura VII

0

Z

**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

White	Amber	Green	Red	Blue	Lens style & location
6	B	G	M	T	
7	C	H	N	U	
8	D	J	P	V	
9	E	K	R	W	
A	F	L	S	Y	
1	2	3	4	5	

11 ACTUATOR COLOR/THUMB PRINT COLOR¹

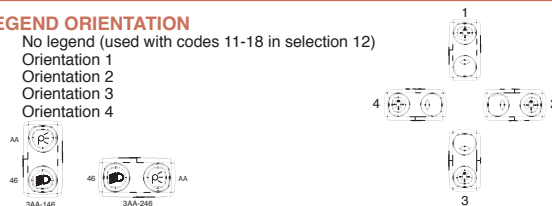
O	N/A - No Actuator	C	Black/Black
H	Grey/Black	S	Red/Black
Y	White/Black		

12 ACTUATOR LENS LEGENDS^{2,4}

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

For additional legend options & codes, visit us at www.carlingtech.com.**13 LEGEND ORIENTATION**

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

**14 ACTUATOR LENS LEGEND**

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.

1 Custom colors are available. Consult factory.

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

3 Additional ratings available. See page 20.

4 Legends available for lighted oval lens version only

V	1	D	A	B	6	0	1	—	6	P	Z	00	—	0	00
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lamp	7 Lamp	8 Bracket	9 Actuator	10 Lens	11 Lens	12 Legend	13 Legend	14 Actuator	Orientation	Lens Legend

1 SERIES

V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
 DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
 Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

SP	DP	2 & 3, 5 & 6	Connected Terminals	1 & 2, 4 & 5
1	A	ON	NONE	OFF
2	B	(ON)	NONE	OFF
3	C	ON	NONE	(OFF)
4	D	ON	NONE	ON
5	F	ON	NONE	(ON)
6	J	ON	OFF	(ON)
7	K	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
R*	(2 & 3, 5 & 6)	2 & 3	OFF
E*	(2 & 3, 5 & 6)	2 & 3	1 & 2
	5 & 6	5 & 3	5 & 1

* Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING⁴

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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: Codes J & K for circuits H, G & M.

5 ILLUMINATION & SWITCH SEALING

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

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Terminals
S	0	NONE		
A	1	# 1	Independent	8+ 7-
B	2	# 1	Down	3+ 7-
C	3	# 2	Up	3+ 7-
D	4	# 1	Down	3+ 7-
E	5	&# 2	Down	1+ 7-
		# 1	Up	1+ 7-
F	6	&# 2	Up	3+ 7-
		# 1	Independent	8+ 7-
G	7	&# 2	Up	3+ 6-
		# 1	Independent	8+ 7-
H	Z	&# 2	Up	3+ 7-
U	Y	# 1	Independent	8+ 7-
		&# 2	Independent	10+ 9-
J	8	# 1	Down	3+ 8-
		&# 2	Independent	6+ 7-
K	W	# 1	Independent	8+ 7-
		&# 2	Independent	6+ 7-
L	9	# 1	Down	3+ 6-
M	R	# 2	Up	3+ 6-
N	T	# 1	Down	3+ 6-
		&# 2	Down	1+ 4-
P	V	# 1	Up	1+ 4-
		&# 2	Up	3+ 6-

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 sel. 12 for lens above lamp 1, & selection 14 for lens above lamp 2.
- Additional ratings available. See page 20.
- Not available with Contura XI rockers.

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	6 12V superbright	7 18V superbright	8 24V
Neon ⁵	1	4 3V	5 6V	Green	Red	
Incandescent	4			F	R	
LED*				G	S	
		Red	Amber	H	T	
2VDC	A			J	V	
6VDC	B					
12VDC	C					
24VDC	D					

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

8 BRACKET COLOR¹, PANEL SEAL (EXTERNAL FOAM GASKET)

# of gaskets	X & XI w/Flush Bracket	2	X, XI, XII w/Raised Bracket	0	1
Black	B	C	D	2	4
White	W	Y	Z	1	5
Gray	G	H	J	3	6

9 ACTUATOR

No Actuator	0				
	Black	Gray	White	Red	
Contura X	1				
Contura XI	6	7	8	9	
Contura XII	J	K	N	M	

Actuator orientation above terminals:



10 LENS - ABOVE LAMP #1 TERMINALS^{1,4}

11 LENS - ABOVE LAMP #2 TERMINALS^{3,6}

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

* All bottom lenses are molded of opaque material. Consult factory for other lens colors.
 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 LEGEND²

00 - No Legend this location/No actuator

11 ON 12 OFF 13 I 14 O

OFF ON O I

15 O O 16 O O 17 O I 18 I O

F N F N F

21 OFF 22 ON 23 O 24 I

25 O 26 O 27 O 28 I

F N F N F

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

13 LEGEND ORIENTATION³

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

1 Orientation 1

2 Orientation 2

3 Orientation 3

4 Orientation 4

30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

62230-1A7 62230-1B7 62230-1C7 62230-1D7 62230-1E7 62230-1F7 62230-1G7 62230-1H7 62230-1I7 62230-1J7 62230-1K7 62230-1L7 62230-1M7 62230-1N7 62230-1O7 62230-1P7 62230-1Q7 62230-1R7 62230-1S7 62230-1T7 62230-1U7 62230-1V7 62230-1W7 62230-1X7 62230-1Y7 62230-1Z7 62230-1AA7 62230-1AB7 62230-1AC7 62230-1AD7 62230-1AE7 62230-1AF7 62230-1AG7 62230-1AH7 62230-1AI7 62230-1AJ7 62230-1AK7 62230-1AL7 62230-1AM7 62230-1AN7 62230-1AO7 62230-1AP7 62230-1AQ7 62230-1AR7 62230-1AS7 62230-1AT7 62230-1AU7 62230-1AV7 62230-1AW7 62230-1AX7 62230-1AY7 62230-1AZ7 62230-1BA7 62230-1BB7 62230-1BC7 62230-1BD7 62230-1BE7 62230-1BF7 62230-1BG7 62230-1BH7 62230-1BI7 62230-1BJ7 62230-1BK7 62230-1BL7 62230-1BM7 62230-1BN7 62230-1BO7 62230-1BP7 62230-1BQ7 62230-1BR7 62230-1BS7 62230-1BT7 62230-1BU7 62230-1BV7 62230-1BW7 62230-1BX7 62230-1BY7 62230-1BZ7 62230-1CA7 62230-1CB7 62230-1CC7 62230-1CD7 62230-1CE7 62230-1CF7 62230-1CG7 62230-1CH7 62230-1CI7 62230-1CJ7 62230-1CK7 62230-1CL7 62230-1CM7 62230-1CN7 62230-1CO7 62230-1CP7 62230-1CQ7 62230-1CR7 62230-1CS7 62230-1CT7 62230-1CU7 62230-1CV7 62230-1CW7 62230-1CX7 62230-1CY7 62230-1CZ7 62230-1DA7 62230-1DB7 62230-1DC7 62230-1DD7 62230-1DE7 62230-1DF7 62230-1DG7 62230-1DH7 62230-1DI7 62230-1DJ7 62230-1DK7 62230-1DL7 62230-1DM7 62230-1DN7 62230-1DO7 62230-1DP7 62230-1DQ7 62230-1DR7 62230-1DS7 62230-1DT7 62230-1DU7 62230-1DV7 62230-1DW7 62230-1DX7 62230-1DY7 62230-1DZ7 62230-1EA7 62230-1EB7 62230-1EC7 62230-1ED7 62230-1EE7 62230-1EF7 62230-1EG7 62230-1EH7 62230-1EI7 62230-1EJ7 62230-1EK7 62230-1EL7 62230-1EM7 62230-1EN7 62230-1EO7 62230-1EP7 62230-1EQ7 62230-1ER7 62230-1ES7 62230-1ET7 62230-1EU7 62230-1EV7 62230-1EW7 62230-1EX7 62230-1EY7 62230-1EZ7 62230-1FA7 62230-1FB7 62230-1FC7 62230-1FD7 62230-1FE7 62230-1FF7 62230-1FG7 62230-1FH7 62230-1FI7 62230-1FJ7 62230-1FK7 62230-1FL7 62230-1FM7 62230-1FN7 62230-1FO7 62230-1FP7 62230-1FQ7 62230-1FR7 62230-1FS7 62230-1FT7 62230-1FU7 62230-1FV7 62230-1FW7 62230-1FX7 62230-1FY7 62230-1FZ7 62230-1GA7 62230-1GB7 62230-1GC7 62230-1GD7 62230-1GE7 62230-1GF7 62230-1GG7 62230-1GH7 62230-1GI7 62230-1GJ7 62230-1GK7 62230-1GL7 62230-1GM7 62230-1GN7 62230-1GO7 62230-1GP7 62230-1GQ7 62230-1GR7 62230-1GS7 62230-1GT7 62230-1GU7 62230-1GV7 62230-1GW7 62230-1GX7 62230-1GY7 62230-1GZ7 62230-1HA7 62230-1HB7 62230-1HC7 62230-1HD7 62230-1HE7 62230-1HF7 62230-1HG7 62230-1HI7 62230-1HJ7 62230-1HK7 62230-1HL7 62230-1HM7 62230-1HN7 62230-1HO7 62230-1HP7 62230-1HQ7 62230-1HR7 62230-1HS7 62230-1HT7 62230-1HU7 62230-1HV7 62230-1HW7 62230-1HX7 62230-1HY7 62230-1HZ7 62230-1IA7 62230-1IB7 62230-1IC7 62230-1ID7 62230-1IE7 62230-1IF7 62230-1IG7 62230-1IH7 62230-1IJ7 62230-1IK7 62230-1IL7 62230-1IM7 62230-1IN7 62230-1IO7 62230-1IP7 62230-1IQ7 62230-1IR7 62230-1IS7 62230-1IT7 62230-1IU7 62230-1IV7 62230-1IW7 62230-1IX7 62230-1IY7 62230-1IZ7 62230-1JA7 62230-1JB7 62230-1JC7 62230-1JD7 62230-1JE7 62230-1JF7 62230-1JG7 62230-1JH7 62230-1JI7 62230-1JJ7 62230-1JK7 62230-1JL7 62230-1JM7 62230-1JN7 62230-1JO7 62230-1JP7 62230-1JQ7 62230-1JR7 62230-1JS7 62230-1JT7 62230-1JU7 62230-1JV7 62230-1JW7 62230-1JX7 62230-1JY7 62230-1JZ7 62230-1KA7 62230-1KB7 62230-1KC7 62230-1KD7 62230-1KE7 62230-1KF7 62230-1KG7 62230-1KH7 62230-1KI7 62230-1KJ7 62230-1KK7 62230-1KL7 62230-1KM7 62230-1KN7 62230-1KO7 62230-1KP7 62230-1KQ7 62230-1KR7 62230-1KS7 62230-1KT7 62230-1KU7 62230-1KV7 62230-1KW7 62230-1KX7 62230-1KY7 62230-1KZ7 62230-1LA7 62230-1LB7 62230-1LC7 62230-1LD7 62230-1LE7 62230-1LF7 62230-1LG7 62230-1LH7 62230-1LI7 62230-1LJ7 62230-1LK7 62230-1LL7 62230-1LM7 62230-1LN7 62230-1LO7 62230-1LP7 62230-1LQ7 62230-1LR7 62230-1LS7 62230-1LT7 62230-1LU7 62230-1LV7 62230-1LW7 62230-1LX7 62230-1LY7 62230-1LZ7 62230-1MA7 62230-1MB7 62230-1MC7 62230-1MD7 62230-1ME7 62230-1MF7 62230-1MG7 62230-1MH7 62230-1MI7 62230-1MJ7 62230-1MK7 62230-1ML7 62230-1MN7 62230-1MO7 62230-1MP7 62230-1MQ7 62230-1MR7 62230-1MS7 62230-1MT7 62230-1MU7 62230-1MV7 62230-1MW7 62230-1MX7 62230-1MY7 62230-1MZ7 62230-1NA7 62230-1NB7 62230-1NC7 62230-1ND7 62230-1NE7 62230-1NF7 62230-1NG7 62230-1NH7 62230-1NI7 62230-1NJ7 62230-1NK7 62230-1NL7 62230-1NO7 62230-1NP7 62230-1NQ7 62230-1NR7 62230-1NS7 62230-1NT7 62230-1NU7 62230-1NV7 62230-1NW7 62230-1NX7 62230-1NY7 62230-1NZ7 62230-1OA7 62230-1OB7 62230-1OC7 62230-1OD7 62230-1OE7 62230-1OF7 62230-1OG7 62230-1OH7 62230-1OI7 62230-1OJ7 62230-1OK7 62230-1OL7 62230-1OM7 62230-1ON7 62230-1OO7 62230-1OP7 62230-1OQ7 62230-1OR7 62230-1OS7 62230-1OT7 62230-1OU7 62230-1OV7 62230-1OW7 62230-1OX7 62230-1OY7 62230-1OZ7 62230-1PA7 62230-1PB7 62230-1PC7 62230-1PD7 62230-1PE7 62230-1PF7 62230-1PG7 62230-1PH7 62230-1PI7 62230-1PJ7 62230-1PK7 62230-1PL7 62230-1PM7 62230-1PN7 62230-1PO7 62230-1PP7 62230-1PQ7 62230-1PR7 62230-1PS7 62230-1PT7 62230-1PU7 62230-1PV7 62230-1PW7 62230-1PX7 62230-1PY7 62230-1PZ7 62230-1QA7 62230-1QB7 62230-1QC7 62230-1QD7 62230-1QE7 62230-1QF7 62230-1QG7 62230-1QH7 62230-1QI7 62230-1QJ7 62230-1QK7 62230-1QL7 62230-1QM7 62230-1QN7 62230-1QO7 62230-1QP7 62230-1QQ7 62230-1QR7 62230-1QS7 62230-1QT7 62230-1QU7 62230-1QV7 62230-1QW7 62230-1QX7 62230-1QY7 62230-1QZ7 62230-1RA7 62230-1RB7 62230-1RC7 62230-1RD7 62230-1RE7 62230-1RF7 62230-1RG7 62230-1RH7 62230-1RI7 62230-1RJ7 62230-1RK7 62230-1RL7 62230-1RM7 62230-1RN7 62230-1RO7 62230-1RP7 62230-1RQ7 62230-1RR7 62230-1RS7 62230-1RT7 62230-1RU7 62230-1RV7 62230-1RW7 62230-1RX7 62230-1RY7 62230-1RZ7 62230-1SA7 62230-1SB7 62230-1SC7 62230-1SD7 62230-1SE7 62230-1SF7 62230-1SG7 62230-1SH7 62230-1SI7 62230-1SJ7 62230-1SK7 62230-1SL7 62230-1SM7 62230-1SN7 62230-1SO7 62230-1SP7 62230-1SQ7 62230-1SR7 62230-1SS7 62230-1ST7 62230-1SU7 62230-1SV7 62230-1SW7 62230-1SX7 62230-1SY7 62230-1SZ7 62230-1TA7 62230-1TB7 62230-1TC7 62230-1TD7 62230-1TE7 62230-1TF7 62230-1TG7 62230-1TH7 62230-1TI7 62230-1TJ7 62230-1TK7 62230-1TL7 62230-1TM7 62230-1TN7 62230-1TO7 62230-1TP7 62230-1TQ7 62230-1TR7 62230-1TS7 62230-1TT7 62230-1TU7 62230-1TV7 62230-1TW7 62230-1TX7 62230-1TY7 62230-1TZ7 62230-1UA7 62230-1UB7 62230-1UC7 62230-1UD7 62230-1UE7 62230-1UF7 62230-1UG7 62230-1UH7 62230-1UI7 62230-1UJ7 62230-1UK7 62230-1UL7 62230-1UM7 62230-1UN7 62230-1UO7 62230-1UP7 62230-1UQ7 62230-1UR7 62230-1US7 62230-1UT7 62230-1UU7 62230-1UV7 62230-1UW7 62230-1UX7 62230-1UY7 62230-1UZ7 62230-1VA7 62230-1VB7 6

V	1	D	A	S	W	0	1	—	1	P	B	00	—	0
1 Series	2 Circuit	3 Rating	4 Termination	5 Illumination	6 Lock	7 Lamp	8 Bracket		9 Actuator	10 Lens	11 Function	12 Legend		13 Legend Orientation

1 SERIES

V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

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

() - momentary

SP - single pole - uses terminals 1, 2 & 3.
 DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.
 Terminals 7, 8, 9 & 10 for lamp circuit only.

Position:

	DP	1	2	3
SP		2 & 3, 5 & 6	Connected	1 & 2, 4 & 5
4	A	ON	NONE	OFF
6	D	ON	NONE	ON
8	J	ON	OFF	ON
9	N	OFF	NONE	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
E*	5 & 6	5 & 3	5 & 1

*Jumper between terminals 2 & 5 for circuits H, G, & M 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 RATING⁴

1	.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

4 TERMINATION/BASE STYLE

8 term	10 term	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	F	Wire Leads no barriers	No
E	F	Wire Leads	No

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

5 ILLUMINATION & SWITCH SEALING

Lamp above terminals 3 & 6 end of switch.

Positive (+) and negative (-) symbols apply to LED lamps only

Sealed	Unsealed	Lamps	Actuator Lens position when Illuminated	Lamp wired to Terminals
S	0	NONE		
C	3	# 2	Up	3+ 7-
H	Z	# 2	Independent	8+ 7-
M	R	# 2	Up	3+ 6-

Selections for Double Pole Switches Only:

6 LOCK

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

7 LAMP

Lamp above terminals 3 & 6 end of switch

No lamp	0	2 250VAC	6 12V superbright Green	7 18V superbright Red	8 24V
Neon	1 125VAC	5 6V			
Incandescent	4 3V				
LED*					
2VDC	Red A	Amber L			
6VDC	B	M			
12VDC	C	N			
24VDC	D	P			

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

8 RAISED BRACKET COLOR¹, PANEL SEAL (EXTERNAL FOAM GASKET)

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

9 HARD SURFACE ACTUATOR

Contura X	Black	Grey	Red	White
	1	2	3	4



Actuator orientation above terminals: 3,6 1,4

10 LENS - ABOVE LAMP #2 TERMINALS^{3,6}

Z - No Lens

	Clear	White	Amber	Green	Red	Blue	Lens Style
3	8	D		J	P	V	Bar
4	9	E		K	R	W	One piece Square
5	A	F		L	S	Y	Two piece Square*
							(w/ clear top protective lens)
2	7	C		H	N	U	Two piece Square*
							(w/ smoke top protective lens)
1	6	B		G	M	T	Two piece Square*
							(w/ white top protective lens)

* All bottom lenses are molded of opaque material. Consult factory for other lens colors.
 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 COLOR³

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

12 ACTUATOR LENS OR BODY LEGEND²

00 - No Legend

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

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

13 LEGEND ORIENTATION³

		Orientation 1	Orientation 2	Orientation 3	Orientation 4
0	No legend (used with codes 11-18 in selection 12)				
1	Orientation 1				
2	Orientation 2				
3	Orientation 3				
4	Orientation 4				
	1PM4F-1				
	4F				
	45				
	18K45-2				
	MC				

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.
- Located over T1-4 end of switch.
- Additional ratings available. See page 20.

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

Contura II, III, IV, V, X, XI, XII 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.

Panel Seal: VPS

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

Contura X, XI, XII actuators with lenses separately: **VV** with code selections 9-14 in the ordering schemes.

Contura X & XI actuators without lenses separately:

VVR **6** **1** **00** **1**

1 Actuator Separately 2 Actuator Style/Color 3 Lens Opening 4 Actuator Legend 5 Legend Orientation

1 CONTURA X & XI ACTUATOR SEPARATELY
VVP**2 ACTUATOR STYLE & COLOR**

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

3 LENS OPENING FOR¹

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

4 ACTUATOR LENS OR BODY LEGEND

00 - No Legend this location

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

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

5 LEGEND ORIENTATION¹

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

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

VVT **1**

1 Lens Separately 2 Color

1 TOP OF 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.

Notes:

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

Contura XII actuators without lenses separately:

VVP **J** **1** **Z** **21** **1** **00**

1 Actuator 2 Style & Color 3 Lens Opening 4 Lens Opening 5 Legend 6 Legend Orientation 7 Legend Orientation

1 CONTURA XII ACTUATOR SEPARATELY
VVP**2 ACTUATOR STYLE & COLOR**

J Black **K** Gray **N** White **M** Red

3,4 LENS OPENING FOR

Z No lens **1** Bar lens **2** Square lens

5, 7 LENS OR BODY LEGEND²

00 - No Legend

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

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

6 LEGEND ORIENTATION³

0 No legend
1 Orientation 1
2 Orientation 2

**Contura X, XI & XII actuator lens assembly separately:**

VVL **2** **1** **00** **0**

1 Lens Separately 2 Lens Style 3 Lens Color 4 Legend 5 Legend Orientation

1 CONTURA X, XI & XII LENS SEPARATELY
VVL**2 LENS STYLE³**

1 Bar lens 2 One Piece Square lens 3 Bottom of Two-Piece Square lens⁵

3 TRANSLUCENT LENS COLOR

1 Clear 2 White 3 Amber 4 Green⁴ 5 Red 6 Blue⁴

4 LENS OR BODY LEGEND²

00 - No Legend

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

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

5 LEGEND ORIENTATION³

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



Easily integrate Contura products into your system, with Contura Accessories

Contura Connectors

Q.C. SELECTION GUIDE				
COMPANY SERIES	PART NO		WIRE RANGE	
	PLAIN BRASS	TIN PLATED BRASS	AWG	MM ² (REF)
PACKARD 58 SERIES	02965580		12	3.0
	02965471	12010601	(2)16-14	(2)1.0-2.0
	02965470		16-14	1.0-2.0
	02965469	06288318	20-18	.5-.8
PACKARD METRI-PACK 630 SERIES		12084590	10	5.0
		12052224	12	3.0
		12015870	16-14	1.0-2.0
		12020035	(2)22-18	(2).5-.8
	12015832	12015869	20-18	.5-.8
		12052222	20-22	.35-.5
AMP 250 SERIES FASTIN-FASTON	60253-1	60253-2	16-12	1.3-3
	42100-1	42100-2	(2) 16	(2) 1.3
	60295-1	60295-2	18-14	.8-2
			22-18	.3-.9

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 Warren, Ohio



Contura X Boot (P/N VB1-01)



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



Additional V-Series Ratings

- 1 .4VA @ 28VDC Resistive
- 4 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, No Agency Listings
- 5 10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP, UL Recognized, CSA Certified
- 6* 15A 125VAC 1/2 HP, 12(2)A 125 VAC μ T85
- 7* 15A 125VAC 1/2 HP, 12(6)A 125 VAC T85
- 8* 10A 250VAC, 15A 125VAC, 1/2 HP 125-250VAC, 12(2)A 250 VAC μ T85
- 9* 10A 250VAC, 15A 125VAC, 1/2 HP 125-250VAC, 12(6)A 250 VAC T85
- B 15A 24V
- C 20A 18V
- D 20A 12V
- E 20A 14V, 10A 14VT (circuits 1, 4, A, & D only)
- F 10A 14V, 6A, 14VT (circuit G only)
- G 20A 6V
- H 20A 3V
- L 15A 125 VAC, 10A 250VAC, 1/2 HP 125-250 VAC; 6A 125 VAC L
- M .4VA/20A 12V (combi-contact)
- (combination gold/silver contacts for borderline dry circuit applications)
- N .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.

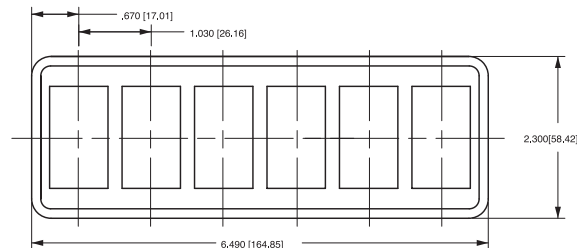
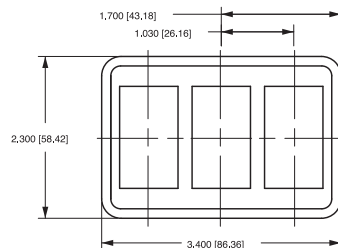
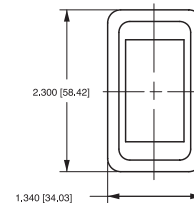
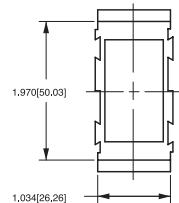
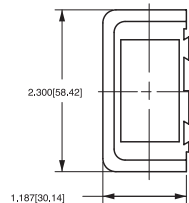
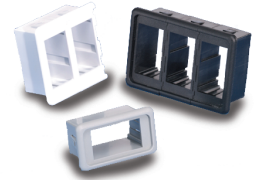
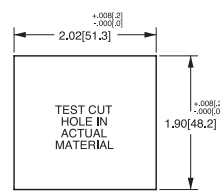
* Ratings 6 - 9 are UL, CSA & VDE certified, require terminations A or B for double pole circuits, & are not available with illumination circuits 4, 8, D, J, N, & T or with wire lead or solder lug terminations. Circuits 1, 4, A, D, H, M & E are not available with rating 6 & 8. Rating 7 & 9 only available with circuits 1, 4, A & D. Circuits 2, 3, 5, 7, 8, K, L are 1/2 HP 250VAC only with rating 8. Ratings 6 & 7 must specify lamp code 1 (125VAC neon). Ratings 8 & 9 must specify lamp code 2 (250VAC neon). Rating L available with circuits 1, 4, A & D only.

Contura Mounting Panels

Dimensional Specifications: in. [mm]

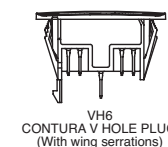
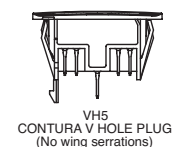
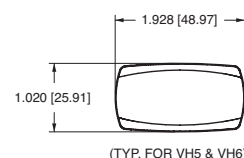
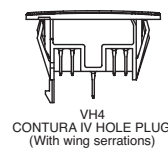
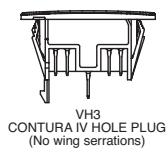
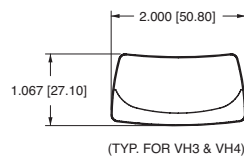
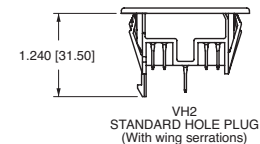
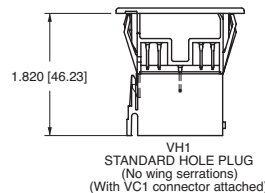
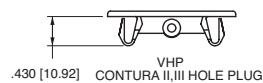
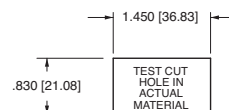
MOUNTING PANEL
For additional units, add 1.03[26.2] per unit.
For more than 2 V-Series Switches, add middle section. Available in Panel Thicknesses listed below. Consult factory.

MOUNTING PANEL THICKNESS
.062[1.57] .187[4.75]
.083[2.36] .250[6.35]
.125[3.17] .375[9.52]



Contura Hole Plug

Dimensional Specifications: in. [mm]



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