The Gemini Series "A" Series Toggles 5 Amp Refer to Pages C32-C36 for Additional Options

"A" SERIES DESIGN FEATURES

- · Meets CSA Requirements
- Toggle Machined brass, heavy nickel plated.
- Bushing & Frame Rigid one-piece die cast, copper flashed, heavy
- Fixed Contact Welded construction, selective placement of precious metal. (Gold or silver.)
- Movable Contact "Captured" design eliminates possibility of displacement due to shock. (01 function.)
- Terminal Seal Epoxy sealing of terminals is standard.
- Termination Precious metal(or silver)/brass or copper strip with
- Case DAP for electrical performance and mechanical strength, UL94VO.

MATERIAL SPECIFICATIONS:

Contacts	Gold/gold flash
	Silver/tin lead
Case Material	Thermoset
Terminal Seal	Epoxy

ENVIRONMENTAL SPECIFICATIONS

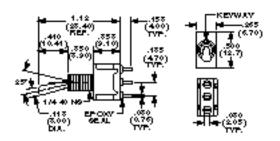
Operating Temperature	20°C to $+85$ °C (-4 °F to $+185$ °F)
Storage Temperature	45° C to $+100^{\circ}$ C (-49° F to $+212^{\circ}$ F)
Solder Heat Resistance	See page M6-7

I YPICAL PERFORMANCE CHARACTERISTICS:
Contact RatingGold: 0.4 VA @ 20 VAC/DC
Silver: 2 A @ 250 VAC: 5 A @ 125 VAC
Initial Contact Resistance30 Milliohms max.
Contact TimingBreak before make
Insulation Resistance1,000 Megohms @ 500 VDC.
Dielectric Strength1,000 Volts RMS @ sea level
Actuation ForceMomentary: 950 Grams max.
Plunger/Actuator TravelMaintained: 1750 Grams max. 25°
Life Expectancy 30,000 Cycles

SPDT



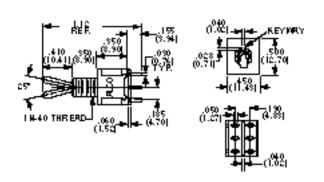
A101SYZQ



Model	Type	Act. Code P.M8	714
Silver Contacts			
A101SYZO	SPDT	1	On None On
A103SYZQ	SPDT	5	On Off On
A105SYZQ	SPDT	5	(On) Off (On)
A107SYZQ	SPDT	5	On Off (On)
A108SYZQ	SPDT	1	On None (On)
Gold Contacts			
A101SYZB	SPDT	1	On None On
A103SYZB	SPDT	5	On Off On
A105SYZB	SPDT	5	(On) Off (On)
A107SYZB	SPDT	5	On Off (On)



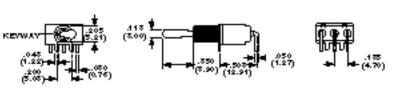
A201SYZQ

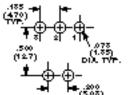


Type	Act. Code P.M	8 🏝	7	4
ts				
DPDT	2	On	None	On
DPDT	6	On	Off	On
DPDT	6	(On)	Off	(On)
DPDT	6	On	Off	(On)
DPDT	2	On	None	(On)
DP3T	11	On	On	On
DP3T	11	On	On	(On)
DP3T	11	(On)	On	(On)
	DPDT DPDT DPDT DPDT DPDT DP3T DP3T	DPDT 2 DPDT 6 DPDT 6 DPDT 6 DPDT 6 DPDT 2 DPDT 2 DPDT 2 DP3T 11 DP3T 11	ts	DPDT 2



SEE PAGE C24 FOR PRODUCT SPECIFICATIONS





SPDT/DPDT



A101SYAB Horizontal Actuation

KEYWAY (12.70) 4	1.1.5 (2.5.7) (1.4.40 NO) (1.2.70) (1.2.70) (2.10) (1.2.70) (2.30)
--	--

Gold Contact	ts		•	17
Model	Type	Act. Code P.M	48 –	
A101SYAB	SPDT	1	On	None On
A103SYAB	SPDT	5	On	Off On
A201SYAB	DPDT	2	On	None On
A208SYAB	DPDT	2	On	None (On)

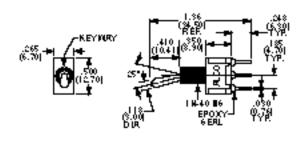
SPDT/DPDT

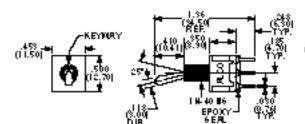


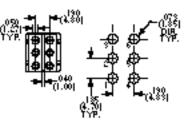
A101SYCB



A201SYCB





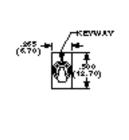


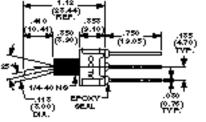
Gold Contacts Model	Type	Act . Code P.M8	L	1	4
A101SYCB	SPDT	1	On	None	On
A103SYCB	SPDT	5	On	Off	On
A108SYCB	SPDT	1	On	None	(On)
A201SYCB	DPDT	2	On	None	On
A203SYCB	DPDT	6	On	Off	On
A208SYCB	DPDT	2	On	None	(On)

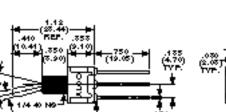
SEE PAGE C24 FOR PRODUCT SPECIFICATIONS

SPDT/DPDT









)	(2.05) - (4.55) (2.05) - (4.55) (2.05) - (4.55) (4.55)
	, ,

M.	.455 - p i (11.50)	0

A201SYWQ

Silver Contacts Model	Туре	Act . Code P. M8	r	1	1
A101SYWQ	SPDT	1	On	None	On
A103SYWQ	SPDT	5	On	Off	On
A201SYWQ	DPDT	2	On	None	On
A203SYWO	DPDT	6	On	Off	On

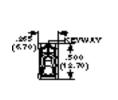
SPDT/DPDT

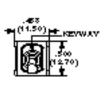


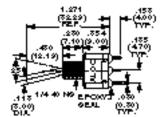
A101SDZQ

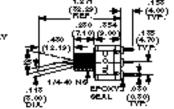


A201SDZQ

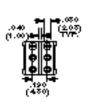










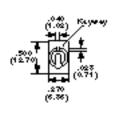


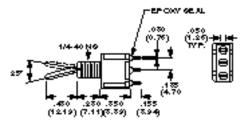
Silver Contacts Model	Туре	Act . Code P.M8	L	1	4
A101SDZQ A103SDZQ A201SDZQ A203SDZQ	SPDT SPDT DPDT DPDT	1 5 2 6	On	None Off None Off	On



SEE PAGE C24 FOR PRODUCT SPECIFICATIONS

SPDT





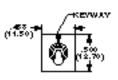


A101SDCQ

DPDT



A201SDCQ



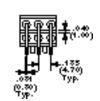
Silver Contacts Model Act. Code P. M8 Type A101SDCQ A103SDCQ A201SDCQ A203SDCQ On None On Off On None On Off SPDT SPDT DPDT DPDT On On A208SDCQ On None

SPDT/DPDT



A101SD9AQ Horizontal Actuation







A201SD9AQ Horizontal Actuation

Silver Contacts Model	Gold Contacts Model	Type	Act. Code P. M8	7.1	4
A101SD9AQ	A101SD9AB	SPDT	1	On None	On
A103SD9AQ	A103SD9AB	SPDT	5	On Off	On
A108SD9AQ		SPDT	1	On None	(On)
A201SD9AQ	A201SD9AB	DPDT	2	On None	On
A208SD9AQ	A208SD9AB	DPDT	2	On None	(On)

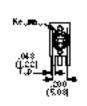
The Gemini Series "A" Series Toggles 5 Amp "Locking Actuator" Refer to Pages C32-C36 for Additional Options

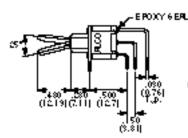
SEE PAGE C24 FOR PRODUCT SPECIFICATIONS

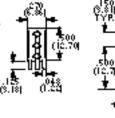
SPDT

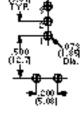


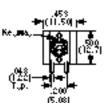
A101SD9AV2Q Vertical Actuation

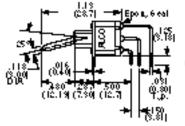


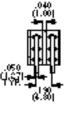


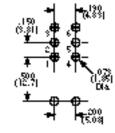












DPDT



A201SD9AV2Q Vertical Actuation

Silver Contacts Model	Туре	Act. Code P. M8	L	1	4	Silver Contacts Model	Type	Act. Code P.M8	L1 .	4
A101SD9AV2Q A103SD9AV2Q	SPDT SPDT	1 5		None Off	On On	A201SD9AV2Q A203SD9AV2Q A208SD9AV2Q	DPDT DPDT DPDT	2 6 2	On None On Off On None (On

SPDT

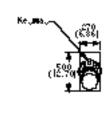


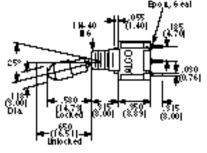
A101KZQ

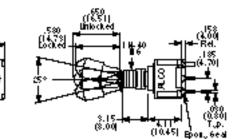


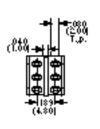


A201KZQ









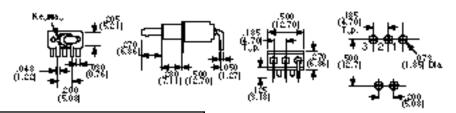
Silver Contacts Model	Туре	Act. Code P. M8	L	1	4
A101KZQ	SPDT	1	On	None	On
A103KZQ	SPDT	5	On	Off	On

Gold Contacts Model	Silver Contacts Model	Type	Act. Code P. M8	L	1	4
A201KZB	A201KZQ	DPDT	2	On	None	On
A203KZB	A203KZQ	DPDT	6	On	Off	On
A205KZB	A205KZQ	DPDT	6	(On)	Off	(On)
A211KZB	A211KZQ	SP3T	11	On	On	On



"A" Series Toggles Right Angle The Gemini Series Refer to Pages C32-C36 for Additional Options

RODUCT SPECIFICATIONS





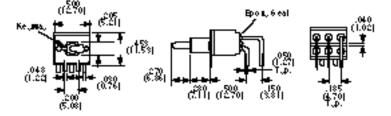
SPDT

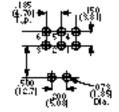
DPDT

SPDT

Silver Contacts Model Gold Contacts Model Act. Code P. M8 A101MD9AB A103MD9AB A108MD9AB A101MD9AQ A103MD9AQ A108MD9AQ SPDT On None Off On None (On) SPDT SPDT

A101MD9AQ Horizontal Actuation

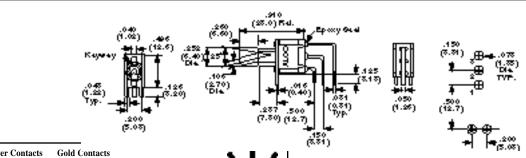






Silver Contacts Model Gold Contacts Model Act. Code P. M8 Type A201MD9AB A203MD9AB DPDT On None On On Off On A201MD9AQ

A201MD9AQ Horizontal Actuation

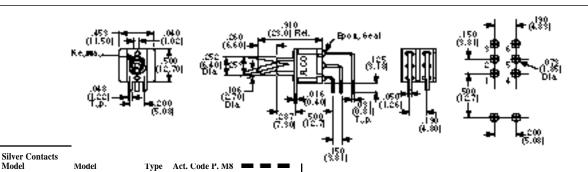






Silver Contacts Act. Code P. M8 Model Type Model A101MD9AV2B A103MD9AV2B On None On On Off On On None (On) A101MD9AV2Q SPDT A103MD9AV2Q A108MD9AV2Q SPDT SPDT

A101MD9AV2Q Vertical Actuation





DPDT

A201MD9AV2AQ Vertical Actuation

Need more technical information?

A201MD9AV2B A203MD9AV2B A208MD9AV2B

Model

A201MD9AV2Q A203MD9AV2Q A208MD9AV2Q

On On None Off

On None (On)

DPDT

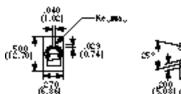
The Gemini Series "A" Series Toggles Flat Actuators/Wire Lug Refer to Pages C32-C36 for Additional Options

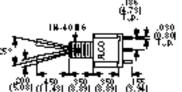
SEE PAGE C24 FOR PRODUCT SPECIFICATIONS

SPDT









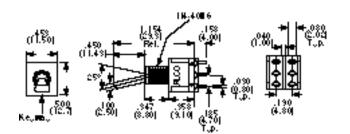


ı	er Contacts	Type	Act. Code P.M8	L	1	4
	A101P3YZQ	SPDT	1	On	None	On
ı	A103P3YZQ	SPDT	5	On	Off	On
١	A105P3YZQ	SPDT	5	(On)	Off	(On)
ı	A107P3YZQ	SPDT	5	On	Off	(On)
١	A108P3YZQ	SPDT	1	On	None	(On)

DPDT



A201P3YZQ

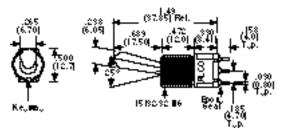


Silver Contacts Model	Type	Act. Code P.M8	١	1	4
A201P3YZQ	DPDT	2	On	None	On
A203P3YZQ	DPDT	6	On	Off	On
A205P3YZQ	DPDT	6	(On)	Off	(On)
A207P3YZQ	DPDT	6	On	Off	(On)
A208P3YZQ	DPDT	2	On	None	(On)
A211P3YZQ	SP3T	11	On	On	On
A215P3YZQ	SP3T	11	(On)	On	(On)

SPDT



A101TZQ

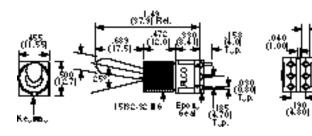




Silver Contact Model	Type	Act. Code P.M8	1	. 1	4
A101TZQ	SPDT	1	On	None	On
A103TZQ	SPDT	5	On	Off	On



A201TZQ



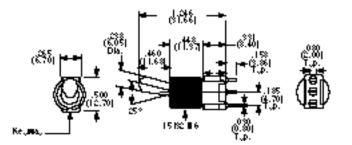
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A201TZQ	DPDT	2	On None On
A203TZQ	DPDT	6	On Off On
A211TZQ	SP3T	11	On On On



The Gemini Series

SEE PAGE C24 FOR PRODUCT SPECIFICATIONS

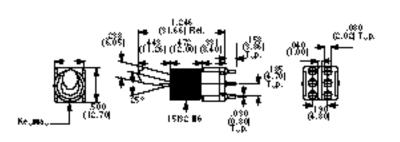
SPDT





A103T1ZQ

Silver Contacts Model	Туре	Act. Code P. M8	714
A101T1ZQ	SPDT	1	On None On
A103T1ZQ	SPDT	5	On Off On
A105T1ZQ	SPDT	5	(On) Off (On)
A108T1ZQ	SPDT	1	On None (On)





A201T1ZQ

Silver Contacts Model	Type	Act. Code P. M8	۲	14
A201T1ZQ	DPDT	2	On	None On
A203T1ZQ	DPDT	6	On	Off On
A205T1ZQ	DPDT	6	(On)	Off (On)
A207T1ZQ	DPDT	6	On	Off (On)
A208T1ZQ	DPDT	2	On	None(On)
A211T1ZQ	SP3T	11	On	On On

The Gemini Series "A" Series Miniature Toggles

FEATURES

Hardware supplied with threaded bushings: two hex nuts, one internal tooth lockwasher and one locking ring. (See Hardware Section for: dress nuts, plastic caps and environment boot seals.)

TYPICAL PERFORMANCE CHARACTERISTICS:

Contact RatingSilver: 2 A @ 250 VAC or 5 A @ 125 VAC Gold: 0.4 VA @ 20 VAC/DC max.

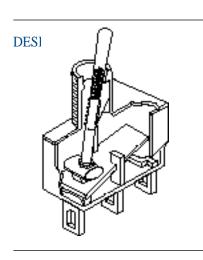
Insulation Resistance1,000 Megohms min. @ 500 VDC.

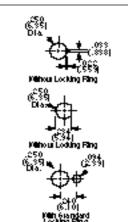
Dielectric Strength1,000 Volts RMS @ sea level initial

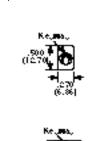
Electrical Life30,000 Cycles

ENVIRONMENTAL SPECIFICATIONS

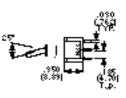
Operating Temperature........ -20° C to $+85^{\circ}$ C (-4° F to $+185^{\circ}$ F) Storage Temperature............45°C to $+100^{\circ}$ C (-49° F to $+212^{\circ}$ F)







Bushing

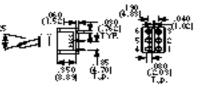




K. K1:

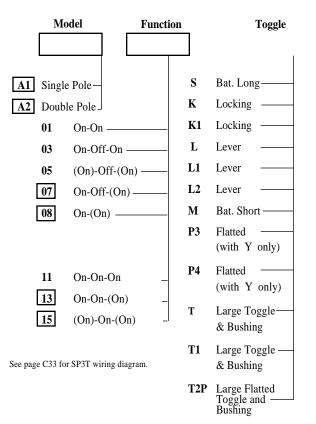
Cap Color

Option



Contact

PART NUMBERING



 \mathbf{Z} Wire Lug A Right Angle AV2 Vertical Right Angle Printed Circuit V90 V30 V40 V60 V70 V80 Z3 Quick Connect 1/4-40 threaded, .35" long, slotted unthreaded, .35" long 1/4-40 threaded, .37" long, actuator & bushing flange environmental seals 1/4-40 threaded, .28" long, slotted Unthreaded, .28" long 1/4-40 threaded, flanged, .30" long

Terminal

Z Wire Lug
A Right Angle

AV2 Vertical Right Angle
C Printed Circuit

V30 V40 V90 Vertical Support
V60 V70 V80 Bracket

W W1 W3 W4 W5 Wire Wrap

Z3 Quick Connect

Note: For surface mount termination, use the "TST" series, Page C8

Other Options

- N Black finish toggle, bushing and hardware. Add "N" to end of part number, but before U.L. option.
- O Internal O-ring environmental actuator seal. Add letter after toggle option: S,M,L,L1 & L2.
- P Anti-Push-In/Anti rotate. Add letter after toggle S,M,L,L1 & L2

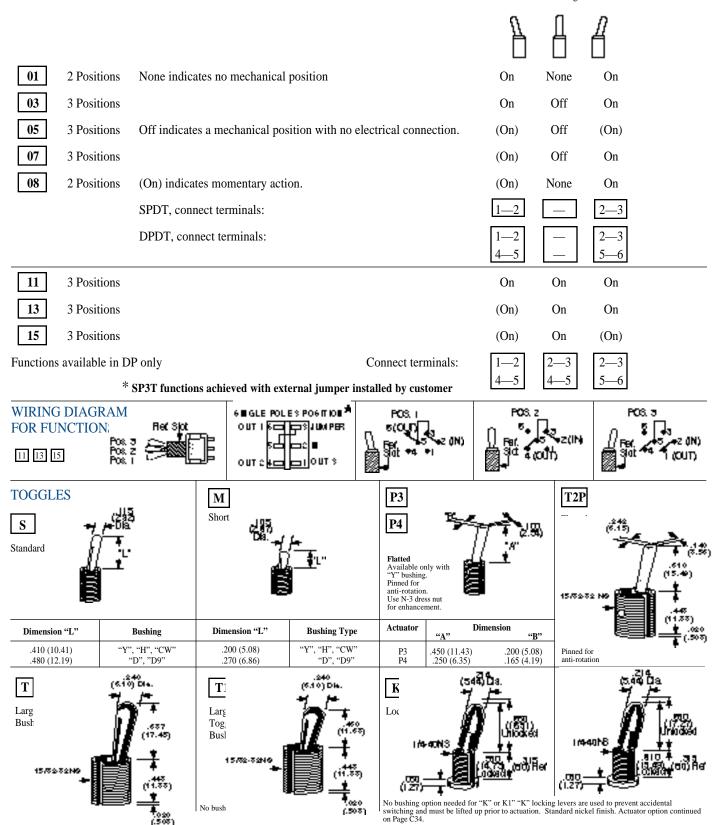
See pages M2-M4 for application specific indexing.



"A" Series Miniature Toggles The Gemini Series

FUNCTIONS

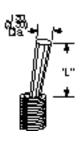
The following functions available in SP or DP.



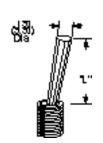
The Gemini Series "A" Series Miniature Toggles "Bushing /Terminal Options"

TOGGLES

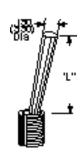










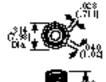


Dimension "L"	Bushing	Dimension "L"	Bushing Type	Dimension "L"	Bushing Type
.840 (21.34)	"Y", "H" "CW"	.640 (16.26)	"Y", "H" "CW"	.550 (13.97)	"Y", "H",
.910 (23.4)	"D", "D9"	.710 (18.03)	"D", "D9"	.620 (15.75)	"D", "D9"

BUSHINGS



1/4-40 Thread .35" long, slotted (Standard)



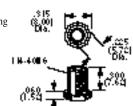


Unthreaded .28" long





1/4-40 Thread Flanged, .30" long





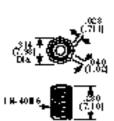


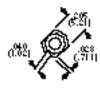
Used with A, AV2, V30 V80 & V90

terminations



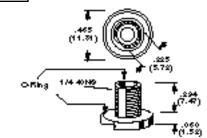
1/4-40 Thread .28" long, slotted







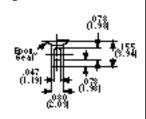




For S & M Toggles

TERMINALS



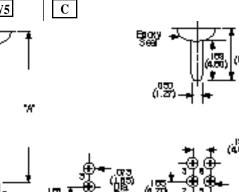


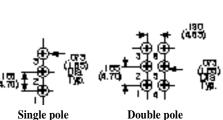


Mates with AMP 61454 or 60900.

W W1 W3 W4 W5 Wire Wrap 5ggy







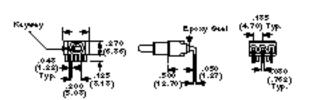


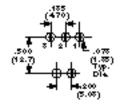
"A" Series Miniature Toggles The Gemini Series

TERMINALS



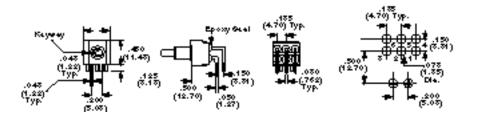
Right Angle Single Pole





Note: Terminal numbers viewed from top of P.C. boards.



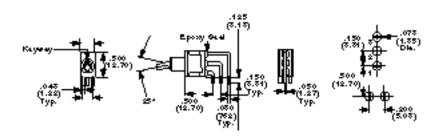


Right Angle Double Pole

Note: Terminal numbers viewed from top of P.C. boards.



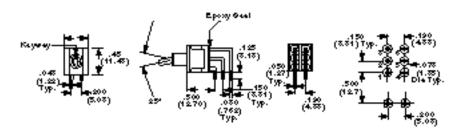
Vertical Right Angle Single Pole



Note: Terminal numbers viewed from top of P.C. boards.



Vertical Right Angle Double Pole



Note: Terminal numbers viewed from top of P.C. boards.

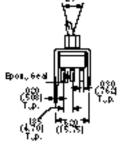
The Gemini Series "A" Series Miniature Toggles "5 Amp" Terminal Options

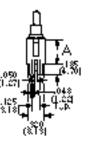
TERMINALS NOTE: Terminal numbers viewed from top of P.C. board

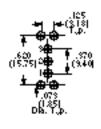




Vertical Support Bracket Single Pole

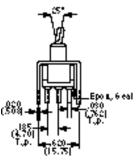


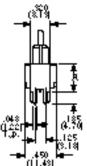


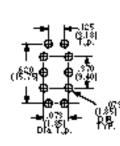


Option Code	Dim."A"
V30	.460 (11.68)
V40	.630 (16.00)
V90	1.150 (29.21)

Vertical Support Bracket **Double Pole**



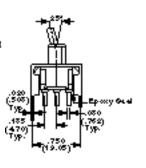


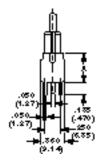


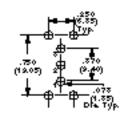
Option Code	Dim."A"
V30	.460 (11.68)
V40	.630 (16.00)
V90	1.150 (29.21)

V60 V70 V80

Vertical Support Bracket Single Pole

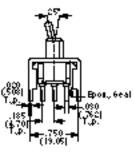


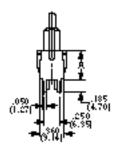


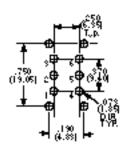


Option Code	Dim."A"
V60	.460 (11.68)
V70	.630 (16.00)
V80	.953 (24.71)

Vertical Support Bracket **Double Pole**







Option Code	Dim."A"
V60	.460 (11.68)
V70	.630 (16.00)
V80	.953 (24.71)

CONTACTS



CONTACTS: Copper alloy with gold plate, welded button.

TERMINALS: Brass with gold plate.

ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC.

CONTACTS: Copper alloy with silver, welded button.

TERMINALS: Brass with tin/lead plate. ELECTRICAL RATING: 5 A @ 125 VAC, 2 A @ 250 VAC,

UL/CSA RATING: 5A @ 125 VAC, 3A@ 250 VAC. (Specify "UL" option code)

5 A @ 28 VDC.

CONTACTS: Copper alloy with gold plate over silver, welded button.

TERMINALS: Brass alloy, with gold plate.

ELECTRICAL RATING: O.4 VA @ 20 VAC/DC or 5 A @ 125 VAC, 2 A @ 250 VAC, 5 A @ 28 VDC.

Note: This contact option can be used for low-level or power switching. If level is above 0.4 VA @ 20 VAC/DC, the switch is rendered usable only for power switching due to arcremoval of gold plate.

UL/CSA RATING: 5A @ 125 VAC, 3A @ 250 VAC (Specify "UL" option code)

