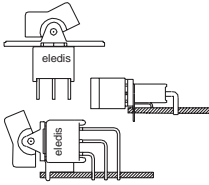




SERIES 3B

- Sealed miniature Rocker & Paddle switches



AGENCY APPROVALS

IP67

- In conformity with:
- EN 60529: 1991
 - IEC 529: 1989

CHARACTERISTICS

- Case and bushing in glass filled nylon with o-ring in the bushing for added seal.
- Many convenient options.

SPECIFICATIONS

Contact Rating: **S** (silver) - 5A with resistive load @ 125 VAC or 28 VDC - 2A with resistive load @ 250 VAC - **A** (gold) - 0.4 VA max @ 20 VAC or DC max
Electrical life: 30,000 cycles at full load
Contact Resistance: <10 mΩ max. initial @ 2-4 DVC; 100 mA for both coin silver and gold plated contacts
Insulation Resistance: 1000 MΩ min.
Dielectric Strength: 1500 VRMS @ sea level
Operating Temperature: -30°C to 85°C

MATERIALS

Case & Bushing: Glass filled nylon 6/6, flame retardant, heat stabilized (UL94V-0)
Actuator: Nylon, blk std., Internal o-ring seal std. with all actuators
Frame: Spring steel, black std.
Switch support: Brass, tin plated
Actuator pivot & mounting bracket: Nylon
Actuator pivot retainer: Stainless steel
Terminal seal: Epoxy

HOW TO ORDER



N° OF POLES

- 1 SPDT
- 2 DPDT
- 3 3PDT

ELECTRICAL FUNCTIONS

1	on	none	on
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)
6 (*)	on	on	on

CONTACT MATERIAL

- S** Silver (std)
- A** Gold
- G** Gold on silver
- T(Δ)** Tinned silver
- K(Δ)** Tinned gold
- V(Δ)** Tinned gold on silver

COLOUR CODE FOR ACTUATORS

- 1 White
- 2 Black (std)
- 3 Red
- 4 (Δ) Orange
- 5 (Δ) Yellow
- 6 (Δ) Green
- 7 (Δ) Blue
- 8 (Δ) Brown
- 9 (Δ) Gray

SEALING

- E** Seal (std)

ACTUATORS

- B1** Rocker
- P1** Paddle
- B2** Large rocker
- P2** Large paddle
- B4** Extra small rocker
- P4** Extra small paddle

TERMINATIONS

- PC** PCB
- W1** Wire wrap 19.05mm
- W2** Wire wrap 24.48mm
- W3** Wire wrap 10.80mm
- W4** Wire wrap 26.97mm
- ST** Solder tag
- H9** 90° horizontal
- H9S** 90° horizontal snap-in
- V9** 90° vertical
- U2** U bracket 11.68 mm
- U3** U bracket 16.00 mm
- U2S** U bracket snap-in 11.68 mm
- U3S** U bracket snap-in 16.00 mm
- QC** Quick connect

(*) 3-way external wiring required

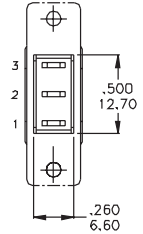
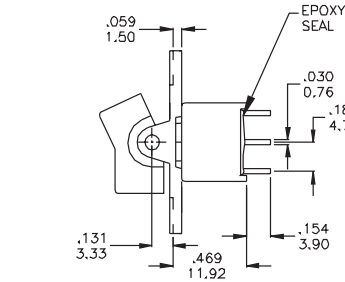
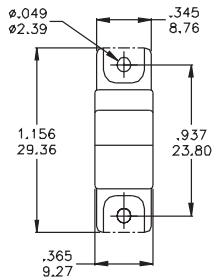
(Δ) Min qty required

(∅) Please enquire

SERIES 3B
ELECTRICAL FUNCTIONS

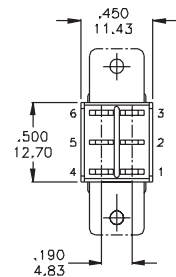
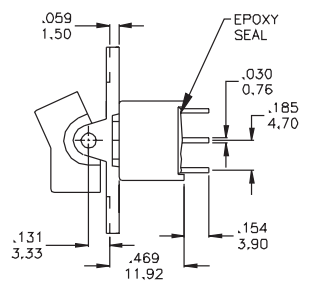
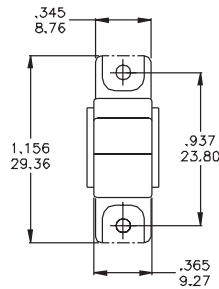
SPDT	Type		
1			
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)
2-3	open 2-1		

2 Comm.

DIMENSIONS

Part N° shown: 3B11-B1STSE2

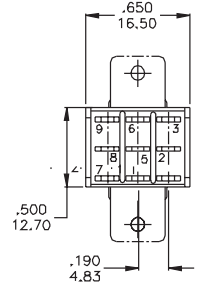
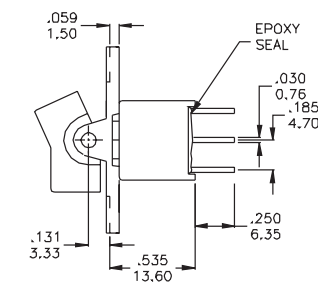
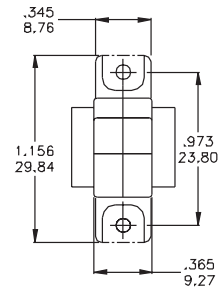
DPDT	Type		
1			
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)
6	(on)	on	on
7	(on)	on	(on)
8	(on)	on	(on)
2-3,5-6	open 2-1,5-4		

2 Comm. 5 Comm.

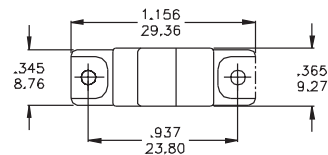

Part N° shown: 3B21-B1STSE2

3PDT	Type		
1			
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)
2-3,5-6	open 2-1,5-4		

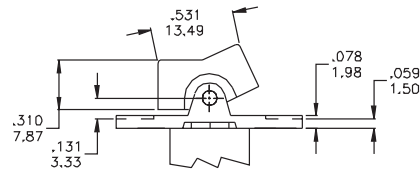
2 Comm. 5 Comm.


Part N° shown: 3B31-B1STSE2
ACTUATORS
PANEL REAR MOUNT

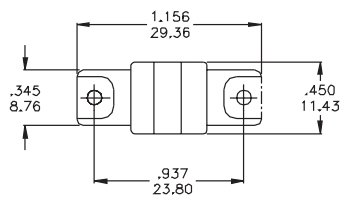
B1
ROCKER



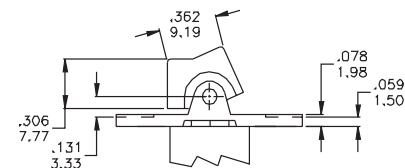
This option can be used for panel mount only

PANEL MOUNTING


B4
PADDLE



This option can be used for panel mount only

PANEL MOUNTING


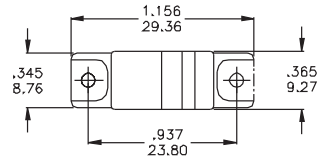


SERIES 3B

ACTUATORS

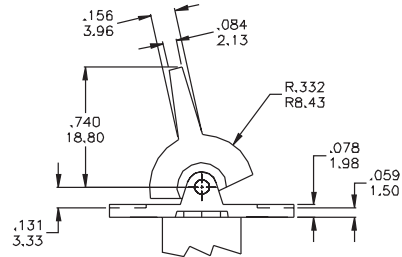
P1

SMALL ROCKER



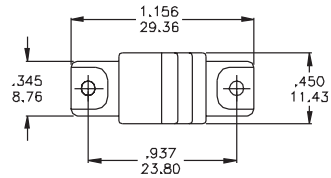
This option can be used for panel mount only

PANEL MOUNTING



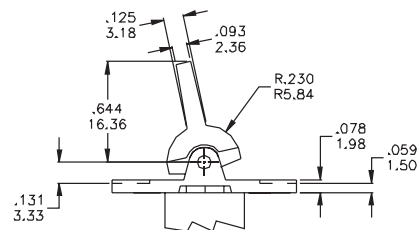
P4

SMALL PADDLE



This option can be used for panel mount only

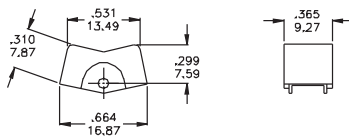
PANEL MOUNTING



P.C. MOUNT

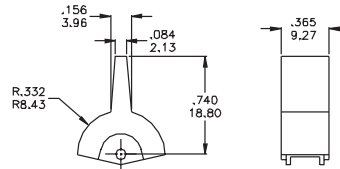
B1

ROCKER



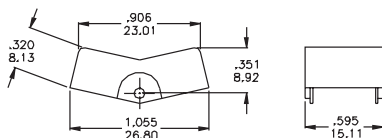
P1

PADDLE



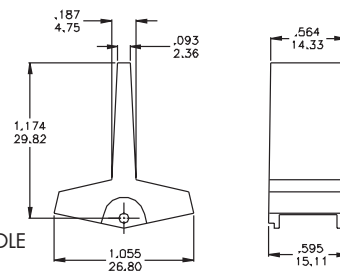
B2

LARGE ROCKER



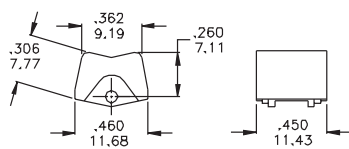
P2

LARGE PADDLE



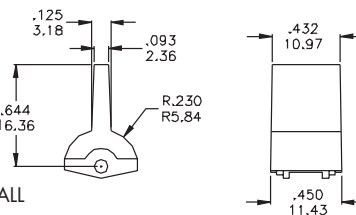
B4

EXTRA SMALL ROCKER



P4

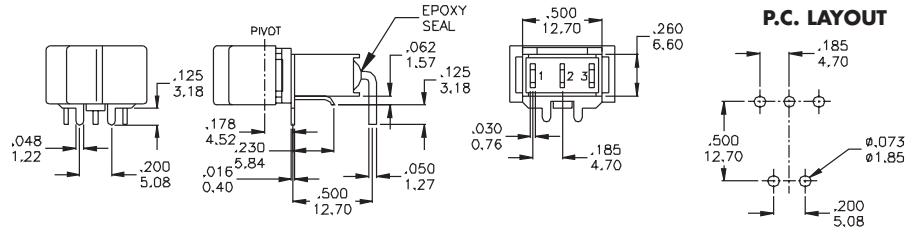
EXTRA SMALL PADDLE



SERIES 3B

TERMINATIONS

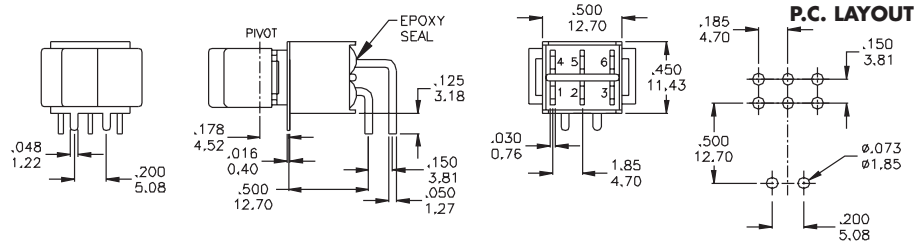
**H9
SPDT**



Available only with B1 Rocker and P1 Paddle

Part N° shown: **3B11-B1H9AE2**

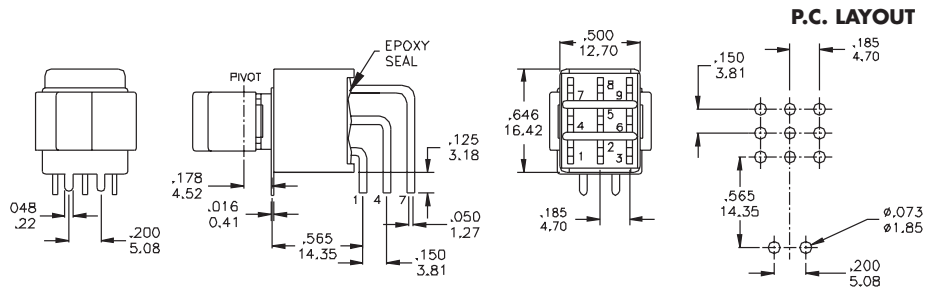
**H9
DPDT**



Available only with B1 Rocker and P1 Paddle

Part N° shown: **3B21-B1H9AE2**

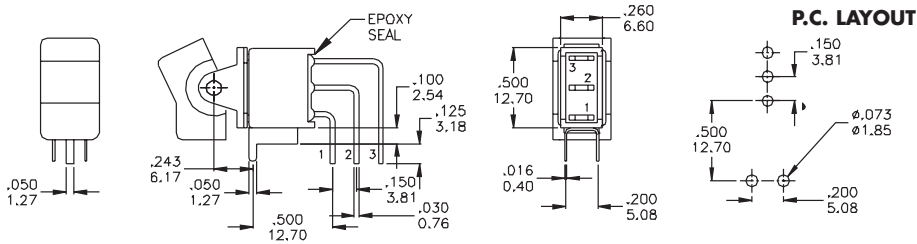
**H9
3PDT**



Available only with B1 Rocker and P1 Paddle

Part N° shown: **3B31-B1H9AE2**

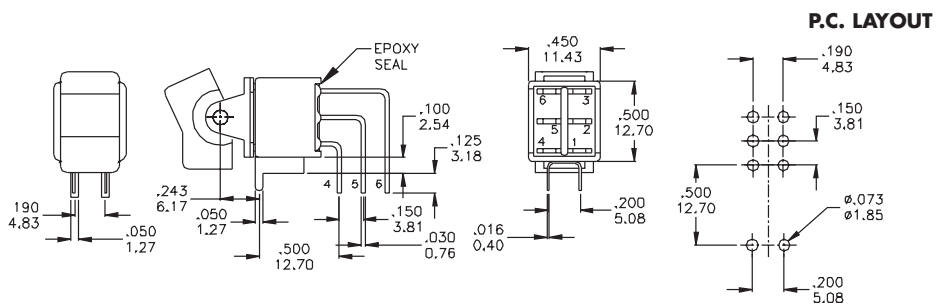
**V9
SPDT**



Available only with B1 Rocker and P1 Paddle

Part N° shown: **3B11-B1V9AE2**

**V9
DPDT**



Available only with B1 Rocker and P1 Paddle

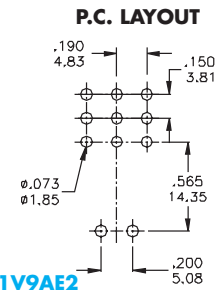
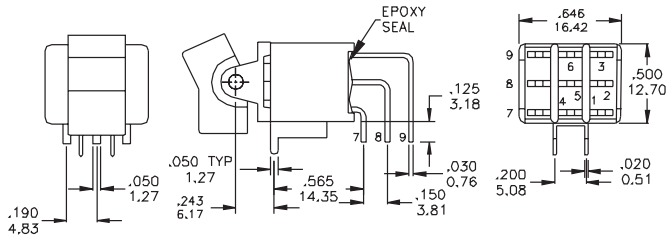
Part N° shown: **3B21-B1V9AE2**



SERIES 3B

TERMINATIONS

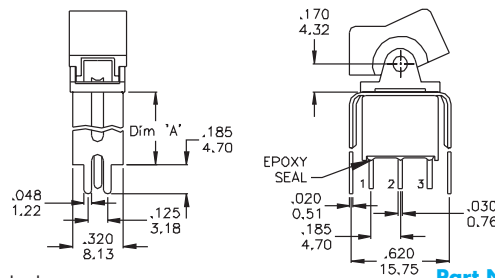
**V9
3PDT**



Available only with B1 Rocker and P1 Paddle

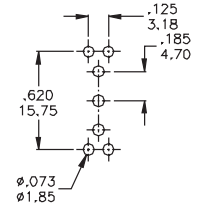
Part N° shown: 3B31-B1V9AE2

**U2
U3
SPDT**



Dim. A	
U2	.460 (11.68)
U3	.630 (16.00)

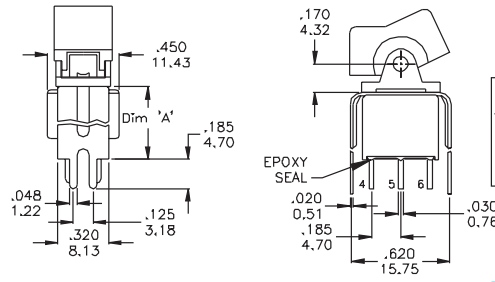
P.C. LAYOUT



Available with all Actuators

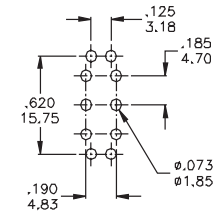
Part N° shown: 3B11-B1U_AE2

**U2
U3
DPDT**



Dim. A	
U2	.460 (11.68)
U3	.630 (16.00)

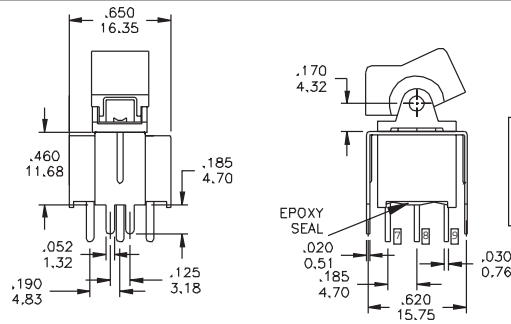
P.C. LAYOUT



Available with all Actuators

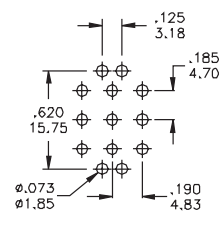
Part N° shown: 3B21-B1U_AE2

**U2
U3
3PDT**



Dim. A	
U2	.460 (11.68)
U3	.630 (16.00)

P.C. LAYOUT



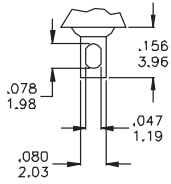
Available with all Actuators

Part N° shown: 3B31-B1U_AE2

SERIES 3B

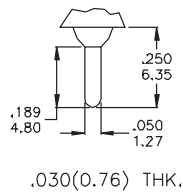
TERMINATIONS

ST



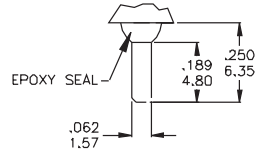
Available with all Actuators

PC



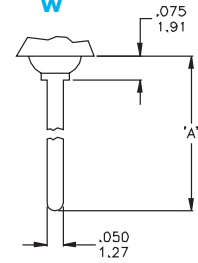
QC

Quick Connect



.030(0.76) THK.

W

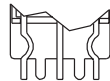
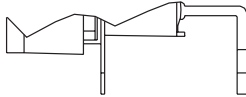


THK .030(0.76)

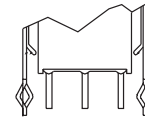
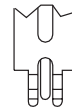
Snap-in termination options

Dim. A	
W1	.750 (19.05)
W2	.964 (24.48)
W3	.425 (10.80)
W4	1.062 (26.97)

H9S



U2S
U3S



H9S U2S U3S have the same P.C mounting but with snap-in bracket



SERIES 3B

CONTACT MATERIALS

CONTACT RATINGS

- S (std)** **Moving Contacts:** coin silver
Terminals: copper alloy, silver plated
Rating: 2 Amps with resistive load @ 250 VAC
 5 Amps with resistive load @ 125 VAC or 28 VDC

- A** **Moving Contacts:** copper alloy with gold plating over nickel plating
Terminals: copper alloy with gold plating over nickel plating
Rating: 0.4 Volts/Amps max @ 20 Volts max (AC or DC)

- G** **Moving Contacts:** gold plating over silver
End Terminals: gold plating over silver
Center Terminals: gold plating over copper alloy, silver plated
Note: G option used for either "high" (2 Amps @ 250 VAC) or "low" (0.4 Volts/Amps max) contact rating (one exclude the other)

PACKAGING

**MARKING
(on products)**

**LABELLING
(on packaging)**

Transparent Trays 15x21x4 cm



Qty per tray: (ST, PC Terminals)
 Series 3B1x 200 pcs
 3B2x 100 pcs
 3B3x 100 pcs

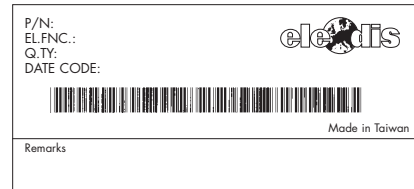
The switches are individually marked with the following information:

- Side 1** TRADE MARK
 SERIES AND MODEL
 DATE CODE

- Side 2** RATING
 CONTACTS

Note: Not all information may be available on some products.

The label on each tray gives full information on the products contained.



A Bar code indicating Model, Quantity, Date Code enables easy traceability.