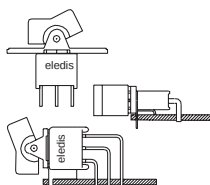




SERIES 3B

- 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

3 B - E

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

ACTUATORS

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

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 |

SEALING

- | | |
|---|------------|
| E | Seal (std) |
|---|------------|

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 |

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

(Δ) Please enquire

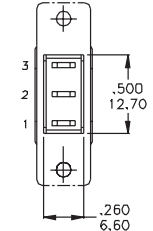
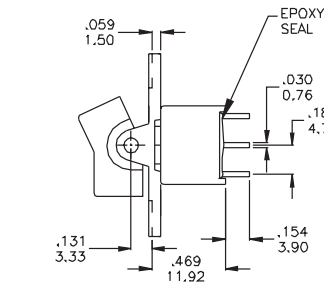
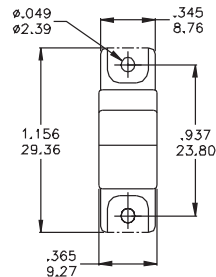
SERIES 3B

ELECTRICAL FUNCTIONS

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

2 Comm.
1 3 •

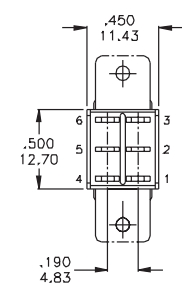
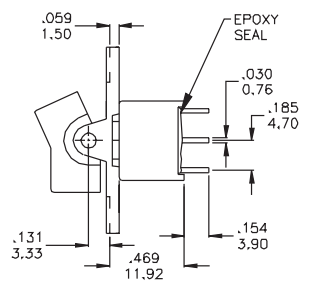
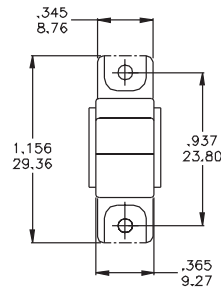
DIMENSIONS



Part N° shown: 3B11-B1STSE2

DPDT	Type	Type	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	open	2-1,5-4

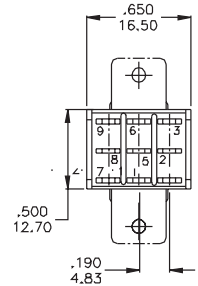
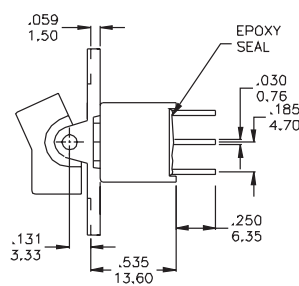
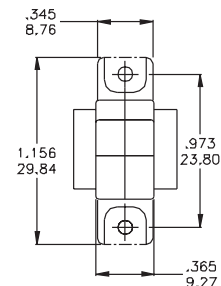
2 Comm. 5 Comm.
1 3 • 4 6 •



Part N° shown: 3B21-B1STSE2

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

2 Comm. 5 Comm.
1 3 • 4 6 •

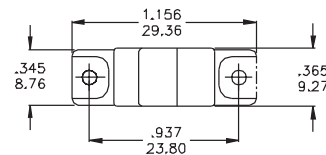


Part N° shown: 3B31-B1STSE2

ACTUATORS

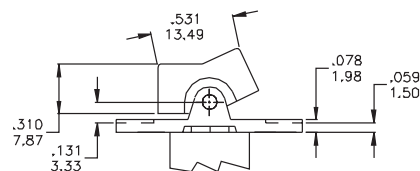
PANEL REAR MOUNT

B1
ROCKER



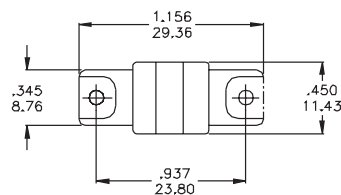
This option can be used for panel mount only

PANEL MOUNTING

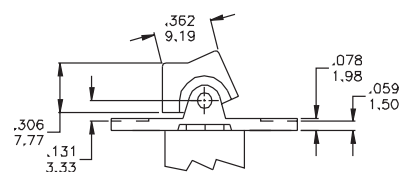


PANEL MOUNTING

B4
PADDLE



This option can be used for panel mount only



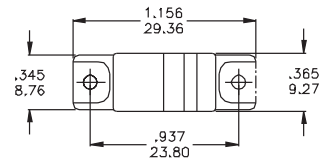


SERIES 3B

ACTUATORS

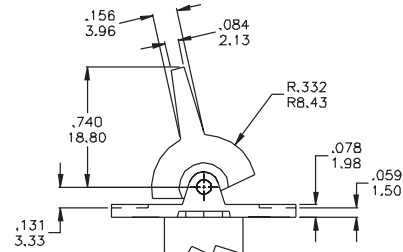
P1

SMALL ROCKER



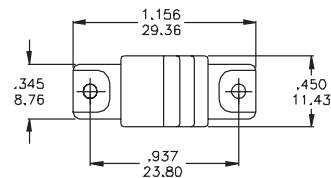
This option can be used for panel mount only

PANEL MOUNTING



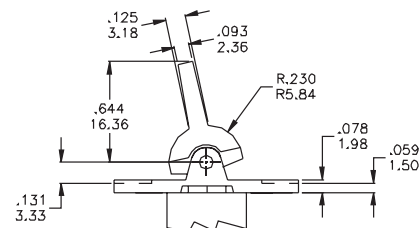
P4

SMALL PADDLE



This option can be used for panel mount only

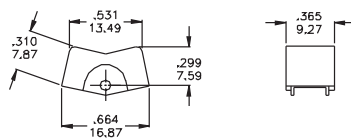
PANEL MOUNTING



P.C. MOUNT

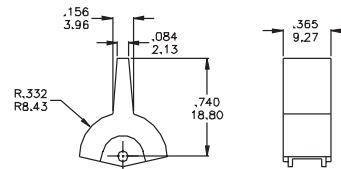
B1

ROCKER



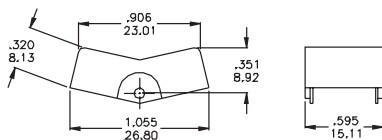
P1

PADDLE



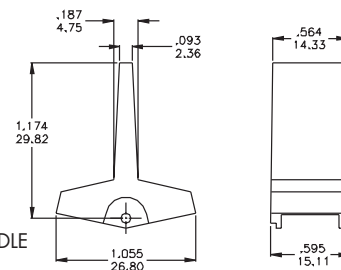
B2

LARGE ROCKER



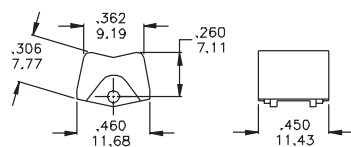
P2

LARGE PADDLE



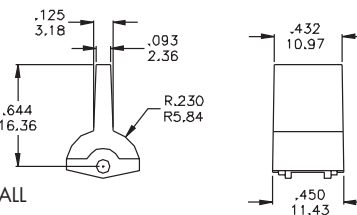
B4

EXTRA SMALL ROCKER



P4

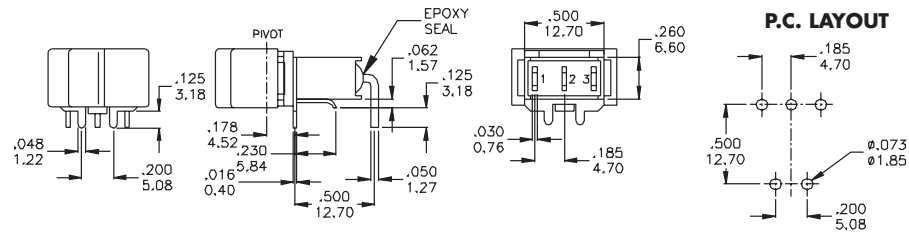
EXTRA SMALL PADDLE



SERIES 3B

TERMINATIONS

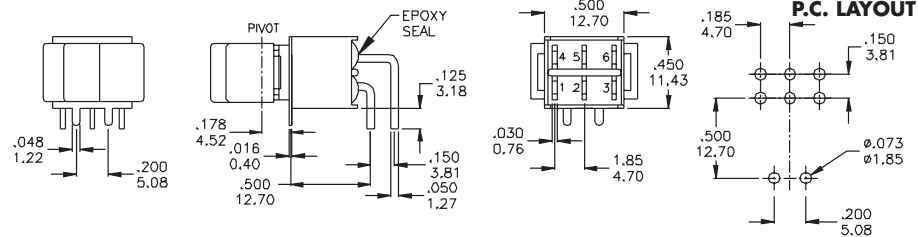
H9 SPDT



Available only with B1 Rocker and P1 Paddle

Part N° shown: 3B11-B1H9AE2

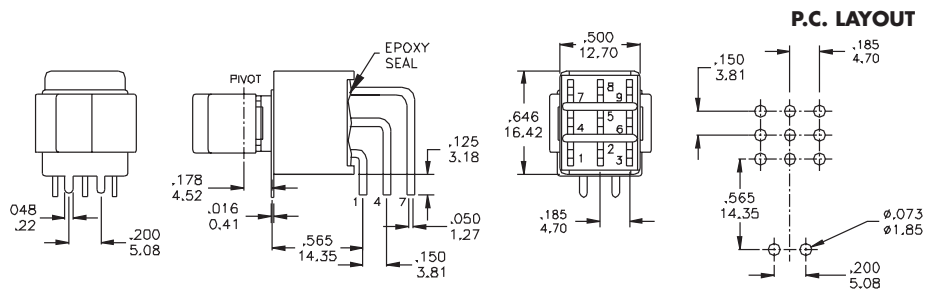
H9 DPDT



Available only with B1 Rocker and P1 Paddle

Part N° shown: 3B21-B1H9AE2

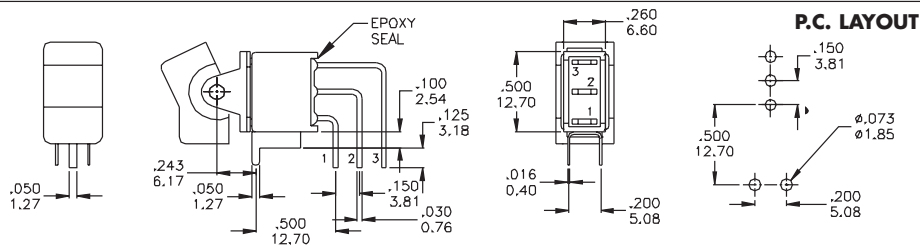
H9 3PDT



Available only with B1 Rocker and P1 Paddle

Part N° shown: 3B31-B1H9AE2

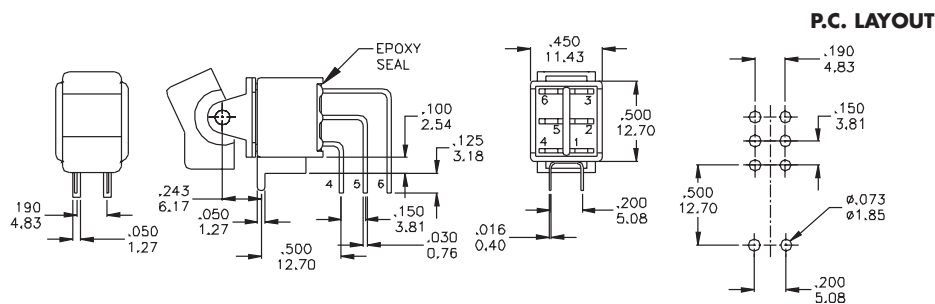
V9 SPDT



Available only with B1 Rocker and P1 Paddle

Part N° shown: 3B11-B1V9AE2

V9 DPDT



Available only with B1 Rocker and P1 Paddle

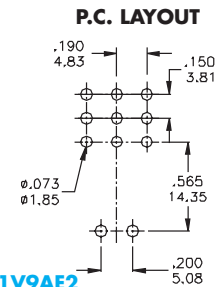
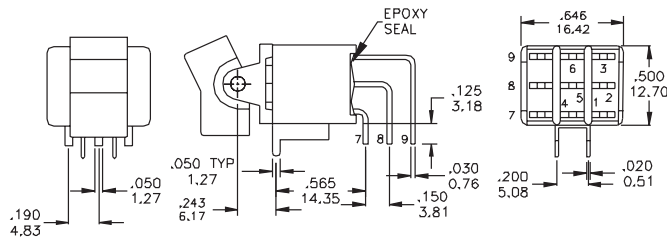
Part N° shown: 3B21-B1V9AE2



SERIES 3B

TERMINATIONS

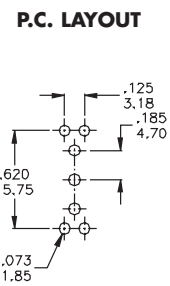
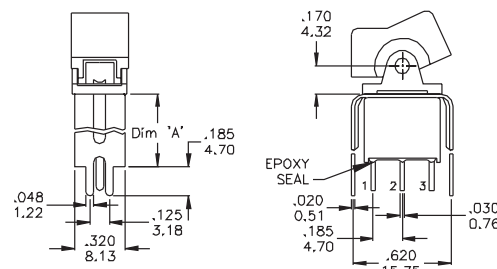
V9
3PDT



Available only with B1 Rocker and P1 Paddle

Part N° shown: 3B31-B1V9AE2

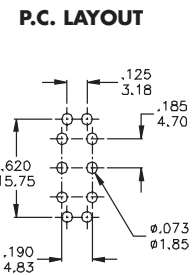
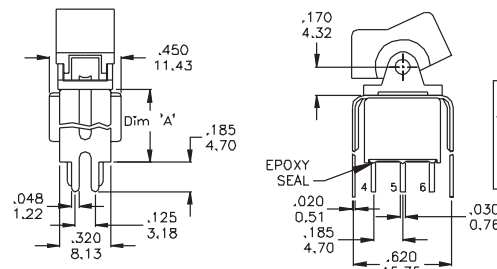
U2
U3
SPDT



Available with all Actuators

Part N° shown: 3B11-B1U_AE2

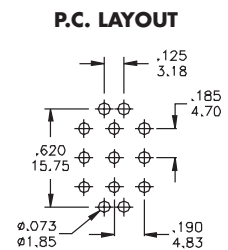
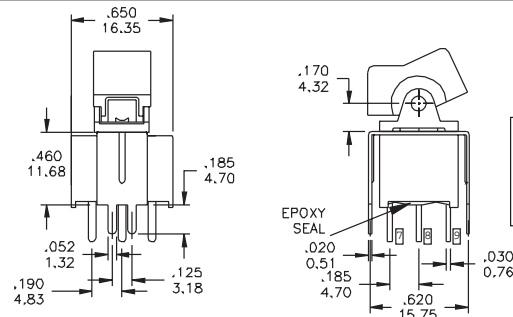
U2
U3
DPDT



Available with all Actuators

Part N° shown: 3B21-B1U_AE2

U2
U3
3PDT



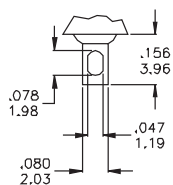
Available with all Actuators

Part N° shown: 3B31-B1U_AE2

SERIES 3B

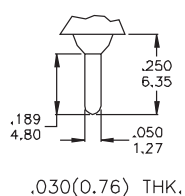
TERMINATIONS

ST



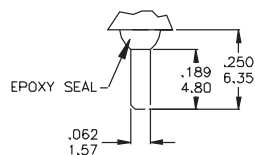
Available with all Actuators

PC



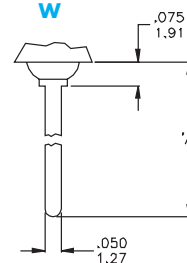
QC

Quick Connect



.030(0.76) THK.

W

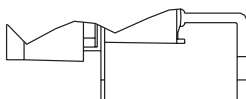


THK .030(0.76)

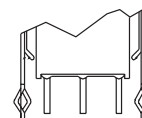
Snap-in termination options

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

Transparent Trays 15x21x4 cm



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

MARKING (on products)

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.

LABELLING (on packaging)

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

P/N: EL.FNC.: Q.TY: DATE CODE:	
	
Made in Taiwan	
Remarks	

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