

IP 67  
ACCORDING TO  
EN 60529:1991+A1:2001  
IEC 60529:2001

UL US  
E 187490

RoHS  
compliant

Pb  
lead-free

### SPECIFICATIONS

**CONTACT RATING:** Dependent upon contact material See Page 64.

**MECHANICAL LIFE:** 30,000 make-and-break cycles.

**CONTACT RESISTANCE:** 10 mΩ max. initial @ 2-4VDC  
100mA for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 1,000 MΩ min.

**DIELECTRIC STRENGTH:** 1,000 Vrms min.@sea level.

**OPERATING TEMPERATURE:** -40°C to 85°C.

### MATERIALS

**CASE & BUSHING :** Glass filled nylon 6/6, flame retardant,  
heat stabilized (UL94V-0).

**ACTUATOR:** Nylon, black std. Internal O-ring seal standard  
with all actuators.

**SWITCH SUPPORT:** Brass or steel, tin plated.

**ACTUATOR PIVOT & MOUNTING BRACKET:** Nylon.

**ACTUATOR PIVOT RETAINER:** Stainless steel.

**TERMINAL/CONTACT:** Silver or gold plated copper alloy.

(See Page 64)







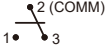




## HOW TO ORDER

MODEL NO.    ACTUATOR    ACTUATOR COLOR    ACTUATOR MARKING    TERMINATIONS    TERMINAL PLATING    SEAL    RoHS SOLDERING

|                       |                                |                |                  |  |                          |               |                    |
|-----------------------|--------------------------------|----------------|------------------|--|--------------------------|---------------|--------------------|
| Model NO.             | Actuator                       | Actuator Color | Actuator marking | Terminations                           | Terminal plating         | Seal          | RoHS soldering     |
| 3AS1 SP ON-NONE-ON    | R1 13.49 long rocker - support | 1 White        | 1                | M1 Solder Lug                          | Q Gold flash over silver | E EPOXY (std) | S RoHS & Lead Free |
| 3AS2 SP ON-NONE-(ON)  | R2 Lever - support             | 2 Black (Std)  | 2                | M2 PC thru-hole                        | R Gold                   |               |                    |
| 3AS3 SP ON-OFF-ON     | R11 9.19 long rocker - support | 3 Red          | 5                | M51 18.70 high, wire wrap              | C Gold over silver       |               |                    |
| 3AS4 SP (ON)-OFF-(ON) | R12 Lever - support            | 4 Orange       | 6                | M52 24.20 high, wire wrap              |                          |               |                    |
| 3AS5 SP ON-OFF-(ON)   | R13 Lever - support            | 5 Yellow       | 7                | M53 10.55 high, wire wrap              |                          |               |                    |
| 3AD1 DP ON-NONE-ON    | R16 Lever - support            | 6 Green        | 8                | M54 26.97 high, wire wrap              |                          |               |                    |
| 3AD2 DP ON-NONE-(ON)  | RB 17.75 long rocker - support | 7 Blue         | L                | M6 Right angle, PC thru-hole           |                          |               |                    |
| 3AD3 DP ON-OFF-ON     |                                | 8 Brown        | J                | M6N Right angle, snap-in, PC thru-hole |                          |               |                    |
| 3AD4 DP (ON)-OFF-(ON) | P.C. Mount only                | 9 Gray         |                  | M7 Vertical right angle, PC thru-hole  |                          |               |                    |
| 3AD5 DP ON-OFF-(ON)   |                                |                |                  | VS2 11.68 high, V-bracket              |                          |               |                    |
| 3AD6 DP ON-ON-ON      | J1 13.49 long rocker           |                |                  | V2N 11.68 high, snap-in V-bracket      |                          |               |                    |
| 3AD7 DP (ON)-ON-(ON)  | J2 Lever                       |                |                  | VS3 16.00 high, V-bracket              |                          |               |                    |
| 3AD8 DP ON-ON-(ON)    | J3 23.01 long rocker           |                |                  |  |                          |               |                    |
| 3A31 3P ON-NONE-ON    | J4 Lever                       |                |                  |  |                          |               |                    |
| 3A32 3P ON-NONE-(ON)  | J5 9.19 long rocker            |                |                  |  |                          |               |                    |
| 3A33 3P ON-OFF-ON     | J6 Lever                       |                |                  |  |                          |               |                    |
| 3A34 3P (ON)-OFF-(ON) | J7 Lever                       |                |                  |  |                          |               |                    |
| 3A35 3P ON-OFF-(ON)   | J8 Lever                       |                |                  |  |                          |               |                    |
|                       | JB 17.75 long rocker           |                |                  |  |                          |               |                    |

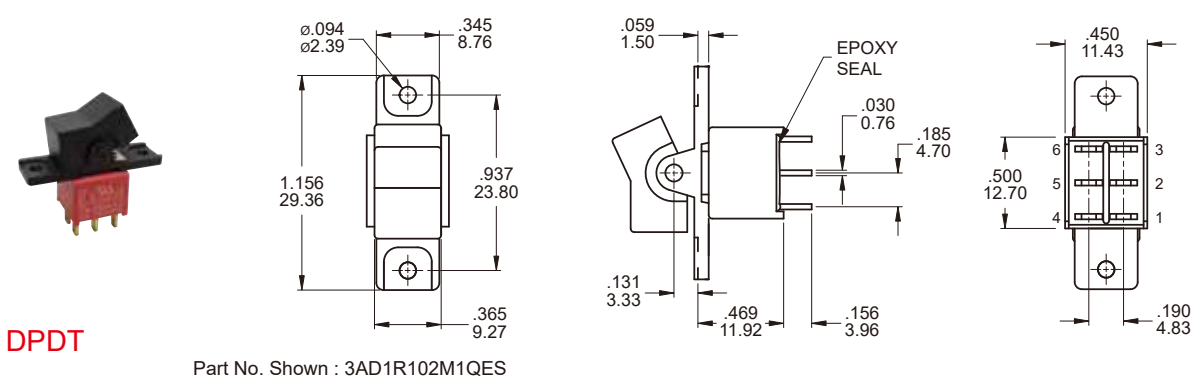
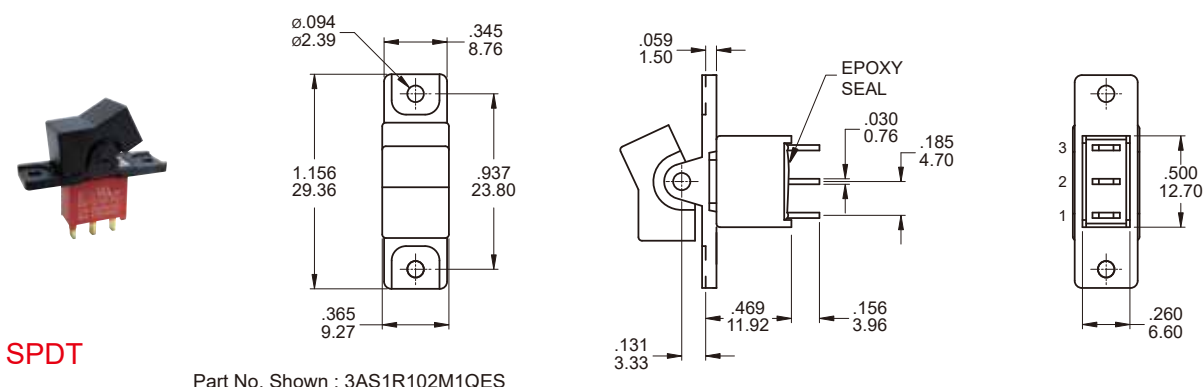
\* Besides standard color,  
other colors need to check stocks available.

**SWITCH FUNCTION**

| NO. POLES | UL/CSA MODEL NO.   | MODEL NO. | SWITCH FUNCTION   |   |   | CONNECTED TERMINALS / SCHEMATIC   |  |   |
|-----------|--|-----------|---|---|---|---|--|---|
|           |  |           | POS.1   | POS.2   | POS.3   | POS.1   | POS.2  | POS.3   |
|           |  |           |  |  |  |  |   |  |
| SP        | Q13A11   | 3AS1      | ON  | NONE  | ON  | 2-3   | N/A  | 2-1   |
|           | Q13A12   | 3AS2      | ON  | NONE  | (ON)  |   |     | OPEN  |
|           | Q13A13   | 3AS3      | ON  | OFF   | ON  |   |  |   |
|           | Q13A14   | 3AS4      | (ON)  | OFF   | (ON)  |   |  |   |
|           | Q13A15   | 3AS5      | ON  | OFF   | (ON)  |   |  |   |
| DP        | Q13A21   | 3AD1      | ON  | NONE  | ON  | 2-3,5-6   | N/A  | 2-1,5-4   |
|           | Q13A22   | 3AD2      | ON  | NONE  | (ON)  |   |     | OPEN  |
|           | Q13A23   | 3AD3      | ON  | OFF   | ON  |   |  |   |
|           | Q13A24   | 3AD4      | (ON)  | OFF   | (ON)  |   |  |   |
|           | Q13A25   | 3AD5      | ON  | OFF   | (ON)  |   |  |   |
|           |  Q13A26 | 3AD6      | ON  | ON  | ON  | 2-3,5-6   | 2-3,5-4  | 2-1,5-4   |
|           |  Q13A27 | 3AD7      | (ON)  | ON  | (ON)  |   |  |   |
|           | Q13A28   | 3AD8      | ON  | ON  | (ON)  |   |  |   |
| 3P        | Q13A31   | 3A31      | ON  | NONE  | ON  | 2-3,5-6,8-9   | N/A  | 2-1,5-4,8-7   |
|           | Q13A32   | 3A32      | ON  | NONE  | (ON)  |   |  | OPEN  |
|           | Q13A33   | 3A33      | ON  | OFF   | ON  |   |  |   |
|           | Q13A34   | 3A34      | (ON)  | OFF   | (ON)  |   |  |   |
|           | Q13A35   | 3A35      | ON  | OFF   | (ON)  |   |  |   |

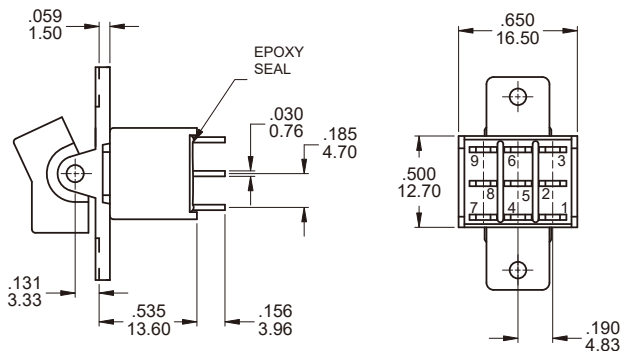
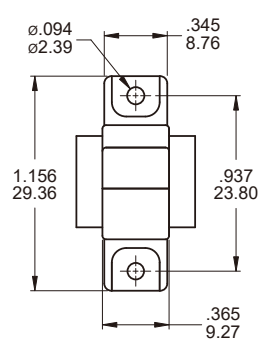
( )=MOMENTARY

▲ Please check the availability in advance before order

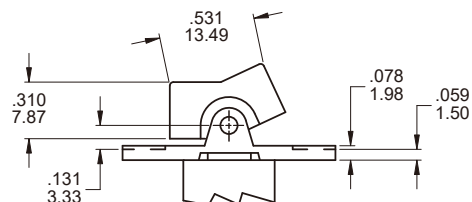
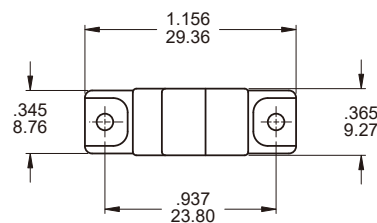
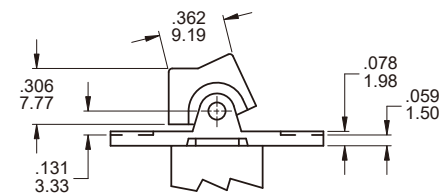
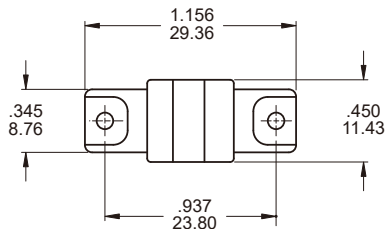
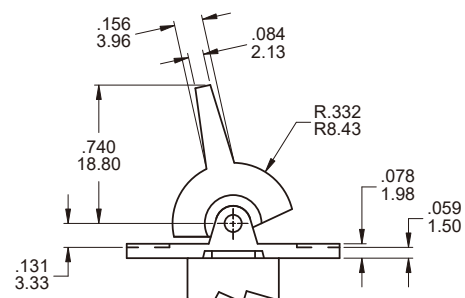
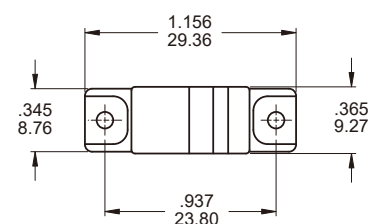
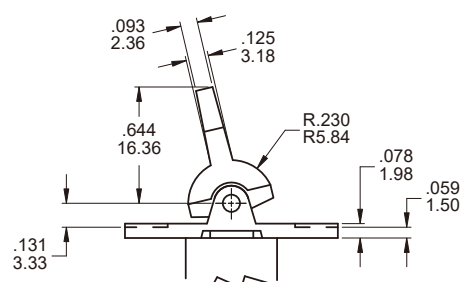
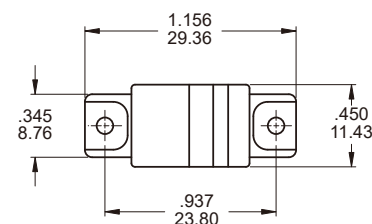
**POLE OPTIONS**


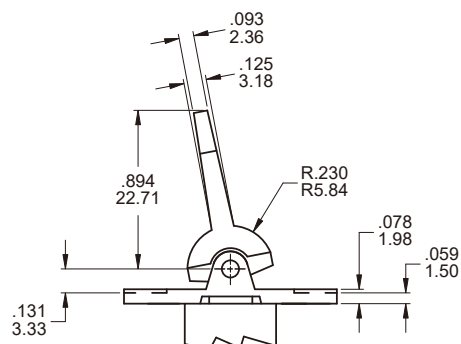
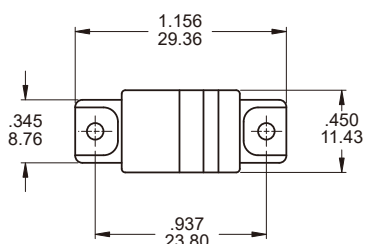
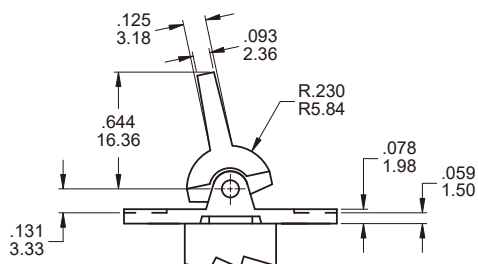
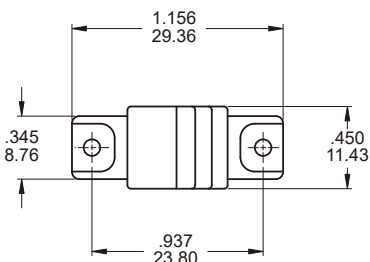
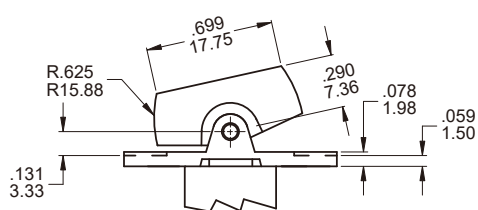
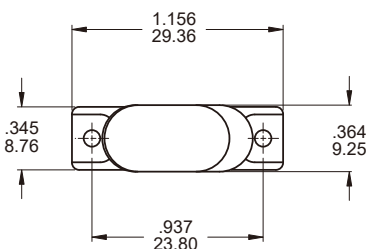
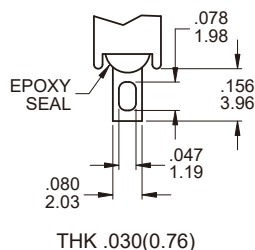
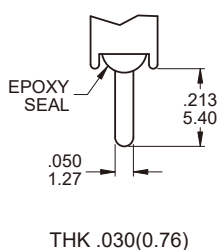
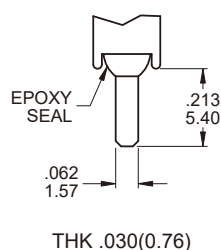
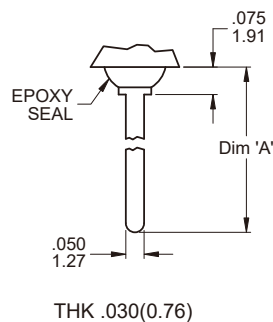

**3PDT**

Part No. Shown : 3A31R102M1RES



## ACTUATOR OPTIONS FOR PANEL MOUNT ONLY

**R1**

**R11**

**R2**

**R12**


**R13**

**R16**

**RB**

**TERMINATION OPTIONS**
**M1 Solder lug**

**M2 PC Thru-hole**

**M3 Quick connect**

**M5 Wire Wrap**

**OTHER TERMINATION OPTIONS**
**M6** Right angle P.C. Mount

**M7** Right angle P.C. Mount

**VS2** Vertical bracket P.C. Mount

**VS3** Vertical bracket P.C. Mount

**M6N** Right angle P.C. Mount with snap-in bracket

**V2N** Vertical bracket P.C. Mount with snap-in bracket

| OPTION CODE | DIM. 'A'      |
|-------------|---------------|
| M51         | .736 (18.70)  |
| M52         | .953 (24.20)  |
| M53         | .415 (10.55)  |
| M54         | 1.062 (26.97) |