**A02 series**

**Keylock & selector switches**

Distinctive features and specifications

- Panel Sealed to IP65
- Single pole to four pole
- Custom engraving & overmould key
- Captive screw & push on tab terminals
- 12A 250VAC

### Electrical Specifications

- **Current/Voltage Rating**: 25mA 5VAC min, 12A 250VAC, 16A 250VAC max; 12A 12VDC max
- **Initial Contact Resistance**: 10mΩ max at 1A 4VDC
- **Insulation Resistance**: 50MΩ min
- **Dielectric Strength**: 2KV between open contacts, 4KV live to accessible
- **Electrical Life**: 50,000 cycles min
- **Contact Gap**: Double break 2 x 1.5mm (0.059)
- **Insulation**: Class 2

### Mechanical Specifications

- **Mechanical Life (operator)**: Momentary, 1 million cycles, maintained 100,000 cycles
- **Lamp**: Midget grove T1 ¾ filament, neon or LED
- **Terminals**: M3 captive screw and push on tab terminal

### General Specifications

- **Operating Temperature**: -20°C to +85°C
- **Sealing**: Panel sealed to IP65, rear of panel IP40

### Materials

- **Key**: Nickel plated steel
- **Key Barrel**: Chrome plated alloy
- **Optional Metal Bezel**: Nickel plated brass
- **Operator**: PBT
- **Nut**: ABS
- **Camtrack Momentary**: PPE
- **Camtrack Maintained**: PPSU
- **Switch Block 1 & 2 Pole**: PBT
- **Switch Block 3 & 4 Pole**: PEI
- **Contacts**: Gold plated silver

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**Dimensions**: first dimensions are in mm while inches are shown in brackets. Refer to the following pages for further information.

**Mounting accessories**: standard hardware 1 nut and 1 sealing washer.

The company reserves the right to change specifications without notice.
A02 series
Keylock & selector switches
Panel cut-out Ø22mm (0.866) or 29.5 (1.161) x 21.5(0.846)mm

Keylock

Selector
Keylock & selector switches

Overview

Keylock

Operator + Switch block

<table>
<thead>
<tr>
<th>Bezel Description</th>
<th>Part No. A-C</th>
<th>Key removable in positions</th>
<th>Contacts</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 pos. maintained</td>
<td>A028101</td>
<td>A-C</td>
<td>1 N.O.</td>
<td>A02501</td>
</tr>
<tr>
<td>2 pos. momentary</td>
<td>A028102</td>
<td>A</td>
<td>1 N.C.</td>
<td>A02502</td>
</tr>
<tr>
<td>3 pos. maintained</td>
<td>A028105</td>
<td>A-B-C</td>
<td>1 N.O./1 N.C.</td>
<td>A02505</td>
</tr>
<tr>
<td>3 pos. momentary</td>
<td>A028106</td>
<td>A</td>
<td>2 N.C.</td>
<td>A02503</td>
</tr>
</tbody>
</table>
| 3 pos. Maint.
  Maintained | A028107     | A-B                        | 2 N.O.   | A02504  |
| 2 pos. maintained | A028201     | A-C                        | 2 N.C.   | A02507  |
| 2 pos. momentary  | A028202     | A                          | 2 N.O.   | A02508  |
| 3 pos. maintained | A028205     | A-B-C                      | 1 N.O.   | A02509  |
| 3 pos. momentary  | A028206     | A                          | 1 N.C.   | A02510  |

Second switch block

<table>
<thead>
<tr>
<th>Bezel Description</th>
<th>Part No. A-B-C</th>
<th>Key removable in positions</th>
<th>Contacts</th>
<th>Part No</th>
</tr>
</thead>
</table>
| 3 pos. Maint.
  Maintained | A028301     | A-B-C                      | 1 N.O.   | A02506  |
| 3 pos. momentary  | A028302     | A                          | 1 N.C.   | A02507  |
| 3 pos. maintained | A028305     | A-B-C                      | 2 N.O.   | A02508  |
| 3 pos. momentary  | A028306     | A                          | 2 N.C.   | A02509  |
| 3 pos. Maint.
  Maintained | A028307     | A-B                        | 1 N.O./1 N.C. | A02510 |
| 3 pos. momentary  | A028308     | A                          | 1 N.C.   | A02511  |

To specify flush mounting (30mmØ) option: add “FM” to the end of the part number. Example: A028301FM (round operator only)

Selector

Operator + Switch block

<table>
<thead>
<tr>
<th>Bezel Description</th>
<th>Short lever A029101</th>
<th>Long lever A029102</th>
<th>Contacts</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 pos. maintained</td>
<td>1 N.O. A02501</td>
<td></td>
<td>A02901</td>
<td></td>
</tr>
<tr>
<td>2 pos. momentary</td>
<td>1 N.C. A02502</td>
<td></td>
<td>A02902</td>
<td></td>
</tr>
<tr>
<td>3 pos. maintained</td>
<td>1 N.O. A02503</td>
<td></td>
<td>A02903</td>
<td></td>
</tr>
<tr>
<td>3 pos. momentary</td>
<td>1 N.C. A02504</td>
<td></td>
<td>A02904</td>
<td></td>
</tr>
</tbody>
</table>
| 3 pos. Maint.
  Maintained | 2 N.O. A02506      |                    | A02905   |         |
| 3 pos. momentary  | 2 N.C. A02507      |                    | A02906   |         |

Second switch block

<table>
<thead>
<tr>
<th>Bezel Description</th>
<th>Contacts</th>
<th>Part No</th>
</tr>
</thead>
</table>
| 3 pos. Maint.
  Maintained | 1 N.O.  | A02506 |
| 3 pos. momentary  | 1 N.C.  | A02507 |
| 3 pos. Maint.
  Maintained | 2 N.O.  | A02508 |
| 3 pos. momentary  | 2 N.C.  | A02509 |
| 3 pos. Maint.
  Maintained | 1 N.O./1 N.C. | A02510 |

To specify flush mounting (30mmØ) option: add “FM” to the end of the part number. Example: A029401FM (round operators only)

Unsealed switches & indicators (IP40) suffix 01 to the end of the part number. Screen engraving insertable legends, & bi-color LED’s please contact APEM. For 6.35mm push on tab terminals suffix the switch block part number with SP.
Installation guide

PANEL MOUNTING ASSEMBLY

- Drill/punch hole shaped as shown on page one.
- Assemble front operator through hole and
  a) Round & square types, tighten nut to a maximum torque of 0.8Nm using tool no. 30-0001. Snap on the adaptor block fit fixing nut and tighten to a maximum
  b) Rectangular types, tighten the two panel fixing screws in the front to a maximum torque of 6cNm
- Wire chosen switch block as required and snap onto back of operator with optional end cap
- Fit bulb if required using tool No. 30-0002.
- Snap screen onto reflector assembly with legend in between if required and snap onto front operator, take care to line up the locating slot with the polarising dot and not to damage the internal seal
- To place/remove the bulb use the bulb extractor 30-0002.

SWITCH BLOCK ASSEMBLY

The switch block snaps onto the adaptor block, to remove, lever out the latches using a small screwdriver taking care not to overbend, pull off the block from the adaptor block.

Tools

Nut fixing key

Bulb remover

30-0001

30-0002

Accessories

Switch block end cap, terminal guard

14-0005