

# KR series

Power rocker switches



## DISTINCTIVE FEATURES

- Unique rocker design
- Wide choice of colors
- Laser etched symbols
- Illuminated or non-illuminated
- Optionally sealed to IP68 or IP69K



## ENVIRONMENTAL SPECIFICATIONS

- Sealing options :  
K : IP68 to front panel components of switch only according to IEC 60529  
Z : IP69K panel sealing according to DIN 40050-9
- Salt spray resistance : 96 hours according to IEC 512-6, test 11f
- Vibration resistance : 10-500 Hz / 10 g per IEC 60068-2-6
- Operating temperature : -40 °C to +85 °C (-40 °F to +185 °F)



## ELECTRICAL SPECIFICATIONS

- Current/voltage rating with resistive load :  
- Silver plated contacts :  
    A : 5 A 24 VDC, 100,000 cycles  
    10 A 24 VDC, 10,000 cycles (terminals 6.35 x 0.8 only)  
    S : 20 A 12 V, 10,000 cycles (see "Build your part number")  
- Gold plated contacts (D) : 20 mA 12 V, 150,000 cycles
- Current/voltage rating with lamp load - silver contacts (A) :  
- functions 1 & 6 : 100 W 24 VDC, 10,000 cycles  
- other functions : 60 W 24 VDC, 10,000 cycles
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength : 2,000 Vrms 50 Hz min. between terminals



## GENERAL SPECIFICATIONS

- Mechanical life : 150,000 cycles min.
- Panel thickness : 0.8 mm to 4.6 mm
- Recommended panel thickness : between 2 mm and 3.5 mm

The company reserves the right to change specifications without notice.



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## MATERIALS

- Case : PA 6-6
- Actuator : ABS
- Bezel : PA 6-6
- Contacts & terminals :  
brass, solid silver grain, silver plated (A or S)  
or brass, solid silver grain, gold plated (D)
- Contact roller : brass, nickel plated

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

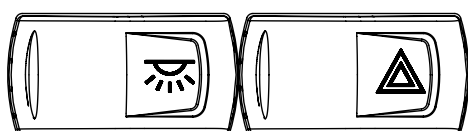
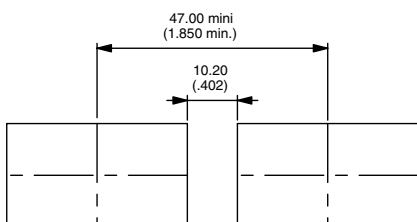
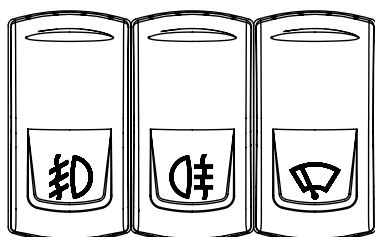
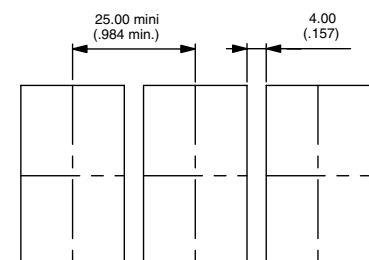


## SEALING

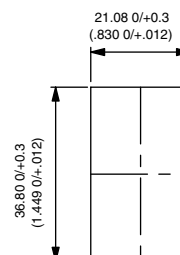
- Sealing is optional. To order a sealed product, complete the appropriate box of ordering format on the following pages.



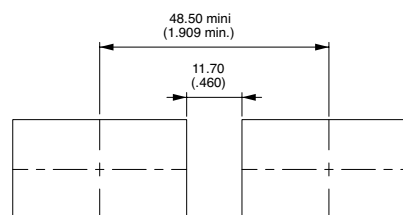
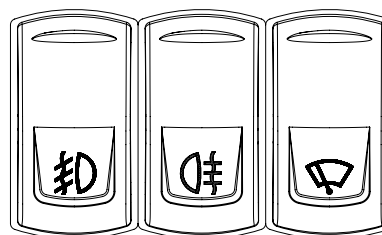
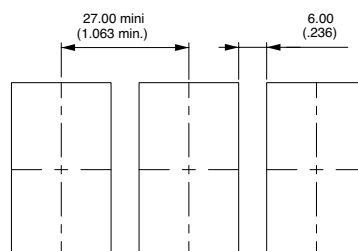
## MATRIX MOUNTING



## PANEL CUT-OUT



## SPECIFIC MATRIX MOUNTING FOR Z VERSION



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## ELECTRICAL FUNCTIONS AND CONNECTIONS

In the tables below, terminal connections as viewed from bottom of switch. Only the contact area is represented. For single pole models, only terminals 1, 2 and 3 are to be considered (not terminals 6, 5, 4).

x = w/o terminal

o = with terminal

▲ = momentary

### 2 POSITIONS

|                           |       |       |
|---------------------------|-------|-------|
|                           |       |       |
|                           | 3 2 1 | 3 2 1 |
| Function 1 *<br>KR31-KR41 |       |       |
|                           | 6 5 4 | 6 5 4 |
| Function 5<br>KR35 - KR45 |       |       |
|                           | 6 5 4 | 6 5 4 |
| Function 6<br>KR36-KR46   |       |       |
|                           | 6 5 4 | 6 5 4 |

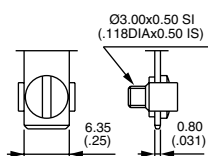
\* Function 1 : Only available for 6 terminal versions.

### 3 POSITIONS

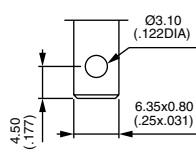
|                          |       |       |       |
|--------------------------|-------|-------|-------|
|                          |       |       |       |
|                          | 3 2 1 | 3 2 1 | 3 2 1 |
| Function 7<br>KR37-KR47  |       |       |       |
|                          | 6 5 4 | 6 5 4 | 6 5 4 |
| Function 8<br>KR38-KR48  |       |       |       |
|                          | 6 5 4 | 6 5 4 | 6 5 4 |
| Function 9<br>KR39-KR49  |       |       |       |
|                          | 6 5 4 | 6 5 4 | 6 5 4 |
| Function 4<br>KR44       |       |       |       |
|                          | 6 5 4 | 6 5 4 | 6 5 4 |
| Function 4-1R<br>KR44-1R |       |       |       |
|                          | 6 5 4 | 6 5 4 | 6 5 4 |



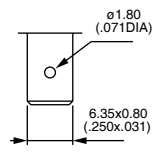
## TERMINALS



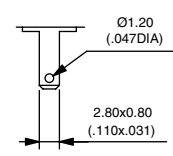
Screw



Solder lug / quick-connect



Normalized quick-connect 6.35x0.8



Normalized quick-connect 2.8x0.8

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## BUILD YOUR PART NUMBER

- To order a complete product, fill in all the boxes of the following order guide.
- To order case only (without actuator), finish your order number with the LED wiring code.
- To order actuator only (without case), begin the order number with code KRR, then follow the order format from "actuator type" until the end of the options.

| CASE + LEDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
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| <div> <div>KR</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div>Side A</div> <div>Side B</div> <div></div> </div> <div> <div>SERIES</div> <div>POLES</div> <div> <div>3</div> <div>4</div> </div> <div> <div>Single pole</div> <div>Double pole</div> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <div>ELECTRICAL FUNCTIONS</div> <table border="1"> <tr><td>1</td><td>ON</td><td>-</td><td>OFF</td></tr> <tr><td>4</td><td>ON</td><td>ON</td><td>ON</td></tr> <tr><td>4-1R</td><td>ON</td><td>ON</td><td>MOM</td></tr> <tr><td>5</td><td>MOM</td><td>-</td><td>ON</td></tr> <tr><td>6</td><td>ON</td><td>-</td><td>ON</td></tr> <tr><td>7</td><td>MOM</td><td>OFF</td><td>MOM</td></tr> <tr><td>8</td><td>ON</td><td>OFF</td><td>MOM</td></tr> <tr><td>9</td><td>ON</td><td>OFF</td><td>ON</td></tr> </table> <div>Function 1 only for 6-terminal versions.</div> |                                                                                           |                                                              | 1                                                                                             | ON                | -                 | OFF | 4 | ON | ON                                                                      | ON                                                                                            | 4-1R                                                                                      | ON                                                                                   | ON                                              | MOM                                          | 5                                               | MOM                                                 | -                                                                 | ON                                            | 6                                            | ON                              | -                                            | ON                                                                     | 7 | MOM                                                               | OFF                           | MOM                           | 8                                                                                             | ON | OFF | MOM | 9                             | ON                             | OFF                          | ON                                                          | <div>CONTACTS</div> <table border="1"> <tr><td>A</td><td>Silver</td></tr> <tr><td>D</td><td>Gold plated</td></tr> <tr><td>S</td><td>Silver 20A***</td></tr> </table> | A | Silver | D                            | Gold plated | S | Silver 20A*** | <div>SEALING</div> <table border="1"> <tr><td>X</td><td>No</td></tr> <tr><td>K</td><td>IP68</td></tr> <tr><td>Z</td><td>IP69K</td></tr> </table> | X | No | K | IP68 | Z | IP69K | <div>LEDS</div> <table border="1"> <tr><td>X</td><td>None</td></tr> <tr><td>A</td><td>LED 6 V red</td></tr> <tr><td>B</td><td>LED 6 V green</td></tr> <tr><td>C</td><td>LED 6 V yellow</td></tr> <tr><td>M</td><td>LED 6 V blue</td></tr> <tr><td>R</td><td>LED 6 V white</td></tr> <tr><td>D</td><td>LED 12 V red</td></tr> <tr><td>E</td><td>LED 12 V green</td></tr> <tr><td>F</td><td>LED 12 V yellow</td></tr> <tr><td>N</td><td>LED 12 V blue</td></tr> <tr><td>S</td><td>LED 12 V white</td></tr> <tr><td>J</td><td>LED 24 V red</td></tr> <tr><td>K</td><td>LED 24 V green</td></tr> <tr><td>L</td><td>LED 24 V yellow</td></tr> <tr><td>P</td><td>LED 24 V blue</td></tr> <tr><td>T</td><td>LED 24 V white</td></tr> </table> <div>etc.</div> |  | X | None | A | LED 6 V red | B | LED 6 V green | C | LED 6 V yellow | M | LED 6 V blue | R | LED 6 V white | D | LED 12 V red | E | LED 12 V green | F | LED 12 V yellow | N | LED 12 V blue | S | LED 12 V white | J | LED 24 V red | K | LED 24 V green | L | LED 24 V yellow | P | LED 24 V blue | T | LED 24 V white | <div>WIRING</div> <div>See following pages.</div> |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -                                                                                         | OFF                                                          |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ON                                                                                        | ON                                                           |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 4-1R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ON                                                                                        | MOM                                                          |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | MOM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -                                                                                         | ON                                                           |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -                                                                                         | ON                                                           |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | MOM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | OFF                                                                                       | MOM                                                          |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | OFF                                                                                       | MOM                                                          |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | OFF                                                                                       | ON                                                           |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Silver                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Gold plated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Silver 20A***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
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| T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | LED 24 V white                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>TERMINALS</div> <table border="1"> <tr> <td> <div>Screw</div> <div>0</div> <div>6 terminals with barrier</div> </td> <td> <div>Normalized quick-connect 6.35x0.8</div> <div>3</div> <div>6 terminals with barrier</div> </td> <td> <div>Normalized quick-connect 2.8x0.8</div> <div>G</div> <div>10 term. with barrier</div> </td> </tr> <tr> <td> <div>Solder lug/quick-connect</div> <div>2</div> <div>6 terminals with barrier</div> </td> <td> <div>5</div> <div>6 terminals w/o barrier</div> </td> <td> <div>H</div> <div>10 term. w/o barrier</div> </td> </tr> <tr> <td> <div>4</div> <div>6 terminals w/o barrier</div> </td> <td> <div>D</div> <div>10 term. with barrier</div> </td> <td> <div>J</div> <div>10 terminals for use with connector U2282</div> </td> </tr> <tr> <td> <div>A</div> <div>10 term. with barrier</div> </td> <td> <div>E</div> <div>10 term. w/o barrier</div> </td> <td></td> </tr> <tr> <td> <div>B</div> <div>10 term. w/o barrier</div> </td> <td> <div>F</div> <div>10 term. for use with connector U2292 or U3152</div> </td> <td></td> </tr> <tr> <td> <div>C</div> <div>10 terminals for use with connector U2292</div> </td> <td></td> <td></td> </tr> </table>                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    | <div>Screw</div> <div>0</div> <div>6 terminals with barrier</div>       | <div>Normalized quick-connect 6.35x0.8</div> <div>3</div> <div>6 terminals with barrier</div> | <div>Normalized quick-connect 2.8x0.8</div> <div>G</div> <div>10 term. with barrier</div> | <div>Solder lug/quick-connect</div> <div>2</div> <div>6 terminals with barrier</div> | <div>5</div> <div>6 terminals w/o barrier</div> | <div>H</div> <div>10 term. w/o barrier</div> | <div>4</div> <div>6 terminals w/o barrier</div> | <div>D</div> <div>10 term. with barrier</div>       | <div>J</div> <div>10 terminals for use with connector U2282</div> | <div>A</div> <div>10 term. with barrier</div> | <div>E</div> <div>10 term. w/o barrier</div> |                                 | <div>B</div> <div>10 term. w/o barrier</div> | <div>F</div> <div>10 term. for use with connector U2292 or U3152</div> |   | <div>C</div> <div>10 terminals for use with connector U2292</div> |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>Screw</div> <div>0</div> <div>6 terminals with barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <div>Normalized quick-connect 6.35x0.8</div> <div>3</div> <div>6 terminals with barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <div>Normalized quick-connect 2.8x0.8</div> <div>G</div> <div>10 term. with barrier</div> |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>Solder lug/quick-connect</div> <div>2</div> <div>6 terminals with barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <div>5</div> <div>6 terminals w/o barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <div>H</div> <div>10 term. w/o barrier</div>                                              |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>4</div> <div>6 terminals w/o barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <div>D</div> <div>10 term. with barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <div>J</div> <div>10 terminals for use with connector U2282</div>                         |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>A</div> <div>10 term. with barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <div>E</div> <div>10 term. w/o barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>B</div> <div>10 term. w/o barrier</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <div>F</div> <div>10 term. for use with connector U2292 or U3152</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>C</div> <div>10 terminals for use with connector U2292</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>ACTUATOR</div> <table border="1"> <tr> <td> <div>TYPE</div> <div>1</div> <div>For non-illuminated application</div> </td> <td> <div>COLOR</div> <div>1</div> <div>Blue</div> </td> <td> <div>5</div> <div>Yellow</div> </td> <td> <div>MARKING ORIENTATION</div> <div>N</div> <div>North</div> </td> <td> <div>Area A</div> </td> <td> <div>Area M</div> </td> <td> <div>Area B</div> </td> </tr> <tr> <td> <div>2</div> <div>For illuminated application</div> </td> <td> <div>1/4</div> <div>Dark blue</div> </td> <td> <div>6</div> <div>Red</div> </td> <td> <div>O</div> <div>West</div> </td> <td colspan="3"> <div>SYMBOLS</div> <div> </div> </td> </tr> <tr> <td></td> <td> <div>2</div> <div>Black</div> </td> <td> <div>7</div> <div>Ivory</div> </td> <td> <div>S</div> <div>South</div> </td> <td colspan="3"> <div> <b>Symbols &amp; Accessories :</b><br/>           see end of the series.         </div> </td> </tr> <tr> <td></td> <td> <div>3</div> <div>Green</div> </td> <td> <div>9</div> <div>Orange</div> </td> <td> <div>E</div> <div>East</div> </td> <td colspan="3"> <div>           Drawings on following pages.         </div> </td> </tr> <tr> <td></td> <td> <div>4</div> <div>Grey</div> </td> <td></td> <td></td> <td colspan="3"></td> </tr> </table> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    | <div>TYPE</div> <div>1</div> <div>For non-illuminated application</div> | <div>COLOR</div> <div>1</div> <div>Blue</div>                                                 | <div>5</div> <div>Yellow</div>                                                            | <div>MARKING ORIENTATION</div> <div>N</div> <div>North</div>                         | <div>Area A</div>                               | <div>Area M</div>                            | <div>Area B</div>                               | <div>2</div> <div>For illuminated application</div> | <div>1/4</div> <div>Dark blue</div>                               | <div>6</div> <div>Red</div>                   | <div>O</div> <div>West</div>                 | <div>SYMBOLS</div> <div> </div> |                                              |                                                                        |   | <div>2</div> <div>Black</div>                                     | <div>7</div> <div>Ivory</div> | <div>S</div> <div>South</div> | <div> <b>Symbols &amp; Accessories :</b><br/>           see end of the series.         </div> |    |     |     | <div>3</div> <div>Green</div> | <div>9</div> <div>Orange</div> | <div>E</div> <div>East</div> | <div>           Drawings on following pages.         </div> |                                                                                                                                                                      |   |        | <div>4</div> <div>Grey</div> |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>TYPE</div> <div>1</div> <div>For non-illuminated application</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <div>COLOR</div> <div>1</div> <div>Blue</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <div>5</div> <div>Yellow</div>                                                            | <div>MARKING ORIENTATION</div> <div>N</div> <div>North</div> | <div>Area A</div>                                                                             | <div>Area M</div> | <div>Area B</div> |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
| <div>2</div> <div>For illuminated application</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <div>1/4</div> <div>Dark blue</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <div>6</div> <div>Red</div>                                                               | <div>O</div> <div>West</div>                                 | <div>SYMBOLS</div> <div> </div>                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <div>2</div> <div>Black</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <div>7</div> <div>Ivory</div>                                                             | <div>S</div> <div>South</div>                                | <div> <b>Symbols &amp; Accessories :</b><br/>           see end of the series.         </div> |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <div>3</div> <div>Green</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <div>9</div> <div>Orange</div>                                                            | <div>E</div> <div>East</div>                                 | <div>           Drawings on following pages.         </div>                                   |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <div>4</div> <div>Grey</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                           |                                                              |                                                                                               |                   |                   |     |   |    |                                                                         |                                                                                               |                                                                                           |                                                                                      |                                                 |                                              |                                                 |                                                     |                                                                   |                                               |                                              |                                 |                                              |                                                                        |   |                                                                   |                               |                               |                                                                                               |    |     |     |                               |                                |                              |                                                             |                                                                                                                                                                      |   |        |                              |             |   |               |                                                                                                                                                  |   |    |   |      |   |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |      |   |             |   |               |   |                |   |              |   |               |   |              |   |                |   |                 |   |               |   |                |   |              |   |                |   |                 |   |               |   |                |                                                   |

\*\*\*S contacts for all functions except 5 and 4-1R - for normalized quick-connect terminals 6.35x0.8 only.

NOTICE : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

# KR series

## Power rocker switches

### 6 TERMINAL VERSION



| Single pole | Double pole | 2-3<br>5-6 | 1-2<br>4-5 |
|-------------|-------------|------------|------------|
| KR31        | KR41        | ON         | OFF        |
|             | KR44*       | ON         | ON         |
|             | KR44-1R*    | ON         | MOM        |
| KR35        | KR45        | MOM        | ON         |
| KR36        | KR46        | ON         | ON         |
| KR37        | KR47        | MOM        | MOM        |
| KR38        | KR48        | ON         | MOM        |
| KR39        | KR49        | ON         | ON         |

\*Function 4 : single pole in double pole case

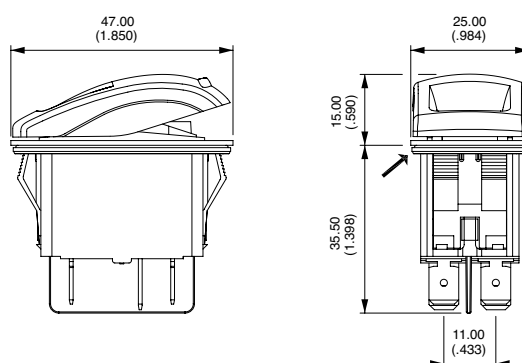
### 10 TERMINAL VERSION



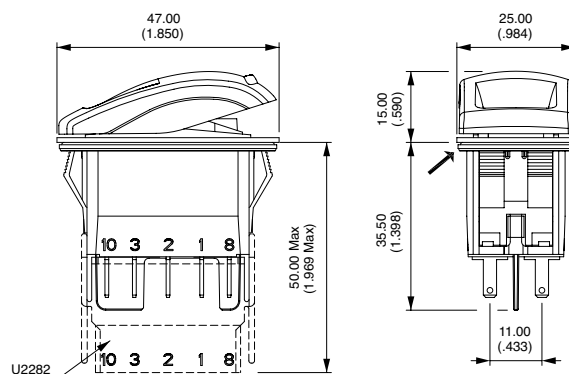
| Single pole | Double pole | 2-3<br>5-6 | 1-2<br>4-5 |
|-------------|-------------|------------|------------|
| KR31        | KR41        | ON         | OFF        |
|             | KR44*       | ON         | ON         |
|             | KR44-1R*    | ON         | MOM        |
| KR35        | KR45        | MOM        | ON         |
| KR36        | KR46        | ON         | ON         |
| KR37        | KR47        | MOM        | MOM        |
| KR38        | KR48        | ON         | MOM        |
| KR39        | KR49        | ON         | ON         |

\*Function 4 : single pole in double pole case

→ FLAT SEAL

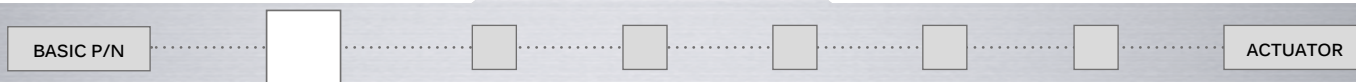


→ FLAT SEAL



### CASE + LEDS

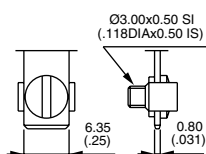
### TERMINALS



To order case only (without actuator), finish your order number with the LED wiring code.

### SCREW

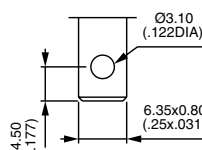
0 6 terminals with barrier



screw

### SOLDER LUG / QUICK-CONNECT

2 6 terminals with barrier  
4 6 terminals w/o barrier  
A 10 terminals with barrier  
B 10 terminals w/o barrier  
C 10 terminals for use with connector U2292 or U3152



Solder lug / quick-connect

# KR series

Power rocker switches

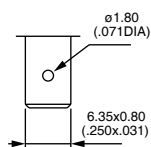
## CASE + LEDS

## TERMINALS (CONTINUED)



### NORMALIZED QUICK-CONNECT 6.35X0.8

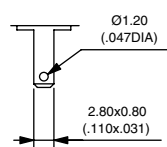
- 3 6 terminals with barrier
- 5 6 terminals w/o barrier
- D 10 terminals with barrier
- E 10 terminals w/o barrier
- F 10 terminals for use with connector U2292 or U3152



Normalized quick-connect 6.35x0.8

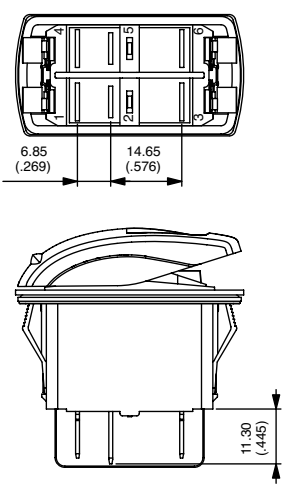
### NORMALIZED QUICK-CONNECT 2.8X0.8

- G 10 terminals with barrier
- H 10 terminals w/o barrier
- J 10 terminals for use with connector U2282

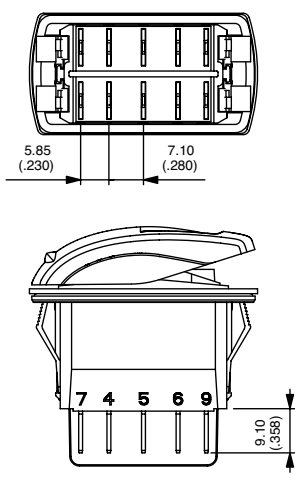


Normalized quick-connect 2.8x0.8

### 6 TERMINAL VERSION



### 10 TERMINAL VERSION



Terminals are marked on the case. The drawings show the maximum possible number of terminals.

## CASE + LEDS

## CONTACT MATERIALS



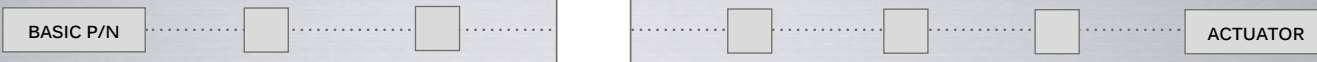
- A Silver
- D Silver, gold plated
- S Silver 20A. For all functions except 4 and 4-1R - for normalized quick-connect terminals 6.35x0.8 only.

# KR series

Power rocker switches

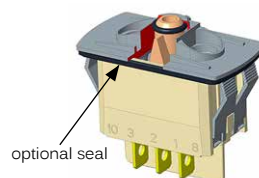
## CASE + LEDS

## SEALING



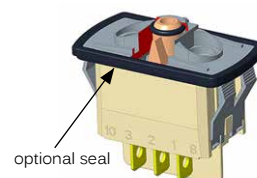
- X No sealing
- K IP68 (front panel components of switch only)
- Z IP69K - Installation notice available on request

Ultrasonic welding of frame to case is standard on all versions. The ultrasonic welding and the optional panel seal prevent water and dust from introducing into the switch housing.



optional seal

K



optional seal

Z

## CASE + LEDS

## LEDS



Complete each enlarged box with one of the codes listed below.

- X Without LED

|             | Red | Green | Yellow | Blue | White | Amber | Red/green |
|-------------|-----|-------|--------|------|-------|-------|-----------|
| 6 VDC       | A   | B     | C      | M    | R     | 4     | 1         |
| 12 VDC      | D   | E     | F      | N    | S     | 5     | 2         |
| 24 VDC      | J   | K     | L      | P    | T     | 6     | 3         |
| No resistor | U   | V     | W      | Y    | Z     | 9     | 8         |

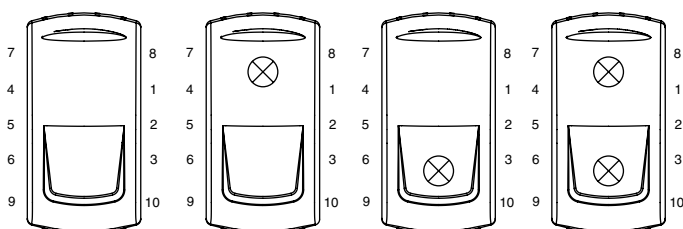
LED consumption : 20 mA @ nominal voltage (25 °C / 77 °F)

Other illumination solutions : on request.

For non-stabilized on-board power supplies submitted to potential voltage surges due to the alternator, 15 V and 30 V LED configurations are also available on request.

LED Tolerance  $\pm 10\%$

## Side A



## Side B

# KR series

## Power rocker switches

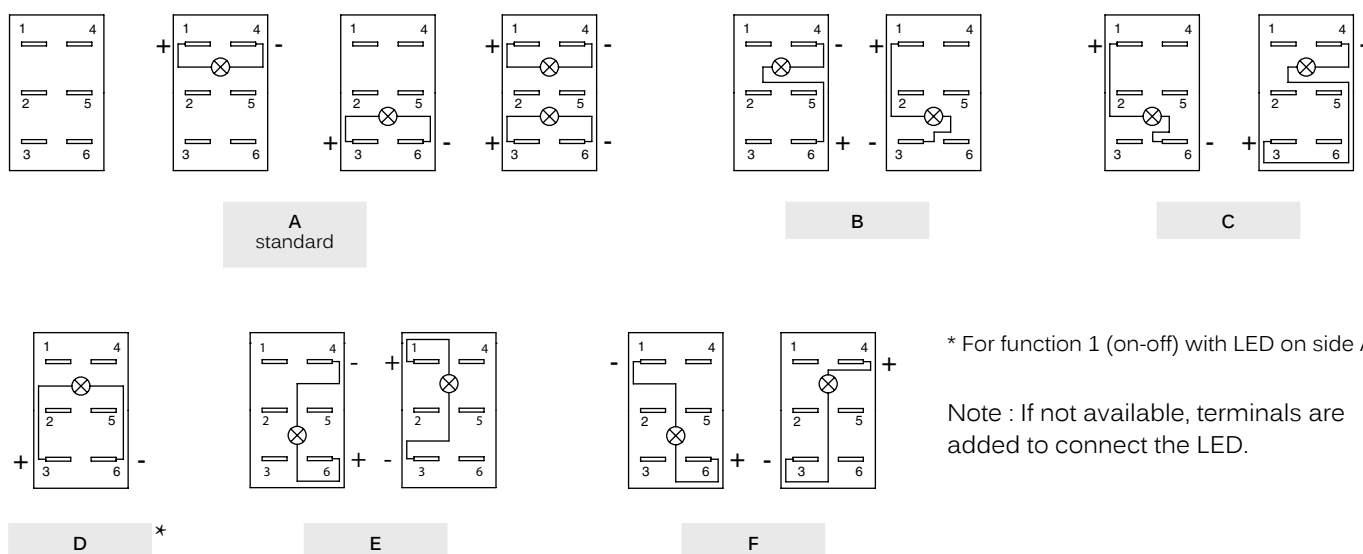
### CASE + LEDS

### WIRING



The LED wiring diagram is shown on the case.

### FOR 6 TERMINAL VERSIONS - LED CONNECTED TO THE LOAD



\* For function 1 (on-off) with LED on side A

Note : If not available, terminals are added to connect the LED.

### FOR 10 TERMINAL VERSIONS - INDEPENDENT LED OR INTEGRATED FUNCTIONS

**G** Standard, to have independent LED.

**H** To obtain 2 symbol illumination levels (night illumination when OFF and higher illumination when ON).  
 - H wiring with LED on side A available with functions 6, 8, 9 and 44.  
 - H wiring with LED on side B available with functions 5, 6 and 9.  
 - H wiring with 2 LEDs available with functions 8 and 9.  
 More information (H wiring schematics) : on request.

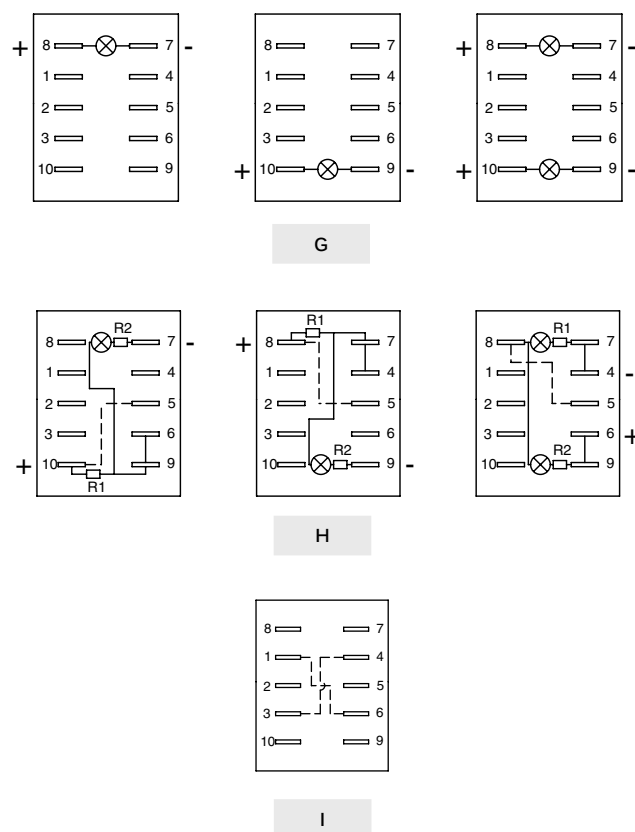
*Dotted line = external wiring, continuous line = internal wiring*

**I** To have a polarity inversion (typical application : fan motor).

*Dotted line = external wiring*

Power supply between 2 and 5 - Load between 1 and 4 or 3 and 6.

Available with H and J quick-connect terminals.



Please contact us for other wiring solutions.



# KR series

Power rocker switches

## ACTUATOR

## ACTUATOR TYPE



To order actuator only (without case), begin the order number with code KRR, then follow the order format from "actuator type" until the end of the options.

- 1 For non-illuminated application
- 2 For illuminated application

Other rocker design : on request.



## ACTUATOR

## ACTUATOR COLOR



- 1 Blue
- 1/4 Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7 Ivory
- 7/1 White
- 9 Orange

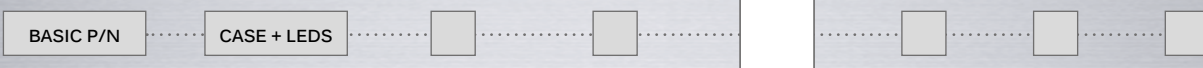


Note : colors 7 and 7/1 not available on illuminated versions.

A **soft-touch varnish** can be added. Consult us.

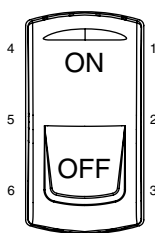
## ACTUATOR

## MARKING ORIENTATION

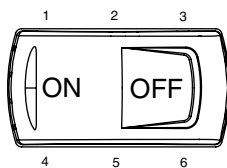


If no marking required, complete the box with code **N**.

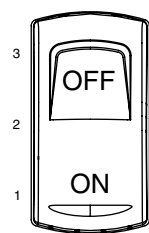
Other orientations : on request



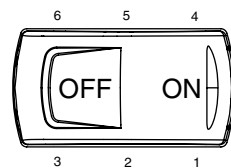
N



O



S



E

# KR series

## Power rocker switches

### ACTUATOR

### SYMBOLS



XX No symbol

**Available symbols :** Complete each enlarged box with the one of the codes listed on the following pages.

**Marking color :** White marking for illuminated rockers (laser etching) and non-illuminated black rockers (pad printing). Black marking for non-illuminated color rockers (pad printing).  
Other : on request.

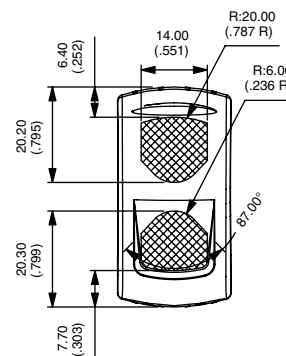
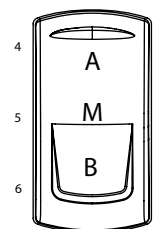
### Laser etching resistance

- Water and petrol resistant according to EN 61058-1
- Tear resistant (cross-cut test) according to NF ISO 2409 : class 0
- UV resistant according to ISO 4892-2

### Marking area

For illuminated versions. The symbol will be included in the hatched area. Marking in M area : on request.

### MARKING AREA



# K range

Power rocker switches and indicators • symbols and accessories



Most symbols meet the ISO 7000 standard “graphical symbols for use on equipment” (code given in bracket in the description).

Contact us for symbols not featured in the following tables.

| CODE | SYMBOL | DESCRIPTION            |
|------|--------|------------------------|
| XX   | None   | -                      |
| 01   | ON     | -                      |
| 02   | OFF    | -                      |
| 03   | O      | -                      |
| 04   | I      | -                      |
| 05   | II     | -                      |
| 06   | STOP   | -                      |
| 07   | A      | Stop                   |
| 08   | M      | Motion                 |
| 09   | ▲      | Up motion              |
| 10   | ▼      | Down motion            |
| 11   | ☀      | Hot                    |
| 12   | ❄      | Cold                   |
| 13   | ⚠      | Hazard warning (0085)  |
| 14   | ☀      | Traveller lighting     |
| 15   | ☀      | Driver lighting (1421) |

| CODE | SYMBOL | DESCRIPTION                          |
|------|--------|--------------------------------------|
| 16   | ☀      | Revolving light                      |
| 17   | ☀      | Rear ventilator                      |
| 18   | ☀      | Heating (0637)                       |
| 19   | ☀      | Door opening                         |
| 20   | ☀      | Windshield demister/defroster (0635) |
| 21   | ☀      | Windshield wiper (0086)              |
| 22   | ☀      | Windshield washer (0088)             |
| 23   | ☀      | Ventilator fan (0089)                |
| 24   | ☀      | Side mirror defroster                |
| 25   | ☀      | Restarting pump                      |
| 26   | ☀      | Front fog lights (0633)              |
| 27   | ☀      | Rear fog lights (0634)               |
| 28   | ☀      | Propulsion system trim               |
| 29   | ☀      | Beacon (1141)                        |
| 30   | ☀      | Anchor                               |
| 31   | ☀      | Electric motor (0011)                |

| CODE | SYMBOL | DESCRIPTION                           |
|------|--------|---------------------------------------|
| 32   | ☀      | Emergency first aid vehicle (2565)    |
| 33   | ☀      | Load tipping (1557)                   |
| 34   | ☀      | Loading light (2457)                  |
| 35   | ☀      | Tractor, rear-ward (1667)             |
| 36   | ☀      | Combine, direction of movement (1678) |
| 37   | ☀      | Use no forks (2406)                   |
| 38   | ☀      | Transmission (1166)                   |
| 39   | ☀      | Working spot light (1145)             |
| 40   | ☀      | Engine (0640)                         |
| 41   | ☀      | Horn (0244)                           |
| 42   | ☀      | Lock (1656)                           |
| 43   | ☀      | Taxi sign light (2551)                |
| 44   | ☀      | Working light (1204)                  |
| 45   | ☀      | Working light symmetric (1204)        |
| 46   | ☀      | -                                     |
| 47   | ASM    | -                                     |

The company reserves the right to change specifications without notice.

# K range

Power rocker switches and indicators • symbols and accessories

| CODE | SYMBOL | DESCRIPTION               | CODE | SYMBOL | DESCRIPTION              | CODE | SYMBOL | DESCRIPTION                  |
|------|--------|---------------------------|------|--------|--------------------------|------|--------|------------------------------|
| 48   |        | All wheel drive           | 69   |        | Engine idle control      | 90   |        | ECAS reset                   |
| 49   |        | Differential lock (1662)  | 70   |        | Cruise res/set           | 91   |        | Driver windows heating       |
| 50   |        | -                         | 71   |        | Driver windows up/down   | 92   |        | Cruise set                   |
| 51   |        | -                         | 72   |        | Middle door opening      | 93   |        | Air bag up/down              |
| 52   |        | -                         | 73   |        | Front door opening       | 94   |        | Read lighting                |
| 53   |        | -                         | 74   |        | Lighting in baggage room | 95   |        | Lighting main switch         |
| 54   |        | Rear window wiper (0097)  | 75   |        | Cruise on/off            | 96   |        | Heating using water          |
| 55   |        | Rear window washer (0099) | 76   |        | TV                       | 97   |        | Low beam                     |
| 56   |        | Lower load (2223)         | 77   |        | Pump                     | 98   |        | Position lights              |
| 57   |        | Cab lock (1560)           | 78   |        | Toilet                   | 99   |        | Diesel acceleration          |
| 58   |        | Extraction                | 79   |        | Toilet decontamination   | A1   |        | Manual mode                  |
| 59   |        | Pumping in                | 80   |        | Front windshield heating | A2   |        | Clockwise cabin rotation     |
| 60   |        | Rear PTO (1572)           | 81   |        | Aus                      | A3   |        | Anticlockwise cabin rotation |
| 61   |        | Front PTO                 | 82   |        | Radiator fan             | A4   |        | -                            |
| 62   |        | Rockshaft down            | 83   |        | Remove retarder          | A5   |        | -                            |
| 63   |        | Rockshaft up              | 84   |        | Restricted speed         | A6   |        | Parking brake                |
| 64   |        | Indicator                 | 85   |        | Preheater                | A7   |        | -                            |
| 65   |        | Brake release             | 86   |        | ABS detection            | A8   |        | -                            |
| 66   |        | Baggage room left door    | 87   |        | ECAS detection           | A9   |        | -                            |
| 67   |        | Baggage room right door   | 88   |        | Engine stop              | AA   |        | -                            |
| 68   |        | Power blinds              | 89   |        | Cruise res/cancel        | AB   |        | -                            |

# K range

Power rocker switches and indicators • symbols and accessories

| CODE | SYMBOL | DESCRIPTION                                 |
|------|--------|---------------------------------------------|
| AC   |        | -                                           |
| AD   |        | -                                           |
| AE   |        | -                                           |
| AF   |        | -                                           |
| AG   |        | Battery charging condition (0247)           |
| AH   |        | Turn signals (0084)                         |
| AJ   |        | High beam (0082)                            |
| AK   |        | Differential lock, bogie (2600)             |
| AL   |        | Brushing with a rotating brush (0070)       |
| AM   |        | Differential lock, transfer case 4x4 (2475) |
| AN   |        | Loader bucket, float (1441)                 |
| AP   |        | Loader bucket (1437)                        |
| AQ   |        | Rear window washer & wiper (0098)           |
| AR   |        | Header, Header drive (1579)                 |
| AS   |        | Excavator/backhoe boom side shift (2091)    |
| AT   |        | Chemical water treatment (1851)             |
| AU   |        | Grapple skidder, single funct° boom (1762)  |

| CODE | SYMBOL | DESCRIPTION |
|------|--------|-------------|
| AV   |        | -           |
| AW   |        | -           |
| AY   |        | -           |
| AZ   |        | -           |
| B1   | HIGH   | -           |
| B2   | LOW    | -           |
| B3   |        | -           |

## Legend scale

Depending on space available on the product (see "Symbols" section at the end of each series).

# K range

Power rocker switches and indicators • symbols and accessories

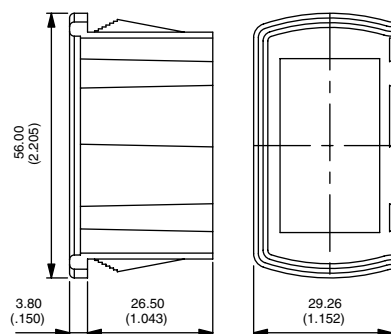
## MOUNTING PANELS

(NOT AVAILABLE FOR USE WITH THE KH SERIES)

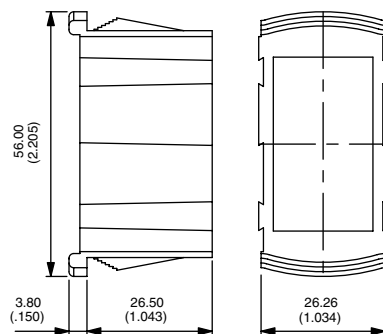
MOUNTING PANEL END

MOUNTING PANEL MIDDLE

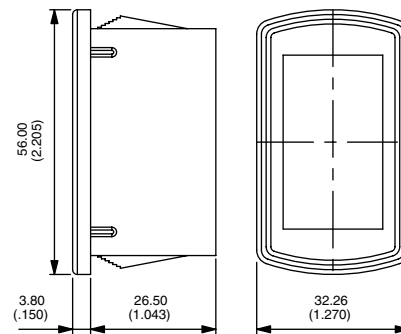
SINGLE MOUNTING PANEL



U2261



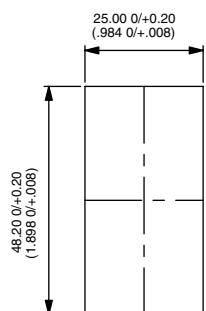
U2262



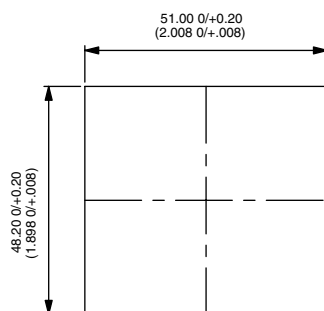
U2267

Recommended panel thickness : 1.10 mm - 1.80 mm - 2.60 mm - 3.40 mm - 4.20 mm - 5 mm - 5.80 mm

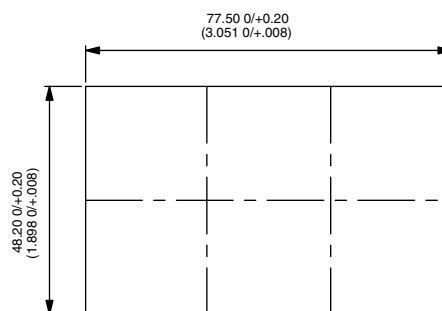
## MOUNTING PANEL CUT-OUT



For 1 element U2267



For 2 elements U2261



For 3 elements (2xU2261 + 1x U2262)

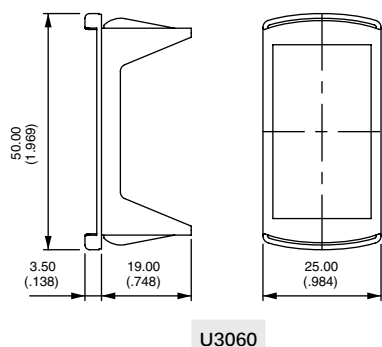
For additional elements, add 26.40 mm (1.039)

# K range

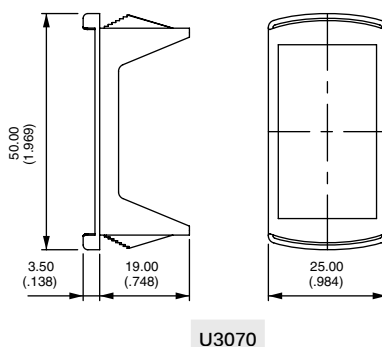
Power rocker switches and indicators • symbols and accessories

## 22 X 44 ADAPTERS

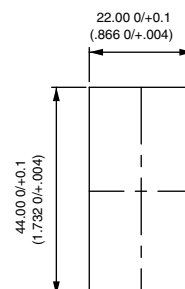
FRONT PANEL DISMOUNTING



REAR PANEL DISMOUNTING



PANEL CUT-OUT



**Recommended panel thickness**

**U3060** 0.60 mm to 1.50 mm

**U3070** 1.60 mm -0.1/0 to 5.60 mm -0.1/0 in stages of 0.40 mm

**Adapter colors** (replace 0 with code)

|     |           |
|-----|-----------|
| 1/4 | Dark blue |
| 2   | Black     |
| 4   | Grey      |
| 5   | Yellow    |
| 6   | Red       |
| 7/1 | White     |

## ACTUATOR REMOVING TOOL

(NOT SUITABLE FOR USE WITH KH1 MODELS - 4-SIDE PROTECTION GUARDS)

**Extract actuator (KR only)**

Allows the extraction of the rocker / rocker support assembly. Place the 2 claws under the support and push as indicated by the arrow.

**Extract rocker (KR only)**

Allows to separate the rocker from its support. Insert the tool between rocker and support as indicated by the arrow. Pull out the tool in the opposite direction.

**Extract switch (KR, KL and KI)**

Allows to extract switch from panel mounting units. 2 Tools are necessary. Insert the tools between switch and panel mounting units from the rear to compress the snap-in device. Pull off switch manually.



U3052

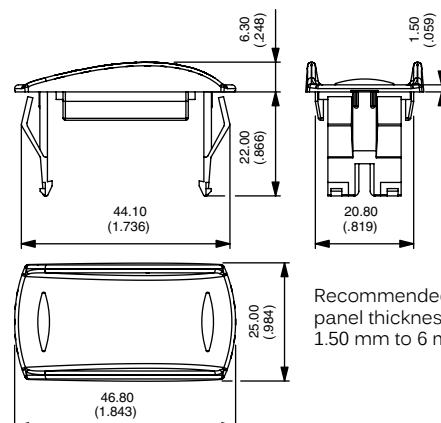
to be ordered by pairs

## BLANKING CAPS

Usefull for future extensions.

Connectors can be hanged on specific hole plugs. Contact APEM.

|         |           |       |        |
|---------|-----------|-------|--------|
| U2271   | Blue      | U2275 | Yellow |
| U2271/4 | Dark blue | U2276 | Red    |
| U2272   | Black     | U2277 | Ivory  |
| U2273   | Green     | U2279 | Orange |
| U2274   | Grey      |       |        |



# K range

Power rocker switches and indicators • symbols and accessories

## CONNECTORS

Standard color : black. Other colors : on request. Connectors cannot be combined with wiring types H and I.

**U2260** 6 terminal version. For use with terminals type 2, 3, 4 or 5.

6.35 (1/4) tabs to be fitted by the user (example : TE42282-2).

Can be used for the KG series.

**U2282** 10 terminal version. For use with terminals type H or J.

2.8 (.110) tabs to be fitted by the user (example : AMP/Tyco 0-927779-3).

**U2292** 10 terminal version : For use with terminals type B, C, E or F.

6.35 (1/4) tabs to be fitted by the user (example : TE42282-2).

**U3152** 10 terminal version. For use with terminals type B, C, E or F.

6.35 (1/4) tabs to be fitted by the user (example : "Timer" terminals TE927833-2)

