

## Type K Heavy Duty Specialty Operators

Table 19.237: Joy Stick Operators—UL Types 4, 13/NEMA 4, 13 [51] [52]

| Description                                                                       |                       |                                           |               | Operator With Contacts [53] | Operator Without Contacts [54] [53] |
|-----------------------------------------------------------------------------------|-----------------------|-------------------------------------------|---------------|-----------------------------|-------------------------------------|
|  | 3 Position—Center Off | Momentary Contact—Spring Return to Center | Without Latch | K71H7                       | K71                                 |
|                                                                                   |                       |                                           | With Latch    | K70H7                       | K70                                 |
|                                                                                   | 3 Position—Center Off | Maintained Contact                        | Without Latch | K73H7                       | K73                                 |
|                                                                                   |                       |                                           | With Latch    | K72H7                       | K72                                 |
|  | 3 Position—Center Off | Momentary Contact—Spring Return to Center | Without Latch | K31H8                       | K31                                 |
|                                                                                   |                       |                                           | With Latch    | K30H8                       | K30                                 |
|                                                                                   | 3 Position—Center Off | Maintained Contact                        | Without Latch | K33H8                       | K33                                 |
|                                                                                   |                       |                                           | With Latch    | K32H8                       | K32                                 |
|  | 5 Position—Center Off | Momentary Contact—Spring Return to Center | Without Latch | K35H2                       | K35                                 |
|                                                                                   |                       |                                           | With Latch    | K34H2                       | K34                                 |
|                                                                                   | 5 Position—Center Off | Maintained Contact                        | Without Latch | K37H2                       | K37                                 |
|                                                                                   |                       |                                           | With Latch    | K36H2                       | K36                                 |

The joy stick operator is ideal for applications where only one circuit is to be energized at one time. The three position joy stick closes one circuit in each Up-Down or Right-Left position with all circuits open in center position. The five position operator closes one circuit in each Up, Down, Left and Right position with all circuits open in center position.

Momentary contact operators are spring return to the center position. Maintained operators remain in position and must be returned manually. Operators with latch cannot be operated until the latch button in center of handle is pressed.

Table 19.238: Contact Arrangements

| Operator Positions                                                                |   | Contact Block Type | Contact Block Location | Contact | Handle position (with reference to Nib) |   |   |   |     |   |   |   |   |
|-----------------------------------------------------------------------------------|---|--------------------|------------------------|---------|-----------------------------------------|---|---|---|-----|---|---|---|---|
|                                                                                   |   |                    |                        |         | 1                                       | ↑ | 2 | → | OFF | 3 | ↓ | 4 | ← |
|  | 3 | KA3                | POS 1 (3)              | A       | —                                       |   | 1 |   | 0   |   | — |   | 0 |
|                                                                                   |   | KA3                | POS 2 (4)              | A       | —                                       |   | 0 |   | 0   |   | — |   | 1 |
|  | 3 | KA2                | POS 1 (3)              | B       | 1                                       |   | — |   | 0   |   | 0 |   | — |
|                                                                                   |   | KA2                | POS 2 (4)              | B       | 0                                       |   | — |   | 0   |   | 1 |   | — |
|  | 5 | KA1                | POS 1 (3)              | A       | 0                                       |   | 1 |   | 0   |   | 0 |   | 0 |
|                                                                                   |   |                    |                        | B       | 1                                       |   | 0 |   | 0   |   | 0 |   | 0 |
|                                                                                   |   | KA1                | POS 2 (4)              | A       | 0                                       |   | 0 |   | 0   |   | 0 |   | 1 |
|                                                                                   |   |                    |                        | B       | 0                                       |   | 0 |   | 0   |   | 1 |   | 0 |

(1) Contact Closed (0) Contact Open

(1) Contact Closed (0) Contact Open

Table 19.239: Selector Push Button Operators—UL Types 4, 13/NEMA 4, 13

| Contact Block Required                                                                       |               | Two Position Operators |       |       |       |                  |       |       |       |        |       |      |       |             |       |  |  |
|----------------------------------------------------------------------------------------------|---------------|------------------------|-------|-------|-------|------------------|-------|-------|-------|--------|-------|------|-------|-------------|-------|--|--|
|                                                                                              |               | 0—Contact Open         |       |       |       | 1—Contact Closed |       |       |       | F—Free |       |      |       | D—Depressed |       |  |  |
| Quantity and Type                                                                            | Mount on Side | Left                   | Right | Left  | Right | Left             | Right | Left  | Right | Left   | Right | Left | Right | Left        | Right |  |  |
|                                                                                              |               | FD                     | FD    | FD    | FD    | FD               | FD    | FD    | FD    | FD     | FD    | FD   | FD    | FD          | FD    |  |  |
| <br>1 KA1 | #2            | 0 0                    | 1 0   | 0 0   | 1 0   | 0 0              | 1 1   | 1 1   | 1 1   | 1 0    | 1 0   | 1 0  | 1 0   | 0 1         | 0 1   |  |  |
| <br>1 KA1 | #1            | 0 0                    | 1 1   | 0 0   | 1 0   | 1 1              | 0 0   | 1 0   | 1 1   | 1 1    | 1 1   | 1 1  | 1 1   | 0 0         | 0 1   |  |  |
| Cam [55]                                                                                     |               | P                      |       | R     |       | S                |       | T     |       | Y      |       |      |       |             |       |  |  |
| Color Insert                                                                                 |               | Type                   |       | Type  |       | Type             |       | Type  |       | Type   |       | Type |       |             |       |  |  |
| Without Insert [56]<br>Black                                                                 |               | KQ11                   |       | KQ12  |       | KQ13             |       | KQ14  |       | KQ15   |       |      |       |             |       |  |  |
|                                                                                              |               | KQ11B                  |       | KQ12B |       | KQ13B            |       | KQ14B |       | KQ15B  |       |      |       |             |       |  |  |

Order Contact Blocks From Type KA Contact Blocks, page 19-90

Key operated push buttons are used wherever unauthorized use of a push button is discouraged. Examples are locking a Start push button in the extended position or locking a Stop push button in the depressed position. The operator can also be locked in the flush position—holding all contacts open. Up to two Type KA contact blocks can be mounted in tandem (total of four blocks). ("X" = locked position) [57]

Table 19.240: Key Operated Push Button – UL Types 4, 13/NEMA 4, 13 [51] [52]

| Description                                                                                                                                                                             | Lockable Positions |                  |                  | Type [53]                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|------------------|----------------------------------|
|                                                                                                                                                                                         | Extended           | Flush            | De-pressed       |                                  |
| Push button operable only with key in lock. Key is removable in locked position only.                                                                                                   | X<br>—<br>—<br>X   | —<br>X<br>—<br>X | —<br>—<br>X<br>X | KR131<br>KR132<br>KR133<br>KR137 |
| Push button operable with or without key in lock. Push button can be locked with key only. Key removable in both locked or unlocked position.                                           | X<br>—<br>—<br>X   | —<br>X<br>—<br>X | —<br>—<br>X<br>X | KR141<br>KR142<br>KR143<br>KR147 |
| To lock the unit, rotate the key with the button in the extended position. Then, push the button to lock it in the position indicated at right. Key is removable only in this position. | —<br>—<br>—<br>—   | —<br>X<br>—<br>— | —<br>—<br>X<br>— | KR152<br>KR153                   |

[51] For use in hazardous locations—See Square D Offering According to Class, Division, and Group, page 19-92.

[52] Legend plate and contact block not included unless otherwise noted.

[53] When ordering, add prefix 9001 to the catalog number.

[54] These operators can be ordered complete with contact blocks—a total of four (4) contact blocks can be used. Add the "H" number chosen from "H" Codes, page 19-93 to the operator type number and add the cost of the "H" number to the operator cost.

[55] Cams are not interchangeable.

[56] Order color inserts from Additional Accessories for Type K and SK Operators, page 19-99.

[57] All key operated push buttons are furnished as standard with Square D no. E10 key change. See catalog 9001CT0001 for other key changes.