

# KILLARK Hazardous Location Controls FXCS Series Factory Sealed Controls Overview

## Applications, Features, Listings, and Electrical Ratings



### Applications

Factory sealed pushbutton stations, selector switches and pilot lights are used to prevent the igniting of external hazardous atmospheres by the enclosed arcing devices in such areas as:

- Hazardous locations due to the presence of flammable gases or vapors, combustible dusts or easily ignitable fibers or flyings
- Installations at petroleum refineries, chemical and petrochemical plants and other processing or storage facilities where similar hazards exist
- Use in conjunction with magnetic starters or contactors for remote control of motors

### Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA



### Features

- Eliminates external sealing requirements
- Lower installation cost
- NEMA 3 weatherproof
- Color coded wiring
- More wiring space for easier field installation
- Stainless steel captive screws for cover assembly
- Ground boss for grounding in the splice box
- Cast conduit hubs 1/2", 3/4" and 1" NPT either dead end or feed through standard in both single and two-gang assemblies
- Pushbutton, selector switches and pilot light bodies are copper-free aluminum
- Operating shaft in both pushbuttons and selector switches are stainless steel
- Miniature and standard size pushbuttons. (miniature 3/4" overall diameter, standard 1 3/8" overall diameter)

Factory sealed devices eliminate the need for external sealing. The difference is the use of a sealing plate between the arcing device and the junction box. The sealing plate confines ignited gases, vapors, flames, or dust to the arcing device chamber, preventing them from traveling through the conduit system. Accurately ground flanges on both sides of the sealing plate provide flame-tight joints. Factory poured seals around the wiring pigtails ensure safe sealing.

### Contact Specifications

All contacts are break before make. Replacement contacts are not available for any of our Killark hazardous duty controls.

| AC Ratings |         |         |         |         |
|------------|---------|---------|---------|---------|
| Current    | 120 VAC | 240 VAC | 480 VAC | 600 VAC |
| Inrush     | 60      | 30      | 15      | 12      |
| Breaking   | 6       | 3       | 1.5     | 1.2     |
| Carrying   | 10      | 10      | 10      | 10      |

| DC Ratings (Max. Amps) |         |         |
|------------------------|---------|---------|
| Current                | 125 VDC | 250 VDC |
| Inrush                 | 0.55    | 0.275   |
| Breaking               | 0.55    | 0.275   |
| Carrying               | 2.50    | 2.5     |

| FXCS Specifications                       |                                                                                                                             |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Dielectric Strength</b>                | 2.5 kV (1 minute)                                                                                                           |
| <b>Electrical Endurance</b>               | 5 million operations at rated load                                                                                          |
| <b>Operating Frequency</b>                | 3,000 per hour                                                                                                              |
| <b>Mechanical Endurance</b>               | Momentary: 5 x 10 <sup>6</sup><br>Push-pull and selector: 2 x 10 <sup>6</sup>                                               |
| <b>LED Consumption</b>                    | 4-6 mA at 110 to 130 VAC/VDC                                                                                                |
| <b>Wire Leads</b>                         | 6.5 inches, 18 AWG                                                                                                          |
| <b>Operating Temperature</b>              | -4 to 104°F [-20 to 40°C]                                                                                                   |
| <b>Device Bodies and Covers Materials</b> | Copper-free Aluminum                                                                                                        |
| <b>Cover Bolts Material</b>               | 1/4-20 x 1.10 inch Stainless Steel                                                                                          |
| <b>Cover Tightening</b>                   | After tightly attaching cover to device box, check with a 0.0015 inch feeler gauge; it should enter gap more than 1/8 inch. |

# KILLARK XCS Series Cover Assemblies and Control Stations - Selector Switches



**Selector  
Switch**

## Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA



| XCS Two-Position Spring Return Selector Switch |          |                     |                                                                                             |                               |                                |                                |                                 |                          |
|------------------------------------------------|----------|---------------------|---------------------------------------------------------------------------------------------|-------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------|
| Part Number<br>(cover included)                | Price    | Drawing<br>Link     | Description                                                                                 | Left Position<br>Left Contact | Left Position<br>Right Contact | Right Position<br>Left Contact | Right Position<br>Right Contact | Legend Plate<br>Marking* |
| <a href="#"><u>XCS-0S2L3F</u></a>              | \$343.00 | <a href="#">PDF</a> | 1 N.O. / 1 N.C., spring return from right; requires SWB series deep style splice/device box |                               |                                |                                |                                 | "OFF ON"                 |

| XCS Three-Position Spring Return Selector Switches |          |                     |                                                                                                                             |                                     |                                      |                                       |                                        |                                      |                                       |               |                             |
|----------------------------------------------------|----------|---------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------|---------------------------------------|---------------|-----------------------------|
| Part Number<br>(cover included)                    | Price    | Drawing<br>Link     | Description                                                                                                                 | Left<br>Position<br>Left<br>Contact | Left<br>Position<br>Right<br>Contact | Center<br>Position<br>Left<br>Contact | Center<br>Position<br>Right<br>Contact | Right<br>Position<br>Left<br>Contact | Right<br>Position<br>Right<br>Contact | Knob<br>Color | Legend<br>Plate<br>Marking* |
| <a href="#"><u>XCS-0S3M6G</u></a>                  | \$343.00 | <a href="#">PDF</a> | 2 N.O., spring return to center from left and right; requires SWB series deep style splice/device box                       |                                     |                                      |                                       |                                        |                                      |                                       | Black         | "HAND<br>OFF<br>AUTO"       |
| <a href="#"><u>XCS-0S3L6G</u></a>                  | \$343.00 | <a href="#">PDF</a> | 2 N.O., spring return to center from right, maintained in center and left; requires SWB series deep style splice/device box |                                     |                                      |                                       |                                        |                                      |                                       | Black         | "HAND<br>OFF<br>AUTO"       |
| <a href="#"><u>XCS-0S3R6G</u></a>                  | \$343.00 | <a href="#">PDF</a> | 2 N.O., spring return to center from left, maintained in center and right; requires SWB series deep style splice/device box |                                     |                                      |                                       |                                        |                                      |                                       | Black         | "HAND<br>OFF<br>AUTO"       |

\* We also offer a large selection of optional legend plates. See accessories later in this section.

# KILLARK SWB Series Splice/Device Boxes For Use With XCS Cover Assemblies

**SWB-2****SWB-5****SWB-8****SWB-11****SWB-42**

## Listings

- UL Listed; File E53360
- Class I, Div. 1 & 2, Groups C, D
- Class II, Div. 1 & 2, Groups E, F, G
- Class III
- NEMA 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11712
- Class I, Zones 1 & 2, Groups IIB, IIA



### SWB Device Bodies

| <i>Part Number</i>   | <i>Price</i> | <i>Drawing Link</i> | <i>Description</i>                      | <i>Hub Size (inches)</i> |
|----------------------|--------------|---------------------|-----------------------------------------|--------------------------|
| <b><u>SWB-2</u></b>  | \$63.00      | <a href="#">PDF</a> | Single gang / Dead-end                  | 3/4                      |
| <b><u>SWB-5</u></b>  | \$64.00      | <a href="#">PDF</a> | Single gang / Feed-through              | 3/4                      |
| <b><u>SWB-8</u></b>  | \$124.00     | <a href="#">PDF</a> | Double gang / Dead-end                  | 3/4                      |
| <b><u>SWB-11</u></b> | \$123.00     | <a href="#">PDF</a> | Double gang / Feed-through              | 3/4                      |
| <b><u>SWB-42</u></b> | \$180.00     | <a href="#">PDF</a> | Single gang / Dead-end / Deep style     | 3/4                      |
| <b><u>SWB-45</u></b> | \$221.00     | <a href="#">PDF</a> | Single gang / Feed-through / Deep style | 3/4                      |