KILLARK Hazardous Location Controls FXCS Series Factory Sealed Controls Overview

Applications, Features, Listings, and Electrical Ratings

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)

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

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	
Dielectric Strength	2.5 kV (1 minute)
Electrical Endurance	5 million operations at rated load
Operating Frequency	3,000 per hour
Mechanical Endurance	Momentary: 5 x 10^6 Push-pull and selector: 2 x 10^6
LED Consumption	4-6 mA at 110 to 130 VAC/VDC
Wire Leads	6.5 inches, 18 AWG
Operating Temperature	-4 to 104°F [-20 to 40°C]
Device Bodies and Covers Materials	Copper-free Aluminum
Cover Bolts Material	1/4-20 x 1.10 inch Stainless Steel
Cover Tightening	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 FXB Series Factory Sealed Splice/Device Boxes for FXCS Series Cover Assemblies

FXB-2
Dead End

FXB-5
Feed Through

FXB-8
Double Gang Dead End

FXB-11
Double Gang Feed Through

Features

Splice Boxes
The FXB series of splice boxes are designed for use with the FXCS series cover sub-assemblies.

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

FXB Splice/Device Box Selection and Dimensions

Part Number	Price	Drawing Link	Description	NPT Hub Size (inches)
FXB-1	$70.00	PDF	Single gang / Dead-end	1/2
FXB-2	$66.00	PDF	Single gang / Dead-end	3/4
FXB-3	$79.00	PDF	Single gang / Dead-end	1
FXB-4	$71.00	PDF	Single gang / Feed-through	1/2
FXB-5	$73.00	PDF	Single gang / Feed-through	3/4
FXB-6	$94.00	PDF	Single gang / Feed-through	1
FXB-7	$160.00	PDF	Double gang / Dead-end	1/2
FXB-8	$137.00	PDF	Double gang / Dead-end	3/4
FXB-9	$136.00	PDF	Double gang / Dead-end	1
FXB-10	$138.00	PDF	Double gang / Feed-through	1/2
FXB-11	$140.00	PDF	Double gang / Feed-through	3/4
FXB-12	$138.00	PDF	Double gang / Feed-through	1

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies

Single Pushbutton

Double Pushbutton

Pilot Light

Features

These pushbutton assemblies include the cover and the pushbutton device. An FXB splice/device box is required.

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

FXCS Momentary Contact Single Pushbutton

Part Number (cover included)	Price	Drawing Link	Description	Diagram	Pushbutton Color	Legend Plate Marking*
FXCS-0B1	$306.00	PDF	1 N.O. momentary operator		Green	"START"
FXCS-0B2	$306.00	PDF	1 N.C. momentary operator		Red	"STOP"
FXCS-0B3	$340.00	PDF	1 N.O. / 1 N.C. momentary operator		Black	Blank plate

FXCS Momentary Contact Double Pushbutton

Part Number (cover included)	Price	Drawing Link	Description	Diagram	Button Color	Legend Plate Marking*
FXCS-0B4	$388.00	PDF	Green operator has 1 N.O. momentary contact and red operator has 1 N.C. momentary contact		Green / Red	"START STOP"
FXCS-0B4U	$417.00	PDF	Each operator has 1 N.O. and 1 N.C. momentary contact		Green / Red	"START STOP"
FXCS-0B5	$388.00	PDF	Each operator has 1 N.O. momentary contact		Green / Green	"START START"
FXCS-0B7	$417.00	PDF	Each operator has 1 N.O. and 1 N.C. momentary contact		Black / Black	Two blank plates

FXCS Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Lens Color	Legend Plate Marking*
FXCS-0B24ALD	$515.00	PDF	Single pilot light		110 VAC/VDC	Amber	Blank plate
FXCS-0B24CLD	$353.00	PDF	Single pilot light		110 VAC/VDC	Clear	Blank plate
FXCS-0B24GLD	$364.00	PDF	Single pilot light		110 VAC/VDC	Green	Blank plate
FXCS-0B24RLD	$353.00	PDF	Single pilot light		110 VAC/VDC	Red	Blank plate

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

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies

Double Pilot Light

Pilot Light / Pushbutton

Pilot Light / Two Mini Pushbutton

Maintained Pushbutton

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

FXCS Double Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Lens Colors	Legend Plate Marking*
FXCS-0B30ALD	$788.00	PDF	Two pilot lights		110 VAC/VDC	Amber / Amber	Two blank plates
FXCS-0B30CLD	$561.00	PDF	Two pilot lights		110 VAC/VDC	Clear / Clear	Two blank plates
FXCS-0B30GLD	$482.00	PDF	Two pilot lights		110 VAC/VDC	Green / Green	Two blank plates
FXCS-0B30RLD	$561.00	PDF	Two pilot lights		110 VAC/VDC	Red / Red	Two blank plates
FXCS-0B30RLD-GLD	$475.00	PDF	Two pilot lights		110 VAC/VDC	Red / Green	Two blank plates

FXCS Momentary Contact Pushbutton and Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Pushbutton Color	Lens Color	Legend Plate Marking*
FXCS-0B13-CD	Retired	PDF	1 N.C. momentary operator and pilot light		110 VAC/VDC	Red	Clear	Pushbutton: "STOP" Pilot light: Blank plate
FXCS-0B13-OD	$411.00	PDF	1 N.O. momentary operator and pilot light		110 VAC/VDC	Green	Red	Pushbutton: "START" Pilot light: Blank plate
FXCS-0B13-UD	$417.00	PDF	1 N.O. / 1 N.C. momentary operator and pilot light		110 VAC/VDC	Black	Red	Two blank plates

FXCS Two Mini Momentary Contact Pushbuttons and Pilot Light

Part Number (cover included)	Price	Drawing Link	Description	Diagram	LED Voltage	Pushbutton Colors	Lens Color	Legend Plate Marking*
FXCS-0A15D	$543.00	PDF	Mini red operator with 1 N.C. momentary contact and mini green operator with 1 N.O. momentary contact, and pilot light		110 VAC/VDC	Green Red	Red	N.O. Pushbutton: "START" N.C. Pushbutton: "STOP" Pilot light: Blank plate

FXCS Maintained Contact Push-Pull Mushroom Pushbutton

Part Number (cover included)	Price	Drawing Link	Description	Diagram	Pushbutton Color	Legend Plate Marking*
FXCS-0MMG3	$749.00	PDF	1 N.O. / 1 N.C. push-pull maintained		Green	Three 2-sided legend plates included: "START / STOP"; "EMERGENCY STOP / RESET"; Blank plate / "RESET"
FXCS-0MMR3	$699.00	PDF	1 N.O. / 1 N.C. push-pull maintained		Red	Three 2-sided legend plates included: "START / STOP"; "EMERGENCY STOP / RESET"; Blank plate / "RESET"
FXCS-0MMK3	$749.00	PDF	1 N.O. / 1 N.C. push-pull maintained		Black	Three 2-sided legend plates included: "START / STOP"; "EMERGENCY STOP / RESET"; Blank plate / "RESET"

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

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies and Selector Switches

Selector Switch

Key-Operated 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 3, 7 (C, D) 9 (E, F, G)
- CSA Certified; File LR11714
- Class I, Zones 1 & 2, Groups IIB, IIA

FXCS Two-Position Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Knob Color	Legend Plate Marking*
FXCS-0S2A1	$418.00	PDF	1 N.O. / 1 N.C.					Black	"OFF ON""
FXCS-0S2A5	$393.00	PDF	2 N.O. / 2 N.C.					Black	"OFF ON""

FXCS Two-Position Key-Operated Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K2A1A	$631.00	PDF	1 N.O. / 1 N.C.					Any position	"OFF ON"
FXCS-0K2A5A	$667.00	PDF	2 N.O. / 2 N.C.					Any position	"OFF ON"

FXCS Three-Position Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Knob Color	Legend Plate Marking*
FXCS-0S3C4	$421.00	PDF	1 N.O. / 1 N.C.							Black	"HAND OFF AUTO"
FXCS-0S3C5	$402.00	PDF	2 N.O. / 2 N.C.							Black	"HAND OFF AUTO"

FXCS Three-Position Key-Operated Maintained Contact Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K3C4A	$535.00	PDF	1 N.O. / 1 N.C.							Any position	"HAND OFF AUTO"
FXCS-0K3C5A	$485.00	PDF	2 N.O. / 2 N.C.							Any position	"HAND OFF AUTO"

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

KILLARK FXCS Series Factory Sealed Control Station Cover Assemblies and Selector Switches - Continued

Selector Switch

Key-Operated Selector Switch

FXCS Two-Position Spring Return Selector Switch

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Legend Plate Marking*
FXCS-0S2L3F	$496.00	PDF	1 N.O. / 1 N.C., spring return from right					"OFF" / "ON""

FXCS Two-Position Key-Operated Spring Return Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K2L3F22A	$669.00	PDF	1 N.O. / 1 N.C., spring return from right					left position only	"OFF" / "ON""

FXCS Three-Position Spring Return Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Knob Color	Legend Plate Marking*
FXCS-0S3M6G	$411.00	PDF	2 N.O., spring return to center from left or right							Black	"HAND OFF AUTO"
FXCS-0S3L6G	$411.00	PDF	2 N.O., spring return to center from right, maintained in center and left							Black	"HAND OFF AUTO"
FXCS-0S3R6G	$411.00	PDF	2 N.O., spring return to center from left, maintained in center and right							Black	"HAND OFF AUTO"

FXCS Three-Position Key-Operated Spring Return Selector Switches

Part Number (cover included)	Price	Drawing Link	Description	Left Position Left Contact	Left Position Right Contact	Center Position Left Contact	Center Position Right Contact	Right Position Left Contact	Right Position Right Contact	Key Removal	Legend Plate Marking*
FXCS-0K3M6G32A	$613.00	PDF	2 N.O., spring return to center from left or right							center position only	"HAND OFF AUTO"
FXCS-0K3L6G32A	$613.00	PDF	2 N.O., spring return to center from right, maintained in center and left							center position only	"HAND OFF AUTO"
FXCS-0K3R6G32A	$581.00	PDF	2 N.O., spring return to center from left, maintained in center and right							center position only	"HAND OFF AUTO"

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

KILLARK Accessories and Replacement Parts

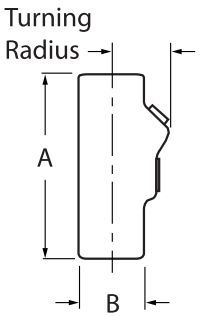
Sealing Fitting

The purpose of seals in a Class I hazardous location is to minimize the passage of gases and vapors and prevent the passage of flames from one electrical installation to another through the conduit system. Consult the electrical code or your local inspector for more detailed information.

ENY-2
Sealing Fitting

ENY-2 Sealing Fitting Dimensions					
Part Number	*Price*	*Hub Size (inch)*	*Dimensions (in-mm)*		*Turning Radius**
			A	*B*	
ENY-2	$31.50	3/4	4-1/16 (103)	2-1/16 (52)	1-9/32 (33)

***Use Turning Radius to help determine if sealing fitting will fit properly in your installation.**



ENY-2 Sealing Fitting
- Suitable for vertical or horizontal installation
- Copper-free aluminum (less than 0.4 %)
- Electro-statically applied powder coating

Sealing Compound and Packing Fiber

Ounces Required per Fitting			
Sealing Fitting	*Hub Size (inch)*	*Sealing Compound*	*Packing Fiber*
ENY-2	3/4	2 oz.	1/8 oz.

Sealing Compound
SC series sealing compound is a cement used extensively for sealing conduit to prevent the spread of explosive gases.
- Non-shrinking and forms a secure seal
- Resists acids, water, oil, etc.
- UL listed when used with ENY series sealing fittings
- CE certified when used with any CSA certified sealing fitting

Sealing Compound		
Part Number	*Price*	*Size*
SC-4-OZ	$12.50	4-ounce container
SC-8-OZ	$12.50	8-ounce container
SC-1-LB	$23.00	1-pound container

Sealing Compound

Packing Fiber
- Made from environmentally safe, non-asbestos material
- Easy to use and forms a positive dam to hold sealing compound

Packing Fiber		
Part Number	*Price*	*Size*
PF-2	$30.00	2-ounce container
PF-4	$54.00	4-ounce container
PF-16	$159.00	1-pound container

Packing Fiber

KILLARK Accessories and Replacement Parts - Continued

Accessories and Replacement Parts Overview

We offer an accessory blank cover, a large selection of legend plates, and replacement keys and LEDs.

Replacement contacts are not available for any of our Killark hazardous duty controls. We also do not offer replacement switches, covers, or bolts.

Blank Cover and Replacement Key

X-10
Blank Cover

KEY-C002B
Replacement Key

Blank Cover and Replacement Key			
Part Number	***Price***	***Drawing Link***	***Description***
X-10	$71.00	PDF	Blank cover for use with splice/device boxes.
KEY-C002B	$15.00	N/A	Replacement key for FXCS and XCS series key-operated selector switches.

Replacement LED Lamps

Replacement 110 VAC/VDC LED lamps for FXCS and XCS series pilot lights.

Replacement LED Lamps			
Part Number	***Price***	***Color***	***Volts AC/DC***
GOLED-A110	$69.00	Amber	110 VAC/VDC
GOLED-G110	$69.00	Green	
GOLED-R110	$69.00	Red	
GOLED-W110	$69.00	White	

KILLARK Accessories - Legend Plates

Legend Plates

- Engraved aluminum legend plates with red fields.
- Three screws included with each legend plate
- Use with XCS and FXCS series devices

XCSNP-HIGH-LOW

XCSNP-RESET

XCSNP-ON-OFF

Legend Plates			
Legend	Color of Field	Part Number	Price
Blank plate	Red	XCSNP-BLANK	$15.00
"CLOSE"	Red	XCSNP-CLOSE	$15.00
"DOWN"	Red	XCSNP-DOWN	$15.00
"EMERG STOP"	Red	XCSNP-ESTOP	$15.00
"FAST"	Red	XCSNP-FAST	$15.00
"FORWARD"	Red	XCSNP-FORWARD	$15.00
"HIGH"	Red	XCSNP-HIGH	$15.00
"IN"	Red	XCSNP-IN	$15.00
"INCH"	Red	XCSNP-INCH	$15.00
"JOG"	Red	XCSNP-JOG	$15.00
"JOG FWD"	Red	XCSNP-JOG-FORWARD	$15.00
"JOG REV"	Red	XCSNP-JOG-REVERSE	$15.00
"LOW"	Red	XCSNP-LOW	$15.00
"LOWER"	Red	XCSNP-LOWER	$15.00
"MOTOR RUN"	Red	XCSNP-MOTOR-RUN	$15.00
"MOTOR STOP"	Red	XCSNP-MOTOR-STOP	$15.00
"OFF"	Red	XCSNP-OFF	$15.00
"ON"	Red	XCSNP-ON	$15.00
"OPEN"	Red	XCSNP-OPEN	$15.00
"OUT"	Red	XCSNP-OUT	$15.00
"POWER ON"	Red	XCSNP-POWER-ON	$15.00
"RAISE"	Red	XCSNP-RAISE	$15.00
"READY"	Red	XCSNP-READY	$15.00
"RESET"	Red	XCSNP-RESET	$15.00
"REVERSE"	Red	XCSNP-REVERSE	$15.00
"RUN"	Red	XCSNP-RUN	$15.00
"SLOW"	Red	XCSNP-SLOW	$15.00
"START"	Red	XCSNP-START	$15.00
"STOP"	Red	XCSNP-STOP	$15.00
"TEST"	Red	XCSNP-TEST	$15.00

Legend Plates			
Legend	Color of Field	Part Number	Price
"UP"	Red	XCSNP-UP	$15.00
"FWD REV"	Red	XCSNP-FWD-REV	$15.00
"HAND AUTO"	Red	XCSNP-HAND-AUTO	$15.00
"ON OFF"	Red	XCSNP-ON-OFF	$15.00
"OFF ON"	Red	XCSNP-OFF-ON	$15.00
"START STOP"	Red	XCSNP-START-STOP	$15.00
"UP DOWN"	Red	XCSNP-UP-DOWN	$15.00
"RUN JOG"	Red	XCSNP-RUN-JOG	$15.00
"JOG RUN"	Red	XCSNP-JOG-RUN	$15.00
"AUTO HAND"	Red	XCSNP-AUTO-HAND	$15.00
"MAN AUTO"	Red	XCSNP-MANUAL-AUTO	$15.00
"OFF REMOTE"	Red	XCSNP-OFF-REMOTE	$15.00
"START JOG"	Red	XCSNP-START-JOG	$15.00
"HIGH LOW"	Red	XCSNP-HIGH-LOW	$15.00
"OPEN CLOSE"	Red	XCSNP-OPEN-CLOSE	$15.00
"RAISE LOWER"	Red	XCSNP-RAISE-LOWER	$15.00
"SLOW FAST"	Red	XCSNP-SLOW-FAST	$15.00
"FWD OFF REV"	Red	XCSNP-FWD-OFF-REV	$15.00
"HAND OFF AUTO"	Red	XCSNP-HAND-OFF-AUT	$15.00
"RUN OFF JOG"	Red	XCSNP-RUN-OFF-JOG	$15.00
"REV OFF FWD"	Red	XCSNP-REV-OFF-FWD	$15.00
"AUTO OFF HAND"	Red	XCSNP-AUT-OFF-HAND	$15.00
"HAND OFF REMOTE"	Red	XCSNP-HAND-OFF-REM	$15.00
"JOG OFF RUN"	Red	XCSNP-JOG-OFF-RUN	$15.00
"STOP RUN START"	Red	XCSNP-STP-RUN-STRT	$15.00
"LOCAL OFF REM"	Red	XCSNP-LOCL-OFF-REM	$15.00
"LOW OFF HIGH"	Red	XCSNP-LOW-OFF-HIGH	$15.00
"RAISE OFF LOWER"	Red	XCSNP-RAS-OFF-LOWR	$15.00
"SLOW OFF FAST"	Red	XCSNP-SLOW-OFF-FST	$15.00